Project Evaluation Report

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Notes:

Some annexes listed in the contents page of this document have not been included because of challenges with capturing them as an A4 PDF document or because they are documents intended for programme purposes only. If you would like access to any of these annexes, please enquire about their availability by emailing uk_girls_education_challenge@pwc.com

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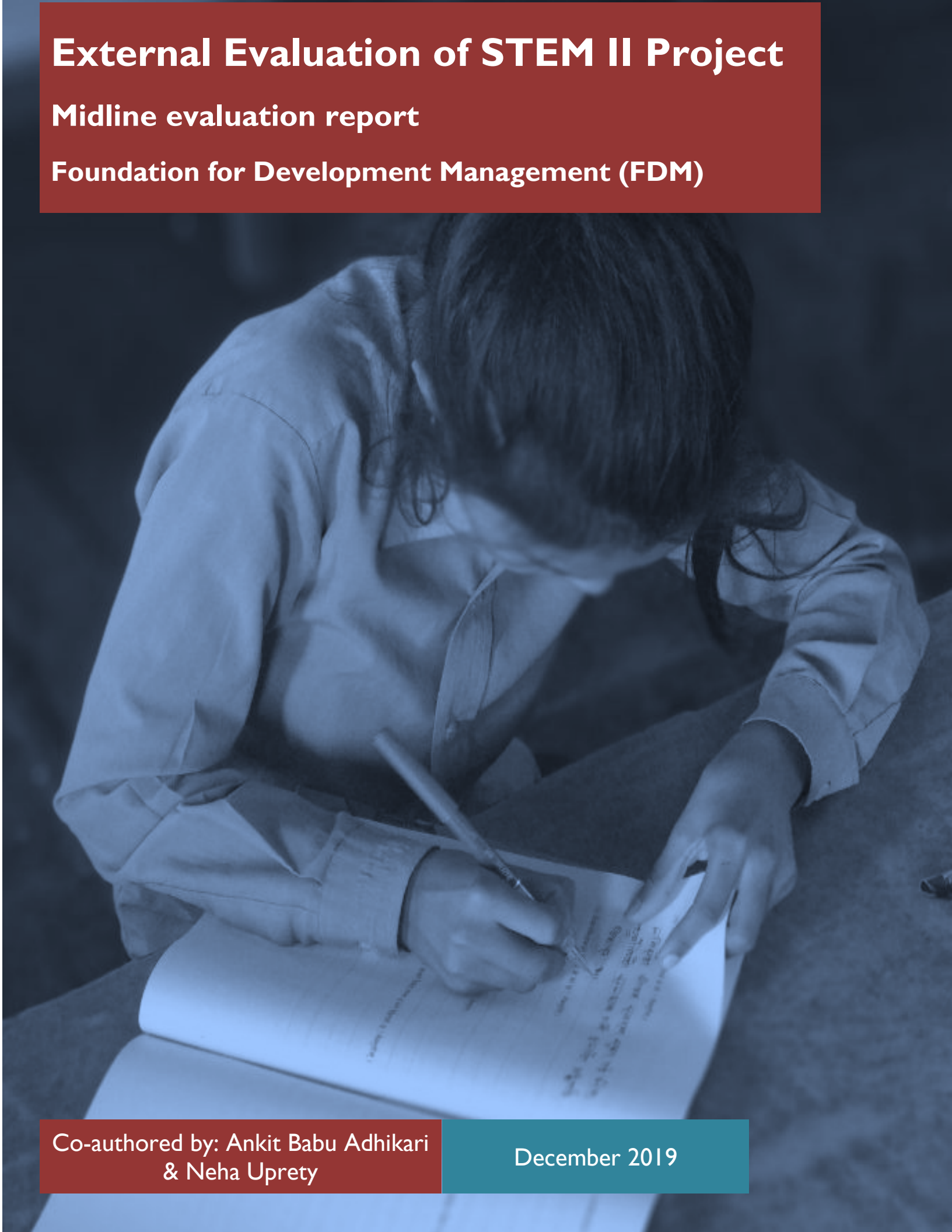
External Evaluation of STEM II Project

Midline evaluation report

Foundation for Development Management (FDM)



Co-authored by: Ankit Babu Adhikari & Neha Uprety

December 2019

Acknowledgments

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Most importantly, I wish to express my gratitude to all the respondents who agreed to be a part of the study and share their opinions and experiences with the research team. I hope that the information presented in this report can be used to address the key issues and concerns they highlighted.

Dr. Shailendra Sigdel
Executive Director / Team Leader (External Evaluation of STEM II Project)
Foundation for Development Management (FDM)

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EXECUTIVE SUMMARY

The STEM II project (Supporting the Education of Marginalized Girls in Kailali district) builds on the achievements of first phase of the project (STEM I), which took an iterative approach to innovation, to refine a more holistic model that enables girls' access, and utilization of, formal education. STEM II's theory of change is that if girls are supported to make safe, healthy and successful transitions through secondary school and/or into secure livelihoods, then they will have increased individual and community resilience. To achieve this, STEM II aims at improving girls' educational outcomes, increase their access to income-generating activities, and cultivate an enabling environment for sustainable changes for girls' empowerment. There are several aspects of the STEM model that build girls' capacities, all of which are directly connected to the girls' learning and transition outcomes, further threaded along several intermediate outcomes that contribute to the achievement of project's objectives.

The project primarily works with in-school (IS) girls from grade 8 to 10 at the time of the project's phase 2 inception in 2017, out of school (OOS) girls who have dropped out from STEM school (from grade 6 to grade 10 in phase I) and also the group who have graduated from grade 10 from 2014 till date but are currently not enrolled in formal education – school graduates (SG). The project has rolled out several activities and interventions to support the lives of the marginalized girls belonging to all three groups. For instance, for IS girls STEM is running literacy and numeracy along with school-level infrastructural support such as computer labs, library, among others, and teachers' training among others. Similarly, financial literacy classes and vocational trainings apart from other life-skills interventions have been implemented for SG and OOS girls. STEM also supports the girls' transition pathways to income generation. Along with direct interventions for girls, it also provides trainings for teachers to improve their teaching quality and school management for better school governance. Awareness programs on importance of girl's education are also run for the parents. School infrastructures have been built and repaired to ensure quality education for all students - both boys and girls. Additionally, academic support has also been provided through after school classes in English, Maths and Science along with life skills training, self-defence training and ASRH education.

In this context, Foundation for Development Management (FDM) has been contracted to conduct longitudinal evaluation of STEM II, spreading the study across three different evaluation points – baseline, midline and end-line. While the data-collection for baseline study was conducted in January 2018, this midline study was commissioned in February and March of 2019, adopting a sequential mixed-methods design.

The midline evaluation paints a bright picture on the girls' learning outcomes. Girls' both literacy and numeracy results have seen a significant facelift in comparison to baseline. The midline targets for both literacy and numeracy were overachieved by an encouraging 115 percent and 266 percent respectively. Nevertheless, in terms of literacy, girls were still found to be lacking critical/ analytical skills, as a result of which, over 30 percent of the girls are still deemed 'non-learners' in essay-drafting subtask of literacy test. Girls mainly attributed overall achievements made in learning outcomes to their engagement in girls' club classes. The teaching attitude of girls' club facilitators, use of interactive methods and participatory learning, among others, were some of

the key factors that the girls highlighted as drivers of their successful learning in the girls' club classes. However, despite the high-quality teaching and learning practices in girls' clubs, the midline evaluation observed that the same has yet to be translated into regular classrooms in the schools.

The learning outcome was found to be related with other intermediate outcomes as well. For instance, as a result of STEM II's layered supports in girls' education – both individual as well as at the level of household/ community – girls' engagement in household chores has significantly reduced as compared to baseline. This has given the marginalized girls the much-needed freedom to attend girls' club classes and engage in other out-of-school activities with friends. With regards to school governance, the evaluation found that study environment of school and the classroom affects girls' learning. Attendance rates of girls was found to be fairly good at over 85 percent at both baseline as well as midline, however, it was not deemed as a statistically significant factor determining girls' learning. Similarly, girls' learning experiences in the girls' club classes underscore the importance of teaching quality. However, the evaluation found a difference in the teaching quality in girls' club classes and regular school classes, an area for the project to further work on.

In regards to the transition, all the targets set by the project for transition outcomes based on baseline findings were found to have been achieved by midline. While transition rate of IS control girls, i.e., girls' mobility to higher grades at school, was higher than that in the treatment group during baseline, the trend has upturned by the midline, marking better transition rates in the treatment group in comparison to the control girls. None of the treatment girls in the evaluation sample were found to have dropped out, thanks to projects efforts in retaining the girls in school through different interventions at individual, community as well as school levels. A similar trend of increase in transition rates for SG and OOS groups, i.e. engagement in life-skills training, income generating activities, among others, was observed at midline evaluation. A number of SG and OOS girls in the sample were found to have initiated self-employment and local business following the life-skills trainings provided by the project. Apart from the chances of employability, girls' confidence and family status were also found to have scaled as a result of training and empowerment.

While recognizing the contributions made by the project, the midline evaluation also observes some of the key areas that the project can further scale-up or improve to gain maximum benefits for marginalized girls' education. As girls' club classes came out as one of the key drivers in increasing girls' confidence as well as learning, there is a possibility of scaling this intervention through partnership with local governments in the place. As the evaluation still puts girls' essay writing skills in question, project should extensively focus on enhancing girls' analytical thinking, comprehension and written expression. In fact, girls' club classes can be used as a platform to work on these weaknesses of girls' learning.

With regards to the difference observed in teaching practices of girls' club facilitators (GCF) and other teachers at school, the project should lobby with school and local government for a mechanism to enable sharing of skills, knowledge and experience among GCF and other school teachers. Only if the best practices of girls' club classes can be institutionalized into regular school

classes, the changes stirred by project in girls' learning outcomes can be retained and sustainably replicated.

Although the income generating skills provided by the project to SG and OOS girls has high degree of effectiveness, a limited number of SG and OOS girls in the sample reported to have already taken these trainings. In this regard, the project should look forward to expand the outreach of its life-skills training activities directed at SG and OOS girls by the end-line evaluation. Similarly, it is also of utmost importance that project works towards ensuring that the skills it imparts to the SG and OOS girls essentially translate into income-generating opportunities for them.

1. Background to Project

1.1. Project Theory of Change and Beneficiaries

STEM II's theory of change is that if girls are supported to make safe, healthy and successful transitions through secondary school and/or into secure livelihoods, then they will have increased individual and community resilience. To achieve this, STEM II aims at improving girls' educational outcomes, increase their access to income-generating activities, and cultivate an enabling environment for sustainable changes for girls' empowerment.

To achieve this vision, STEM II launched its project, building on STEM I which took an iterative approach to innovation, to refine a more holistic model that enables girls' access, and utilization of, formal education. STEM II aims to accomplish this by strengthening the enabling environment. There are several aspects of the STEM model that build girls' capacities, all of which are directly connected to the intermediate outcomes of this project's Theory of Change.

A. Barriers to learning

STEM has identified several barriers to preparing for, making and sustaining a successful transition to the next level of education, personal and/or economic empowerment. These barriers include, pressure for early marriage, early pregnancy, natural disasters, and lack of life and vocational skills. Several barriers to learning in schools include illiteracy, poor school infrastructure and lack of WASH facilities, inadequate reproductive health education and services, inadequately trained teachers, security and distance to schools. Other important underlying and less visible barriers include lack of gatekeeper support and enabling environment, gender inequalities and norms, gender-based violence, sexual abuse, lack of access to diverse markets for income generation, and politicisation of school governance activities. Qualitative findings during baseline study suggested a prevalence of instances of gender-based violence, mostly inappropriate touching, verbal abuse to girls and bullying. In order to address this challenge, project rolled out self-defence training for girls. 53.6 percent of the treatment IS girls said they have received the self-defence training. Out of them, over 70 percent said they would fight back (with words or physically) against the people carrying out inappropriate activities with them. Nevertheless, self-defence training should be understood as a caveat, especially as girls' ability to fight back is not the only area to be intervened in order to address the issue of gender-based violence and sexual abuse. Rather, it is equally important to work towards changing the behaviour and attitude of perpetrators as well, which the self-defence training does not cover.

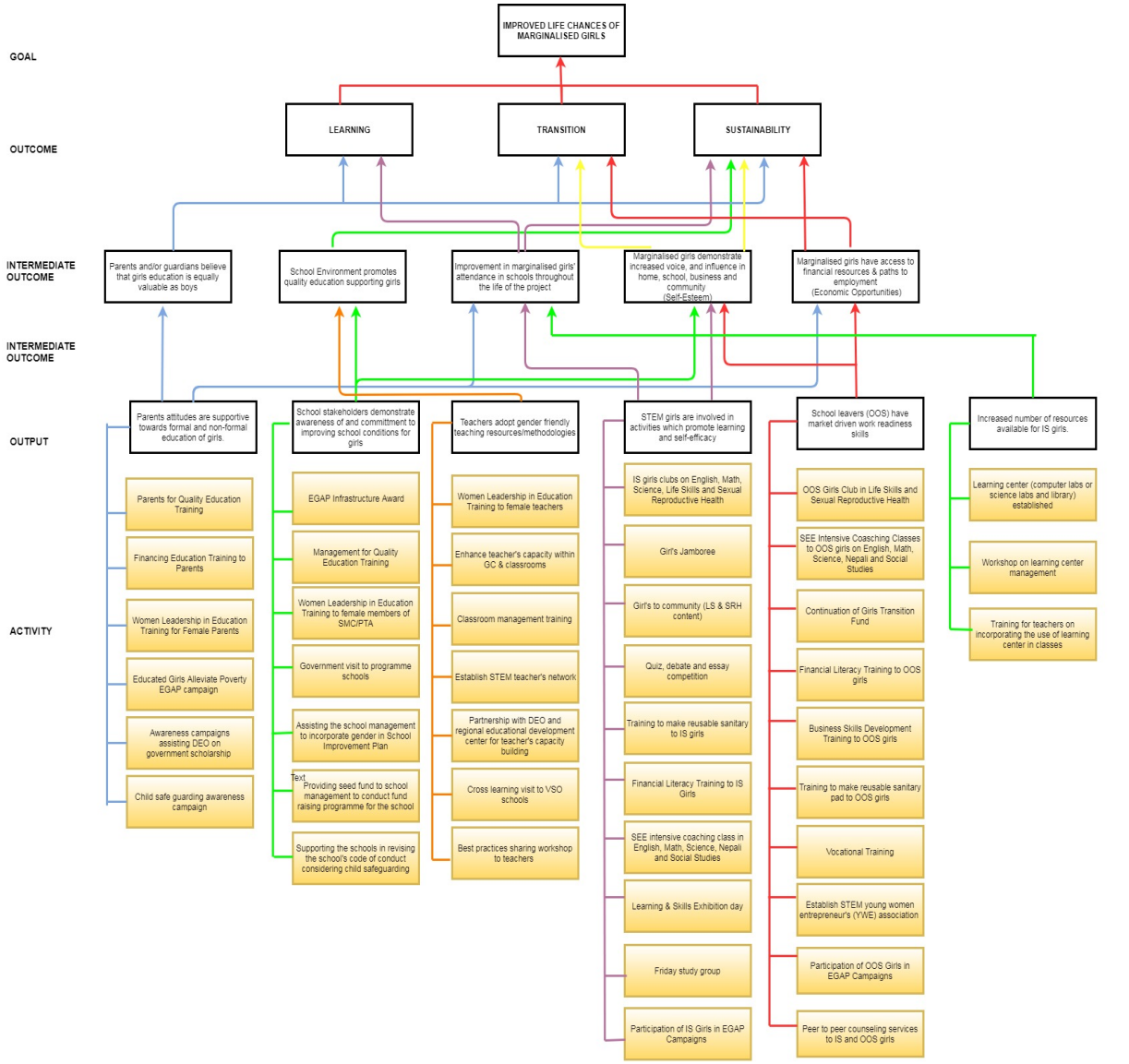
To increase active involvement of parents and community on girls' education, Mercy Corps and its partners have been delivering Parents for Quality Education (P4QE) training to community stakeholders. The project delivers training on Financing Education to parents and community stakeholders, disseminating information about government's scholarship provisions, and carrying out EGAP campaigns in project areas. To ensure that school environments (infrastructure and governance) are supportive of girls' education, STEM has been providing Educate Girls Alleviate Poverty (EGAP) Upgrade Awards to school that achieved the targets set by the project. The

project has also been working on increasing the SMC and PTA member's knowledge of their roles and responsibilities and making them more accountable towards their responsibility, thereby creating a sense of ownership of the school from the school management, teachers, students and the communities. Improved teaching quality increases students' performance in schools. To do this, Mercy Corps has been enhancing teachers' capacities within girls' clubs and classrooms and link the STEM teachers with district teacher's union. To increase marginalized (IS) girls' access to resources, the project has been operating girls' clubs, and increasing access to educational resources. To ensure that school leavers (referred to in this project as OOS girls - girls who have dropped out from STEM school from grade 6 to 10 after the year 2009) and school graduates (referred to this project as SG girls - girls who have graduate from STEM school grade 10 and have not enrolled in further education) have demand driven work readiness skills and better access to income generating activities, Mercy Corps has been implementing several activities. Those include enhancing OOS girls' knowledge on financial literacy and business skills, link girls to vocational training opportunities in Kailali, and establish the STEM Young Women Entrepreneurs Association. Additionally, the project has also been working on establishing and providing peer-to-peer counselling services and continue operating the Girls' Transition Fund, which offers OOS young women wishing to start or expand their businesses collateral-free low interest loans through a revolving fund that is provided by the project's four partner cooperatives.

Enhanced learning experiences combined with increased income-generation and asset building skills, enhanced life skills training, and improved gatekeeper perception will provide a holistic stepping stone, enabling girls to prepare for, and successfully transition to adulthood. These intermediate outcomes contribute to the STEM donor Girls' Education Challenge (GEC) Transition fund Outcomes of learning, transition and sustainability. Specifically, girls will increase their functional literacy and numeracy rates, improve financial literacy, and are equipped with new competencies, with the support of gatekeepers, parents and peer mentors make a successful and sustained facilitated transition to the next phase of education and empowerment. By engaging key stakeholders from the beginning, including those who have supported STEM I, the project aims at maximising the chances of strengthening the enabling environment for marginalised girls and young women in Kailali district. The impact of STEM II will be seen by marginalised girls who will have brighter futures, having successfully transitioned to productive participation in the workforce or further education, with increased self-efficacy and greater life skills to maintain personal and financial empowerment.

Most of the barriers highlighted in the baseline study continued to persistent during the midline evaluation as well. However, it has been observed that one of the barriers, 'lack of girls' study time at home', will need revision for the endline, as it was found that study time at home alone does not sufficiently cover the amount of time that girls devote to learning activities, especially in the girls' club classes. Apart from this, the number of households that reported that they were unable to meet basic needs has increased during the midline. This poverty characteristic has been taken into account for all sub-groups' analysis of learning, transition and intermediate outcomes. Details surrounding the changes in key characteristics, barriers and the external evaluator's observation on appropriateness of project activities has been discussed in further detail in section 2 of this report.

B. Theory of Change



C. Assumptions

This ToC is contingent upon a number of assumptions, some of which include: improved gatekeeper perception and support contributes to an enabling learning environment for marginalised girls and that increased access to economic opportunities coupled with learning will lead to economic empowerment for girls. The detailed assumptions are as follows-

- With improved classroom environment, child centric teaching methodologies, basic learning resources and parental support, it will together improve the learning of the girls. This will also support the girls to get promoted to a higher grade.

- As a result of different trainings like Financial Literacy, Business Skills Development, Vocation Skills it will help the Out of School Girls and School Graduates have job/business readiness skills. With these skills the girls are expected to have increased confidence to venture into the job market or self-employment.

- Similarly, income generating opportunities like Girls Transition Fund which is managed by local cooperatives by giving out collateral free low interest loans to school drop-outs and graduate girls will increase the financial status of the marginalized girls. The GTF is positioned in a way where the fund revolves which automatically expands it reach to other marginalized girls without the project and the cooperatives inject additional money after the project. The fund is expected to be handled in a transparent and accountable way by the GTF Management Committee and is owned by the community and local government.

- By working with the parents, providing counselling services through individual household visit and through EGAP campaigns the project expects to improve the school attendance of girls.

- With supportive family environment by balancing gender roles and responsibilities, parents regularly visiting their children's school and also engage in STEM II activities, it will motivate girls to actively participate and thrive at the household, school and community.

- When teachers are well trained and motivated to use the skills learned at the training in their classroom practices, the students will have better cognitive growth and higher learning achievements.

- The schools form and operationalize different functional committees in a meaningful and participatory way that contributes to safe and accessible services at school.

- All stakeholders are promoting the psycho-social well-being of the children.

The project primarily works with IS girls from grade 8 to 10 at the time of the project's phase 2 inception in 2017, OOS girls who have dropped out from STEM school (from grade 6 to grade 10 in phase I) and also the group who have graduated from grade 10 from 2014 till date but are

currently not enrolled in formal education (SG). The project has categorised the STEM II beneficiaries into three cohorts:

- In School (IS) (Grade 8 to 10)
- School Graduate (SG)
- Out of School (OOS)

IS girls

The IS cohort comprises of girls studying in STEM II's 30 intervention schools. At baseline, the project started its interventions with girls studying in grades 8, 9 and 10. At midline, most of the grade 8 girls had transitioned-to the upper grade 9, those in grade 9 transitioned to grade 10 and grade 10 girls at baseline appeared and graduated the national SEE board exams. As per the new grading system implemented as a part of new Federal Education Act, 2018[1], students studying in any grade are assessed on a letter grading system, where students are very much less likely to fail any grade. However, some of the students in grade 8 and 9 in the intervention schools were found to have repeated grades owing to poor performance in the final exams. This was also confirmed by the project's partner organization responsible in implementation of the project activities in Kailali. "Even though federal education act says no failure, the general practice in government school is still assessing the students on the basis of pass or fail," said a project staff from the MCN's partner organization. Therefore, at midline, external evaluators have tracked sample girls from all three grades 8, 9 and 10. Majority of girls who–were in grade 10 during baseline and graduated last year could not be tracked in the schools as many have moved either to higher grades in different colleges or migrated for studies and/ or work. Moreover, they are no longer receiving STEM's interventions (STEM tracks transition of IS girls up to SEE graduation), following their graduation from SEE as they have moved out of project area. However, a small number of these IS graduates in the sample have been tracked. However, as these girls were mostly tracked at the household level, their learning tests (SeGRA and SeGMA tests taken during midline evaluation) have not been conducted. This has also resulted in the difference in attrition rates reported for learning and transition samples during midline evaluation. Details around this have been discussed in Annex 3.

SG/ OOS girls

SG and OOS cohorts comprise of girls with two different characteristics respectively – a) those who graduated from grade 10 during project period in either phase 1 or 2 and did not enrol in further education and, b) girls who dropped out of STEM school or girls from the project area who have never been to school. Although SG and OOS are two different cohorts, most of the findings relevant to these groups have been merged together in this report, as in the baseline, as these groups receive the same interventions from the project.

Given below are the beneficiaries' grades and age:

[1] https://bit.ly/2WrEjOM

Table 1: Beneficiary grades and ages

	Grade/ Age	Baseline	Midline
IS girls	Grade 8 (now Grade 9)	1,168 girls	1,723 girls
	Age group	11-14 years: 642 15-17 years: 503 18-23 years: 23	11-14 years: 697 15-17 years: 989 18-23 years: 36 24-34 years: 1
	Grade 9 (now Grade 10)	1,721 girls	1,508 girls
	Age group	11-14 years: 507 15-17 years: 1,127 18-23 years: 86 24-34 years: 1	11-14 years: 446 15-17 years: 992 18-23 years: 70 24-34 years: 0
	Grade 10 (now SEE graduate)	1,571 girls	1,537 girls
	Age group	11-14 years: 84 15-17 years: 1,295 18-23 years: 190 24-32 years: 2	11-14 years: 84 15-17 years: 1,258 18-23 years: 193 24-34 years: 2
SG	Age group 1	12-14 years: NA	12-14 years: NA
	Age group 2	15-17 years: 80	15-17 years: 81
	Age group 3	18-23 years: 771	18-23 years: 816
	Age group 4	24-32 years: 20	24-32 years: 29
OOS	Age group 1	12-14 years: 5	12-14 years: 5

	Age group 2	15-17 years: 39	15-17 years: 68
	Age group 3	18-23 years: 607	18-23 years: 792
	Age group 4	24-32 years: 282	24-32 years: 321

Source: Project beneficiary data

Apart from the direct beneficiaries STEM II is working with a number of other indirect beneficiaries have also been identified. These are parents, teachers, head teachers, boys, girls from non-STEM grade in STEM school, SMC and PTA, local government, cooperatives and community members. The indirect beneficiaries are expected to benefit from STEM's community-level activities, sensitization, awareness, financial benefits as a result of employment opportunities to SG/ OOS girls, school-level benefits to entire school stakeholders through the construction of school infrastructures, materials, etc. The beneficiary profile remains the same from baseline.

1.2. Project Context

According to the Gender Gap Report (2018), Nepal has ascended several places from 111 to 105 in rank in the overall gender gap index. It has ascended seven spots in ranks by narrowing its gender gap in labour force participation as well as greater representation of women in parliament. The gender gap in enrolment in tertiary education has also been upheld and secured in position for the second year running. Additionally, it has also maintained its position as the top five climbers over the past decade on the overall Gender Index and on the Educational Attainment sub-index.

Over the past decade, Nepal has witnessed substantial changes in terms of gender equality. Be it representation in politics, health indexes, educational attainment or labour force participation, remarkable progress has been achieved. Women are well represented in politics ever since the welcoming of federalism in the new government structure, the health of women is improving due to access to better health services, enrolment in education is also increasing along with women presented with more opportunities in the labour force. These changes have not been just for show. The Global Gender Gap 2018 report validates these developments through its indexes. According to the report, Nepal has been ranked as the second-most improved country in the world on Educational Attainment and third-most improved globally on the overall Index and on Health and Survival. The report states that Nepal has closed its education gender gaps by 18–19% in the past 10 years.

Although improvements like these have been observed, it is not uniform throughout the country. These achievements do not hold true for women and girls across all communities, ethnicities, religion, geographical area and class. Our traditional and socio-cultural norms, rituals, practices,

gender stereotype and geographical terrain hinder the access of girls to adequate education, health facilities along with labour participation and job opportunities. Along with girls, various excluded ethnic and caste groups in the Far West face high levels of poverty and are characterized by low attainment levels in its development indicators namely economic, education and health. These said groups have comparatively very low access in productive resources, national policy and governance structures. Even though the representation of women and marginalized ethnic groups is increasing, a lot of work is still to be done for their meaningful participation. Women and girls in far-western region of Nepal face barriers especially when it comes to education. This discrimination is prevalent in STEM's project district Kailali. The girls of this district are marginalized due to the gender-based discriminatory practices which comprise of unequal access to quality education, absence of decision-making roles in the household, unfair access in economic assets, lack of division in household chores and unequal pay in the labour market to name a few.

The scenario of girls' education in Kailali is slowly but gradually improving over the past few years. Despite these developments, girls in Kailali are yet to be released from different forms of marginalization that still exist. According to the government officials consulted during the evaluation, a lot of changes in the trend of girls' education can be attributed to the project's interventions. There have been some changes in parental attitudes towards girls' education. Parents now understand the importance of educating their daughters and have reduced their burden of household responsibilities. Nevertheless, parents continue to invest more time and money in boys' education. The families targeted by STEM's interventions are usually economically underprivileged. Therefore, as primary wage earners, boys are automatically given preference to access higher quality education, while girls must bear the brunt of household workload. Due to barriers such as time poverty, girls still face challenges in passing their exams and as a result are dropping out of school. Girls are also dropping out of school due to early marriage, according to stakeholders interviewed by the STEM II team for its gender analysis report. Linkages related to girls' education with economic well-being, improved health and nutrition outcomes in children and family, and overall societal welfare were identified by the respondents in the gender analysis report.

In recent years, many plans and policies have been designed for greater inclusion of girls' education, although in practice challenges remain. The School Sector Reform Plan (SSRP) implemented from 2009 to 2016 has made the most notable changes. The plan had 'equity and social inclusion' as one of its fundamental focuses. It predominantly stated that it 'would focus on girls and women and children from educationally deprived groups so that they participate equally and attain equitable results.' Numerous measures were taken under the SSRP to ensure equity in the education sector including scholarships for girls, a midday meal program, the 'Welcome to School' advocacy campaign, ensuring an improved learning environment at schools and partnering with I/NGOs.

The SSRP followed up by the School Sector Development Programme (SSDP) (2017 - 2023) also states 'equity' as one of its core focus areas. The SSDP aims to ensure that the education system is inclusive and equitable in terms of access, participation and learning outcomes with a special focus on reducing disparities among and between groups having the lowest levels of access, participation and learning outcomes. In line with the SSDP, schools in Kailali have already started

and will until 2023 look to increase the participation and completion of girls in secondary education through strategies aimed at (i) push factors such as strengthening the gender network and peer support and the establishment of gender-sensitive learning environments that take the specific needs of adolescent girls into account, and (ii) pull factors such as ending early marriage and reducing the expectation of girls' involvement in home based chores and labour. Moreover, programmes to support outstanding students on a merit basis will be introduced and schools will expand school-based technical and vocational programmes, prioritizing the provision of these subjects in secondary schools in communities with low socioeconomic status. Additionally, the SSDP will also implement strategies to increase the access to secondary education of students from families with low socio-economic status by providing needs-based scholarships. Apart from SSDP, the constitution for the first time has placed education as one of the main responsibilities of the provincial governments regarding it as the central pillar of newly formed provinces. It has also guaranteed education as the fundamental right of every citizen, which includes right to access to education and right to free education up to the secondary level.

However, constructing plans and policies were not enough to support implementation of girl's education in the district. Specific targeted interventions like that of STEM are playing their role in empowering the marginalized girls by helping cement a supportive environment. In this regard, the project aims to help girls by accessing education, and proper technical support in economic activities. The lives of the marginalized girls have been made easier and more goals-oriented ever since the inception of STEM through a series of proven interventions cantered on the ToC. STEM is running literacy and numeracy along with financial literacy classes and vocational trainings for all groups of girls: school going as well as SG and OOS girls. STEM also supports the girls' transition pathways to income generation. Along with direct interventions for girls, it also provides trainings for teachers to improve their teaching quality and school management for better school governance. Awareness programs on importance of girl's education are also run for the parents. School infrastructures have been built and repaired to ensure quality education for all students - both boys and girls. Additionally, academic support has also been provided through after school classes in English, Maths and Science along with life skills training, self-defence training and ASRH education.

1.3. Key Evaluation Questions and Role of the Midline

The quantitative data collection for midline evaluation was conducted in February 2019 and qualitative data in April 2019 (the second year of project implementation) to explore and map changes observed among the beneficiaries from baseline (January 2018) to midline, in line with the evaluation questions outlined in the M&E framework of the project.

In order to seek answers to the evaluation questions, the external evaluator adopted a quasi-experimental longitudinal mixed-methods approach. In terms of reporting, quantitative data was used to examine the changes in girls' learning, transition, sustainability of the project and the indicators and targets spelled out in the project's logical framework. Similarly, qualitative data was used to explore the relationships between outcomes and intermediate outcomes, and answer 'how' and 'why' aspects of the trends observed in quantitative findings. The midline evaluation report presents quantitative and qualitative findings together, where findings from quantitative

exercises have been to explore deeper and confirm or challenge qualitative findings, and vice-versa.

While the baseline evaluation was conducted using concurrent data collection in mixed-methods approach, i.e., simultaneously administered quantitative and qualitative data collection, the midline evaluation undertook a sequential approach to data collection. As a part of this, qualitative data collection was conducted after the completion and preliminary analyses of quantitative findings. This allowed the external evaluator to streamline qualitative discussions as per the emerging findings from quantitative surveys and learning tests.

The evaluation questions are designed to assess relevance, effectiveness, impact, Value for Money (VfM) and sustainability of the project. The evaluation questions address to all the outcomes and IOs mentioned in the log-frame, as the questions cover all the overarching aspects of the ToC. The evaluation questions also touch upon all the barriers mentioned in the ToC pertaining to household environment determining girls involved in household chores and study time, child protection, transition into higher education or other economic pathways, among others. In a bid to answer these evaluation questions, the midline evaluation has explored the impact of barriers in learning, transition and sustainability.

As in the baseline, the answers to these questions provide an assessment of how well the project activities are suited to achieve the outcomes and intermediate outcomes for the project. This will help the project decide during subsequent evaluation point as to whether some of its interventions need modification or whether any additional interventions are still required. From an evaluation point of view, the questions are adequately placed to explore the cause-effect relationship within the project.

The key evaluation questions are as follows:

1. **Was STEM II successfully designed and implemented?**

    a) How successful was the project in targeting marginalised girls?
    b) Did STEM II design effective and efficient interventions?
    c) What lessons can be learned from the MCN experience of implementing STEM II?

2. **What impact did STEM II have on the learning and transition of marginalised girls?**

    a) What was STEM II's impact on enrolment and retention of girls in Formal Education (FE)/Non Formal Education (NFE)?
    b) What was the impact of the project on the learning and transition outcomes of the beneficiaries?
    c) What was the impact on school level indicators of performance such as improved attendance, grades and performance of the beneficiaries?
    d) Did the impact of the project represent good VfM?
    e) What aspects of the programme did not work well and why?

3. **What works to increase the enrolment, retention, learning and transition of marginalized girls?**

   a) What impact did STEM II have on barriers to educating girls at the individual/household, community and institutional level?
   b)
      i. Which STEM II approaches were most successful in increasing retention and learning of marginalised girls?
      ii. What were the drivers for increased attendance of girls in both formal classes and Girls Club?
      iii. What were the drivers for successful transitions of the girls?
      iv. Did improving the school governance and regularly updating SIPs as per school need contribute towards girls learning and transition achievements and promote girls sensitive education?
      v. Did teachers adopting girl-friendly teaching resource/methodologies increase girls attendance, class participation and learnings?
      vi. What were the contributors to increased self-efficacy of the girls?
      vii. Did the level of self-efficacy have any impact on attendance, learning and transition of marginalised girls?

   c) Gender inequalities theme: How did girls' experience of gender inequality interact with educational opportunity?
   d) Dimension of marginalisation theme: How did girls from different ethnicities experience of marginalisation interact with educational opportunity?
   e)
      i. How have the vocational skills, financial literacy and business development skills contributed for the girls to prepare for their job and entrepreneurship readiness?
      ii. How have the income generating activities - Girls Transition Fund (GTF) or other employment contributed to marginalised girls' economic status and self-efficacy?

4. **How sustainable were the activities funded by the GEC and was the programme successful in leveraging additional interest and investment?**

   a) How successful was STEM II in leveraging funds?
   b) What STEM II activities are sustainable? Has STEM II made a substantial impact?
   c) Did the engagement of different partners (private sector, civil society and government) contribute more or less to the longer-term sustainability of the programme or helped to create a more sustainable environment to girls' education?
   d) Has there been project/activity ownership from the girls, school, their parents, communities and other stakeholders?

5. **What worked best to change behaviours and practices?**

a) What worked to positively change behaviour and practices of marginalised girls, their parents, communities and schools?
b) Did changing parents and community members attitudes towards girls formal and non-formal education increase their attendance, learning and transition?
c) Which part of EGAP campaigning was found to be most effective by the girls, boys, their parents, communities and schools?

6. What were the unintended outcomes of the project, if any?

a) Did the emphasis on changing parents' attitudes towards the education of their daughters have any impact on their aspirations for their sons' education and/or their personal educational aspirations?
b) Have the parents welcomed untouched avenues for financial resources in order to support their daughters' education?
c) What sort of impact did the project have on boys?

2. Context, Education Marginalization and Intersection Between Barriers and Characteristics

2.1. Changes in barriers and characteristics since baseline for key subgroups

This section explores the changes in barriers and characteristics of IS and SG/ OOS girls since baseline. The barriers and characteristics discussed here were identified during baseline, based on the project's theory of change.

Table 2: Characteristics and barriers of re-contacted IS girls

CHARACTERISTICS AND BARRIERS (Re-contacted IS Girls)		
	Midline value	**Baseline value**
BARRIERS		
Barriers at home/ community level		
Fairly unsafe or very unsafe to travel to school	5.75%	2.3%
Has to perform household chores for 3 hours or more than 3 hours	13.8%	77.32%
Doesn't get support to stay in school and do well	1.43%	0.87%
Studies for 1 hour or less	7.2%	31.39%
Involved in any form of paid work	1.7%	1.45%
Takes more than 1 hour to reach school	0.7%	0%

Attends school only half the time	3.3%	0%
Barriers at school level		
Doesn't feel safe at school	0.7%	0%
Feels disturbed in concentrating at school	0.7%	4.94%
No seats for all students	1.8%	1.74%
Doesn't use drinking water facilities at school	1.79%	0%
Doesn't use toilet at school	0.4%	0%
Toilets are cleaned only 'sometimes'	35.7%	50%
Lack of sanitary pad disposal facility	52.7%	58.43%
Disagrees teachers make them feel welcome	10.79%	2.03%
Agrees teacher treats boys and girls differently	24.82%	5.23%
Agrees teacher are often absent from class	41.72%	13.08%
CHARACTERISTICS		

Household characteristics		
Girls living without both parents	3.45%	3.19%
Married	0.60%	0%
Primary caregiver/ head of household has no education	17.6%	28.2%
Households having 5 or more than 5 members	76.4%	77.61%
Poverty characteristics		
Household not having land for themselves	6.1%	12.01%
Roof made of hay	2%	3%
Unable to meet basic needs	17.90%	0%
Gone hungry to sleep many days in the past year	0.3%	0%
Cultural characteristics		
Language of instruction at school different from mother tongue	49.3%	58.13%
Girl finds language of instruction at school very difficult to understand	0.5%	0.5%

Source: Girls and household surveys | n=437

As presented in Table 2 above, some changes have been observed in the barriers for IS girls reported at home/ community and school levels. For instance, the percentage of girls who have to perform household chores for three hours or more than three hours has decreased significantly from 77.32 percent at baseline to 13.8 percent at midline. The qualitative findings of midline evaluation suggest this change is a result of girls' engagement in girls' club classes and parental awareness on girls' education, enhanced through family dialogue and P4QE (parents for quality education) trainings provided by the project. Further evidence showcasing this has been presented in learning 'IO 1' sections of this report. 1 This has been further discussed in the Learning section in this report. Similarly, table 2 also shows a sharp decline in the percentage (from 31.39 percent at baseline to 7.2% at midline) of girls studying for one hour or less than an hour at the household. This can again be attributed to the project's intervention aimed at increasing the study time of the girls, as directed by IO 1.

Other pertinent barriers at school level are the lack of cleanliness of toilets, where despite a decrease in the percentage of girls who said toilets are clean only 'sometimes' from baseline, the number is still high at 35.7 percent. Likewise, the status of sanitary pad disposal facility has also seen some improvement since baseline, however, still high at 52.7 percent.

In terms of the barriers related to teaching quality, girls who disagreed with the statement that teachers make them feel welcome in the classroom increased from 2.03 percent at baseline to 10.79 percent at midline. A higher percentage of girls also reported that teachers treat boys and girls differently (from 5.23 percent at baseline to 24.82 percent at midline). Similarly, while at baseline 13.08 percent of the girls agreed that the teachers are often absent from class, the same has gone up to 41.72 percent at midline. The increase in the percentage in barriers related to teaching quality suggests that the girls are increasingly becoming more confident than before in terms of reporting teachers' attitudes towards them and practice of learning in school. This can be attributed to the project interventions that are focused around increasing girls' self-confidence through engagement and interactions in girls' club and other school-level intervention activities.

Likewise, some changes have also been observed in the key characteristics of the girls and their respective households. In terms of household characteristics, the size of the household still seems to be a pertinent characteristic with about 77 percent of the girls stating that their respective households have five or more than five members. A sharp decline has been observed in the percentage of households with primary caregiver/ HoH with no education. At the baseline, 38.24 percent of the household respondents stated the primary caregiver of the girl/ head of the household is 'illiterate'. However, during the midline evaluation, the pattern of options given to the respondents for this particular question was modified based on GEC's template, where the lowest education level mentioned was 'no school level completed'. Therefore, taking into account the fact that some people could be literate even though they did not complete any school level, the respondents who are actually illiterate did not have a valid option to select for this question. As a result of this, the number of respondents who selected 'don't know' as an option for this question has gone up significantly. Nevertheless, although the quantitative figure presents a lower percentage of primary caregiver/ head of household with no education, our qualitative findings suggest that there are a greater number of households with uneducated/ illiterate head of

household/ girls' primary caregiver. Given this, primary caregiver/ head of household with no education is still an important household characteristic to be considered.

Apart from that, households reporting that they are unable to meet basic needs has gone up from 0 percent at baseline to 17.90 percent at midline. Out of the households who said they are unable to meet basic needs, more than 82 percent are farmers, daily wage labourers or unemployed. Heavy reliance on traditional farming and other contextual factors resulting in a decrease in agriculture production in 2017-2018 overall in Province 7, of which Kailali district is a key producer of paddy or other seasonal crops, is one of the reasons behind increase in this poverty characteristic *(discussed further in section 'Contextual factors or changes in barriers or characteristics that may impact IOs and Outcomes' below)*. In this light, poverty has been identified as one of the barriers that could affect girls' education. When families are struggling to meet basic needs, priorities like education and health get compromised and this might have a negative impact on outcomes and IOs.

In terms of cultural characteristics, as 49.3 percent of the girls reported the language of instruction at school is different from mother tongue, this is an important characteristic to consider. However, only 0.5 percent of the girls mentioned that they do find it difficult to understand lessons at school due to difference in language of instruction and their respective mother tongues, so this is not necessarily a barrier.

Table 3: Characteristics and barriers of SG/ OOS girls

CHARACTERISTICS AND BARRIERS (SG/ OOS girls)		
	Midline value	**Baseline value**
BARRIERS		
Barriers at home/ community level		
Has to perform household chores for 3 hours or more than 3 hours	75.54%	97.17%
Doesn't get support to participate in training or initiate business	0.64%	1.45%
CHARACTERISTICS		

Household characteristics		
Girls living without parents	8.15%	5.32%
Married	41.1%	38.87%
Primary caregiver/ head of household has no education	25.4%	38.24%
Households having 5 or more than 5 members	82.1%	87.14%
Poverty characteristics		
Household not having land for themselves	3.4%	10.34%
Roof made of hay	1.3%	1.88%
Unable to meet basic needs	14.7%	0%
Gone hungry to sleep many days in the past year	0.3%	0%

Source: Girls and household surveys | n=319

As shown in Table 3, the barriers for SG/ OOS girls have not seen any major changes since baseline. Engagement in household chores is a pertinent barrier among SG/ OOS girls as 75.54 percent of the SG/ OOS girls said they have to perform household chores for 3 hours or more than 3 hours every day. However, there has been a percentage decline in this barrier, as the same at baseline was 97.1 percent.

Likewise, apart from the characteristic 'primary caregiver/head of the household has no education, no major changes in household characteristics were observed among SG/ OOS girls (explanation above). As with IS girls, households that reported being unable to meet basic needs have gone higher in percentage, compared to baseline (from 0% to 14.7%). Reasons like high

dependency in traditional agriculture and involvement in volatile income generation activities like day wage earning can be attributed to this. Among the SG/ OOS girls, 131 girls out of 319 reported that they are married. Out of that only eight girls are under the legal age of 20.

2.2. Appropriateness of Project Activities to the Key Barriers and Characteristics

STEM has identified several barriers to preparing for, making and sustaining a successful transition to the next level of education, personal and/ or economic empowerment. The barriers and key activities that the project has been implementing to combat the barriers have been discussed in Section 1 of this report. However, in light of the findings presented above, a number of barriers mentioned in the ToC are absent among girls. For instance, as shown in Table 2 above, barriers related to safety while traveling to school, lack of family's support to stay in school and do well, involvement in paid work, school distance, attendance, among others, do not prevail as barriers. The only pertinent barriers at home/ community level are engagement in household chores and girls studying for 1 hour or less. This is exactly in line with the baseline findings. In that regard, project's interventions acting upon the baseline findings surrounding girls' engagement in household chores and little study time at home through increased parental engagement and girls' club classes, have been highly relevant. As these barriers still prevail, the activities focused around these barriers are still appropriate and it is advisable to carry on with these activities until the next evaluation point. In terms of evaluation, however, it was found during midline evaluation that girls' study time has increased overall and not particularly within the household. Therefore, it is recommended that the indicator measuring girls' study time be revised to incorporate girls' study time in general, which will include girls' engagement in girls' club classes, group work and activities with peers, among others.

Similarly, school-level barriers mentioned in the ToC, such as school safety and disturbance resulting in lack of concentration are not relevant, given a limited number of girls identifying these as barriers at midline evaluation. However, some of the WASH related barriers such as cleanliness of toilets and lack of sanitary pad disposal facility are still pertinent. Percentage of girls reporting that the toilets in their respective schools are cleaned only 'sometimes' has decreased from 50 percent at baseline to 35.7 percent at midline. This means project's activities focused around cleanliness of toilets through school-level support has been effective to some extent. However, the number of girls who stated that the school lacks sanitary pad disposal facility has not reduced much (from 58.43 percent at baseline to 52.7 percent at midline), warranting further effort towards addressing this barrier.

A stark difference has been observed in barriers related with teachers and teaching quality. As also discussed above, higher percentage of girls have disagreed teachers make them feel welcome while also confirming that the teachers treat boys and girls differently and teachers often remain absent from class. At one hand, this means that the girls are increasingly becoming vocal about their experiences of learning at school. This also reflects on the girls' increasing self-confidence, thanks to girls' club classes and other engagement activities rolled out by the project.

On the other hand, this also brings up the need to intensify project activities with teachers enhancing their behavioural change, changing their perception towards learning activities in the classroom. Meanwhile, as also discussed in the 'learning' section below, during qualitative consultations, a number of girls stated that the teachers in the girls' clubs are more interactive and friendlier in nature in both girls' club classes as well as regular school classes. The project can scale up on it by developing a mechanism to transfer skills of trained teachers with other non-trained teachers at school. This is something to look at for the next evaluation period. Likewise, in terms of characteristics of IS girls, the most relevant characteristics, based on table 2, are households having 5 or more than 5 members, households with primary caregiver. HoH having no education, households unable to meet basic needs and girls who speak different primary language than the language of instruction at school.

Likewise, project's activities towards reducing the burden of household chores off SG/ OOS girls seems to have been appropriate to an extent. However, despite a decrease in percentage from baseline to midline, as 75.54 percent SG/ OOS girls said they work 3 or more than 3 hours at home, this warrants concerted efforts towards mitigating this barrier. Interventions surrounding this barrier can be deemed to be still appropriate. In terms of household characteristics, girls living without parents did not emerge as a pertinent barrier for SG/ OOS girls, as during qualitative consultation, it was found that a number of SG/ OOS girls are actually allowed by their households to live away from home and work. Similarly, although 41.1 percent SG/ OOS girls are married, only eight of them are under the legal age of 20. Therefore, as suggested by ToC, early marriage does not seem to be a major barrier in this case. Other appropriate characteristics to consider, meanwhile, are households having 5 or more than 5 members and households and households that are unable to meet basic needs, as discussed above.

2.3. Contextual factors or changes in barriers or characteristics that may impact IOs and Outcomes

As presented in Tables 2 and 3, there has been a sharp increase in the percentage of households that report being unable to meet basic needs. The percentage for this characteristic has gone up from 0 percent to 17.90 percent among IS girls and 0 percent to 14.7 percent among SG/ OOS girls. Most of the households (above 80 percent) that stated they are unable to meet basic needs are either farmers, daily-wage earners or unemployed for both IS as well as SG/ OOS groups. As already mentioned above, a contextual factor affecting this change in percentage could be the decrease in agricultural yield in the year 2017-18 (midline period) compared to 2016-17 (baseline period), as shown by the statistical figures of Nepal Government's Department of Agriculture (DoA)[2]. According to the figures of DoA, the paddy production decreased from 593,327 metric tonnes in the fiscal year 2016-17 to 506,457 metric tonnes in the fiscal year 2017-2018. This is a contextual factor that can be assumed to have affected the poverty status of households that are dependent on agriculture. However, as this was not a research area that the external evaluator

[2] http://www.doanepal.gov.np/downloadfile/Final%20Report%20Inter-Provincial%20Dependency%20on%20Agriculture%20-%20DVN%202018_1548834926.pdf
file:///C:/Users/HP/Downloads/STATISTICAL%20INFORMATION%20ON%20NEPALESE%20AGRICULTURE%202073_74%20(2016_17).pdf

extensively focused during midline evaluation, it cannot be guaranteed that this is the only reason that led to the increase in the numbers of households who reported they are unable to meet basic needs.

Apart from this, no other contextual factors were found to have affected any of the barriers and characteristics discussed in this section and in the theory of change.

2.4. Intersection between barriers and characteristics

This section presents an intersection between barriers and characteristics of IS and SG/ OOS girls separately. As identified in sections above, the key characteristics of IS girls to look at are the households that are unable to meet basic needs, households having five or more than five members, primary caregiver having no education and girls who speak different primary language than the language of instruction at school. Meanwhile, the key barriers identified for IS girls are girls studying one hour or less than one hour at home, girls who contribute 3 hours or more than 3 hours to household chores every day, lack of cleanliness of school toilets, teachers not making the girls feel welcome, different treatment of girls and boys by teachers, school toilets without sanitary pad disposal facility and teachers' absenteeism from class.

Likewise, for SG/ OOS girls, the key characteristics to look at are the households that are unable to meet basic needs, households having five or more than five members and primary caregiver having no education. The key barrier identified for SG/ OOS girls, as explained in above sections, is the girls who contribute three hours or more than three hours to household chores every day.

As presented in Table 4 below, there has been a decrease in the number of girls who study less than one hour per day for all the characteristics discussed except those households that are unable to meet basic needs, a new poverty characteristic that emerged significant during midline evaluation. 5.76 percent of the girls whose households are unable to meet basic needs study less than an hour at home. Apart from this, 8.69 percent of girls who live in a family of at least five members study less than an hour a day, in comparison to the baseline percentage of 31.3 percent for the same. Similarly, 10.21 percent of the girls whose primary language is different from the language of instruction at school said they study less than one hour a day, which was again at a higher 37.7 percent during the baseline. This suggests that the number of girls who study less than an hour per day has reduced significantly in the midline, highlighting the effectiveness of project activities. This has been discussed in greater detail in the relevant sections in the findings discussed in this report, i.e. learning section and IO 1.

A similar trend can also be observed when we look at the number of IS girls who contribute 3 or more than 3 hours to household chores. Except for the characteristic 'unable to meet basic needs', the data presented in Table 4 below shows that there has been an improvement in terms of reducing girls' engagement in household chores. However, as 40 to 50 percent of the IS girls – looked at from all the pertinent characteristics – stated that they still devote three or more than three hours to household chores every day, the midline finding shows that this is still a pertinent barrier that the project should extensively focus on. This has also been discussed in greater detail in the relevant learning and IO 1 sections of this report.

From the data presented in Table 4, it can be observed that cleanliness of toilet is still a major issue for girls, as 23.07 percent of girls who live in the households that are unable to meet basic needs, 42.23 percent of the girls who have five or more than five family members, 33.33 percent of the girls whose primary caregiver has no education and 37.95 percent of the girls whose primary language is different from the language of instruction at school, said school toilets are cleaned only sometimes. This is also corroborated by observation made by researchers during midline evaluation data collection, as most of the toilets visited were in sorry state, with no running water and/ or sanitary pad disposal facility.

The availability of sanitary pad disposal facility in the school toilet still seems to be a problem for many. A project staff member interviewed in the course of this study said that this is mainly due to schools' negligence and inability to regularly maintain facilities provided by projects like STEM II. "The facilities like sanitary pad disposal bins remain in the toilet unless they are not damaged," the project staff said. "Once these facilities become damaged, schools rarely take any initiative to replace or repair them." The project staff also said that STEM II has recently rolled out interventions to ensure a more sustainable solution to the problem of sanitary pad disposal, the effect of which might be evident by the end-line evaluation.

As already discussed above, barriers related to teachers' treatment of students has emerged to be of a higher concern at midline evaluation. While at one hand this indicates that the girls have become more vocal and confident than ever in reporting their experiences at school, on the other hand, this also showcases a dire need to action program interventions towards mitigating this challenge in the subsequent evaluation period by increasing engagement with teachers, especially those that are not trained by STEM II.

Furthermore, as suggested by DFID's Regional Education Advisor and FM's disability expert the midline HH survey also included questions around girl's disability to triangulate disability information provided by the girls in the girls' survey. While the households were asked child functioning questions, the girls were administered the Washington Group questions on disability. As in the baseline, the disability prevalence was recorded at below 1 percent at the midline, hence disability has not been presented as a barrier in this report. Data on disability prevalence have been presented in Annex 3 and Annex 9.

The disability status was low primarily because there were largely limited number of girls with disabilities identified as project beneficiaries during Phase 1, resulting in a limited inclusion of girls with disabilities who may have dropped out of school earlier. The project worked with girls from grade 6 and 10 during baseline of phase 1 and the trend of GwDs dropping out of school before that. Also, since the project was under innovation window, the centre of project design was around education marginalization, where intersectionality like disability was considered as one of the characteristics to be explored but was not central to the design itself. However, the project has included activities in inclusive education after receiving the feedback from fund manager, i.e. EGAP campaign with disability messages, household visit of CwD, inclusive education training to teachers and referral of students with disability to local government for disability card. The low number of disability coverage of midline evaluation is also further verified by MCN's beneficiary

mapping data, where out of total beneficiaries, only nine IS girls and 4 SG/ OOS girls were reported to have some form of disability. The fact that none of the FGD and KII respondents mentioned 'disability' as being a challenge points to the fact that disability was not really a problem for the girls in both quantitative as well as qualitative sample. Apart from this, even among the girls surveyed during midline data collection, it was difficult for the external evaluator to exactly determine between 'some' and 'a lot' of functional difficulties as the responses were recorded exactly as provided by the girls' caregivers/ head of the household, limiting the accuracy of data in this area.

In terms of SG/ OOS girls, table 5 shows that the prevalence of girls who work for three or more than three hours is higher in SG/ OOS group in comparison to the IS group. This is understandable as the SG/ OOS girls spend more time in the household while the IS girls are engaged in studies in school and girls club classes. However, as the number of SG/ OOS girls contributing three or more than three hours to household chores is higher at above 70 percent for all three characteristics discussed, it is advisable to the project to roll out interventions to reduce the amount of household burden from SG/ OOS girls as well.

Table 4: Intersection between key characteristics and barriers of IS girls

		CHARACTERISTICS			
		Unable to meet basic needs	**Households having 5 or more members**	**Primary caregiver having no education**	**Girls who have different primary language and language of instruction**
BARRIERS	**Girls studying 1 hour or less than 1 hour at home**	5.76 % Baseline: 0 %	8.69 % Baseline: 31.3%	6.25% Baseline: 40 %	10.21% Baseline: 37.7 %
	Girls who contribute 3 hours or more than 3 hours to household chores	43.10 % Baseline: 0 %	48.48 % Baseline: 80 %	47.54% Baseline: 27.3 %	48.22% Baseline: 88.1
	Toilets are cleaned only sometimes	23.07% Baseline: 0 %	42.23 % Baseline: 51.93 %	33.33 % Baseline: 51.81 %	37.95 % Baseline: 47.45 %
	Disagrees teachers make them feel welcome	11.53 % Baseline: 0 %	12.07 % Baseline:1.29 %	14.58 % Baseline: 14.58%	14.59 % Baseline: 1.69 %
	Agrees teachers treat boys and girls differently	32.69 % Baseline: 0 %	20.77 % Baseline: 2.58 %	25 % Baseline: 5.45 %	20.43 % Baseline: 7.62 %
	Toilets without sanitary pad disposal facility	57.69 % Baseline: 0 %	55.82 % Baseline: 79.46 %	52.08 % Baseline: 21%	55.47 % Baseline: 56.54%

	Agrees teachers are often absent from class	38.46 % Baseline: 0 %	40.57 % Baseline:17.41 %	41.66 % Baseline:10.90 %	43.06 % Baseline:13.93 %

Source: Girls and household surveys | n=437

Table 5: Intersection between key characteristics and barriers of SG/ OOS girls

	CHARACTERISTICS			
BARRIERS	**Barriers:**	**Unable to meet basic needs**	**Households having 5 or more members**	**Primary caregiver having no education**
	Girls who contribute 3 hours or more than 3 hours to household chores	77.77 % Baseline: 0 %	71.92 % Baseline: 80 %	72.83 % Baseline: 77.3 %

Source: Girls and household surveys | n=319

Despite some differences observed among certain characteristics as discussed above, in general, a significant reduction in the number of girls studying less than one hour per day can be observed, and related to this, girls' involvement in household chores has also significantly reduced. This is a positive achievement towards addressing both the barriers discovered at baseline. In this regard, the interventions of STEM II can be said to have created positive results among project beneficiaries. This is further corroborated in reference to the control-treatment differences presented in the learning section and subsequent sections on IOs in the following chapters.

Meanwhile, Section 2 of the chapter on 'Key Outcome Findings' that presents subgroup analysis of learning outcome suggests that girls' study-time at home does not have a significant impact on their learning scores, which contradicts with the baseline finding that established study time as a major barrier for girls' learning. However, during qualitative discussions, girls strongly mentioned that their overall study time has increased as a result of their engagement in tuition classes and girls' club classes, hence the significant improvement in their learning scores. In that sense, it can be inferred that the subsequent evaluation point should take into account girls' study time, not just in terms of the time that they get to study at home, but also the hours they spend learning outside the home, especially in the girls' club classes and tuition/coaching classes after regular school hours. However, it should be noted that comparing the overall study time after school – both at home as well as outside home – will not be possible at end-line, as study hours at home have only been considered at baseline and midline evaluations.

Apart from this, teachers' attitude towards the girls (about making the girls feel welcome at classroom, about treating boys and girls differently and about teachers' absenteeism), have emerged as pertinent barriers at school level, that the project needs to extensively focus on. In terms of characteristics of the household, as higher number of households in midline evaluation said that they are unable to meet basic needs, this characteristic, along with others presented in

Table 4, will be referred to while running any sub-group analysis of learning and transition outcomes, and also the subsequent IOs.

***Project*:** The barriers identified by the evaluators in midline such as HH chore burden, study time at home, absence of sanitary pad disposal facilities at school, primary language different from the language of instruction are the same as the baseline. Thus, the designed activities are still fit to address these barriers. Therefore, while implementing activities the project prioritizes participants based on the barriers identified by the evaluators as well as from the project's internal monitoring. Based on the midline findings, the project does not see the need to change the Theory of Change.

3. Key Outcome Findings

3.1. Learning Outcome

As with the baseline study, Secondary Grade Reading Assessment (SeGRA) and Secondary Grade Mathematical Assessment (SeGMA) tools were used to assess literacy and numeracy scores of sample girls, respectively. The tools used for midline evaluation were calibrated in the inception phase of baseline evaluation and piloted for a second time for midline as the tool had few changes. These can be found in (annex/ appendix 12).

3.1.1. Literacy scores

A. Overall results against target

Table 6 below shows the, mean SeGRA score obtained by the treatment girls is higher than their control counterparts overall and across each grade and their respective standard deviations. Similarly, Table 7 shows the difference in literacy scores of both treatment and control groups since baseline and Table 8 shows a difference-in-difference analysis presenting the project's performance against target set at baseline. Given the low number of grade 10 samples, most of whom could not be tracked in STEM intervention schools as they already graduated SEE exams last year, the following analysis has been presented only for girls who were in grades 8 and 9 at the baseline.

Table 8 shows that the target set at baseline was overachieved by 115 percent, highlighting a positive impact left by the project through its interventions aimed at increasing girls' literacy scores. The performance against target, as mentioned in the table below, was determined by calculating the difference between beta value observed at midline and the target determined as per baseline literacy performance of girls. The grade-wise difference in the score of treatment and control samples is statistically significant, as demonstrated in Table 6. Comparing the scores from baseline to midline, in Grade 8, a growth of 7.5 percent has been observed from baseline to midline. In Grade 9, the mean SeGRA score has increased from 46.1 percent at baseline to 54.8 percent at midline, an improvement by 8.70 percent. The growth observed in all grades is statistically significant.

The girls attributed this change to the girls' club classes. According to them, girls' club classes are highly interactive in nature and as a result, they do not hesitate to ask questions whenever they have any difficulties or confusions. Some girls even mentioned that they feel more comfortable to ask questions to teachers in girls' club classes. This is mainly because of the low number of students in girls' club classes, different teaching methodologies and conducive classroom environment where girls are more expressive in the absence of boys. Moreover, the girls' club facilitators were regarded as cooperative and open to any confusion raised by the girls during the girls' club classes. At girls' clubs, the girls get to revise the lessons that are taught at regular classes which are helping them understand the subject matter better.

Girls' engagement in the girls' club classes has also had a ripple effect in their engagement in regular school classes. During an FGD, a Grade 9 girl from Tikapur said she feels comfortable asking questions and concentrating in regular school classes as girls club facilitators are also the regular teachers at school. In this light, 70 percent of the sample girls said the girls' club has helped them improve their learning in terms of developing interest in studies, understanding and scores. Discussions held with girls also highlighted the fact that improvement in teaching quality has also led to the improved learning scores. As cited by one of the girls in Dhangadhi, the teachers (Girls Club facilitators who also teach at regular classes in school) have adopted better teaching methods in regular school classrooms as well, which include interactive pedagogies, group-work in classrooms, use of teaching materials such as maps and globes, among others.

> After attending girls' club classes regularly, I have become more confident about my own learning. I have realized that any sorts of confusion can be cleared out if we ask questions to teachers.
>
> **-A girl from Sukhad**

Table 6: Literacy scores at midline by grade (SeGRA)

Grades	Category		Std. Deviation in Treatment Group	P-value
	Treatment (n=275)	Control (n=162)		
Grade 8 (n=145T+80C)	9.51 (47.55%)	8.25 (41.25%)	3.66	0.007*
Grade 9 (n=130T+82C)	10.95 (54.77%)	9.02 (45.12%)	4.05	0.000*
Overall	10.19 (50.97%)	8.64 (43.22%)	3.94	0.000*

Source: SeGRA test | n = 437

Table 7: Literacy scores from baseline to midline

Grades	Treatment (n=275)			Control (n=162)			Difference in difference (treatment – control differences)
	Baseline literacy	Midline literacy	Difference baseline to midline	Baseline literacy	Midline literacy	Difference baseline to midline	

Grade 8 *Treatment n=145 Control n=80*	40.1%	47.6%	7.5%	34.8%	41.3%	6.5%	1%
Grade 9 *Treatment n=130 Control n=82*	46.1%	54.8%	8.7%	44.8%	45.1%	0.3%	8.4%
Overall *Treatment n=275 Control n=162*	43.1%	51.2%	8.1%	39.8%	43.2%	3.4%	4.7%

Source: SeGRA test | n = 437

Table 8: Literacy DiD result against target

Result	Details	Comments
Literacy Baseline – Midline	Beta = 0.94	Beta=Total difference in score Hence, Beta 0.94=4.7% of 20 (total score) Difference from target = 2.63% 4.7% of 4.09% = 115% Hence, performance against target = 115%
	p-value = 0.069	
	Midline target = 4.09% above control	
	Performance against target = 115%	

Source: SeGRA test & Outcome Spread-Sheet

B. Subtask analysis

The sub-tasks for SeGRA were as follows:

Subtask 1: Subtask 1 comprised of a comprehension passage followed by 5 analytical questions. Each question carried either 1 or 2 marks depending on the type of answer the question required. A girl who was unable to answer was not awarded any marks, while girls who partially answered any questions with full marks '2' was given half the full score, i.e. '1'. The full marks for Subtask 1 were 7.

Subtask 2: Subtask 2 comprised of comprehension passage followed by 6 inferential questions. As with Subtask 1, the marks ranged from 1 to 2 depending on the type of answer the question required. A girl who was unable to answer was not awarded any marks, while girls who partially answered any questions with full marks '2' was given half the full score, i.e. '1'. The full marks for Subtask 2 were 8.

Subtask 3: Subtask 3 required the girls appearing the test to construct an essay. The scoring for the essay was done based on content, language and type of sentences constructed. Simplistic content and simple sentence construction were awarded a minimum 1 mark with marks increasing as the level of content and sentence construction went up. The full marks for Subtask 3 were 5. In order to maintain consistency in grading the essay, a total of two individuals graded subtask 3 of all the girls. The grading was guided by criteria and exact steps as provided by the ERO before baseline evaluation when the tools were all designed. For instance, 1 mark was provided for limited sentence formation, limited vocabulary and limited grammatical accuracy. 2 marks were provided for limited skills in sentence formation, vocabulary, grammatical accuracy, along with basic structuration of the essay, i.e. introduction of the subject matter, with the ability to separate the paragraphs in a logical manner. 3 marks were provided for essays with clear sentences with the use of punctuation, vocabulary with fair structuration of the essay. 4 marks were provided for essay formation with fair language command, along with identification of the problem and presentation of logical solutions to it. Lastly, 5 marks were provided for the essays with excellent language command, along with structuration following clarity of ideas and arguments and analytical and advanced reasoning. The individuals involved in grading the essays were all oriented on these criteria in detail.

Tables 9 and 10 below demonstrate a subtask-wise analysis of grades 8 and 9 respectively. Building on the quantitative and qualitative findings outlined above, the figures below tell us that the literacy scores of treatment samples have higher growth than their control counterparts.

As shown in Table 9, in Grade 8, the aggregate scores of treatment girls are higher than their control counterparts in subtasks 1 and 3 and slightly lower in Subtask 2. However, the subtask-wise difference between treatment and control samples is not statistically significant for all three subtasks, hence cannot be generalized to the entire population. Nevertheless, the mean difference in the aggregate SeGRA score of treatment and control samples is statistically significant. Likewise, according to Table 10, the Grade 9 treatment girls have scored higher than their control counterparts in subtasks 1 and 3 and exactly the same in Subtask 2.

Table 9: Grade 8 literacy scores disaggregated by subtasks

Subtasks	Category		Std. Deviation in Treatment Group
	Treatment (n=145)	Control (n=80)	
Subtask 1	4.50 (64.28%)	3.32 (47.42%)	1.629
Subtask 2	3.77 (47.12%)	3.80 (47.50%)	1.929
Subtask 3	1.24 (24.8%)	1.12 (22.4%)	1.203

Source: SeGRA test | n = 225

Table 10: Grade 9 literacy scores disaggregated by subtasks

Subtasks	Category		Std. Deviation in Treatment Group
	Treatment (n=130)	Control (n=82)	
Subtask 1	4.76 (68.00%)	3.82 (54.57%)	1.791
Subtask 2	4.35 (54.37%)	4.35 (54.37%)	2.090
Subtask 3	1.84 (36.8%)	0.85 (17%)	1.519

Source: SeGRA test | n = 212

C. Skills gap analysis

Table 11 below shows the literacy skills gaps observed among the treatment samples.

Foundation literacy skills gap of treatment samples, as presented in table 11, shows that there has been positive growth in the learning categories in Subtask 1 and Subtask 3. For instance, in Subtask 1, the percentage of proficient learners has increased from 9.3 percent at baseline to 35.8 percent at midline. In Subtask 3, percentage of non-learners has decreased by almost half, from 61.6 percent at baseline to 32.3 percent at midline. This showcases a remarkable progress, as at the baseline, the greatest number of sample girls (over 60%) who took SeGRA tests could not even attempt Subtask 3. Percentage of 'established learner' and 'proficient learner' has also increased from 2.9 percent to 21.5 percent and 0 percent to 2.5 percent respectively. A similar trend of decline in subtask 2 can also be observed in the control group where the number of proficient learners has gone down from 24.7 percent at baseline to 5.6 percent at midline. The reason behind decrease in number of proficient learners in subtask 2 should be explored further during qualitative discussions in the endline, as there are no possible explanations to this at this stage, especially as the difficulty level of all the subtasks for all evaluation points were calibrated right before baseline evaluation.

However, in terms of the gaps, in subtask 2, despite an improvement that can be observed in non-learners, emergent learners and established learners' category, percentage of 'proficient learners' has decreased from 25.4 percent at baseline to 12.2 percent at midline.

Despite an encouraging growth, as most of the non-learners are in Subtask 3 for both grades 9 and 10, it is evident that girls are still facing problems in drafting essays. As drafting an essay requires expressive skills, literacy aptitudes of the girls have to go beyond analytical or inferential skills demonstrated in other two subtasks. Although the percentage decrease in non-learners in Subtask 3 indicates that the project is moving towards the right direction in terms of improving overall literacy skills of the girls, it is evident that there still is a lot more to be done to develop the girls as fluent essay writers.

This was also further elaborated in qualitative consultations with girls, teachers and head-teachers. When asked what they find most difficult in reading and writing, girls said they can't form essays on their own as it is not as much emphasized in regular classes as other exercises that are mostly in question-answer format. Teachers and head-teachers echoed this concern stating that the structure of the curriculum and lesson formats also do not allow to liberally practice essay writing in classrooms. Experts from the Education Review Office (ERO) were consulted to explore the reasons behind low performance of students in essay-writing. According to them, a similar trend can be observed "almost everywhere" in the country, "even in urban cities". "This is mostly because our education practice focuses on passing the exams rather than developing critical thinking. Even if students can think of arguments, they are not able to articulate it in their writing," said an expert from ERO. Literature consulted in the course of this evaluation also suggested that students in the community schools of Nepal have poor writing skills mostly

owing to traditional teaching-learning pedagogies and rote-learning practices prevalent all over Nepal[3].

"Constructing an essay has always been challenging. We do not practice writing as much. We copy what the teacher presents or mug up our answers."

-In-school girl from Dhangadhi

Table 11: Foundation literacy skills gap by grade level achieved

	Grade 8 (n=145)						Grade 9 (n=130)					
Categories	**Subtask 1**		**Subtask 2**		**Subtask 3**		**Subtask 1**		**Subtask 2**		**Subtask 3**	
	BL	**ML**	**BL**	**ML**	**BL**	**ML**	**BL**	**ML**	**BL**	**ML**	**BL**	**ML**
Non-learner (0%)	1.4%	0.0%	9.0%	2.8%	72.4%	35.2%	1.5%	0.8%	3.1%	1.5%	49.2%	28.5%
Emergent learner (1%-40%)	31.7%	12.4%	31.0%	42.8%	22.8%	49.0%	26.2%	10.8%	20.0%	36.2%	50.0%	38.5%
Established learner (41%-80%)	57.9%	57.9%	37.9%	46.2%	4.8%	15.2%	63.1%	46.2%	48.5%	46.2%	0.8%	28.5%
Proficient learner (81%-100%)	9.0%	29.7%	22.1%	8.3%	0.0%	0.7%	9.2%	42.3%	28.5%	16.2%	0.0%	4.6%

Source: SeGRA test | n = 275

D. Grade level analysis

As per the experts from Education Review Office (ERO) of government of Nepal, who developed the SeGRA/ SeGMA tools for all evaluation points of STEM II, based on the mapping of content for each grade, following are the grade level achieved for grades 8, 9 and 10. As with the all the other analyses presented above, the planned achievement as per grade in SeGRA has been presented only for grades 8 and 9, given the low number of grade 10 samples.

[3] https://archive.nepalitimes.com/article/Nepali-Times-Buzz/not-catching-them-young-schools-in-rural-nepal,3773

Table 12: Grade level achieved in SeGRA

	Proficiency level in SeGRA
Grade 8	Foundational skills in analytical answering Foundational skills in inferential answering Foundational skills in essay drafting
Grade 9	Established skills in analytical answering Established skills in inferential answering Established skills in essay drafting
Grade 10	Proficient skills in analytical answering Proficient skills in inferential answering Proficient skills in essay drafting

Table 13 below presents the grade-wise data on grade-level achieved by the treatment IS girls at midline. According to the data, most of the sample girls in both grades 8 and 9 are currently at the grade level 9. The number of girls who are at the grade level 10 is higher in grade 9 samples (13.8%), compared to 6.2 percent in samples from grade 8. The grade-level analysis signifies that the greatest number of girls, regardless of which grades they are currently studying in – grade 9 or 10 – they are struggling to get past the level set for grade 9, i.e. established skills in analytical answering, inferential answering and essay drafting. In that regard, with continued STEM interventions, higher percentage of girls would be expected to be climbing up the level arriving at 'grade 10' category by the endline.

Table 13: Grade level achievement (SeGRA)

Grade level achieved	Grade 8	Grade 9
Below grade 8	2.1%	2.3%
Grade 8 achieved	40.7%	33.1%
Grade 9 achieved	51%	50.8%
Grade 10 achieved	6.2%	13.8%

Source: SeGRA test | n = 275

3.1.2. Numeracy scores

A. Overall results against target

As with the SeGRA, Table 14 below shows the mean SeGMA scores obtained by the treatment girls studying in grades 8, 9 are higher than their control counterparts overall and across each grade and their respective standard deviations. As stated in Annex 3, subtask 3 was removed from midline SeGMA questions given the floor-effect observed at baseline. The removal of subtask 3 was replaced with five additional questions in subtask 1. However, the additional questions have not been taken into account for calculation of scores comparable to baseline.

Table 15 below shows the difference in numeracy scores of both treatment and control groups since baseline and Table 16 shows a difference-in-difference analysis presenting the project's performance against target set at baseline. As with SeGRA, given the low number of grade 10 samples, most of whom could not be tracked in STEM intervention schools as they already graduated SEE exams last year, the following analysis has been presented only for girls who were in grades 8 and 9 at baseline.

Table 16 shows that the target set at baseline was overachieved by 265.97 percent – statistically significant at 99 percent confidence level, highlighting an encouraging performance of the project interventions aimed at increasing girls' numeracy scores. As with SeGRA, the performance against target was determined by calculating the difference between beta value observed at midline and the target determined as per baseline numeracy performance of girls. The grade-wise difference in the score of treatment and control samples in statistically significant, as demonstrated in Table 14.

Comparing the scores from baseline to midline, statistically significant aggregate improvement by 22.42% percent can be observed in the treatment girls. An improvement of 11.41% percent can also be seen in control samples; however, the difference between treatment and control samples is statistically significant. As also discussed in the 'literacy scores' section above, the main reason behind increased numeracy scores is girls' engagement in the girls' club classes. Apart from that, girls also mentioned improved teaching practices as a reason behind their improved numeracy scores. A girl said she has started to understand 'probability' lessons in mathematics better as her teacher has been recently using coins to teach probability. A math teacher interacted with in the course of this research said he has been using worksheets containing basic ideas about the lessons planned for the next day. According to him, the worksheets have made it easier for the students to understand and prepare for the lessons as the worksheets contain practical problems and issues without the mention of any technical terms and jargon.

> "After teaching in the girls' club classes, I realized how easy it is to deliver lessons with the use of local materials like marble and clay. Now I am habituated to teach like this is any class I take in school as well as in the girls' clubs."
>
> **- A teacher in Darakh**

Table 14: Numeracy scores at midline by grade

Grades	Category		Std. Deviation in Treatment Group	P-Value
	Treatment (n=275)	Control (n=162)		
Grade 8 (n=145T+80C)	8.61(43.05%)	6.30 (31.5%)	5.007	0.000*
Grade 9 (n=130T+82C)	9.62 (48.1%)	7.92 (39.60%)	5.306	0.000*
Overall	9.09 (45.45%)	7.12 (35.6%)	5.566	0.000*

Source: SeGMA test | n = 437

Table 15: Numeracy scores from baseline to midline

Grades	Treatment (n=275)			Control (n=162)			
	Baseline numeracy	Midline numeracy	Difference baseline to midline	Baseline numeracy	Midline numeracy	Difference baseline to midline	Difference in difference (treatment – control differences)
Grade 8	20.85%	43.05%	22.2%	21.6%	31.5%	9.9%	12.3%
Grade 9	24.95%	48.1%	23.15%	26.25%	39.6%	13.35%	9.8%
Overall	22.86%	45.28%	22.42%	23.98%	35.39%	11.41%	11.01%

Source: SeGMA test | n = 437

Table 16: Numeracy DiD result

Result	Details	Comments

Literacy Baseline – Midline	Beta = 2.20	Beta=Total difference in score Hence, Beta 2.20=11.02% of 20 (total score) Difference from target = 6.88% 11.02% of 2.20% = 265.97% Hence, performance against target = 265.97%
	p-value = 0.000	
	Target = 4.14 above control	
	Performance against target = 265.97%	

Source: SeGRA test & Outcome Spread-Sheet

B. Subtask analysis

The subtasks for SeGMA consisted of:

Subtask 1: Subtask 1 consisted of 15 different advanced arithmetic questions like multiplication and division, proportions (fractions, percentages), space and shape (geometry) and measurement (distance, length, area, capacity, money). Each question carries one mark. Girls who were unable to calculate the answer or calculated the right answer using the wrong approach were not awarded any marks. Partial attempts to solve a problem were not awarded any marks, as per the guidelines provided by ERO before the baseline when the tools were all designed.

As this subtask contained only 10 questions in the baseline, only the questions that were pre-designed and calibrated during the inception phase of the baseline study were used for comparison across baseline-midline. The aggregate SeGMA score including the entire set of 15 questions in Subtask 1 was separately analyzed, and will be used for comparison during the endline. The full marks for Subtask 1 was 15 but the total marks of questions used for midline was 10.

Sub-task 2: Subtask 2 consisted of six algebra questions. The marks for each question ranged from one to three depending on the type of answer the question required. The full marks for sub-task 2 were 10.

Tables 17 and 18 below demonstrate a subtask-wise analysis of SeGMA scores of grades 8 and 9 respectively. Building on the quantitative and qualitative findings outlined above, the figures below tell us that the numeracy scores of treatment samples have higher growth than their control counterparts.

As shown in table 17, in Grade 8, average score of treatment girls in Subtask 1is 6.11 (61.10%), followed by 4.80 (48%) for the control group. Both treatment and control groups demonstrated a weaker performance in Subtask 2 where the scores are 2.50 (25%) and 1.50 (15.0%) for

treatment and control groups respectively. This difference observed between treatment and control groups is statistically significant for both the subtasks. Likewise, in Grade 9, the difference observed between treatment and control samples in Subtask 1 is statistically significant, whereas, the slight difference observed in Subtask 2 is not statistically significant.

Table 17: Grade 8 numeracy scores disaggregated by subtasks

Subtasks	Category		Std. Deviation in Treatment Group
	Treatment (n=145)	Control (n=80)	
Subtask 1	6.11 (61.10%)	4.80 (48%)	2.563
Subtask 2	2.50 (25%)	1.50 (15%)	2.937
Overall	8.61 (43.05%)	6.30 (31.5%)	5.007

Source: SeGMA test | n = 225

Table 18: Grade 9 numeracy scores disaggregated by subtasks

Subtasks	Category		Std. Deviation in Treatment Group
	Treatment (n=130)	Control (n=82)	
Subtask 1	6.49 (64.9%)	5.15 (51.5%)	2.528
Subtask 2	3.13 (31.3%)	2.77 (27.7%)	3.245
Overall	9.62 (48.1%)	7.92 (39.6%)	5.306

Source: SeGMA test | n = 212

C. Numeracy skills gaps

The foundation numeracy skills gap of treatment samples, as presented in table 19 below, shows that there has been positive growth in the learning categories in both the subtasks. For instance, as in SeGRA, percentage of non-learners has decreased, while marking an increase in the percentage of girls under other higher level of learning categories - 54.5 percent in 'established learner' category and 22.2 percent in 'proficient learner' category, an increase from 31.5 percent and 0.7 percent respectively at baseline.

A similar trend can also be observed in Subtask 2, where the percentage of non-learners has decreased by about half compared to the baseline – from 65 percent at baseline to 34.4 percent at midline. This decrease in the non-learner category has resulted in progress towards other subsequent categories – 41.2 percent emergent learners, 15.4 percent established learner and nine percent proficient learner.

While at one hand, a significant improvement could be observed in mathematics scores of the girls from baseline to midline, it is equally true that girls from both grades 8 and 9 are still facing difficulty, especially in solving algebra problems given in Subtask 2. Average scores in Subtask 2 for both the grades are 30 percent, warranting an extensive focus on improving algebra skills of the girls.

During qualitative discussions as well, girls acknowledged that their grasp of mathematics has increased in comparison to the past, however, they also said that mathematics still remains one of the most difficult subjects taught in school. Within mathematics, according to the girls, analytical word problems and algebra are among the highly challenging exercises, which according to them, are gradually getting better as the teachers have been practicing newer methods of teaching in the classroom with the use of local materials such as pictures, peer learning, coins, marbles and worksheet.

When asked what makes mathematics one of the most difficult subjects, a girl from Dhangadhi said that she cannot relate the practicability of mathematics in her daily life beyond addition and subtraction. The researchers posed this response as a query to the head-teacher from same school. The head-teacher deemed the girl's response 'genuine' and 'generalizable'.

> It is natural for the students to think that way as they have hardly been oriented about the real use of mathematics through practical learning exercises in the classroom. It is a struggle for both students as well as teachers.
>
> **-A head-teacher from a school in Dhangadhi**

Table 19: Foundation numeracy skills gap by grade level achieved

Categories	Grade 8					Grade 9				
	Subtask 1		Subtask 1 (15 questions)	Subtask 2		Subtask 1 (10 questions)		Subtask 1 (15 questions)	Subtask 2	
	BL	ML	ML	BL	ML	BL	ML	ML	BL	ML
Non-learner (0%)	6.2%	2.8%	1.4%	73.8%	37.2%	4.6%	0.8%	0%	55.4%	30.8%
Emergent learner (1%-40%)	64.8%	21.4%	23.4%	22.1%	41.4%	60.0%	20.8%	21.5%	40.8%	40.8%
Established learner (41%-80%)	28.3%	55.2%	60.7%	4.1%	13.8%	34.6%	53.8%	49.2%	3.1%	17.7%
Proficient learner (81%-100%)	0.7%	20.7%	14.5%	0%	7.6%	0.8%	24.6%	29.2%	0.8%	10.8%

Source: SeGMA test | n = 275

Similarly, based on the mapping of content for each grade, following are the grade level achieved for grades 8, 9 and 10. As with SeGRA, the grade level achievement in SeGMA has been presented only for grades 8 and 9 as there are low number of grade 10 samples.

Table 20: Grade level achieved in SeGMA

	Proficiency level in SeGMA
Grade 8	Foundational skills in arithmetic questions Foundational skills in algebra questions
Grade 9	Established skills in arithmetic questions Established skills in algebra questions
Grade 10	Proficient skills in arithmetic questions Proficient skills in algebra questions

Table 21 below presents the grade-wise data on grade-level achieved by the treatment IS girls at midline. According to the data, most of the sample girls in both grades 8 and 9 are currently at the grade level 9. The number of girls who are at the grade level 10 is higher in grade 9 samples (10.8%), compared to 7.6 percent in samples from grade 8. The grade-level analysis signifies that the greatest number of girls, regardless of which grades they are currently studying in – grade 9 or 10 – they are struggling to get past the level set for grade 9, i.e. established skills in arithmetic questions and algebra questions. In that regard, with continued STEM interventions, higher percentage of girls would be expected to be climbing up the level arriving at 'grade 10' category by the endline.

Table 21: Grade level achievement (SeGMA)

Grade level achieved	Grade 8	Grade 9
Below grade 8	2.8%	0.8%
Grade 8 achieved	42.1%	34.6%
Grade 9 achieved	47.6%	53.8%
Grade 10 achieved	7.6%	10.8%

Source: SeGMA test | n = 275

3.2. Subgroup Analysis of Learning Outcome

Tables 22 and 23 below present the analysis of learning outcomes by characteristics and barriers respectively. The purpose of this section is to provide a clear understanding of scores across different subgroups and barriers.

As we can see in table 22, the key characteristics taken into account when looking at the literacy and numeracy scores are ethnicity, location type, and other key household-level characteristics. These characteristics including 'households unable to meet basic needs', 'households having 5 or more than 5 members', 'primary caregiver with no education', and 'language of instruction at school different from the girls' primary language'. Likewise, as highlighted in table 23, the key barriers discussed here include: 'girls studying less than 1 hour at home', 'girls who spend 3 hours or more in household chores', 'cleanliness of toilet at school', 'availability of sanitary pad disposal facility at school toilets', 'teachers' attitude (making students feel unwelcome in the class', 'teachers treating boys and girls differently', and 'teachers' absenteeism from class'.

Difference in the scores of different ethnicities observed at baseline has reduced in percentage this time. For example, while the difference in SeGRA between Brahmin/ Chhetri ethnic groups and Dalit girls was about 11 percent at the baseline, the difference has reduced to around 4 percent at midline. Likewise, in SeGMA, despite an improvement in percentage from baseline to midline, the difference between ethnicities is still similar as observed during baseline. For example, scores of Brahmin/ Chhetri and Dalit have increased by over five percent from baseline to midline, however, the difference between scores of Brahmin/ Chhetri and Dalit is still around eight percent.

In that light, as table 22 shows ethnicity is still a factor in numeracy, but the gap in literacy has closed. This reflects that despite an improvement observed in the scores of all ethnicities across baseline-midline, ethnicity is still a factor hindering girls' learning, especially when it comes to mathematics.

Likewise, the location type that the girls come from – rural, semi-urban or urban – has a significant impact on their SeGMA scores. For instance, girls belonging to urban location scored highest in SeGMA, compared to girls from rural or semi-urban locations. However, in SeGRA, no significant relationship was established between scores and location, as the marks obtained by girls are similar across all location types.

Poverty status of the girls' households was also taken as a reference to analyze the SeGRA and SeGMA scores at midline. However, as in the baseline, the characteristic 'households unable to meet basic needs' did not have any impact on the learning scores of the girls.

In SeGMA, girls whose primary language is different than the language of instruction at school were found to be scoring higher than those having the same medium of language at both household and school. This difference in SeGMA was statistically significant, whereas no such relation was established for SeGRA, although the mean SeGRA scores of girls with different language at home and school were slightly higher than the other group. When asked if language

makes it difficult for them to understand what is being taught at school, 91 percent girls said they understand the lessons, regardless of which language they speak at home.

> We have been learning Nepali at school and also in the community since childhood. Therefore, we do not face any difficulties understanding lessons or communicating in Nepali language.
>
> **- A Tharu girl from Ratanpur**

Table 22: Literacy and numeracy scores by key characteristics

Characteristics	Literacy		Numeracy	
	Midline	Change in baseline	Midline	Change in baseline
	Ethnicity			
Brahmin/ Chhetri	52.35%	5.95%	52.55%	24.6%
Janajati	50%	12.05%	38.25%	12.05%
Tharu	50.05%	6.7%	41.43%	21.43%
Dalit	48.75%	13.6%	44.70%	24.85%
	Location type			
Rural	50.85%	9.6%	42.65%	21.05%
Urban	50.50%	6.05%	42.30%	22.35%

Semi-urban	50.70%	4.2%	56.30%	26.3%
	Household-level characteristics			
Households unable to meet basic needs	48.8%	4.35%	43.55%	24.75%
Households having 5 or more than 5 members	50.4%	7%	45.3%	22.05%
Primary caregiver having no education	51.85%	8.6%	42.65%	21.8%
Language of instruction at school different from mother tongue	50.95%	6.7%	42.2%	20.55%

Source: SeGRA & SeGMA tests | HH & Girls Surveys | n = 275

Similarly, in terms of barriers, table 23 does not show any major difference in the scores of the girls studying 1 hour or less than 1 hour at home or contributing 3 hours or more than 3 hours to household chores. Both study time as well as household chores were not found to be significantly correlated with the SeGRA and SeGMA scores of the girls. Nevertheless, during qualitative consultations, girls acknowledged that the burden of household chores has reduced, further stating that this has been allowing them more time to complete home-work and spend time with friends and other family members. In that regard, as already mentioned above, girls' increased performance can rather be attributed to their regular engagement in girls' club, which has given them confidence to raise questions and learn better in both girls' club classes as well as regular school classes.

State of toilets at school was also taken as a factor of analysis for SeGRA/ SeGMA scores in order to see if clean or dirty toilets have any impact on girls' learning. However, no such relationship between status of toilet and girls' SeGRA/ SeGMA midline scores was observed.

Apart from that, although table 23 below shows that girls who report availability of sanitary pad disposal facility in the toilet at school score slightly higher than those without the facility, this difference was not deemed statistically significant, and therefore cannot be generalized to the entire population.

Likewise, no significant difference was observed in the learning scores of girls, when cross-tabulated against other barriers identified - 'teachers' attitude (making students feel unwelcome in the class', 'teachers treating boys and girls differently' and 'teachers' absenteeism from class'.

Table 23: Literacy and numeracy scores by key barriers

Barriers	Literacy		Numeracy	
	Midline	Change in baseline	Midline	Change in baseline
	Household-level barriers			
Girls studying 1 hour or less than 1 hour at home	51.5%	8.9%	41.9%	19%
Girls who contribute 3 hours or more than 3 hours to household chores	52.25%	9.5%	56.55%	33.55%
	School-level barriers			
Toilets in school are cleaned only sometimes	49%	7.45%	43.8%	24.75%
Toilets in school without sanitary pad disposal facility	49.95%	8.1%	44.6%	22.7%
Disagrees teachers make them feel welcome	45%	0.4%	47.4%	29%
Agrees teachers treat boys and girls differently	55%	13.95%	50%	30%
Agrees teachers are often absent from class	51.7%	11.9%	46.65%	23.1%

Source: SeGRA & SeGMA tests | HH & Girls Surveys | n = 275

3.3. Transition Outcome

Table 24 shows the successful and unsuccessful transition pathways.[4]

Table 24: Transition pathways

Group tracked for transition	Successful transition	Unsuccessful transition
IS	• Upgraded to successive class • Successive class with conditions (married, working, moved to different school etc.) • SEE graduate • Dropout and moved to non-formal education (vocational, training)	• Dropout and stays at home • Repeat grade
SG/ OOS	• Re-enrol in school • Re-enrol in school with conditions (married, working, training) • Started/continued training • Started/continued business (including vegetable/fruit stalls, handicraft, food kiosks, tailoring shop) • Started/continued formal job (including any form of salaried job. This could be formal jobs like clerical ones or informal ones like working in a tailoring shop on a monthly salary basis) • Started/ continued working as a wage labourer • Positive Migration (e.g. migration for a better job, education, social opportunities)	• Drop - out (If the OOS/SG girl was enrolled in school last year) • Engaged in unpaid domestic work only • Has been doing nothing[5] • Negative migration (e.g. trafficking, due to natural disasters etc.) • Early marriage/child birth under 20 years

Most of the transition pathways taken into consideration at midline are the same ones that were used to measure transition outcomes at baseline. However, as the girls who were in Grade 10 at baseline would have already appeared the national board exams, an additional successful transition pathway – SEE graduate – has been added in the IS category. In terms of transition pathway of IS girls, considering grade upgradation as a successful transition should be treated as a caveat, as many girls would automatically transition to higher grades, even without any project intervention.

For SG/ OOS girls, business included setting up vegetable/fruit stalls, selling of handicraft items, setting up food kiosks in the community, establishing their tailoring shops and setting up their own grocery stores. These are the most common forms of business initiated by SG/ OOS girls (as seen in STEM I as well as during the baseline and midline of STEM II) in the project area. Other forms of businesses explored at midline are animal farming, beauty parlour, cosmetic shop, cycle

[4] In GEC-T, transition refers to the progression into and through successive grades of formal and non-formal education, vocational training, or into safe, fairly paid employment or self-employment

[5] Girls who have been staying idle at their households, not engaged in any form of life skills training or income-generating activities.

shop, electrical shop, fancy store (clothing), hardware shop, mobile gallery, auto-driver, shoe shop, among others.

Likewise, jobs referred to any form of salaried job. In the project area, this could mean both clerical as well as non-clerical form of jobs, for example, working in a shop, school or office. Only those girls who received a monthly salary for their work were defined as holding a job. Others, who were compensated on a daily basis, were considered as daily wage labourers. Despite the temporary nature of daily wage work, it was found that girls who have received different types of VT training have, in some cases, been employed for a non-exploitative and stable daily wage, such as work in tailoring centres, food-stalls, among others. Therefore, daily wage work is also considered as a successful transition from no employment to employment.

A. Transition rates of IS and SG/ OOS girls

As highlighted in Table 25 below, the difference between transition rates of treatment and control girls is at 18.9 percent, which is statistically significant. Transition rate of treatment IS girls has increased from 93.7 percent at the baseline to 94.5 percent at midline. This means a vast majority of girls have transitioned from lower to higher grades. On the other hand, transition rate of the control IS girls has decreased from 95.1 percent at baseline to 75.4 percent at midline. The sharp decline in transition rate of the control group indicates that instances of either dropping out or repeating the same grade due to failure are higher in the lower-secondary grades of 8, 9 and 10.

Some of the girls who appeared Grade 10 SEE exams last year completed the project's intervention cycle and have moved out of the district either for higher education or work. The highest number of attritions was observed from this group of the population. Therefore, as a very limited number of Grade 10 samples were found in their respective schools, they could not appear the learning tests. However, the enumerators contacted some of them at the household level to get the transition data. For this reason, different attrition rates have been reported for learning and transition samples. With regards to the attrition of grade 10 girls who could not be reached, it was mainly because the girls have migrated outside the district either for higher studies or work. In any case, this mobility of the girls after graduating from SEE indicates towards a positive direction of girls' transition, even after completing the project intervention cycle.

Taking the attrition into account, Table 25 below also presents a disaggregation of transition data of grade 10 and non-grade 10 girls. Among the grade 8 and 9 girls (i.e. non-grade-10), a similar trend of transition rate, as explained above, can be observed. While the transition of treatment samples in this group has been retained at about 94 percent from baseline to midline, the transition rate of control samples has decreased from 94.6 percent at baseline to 89.2 percent at midline. Similarly, among the grade 10 treatment samples, transition rate as increased from 90.7 percent at baseline to 96 percent at midline, while the same has decreased for control samples from 97.3 percent at baseline to 13.5 percent at midline. The transition pathways observed among both treatment and control samples disaggregated using the same grade characteristic has been discussed in the following section.

A further caveat should be considered while reviewing the performance of the in-school girls against the target set for the transition outcome. The midline data on transition that has been presented in this section, is of the girls who were re-contacted during the midline. Whereas, the target and the baseline value used for the calculation of performance against the target was derived from the entire sample size of the baseline.

As SG and OOS girls do not have a control group for comparison, for these groups, only the pre-post transition rates have been analysed. In that regard, while the transition of SG girls has seen an increase of 22.2 percent, from 29.8 percent at baseline to 52 percent at midline. Likewise, transition rate of OOS girls has increased from 34.7 percent at baseline to 47.6 percent at midline.

Table 25: Transition rates of treatment and control groups across baseline-midline

Transition cohorts	Baseline		Midline		Target	% of target achieved
	Treatment transition rate	Control transition rate	Treatment transition rate	Control transition rate		
IS girls *(T = 347, C = 203)*	93.7%	95.1%	94.5%	75.4%	5 percent over and above control sample	Target overachieved by 15.5 percent
IS girls (non-Grade 10) *(T=272, C=166)*	94.5%	94.6%	94.1%	89.2%	N/A	N/A
IS girls (Grade 10) *(T=75, C=37)*	90.7%	97.3%	96%	13.5%	N/A	N/A
SG (n=172)	29.7%	-	52.3%	-	8 percent over baseline	Target overachieved by 14.6 percent
OOS (n=147)	34.7%	-	47.6%	-	8 percent over baseline	Target overachieved by 4.9 percent

Source: HH survey | n = 869

B. Transition pathways of IS girls

According to table 26, among the non-grade 10 samples, 7.8 percent repeat grade rate was observed in the control group at midline, compared to 5.9 percent in the treatment group. Likewise, while 3 percent drop-out was reported in the control group, no drop-out was recorded in the treatment sample. Although the project considers repeating a grade as an unsuccessful transition, the positive aspects of repeating a grade despite the failure were observed during

qualitative discussions and observations. For instance, community members and school-level stakeholders interacted with during the research said the trend of repeating a grade, instead of dropping out, after failing an annual examination is increasing of late. Teachers and head-teachers were of the view that girls not opting to drop out from school after failing a grade is an "extremely positive" result that has been observed in recent years.

> "If a girl repeats any grade, she is very much likely to pass and upgrade in the next year. Chances of her dropping out are very low if she repeats the grade in spite of failure."
>
> **- A teacher from Dhangadhi**

The reason behind repeating a grade, as cited by the girls who are currently studying in the same grade as baseline is 'failure in examination'. Therefore, the difference observed between treatment and control samples can be analysed in terms of learning achievement that has significantly increased among treatment samples, as already discussed in the learning section. As no school dropout was recorded in the treatment sample during midline, there are no quantitative evidence of any possible reasons for dropout.

Table 26: Transition pathway of IS girls observed at midline (non-Grade 10)

	Transition pathways	Treatment (n=272)	Control (n=166)
Successful transition	Upgraded	92.3%	89.2%
	In-school & non-formal education	1.5%	0%
	Repeat grade and engaged in vocational training	0.4%	0%
Unsuccessful transition	Repeat grade	5.9%	7.8%
	Dropped out	0%	3%

Source: HH survey | n = 438

Similarly, table 27 below shows the transition pathway of grade 10 girls. The number of girls opting for employment, vocational training or family business after graduation is higher among the treatment girls in comparison to the control group. While 8 percent of the treatment girls in the sample were found to have either repeated the grade or upgraded (still in school), the number

is lower among control girls at about 5 percent. This showcases that the transition among grade 10 girls is better among the treatment girls in comparison to the control samples.

Table 27: Transition pathway of IS girls observed at midline (Grade 10)

	Transition pathways	Treatment (n=75)	Control (n=37)
Successful transition	Graduated	78.7%	94.6%
	Graduated and engaged in employment	5.3%	0%
	Graduated and engaged in vocational training	6.7%	0%
	In-school and engaged in family business	1.3%	0%
	Graduated and upgraded	4%	2.7%
Unsuccessful transition	Repeat grade	4%	2.7%

Source: HH survey | n = 112

C. Transition pathway of SG/ OOS girls

In terms of the transition pathway of SG/ OOS girls, 25.6 percent of SG girls and 34.7 percent of the OOS girls were found to be engaged in different forms of employment. Likewise, while 47.7 percent SG girls said they are staying idle, not doing anything in particular, the percentage of samples 'doing nothing' was slightly higher in OOS girls (52.4%). In the treatment sample, girls who reported they are 'doing nothing' are the ones who had not taken any training. As the evaluation undertook a random sampling design, not all the girls who had taken the trainings were a part in the sample, as trainings offered by the project are not mandatory for all intervention girls to participate. Notwithstanding the number of OOS/ SG trainees covered by the sample, the project has so far delivered YFLT training to 829 girls, VT to 391 girls, BSD to 771 girls and GTF to 279 girls.

As a limited number of girls in the SG/ OOS sample had been engaged in STEM II's OOS GC - Life Skills (LS), Youth Financial Literacy Training (YFLT) and Business Skills Development (BSD) trainings and Vocational Training (VT) and Girls Transition Fund (GTF) (see section on IO 4), the

external evaluator concentrated their qualitative inquiry among the girls who had received these interventions. They underscored that with financial literacy and vocational skills provided by STEM II, they have become more confident about their own future. Most of the girls who had taken the trainings were found to be currently engaged in community-level employment opportunities such as sewing, beauty parlour, grocery shops, among others. Girls also mentioned that their share in the family income has earned them respect in the family as well as in the entire community.

> I never wanted to stay idle at home but I had no skills or confidence required to take an initiative on my own. After receiving vocational training on tailoring, I initially thought of opening up my own business. But as there was already a tailoring centre in my neighbourhood, I thought it would not be a wise decision to set up a new business entirely as it would not bring me as much profit. Therefore, I approached the owner of the tailoring centre and got a job at his place.
>
> **- An OOS girl in Bauniya**

This also relates to the baseline transition finding that low transition rates among SG/ OOS girls compared to IS girls is mainly resulted due to lack of skills and economic opportunities. During FGDs, the researchers also came across girls who had completed all three trainings provided by STEM II – FLT, VT and BSD – and also taken GTF loans to open up their own business. Those who had taken all three trainings demonstrated high level of confidence and willingness to engage in self-sustaining businesses or employment, the evidence of which can be observed in the quotes and cases of girls who had taken more than one training. When asked what difference did the YFLT, VT and BSD trainings made in their lives, girls who had taken at least two or all three training said the subsequent trainings after YFLT provided them with more skills and confidence. Nevertheless, it will be equally crucial for the project to ensure that the trainings on YFLT and different vocational trainings necessarily translate into girls' employment or engagement in income generating activities. While as of now, these skills and non-formal education present the evidence of successful transition of SG/ OOS girls, the project should further work on exploring the chances of girls' employability after the training, as a part of its endeavour to retain the sustainability of transition outcomes.

> "I recommend all girls like me to take more trainings if possible. New trainings act as refresher to the old one and with each training you take, you become more confident and newer ideas start coming into your mind."
>
> **-A girl from Narayanpur**

Parents were also found largely supportive towards SG/ OOS girls taking up a job or starting any business. 93.5 percent of the parents of SG/ OOS girls even mentioned that they would allow their daughters to live outside the community to work. Although girls could not confirm if their parents would, in practice, allow them to stay outside the community and work but parents are slowly opening up to this idea.

> We have always seen boys going outside the community and working, while girls usually live in the same community. We don't really know if that can be a possibility for girls as well, if we come across any convincing opportunity. I think parents will be happy to send us as well,

if we convince them.

- SG girl in Narayanpur

Therefore, qualitative findings at midline study paint a bright picture on the transition of girls receiving training and skills from STEM II. This warrants an extensive focus of the project on expanding its outreach to the SG/ OOS girls to facilitate girls' transition into successful pathways by the subsequent evaluation point.

Table 28: Transition pathway of SG/ OOS girls observed at midline

	Transition pathways	SG (n=172)	OOS (n=147)
Successful transition	Engaged in employment	44 (25.6%)	51 (34.7%)
	Non-formal education	43 (25%)	16 (10.9%)
	Non-formal education and business	2 (1.16%)	3 (2%)
	Rejoined school	1 (0.6%)	-
Unsuccessful transition	Has done nothing	82 (47.7%)	77 (52.4%)

Source: HH survey | n = 319

D. Transition of added samples

Transition analysis of the added sample also tell a similar story, where 87.5 percent successful transition was observed for treatment samples, followed by 76.7 percent successful transition for the control group. The difference between added control and treatment samples is statistically significant.

Table 29: Transition rates of added IS sample

	Successful transition	Unsuccessful transition

Treatment	87.5%	12.5%
Control	76.7%	23.3%

Source: HH survey | n = 139

In terms of transition pathway, while 87.5 percent of treatment added samples upgraded to successive class, from Grade 8 at baseline to Grade 9 at midline, 12.5 percent repeated grade due to failure. In control added samples, 76.7 percent transitioned into Grade 9, 23.3 percent repeated the grade due to failure.

Table 30: Transition pathway of added IS sample

	Transition pathways	**Treatment (n=96)**	**Control (n=43)**
Successful transition	Upgraded	84 (87.5%)	33 (76.7%)
Unsuccessful transition	Repeat grade	12 (12.5%)	10 (23.3%)

Source: HH survey | n=139

3.4. Subgroup Analysis of Transition Outcomes

Table 31 and Table 32 below presents a sub-group analysis of transition outcomes of IS and SG/ OOS girls respectively. The characteristics and barriers highlighted earlier in this report have been used to cross-tabulate the transition rates.

Table 31 shows that there has been a high successful transition rate for different characteristics taken into account. When looked at from given characteristics like location, ethnicity, age, and household level characteristics, the transition rates were largely similar as in the baseline, and the difference between transition rates reported at baseline and midline for these characteristics was not deemed statistically significant.

Table 32 also presents a similar calculation based on different barriers identified at household and school level for IS girls. None of these key barriers identified were found to be significantly affecting girls' transition outcomes.

Table 31: Transition rates of IS girls by characteristics and barriers

CHARACTERISTICS	Transition rates	
	Midline	Change since baseline
	Ethnicity	
Brahmin/ Chhetri	97.32%	3.57%
Janajati	93.3%	6.7%
Tharu	93.22%	1.69%
Dalit	97.32%	2.33%
	Age-groups	
12-14	92.17%	3.48%
15-17	96.58%	2.92%
18-23	88.88%	3.69%
	Location	
Rural	93.37%	2.21%

Semi-urban	94.68%	2.12%
Urban	97.22%	12.49%
	Household characteristics	
Households unable to meet basic needs	91.93%	6.44%
Households having 5 or more than 5 members	94.33%	0.75%
Primary caregiver having no education	93.65%	1.58%
Language of instruction at school different from mother tongue	91.85%	4.44%
BARRIERS	**Household level barriers**	
Girls studying 1 hour or less than 1 hour at home	97.46%	6.33%
Girls who contribute 3 hours or more than 3 hours to household chores	94.73%	5.27%
	School-level barriers	
Toilets in school are cleaned only sometimes	89.36%	4.84%

Toilets in school without sanitary pad disposal facility	96.94%	3.81%
Disagrees teachers make them feel welcome	90%	6.66%
Agrees teachers treat boys and girls differently	92.75%	1.45%
Agrees teachers are often absent from class	91.37%	3.45%

Source: HH survey | n = 347

Similar analyses disaggregating the transition outcomes of SG/ OOS girls were run taking into account several characteristics and barriers identified for SG/ OOS girls' section above.

Likewise, other characteristics taken into consideration to analyse the transition rate of SG/ OOS girls were – a) ethnicity, b) age, c) location type, d) households unable to meet basic needs, e) primary caregiver/ household head has no education and, f) households having five or more than five family members. However, despite an increase in the transition rates of SG/ OOS girls under each of these characteristics, none of these factors were deemed to be significantly affecting the girls' transition rates at midline.

In terms of barriers, girls who have to perform household chores for three or more than three hours have the lowest transition rate (38.94%), although it has seen an increase of 14.73 percent across baseline-midline. However, statistically, number of hours spent in household chores does not have any significant impact on girls' transition rates.

Table 32: Transition rates of SG/ OOS girls by characteristics and barriers

Characteristics	**Transition rates**	
	Midline	**Change since baseline**
	Ethnicity	
Brahmin/ Chhetri	42.22%	17.78%

Janajati	50%	37.5%
Tharu	52%	18%
Dalit	43.75	12.5%
	Age-groups	
15-17	54.54%	18.17%
18-23	48.13%	19.08%
24 or above	56.71%	14.91%
	Location	
Rural	51.06%	19.67%
Semi-urban	46%	17%
Urban	58.06%	12.89%
	Household characteristics	
Households unable to meet basic needs	61.70%	25.53%

Households having 5 or more than 5 members	50%	18.71%
Primary caregiver having no education	43.75%	16.25%
Barrier(s)		
Girls who contribute 3 hours or more than 3 hours to household chores	38.94%	14.73%

Source: HH survey | n = 319

Furthermore, to better understand the future prospects of girls' transition, they were asked what they wanted to do in the future, where 'the future' was explained as a five-year window. Most of the IS girls (64%) said they wanted to engage in formal employment, while the percentage for same at baseline was only 2.8 percent. This can be attributed to their exposure to STEM and its support activities like training, orientation, life-skills classes for IS girls, among others. This was followed by 52 percent of the girls aspiring to engage in vocational training and 49.1 percent willing to continue their education. While 36.9 percent of the IS girls said they want to initiate business in the future, 31 percent said they want to get married.

3.5. Sustainability Outcome

The sustainability indicators associated with intermediate outcomes have been measured at midline evaluation. Through these indicators, project can demonstrate that the changes it has brought about increasing learning and transition through education cycles are sustainable.

Sustainability scores have been presented conferring to the performance of the project. The scores have been awarded based on school-level data collection, which included classroom observation, SIP evaluation from, and relevant information generated during the FGDs and KIIs. Scores for the concerned indicators are presented in table 34 below.

The overall scoring has been provided on a scale of (0-4) -- 4 being the highest and 0 being the lowest. The basis of scoring has been presented below:

Table 33: Scorecard for sustainability

Score	Rating
4	Established
3	Becoming established
2	Emerging
1	Latent
0	Negligible

Table 34: Sustainability measurement by sustainability indicators

INDICATOR	SUSTAINABILITY MEASURES
COMMUNITY LEVEL	
Indicator 1.1: Number of Community Education Network (CEN) formed (Target: 3)	Out of the six project municipalities, five of them have formed Education Committee/ CENs (except Tikapur). These CENs are formulated under the guidelines of the new structure of the local government. After the country transitioned from unitary to federal system of governance, the project shifted its focus from District Education Office to local governments. In this context, the constitution of Nepal 2015 granted powers and functions relating to school education to local governments (LGs). Further to MoU signed with the municipalities the project jointly works with LG for the orientation to community stakeholders and executive committee about Education policy, SSDP and STEM baseline finding followed by orientation in different level to form CEN. Till the date the project has conducted more than

	12 workshops at different levels with Education Committees/CEN involving Mayor, Deputy Mayors, Ward Chairs, Chief of Education Section, ward chair, etc. The first round of the workshop focused on orienting 23 education rights of LGs, framework of strategic plans and its various components, issues to be included in the education plans and policies while the second round of workshop involved on forming task force to draft, share and finalize education plans within stipulated time-frame. The workshop has been able to build up rapport and the support has been timely because LGs are in the need of such support in the present context that LGs have recently been set up.
Sustainability score	**2** *A score of 2 has been given considering that 5 CENs have been formed in each of the municipalities. The project has exceeded the target but CEN are still in a preliminary stage and will need further support for institutionalization and their own sustainability.*
Indicator 1.2: Number of targeted school visitors (School supervisors, community leaders, parents, SMC/PTA, project staff, etc.) visiting STEM schools reported by the head teachers. (Target: 150 members)	On an average, 166 visitors (per school per year) visit the STEM schools according to the school registers. Upon investigation with the head teachers, it was brought to our attention that the type of visitors visiting the schools are parents, school supervisors appointed by the municipality, SMC/PTA members and project staff. The parents visit the school the most followed by the SMC/PTA and project staff and supervisors. According to the household surveys 50% of the parents from the treatment schools visit schools which further validates the visitors list numbers from the school registers. This indicator was introduced only for the midline evaluation and does not have a basis for comparison. One of the major problems encountered during baseline was that the community members did not visit the school for any purposes whatsoever. The project worked with both parents and school management to make the school more accountable. As a result, the parents were found to be more actively involved in their children's education. The project has conducted various interaction programs between the school and the community to ensure that the parents visit schools more often. The data provided by the project on control schools further validates this point. On an average only 28-45 visitors (per school per year) visit the control schools. It was found that most of the control school do not even maintain a register to record the flow of visitors. The qualitative findings also validate the points mentioned above. Few of the discussions and interviews with the parents also suggest that they did not visit schools before the project intervention. Most of them attributed their change in behaviour to the project activities aimed at engaging them in girls' education. However, as it would not be possible for the school to keep record of all the conversation with parents, we do not know the degree of meaningfulness of parents' school visit. This is an area to further work on.
Sustainability score	***3*** *A score of 3 has been awarded because the number of visitors has well exceeded the target and our qualitative data suggests that parents have started taking initiatives on their own, visiting their daughters' school.*
SCHOOL LEVEL	
Indicator 2.1: Number of schools making acceptable progress or above towards achieving their SIP. (Target: 10 schools)	Most of the SIPs that were evaluated indicated that most of the plans have been centred on building and repairing infrastructure, some have been designed around the continuity of girls' club and gender friendly teaching environment. Despite the recurring mention of budget constraints, 50% of the treatment schools were making notable attempts in implementing their development plans set out in their SIPs. Since this indicator was also introduced for the midline evaluation, we do not have a basis for comparison. However, FGD with girls and parents and KIIs with the school administration as well as the DEO suggests that the planning of SIP has become more inclusive. The students shared that they did not even know what a SIP was and what it looked like. After the project interventions, students and parents have developed an ownership towards SIP formation. Although the project can still work on

	mainstreaming gender-based priorities in SIPs, behaviour change among the community members have been observed to an extent.
Sustainability score	***2*** *A score of 2 has been rewarded as 15 schools have been making progress for achieving their SIP. The target can however be increased for end-line.*
Indicator 2.2: Number of schools practicing sharing of lessons learned and best practices with non-STEM teachers from their school. (Target: 30%)	With the purpose of improving the peer learning practices, the project has motivated schools' leaders and GC teachers to expand and transfer the skills to non-STEM-trained teachers. Some of the schools are adopting the practice of preparation of teaching and learning materials in regular classes. For eg: teachers are using worksheet for math in regular classes. As a result of the interventions, a Nepali teachers association has been formed for Kailali. In addition to this, during monthly meetings, peer to peer sharing and, in some schools, individual mentoring was also conducted. This information was extracted from the KIIs with the teachers and the head teachers and STEM II project staff. However, this practice was observed in only a handful of schools. Additionally, the trainings had not yet been conducted during the baseline evaluation. Since this indicator was explored with the help of FGDs and KIIs, the exact number of schools practicing sharing of lessons learned and best practices with non-STEM teachers from their schools could not be quantified.
Score	***2*** *A score of 2 has been given because even though few, teachers had the practice of sharing lessons learned and best practices.*
Indicator 2.3: Number of schools with inclusive infrastructure established and maintained. (Target: 15 schools)	The evaluation of school information form suggests that out of the 30, 15 schools were found to have inclusive infrastructure established and maintained. The inclusive infrastructure that existed at the schools were the separate toilets for boys and girls like that of baseline evaluation. According to the girl's survey, 41% of the girls said that they had sanitary pad disposal facilities in their toilets. Additionally, 48% of the girls admitted that the toilets were kept clean. Similarly, 58% of the treatment girls said that there was running water facilities in the school. All the 30 schools have initiated fund raising activities during the festival season and harvesting crops through the support from project which allow them to collect separate fund for the use of repair and maintenance and procurement of hygiene materials (Sanitary pad, soap and first aid).
Score	***3*** *A score of 3 has been provided as a total number of 15 schools have inclusive infrastructure established and maintained, which includes separate toilets for boys and girls and provision of gender-friendly WASH facilities such as sanitary pad disposal facility, running water, cleanliness, privacy, among others. Although there has been specific change in behaviour from the school management, this practice has yet to be expanded to other 15 schools that were not found to have focused on inclusive infrastructure by the midline.*
SYSTEM LEVEL	
Indicator 3.1: Number of MoU signed by District and Local level Education Office in support of STEM II program. (Target:1)	A total of 7 MoUs has been signed. 6 MoUs at the local level and 1 at the DEO/Education Development and Coordination Unit. These MoUs have been signed to execute the implementation of STEM II with clear roles and responsibilities of both parties. Apart from the MoUs signed with the DEO, the local level signing took place only after the baseline. Project has jointly organized enrolment campaign where the local mayors, chief minister and other high-level stakeholders participated to reach out individual household. This initiative has supported schools to bring children from most marginalized groups such as bonded labour, Dalit and children with disability. Match funding was shared by local government and other agencies for resource centre establishment, EGAP award and other campaign. LG has prepared guideline and annual education development plan which increase the fund in STEM LG in compare to other local government in far west. In addition to this, the project is also providing technical support to develop the municipal education plan. Before the country

	entered the federal government structure, the MoU were to be signed with only the District Education Office. The implementation of the new federal structure resulted in signing of more MoUs.
Score	***3*** *A score of 3 has been awarded as the project and resources still play a role but there is potential for this to be phased out*
Indicator 3.2: Number of RPs actively involved in STEM II programme. (Target: 6 RPs)	Owing to the recent changes in government education system, the position of Resource Person has been scraped and replaced by Section officers. There will be a minimum of 1 section officer in each municipality. 14 Resource Persons/ School Supervisors are actively involved in STEM II programme for M4QE/Municipal Level Education Development Plan. The project has also trained 6 municipal officers and the provincial government who are now involved in building capacity of SMC, HT and local stakeholders. The indicator was introduced after the baseline. As a result, the involvement of Resource persons cannot be quantified for comparison.
Score	***3*** *Project staffing and resources still play role but there is potential for this to be phased out. However, the participation of the newly appointed section officers can be further explored.*
Indicator 3.3: Number of key targeted stakeholders STEM II share its learning activities with. (Target: 1)	There have been 318 sharing events in total: 6 LGs; 1 DEO/Education Development and Coordination Unit; 30 community schools; 30 SMCs; 30 PTAs; 5 VTs; 4 cooperatives; 122 community level project inception meetings; 90 finding-sharing meetings of P4QE and M4QE trainings at the community level. The trainings for the teachers began after the baseline so the sharing of learnings and activities couldn't be compared.
Score	***3*** *Project staffing and resources still play role but there is potential for this to be phased out.*

Source: School-level data collection | n = 30 STEM intervention schools
****The targets have been extracted from the STEM II Log frame**

The table 35 below represents the indicator wise sustainability score at community, school and system level. Since most of the interventions had not been implemented at baseline, an overall score of 1 had been provided according to the systems: Community (1), School (1) and System (1). Due to this, comparison according to the indicators is not provided. The overall sustainability scores at midline for the three levels along with the set target scores have been presented below.

Table 35: Indicator-wise scoring

	Community	**School**	**System**
Indicator 1	2	2	3
Indicator 2	3	2	3
Indicator 3	-	3	3
Midline score (Total)	5	7	9

Overall sustainability score (0-4, average of the three level scores)	2.5	2.3	3

The overall sustainability score for midline is 21 out of 32. The baseline score for sustainability was 3 out of 16, so at the midline, this has increased significantly which indicates that the activities designed have ensured the sustainability of the project. During baseline, only 18.75% of the overall sustainability score was achieved. While in midline, it has increased to 65.63%. As anticipated in the baseline, the sustainability score has significantly increased which points to the commendable efforts made by the interventions designed by the STEM-II project.

The various workshops conducted have been successful in generating ownership of LGs as relevant stakeholders are thoroughly involved in the process. As a result, they are motivated and encouraged to undertake the job, which ensures the sustainability of the project. Apart from the ownership and motivation for the project, the LGS still lack behind in terms of human resource to prepare education development plans. After being elected two years ago the local government is still confused about preparing local education development plans. This indicates that they still require technical support from the project side.

***The following sub-section and Table 36 have been completed by the project:*

Table 36: Changes needed for sustainability

	Community	**School**	**System**
Change: what change should happen by the end of the implementation period?	For sustaining the impact made by project, project has aimed to create a system which engages the parents through different sets of committees and network. Through such network parents will get platform to engage regularly for the improvement of overall education system.	Since all the project schools have experienced in student centric SIP making process which increased the ownership or students and parents on SIP. The project will continue this facilitation which will support schools to continue the best practices of STEM program including teaching skills and maintenance of girl's friendly infrastructures.	Nepal local government which is in transition will understand and collaborate for promoting gender friendly education system and overall education quality at local level.
Activities: What activities are aimed at this change?	Project has planned different activities for positive changes in parental attitude for girls (Family Dialogue, P4QE & EGAP campaign) to build leadership skills of female parents and encourage them to be the part of school management committee.	Through the different consultative workshop i.e. M4QE and P4QE project showcased the change in SIP making is possible however this may require intensive follow up for action points. Project will continue tracking the action points and also increase the individual mentoring of	In collaboration with local government project will support for school enrolment campaign, provide technical support for WASH infrastructures and connect schools with existing support system on education, child safeguarding and ASRH.

		school leaders, teachers and WASH infrastructures.	
Stakeholders: Who are the relevant stakeholders?	With the approach of engaging multiple stakeholders project has intensively supported girls' parents, women leaders, indigenous leaders and ward level representative for the changes at community level.	Role of headteachers, students' leaders, model teachers and SMC president played a significant role in systemic change for quality education which will be continued in future.	Project has been implementing joint programme for ASRH education, enrolment, promotion of child safeguarding mechanism at schools and ward level and involve in promoting model schools that incorporate student centric education system.
Factors: what factors are hindering or helping achieve changes? Think of people, systems, social norms etc.	Delay in preparation of local level education act, unclear SMC & PTA roles and undermining female leaders' capacity at local level are the factors which usually hindered the systematic changes at community level.	Lack of resource person, frequent changes in education officer and low capacity of municipal leadership in education development mostly hindered achieving changes. Whereas headteacher commitment, teacher's motivation to share their skills and student's leadership supported for the positive changes.	Support from Dy mayors and local leadership has significantly grabbed the attention of different stakeholders for overall change in system however high turnover of trained personnel at local municipal offices sometime create gaps and took long time for substantial changes.

A. Community

Indicator C 1.1:

At the community level, the project will work with the remaining one Municipality to form an education network. In this transition phase of the government in the federal system, there is still no clarity at the local level, and in this one Municipality, Tikapur, the Education Officer had not been appointment in the last one year. Hence, the project could not move ahead with the formation of Education Network here. Once the local government in this Municipality has clarity on the roles and responsibility and assigns officer, the project will work to form a network. In the education networks that have been formed, the project will facilitate the process of developing education plan through multi-stakeholder engagement. This will help make the schools accountable towards the community, which will directly hit the improvement in school governance.

The project has received a score of 2 out of 4 for this indicator for the formation of the education network in 5 out of 6 municipalities but believes the work the project has done till midline deserves a higher rating. The project met not only the target of forming community network but also conducted numerous joint initiatives with these networks such as HH visits during enrolment, organized thematic event, conducted training and orientations to build their capacity.

In the next year, the project will focus on forming an Education Network at Tikapur and making all these educational networks even more functional by training the members, providing technical support on designing education policies at local level, and ensuring they are implemented.

Indicator C 1.2:

The involvement of parents has significantly increased due to the project's interventions, which have increased the ownership of parents in their children's education and connect them with the project schools. This practice will be continued more intensively, which will influence parents to act as strong gatekeepers. In the second indicator, the project has achieved 30 time more target than projected. At the baseline and in the first phase of STEM, there were very few parents and community members visiting school and no records were maintained by the schools. However, in this phase the project has worked with the community on their roles and responsibility of a gatekeeper for the schools in their community through activities, such as P4QE, M4QE, EGAP campaigns, door-to-door visits, street drama, and radio jingles etc. The project has also been working with the school management to create a welcoming environment towards the community members and to maintain a visitor's logbook. Even though the endline targets have been achieved by a significant degree, the project is confident it will maintain the midline numbers during the endline.

The project has received a score of 3 out of 4 for this indicator. The project strongly believes that a stronger school can be built when it has a good gatekeeper in the form of parents. Working on this not only helps improve the overall school governance but also address age-old gender problem of parents being least involved in their daughters' education especially when they are enrolled in the public school. The project is on track to achieve this indicator, and has proposed to push the endline target in the 'Recommendations' section of this report.

B. School

Indicator Sc 2.1:

The project has been continuously working with schools not only to develop their SIPs but also to ensure that schools are progress towards their SIP agendas. For this, the project has encouraged the schools to form a SIP development committee comprising of head teachers, management and students. This way the ownership of the SIP will not lie with one particular group but each stakeholder will take ownership.

The project has received a score of 2 out of 4 for this indicator. The project will focus on working closely with the schools in the next year to develop child-centric SIPs based on the actual needs, and will explore ideas to achieve these SIPs not only through government but also by engaging parents and community members. Due to this engagement, the SIP will not remain as a static document but will service as guide for schools and parents to increase their accountability and responsibility to meet the targets they set in SIP development process. In the next year, the

project will work with all 30 schools but will provide close support to the 15 schools that did not achieve this target by the midline.

Indicator Sc 2.2:

The project will continue to encourage the head teachers and STEM II GC facilitators to share their learning with non-trained STEM teachers from lower grades. The project will also encourage the schools to have a repository of training materials where the hard copies and soft copies of the training manuals, books and other resources can be maintained. The project will ensure that peer to peer sharing, individual mentoring and repository of training contained is maintained at every STEM school by endline.

The project has received a score of 2 out of 4 for this indicator. The project believes that, supported by midline findings, the GC is one of the strongest reasons in the project to the increased learning scores and this can be attributed to many factors, one of which is improved teaching methodologies. As such, the project has worked continuously to transfer the teaching practices and teaching environment from clubs to classrooms, which is one of the approaches being sharing between trained and non-trained teachers. In the next year, the focus will be on conducting sharing events as well as working with the head-teachers to establishing a mechanism within schools, such as creating a space in teachers' meetings for sharing learning or allocating a day every month for sharing between teachers. Therefore, through formal and even non-formal approaches the project will work to ensure that sharing is carried out.

Indicator Sc 2.3:

The project has been ensuring that each school has separate toilet for girls and boys, running water, hygiene utilities and dustbin and/or incinerator at each toilet. Even though the project has achieved a score of 3 out of 4, the project is still not satisfied with 41% of the girls saying they have sanitary pad disposal facilities in their toilet, 48% saying they have clean toilets and 58% saying they have running water. In the next year, the focus of the project will be to support each school with pad disposal incinerator and will conduct WASH and hygiene campaign in each school. To achieve this indicator the girls will have to play a major role to ensure the availability of these facilities and maintain the condition.

C. System

Indicator Sy 3.1:

The project has achieved this target, and in the next one year the project will work with the local level educational authorities to promote gender friendly education system and focus on improving overall education quality. The project has successfully developed and maintained a good relationship with local and provincial government in the project areas and have been involving local government actors in concerned project activities. The project will continue to do so in the next one year as well, and share best practices and lessons learned with the authorities to scale

it up in other government schools in the area. The project is satisfied with the rating of 3 and will continue to work closely with the local government by providing workshops/trainings, technical support to develop policies, and also by sharing the midline summary, how-to-notes and policy briefs.

Indicator Sy 3.2:

Until the midline, the project has worked with majority of Resource Persons in STEM areas to develop student centric teaching curriculum, connecting schools and local government through RPs and involving the RPs in different STEM trainings, after which the RPs play a role to influence schools to promote quality education. Since the project has already achieved the endline target, in the next one year the project will continue to work with RPs to develop education plans at the local level as well as promote the agenda of the project.

The project has received a score of 3 out of 4 for this indicator. However, with changes to the local government the position of RP has been dissolved and under each administrative area an Education Section has been formed which has up to 3 key positions – Education Officer, Under Secretary and School Supervisor (which can change per administrative area). This means the project will now have to work from scratch to build relationships with these new positions and work closely for joint initiatives in each of the respective Local Governments.

Indicator Sy 1.3:

The evaluators have accessed the local level project sharing through which the project has surpassed the endline indicator. Apart from this project has also been sharing its best practices and lessons learned with other LNGB project, VSO, Girls Spark, the British Council, Association of NGOs in Nepal, Nepal Government's Central Project Advisory Committee and at GEC roundtables. After midline is signed off, the project continues to share the findings with stakeholders at local, central and international level.

The project has received a score of 3 out 4 for this indicator. With the finalisation of the midline report, the sharing events will increase significantly. However, since the project already shares this information every quarter to the FM through the QPR the project would like to drop this indicator.

4. Key Intermediate Outcome Findings

4.1. IO 1: Attitudes and Behaviours

IO Indicator 1.1. Average proportion of time per day IS girls spend on unpaid domestic and care work

Table 37: Summary findings on IO Indicator 1.1.

IO	IO Indicator	Baseline	Midline Target	Midline	Target achieved?	Target for next evaluation point	Will this IO indicator be used for next evaluation point?
IO 1: Attitudes and behaviours	IO Indicator 1.1. Average proportion of time per day IS girls spend on unpaid domestic and care work	3.4 hours	3.2 hours	1.81 hours	Yes	1.81 hours	Yes
Key qualitative findings							
The girls agreed that they do not have to spend as much time in household chores during school days and exam days as they are mostly busy in attending tuition classes and girls' club classes.							
As girls remain busy in attending the classes, the household works are also evenly shared among family members.							
Upon discussions with the parents it was found that since girls in grades 9 and 10 are at a higher class, they need to attend tuition classes in order to prepare for SEE exams, hence the reduction in their engagement in household chores.							

Source: Girls survey | n = 347

A. Interpretation and relationship to outcomes

The table 37 above shows that the target was achieved. The key reasons for this were girls' engagement in girls' club classes and tuition classes. As girls remain busy in attending the classes, the household works are also evenly shared among family members. 84.7 percent girls said that household chores are fairly divided among all family members in their respective families.

> Household chores are the responsibilities of all the members of the family. My daughter will be appearing SEE exams this year and I and my husband have made sure her involvement in household chores does not affect her studies. We have made it a point not to overburden our daughter with works at the household.
>
> **- Mother of a girl in Hasuliya**

This can also be viewed in reference to the learning outcome, where the result of reduction in time devoted by girls in household chores is reflected in the improvement in literacy and numeracy scores of the girls, as presented in the learning section of this report. Household chores and learning outcome of the girls was found to be significantly correlated at the 0.05 confidence level.

In terms of time spent by girls in household chores during different stages in a year, girls were found to be spending more time in household chores during farming and festival seasons. During farming season, parents and male siblings of most of the girls remain busy in the fields, which require the girls to take the responsibilities of household chores. However, the increased amount of work during farming season applies to all family members, not just the girls. Even during festivals and social events, girls are required to do household work by helping their parents as they have guests and well-wishers visiting their homes.

> We have guests in our house during festivals and social events. We ask the girls to help us as we are overwhelmed with work.
>
> **- Parent from Sukkhad**

Table 38 below presents the amount of time girls spend on household chores during different times of the year.

Table 38: Amount of time spent by girls on household chores during different times of the year

Time spent on household chores during …	Average time spent (in hours)	Average time spent (in minutes)
School days	1.48	88.8 minutes
Farming season	2.26	135.6 minutes
Festival	2.12	127.2 minutes
Exams	1.41	84.6 minutes

Overall	**1.81**	**108.6 minutes**

Source: Girls survey | n = 347

B. Sub-group analysis

Table 39 below presents the baseline-midline comparison of girls' engagement in household chores across different characteristics and barriers identified. By ethnicity, we can see that Dalit girls, among other ethnicities, are still working about 2 hours every-day, in-spite of a 1.46-hour decline in their engagement in household chores since baseline.

Further disaggregating household chores according to location type, girls staying in the rural areas were found spending the most amount of time in household chores. According to an education officer interviewed in Dhangadhi, this difference in time among the girls living in different location setting might be because of more works in the rural household, such as livestock rearing, farming engagements, among others, are practiced in rural areas as compared to urban.

In terms of barriers, it is interesting to observe that even the girls who study less than an hour a day at home have a significant decline in their household responsibilities. This further corroborates our findings discussed above in learning section, arguing that reduction of hours spent in household chores shouldn't necessary result in the increase in study time at home as girls are busy in their learning engagement outside the home, such as tuition classes, girls club classes, among others.

Table 39: Sub-group analysis of IO Indicator 1.1.

Characteristics	**Baseline**	
	Baseline	**Midline**
	Ethnicity	
Brahmin/ Chhetri	2.95 hours	1.66 hours
Janajati	2.73 hours	1.68 hours
Tharu	3.63 hours	1.88 hours

Dalit	3.46 hours	2 hours
	Location type	
Rural	3.56 hours	1.94 hours
Semi-urban	3.30 hours	1.75 hours
Urban	2.88 hours	1.61 hours
	Household characteristics	
Households unable to meet basic needs	3.25 hours	1.81 hours
Households having 5 or more than 5 members	3.34 hours	1.81 hours
Primary caregiver having no education	3.13 hours	1.86 hours
Language of instruction at school different from mother tongue	3.53 hours	1.78 hours
BARRIERS		
	Household level barriers	
Girls studying 1 hour or less than 1 hour at home	3.60 hours	1.38 hours

Girls who contribute 3 hours or more than 3 hours to household chores	N/A	N/A
	School-level barriers	
Toilets in school are cleaned only sometimes	3.36 hours	1.81 hours
Toilets in school without sanitary pad disposal facility	3.43 hours	1.73 hours
Disagrees teachers make them feel welcome	3.36 hours	1.47 hours
Agrees teachers treat boys and girls differently	3.29 hours	1.63 hours
Agrees teachers are often absent from class	3.50 hours	1.91 hours

Source: Girls & HH survey | n = 347

C. Reflections and targets

The indicator on amount of time spent by girls on household chores tells us how the change in the burden of household works has been working around for girls' learning performance. As baseline evaluation of STEM II identified household chores as a key barrier to girls' education, this indicator is directly associated with the learning outcomes of the project.

Despite a significant reduction in amount of time devoted by girls to household chores from baseline to midline, it is critical to retain this trend in order to ensure that the project sustains its learning achievements observed by the midline evaluation. Apart from that, ample qualitative evidences have been presented in above sections, highlighting how the girls perceive reduction of household chores as an important factor that allows them time to engage in learning activities, meet with friends, participate in girls' club classes, attend tuition classes after school, among others. In this light, the indicator on household chores still seems relevant, and will continue to affect girls' overall development in the future as well. Hence, it is recommended that this indicator be retained for the next evaluation point as well.

However, midline findings show that the target set for reduction of household chores has been overachieved. While the target set for endline was to reduce the amount of time spent by girls on household chores to three hours, midline data shows us that the achievement was beyond

that. In that regard, it is advisable to revise the target set for the next evaluation point, considering the achievements made by the project by midline evaluation.

IO Indicator 1.2.: Average proportion of time per day girls spend to study at home

Table 40: Summary findings on IO Indicator 1.2.

IO	IO Indicator	Baseline	Midline Target	Midline	Target achieved?	Target for next evaluation point	Will this IO indicator be used for next evaluation point?
IO 1: Attitudes and behaviours	IO Indicator 1.1. Average proportion of time per day girls spend to study at home	1.9 hours	2.1 hours	1.61 hours	No	3 hours (including study time at home and outside home, i.e. girls' club classes, tuition classes, group studies, etc.)	Yes, with revision recommended
Key qualitative findings							
No significant difference in the study hours at home from baseline to midline despite a remarkable decrease in the time spent by girls in household chores. However, girls said study time has increased outside of home as a result of reduced household chores.							
When asked if they have enough time to study at home, only 0.58 percent of the girls said they don't have enough study time. Similar findings were echoed during qualitative discussions as well. Both parents and teachers confirmed that girls indeed get enough time to study at home.							

Source: Girls survey | n = 347

A. Interpretation and relationship to (learning) outcomes

As shown in table 40 above, the midline target for study hours at home set during baseline was not achieved. It was interesting to observe no significant difference in the study hours at home from baseline to midline despite a remarkable decrease in the time spent by girls in household chores. The external evaluator raised this point during qualitative discussions, to which the girls unanimously stated that their study time has indeed increased. According to them, as a result of reduced household chores, they get time to meet friends and discuss studies, attend tuition classes and girls club classes. The enhanced access to social capital is reflected by the following quote.

> The fact is that I study outside home a lot. Because of extra classes, I come home tired in the evening and take rest. Even my parents don't force me to household chores. When I come home late in the evening after attending classes, my mother asks me to have dinner and take rest while she does the chores in the kitchen by herself.
>
> **- A girl in Bauniya**

When asked if they have enough time to study at home, only 0.58 percent of the girls said they don't have enough study time. Similar findings were echoed during qualitative discussions as well. Both parents and teachers confirmed that girls indeed get enough time to study at home.

> Parents are increasingly becoming aware about the importance of studies for both boys as well as girls. This is the reason behind girls' improving school performance.
>
> **- A teacher in Dhangadhi**

Relating this with their improvement in learning outcome – both literacy as well as numeracy – girls reflected during qualitative discussions that it is their engagement in girls' club activities and enhanced social capital that has made all the difference. However, as already discussed above, as the amount of time spent in studying within the household does not sufficiently cover the entire study hours of the girls, study time at home was not found to be correlated with learning outcomes.

In terms of time spent by girls studying at home during different stages in a year, girls were found to be spending much time studying during exams than any other time of the year. Table 41 below shows that the girls' study time at home declines sharply during farming and festival seasons as they keep busy either in the field/ farm or celebrating festivals.

Table 41: Girls' study time at home

Time spent on studies	Average time spent (in hours)	Average time spent (in minutes)
School days	1.18 hours	70.8 minutes
Farming	0.89 hours	53.4 minutes
Festival	0.87 hours	52.2 minutes
Exams	1.77 hours	106.2 minutes
Overall	1.61 hours	96.6 minutes

Source: Girls survey | n = 347

B. Subgroups analysis

Table 42 below presents the baseline-midline comparison of girls' study time at home across different characteristics and barriers identified. No significant difference between time spent on reading can be observed in any of the specific characteristics or barriers.

By ethnicity, we can see that Brahmin/ Chhetri girls spend the most amount of time studying at 1.72 hours while girls belonging to Janajati ethnicity spend the least amount of time studying at home at about 1.5 hours.

The table shows a slightly higher amount of reading time for girls belonging to 'urban' locations, however, the difference between rural, semi-urban and urban location types is only marginal.

Table 42: Sub-group analysis of IO Indicator 1.2.

Characteristics	Baseline	
	Baseline	Midline
	Ethnicity	
Brahmin/ Chhetri	2.04 hours	1.72 hours
Janajati	2 hours	1.43 hours
Tharu	1.89 hours	1.54 hours
Dalit	1.68 hours	1.68 hours
	Location type	
Rural	1.97 hours	1.64 hours

Semi-urban	1.98 hours	1.52 hours
Urban	1.89 hours	1.66 hours
	Household characteristics	
Households unable to meet basic needs	1.84 hours	1.79 hours
Households having 5 or more than 5 members	1.97 hours	1.55 hours
Primary caregiver having no education	1.78 hours	1.47 hours
Language of instruction at school different from mother tongue	1.98 hours	1.89 hours
BARRIERS		
	Household level barriers	
Girls studying 1 hour or less than 1 hour at home	N/A	N/A
Girls who contribute 3 hours or more than 3 hours to household chores	1.9 hours	1.5 hours
	School-level barriers	
Toilets in school are cleaned only sometimes	1.90 hours	2.03 hours

Toilets in school without sanitary pad disposal facility	1.82 hours	2 hours
Disagrees teachers make them feel welcome	2.08 hours	1.66 hours
Agrees teachers treat boys and girls differently	1.73 hours	1.92 hours
Agrees teachers are often absent from class	1.94 hours	2.04 hours

Source: Girls and HH survey | n = 347

C. Reflections and targets

The indicator on the proportion of time spent by girls studying at home is intended at recording the proportionate growth in reading time with a reduction in the burden of household chores. However, as we can see in the findings above, reduction of household chores has not necessarily resulted in the increase in study-time at home. Rather, it has enhanced the girls' social capital, allowing them to engage in activities outside school and home, meet friends, attend girls club classes, among many others, which has resulted in the girls' overall development, including an improvement of learning performance, as discussed in learning section of the report.

In that sense, the indicator has not been able to adequately address the requirement to know in quantitative figures how the project activities have increased girls' engagement in learning activities. This finding of midline evaluation is a realization that 'study hours at home' tell us only a half-baked story, while missing out on a complete picture of how the girls might be developing through an exposure to girls' club classes/ activities, tuition classes, among others.

Having said that, as time spent by girls in studies is a critical lens through which we can observe their learning performance, it is important carefully record girls' study time, not just at home, but also the outside-home activities that are related to learning. It is therefore recommended that the indicator measuring girls study time be revised and target set accordingly, in order to incorporate a broader picture of study hours outside home as well.

D. Other relevant analyses for IO Attitudes and Behaviours

With regards to other general attitudes and behaviours, parents said that they wanted their children, be it a girl or boy to receive education. During focus group discussions with the girls and the boys, they also had similar opinions to share. Girls said that their parents motivated them to study as much as their family's economic conditions would allow. These findings resonated in the boys' group discussion as well. According to one of the boys in Tikapur, "Me and my sisters

would want to achieve as much education as we can. We could earn and study simultaneously if our parents cannot afford our education."

My parents would never stop me from attaining higher education. I could study as much as my financial condition would allow.

- IS Girl from Ratanpur

We want all our children to get educated and become independent, be it boy or girl. We want all of them to progress in the future.

- Parent from Ratanpur

Table 43: Level of schooling parents want their children to achieve

Level of schooling	Baseline		Midline	
	Girls	Boys	Girls	Boys
Pass SEE	2.02%	1.45%	0.57%	0.29%
Complete Higher Secondary	6.92%	2.41%	1.44%	2.31%
Complete Bachelors	6.34%	0.97%	2.6%	1.73%
Complete Masters	4.61%	7.22%	6.34%	8.65%
Whatever level they want to study in	78.97%	86.54%	85.6%	87%
Don't know	1.16%	1.45%	3.45%	-

Source: Girls' survey | n = 347

Parents normally visit their daughter's school only when they have to pick up results or when they are summoned by the school. From the household surveys conducted, we found out that about 50 percent of the parents from treatment school visited their daughters' school and only 37 percent of parents from control schools visit the schools. This indicates that the interventions conducted by STEM have had some positive effect on parental engagement in their daughters' studies. This finding was validated from the qualitative consultations as well. Upon interrogation, they shared that because of STEM, they now visit schools more. Before a year or so they did not bother visiting the schools. But now, they participate in parent teacher meetings and inquire about their daughter's performance in schools. They also participate in admissions campaigns put up by the local government and schools. Parents of the treatment schools said that they participated in various awareness campaigns directed to the other community members such as street drama, community discussions, among others. The campaigns were specifically designed to spread awareness about the importance of education for children both boys and girls, lessen the disparity between private and public schools and why parents shouldn't neglect basic aspects like cleanliness and regularity even when sending off their students to government schools.

> We want the other parents in the community to understand that just because they are sending their children to government school, they shouldn't take it for granted. Even students in public school need to dress neat and tidy and be punctual and regular to school be it government or private.
>
> **- A PTA member from Dhangadhi**

Meanwhile, in terms of marriage, parents interacted with in the course of this study wanted their daughters to settle down only when they are ready. As shown in table 44 below, even though the appropriate age for marriage is quite similar across all ethnicities for both baseline and midline, it has increased only slightly from Baseline to Midline. Average appropriate age for marriage as reported by the girls' parents during household survey is 22 years, which exceeds the national marriage age limit of 20 years. In that regard, these figures from Kailali paint a bright picture, while UNICEF's record state Nepal has the 17th highest prevalence rate of child marriage in the world and 17th highest absolute number of child brides[6].

During the discussions with parents it was highlighted that the practice of child marriage has been long gone and they do not force or persuade their daughters to get married at an early age. The only time child/early marriage takes place is when girls themselves elope with their partners to get married. This ill practice has been invited by the exposure to social media. Girls who have access to internet and mobile phone fall prey to this practice. One of the parents from the FGDs coined this practice as *Facebook marriage.* Boys and girls meet through Facebook, fall in love at a tender age and elope together as their parents would not agree to their marriage.

> We don't encourage early marriage. But girls take these decisions on their own these days. They take decisions on their own and elope with their boyfriends and boys who they have met through Facebook.

[6] https://www.girlsnotbrides.org/child-marriage/nepal/

- A Parent from Tikapur

Table 44: Appropriate age for marriage as stated by parents

Ethnicity	Baseline	Midline
Brahmin/ Chettri	22	23.5
Dalit	21	22
Janajati	21	23
Tharu	21	22

Source: Girls' survey | n = 347

4.2. IO 2: School Governance

Table 45: Summary findings of IO Indicator 2.1.

IO	IO Indicator	Baseline	Midline Target	Midline	Target achieved?	Target for next evaluation point	Will this IO indicator be used for next evaluation point?
IO 2: School Governance: School Environment promotes quality education supporting girls	IO Indicator 2.1: Percent of STEM schools that identify girl's needs through gap assessment and incorporate into their SIPs	0	50 percent	50 percent	Yes	90 percent	Yes
Key qualitative findings							
The development of plans has come a long way from that evaluated at baseline. The SIPs in 15 schools visited are formulated and endorsed through an all-encompassing approach whereby head teachers, teachers, SMC/PTA members and student representatives hold a meeting to identify the needs of the schools.							
Although a few plans centered around the girl's needs have been incorporated into the SIP, infrastructure development however remains a top priority.							
During FGDs girls said that they had a better understanding of the SIP now. Until a year or two ago they did not even know what a SIP was. They feel a sense of achievement now that they are part of drafting the SIP.							
Although a few of the girls expressed through the FGDs that if there were fans in the classroom, it would be easier to concentrate in their studies especially when they are running classes under tin-roofs. Even in cases where they had fans, lack of electricity posed a huge problem. Other than this, they did not mention any concerns about not being able to concentrate in their studies.							

Source: School SIP assessment | n = 30 schools

Through this intermediate outcome, STEM II plans to promote a school environment that ensures quality education for supporting girls. In order to achieve this, schools that have received STEM interventions are expected to develop SIPs that identify girl's needs through gap assessment and incorporate it into their SIPs. However, midline evaluation found that despite an improvement

compared to baseline, SIPs are still focused mainly on building and maintaining physical infrastructure rather than including gender-friendly plans.

In order to evaluate the SIPs developed by the schools, FDM visited all the 30 treatment schools. Upon assessing the SIPs, the SIP evaluation form was filled. The forms were designed to evaluate the SIPs on various criteria: does the school have an updated SIP, when was it last updated, and if it incorporates the gap assessment. After the assessment of the plans and activities mentioned in the action plan, they were scored based on how well they identified the girl's needs and incorporated it into their SIPs. 1 being the score for serious concern (nothing in place) and 5 being the score for outstanding progress (all action taken and currently being incorporated).

A. Interpretation and relationship to outcomes

Upon evaluation of the SIPs and consultations with the head teachers and SMC/PTA members, 50 percent of the schools were found to have incorporated plans in their SIPs after assessing the girl's needs, as shown in table 46 below. These plans included building and expanding girl's toilet for the convenience of their female students and implementing and continuing the girls club classes. Even though there has been some improvement in the gender-friendly SIPs, most of the plans are still designed around infrastructure development. The main features which were found in common across all SIPs were: building of boundary walls, buying sports equipment, better management of drinking water facilities, construction of furniture for the classroom, better internet facilities and computer lab, among others. Other features also contained improving the learning outcomes of the students, learning outcomes of marginalized students, increasing student enrolment and maintaining continuity and improving teaching quality. One of the schools also listed disaster preparedness as one of the agendas in SIP.

Table 46: SIPs with gender-friendly plans

Total no. of SIPs reviewed	Number of SIPs with gender friendly plans	Remarks
30 treatment schools	15	These schools have identified girl's needs through gap assessment and incorporated it into their SIPs to create an enabling environment for girls to study.

Source: School SIP assessment | n = 30 schools

The development of plans has come a long way from that evaluated at baseline. The SIPs in 15 schools are formulated and endorsed through an all-encompassing approach whereby head teachers, teachers, SMC/PTA members and student representatives hold a meeting to identify the needs of the schools. The teachers, SMC/PTA members and students have a better understanding of the school improvement plans now. Education officer interviewed during qualitative data collection also validated this information saying that the stakeholders of some schools are well-informed about the SIPs. Nevertheless, although a few plans centered around the girl's needs have been incorporated into the SIP, infrastructure development still remains a top priority for all the schools.

> Building schools and walls will always be our priority. We can talk about gender-friendly plans only when we have a roof over our heads and our boundaries are secure.
>
> **- A Teacher from Ratanpur**

When we asked the girls about this during the FGDs they said that they had a better understanding of the SIP now. Until a year or two ago they did not even know what a SIP was. They feel a sense of achievement now that they are part of drafting the SIP.

> Until a year ago, I did not know what a SIP was. Now we participate while designing it. It feels good to be involved.
>
> **- IS Girl from Dhangadhi**

The association of this IO can be established with the learning outcome qualitatively. Some girls interacted with during qualitative discussions stated that schools incorporating girls' needs in their overall management and development encourages the girls to participate in learning activities and concentrate in their studies. A girl from Dhangadhi articulated this comparing the girls club classes and their schools.

> Girls club classes are very well managed and this helps us to perform well in our studies. Same would apply in regular school classes as well, however, not all aspects in the school are as well-managed as the girls club classes, although there have been some improvements recently.
>
> **- IS girl from Ratanpur**

B. School WASH facilities analysis

As this IO indicator was examined through school-level observation and SIP assessment, subgroup analysis by characteristics and barriers identified for midline have not been conducted. Rather, this section presents an analysis of the key school WASH facilities as recorded through girls' survey.

As highlighted in table 47 below, there has been a slight increase from 50 percent to 58.9 percent girls stating school toilets now have the facility of running water. Despite this improvement, 20.5 percent girls said they still do not have running water in the toilet, a problem that needs fixed in order to ensure a conducive learning environment in school. Likewise, only 25.18 percent girls said the toilets are always clean, warranting school administrations' attention towards toilet cleanliness. A few of the girls during FGD voiced concerns that the state of the toilets sometimes demotivates them to attend schools, especially during periods. It was observed during school visits, that some of the toilets were in terrible conditions. The bathroom doors either did not have locks, or they were half damaged.

The school tries their best to keep the toilet clean. Maybe even they do not have the resources to keep it clean and well maintained all the time.

- IS girls from Ratanpur

Likewise, percentage of girls stating that there are no sanitary pad disposal facilities in the school has increased from 41.37 percent at baseline to 47.12 percent at midline.

A project staff member interviewed in the course of this study said that this is mainly due to schools' negligence and inability to regularly maintain facilities provided by projects like STEM II. "The facilities like sanitary pad disposal bins remain in the toilet unless they are not damaged," the project staff said. "Once these facilities become damaged, schools rarely take any initiative to replace or repair them." The project staff also said that STEM II has recently rolled out interventions to ensure a more sustainable solution to the problem of sanitary pad disposal, the effect of which might be evident by the end-line evaluation.

Table 47: School WASH facilities

	Baseline	**Midline**
	Availability of running water in the toilet	
Always	50%	58.9%
Only sometimes	29.8%	20.5%
Most of the times	14.3%	15.47%
Never	5.76%	4.68%
	Cleanliness of the toilets	
Always	21.94%	25.18%

Only sometimes	52.16%	35.61%
Most of the times	15.83%	23.74%
Never	10.07%	15.11%
	Sanitary pad disposal facility in school toilet	
Yes	58.63%	52.88%
No	41.37%	47.12%

Source: Girls survey | n = 347

C. Reflections and targets

As already stated above, school governance has a direct impact on girls' overall participation in learning as well as non-learning activities in school, such as making and prioritizing plans in SIPs. Considering this, the indicator on school governance is important to measure how the schools have been developing their governance systems by drafting and implementing gender-friendly and inclusive SIPs, encompassing the specific needs of the girls. As our finding shows that a lot still needs to be done in terms of improving overall school environment to create a conducive learning milieu for marginalized girls, this indicator will be useful to measure any changes recorded through baseline and midline to endline evaluation point. As the project staff have said they are planning on rolling out new interventions to support school WASH facilities for the next evaluation period, it will be interesting to see how well these supports are managed and utilized by the schools at the endline. As the midline target set during baseline was successfully met, it is advisable to continue interventions towards meeting the target set for endline, without any changes.

4.3. IO 3: Attendance

Table 48: Summary findings on IO Indicator 3.1.

IO	IO Indicator	Baseline	Midline Target	Midline	Target achieved?	Target for next evaluation point	Will this IO indicator be used for next evaluation point?
IO3 Attendance: Improvement in marginalized girls' attendance in schools throughout the life of the project	IO Indicator 3.1: Percentage improvement in attendance rates	85.1%	88.1%	87%	No	88.1%	Yes
Key qualitative findings							
Trend of attendance across given months shows a largely similar result at both baseline and midline. Despite a decent attendance rate throughout the year, in some specific months (April/ May, July/August & October/November), a sharp decline in attendance can be observed.							
A project staff said the project can focus on increasing the attendance for Baisakh and working with the school to ensure that the schools are properly running from the start of the academic year itself. However, as other months with higher absence is a purely financial factor where the family needs collective effort for harvesting and cultivation, the project may not have much stake around changing this trend.							
None of the stakeholders interviewed either in group or individually flagged up girls' 'low attendance' as a barrier, as attendance is already high at over 85 percent.							

Source: School attendance records | n = 396

STEM II recognizes that barriers like obligation of household chores, plantation and menstruation causes many girls to remain absent from school at regular intervals. Missing classes is likely to affect the girls' understanding of the lessons which is certain to have an adverse impact on their learning. Repeated poor performance and failure then leads girls to drop out, successively, affecting their transition as well. Activities planned under IO3, will help ensure that girls maintain a steady attendance throughout the year and barriers at household level do not affect the attendance as well as learning and transition of the girls.

As a part of the midline evaluation, attendance of girls in the sample was collected from the attendance registers at respective schools. The sample girls were identified in the registers at first

and their information was subsequently recorded. As in the baseline, attendance data of control schools was not collected.

A. Interpretation and relationship to outcomes

As shown in the Table 48 above, the overall attendance rate has increased by about 2 percent from baseline (85.1%) to midline (87.0%). Although the midline target of 88.1 percent attendance was not met, the difference observed in the attendance rate from baseline to midline was deemed statistically significant.

Trend of attendance across given months shows a largely similar result at both baseline and midline. Despite a decent attendance rate throughout the year, in some specific months, a sharp decline in attendance can be observed. Figure 1 below shows decline in attendance in the months of *Baisakh* (April/ May), *Shrawan* (July/ August) and *Kartik* (October/ November). Nevertheless, an increase was observed in the attendance recorded in these specific months across baseline-midline.

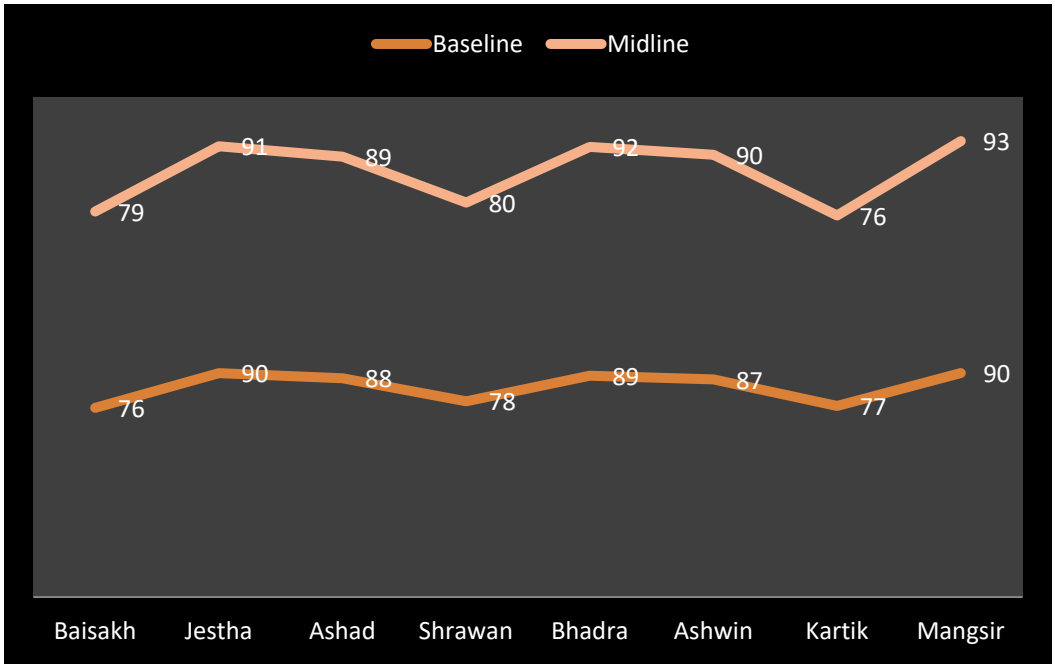


Figure 1: Attendance rates observed at baseline and midline across different months
Source: School attendance records | n = 396

As highlighted also during baseline, Baisakh (April/ May) is the first month of Nepali academic year. Classes are not regular on the first few days as some teachers as well as students alike, who come from outside the district, are unable to arrive on time, hence the high absence recorded this month.

Similarly, the reason behind relatively lower attendance rates observed during monsoon season Shrawan (July/ August), is plantation. During monsoon, on peak plantation days, girls remain absent from school as they have to participate in plantation along with other family members.

Again, in Kartik (October/ November), girls' attendance takes a dip due to their responsibilities in harvesting the field.

This is also reflected by the findings from girls' survey, where 60.37 percent girls said they devote more than two hours to household works during farming season, compared to 43.61 percent during normal school-going days, 32.97 percent during examinations. Higher amount of work at home during farming seasons resulting in relatively lower attendance at school are also explained further as 70 percent of the girls said they have to miss school because of household works/ responsibilities, as shown in the table 49 below. Apart from household works, other major reasons for absence are festivals, menstruation and agricultural work.

Table 49: Reasons for absence

Reasons for absence	
Household works	70.5%
Festivals	61%
Menstruation	29%
Agricultural work	24.1%
Caring for other family members	6.5%
Engagement in family business	4.1%
Sickness	1.6%

Source: Girls' survey | n = 347

High attendance of girls in the schools was further corroborated during qualitative discussions as well. None of the stakeholders interviewed either in group or individually flagged up girls' 'low attendance' as a barrier. For instance, a head teacher interviewed in Ratanpur, a rural location affected by seasonal flood every year said girls' attendance has never been a problem in his school.

> Girls who are enrolled are regular in school. Some girls skip classes due to stomach pain when they have periods, but this is occasional. In fact, girls have better attendance than boys.
>
> **- A head-teacher in Ratanpur**

According to the head-teacher, there is a trend of seasonal work-migration to India among boys, due to which they remain absent sometimes for even two to three months. During FGDs, boys said that the trend of going to India is decreasing in recent years; however, some of them still go to India during the winter season for work. As highlighted in the baseline report, boys' seasonal migration is not a result of compulsion to support their families financially, but their own decision to earn some money and buy gadgets like mobile phones for themselves.

The external evaluator also conducted spot check - a random head-count of students of grades 9 and 10 in the intervention schools during school-level data collection. As most of the intervention population in Grade 8 at baseline would have transitioned into the successive Grade 9, head-count was not conducted in Grade 8. The head-count data is more or less in line with the attendance data obtained from school registers. While the average attendance of Grade 9 students, as obtained from school registers, was 86.7 percent, the same for the day of head-count was 85.40 percent. The table below also presents the head-count data collected by the project in June 2018 and December 2018. The external evaluator conducted the head-count in February 2019, during the data collection for midline evaluation.

Table 50: Head-count data

Grade	Total girls enrolled	Attendance reported in school register	Attendance reported through head-count	Attendance rate (from school register)	Attendance rate (from head count)
Grade 9	1107	949	938	85.70%	84.70%
Grade 10	1657	1453	1429	87.70%	86.20%
Total	**2764**	**2402**	**3536**	**86.70%**	**85.40%**

Source: Spot-check data| n = 30 schools

In terms of attendance's relation with the learning outcome of girls, table 51 below presents SeGRA and SeGMA scores of the girls disaggregated by different attendance categories. However, no statistical significance or any correlation was observed between girls' attendance and their literacy and numeracy scores. This is also explained by high attendance rate already, where 82.90 percent of the girls have attendance rate of above 80 percent.

Table 51: Attendance and its relation with literacy and numeracy

Attendance rate	Literacy		Numeracy	
	Baseline	Midline	Baseline	Midline

70-80 percent (n=47)	45.7%	57.75%	22.55%	49.35%
80-90 percent (n=137)	42.7%	49.8%	23.5%	43.65%
More than 90 percent (n=91)	42%	48.9%	16.35%	45.9%

Source: Attendance records and learning tests | n = 275

B. Subgroups analysis

Table 52 below presents the attendance rates of girls according to difference characteristics and barriers identified. Girls representing all the difference characteristics taken into account as well as the pertinent barriers have demonstrated a growth in their attendance rates in comparison to baseline.

Table 52: Sub-group analysis of IO 3

Characteristics	**Attendance rates**	
	Baseline	**Midline**
	Ethnicity	
Brahmin/ Chhetri	86.64%	87.20%
Janajati	85.62%	84.75%
Tharu	83.95%	87.45%
Dalit	85.57%	86.02%

	Location type	
Rural	83.80%	86.85%
Semi-urban	86.33%	86.75%
Urban	86.92%	88.45%
	Household characteristics	
Households unable to meet basic needs	85.77%	88.46%
Households having 5 or more than 5 members	85.27%	86.97%
Primary caregiver having no education	84.70%	86.73%
Language of instruction at school different from mother tongue	84.32%	87.42%
BARRIERS		
	Household level barriers	
Girls studying 1 hour or less than 1 hour at home	85.1%	89%
Girls who contribute 3 hours or more than 3 hours to household chores	84.74%	87.46%

	School-level barriers	
Toilets in school are cleaned only sometimes	84.91%	86.80%
Toilets in school without sanitary pad disposal facility	85.26%	87.29%
Disagrees teachers make them feel welcome	83.6%	87.2%
Agrees teachers treat boys and girls differently	85.03%	87.10%
Agrees teachers are often absent from class	84.18%	86.94%

Source: Attendance records, girls and HH surveys | n = 347

In terms of grades, attendance records of girls from all grades are similar. It was highlighted during baseline that decline in the attendance of even the grade 10 girls during three months discussed above is alarming as it could have an impact on their SEE preparations. There has been a slight increase in the attendance rate of grade 10 girls in these specific months. However, as the margin between attendance recorded during these times and other regular months still exists, project can lay more focus on this in its activities. During an interview, a project staff said the project can focus on increasing the attendance for Baisakh and working with the school to ensure that the schools are properly running from the start of the academic year itself. However, as other months with higher absence is a purely financial factor where the family needs collective effort for harvesting and cultivation, the project may not have much stake around changing this trend.

Table 53: Attendance records disaggregated by months and grades

Month	Baseline			Midline		
	Grade 8	Grade 9	Grade 10	Grade 8	Grade 9	Grade 10
Baisakh (April/May)	75.40%	76.10%	75.70%	72.8%	79.3%	76.0%
Jestha (May/June)	89.90%	89.70%	89.30%	91.2%	88.6%	92.0%

Ashad (June/July)	87.90%	87.60%	87.20%	88.3%	86.2%	85.6%
Shrawan (July/August)	78.10%	78.70%	78.30%	76.7%	77.5%	81.2%
Bhadra (August/September)	88.40%	88.60%	88.70%	89.9%	91.3%	90.8%
Ashwin (September/October)	86.80%	87.20%	87.40%	86.3%	85.3%	92.5%
Kartik (October/November)	76.30%	76.90%	76.30%	74.7%	75.2%	78.8%
Mangsir (November/December)	89.50%	89.70%	89.80%	92.2%	91.9%	94.5%
Poush (December/ January)	-	-	-	89.9%	90.6%	93.4%
Magh (January/ February)	-	-	-	90.2%	91.3%	92.7%

Source: School attendance register | n = 396

C. Reflections and targets

Although the midline target set at baseline was not met, attendance has a seen a growth of about two percent since baseline, arriving at a figure of 87 percent at midline from 85 percent at baseline. Our qualitative findings also suggest that attendance of girls has not been a matter of concern to both school-based stakeholders as well as girls alike, as most of the girls are largely regular in school. Taking the trend of findings from both baseline and midline into account, attendance does not even seem to significantly affect the learning performance of girls. In that light, it is advisable to organize a discussion among project, evaluators and the fund-manager to identify a more meaningful IO and IO indicator to better address the challenges around girls education in Kailali.

4.4. IO4: Financial Literacy

Table 54: Summary findings on IO Indicator 4.1.

IO	IO Indicator	Baseline	Midline Target	Midline	Target achieved?	Target for next evaluation point	Will this IO indicator be used for next evaluation point?
IO4 Financial Literacy: Marginalized OOS/SG girls are equipped with skills and knowledge that allows them to make informed financial decisions	IO Indicator 4.1: Percent of OOS/SG marginalized girls who get STEM's YFLT move to a higher learning level	43.41% (Average pre-score)	70% (movement to higher learning level)	89.5%	Yes	90%	Yes
Key qualitative findings							
SG/ OOS girls lauded STEM II's effort in providing them trainings, which has helped not only to support the girls in their transition, but also their respective families' economy.							
From qualitative discussions, it was found that the trainings provided by STEM II have been highly impactful. However, a limited number of girls in the sample have taken trainings provided by STEM II. This warrants a need to diversify and scale the training to expand its outreach.							

Source: YFLT scores pre/ post data | n = 829

In a bid to expand girls' economic opportunities through financial engagements and employment, STEM II provided SG/ OOS girls with youth financial literacy trainings (YFLT), which was followed by trainings on vocational skills development, business development skills and a GTF loan to support girls willing to initiate or expand their existing business.

As agreed among external evaluator, project team and the fund manager, the pre-post score data of girls taking financial literacy training, which was recorded by the project at the time of the training, have been presented in this section. Apart from that, findings from the girls' survey around girls' involvement in other subsequent trainings and the outcomes of these trainings have also been presented. Qualitative discussions around the impact of these trainings on girls' overall development have also been presented along with these findings. As the project has been providing these trainings on a phase-wise basis, it was underscored during the design phase of midline evaluation that the girls in sample may or may not have already received these trainings

at midline. Taking this factor into account, it was agreed that the qualitative exercise would be concentrated among the SG/ OOS girls who have received YFLT and other subsequent trainings.

A. Interpretation and relationship to outcomes

Table 54 above shows that the midline target set during baseline has been achieved by the project. In terms of girls' performance in YFLT, analysis of pre-post survey conducted by the project team to gauge girls' financial literacy shows an increment of 33.38 percent. While the mean percentage of scores achieved by girls before the training was provided was 43.41 percent, it increased to 76.79 percent after the training. The difference in pre-post scores is statistically significant.

In terms of target achievement, 70 percent of the girls were expected to move to higher learning level than that during the baseline. This target was over achieved as according to table 55 below, 89.5 percent of the girls moved to higher learning level.

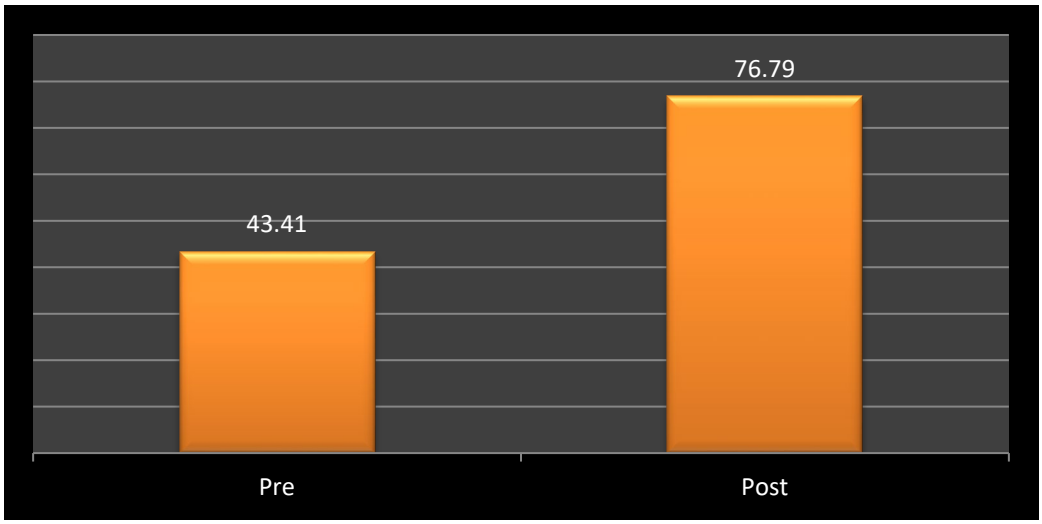


Figure 2: Pre-post mean YFLT score of SG/ OOS girls
Source: YFLT pre-post survey | n = 829

Significant pre-post improvement of SG/ OOS girls in youth financial literacy is also further corroborated by the scoring rubric developed by the project team which was approved by the FM, where girls scoring below 30 percent are considered as low scorers, 30 percent to 60 percent medium, 60 percent to 80 percent high and above 80 percent extremely high. In that regard, while the greatest number of SG/ OOS girls (76%) had a medium financial understanding and knowledge, this percentage advanced to high (46.3%) and extremely high (42.6%) post training.

Table 55: Pre-post YFLT score of SG/ OOS girls by scoring rubric

	Pre	Post
Low (<30%)	15%	0%

Medium (30% to 60%)	76%	11.1%
High (60% to 80%)	8.9%	46.3%
Extremely high (>80%)	0.1%	42.6%

Source: YFLT pre-post survey | n = 829

As per the pre-post scores, a total of 89.5 percent of the girls moved to higher learning level. 45.7 percent of the OOS/ SG girls moved up by one learning level, 39.8 percent marked a growth of two learning levels and 4 percent by more than two learning levels. Even within the bracket 'No change', a mean growth of about 4 percent has been achieved – from 15.08 at pre-stage to 19.28 at post.

Table 56: Learning level achievement

Learning level increment	
1 level increased	45.7%
2 level increased	39.8%
More than 2 level increased	4%
No change	10.5%

Source: YFLT pre-post survey | n = 829

In terms of the relationship between YFLT scores and transition outcomes of SG/ OOS girls, table 57 below shows that improvement in YFLT scores alone doesn't necessarily affect girls' transition. For instance, those who successfully transitioned at midline have improved their YFLT score from pre to post by 32.64 percent. A similar difference in the YFLT score can also be observed among the girls who did not transition successfully from baseline to midline. Rather, as already discussed above in transition section, transition of girls is affected by multiple factors including the support from parents, access to other income generating activities/ trainings, among others.

Table 57: YFLT score and girls' transition

Midline transition	YFLT score (PRE)	YFLT score (POST)
Successful transition	45.31%	77.95%
Unsuccessful transition	45.21%	78.38%

B. Subgroups analysis

Only about 35 percent of the 319 SG/ OOS girls surveyed during midline data collection were found to have taken the YFLT training provided by the project. The YFLT score of these SG/ OOS girls divided along different characteristics and barriers has been discussed in this section.

As shown in the table 58 below, trend of increase in the YFLT score from pre to post is similar across almost all the characteristics and barriers identified. There is an interesting growth of above 50 percent in the YFLT score of girls belonging to urban areas, compared to about 30 percent growth marked in all other characteristics and barriers. This could be the result of relatively better access and exposure of urban girls to market areas. However, this should be explored at more depth during the endline evaluation.

Table 58: Sub-group analysis of IO 4

Characteristics (n=123)	YFLT Score	
	Pre	Post
	Ethnicity	
Brahmin/ Chhetri	41.40%	77.08%
Janajati	53.13%	71.88%

Tharu	45.43%	78.36%
Dalit	48.95%	77.08%
	Age-groups	
15-17	48.44%	78.12%
18-23	47.34%	78.68%
24 or above	33.71%	75.16%
	Location	
Rural	46.27%	74.73%
Semi-urban	44.43%	83.49%
Urban	38.28%	91.79%
	Household characteristics	
Households unable to meet basic needs	44.73%	69.24%
Households having 5 or more than 5 members	45.05%	77.78%

Primary caregiver having no education	44.15%	78.12%
Barrier(s)		
Girls who contribute 3 hours or more than 3 hours to household chores	43.97%	77.9%

Source: Girls and HH surveys | n = 319

Likewise, school drop-out grades or the last education level of the SG/ OOS girls was also taken into account to see if this factors into girls' understanding of financial literacy. According to table 59, girls educated up to primary level (grade 5) have highest post YFLT score. While the post YFLT score of girls educated up to lower-secondary level have scored 74 percent, an increment to which can be observed as the education level goes up to other subsequent levels – secondary and higher secondary. The difference observed in the post YFLT score of girls with different education levels was deemed statistically significant.

Table 59: YFLT score of SG/ OOS girls by last education level

Last education level	Pre	Post
Primary (Grade 1-5)	35.94%	85.94%
Lower secondary (Grade 6-8)	41.84%	74.64%
Secondary (Grade 9-10)	43.47%	76.75%
Higher secondary (Grade 11-12)	47.45%	83.47%

Source: YFLT pre-post survey | n = 829

C. Analysis of other training interventions

As discussed above, as STEM II is providing interventions for economic opportunities to SG/ OOS girls in different phases, a very limited number of girls in the sample were found to have participated in the training provided by the project. Out of 319 SG/ OOS girls surveyed, only 27.6 percent girls had taken YFLT training, 34.5 percent vocational training, 11.3 percent business skills development training and another 4.7 percent had taken GTF loan to either initiate or expand their business/ self-employment.

Table 60: SG/ OOS girls in sample who have received STEM II trainings and interventions for economic opportunities

Trainings and interventions	
Youth Financial Literacy Training	27.6%
Vocational Training	34.5%
Business Skills Development Training	11.3%
GTF Loan	4.7%

Source: Girls Survey | n = 319

Out of those who had taken YFLT training, 100 percent of the respondents stated that the training was useful in terms of increasing their knowledge on financial literacy, which will be helpful not just in their professional but also personal life. 95 percent girls said the training was helpful in teaching them about the importance and ways of saving more. 83 percent of the girls said the training taught them how to manage their expenses better.

Table 61: Usefulness of YFLT training

Usefulness of YFLT training (what they are actually doing post training)	
Increased knowledge on financial literacy	100%
Useful in professional and personal life	100%
More saving	95%
Able to open bank account	59.1%
Managing expenses better	83%
Able to calculate interest	51%
Knowledge about different financial institutions	14.8%

Source: Girls Survey | n = 88

The most common forms of vocational training provided by STEM II to SG/ OOS girls are tailoring, beauty parlour, cooking, hand embroidery, mobile repairing, cobbler making, pig farming, goat farming, computer training, among others. 45 percent of the VT recipients in the SG/ OOS girls sample took tailoring training, 17 percent took embroidery, and about 14 percent each took beauty parlour training and cooking.

Most of the SG/ OOS girls interacted with during qualitative consultations were found to be engaged in employment/ self-employment. According to them, the skills they got through STEM II has helped not only to support the girls in their transition, but also their respective families' economy.

> I always thought there was nothing for girls like us in the community, in terms of economic and financial opportunities. I was just staying at home and waiting to get married, when I got the opportunity to take training on embroidery. Immediately after the training, I was hired by a tailoring center in Sukkhad, which is about 45 minutes away from my village. I have bought a bicycle and I use it to travel to work. I spend about six hours every day at the tailoring centre and the pay is decent. After I started earning, I started contributing expenses in the family. I buy ration like rice, lentils and vegetables on my own. My parents are very happy and don't feel like getting married anytime soon.
>
> **- An OOS girl in Darakh**

Figure 3: SG/ OOS girls taking different kinds of vocational trainings
Source: Girls Survey | n = 109

When asked what they wanted to do with the vocational skills they have received from STEM II, 63 percent of the girls said they want to start their own business in the same field. Another 17.3 percent of the girls said they already have a similar business in place and want to expand/ extend it with the new skills they have. In overall, 93 percent girls said they think the skills will be useful to them to live a better future.

Only 36 out of 319 SG/ OOS girls in the sample were found to have taken business skills development training provided by STEM II. 94.4 percent of them said the training was helpful. During qualitative consultations, the girls who had taken BSD training said the training was mostly useful for them to learn about business development, partnership with small and cottage industries, investment, and profit calculations, among others.

> I found BSD training interesting, as it took my understanding from financial literacy training to the whole next level. Apart from profit calculations, identification of banks and opening accounts, BSD also included aspects like analysing the scope of business, market study and business registration. I took this training a few months ago, and now my family is supporting me to open a fast-food stall in my village. There are no such food-stalls in my village at present and youngsters go to nearby market area in the evening to eat noodles and pakodas. Once my stall is ready, I am sure it will earn me a great deal of profit. I am already excited.
>
> **- A SG girl in Narayanpur**

Depending upon the girls' business plans, STEM II has also been facilitating the girls' request for loan to start or expand any business by linking them with micro-finance institutions in the locality. In that regard, 15 of the girls in the sample had also taken GTF loan – 12 to start new business and three to expand their existing business. Quantitative results show that tailoring, small shops/ kiosks, mobile shops, among others, are the common business options opted for by the SG/ OOS girls.

Some of the girls who were interviewed during qualitative fieldwork had already taken the loan, while some had just applied for it. Other girls, who had neither already taken nor applied for the loan, said they would get financial support from their parents to start the business. When asked what are the most common forms of business girls like them do in their communities, most of the girls said tailoring, as it requires little investment.

> Beauty parlour is a profitable source, but it requires a lot of money to start it. For tailoring, we just need a sewing machine and set it up in our own house. Clients usually come with their own garments, there is no big initial investment required. Setting up a tailoring facility is very easy and cheap.
>
> **- A girl in Dhangadhi village**

Taking into account these findings, the economic and financial consciousness observed among all the girls consulted during qualitative exercises in different communities across Kailali, it can be inferred that the economic opportunities provided through different forms of training have helped the girls a great deal, not just financially but also by increased their self-efficacy, agency, living standard. What's more, girls were also found to have gained higher status in the family as they are able to positively influence family decision making, as a result of their economic contribution within the family. Nevertheless, as only a limited number of beneficiaries were encountered during quantitative study, it is equally important for the project to extend its outreach on this front.

D. Reflections and targets

The analyses presented in this section showcases a significant improvement in the financial literacy of SG/ OOS girls when analysed in two different phases – pre-training and post-training – with overachievement of the targets set at baseline. However, as with some of the other indicators discussed above, girls' YFLT score alone is not sufficient to measure the extent to which girls are equipped with skills and knowledge that allows them to make informed financial decisions. Although project has other interventions such as vocational training, business skills development training and girls transition fund at the disposal of marginalized SG/ OOS girls, this indicator does not sufficiently measure outcomes of each of these different trainings. In that regard, it is advisable to expand the coverage of the indicator by not just limiting it to the YFLT score of the girls, but also the outcomes of other interventions provided.

4.5. IO 5: Teacher Quality Improvement

Table 62: Summary findings on IO Indicator 5.1.

IO	IO Indicator	Baseline	Midline Target	Midline	Target achieved?	Target for next evaluation point	Will this IO indicator be used for next evaluation point?
IO5: Teacher quality improvement: STEM II teachers promote student centered teaching environment	IO Indicator 5.1: Percent of STEM II teachers using student-centered teaching methodologies	N/A (Indicator added after baseline)	60%	30%	No	50%	Yes
Key qualitative findings							
Despite ample interaction in the classroom, use of other interactive pedagogies -- use of IEC materials, use of technology, group works in the classroom, among others – were found to be limited.							
Teachers were found to be giving equal attention to both boys and girls. The boys however overpowered the girls in almost half the schools.							

Source: Classroom observation | n = 30 schools

The IO 5 of STEM aims to evaluate the teacher's quality improvement. Through its interventions, teachers have been trained on student centred pedagogies which will ultimately lead to the girls' better understanding of subject matter. Since the teaching practice in Kailali is based principally on traditional teaching methods, this outcome will help shape the teaching quality in all the treatment schools which will ultimately lead to increased performance of the girls in school. Increased performance here means not just increased scores but better understanding of the subject matter additionally. The target set for midline is that at least 60% of the teachers are using child-centred teaching methodologies.

The findings of this outcome have been derived from the classroom observations and girls' survey which have been triangulated by the interviews with the teachers and head teachers. The findings of this outcome have also been compared against baseline findings in order to do a comparative analysis of how teaching quality has changed.

The external evaluator visited 30 project schools and observed a sample classroom in each school run by a girl's club facilitator. The classroom was a regular timetable lesson in school, which was randomly selected for observation on the data-collection day. The classroom observation explored four verification criteria – a) use of resource centre by teachers in T&L; b) teachers encouraging presentation/group work at classes; c) use of local resources/ IEC materials by teachers, and; d) opportunity for students to ask and answer questions in the class. For a teacher to gain a point, s/he must meet three of the four criteria.

As this indicator was assessed based on classroom observations, sub-group analysis of teaching quality using the girls survey has not been conducted for this indicator.

A. Interpretation and relationship to outcomes

As shown in table 62 above, the midline target has not been achieved. Out of the 30 teachers observed in their regular classrooms in the schools, only nine were found to be adequately using student-cantered teaching methods.

Looking at the over-all trend of teacher and students' interaction, it can be generalized that there is abundant interaction in the classroom. In 90% of the schools, i.e., in 27 schools, students asked questions in the classroom and in almost all the schools teachers responded to the questions. In majority of the schools, there were lesson plans for the lessons to be taught in the classroom. However, only some of schools used high order of thinking. There is still an absence of understanding, practicing, analysing, and bringing in real life experiences and examples. One of the teachers through his interview articulated that "teaching in our education system is based more on finishing the course before the examination other than teaching students how to sharpen their analytical capacity" which only adds to the fact the education system in our country is more curriculum based than knowledge based.

> There are different types of students in the classroom. Some ask questions and some do not. But usually, they ask a lot of questions. The classes are usually very interactive.
>
> **- Head teacher from Dhangadhi**

According the classroom observations, 97% of the schools assign individual classwork / class activity to their students, group work was not observed in many of the classrooms. Even when individual work was assigned it could not be monitored on one on one basis. Through our discussions, we inferred that this was because of the volume of the students in the classrooms. Since there are as many as 100 students and the class time is 40-45 minutes, it is hard to assign group work, monitor and provide feedback on their performance. Feedback is done mostly during distributing results of the examination or when parents come to inquire about their children's performance.

> Giving group work and monitoring their work hasn't really been a part of our teaching methods. We mostly focus on giving classwork and checking their homework's.
>
> **- Teacher from Sukkhad**

The use of teaching and learning resources has been quite infrequent. Albeit all the classrooms used blackboard and referred to textbooks while teaching, using of additional digital devices wasn't found in any of the sample classrooms. The only time computers were used was during the computer classes in the computer labs. Other than that, methods of teaching through ICT in regular classes weren't observed. Even though the use of ICT has been quite a challenge for the teachers, the teaching methods have however been shared widely amongst the non- girls' club facilitators. As corroborated by one of the teachers from Dhangadi SS, the teachers have a sharing session, although informal where they talk about how they exchange the teaching methods that they have been taught to conduct the girls' club classes. This finding was echoed through the head teacher's interview as well. The head teacher from Nabadurga School in Dhangadhi said that he encouraged his Girls club facilitators to share the learnings from the GC. He quotes, "It creates a wonderful learning environment for the students if all the teachers are aware about new teaching pedagogies." One of the teachers was also of the opinion that if all the teachers were to be trained in student-centered teaching, it would be an asset to the school. The girls also confirmed this through the FGDs. Many have associated their increase in understanding of the subject matter because of improved teaching methods which is mentioned in the learning section as well. Because the teachers are well trained in student- centered teaching methods, the learning scores of the girls are also increasing in addition to their GPAs during examination.

Due to limited sources of ICT, it restricts us from replicating the methods that in normal classroom.

-Teacher from Dhangadhi

Table 63: Different factors observed in the classroom

Activity/ Time	Yes	No
Teacher and students' interaction		
Teacher asks close ended questions	80%	20%
Teacher asks open ended questions	77%	23%
Individual student(s) respond(s) with short answers (1 – 4 words)	60%	40%
Individual student(s) respond(s) with longer answers (a sentence or more)	60%	40%
Students using higher order thinking (Understanding, practicing, analysing, bringing in real life experiences and examples)	60%	40%

Student(s) ask question(s)	90%	10%
Teacher responds to student question(s)	97%	3%
Open to creativity (Involvement of songs/ poems)	3%	97%
Lessons planned in varied structures (Teacher's planning)	90%	10%
Classroom activities		
Teacher assigns individual classwork / class activity to students	97%	3%
Teachers assigns pair / group class work/class activity to students	30%	70%
Students work in groups on task	30%	70%
Teacher monitors individual/ pair/ group work	30%	70%
Teacher gives feedback on student performance	30%	70%
Teacher gives a demonstration/ contextual example	30%	70%
Teaching and Learning resources		
Teacher / student makes use of digital devices(projector/phone/computer)	-	100%
Teacher / students uses the blackboard	100%	-
Teacher refers to textbook	100%	-
Teacher / student uses additional resources (not digital, blackboard of textbook) – chart paper, local resources	13%	87%
Teacher assigns activities which requires the use of computer lab	17%	83%

Teacher recommends the use of library after classes	6%	94%

Source: Classroom observation | n = 30 schools

Apart from that, teachers were found to be giving equal attention to both boys and girls. The boys however overpowered the girls in almost half the schools. This was validated through the FGDs with girls as well.

> Boys are loud and dominating in the classroom. We also ask questions in the classroom, but we prefer to do so in the girls' club classes.
>
> **- A girl during FGD**

It was also observed in a few of the schools that the students made noise and overpowered the teachers. Nevertheless, this was observed only in Grade 10. Furthermore, in none of the classes, teachers used offensive language towards the students and touched the students inappropriately while teaching and did not use corporal punishment at the time of classroom observation. This finding was also observed in the baseline girls' survey. Majority of the girls said that they did not experience such behaviour from the teachers.

Table 64: General classroom observations

General Observations	Yes	No
Does the teacher give equal attention to both boys and girls?	97%	3%
Do boys overpower girls in the classroom (bullying, making noise and disrupting answers)?	50%	50%
Do students overpower teachers in the classroom (bullying, teasing, making noise, disrupting lecture)?	7%	93%
Is the language and tone used by the teacher offensive (towards girls, boys, other ethnicities, students with disability, poor performing students, shy students, etc.)?	-	100%
Does the teacher inappropriately touch students while teaching?	-	100%
Does the teacher use corporal punishment?	-	100%

Source: Classroom observation | n = 30 schools

In terms of the relationship between teaching quality and learning outcomes, we have ample evidence, which has been discussed throughout this report, arguing that the girls' club classes have contributed a lot in increasing girls' learning performance. Teachers in the girls' club classes are a lot more interactive and student-centred, in comparison to the regular school classes. As

already mentioned above, this is mainly because of the difference in class-size (number of students in girls' clubs are lesser compared to regular school classes), no pressures of a rigid course structure, among others. We can infer from this that quality of teaching is directly associated with the learning outcomes of the girls, although as of now, variables used to determine teachers' absenteeism, attitude towards students, treatment of boys and girls, among others, were not found to be correlated with the midline SeGRA and SeGMA scores. In that sense, the findings from midline evaluation highlights the gap in teaching practices in school, wherein project can intervene for the next evaluation period. As most of the girls' club teachers interacted with in the course of this study mentioned that sharing of their skills with other non-STEM-trained teachers in school is largely informal and isn't mechanised with a proper structure to ensure that skills are shared and transferred, STEM II can work towards putting a mechanism for the same, in collaboration with school management as well as local government bodies.

B. Other relevant analysis of teaching quality

Apart from the classroom observation, it was also inquired during the girls' survey if the teachers treated the boys and girls differently, 67.27% of treatment said that they disagreed a little which has decreased from the 77.34% in Baseline. Yet 20.86% of the treatment girls say that they still feel a little biasness from the male teachers towards their male students. 17.09% girls in baseline agreed a lot when they were asked if teachers made them feel welcome in the class which has significantly increased to 58.18% in midline which indicates that teachers are working towards creating a more enabling environment for their students.

Apart from that, teachers were found to be giving equal attention to both boys and girls. The boys however overpowered the girls in almost half the schools. This was validated through the FGDs with girls as well.

> Boys are loud and dominating in the classroom. We also ask questions in the classroom, but we prefer to do so in the girls' club classes.
>
> **- A girl during FGD**

Table 65: Response on teachers' behaviours

Category	Teacher's behaviour	Degree of satisfaction				
		Agree a lot	Agree a little	Disagree a little	Disagree a lot	Don't know/Can't say
Baseline	My teachers treat boys and girls differently in the classroom	1.08%	3.24%	77.34%	17.99%	0.36%
	My teachers make me feel welcome in the classroom	17.09%	80.72%	2.18%	-	0.36%

	My teachers are often absent	1.09%	12.36%	73.81%	11.27%	2.54%
Midline	My teachers treat boys and girls differently in the classroom	20.86%	3.96%	67.27%	6.47%	1.44%
	My teachers make me feel welcome in the classroom	58.18%	25.81%	9.09%	1.81%	5.09%
	My teachers are often absent	13.81%	28%	44.36%	11.27%	2.54%

Source: Girls survey | n = 275

Similarly, 33.8 percent of treatment girls said the teachers use physical punishment in the classroom to discipline students or whenever the students get things wrong in a lesson. The quantitative findings presented below corroborate that 27.9 percent use physical punishment, 64.6 percent of the teachers shout at their students and 7.5 percent teachers provide detention to their students. Since these findings were extracted from the girl's survey, the teachers who use physical punishment could be the same teacher punishing all the girls or multiple teachers. Twisting the ears, hitting on the hands with a ruler, asking students to stand outside the classroom or standing on the bench was the most commonly used forms of punishment as told by the students from the FGDs. The girls were also of the opinion that the teachers sometimes just talked to their students and counselled them when they broke-rules and did not remain disciplined.

> Not all students are the same and come from the same background. Some students require punishment to correct their behaviors.
>
> **- Teacher from Tikapur**

Table 66: Response on whether teachers give physical punishment to students

Do the teachers give the students physical punishment?	
Yes	33.8%
No	64.7%

Source: IS girls' survey | n = 275

Table 67: Response on the types of punishment

Types of Punishment	Percent

Physical punishment	27.9%
Shouting	64.6%
Detention	7.5%

Source: IS girls' survey | n = 275

C. Reflections and targets

As we can see in the analysis of the intermediate outcome on teaching quality, a number of challenges have been highlighted, some of which include large classroom size, limited training among teachers on interactive pedagogy and participatory methods in assessment of students, rigid course structure, among others. Despite all these challenges, teaching quality still remains a key factor that determines girls' learning performance. In this light, the indicator will still be relevant to measure during the endline evaluation. However, considering that the target set for midline as not been met, a revision might be necessary in the target, considering the indicator's performance at midline.

5. Conclusion and Recommendation

5.1. Conclusion

The midline evaluation of STEM II was conducted with the same girls that constituted of the sample at baseline. Apart from that, FDM, in consultation with the project team and fund manager, topped up the samples with additional 104 treatment girls and 50 control girls, in order to make up for the attrition among Grade 10 samples, as the girls who were in Grade 10 would already have completed the project intervention cycle after graduation from SEE exams. Leaving aside a few girls who failed and repeated the same grades as in baseline, – grades 8 and 9 – most of the girls were found to have successfully transitioned into subsequent higher grades. While the additional samples will be used for comparison across midline-endline in the next evaluation point, the midline evaluation itself took into account only the scores of re-contacted girls to make a cross baseline-midline comparison.

Learning

With regards to the learning outcome, significant improvements have been observed at midline in comparison to the girls' literacy and numeracy results at baseline. For instance, mean literacy score of girls has increased from 43.4 percent at baseline to 50.95 percent at midline. Likewise, numeracy score has increased from 22.86 percent at baseline to 45.28 percent at midline.

However, in terms of SeGRA, despite significant improvements recorded at midline, girls still demonstrated major challenge in drafting essays. With project interventions, 61.6 percent of 'non-learners' in essay drafting at baseline have moved up to the higher learning brackets of 'emergent learner' (43.7%) and 'established learner' (21.5%). Nevertheless, aggregate score in essay drafting of the Grade 8 girls is just 24.8 percent and 36.8 percent of the Grade 9 girls. This makes it a point that despite the achievements made across baseline-midline, girls are still facing difficulties in essay writing. Similarly, the numeracy score has gone up from 22.86 percent at baseline to 45.28 percent at midline, marking the project's performance against target at an encouraging 265 percent.

Examining the girls' learning levels across key subgroups, it was found that the difference in the scores of different ethnicities observed at baseline has reduced in percentage this time in SeGRA. However, in SeGMA, despite an improvement in percentage from baseline to midline, the difference between ethnicities is still similar. For example, scores of Brahmin/ Chhetri and Dalit have increased by over five percent from baseline to midline, however, the difference between scores of Brahmin/ Chhetri and Dalit is still around eight percent. Especially as these results are statistically significant, this reflects that despite an improvement observed in the scores of all ethnicities across baseline-midline, ethnicity is still a factor hindering girls' learning, especially when it comes to mathematics.

Analysis of learning outcome was conducted using other subgroup references such as poverty level of the households, school sanitation, region (rural, urban, semi-urban), school infrastructure

in place, physical punishment practiced in school and school-based differences in gender treatment, among others. None of these sub-groups were found to be affecting girls' learning scores for both literacy as well as numeracy. Rather, the factors that emerged key to the learning of girls is teaching quality, as a huge difference was found in the teaching quality in girls' club classes and regular school classes.

Transition

All the targets set by the project for transition outcomes based on baseline findings were found to have been over-achieved by midline. For instance, midline IS transition increased from 93.7 percent at baseline to 94.5 percent at midline, while also marking a different of almost 20 percent against the control group. Similarly, transition of SG girls increased from 29.7 percent at baseline to 52.3 percent at midline and from 34.7 percent to 47.6 percent among the OOS girls.

Among IS samples, repetition of grade due to failure in annual exams in grades 8 and 9 were found to be the only cases of unsuccessful transition, while no instance of dropout was recorded among sample girls. A similar trend of transition results is likely to be observed in subsequent evaluation point as well, as the girls who are currently enrolled in Grade 10 will all graduate from the SEE exams this year. Among SG/ OOS samples, it was observed that a number of SG/ OOS girls were yet to get project intervention so far, and will be getting the intervention throughout this year. As a result of this, higher transition rates can be expected for SG/ OOS girls at endline.

Transition rates of girls were analysed also in a sub-groups-wise breakdown. The key subgroups taken into account are age and ethnicity which was also further analyzed with different characteristics and barriers such as -- education level of the primary caregiver/ household head, language of instruction at school, number of household members, involvement in household chores, household study time, among others. None of these factors were found to be significantly affecting girls' transition rates.

Sustainability

In account of evidences recorded during midline evaluation, the project has made considerable progress towards ensuring the sustainability of its activities. At community level, sustainability of activities was ensured through the formation of community education networks and encouraging the communities to engage with schools by paying regular visits. Likewise, at school level, project worked on SIP formation, inclusive infrastructure and sharing between girls' club facilitators and non-STEM teachers. While the project is close towards achieving its targets on SIP formation and provision of inclusive infrastructure, there is no evidence to quantify the practice of sharing of skills and experience between trained and non-trained teachers. Similarly, at the system level, STEM II worked with local government units, signing MoUs for joint initiatives for quality education, engagement with resource persons (RPs) and sharing events. Based on overall analysis of project's sustainability direction by the midline, the project total sustainability score is 65.63 percent.

Intermediate outcomes

Apart from the three outcomes, the evaluation focused on five intermediate outcomes.

IO 1 focused on attitudes and behaviours, aligning its indicators to average proportion of time IS girls spend on household works and studies. On an average, the time spent by girls in household chores has decreased from about 3.44 hours at baseline to 1.70 hours at midline. The girls mentioned that this is the result of their extensive involvement in project activities outside the home and school and engagement in girls' club classes. As a result of reduced housework and studies outside home, there has not been much difference in the girls' study time inside home (less than two hours). As the girls' significant improvement in their learning results align directly with reduced housework, their engagement in girls' club classes and the parents' support in all these changes in activities, the assumption that girls necessarily have to study for extended hours inside their own home does not seem to hold water. As long as the girls are studying and performing well in their academics, the place where they study matters least.

IO 2 focused on plans to promote a school environment that ensures quality education for supporting girls. Towards achieving this result, schools that received STEM interventions were expected to develop SIPs that identify girls' needs through gap assessment and incorporate it into their SIPs. Out of 30 STEM intervention schools, 15 schools were found to have incorporated gender friendly plans in their SIPs. This is an encouraging number, especially as none of these schools had any gender-specific priorities in their SIPs during baseline. However, it is still too early to point major conclusions on enabling good transitions and how this can be scaled among other schools that still don't have this in practice.

Under IO 3, the overall attendance rate has increased by about 2 percent from baseline (85.1%) to midline (87.0%). The difference observed in the attendance rate was deemed statistically significant. Nevertheless, trend of attendance across given months shows a largely similar results at both baseline and midline. Despite a decent attendance rate throughout the year, in some specific months – *Baisakh* (April/ May), *Shrawan* (July/ August) and *Kartik* (October/ November), a sharp decline in attendance can be observed. The low attendance results in *Baisakh* (April/ May) have been attributed to irregular classes on the first few days at the beginning of the academic year. Likewise, monsoon and consequent plantation season results in lower attendance during Shrawan (July/ August) and harvesting in Kartik (October/ November). Nevertheless, an increase was observed in the attendance recorded in these specific months across baseline-midline.

IO 4 is related with the financial literacy. In a bid to expand girls' economic opportunities through financial engagements and employment, STEM II provided SG/ OOS girls with youth financial literacy trainings (YFLT), which was followed by trainings on vocational skills development, business development skills and a GTF loan to support girls willing to initiate or expand their existing business. As agreed among external evaluator, project team and the fund manager, the pre-post score data of girls taking financial literacy training was taken into account to calculate the girls' financial literacy. In that regard, analysis of pre-post survey conducted by the project team shows an increment in girls' financial literacy by 33.38 percent. While the mean percentage of scores achieved by girls before the training was provided was 43.41 percent, it increased to

76.79 percent after the training. In terms of age, girls in the age group 15-19 demonstrated highest YFLT score at 79.27 percent, followed by girls aged 25-34 (76.80%) and girls aged 20-24 (75.58%). In terms of previous academic experience of SG/ OOS girls, girls educated up to Grade 5 have highest post YFLT score. Ethnicity, meanwhile was not deemed a statistically significant factor to determine girls' understanding about YFLT.

Findings for IO 5 – teacher quality improvement – were derived from the classroom observations and girls' survey. The external evaluator visited all 30 project intervention schools and observed a sample classroom in each school run by a girls' club facilitator, who is also a regular school teacher. Looking at the overall trend of teacher and students' interaction, it can be generalized that there is abundant interaction in the classroom. In 90% of the schools, i.e., in 27 schools, students asked questions in the classroom and in almost all the schools teachers responded to the questions. In majority of the schools, there were lesson plans for the lessons to be taught in the classroom. Nevertheless, a gap was observed in terms of understanding, practicing, analyzing and bringing in real life experiences and examples. This was mainly attributed to rigid course structure of regular classes and pressures to go by the prescribed syllabus. Similarly, the use of teaching and learning resources was not observed during the classroom observation. However, if we go by statements of girls during qualitative part, some of the teachers, especially those who are also the girls' club facilitators, have been using locally available materials and learning resources to facilitate their classes in more frequency than the past. There is a need to scale this practice among other school teachers as well, an area for the project to further work on.

Similarly, in terms of gender accommodation in project activities, as STEM II primarily aims at working for improvement of girls' education, it does not have any particular activities that focus on boys. Nevertheless, the project's school-level intervention such as infrastructural support, teachers' training, among others, tend to support boys as well in their studies. Notwithstanding the project's support modality and its focus on girls, some boys during qualitative discussions, expressed their willingness to participate in project activities as according to them, learning support such as girls' club classes are the need for both girls as well as boys equally.

STEM II has taken an inclusive approach taking into account the local castes and ethnicities while selecting its beneficiaries. The marginalized Tharu ethnicity, which dominates the population composition of Kailali, is most well-represented in the beneficiary identification and hence the sampling for this study. Apart from that, marginalized girls belonging to different rural and urban settings within Kailali, girls belonging to other ethnicities including Dalit, Brahmin/ Chhetri, among others have also been incorporated. As project mainly works with in-school girls, there are already largely limited number of girls with disabilities enrolled in schools. For this reason, disability representation among project's beneficiaries are very low, hence a limited representation of disability in the sample drawn for the purpose of this evaluation.

5.2. Recommendations

Learning

- Girls attributed the main reason behind their improved literacy and numeracy performance at midline to their engagement in girls' club classes. They lauded the interactive learning methods used by girls' club facilitators. As a result of their engagement in girls' club classes, they have grown more confident in asking questions to the teachers not only in girls' club classes but also in regular classes in the school. Apart from that, engagement in girls' club classes has reduced girls' household responsibilities like cooking, cleaning and caring. Therefore, in light of these findings, girls' club classes are one of the most successful interventions of STEM II and it is advisable that project expands the volume of girls' club classes through collaboration with schools and local governments, introducing multiple subjects along with ample extracurricular activities.

- Despite a significant improvement in girls' literacy and numeracy performance, girls were still found to be facing a lot of difficulties in essay writing (Subtask 3 of SeGRA). In that light, the project is recommended to introduce specific interventions to enhance girls' analytical thinking, comprehension and written expression.

- Unlike baseline, midline evaluation showed some differences in teaching methods. Girls mentioned that teachers are using local materials, learning sheets, and interactive pedagogies. However, as all of this was not clearly evident during classroom observation, there is still room for improvement, where project can extensively focus on teachers training and further intervention to make the classroom environment more conducive for learning and interaction.

Transition

- On account of improved transition rates for both IS as well as SG/ OOS girls, the project's transition-oriented interventions can be deemed to have been successful. The fact that none of the girls in the sample dropped out from grades 8 and 9 even after their failure is an encouraging achievement, although repetition of grades is labeled as an unsuccessful transition. In order to retain these results until endline and beyond, it is important to focus on girls' performance in school as a number of stakeholders said failure in examination is still a major reason leading to girls' drop-out.

- For the sustainability of transition achievements among IS girls, project should focus towards retaining higher education of the girls even after their graduation from SEE. In order to do so, project can engage with parents and provide them financial education trainings in efficiently managing funds for higher education.

Sustainability

- As per the project's sustainability plan, STEM II has supported the local government units to form Community Education Networks. CEN has been formed in five out of six municipalities/ rural municipalities in Kailali. However, in order to ensure the institutionalization of these education networks, STEM II is recommended to provide further technical support, enabling the CENs to design and implement education plans. Moreover, as the formation of CENs has already been largely achieved, it is advisable to change the Community-Level sustainability indicator 1.1. "Number of CEN formed", for the end-line.

- The evaluation has evidence of increasing number of schools including gender-friendly plans in their SIPs. However, as infrastructural development is still the top priority of most of the schools, resources allocation for implementation of gender-friendly plans is still a challenge. In this regard, project can liaise between schools and local government units to access relevant funds for implementation of gender-friendly plans.

- The sustainability indicator 2.2. "Number of schools practicing sharing of lessons learned and best practices with non-STEM teachers from their school", was not measurable, especially as there does not exist a fixed mechanism mandating the practice of such sharing. The external evaluators observed some instances where the girls' club facilitators have been replicating their improved teaching methods from girls' club classes into the regular school class-rooms. However, there is no mechanism to mandate the girls club facilitators to transfer their knowledge and skills among other fellow teachers in their respective schools. Therefore, in collaboration with school management, STEM II can set up a mandatory provision for sharing of knowledge and skills among STEM and non-STEM teachers.

- Sustainability indicator 2.3. "Number of schools with inclusive infrastructure established and maintained", is vague, in a sense that project has worked mainly on just the WASH facilities in the schools. In that regard, 'inclusive infrastructure' is too broad to justly cover project's focus. Therefore, the evaluation recommends to change this indicator and focus extensively on WASH-related facilities, for the end-line.

- Sustainability indicator 3.1. "Number of MoU signed by District and Local level Education Office in support of STEM II program", is no more valid to measure at end-line, especially as the MoUs have been signed in all local units of the district. In this light, the evaluation recommends to remove this indicator.

- Sustainability indicator 3.2. "Number of RPs actively involved in STEM II programme", needs revision, especially as the position of RPs has been replaced by the new position of Section Officer.

- Sustainability indicator 3.3. "Number of key targeted stakeholders STEM II share its learning activities with", has been overachieved by considerable margin. This indicator can be removed for end-line.

- In the changed context of governance, the entire education mobilization of the district falls under the responsibility of local governments. The local governments now have resources to invest in the development of multiple sectors including education in their respective areas. However, a serious gap in the technical capacity of local governments has been highlighted by a number of studies. In that regard, mechanisms of local government are an opportunity for the project to ensure sustainability of its activities. However, it is equally important for STEM II to engage with respective local governments in enhancing their technical capacities in engaging with schools, parents and community with the view to contribute to improved scenario of girls' education. Similarly, the project can also expand its outreach to beyond 30 selected schools through collaboration with the local government, providing it with adequate capacity and skills, for example SIP formation, teachers' training, etc., to scale and replicate STEM's interventions to other areas as well.

IO 1: Attitudes and behaviours

- As stated in the findings section, the reduction in the amount girls are involved in household chores has resulted in their increased engagement in girls' club classes and project's activities outside home or school. As this has a direct impact on girls' learning, it is important for the project to be able to sustain this change in girls' household responsibilities. For this, the project will need to increase its dialogues and consultations with parents, encouraging them about the changes that have taken place in the last one year and communicating about its effect in girls' learning.

- Findings of midline evaluation show an increase in the number of parents visiting their daughters' school for various reasons. The project should sustain this change by maintaining the regularity of parents' teachers' meeting at school, school-based activities, cultural and recreational events to attract most of parents that are still not visiting the school on a regular basis.

- With regards to the project's gender sensitivity, a number of boys interacted with during qualitative discussions, mentioned that they are not included in any form of activities initiated by STEM II. Even though the project is primarily centred around girls' education, it is important to maintain a balance in order to make sure that it does not have any negative repercussions on the attitude of boys towards girls' education. Therefore, inclusion of boys in some specific sessions of girls' club classes or any other form of activities with possibilities of direct involvement of boys is advisable.

- Following the baseline study, it was assumed that reduction of girls' household works will eventually result in increased study time inside home and hence the increased learning outcomes. The indicators for this intermediate outcome were also accordingly revised.

However, as already mentioned above, the midline evaluation discovered that reduction of girls' engagement in household chores results in their engagement in girls' club and project activities outside the house, and does not necessarily mean that they would spend a lot of time studying within their own households. In this light, project is recommended to measure not just the study time within household, but also the hours they spend studying outside both school as well as household.

IO 2: School governance

- Unlike baseline, midline evaluation came across a number of evidence where schools have been incorporating gender-friendly plans in their SIPs. However, these gender friendly plans are largely limited to the improvement of existing sanitation infrastructure. Aside that, project needs to orient the school management about the importance of allocating specific sports for girls, dedicated space to practice these sports along with necessary equipment. Likewise, the schools have also not yet realized the importance of a separate sick room, especially for the girls to rest during menstruation. This is particularly important also because some girls reported that they go to home early when they have menstruation at the middle of a school-day.

- In order to sustain the sanitary pad distribution at school level, the project can collaborate with local governments. There are ample evidences of school's partnerships with local governments in other parts of the country as well, where the local governments have been providing funds for sanitary pad distribution to support girls' education. Apart from this, the project can also lobby with local governments to put other sustainable means of teaching quality improvement, such as ban on physical punishment, enforcement of government code of conduct for teachers, among others.

IO 3: Attendance

- There has been a general increment in attendance rates of girls across baseline-midline. However, despite a reduction in absence rates in specific times of the year – Baisakh and Shrawan and Kartik – attendance rates in these months is still below average. The project can further work towards mitigating this challenge, even though attendance is not highlighted as a major challenge in their learning.

IO 4: Financial literacy

- Interventions on financial literacy has resulted in positive outcomes in SG/ OOS girls' transition. However, it is equally important to track the girls who received financial literacy training and observe how they utilize the training in their daily lives, either through employment or business. This can be done by organizing sharing events, follow-up trainings and one-to-one consultation using the social mobilizers.

- Financial literacy training to SG/ OOS girls was followed by other life-skills interventions – vocational training, business skills development training and GTF loans. The girls who

had already received these trainings demonstrated a highly positive attitude and confidence towards their own economic prospects. Some of them had actually initiated small business on their own. However, many girls at midline were found to have just started these trainings, hence could not shed any light on the benefits of the training. Apart from that, a very few of the girls in the evaluation sample had taken these subsequent trainings provided by the project by midline. In this regard, the project is recommended to expand the outreach of these trainings and support to as many girls as possible by end-line and also look for possible options to scale and put in place a right mix of skills/ loans/ support groups and mentorship.

IO 5: Teacher quality improvement

- Trainings provided by the project to the teachers who take girls' club classes have yielded positive results. This was evident during interaction with girls as they lauded teachers' efforts in making the classroom environment more interactive in nature using local materials and resources available. Some of the girls even mentioned that similar practices in the girls' club classes are also replicated in the regular school classes by some of the teachers. However, given a more rigid course structure and syllabus-oriented teaching in regular classes, teachers are still not practicing interactive pedagogies to the fullest in regular school classes. Same was found during classroom observation conducted by the external evaluators. In order to make the teachers internalize the process of interactive pedagogies and use of local materials in regular classes, they will need further training and materials.

- Most of the girls appraised the teaching quality of girls' club facilitators and even mentioned that some of the other teachers in their school are also following similar teaching methods in some of the lessons. The school teachers and head-teachers interacted with also stated that the girls club facilitators share their knowledge informally with other teachers of the school. However, this practice has yet to be institutionalized as there is no formal mechanism mandating this kind of sharing activities. In collaboration with the school management, the project should establish a mandatory mechanism to ensure transfer of knowledge and skills among girls' club facilitators and other school teachers.

- Apart from that, in order to transform the entire teaching-learning practice within a school, it must be ensured that all the teachers follow the same standards of interactive and child-friendly methods and a blanket ban on physical punishment. In order to do so, all the teachers would have to be adequately trained. As already mentioned above, the project can collaborate with local government for these kinds of initiatives that require extensive efforts and resources.

Annex 2: Intervention roll-out dates

Table 16: Intervention roll-out dates

Intervention	Start	End
Community level kick off meeting	4-Nov-17	20-Feb-18
School level kick off meeting	15-Sep-17	3-Nov-17
P4QE trainings to STEM staffs	6-Feb-18	8-Feb-18
P4QE training to community groups (Stage:1)	14-Feb-18	20-Mar-18
P4QE training to parents at their communities *(Sharing meeting at community level)*	5-Sep-18	25-Sep-18
Orientation on family dialogue to STEM II staff (Orientation of Family Dialogue)	27-Dec-18	27-Dec-18
Family Dialogue at Community Level	28-Jan-19	Ongoing
Review and reflection meeting on enrollment campaign's Year 1	14-May-18	4-Jun-18
Door to Door campaign Year 1	6-Apr-18	29-Apr-18
IAG Day Celebration Year 1	18-Apr-18	29-Apr-18
Radio jingle Round 1 Year 1	15-Dec-17	15-Jan-18
Radio jingle Round 2 Year 1	15-Oct-18	13-Nov-18
EGAP campaign Street drama	12-Dec-18	21-Dec-18
Child safeguarding ToT to head teachers	10-Nov-17	11-Nov-17
Child safeguarding at community level	11-Nov-18	1-Dec-18
Child safeguarding to the students at STEM schools	2-Jan-18	25-Feb-18
Child Protection training to Partner organization	1-Mar-18	1-Mar-18
Orientation around building resilient in all STEM school	8-Aug-18	26-Sep-18
SMC/PTA profiling	13-Nov-17	30-Jan-18
M4QE training to SMC and PTA	13-May-18	24-Aug-18
Fundraising campaign	5-Nov-18	Ongoing
Teacher's ToT on GC curriculum	29-Jun-17	1-Aug-18
Teacher's training to ASRH facilitators	23-May-18	24-May-18
Refresher training to Maths facilitators	18-Aug-18	22-Aug-18
Classroom Management Training with student	3-Jun-18	20-Jun-18
Classroom management training with teachers	5-Jun-18	22-Jun-18
Workshop with Municipal Education Committee	12-Jan-19	12-Jan-19
Learning center management training	30-Jan-19	25-Feb-19
Best Practices sharing workshop for teachers at the center and cluster level *(Math and Nepali Subject)*	12-Feb-19	18-Feb-19
IS girls clubs Year 1	15-Dec-17	24-March-18
IS girls clubs Year 2	10-Aug-18	15-Mar-19
SLC Intensive classes Year 1	10-Jan-18	19-Mar-18
SLC Intensive classes Year 2	21-Dec-18	23-Mar-19
SEE upgrade Class Year 1	1-Jul-18	5-Aug-18
Youth Day Celebration Year 1	12-Aug-18	12-Aug-18
Day Celebration (16 Days campaign against women violence) Year 1	26-Nov-17	12-Dec-18
Child Day Celebration Year 1	14-Sep-18	14-Sep-18
Self-defense training to IS girls	6-Jan-19	25-Feb-19
Friday study groups	16-Nov-18	1-Mar-19
YFLT Class in OOS GC Year 1	27-May-18	11-Sep-18
BSD Class in OOS GC Year 1	28-May-18	10-Sep-18
ASRH Class in OOS GC Year 1	30-May-18	10-Sep-18
Orientation on Business skills development to GTF recipients	19-Feb-18	25-Dec-18
Deliver VT to OOS girls	3-Aug-18	24-Mar-19
Workshop of Young Women Entrepreneurs with OOS	20-Aug-18	28-Feb-18
Follow-up workshop to GTF recipients	18-Jan-18	15-Feb-19
Review meeting with GTF management committee members and GTF sub-committee members	1-Sep-17	Ongoing
Orientation to EGAP construction committee	21-Jan-19	19-Mar-19

Annex 3: Midline evaluation approach and methodology

The following section discusses the outcomes and intermediate outcomes, level at which measurement took place at midline, tools and mode of data collection, rationale behind the selection of given tools and mode of data collection, frequency of data collection and any changes reported from baseline.

Outcomes and Intermediate Outcomes

Table 1: Outcomes for measurement

Outcome	Level at which measurement will take place, *e.g. household, school, study club etc.*	Tool and mode of data collection (please specify both the quantitative and qualitative tool used)	Rationale, i.e. why is this the most appropriate approach for this outcome	Frequency of data collection, i.e. per evaluation point, annually, per term	Who collected the data?	Discuss any changes from BL (including whether this indicator is new)
Outcome 1: Learning *Number of marginalised girls supported by GEC with improved learning outcomes)*						
Literacy indicator: ***Number of marginalised girls supported by GEC with improved literacy***	School	**Quant:** SeGRA **Qual:** FGD with girls, FGD with parents, KII with head-teachers, KII with teachers	SeGRA is a custom-built literacy assessment framework containing sub-tasks which evaluates the literacy skills of students in various aspects. It has been designed by following the GEC guidance for each subtask, standardize it across the GEC project and also map the content of the tool with the government curriculum (Nepali subject) of the project grade. The tool has been calibrated and piloted to accommodate any ceiling and floor effects.	Per evaluation point	External Evaluator	Subtask 3 has been slightly reworded
Numeracy indicator (*Number of marginalized girls supported by GEC with improved numeracy*)	School	**Quant:** SeGMA **Qual**: FGD with girls, FGD with parents, KII with head-teachers, KII with teachers	SeGMA is a custom-built numeracy assessment framework containing sub-tasks which evaluates the numeracy skills of students in various aspects. It has been designed by following the GEC guidance for each subtask, standardize it across the GEC project and also map the content of the tool with the government curriculum (Math subject) of the project grade. The tool has been calibrated and piloted	Per evaluation point	External Evaluator	Subtask 3 has been removed as it showed floor effect during baseline and an additional 5 items have been added in subtask 1 as per the discussion and agreement between the FM, EE and STEM team.

			to accommodate to ceiling and floor effects.			
Outcome 2: Transition *(Number of marginalised girls who have transitioned through key stages of education, training or employment)*						
Transition indicator (*Transition Rate*)	Household	**Quant**: Household survey, school records **Qual**: FGD with girls, FGD with parents, KII with teachers/ head-teachers	While the household survey with parents of transition cohort girls will generate information on the status of their transition, the qualitative research will explore the enablers, barriers and other influencing factors of transition, especially those that are specific to girls.	Per evaluation point	External Evaluator	The HH and Girls BL survey has been adapted based on changes in the project design post baseline, project's priority activities. However, the transition question remains the same.
Outcome 3: Sustainability at Community level						
Sustainability indicator 1.1: Number of Community Education Network Formed	Village/ municipality level	**Quant**: Approval letter and meeting minutes to be collected with STEM II Education Coordinator **Qual**: KII with the members of Community Education Network	Updated records of CEN formation available with evaluation coordinator from the project team. - Further, qualitative inquiries with members of CEN to validated the frequency of their meetings, activities contributing to girls education in Kailali	Per evaluation point	External Evaluator	N/A
Sustainability indicator 1.2: Number of targeted school visitors (VCPC members, Resource Person, Community	School Village/ municipality level	**Quant:** School guest register **Qual:** FGDs/KIIs with the community members visiting school	School guest register to confirm the number of visitors who visited the school in last one year. FGDs and KIIs with community members visiting schools provided information regarding reasons behind school visits, occasions when the members visited schools, etc.	Per evaluation point	External evaluator	N/A

leaders, Parents, etc.) visiting STEM schools reported by HTs						
Outcome 3: Sustainability at school level						
Sustainability indicator 2.1: ***Number of schools making acceptable progress or above towards achieving their SIP***	School	**Quant:** SIP observation, School level data collection **Qual:** KII with head-teacher, SMC/ PTA members	First-hand observation of SIPs across all STEM II intervention schools provided a quantitative picture of how well the schools have been identifying the gaps in the SIPs and towards implementing key activities planned in the SIPs. Likewise, KII with head-teacher and SMC/ PTA helped to look into challenges and progress made over the past year in SIP formulation and its implementation.	Per evaluation point	External evaluator	New indicator in the log-frame
Sustainability indicator 2.2: ***Number of schools practicing sharing of lessons learned and best practices with non-STEM teachers from their school***	School	KII with head-teachers, teachers	KII with teachers and head-teachers shed light on the general practices of sharing of skills among teachers within a school. This was also validated by qualitative inquiries with girls.	Per evaluation point	External evaluator	N/A
Sustainability indicator 2.3: ***Number of schools with inclusive infrastructure***	School	**Quant:** School level data collection/ observation **Qual:** Assessment by MCN, verification by FDM	As with the earlier school-level sustainability indicator, number of schools with inclusive infrastructure established and maintained was collected on the basis of first-hand observation of all STEM II intervention schools. Likewise, FGDs and KIIs with girls, parents and	Per evaluation point	External evaluator	N/A

established and maintained.		FGD with girls KIIs with head-teachers/ teachers	teachers helped to look at how these infrastructure have supported the students.			
Outcome 3: Sustainability at Community level						
Sustainability indicator 3.1: ***Number of MoU signed by District and Local level Education Office in support of STEM II programme***	District level	MoU agreement paper KII with members of government stakeholders (education office)	Number of MoU agreements signed were obtained from STEM II project team. KII with local level education officer explored benefits and changes observed as a result of STEM II's interventions	Per evaluation point	External evaluator	N/A
Sustainability indicator 3.2: ***Number of Resource Person (RP) actively involved in STEM II programme***	School District	KII with RPs and head-teachers KII with project staff	This data was obtained from STEM II project team verified by checking activity report and attendance list	Per evaluation point	External evaluator	N/A
Sustainability indicator 3.3: ***Number of key targeted stakeholders STEM II share its learning/activities with***	District	STEM II project record Acknowledgement/ request letter/ email from external stakeholders KII with project manager, STEM II	This data was obtained from STEM II project team.	Per evaluation point	External evaluator	New indicator in the log-frame

Intermediate outcome 1: Attitudes and behaviours *(Carers allow girls to spend more time studying)*						
Intermediate outcome 1.1: ***Average proportion of time per day IS girls spend on unpaid domestic and care work***	Household Community	**Quant**: Girls survey **Qual**: FGD with girls, FGD with parents	Exact number of hours that the girls spend in household chores at different times of the year was recorded in the girls' survey. Qualitative inquiry with girls and parents also helped to further explore why in certain time of the year the workload is higher and how the trend of girls' involvement in household chores has changed over the past one year.	Per evaluation point	External evaluator	New indicator in the log-frame. As household chore was identified as a major barrier at baseline, this indicator was added at midline.
Intermediate outcome 1.2: ***Average proportion of time per day girls spend to study at home***	Household Community	**Quant**: Girls survey **Qual**: FGD with girls, FGD with parents	Exact number of hours' girls spend studying at home was recorded in the girls' survey, for different times of the year. This provided a comprehensive picture of how much time girls get to study at home during exams, normal school-going days, festivals and farming seasons. FGDs with girls and parents also explored different factors leading to any change in the study pattern/ time over the past one year.	Per evaluation point	External evaluator	New indicator in the log-frame. As study time was identified as a major barrier at baseline, this indicator was added at midline. However, midline findings suggest that it is not just the study time that girls get within the household that helps them in their overall studies. Rather, it is important to record the time they spend studying outside school, like attending girls club classes, group studies with friends and tuition classes. Change in this indicator is advisable for the endline - either to remove this indicator altogether or to capture all the different study hours outside classes.

Intermediate outcome 2: School Governance *(School environment promotes quality education supporting girls)*						
Intermediate outcome indicator 2.1: ***Percent of STEM schools that identify girls' needs through gap assessment and incorporate into their SIPs***	School	SIP observation School-level data collection KII with head-teachers Girls survey	Since indicator for this IO is the number of schools that incorporate issues related to girls education in their SIPs, every year the evaluation team will directly monitor the SIPs of each school to identify if the girls education agenda has been incorporated in their SIPs. The information will be further validated through qualitative tools.	Per evaluation point	External evaluator	N/A
Intermediate Outcome 3: Attendance *(Improvement in marginalized girls' attendance in schools throughout the life of the project)*						
Intermediate Outcome indicator 3.1: ***Percentage improvement in attendance rates***	School	**Quant:** School attendance register, HH survey, Spot-checks **Qual:** FGD with girls, KII with teachers	Attendance data will be collected by external evaluator from the school register on an annual basis. Spot check to be conducted bi-annually by the project team and per evaluation point by the EE.	Per evaluation point	External evaluator	N/A
Intermediate Outcome 4: Financial Literacy *(Marginalized OOS/SG girls are equipped with the skills and knowledge that allows them to make informed financial decisions)*						
Intermediate Outcome 4.1: ***Percent of OOS/SG marginalized girls who get STEM's YFLT move to a***	Household Cluster	**Quant:** Pre-post survey conducted by MCN, analysis by FDM **Qual:** FGD with girls	Pre-post survey conducted by the project team was independently analysed by the EE. Apart from that, data of sample girls who had taken the YFLT training was also analysed and presented in the report.	Per evaluation point	External evaluator	New indicator added in the log-frame

higher learning level						
Intermediate Outcome 5: Teacher Quality Improvement (STEM II teachers promote student centred teaching environment)						
Intermediate Outcome Indicator 5.1: Percent of STEM II teachers using student-centred teaching methodologies	School	**Quant:** Classroom observation at sample of classrooms **Qual:** KII with teachers, FGD with girls	A classroom each was observed in all of the STEM II intervention schools. A set criterion was developed for the observation of class, as guided by the log-frame. Apart from that, the teaching methods was discussed also with the girls, in order to validate the observation.	Per evaluation point	External evaluator	New indicator added in the log-frame

Labelling the groups:

The table 2 below outlines and describes the two direct beneficiary groups that will be referred to throughout this annex. It further displays which groups have a control group and if an additional sample was added. Since these groups received different interventions, they will be referred to separately throughout the document. When referring to the sample sizes, the total sample sizes and a breakdown of the re-contacted samples from baseline and the buffer sample added during midline will be presented.

Table 2: Labelling of the groups

Group name	Acronym	Description of group	Control group?	Additional sample added?
School grads and out of school girls	SG/OSG	The girls who had dropped out from grade 6 to 10 from STEM schools in the first phase (OOS) and those grade 10 graduates from 2013-2016, who were not enrolled in formal education and were looking after their household chores are involved in some form of income generating activities within or outside their home (SG), before baseline. The project supports them through different life skills training and engagement which helps them find gainful employment or enrol into school or vocational training.	No	No
In-school girls	IS	In-school girls who were enrolled in grades 8, 9 and 10 in intervention or control schools during baseline. This is the primary beneficiary population of STEM II. Some of the key interventions for this group are girls club classes to improve learning outcomes, school infrastructure support, among others.	Yes	Yes

Evaluation methodology

The midline evaluation used a quasi-experimental design approach. The rationale behind adopting the quasi-experimental design was that the change happening in the control group (non-intervention group) could provide the counterfactual scenario to the project's interventions and help assess the project's impact and effectiveness more clearly. In addition, DID relies on a less strict exchangeability assumption, i.e. in absence of treatment, the unobserved differences between treatment and control groups are the same overtime. Hence, Difference-in-difference is a useful technique to use when randomization on the individual level is not possible.

The respondents of the baseline evaluation included a sample of the project's primary beneficiaries i.e. IS, SG and OOS girls as well as a sample of the project's secondary beneficiaries, namely, the parents, school teachers, head teachers, local government officials and community leaders who were re-tracked using contact details and address recorded earlier.

To conduct data collection, the evaluation team used a mixed methods approach comprising of both quantitative and qualitative tools. The role of the quantitative tools was to provide a numerical measurement of the characteristics, barriers and current scenario of the sample while the role of qualitative tools was to explore personal and social experiences, meanings and practices as well as the role of context in shaping these. Furthermore, through sequencing of the two methods, qualitative data was used as an exploratory approach to look for emergent themes around girls' education.

More specifically, quantitative approach was used to explore learning, transition and sustainability outcomes, along with the intermediate outcomes. The qualitative approach, similarly, was used to explore in further depth the emerging findings from quantitative surveys and school observation. As sequential data collection was used at midline, unlike quantitative, qualitative approach was not used to explore all the indicators. The qualitative data collection mainly focused on striking findings that emerged from the first phase of data collection, i.e. quantitative. FDM shared its preliminary quantitative findings with the project team and FM, and it was jointly decided which factors should be explored in more depth during qualitative inquiry. For instance, the quantitative findings showed a significant improvement in learning performance of treatment IS girls, which was explored in further depth during qualitative data collection.

Both quantitative and qualitative findings account for answering the evaluation questions defined in MEL framework and Section 1 of the main report body. Given below is a summary of research strategy determining which evaluation questions have been explored by either qualitative or quantitative or both the approaches.

Table 3: Evaluation questions and use of qualitative and quantitative tools

Evaluation questions	Qualitative	Quantitative
1. Was STEM II successfully designed and implemented?	✓	✓

2. What impact did STEM II have on the learning and transition of marginalised girls?	✓	✓
3. What works to increase the enrolment, retention, learning and transition of marginalized girls?	✓	
4. How sustainable were the activities funded by the GEC and was the programme successful in leveraging additional interest and investment?	✓	✓
5. What worked best to change behaviors and practices?	✓	
6. What were the unintended outcomes of the project, if any?	✓	

The preliminary findings of quantitative data collection were used to determine the main factors to be explored by qualitative inquiry, development of the checklists in line with preliminary quantitative findings, identification of stakeholders to be consulted, among others. Given below is a summary of indicators that the quantitative and qualitative approach helped in exploring.

Table 4: Indicators and use of qualitative and quantitative tools

Indicator	**Source for Logframe Target (Quant.)**	**Source for Logframe Target (Qual.)**
Number of marginalised girls supported by GEC with improved literacy	SeGRA	-FGDs with girls -KII with teachers and head teachers
Number of marginalised girls supported by GEC with improved numeracy	SeGMA	-FGDs with girls -KII with teachers and head teachers
Transition Rate	HH Survey – Transition Question Section School records	-Change mapping exercise during FGDs with girls -FGD with parents and KII with teachers
Indicator S 1.1: Number of Community Education Network formed	Approval letter and meeting minutes to be collected with STEM II Education Coordinator	-KIIs/FGDs with the members of Community Education Network
Indicator S 1.2: Number of targeted school visitors (VCPC members, Resource Person, community leaders, parents, etc) visiting STEM schools reported by HTs	Check the School Register in each school	-KII with Head Teachers
Indicator S 2.1: Number of schools that acts on the school action plan that are achievable	Check SIPs and Action Plan in each school. FDM to categorize achievable and non-achievable in the short run	-KII with HT, SMC and PTA chair

Indicator S 2.2: Number of schools practicing sharing of lessons learned and best practices with non-STEM teachers from their school	Event Report, notes	-KII with teachers/ head-teachers
Indicator S 2.3: Number of schools with inclusive infrastructure established and maintained.	FDM to collected phase 1 and phase 2 EGAP Upgrade Award list from BASE Engineer	-FGDs with girls KIIs with head teachers/teachers
Indicator S 3.1: Number of MoU signed by District and Local level Education Office in support of STEM II programme	Signed MoU be collected with Deputy Programme Manager	-KIIs with municipal education officer
Indicator S 3.2: Resource Persons have increased involvement in STEM activities	Activity attendance to be collected with Senior Programme Officer, Pabitra Chaudhary	-KII with Resource Persons
Indicator S 3.3: Number of key targeted stakeholders STEM II share its learning/activities with	Project record/evidence to be collected with STEM II	-KII with programme manager
IO Indicator 1.1: Average proportion of time per day IS girls spend on unpaid domestic and care work	Girls Survey – Practice at home section – question 1,2 and 3	-FGD with girls and parents -Community Immersion
IO Indicator 1.2: Average proportion of time per day girls spend to study at home	Girls Survey – Practice at home section – question 5 and 6	-FGD with girls and parents -Community immersion
IO Indicator 2.1: Percent of STEM schools that identify girl's needs through gap assessment and incorporate into their SIPs	Check SIPs in each school	-FGD with girls -KII with HT, SMC, PTA members
IO Indicator 3.1: Percentage improvement in attendance rates	Verify school register in 30 schools for 1 academic cycle HH survey Bi-annual spot checks	-FGDs with girls - KIIs with teachers
IO Indicator 4.1: Percent of OOS/SG marginalized girls who get STEM's YFLT move to a higher learning level	Pre-post test provided by MCN OOS girls survey	-FGD with girls -Community immersion
IO Indicator 5.1: Percent of STEM II teachers using student-centered teaching methodologies	FDM to conduct Classroom Observation	1. FGDs with students 2. KIIs with teachers

Considering that the intermediate outcomes could have impacted the outcomes achievement, the analysis of findings also explored relationships between some of the IO indicators and outcomes. For instance, some of the variables in attitudes and perceptions, school environment, infrastructure, among others, were used to relate with the learning findings. The significance of relationships thus established was examined by using the inferential statistical tools such as Anova, t-test, chi-square test, among others. A similar approach was used during qualitative data collection as well, whereby, some of the IO indicators were mixed across the outcomes while framing interview schedules and checklists.

Table 5: Target groups evaluated for each outcome and IO

Outcomes and IOs	Direct beneficiaries			Indirect beneficiaries				
	OOS girls	SG girls	IS girls	Guardians	School authorities (including teachers, head teachers and SMC members)	Local Government	Boys	Community leaders
Learning			✔	✔	✔			
Transition	✔	✔	✔	✔	✔			✔
Sustainability					✔	✔		
IO 1: Parental attitude and perception	✔	✔	✔	✔	✔	✔	✔	✔
IO 2: School governance			✔	✔	✔			
IO 3: Attendance			✔	✔	✔			
IO 4: Financial Literacy	✔	✔	✔	✔	✔			
IO 5: Teacher Quality Improvement	✔	✔		✔				✔

Learning cohort

The learning cohort is comprised of IS girls. This is the population that will receive the project's learning interventions particularly aimed at improving the girls' literacy and numeracy skills.

The treatment learning cohort had a corresponding control learning cohort. The treatment learning cohort was selected from all 30 treatment schools and the control learning cohort was selected from all 15 different control schools (12 of which were a part of STEM I as control schools, 3 new schools were added to match the characteristics of control and treatment schools).

As suggested in the Monitoring & Evaluation (M&E) framework, cohort tracking for learning was carried out at the school level. The SeGRA/ SeGMA tests were conducted to measure learning. Upon completion of the SeGRA/ SeGMA test, the cohort girls were administered the girls' survey in the school itself. The enumerators then followed these girls to their house where household survey was conducted at the girls' household.

Transition cohort

The transition cohort, on the other hand, is comprised of SG, OOS and the entire IS sample. The same learning cohort was a part of the transition cohort.

As agreed between GEC, MCN and FDM, the SG/OOS girls from the transition cohort did not have any control group to compare the data with. This was decided as it was understood that identifying the SG and OOS control population was not feasible. Thus, the SG/OOS girls will not have a counterfactual group to compare its information with. Their transition will be measured by comparing baseline and midline information. IS transition cohort, on the other hand, will have a counterfactual group to compare the transition information with.

Transition was measured through the household survey and the girls' survey. The cohort tracking for transition girls was done at the household level.

Gender Equality and Social Inclusion (GESI) standards

Keeping in mind the importance of GESI in the evaluation, the evaluation team was oriented on the topic by MCN staff before the evaluation. In accordance to the orientation, language of all research tools was made gender sensitive. Furthermore, the research team was oriented on how to conduct the entire evaluation in line with the project's GESI standards. The Project Coordinator from FDM also served as the Gender Focal Point and coordinated with the Gender Focal Point of MCN Dhangadhi office in case any issue pertaining to GESI arose. MCN also shared its gender report to FDM for reference.

Similarly, although the project focuses on girls' education, boys were also included during qualitative data collection. This was done in order to get the alternative views of a different gender about changing parental perceptions, study time at home, household work division among boys and girls, among others. However, as project does not directly work with boys, quantitative surveys did not involve boys.

FDM ensured that each of its research tools were gender sensitive. Survey tools were designed in close collaboration with the project team and the FM and in the process, conscious effort was made to ensure that questionnaires don't contain insensitive remarks or derogatory terms. The survey tools as well as qualitative checklists avoided any (in) sensitive questions around harassment, sexual abuse, among others.

In addition, to ensure inclusion of girls across a range of characteristics, the evaluation team gave uttermost importance to criteria like ethnicity and age while selecting the sample. Since the sample was calculated to be representative of the actual target population, girls across all characteristics were represented in the sample.

The GESI minimum standards outlined in the GESI Addendum – Midline Report Template – were specifically incorporated in the midline evaluation.

Culture and capacity: FDM maintained a gender-balanced research team in midline evaluation assignment. Both research coordinator (male) and the researcher (female) had prior experience in conducting GESI-related studies. Apart from that, out of 20 enumerators used for midline data collection, 10 were female and most of them had prior involvement in STEM I evaluations as well as STEM II baseline evaluation.

Analysis: Previous study reports on gender and social inclusion conducted by the Government of Nepal and other stakeholders were used to examine the context of GESI. The analysis of context has been presented in the background section of the main report.

Data: The evaluation team collected sex, age and disability disaggregated data. Relevant disaggregation of outcomes has been presented in the respective report sections. As the project primarily works with only the girls, boys were not a part of quantitative data collection. However,

in order to incorporate views and opinions of boys, separate FGDs were conducted with boys as well during qualitative data collection.

Indicators: The evaluation team followed the indicators in the log-frame. The indicators were designed in close collaboration with the project team and FM, and gender and disability sensitivity were closely followed in the process.

Do no harm: Gender and social inclusion were taken into consideration while adhering by the principle of do no harm during research design, data collection, data analysis and presentation. For instance, in order avoid potential harms and conflict, respondents' identity has been protected throughout the research process, sensitive questions around physical abuse, sexual harassment were avoided in the tools used for midline evaluation. Apart from that, in order to maintain high child safeguarding standards, enumerators and researchers were provided a detailed orientation by the project team prior to data collection. Similarly, a separate orientation around disability sensitivity was also provided to the enumerators prior to data collection. The orientation included techniques for administering Washington Group Questions on child sensitivity, use of sensitive terminologies, among others.

Ethical considerations

Child protection

Mercy Corps believes that all forms of abuse or exploitation are unacceptable, regardless of who is affected by that abuse and/or exploitation. Other Mercy Corps policies which prohibit exploitation or abuse include the Prevention of Sexual Exploitation and Abuse Policy. However, there is a need for a focus on safeguarding children, due to their vulnerabilities, dependencies and specificities.

As an agency which works with communities suffering and recovering from disaster, conflict or economic collapse, Mercy Corps recognises its responsibility to adopt and abide by its CP policy to ensure that children with whom Mercy Corps comes into contact are safeguarded from abuse, including physical, sexual, emotional abuse, and neglect. By clearly setting out our commitment to safeguarding children, regardless of their race, sex, ethnicity or religion, this policy also aims to define our accountability to the communities with whom we work, and to ensure we engage with children safely and positively.

Child Safeguarding orientation/training was given to the entire team of External Evaluators before midline data collection. Each member of the STEM II team, MCN, partners and the EE were required to thoroughly read and understand the child safeguarding policy and agree to it by signing it. The same process was also carried out with the enumerators used for data collection. The EE as well as enumerators were pre-informed on the child protection issues that the project faced in phase 1. The time and location for survey was also planned by the EE mutually agreed upon by the project team keeping in mind the safety of the survey respondents. Before the survey, the enumerators were directed to get a consent form signed by each survey respondents and the go/no go decision of the respondents were fully respected throughout data collection. However, there were no instances where respondents did not agree to participate in the survey. The EE as

well as enumerators were strictly oriented about the fact that any instances of violation of Child Protection policies and if any member of the team is found guilty of child abuse, immediate action would be taken which can be as severe as the termination of the contract.

Meanwhile, the study also complied with DFID Ethics Principles for Research and Evaluation[1], along with the moral and ethical standards that are practiced within Nepali socio-cultural context. As per FDM's ethical guidelines, the researchers maintained honesty and truth about responses recorded during the course of this study. Researchers adhered to the principle of 'do no harm' and strictly avoided biases and prejudices towards responses on basis of the respondents' gender, caste, ethnicity, economic standard, or any other parameters. Leading questions that tend to provoke respondents to provide answers as per the interest and biases of researchers were avoided. Apart from these, researchers were oriented on following ethical guidelines during pre-study research brief.

Consent: Written consent was taken by enumerators and researchers before beginning surveys. Verbal consent was taken prior to qualitative consultations. Respondents were thoroughly explained about the research objectives, and confidentiality. No audio-visual recording or photography were performed without the consent of respondents.

Anonymity: Identities of all the respondents have been kept anonymous in the report. Identity here does not just mean name of the respondents. Rather, any indicative details and personal information about the respondents including full address, parents'/ relatives' name, appearance, physical traits/ characteristics, have remained fully anonymous.

Respondents' right to reject: Researchers have respected the respondents' right to reject or refrain from answering certain questions or talking about issues that they are not comfortable with. For instance, some of the respondents from the control sample may be reluctant to talk to enumerators during the survey. In case of such reluctance, the enumerators were told not to force the respondents to take part in the survey or interview.

Inclusion: Respondents constituted a vulnerable population, i.e. extremely marginalized girls. This required high level of gender sensitivity not only in terms of research and tool design, but also in team composition of researchers. This was considered a priority during midline evaluation, as explained in detail in GESI section above.

Enumerators/ researchers' safety: The safety of enumerators and researchers was the responsibility of FDM. Therefore, everyone involved in the research team was insured by FDM. Apart from that, in order to ensure safety during data collection, enumerators were mobilized in groups and clusters and were kept in continuous communication loop with the research coordinator.

[1] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/67483/dfid-ethics-prcplsrsrch-eval.pdf 10 / 50

Data protection: The data collected for the assignment was stored safely in FDM's office. The soft data was only accessible to the core evaluation team including the team leader, research coordinator and research assistant.

Sensitivity: While surveying disabled respondents, the external evaluators will have to adhere to the disability survey guideline prescribed by GEC as well as conduct its survey in line with the Washington Group of Survey.

Report production and dissemination: The reports have been produced by the external evaluator team and STEM II team as per the donor guidance. Reports have not call out on the official name of any individual. The report presented by the EE will be further disseminated by the project team to district-based government stakeholders, CSOs, I/NGOS working in education sector.

Major ethical hurdles were not faced by the research team during data collection. However, as the control samples have not received any project interventions, there was a tendency among control schools, not properly cooperating with enumerators. Moreover, some of the control school principals even exerted pressures on the enumerators and researchers to lobby the project to provision interventions for them as well in the coming year. As this ethical dilemma was stipulated earlier, the research team was mindful about not raising the expectations of control schools by making unrealistic assurances. Rather, the enumerators and researchers told the control school principals that they were only there for the study and the finding would benefit all the schools, not just in Kailali, but nationwide. However, no such ethical dilemmas were posed before enumerators while interviewing the control households.

Similarly, an expected ethical dilemma faced by the researchers is the annual examinations. The evaluation team encountered situations whereby in many schools, exam was underway during data collection. To mitigate the impact of data collection on the examination of the girls, the evaluation team undertook extensive discussion with school management and implementing partners to identify a date and time which would have the least impact. In many such schools, girls survey and learning tests were administered on Friday after examination as they would not have examinations on the following day i.e. Saturday, this also led to extension in the data collection period. In locations where this was not possible, the evaluation team further discussed with the sample girls, and in clear language stated that the evaluators were aware about the required time and possible impact on examination, and also reinforced to them that they had no obligation whatsoever to participate.

Midline data collection process

A. Pre-data collection

Sampling

The EE was supposed to track the same cohorts of girls and their households surveyed at baseline. Given below are the total samples approached at baseline:

Table 6: Sample at baseline

Category	Treatment	Control

Learning		
IS	400	250
Transition		
IS	400 learning samples	250 learning samples
OOS and SG	350	-

Stratified random sampling was adopted to draw an additional 104 samples from the total sample list of Treatment and 50 of Control IS girls. The sampling was stratified based on respondents' location and ethnicity. Crossing three survey locations (rural, semi-urban and urban), and four ethnicities (Brahmin, Dalit, Janajati & Tharu), 12 strata were created. Moreover, respondent from 'other' ethnicity (urban) were also added creating a total of 13 strata. A random sampling was done thereafter to replace the girls who would be lost during midline.

Thus, the final midline sample for learning as well as transition cohorts, including additional sample as explained above, is given below:

Table 7: Final learning cohort sample (Including additional samples) for midline

Category	Treatment	Control
Learning		
IS	504 [400 baseline samples + 104 added samples]	300 [250 baseline samples + 50 added samples]
Transition		
IS	504 [400 baseline samples + 104 added samples (learning samples)]	300 [250 baseline samples + 50 added samples (learning samples)]
OOS and SG	350	-

For qualitative part, purposive sampling was used to select the respondents for the FGDs and KIIs. FGD participants included community members representing different social disaggregation – ethnicities, gender, location, etc. Each FGD had five to seven respondents.

FGDs were planned with IS girls, SG/ OOS girls, parents and boys. Each FGD consisted of five to seven participants. Likewise, KIIs were conducted with teachers, SMC/ PTA members, head-teacher, and representative of local level education office, RPs, representative of Mercy Corps project team and member of the partner organization. Following number of qualitative consultations will be conducted:

Table 8: Sample for FGD and KII

Respondent group	Number of FGDs	Number of KIIs
IS girls	5	-
SG/ OOS girls	3	-
Parents	3	-
Boys	3	-
Teachers	-	3
SMC/ PTA	-	3
Head teachers	-	3
Representative of local level education office	-	2
RPs	-	2
Representative of Mercy Corps project team	-	1
Representative of partner organization	-	1

Tools

Following tools with revisions and/or adaptations from baseline were used for midline evaluation.

QUANTITATIVE

SEGRA AND SEGMA TESTS

SeGRA and SeGMA tests were administered with all learning cohort (IS girls). Unique sets of SeGRA and SeGMA tools for each evaluation point (baseline through endline) were designed by the project in close coordination with members of GoN's Education Review Office (ERO). Three sets of SeGRA and SeGMA tools were designed in such a manner that they match the same difficulty level to be tested and compared across three evaluation points. However, as wordings of some of the questions in SeGRA made it difficult for some students to understand the question, FDM, after consulting with project team and the FM, made some minor changes in the wording of the essay questions. As discussed among FDM, Mercy Corps and the FM, the changes will not have any implication in marking, as the question, fundamentally remains the same. As for the SeGMA tests, subtask 3 has been removed as it showed floor effect during baseline and an additional 5 items have been added in subtask 1 as per the discussion and agreement between the FM, EE and STEM team. As all 6 set of tools have already been piloted and calibrated before baseline and there has been no significant changes made in the ML and EL tools, the tools were not re-calibrated or re-piloted. Some aspects of the learning tests have been edited (subtask 1 and subtask 3) and are not exactly comparable with the baseline learning tests anymore. For example, some easier questions to SeGMA subtask 1 have been added and subtask 3 has been removed. However, in order to ensure comparability across baseline-midline, only the old set of 10 questions were used for comparative analysis. Scores taking into account all 15 questions in subtask 1 have also been calculated and presented in the report. The set of 15 questions will be used for comparative analysis across midline-endline.

HOUSEHOLD SURVEY

Household survey were conducted with respective households/ parents/ caregivers of the sampled girls for both learning and transition cohorts from both control as well as treatment schools. Household survey for midline was adapted from the baseline household survey questionnaire. Changes were made as per the change in the logical framework and adjustment of new indicators and interventions to be measured. As in the baseline, questionnaire developed for midline also contextualizes the standard household survey provided by GEC. Furthermore, as suggested by DFID's Regional Education Advisor and FM's disability expert the midline HH survey also had questions around girl's disability to triangulate disability information provided by the girls in the girls' survey. The HH survey were piloted in a government school in Geta, Dhangadhi municipality.

GIRLS' SURVEY

Girls survey were conducted with girls representing both learning and transition cohorts from both control as well as treatment schools at the school level. The survey followed the baseline girls survey format where in changes made in the logical framework and indicators had been addressed accordingly. KAP survey questionnaire also followed the standard guideline provided in GEC survey questionnaire with girls. The Washington Disability and child functioning questions were also a part of this survey. As suggested by DFID's Senior Education Advisor and FM's

disability expert, the external evaluators also asked screening and probing questions in addition to the set disability questions.

SECONDARY DATA COLLECTION

FDM was also responsible for collecting/reviewing secondary data to support the primary data. Information regarding enrolment, attendance, promotion and dropout (which is maintained by the school authority) have been collected on an annual basis by the external evaluator. In addition, the external evaluator also reviewed secondary documents like club records, government data, information from previous evaluation studies, etc.

- School and club records
- Government and administrative data
- Statistical agencies data
- International organizations data
- Previous evaluations and studies

SPOT-CHECK

As per the MEL Framework, 2 spot checks had to be conducted every year, one by the EE during evaluation data collection and another by the project. The project has already conducted two spot checks one in June, 2018 and another in December, 2018 and the next one was conducted by the EE in February, 2019. Spot checks assess the following:

- A comparison of reported attendance and physical attendance on the day of the spot check, in order to give an indication of the reliability of school registers
- The extent of enrolment, re-enrolment, retention, and drop-out in the period since the previous spot check
- The condition of school infrastructure

QUALITATIVE

Qualitative inquiries during midline evaluation were made in a sequential manner in mixed method. Following the completion of quantitative data collection, preliminary data analysis was conducted and based on preliminary findings, major areas of inquiry were determined for qualitative discussions. The preliminary findings not only helped the evaluators identify gaps in research findings, but also flagged up some striking results from quantitative analysis. These areas were further explored during qualitative data collection. While highlighting which areas to specifically focus during data collection, the sequential approach also helped to streamline the qualitative tools to a large extent, as some variables self-explanatory by quantitative findings and redundant in qualitative tools as well in earlier evaluations were avoided this time. The redundant parts in the qualitative tools were cut short. Apart from consultative interviews and discussions, the researchers also noted field observation as a part of their qualitative exercise. The observation of trends and practices helped validate the findings and comprehend emerging issues in a more localized manner. Given below are the tools used for qualitative data collection:

FGDs

FGDs were planned to be conducted with stakeholders including IS girls, SG/ OOS girls, parents and boys. The checklist from STEM II baseline study was used as reference by FDM to design FGD checklists. However, changes made in the project logical framework as a part of adaptive management principles based on learning from baseline findings, were addressed in the FGD

checklist. The FGD checklist also intensively referred the preliminary analysis and emerging trends from quantitative data collection, as at midline, sequential data collection method under mixed method design was adopted. Following is the FGD sample:

- IS girls – 5
- SG/ OOS girls – 3
- Parents – 3
- Boys – 3

Three FGDs each with the above-mentioned stakeholders were conducted during baseline in project areas disaggregated by following criteria: rural, semi-urban and urban. However, as suggested by the project team and given concentrated population and interventions at school level, five FGDs were conducted with IS girls during the midline.

FGDs were not only used to validate and support the information generated through the surveys. Rather, FGDs also explored in-depth causal and contextual factors triggering the situation of overall girls' education in line with project activities. Sequencing was done during the mixed evaluation process wherein the quantitative data collected in the first phase of data collection were analysed to inform the depth of questions for FGDs.

In order to ensure that the qualitative sampling represented all areas that project works within Kailali district, midline evaluation followed the footsteps of baseline evaluation, dividing the intervention areas in three clusters – rural, semi-urban and urban. FGDs with all stakeholders were conducted in all three clusters. FGD participants from IS girls' population were randomly selected from the list of beneficiaries, in coordination with the local project team and social mobilizers mobilized in the respective research locations. Parents of intervention girls were also approached randomly in the communities, while FGD with secondary-grade boys were conducted in the school, with the support from head-teacher. As the quantitative sample of SG/ OOS girls consisted of only a limited number of training recipients, it was mutually agreed among evaluators, project team and the fund manager that training recipients would be focused for qualitative inquiries with SG/ OOS girls. For the same, a list of training recipients was obtained from the project team and participants for FGD were randomly approached from the list.

KIIs

The KIIs will be conducted with a range of project stakeholders including government officials, SMC/ PTA, teachers, head teachers, among others. KII checklists from baseline will be used as reference to frame interview schedules for midline, however, as in the FGDs, changes will be made as per the recent modifications made in the project logical framework and sequencing was used. Like the FGDs, KIIs will also be conducted in three different geographical contexts the project operates in, namely – rural, semi-urban and urban. Approaching the sample for KIIs involved similar methods as for the FGDs, discussed above. Following is the proposed KII sample list:

- Teachers – 3
- SMC/ PTA – 3
- Principal – 3
- Local level education office – 2
- RPs – 2

- Mercy corps project team – 1
- Partner organization – 1

CLASSROOM OBSERVATION

Classroom observation checklist was prepared in consultation with the project team in order to assess mainly the IO 5 of the log-frame. Classroom observation was mainly focused around assessing the overall classroom environment, teaching methods of the teachers, students' participation in learning and interactive pedagogy. In coordination with head-teacher, classrooms with STEM-trained teachers were selected for observation. Enumerators who were responsible for collecting the school-level data -- attendance, SIP records, visitors list -- conducted the classroom observation as well. The enumerators were provided detailed orientation on the classroom observation tool during training conducted prior to data collection.

Enumerator selection and orientation

A total of 20 enumerators were locally hired by FDM. Enumerators who were involved in data collection during the baseline were re-contacted for the midline evaluation. For enumerators who were involved during the baseline and unable to participate in data collection for midline, additional enumerators were hired through a rigorous process. Individuals with prior experience in mobile-based data collection were given priority.

The FGDs and KIIs were conducted by FDM researchers who had been deployed from the office in Kathmandu. Both the researchers had at least 5 years of experience in conducting FGDs and KIIs for various development projects pertaining to thematic areas such as education, health and infrastructure. Since the researchers had been involved in the qualitative tool design process from the very beginning, an extensive training was not required for them. However, the Project Coordinator did conduct a brief orientation before the field visit to ensure that key areas were adequately covered during qualitative tool administration.

A three-day rigorous training was provided to the enumerators. The table below was the tentative orientation schedule:

Table 9: Enumerators' training schedule

Day 1	Introduction to the project Objectives of the midline Comprehensive overview of the household and girls survey Introduction to SeGRA/SeGMA tests and how to administer them
Day 2	Training on how to administer the surveys using the tablet Approaching the control schools Code of conduct and Child Protection Policy (the latter to be provided by MCN) Disability data collection process Team formation and allocation of cluster to each team/field mobilization plan

Day 3	Mock data collection Feedback Final question and answer

In addition, the enumerators were also oriented on child safeguarding policy and standard research ethics.

B. During data collection

In order to enrich the quality of data and information, sequential data collection was followed for data collection. FDM conducted quantitative data collection in the first phase – beginning second week of February, 2019 until first week of March, 2019. Following a preliminary analysis of the quantitative data, research team identified what areas and factors to probe during qualitative consultations with different stakeholders. This provided an opportunity to explore deeper into the context as preliminary findings significantly informed the entire research exercise by identifying evident incomplete areas that needed further inquiry. Qualitative data collection was conducted in the last week of March, 2019.

For the quality of quantitative data, enumerators were provided a three-day extensive training on tools and techniques of data collection. Apart from research orientation, the enumerators were also trained on child protection protocols, gender sensitivity and ethical standards to be maintained during the data collection. On the third day of the training, the enumerators were sent to a local school to mock-practice the surveys. The school for mock survey practice was approached and arranged by the local project team. Each enumerator was asked to conduct at least three surveys in a real set-up. After the mock-sessions, enumerators' confusions regarding some of the questions and minor errors in the questionnaire design in online system, for example, skip logic errors, grammar errors, unclear translation, among others, were all discussed and corrected.

Apart from additional samples, sampling for midline evaluation was done only among girls and their caregivers who had provided consent to be re-contacted at baseline.

For the data collection, enumerators were divided across three different clusters by locations of sample schools. Based on enumerators' performance during the baseline, each cluster team was assigned a supervisor from among the enumerators themselves. The supervisor was responsible to lead the researchers and enumerators during cases of difficulty or confusions that arose during data-collection. Each supervisor was also responsible for ensuring that data collected on tablets were regularly updated in the server. The data uploaded on the server was monitored by research coordinator in every two to three days throughout the data-collection process. Any emerging mistakes or confusions were therefore immediately sorted out through telephone conversation with the enumerator him/ herself. Two competent researchers from FDM, including the evaluation coordinator himself, stayed at the field and monitored the quantitative data collection on a regular basis.

For quantitative data collection, girls were tracked at school level and households at the respective communities. For girls who were not found in the school on the day of data collection, enumerators contacted their households via cell-phone and conducted the interview of both girl as well as parent at the household level. However, as it was not feasible to conduct learning tests individually at household level, the IS girls who could not be tracked in school did not appear learning tests. As a result of this, there is a difference between learning and transition samples achieved (Refer to table 10). In case the girl and household members both could not be contacted even at household level, at least two consecutive attempts were made to contact either the girl or the household. As in some cases enumerators were still unable to establish a contact, it resulted in attrition of some girls. If the enumerators had information from neighbours that the girl or the household would return to the community, they would plan another visit. However, if the girls or the household members had gone outside the district, the enumerators had to drop them. For samples that could not be re-contacted in transition cohort, we tried contacting the girls' family. However, some girls could not be tracked even at the household level.

As an additional sample of 104 treatment IS girls and 50 control IS girls was topped-up in the baseline sample list, no replacement strategy was adopted. Girls who could not be tracked, were therefore not replaced, as in the baseline evaluation.

Likewise, FGDs, KIIs and other qualitative exercises were conducted by two FDM researchers deployed in the field. Project Coordinator from FDM was also directly involved in qualitative data collection. While qualitative respondents were randomly selected in the intervention areas, SG/ OOS respondents were selected randomly from a list of those SG/ OOS girls who had taken trainings provided by STEM II, as a very limited number of SG/ OOS girls in the quantitative sample had taken these trainings.

The cohorts, especially for the quantitative surveys and learning tests, were contacted primarily at school level. All the treatment as well as control schools were prior communicated by the project team about the impending midline data collection. Nevertheless, some of the samples were also tracked at the household level, as some of the schools had already been closed following the completion of annual examinations.

In order to ensure high ethical and child protection standards, all the enumerators were provided a detailed orientation by the project team as well as project coordinator from FDM prior to the data collection. For the enumerators and researchers' own safety, everyone mobilized in the field for data collection was insured by FDM.

The final sample sizes for each of the instruments (quantitative and qualitative) are presented below:

Table 10: Tool details

Tool (used for which outcome and IO indicator)	Beneficiary group	Sample size agreed in MEL framework for treatment and (control group) – if appropriate	Actual sample size (treatment and control group)	Major changes to the tools
SeGRA and SeGMA used for learning outcome	IS girls	**Baseline samples:** In-school 400 T (250C) **Midline samples:** **504** T [400 BL + 104 added at ML] **300** C [250 BL + 50 added at ML]	375 T [279 BL + 96 added at ML] 206 C [163 BL + 43 added at ML]	**Changes in the tools:** Taking into account the floor effect achieved in subtask 3 of SeGMA at baseline, subtask 3 was removed from the tool at midline, while five additional questions were added to subtask 1. However, as all the learning tools were piloted and calibrated prior to baseline, a separate piloting of learning tests prior to midline evaluation data collection was not conducted. This was mutually decided and agreed upon by the evaluation team, project team and fund manager, as even the questions added in subtask 1 followed the same pattern as other previous questions and were of the same difficulty level.
Girls survey	IS girls SG/ OOS girls	**Baseline samples:** In-school 400T (250C) SG/ OOS 350 (0) **Midline samples:** **504** T [400 BL + 104 added at ML] **300** C [250 BL + 50 added at ML] SG/ OOS 350 (0)	In-school 443 T [347 BL + 96 added at ML] 246 C [203 BL + 43 added at ML] SG/ OOS 319 (0)	**Changes in the tools:** Based on the baseline findings, some changes were made to the project log-frame. The survey tool for midline was accordingly adapted. For instance, as per the changes in the log-frame, questions aimed at measuring girls study time and time spent in household chores were included in the midline questionnaire. **Piloting:** A full-fledged piloting was not conducted considering that most of the questions had already been piloted at the baseline. However, in order to ensure the logical flow of questions that were added at midline, a brief mock-survey of girls' survey was conducted in a school in Kathmandu. Apart from that, enumerators were also required to conduct a pilot test of the survey at a local school in Kailali.

Household survey	IS girls' caregivers (HH heads) SG/ OOS girls caregivers (HH heads)	**Baseline samples:** In-school 400T (250C) SG/ OOS 350 (0) **Midline samples:** **504** T [400 BL + 104 added at ML] **300** C [250 BL + 50 added at ML] SG/ OOS 350 (0)	In-school 443 T [347 BL + 96 added at ML] 246 C [203 BL + 43 added at ML] SG/ OOS 319 (0)	**Changes in the tools:** As with the girls' survey, changes were made in the HH survey tools, based on the changes made in some of the log-frame indicators. **Piloting:** A full-fledged piloting was not conducted considering that most of the questions had already been piloted at the baseline. However, in order to ensure the logical flow of questions that were added at midline, a brief mock-survey of HH survey was conducted in the same community where the school for piloting is located in Kathmandu. Household Survey was not separately piloted in Kailali.
Attendance records	STEM II intervention schools	30 STEM II intervention schools	30 STEM II intervention schools	**Changes in the tools:** At baseline, the FDM collected attendance records of all the students of intervention schools. However, a problem in analysis was found as not all the photo records of attendance were readable. Considering this challenge, FDM, MC and the fund manager agreed that attendance records of only the sample girls would be taken during midline. For this, a separate attendance sheet to record attendance of sample girls was prepared. Enumerators were accordingly trained on filling up this attendance sheet.
SIP observation	STEM II intervention schools	30 STEM II intervention schools	30 STEM II intervention schools	**Changes in the tools:** SIP assessment tool used for the midline was a participatory tool designed to engage the head-teacher as well in the assessment process. The enumerators, in collaboration with head-teacher identified five major action-points mentioned in the SIP and then evaluated its implementation status through school observation and consultation with the head-teacher.
Classroom observation	STEM II intervention schools	30 STEM II intervention schools	30 STEM II intervention schools	**Changes in the tools:** Classroom observation tool for the midline focuses on four major observation points – use of resource centre in learning, group works and presentations in the classroom, use of local resources, IEC materials and students asking questions in the classroom. Based on these four observation points, a number of other criteria were designed, such as, practice of corporal punishment, seating arrangement, classroom structure, mobility within classroom, among others.

FGDs	IS girls, SG/ OOS girls, parents, community members, boys	N/A	IS girls – 5 SG/ OOS girls – 3 Parents – 3 Boys – 3	N/A
KIIs	School Management Committee members, Parents' Teachers Association members, Head-teachers, Teachers, Project staff, local level education officer	N/A	Teachers – 3 SMC/ PTA – 3 Principal – 3 Local level education office – 2 RPs – 2 Mercy corps project team – 1 Partner organization – 1	N/A

Attrition

Groups	Attrition
IS samples (girls and household)	Including the additional sample, which will be tracked and compared at end-line, the actual attrition is 10.61%. Not considering the additional sample, following attrition was recorded: Learning – 30.25% in Treatment & 34.8% in Control Transition – 13.25% in Treatment & 18.8% in Control Likewise, 7.69% attrition in in-school treatment added sample and 14% attrition in in-school control added sample was recorded.
SG/ OOS samples (girls and household)	8.85% attrition in SG/ OOS sample.

As already mentioned above, attrition percentages reported for learning and transition cohorts are different, as some IS girls who could not be located at school (especially those who have already passed grade 10 last year and completed the project's intervention cycle), were surveyed at the household level. Therefore, some of the IS girls/ households who could not appear learning tests have participated in the survey, giving us the data on transition.

There were several factors that resulted in attrition of sample girls during the midline evaluation. Some of them are discussed as follows:

- Some of the girls who appeared Grade 10 SEE exams last year completed the project's intervention cycle and have moved out of the district either for higher education or work. The highest number of attritions was observed from this group of the population. Therefore, as a very limited number of Grade 10 samples were found in their respective schools, they could not appear the learning tests. However, the enumerators contacted some of them at the household level to get the transition data. For this reason, different attrition rates have been reported for learning and transition samples.

- The midline data collection coincided with annual school examination. When the enumerators went for data collection, exams were already over in some of the schools and the annual session break vacations had already started. In such cases, some girls were found to have moved out of the district to visit their relatives and celebrate the session-break, resulting in the reported attrition rates.

- Attrition among SG/ OOS population was anticipated as this group of the population is the one with mobile characteristics and does not have a single point of contact as with the IS girls, i.e. school. Some of the SG/ OOS girls were found to have migrated outside the district or to India for employment.

C. Post data collection

The paper-based data (learning tests, classroom observation, school information, among others) collected for the assignment was stored safely in FDM's office. Similarly, the password protected soft copies of the clean datasets were shared with the core members of the evaluation team – team leader, research coordinator and research assistant. In order to prevent data loss, the password protected soft copies of the datasets were stored in multiple computers in the FDM.

The quantitative data collection was followed by a preliminary analysis, which was used to understand the general trend and gaps that needed to be explored during qualitative inquiries. Based on evidences generated and trend observed in the preliminary phase of analysis of quantitative data, FDM devised comprehensive qualitative tool, in collaboration with the project team and fund manager. While the qualitative data collection was underway, FDM's research team was cleaning the quantitative data, arranging the data in same order as with baseline in order to ensure comparison. Throughout this process, data safety was of utmost importance to the evaluators. Considering this, the raw dataset without any changes was saved separately in order to ensure access in case of any unforeseen loss of data during the cleaning and sorting process. While the midline data were being cleaned, they were sorted according to different criteria, such as ordering same as the baseline, sorting by treatment/ control/ SG/ OOS girls, sorting by schools, location type, among others. Use of different criteria to sort the data was also applied during data analysis and report writing.

The external evaluator ensured that both the quantitative and qualitative data is representative of gender, ethnicity, location, age. During analysis of both quantitative and qualitative data, the findings were further analysed by looking at the results across different gender, especially for parents, SMC and PTA members, Head Teachers and other stakeholders, and identifying the reasons for the differences and what played a major role for these. The project team as well as the external evaluator also looked into how well the project has performed regarding the evaluation questions, and looked deeper into it by analysing the questions by different groups – ethnicity, gender, age, location, status etc.

While the data cleaning was underway, researchers involved in qualitative data collection were writing their field notes, producing transcripts of interviews and consultations they conducted in the field. All qualitative consultations were transcribed word for word on the basis of field recordings and notes taken during interviews. The transcripts of qualitative discussions were developed on a thematic basis, where summaries and quotes of respondents were written along several headings provided in the qualitative checklist.

In order to ensure that the girls tracked at midline will be re-contacted for end-line evaluation, the girls as well as their parents have been told that a similar study will also be conducted in the following year. All of the respondents agreed to be interviewed in the following year as well. Apart from that, the respondents' updated contacts have been recorded in FDM's sample database. As IS girls will be mostly re-contacted at school level, the enumerators have established a rapport with all the school head-teachers in both control as well as treatment schools. As the annual examination and annual session break were unforeseen challenges that resulted in high

attrition rates this time, it is advised that data collection for end-line evaluation be conducted at least a month before the annual exams.

Data analysis process for both quantitative and qualitative component of the study has been outlined below:

Quantitative analysis

Following the quantitative data collection, it was thoroughly cleaned using the following steps:

Step 1: Conducting frequency analysis in each of the variable to check whether any data is missing in any of the variables
Step 2: Appending missing data wherever possible by re-contacting the enumerators
Step 3: Standardizing data wherever there is inconsistency.
Step 3: Arranging each of the variable in a standard order (ascending/descending) to purge any duplicated information or any other outlier. Since all the girls/parents had a Unique ID, duplication of information could be easily spotted.
Step 4: Checking for coding errors while data is arranged in ascending/descending order.
Step 5: Checking the variable description and ensuring that the 'measure' is correct (nominal, ordinal or scale)
Step 6: Conducting frequency analysis one more time to see if all inconsistencies and missing data has been filled.

The quantitative data analysis was conducted using IBM-SPSS software. Once the data cleaning was complete, normality test using box plot and bell curve was conducted for the continuous variables. This allowed for identification of outliers and also check for skewness. Based on this the evaluation team decided on the use of parametric or non-parametric tests for variables.

For continuous variables with normal distribution tests following inferential statistics tests were run to assess the significance of difference in means:

i. Paired sample t-test
ii. Independent/two sample t-test
iii. One-Way Anova

For variables that did not have normal distribution, Mann-Whitney U test (non-parametric) was used.

To check for association and correlation of variables and the significance level of association, linear regression model and chi-square tests were conducted.

Beside above-mentioned inferential statistic techniques, descriptive statistics techniques including frequency measurement, central tendency measurements and measurement of dispersion or variation were conducted.

For the study, p value less than 0.05 was considered as an acceptable level for determining statistical significance of the data, as suggested by the project M&E team.

As the study was designed to allow for difference in difference (DiD) analysis, linear regression model with dummy variables was used to determine the DiD value of literacy and numeracy scores.

All these allowed for comparative analysis of the midline findings with that of the baseline.

Qualitative analysis

The qualitative data, on the other hand, was collected by the researchers using a recording device. The entire FGD/KII was recorded only after permission was acquired from the respondents at the start. Each of the recorded FGDs and KIIs were then copied to computers where they were named and given a date (the date on which the FGD/KII was conducted). Upon return to FDM office (from Kailali), the researchers then transcribed the recorded clips word for word and then translated them into English for the purpose of this report.

Qualitative analysis involved following major steps.

STEP 1 – Data coding: Form the transcripts of the qualitative discussion coding of the qualitative data was conduction. The coding involved identification of key terms and grouping the responses. Descriptive coding was used for the study. This was especially important as it was pivotal in enabling the research team to efficiently pull out and refer back to data throughout report preparation.

As the qualitative research was conducted under sequential mixed method design and was primarily intended to provide causal inference and explanation to finding from quantitative data "concept driven coding" was used. However, the process allowed for adaptation of the coding schemes i.e. some degree of openness in coding was allowed based on emerging information.
This preliminary coding was done by a team of three researchers including team leader.

STEP 2 – Theme generation/ Final coding: In this step, the data with preliminary coding were further grouped into themes through the process of "focused coding" - combining smaller, related coded data into one category, subdividing more common coded data into sub categories or eliminate themes/categories that became outliers. The thematic coding was done during a two days' workshop at FDM among the three research team members. Matrices were used for grouping of the coded data into themes which were identified based upon the log-frame indicator, evaluation questions, midline report template, and preliminary findings from quantitative data. Furthermore, aids flow charts and mind maps were also used to facilitate the workshop.

This process also enabled the systematic organization of information from qualitative consultations and in determining trends among groups and contexts. An interrater agreement of 80% or above was sought for validation.

STEP 3 – Data Interpretation: This step involved analysis of the data which were coded and categorized into themes and drawing conclusion. The interpretation i.e. analysis and conclusion of the data focused on explaining trends and findings casual interference to the quantitative data. This step also included presentation of opposing views, use of quotes and sought to establish inter thematic validation and relation of data.

The quantitative and qualitative data analysed using above mentioned method was then consolidated into a report which included inter method validation, explanation and inferences. This also included segregation of findings based upon different sub groups.

The baseline evaluation and the midline evaluation had identified various sub-groups based on which the data were to be analysed for more nuanced information on casual factors of educational marginalization. The subgroups were identified based on demographic, and socio-economic characteristic of girls. In addition, analysis was also done based upon the school grades of the girls. Following are the characteristics on which the subgroups are based:

- Grade
- Ethnicity
- Age
- Location (rural/ urban/ semi urban)

The findings on the outcomes and the intermediate outcomes are segregated based upon these groups as well as other relevant sub groups. The sub group analysis also allowed for identification of relationship between different characteristics, and relevant variables associated with outcomes and intermediate outcomes. Furthermore, the qualitative information provides additional analysis on causal factors on the difference that might exists between subgroups.

In addition, within the sample girls, girls from sub groups mentioned below were of further interest to the project, as girls from these groups were considered to be more vulnerable and at risk to educational marginalization. The sub groups are:

- Girls living without both parents
- Girls living in household headed by female
- Girls from "Poor" household
- Girls whose mother tongue was different from the language of instruction at schools
- Girls from households whose head had low education i.e. had not completed primary education
- Girls who were from marginalized ethnic groups like Dalit and Madheshi ethnicity

Challenges in midline data collection and limitations of the evaluation design

The challenges and limitations of the midline evaluation differed in context and implication. Most of the limitations and their implication in the robustness of the report could be successfully overcome owing to the design of the evaluation, sampling design outlined in the MEL framework and also the contingency plans adopted by the midline evaluation team. However, the challenges posed by self-report bias, difference between the responses of girls and their family members/ household, difference between some data collected by external evaluator and the project, warrant consideration of caveats in the report. The detailed discussion on the challenges and limitation of the midline evaluation is presented in table below:

Table 11: Challenges and mitigation strategy

S.N.	Challenge	Type of Challenge	Mitigation strategy
Pre-data collection			
1	Difficulty in data collection due to closure of schools due to cold-wave	Attrition (Sampling)	During baseline, due to the extreme weather conditions, all schools in the project districts closed during the final three days of data collection. FDM coordinated with the local partner and school authorities and contacted the cohort girls to survey them. Since the schools had already been closed, the SeGRA/ SeGMA test was undertaken in a community space which could accommodate the students. To ensure that this did not come up as a challenge in the midline, field dates were planned in February (cold-waves mostly hit the Terai region of Nepal during January)
2	Reluctance of control schools to participate in the evaluation	Methodology	Despite the provision of incentives, two of the control schools were reluctant to participate in the baseline survey. These schools complained about not being informed about the survey beforehand even though FDM had communicated its field plan a week prior to the commencement of the evaluation. The students of these control schools were contacted at household level and surveyed. In order to mitigate this challenge during midline, MCN and BASE staffs visited all the control schools beforehand with letters of authenticity and inform about the impending evaluation program. The schools were also given the exact dates the data collection would be conducted.
3	Challenges in re-contacting girls who appeared SEE examinations	Attrition (Sampling)	This challenge was foreseen by the evaluation team during the baseline as well. For this reason, lesser number of grade 10 girls was included in the sample for both treatment (100) and control (50) schools. While the survey team tried to follow the girls, who may have left the school after appearing

	last year and have left the school already.		the SEE examination last year, FDM had also selected an additional sample of 154 girls from grade 8. Also, during analysis phase, in order to check attrition bias, characteristics and barriers between the girls who were lost at midline and those re-contacted was matched. The characteristics did not match in terms of grades, as most of the grade 10 girls who completed the project's intervention cycle after baseline could not be re-contacted. As a control measure for this, it was decided that grade 10 girls (only five of them in the sample) would be excluded from DiD analysis, given a very limited number of grade 10 girls who took literacy and numeracy tests at midline. Apart from this, no major discrepancy was noticed in characteristics and barriers faced by girls who were lost from BL to ML and those who were re-contacted at midline. For instance, in terms of ethnicity, highest percentage of girls belong to Tharu ethnicity, followed by Brahmin/ Chhetri, Dalit and Janajati, in both lost and re-contacted girls, in both treatment as well as control groups. Similarly, baseline percentage of girls living without both parents, married girls, girls belonging to poor households, girls who do not feel safe traveling from and to the school, among other characteristics and barriers, were found to be similar among both lost as well as re-contacted girls in both treatment as well as control groups. A similar trend was also observed in the girls' literacy and numeracy scores. The average baseline SeGMA score of re-contacted and lost treatment girls is 15.4% and 18% respectively. The SeGRA score is also similar – 32.2% (lost girls) and 41% (re-contacted girls). In the control group, SeGRA score of lost and re-contacted girls is 32.7% and 37.3% respectively. Similarly, SeGMA score of lost and re-contacted girls is 11.5% and 19% respectively. As no striking difference was observed between the baseline scores of lost and re-contacted girls at midline, no further controls or adjustments were required. A complete presentation of regression tables used to analyse the difference between the characteristics and barriers of re-contacted girls across their SeGRA and SeGMA scores has been presented in 'Adjustments' section below. The key baseline characteristics of lost and re-contacted girls has been presented in the following Table 12.

4	Researcher bias in data collection	Methodology	FDM realizes that evaluation studies are prone to researcher bias. The risk of researcher bias was high in this project because all the enumerators belonged to the project district (half of them belonged to the Tharu ethnic group, that majority of girls belonged to) and posed the risk of recording impartial information. Abiding by its strict policy of minimizing any form of researcher bias, the enumerators were well-oriented during the three-day orientation on what kind of actions were referred to as being 'impartial' and how it could affect the study findings. It was ensured that none of the enumerators had been associated with Mercy Corps or STEM I project in any way. All the enumerators had some form of research experience before, hence they were aware about the risks of researcher bias in evaluation studies. To ensure that the questionnaires were not wrongly interpreted into Tharu (while administering the surveys), all the enumerators were properly explained during the orientation the purpose of each question and asked to note down key Tharu words for each question to avoid misinterpretation. Furthermore, FDM researchers also paid unannounced visits to the survey sites (schools and households both) to monitor these surveys and ensure that research bias was minimized as much as possible. For qualitative data, trained FDM researchers with extensive experience in evaluation studies were deployed from the head office in Kathmandu. Research Coordinator himself was involved in data collection.
5	Self-reported bias	Data collection	A challenge encountered in terms of self-reported bias is that participants including parents, girls, teachers, head-teachers, etc. may not have been fully truthful while responding on any critical questions about themselves or the bodies they represented. In order to mitigate this challenge, data obtained from school-stakeholders like teachers, head teachers and SMC was triangulated with girls and parents and school-observation data collected by the EE. Likewise, responses of girls and households were also triangulated against each other. This should be considered a caveat in the main report.
5	Challenge for male enumerators to ask sensitive questions around girls' safety, mensuration, etc.	Contextual (Socio-cultural)	It was challenging for some of the male enumerators to ask questions around girls' safety in school, communities, within the family, and also some other sensitive issues like menstrual hygiene. This challenge was mitigated by orienting the enumerators about rapport building, approaching samples, explaining the purpose of the study, among others. This was done during a separate session that was planned during the pre-data collection training for enumerators in Kailali.

During data collection			
1	Absence of Grade 10 girls at school due to impending SEE examination	Attrition (Sampling)	Especially as the SEE examinations were approaching (mid-March), grade 10 girls in some of control and treatment schools were on examination preparation leave. In such cases, school administrations were requested to contact the sampled girls and invite at school to undertake the survey. Some of the girls were also tracked at household level by the enumerators.
2	Enumerators facing difficulty in operating the mobile-based data collection tools	Data-collection	The training for enumerators had a half-day session to acquaint enumerators with techniques required to operate the tablets and fill survey forms. This session was used to train the enumerators on skip logic, difference between string entry, numeric values entry and multiple-choice questions among others. Likewise, the enumerators were also trained on how to submit the survey forms, switch between girls and household surveys, and open a new form. All these skills were also practiced practically in mock sessions and during the pilot survey in a community school in Dhangadhi.
3	Difference in enumerators' understanding of questions resulting in irregularities in response	Data-collection	In order to make sure that enumerators are all on the same page in terms of understanding the questions, all sets of tools were separately discussed, question-by-question during enumerators training. The enumerators were first given printed copies of questionnaire and only when everyone was well versed with the questions and their purposes, they were given tablets. The enumerators were again made to fill out all the questions on the tablet. Any confusions flagged up during these sessions were discussed and sorted out in the group itself. Moreover, a mock-session was run among the enumerators themselves to make sure that everyone understood the questions in the same and uniform manner. Apart from that, on the last day of the training, the enumerators were engaged in a pilot session in a nearby community school in Dhangadhi. Any confusions that arose during the pilot session were also discussed within the team. Throughout the data collection process, research supervisors from the FDM, including the research coordinator, were available to answer any concerns raised by enumerators in data collection process.
4	School holidays after annual examinations	Attrition (Sampling)	As already mentioned above, some of the schools had already closed for annual session break after the final exams. As a result of this, girls could not be located at some of the schools as they had already gone on leave. These girls were contacted at the household level.

5	Difficulty in data collection due to exam dates of treatment and control schools	Attrition (Sampling)	Another challenge encountered was the exam dates colliding with the dates of data collection. Enumerators were provided with a field mobilization plan which was drafted keeping in mind the exam dates. Some of the girls in Grade 8 and 9 could not be surveyed at school because the schools were already on session break. The girls were invited to the school by the administration and others were contacted at the household level itself.
Post-data collection			
1	Challenges during data cleaning due to irregular spellings, errors for string-entry responses	Data analysis	A number of questions in the survey forms, including unique ID, name of the village, municipality, school, among others, required string entry. This left a room for error as enumerators would not be typing uniform spellings for the name of the village, municipality, duplication of unique IDs, etc. During data cleaning process, FDM researchers made a conscious effort to identify these errors and correct them. As this challenge was prior foreseen, at least a week of time for data cleaning was stipulated in the research timeline.
2	Challenges in midline data alignment with baseline data	Data analysis	The research team faced challenge in aligning the midline data with baseline due to three major reasons – 1) there were several changes in the questions used in the survey forms, 2) the order of surveys was not exactly the same as in baseline, and 3) unlike baseline, the surveys for IS girls, OOS/ SG girls, IS HH and OOS/ SG HH were not segregated in different forms – rather they were integrated in two survey forms namely, girls survey and household survey. This challenge was mitigated in the data cleaning process by matching the unique IDs, arranging them in same order as the baseline and identifying the questions that require comparison for midline data analysis. For the difference in composition of survey forms for both girls as well as households, the survey forms contained skip logic patterns in the beginning to streamline the questions designed for particular groups.
3	Difference between data collected by external evaluator and project	Data analysis	During data analysis, some difference was spotted in transition data of SG/ OOS girls in the data collected by EE during midline evaluation and the data collected prior to midline evaluation by the project itself. Some of the girls who were reportedly trained by the project on various life-skills reported to have never taken any training. In such cases, girls might have forgotten the skills they took in the trainings as a result of not using those skills in everyday life for income generation or employment. As the MEL framework states that transition calculation should take into

			account not just the fact that a girl is trained or not, but also what she has been currently engaged in after the training, it was mutually agreed upon by the EE, project team and the fund manager, that data collected during midline evaluation should be used for transition rate calculation. However, the figures around percentage of girls trained by the project has also been referred to in the report along with transition rates reported as per the midline evaluation. This should be considered as a caveat in the presentation of findings in the main report.

The challenges observed during different phases of midline evaluation were mitigated using different measures determined through coordination among FDM, project team and the fund manager. While doing so, it was ensured that none of the mitigation strategies undertaken or the challenges faced hamper the reliability of midline evaluation findings. Nevertheless, in view of higher attrition rates observed in light of annual examinations and closure of some schools after the exams, it is advised to conduct the end-line evaluation before the examinations for the subsequent evaluation point.

Table 12: Baseline characteristics of lost and re-contacted girls

Treatment or Control				
	Lost samples (n=107)		**Re-contacted samples (n=543)**	
Treatment	52.33%		63.35%	
Control	47.66%		36.64%	
School location	**Treatment (n=56)**	**Control (n=51)**	**Treatment (n=344)**	**Control (n=199)**
Rural	53.57%	49.01%	52.32%	68.84%
Semi-urban	30.35%	37.25%	27.61%	19.09%
Urban	16.07%	13.72%	20.05%	12.06%
Other characteristics	**Treatment**	**Control**	**Treatment**	**Control**
Study hours	*1 or less than 1 hour:* 44.64% *More than one hour:* 60.71%	*1 or less than 1 hour: 33.33% More than one hour: 66.66%*	*1 or less than 1 hour:* 31.39% *More than one hour:* 68.60%	*1 or less than 1 hour: 36.68% More than one hour: 63.31%*
Living without both parents	4.67%	6.12%	3.19%	5.52%
Poor household: Difficult to afford for girl to go to school	62.06%	79.59%	54.65%	51.75%
Language difficulty: Language of instruction different from mother tongue	64.28%	60.78%	58.13%	48.74%

Representativeness of the learning and transition samples, attrition and matching of intervention and control groups

Sample size

Based on the MELF, the minimum sample to detect .25 SD to the power and significance etc. agreed with the FM (excluding the 13% attrition added in baseline sample) is 354. Our learning sample size without the additional sample is 279. Meanwhile, the learning sample with additional sample recorded at midline is 375.

Therefore, when the additional sample is not added, the sample size does not allow us to detect learning to 0.25 X SD. Nevertheless, given the effect size and confidence interval of the sample, the sample size is still deemed statistically significant, hence not warranting any further controls or adjustments (see section 'Adjustments' for more details).

Table 13: Target Midline Sample

Cohort group	Target midline sample agreed in MEL (Treatment)	Re-contacted (treatment)	Target midline sample agreed in MEL (Control)	Re-contacted (control)
Learning cohort (IS girls)	504 [400 BL + 104 added at ML]	375 [279 BL samples + 96 added at ML]	300 [250 BL + 50 added at ML]	206 [163 BL samples + 43 added at ML]
Transition cohort (IS girls + SG/ OOS girls)	504 learning cohort samples [400 BL + 104 added at ML] 350 SG/ OOS samples	443 learning cohort samples [347 BL + 96 added at ML] 319 SG/ OOS samples	300 learning cohort samples [250 BL + 50 added at ML]	246 [203 BL samples + 43 added at ML]

Table 14: Attrition in learning and transition cohorts

Cohort group	Attrition (Treatment)	Attrition (Control)
Learning cohort (IS girls)	30.3%	34.8%
Transition cohort (IS girls + SG/ OOS girls)	13.25%	18.8%

Sample composition (age, region, disability and grade)

Tables 13, 14, 15, 16 and 17 show the sample composition in terms of overall, age, region, grade, disability). The only major difference to the sample composition between baseline and midline is due to the attrition issues discussed in the challenges section above. However, as we used the same matching criteria between control and treatment groups at baseline to determine the new additional samples for midline the sample composition remained consistent.

In terms of disability, minimal disability prevalence was observed as in the baseline. As suggested by the fund manager and GEC, set of 24 Washington Group Questions was asked at the household level, while the girls were asked the set of seven child functioning questions. The table below presents the disability prevalence among IS girls. As per the GEC guidelines, only those with 'a lot of difficulty' or 'cannot do at all' were considered as having a disability. Other responses including 'some difficulty' and 'no difficulty' were not considered as having a disability. The low disability prevalence in the midline sample is also reflected by MCN's beneficiary mapping data where out of total beneficiaries, only 9 IS girls and 4 SG/ OOS girls were reported to have some form of disability.

Table 15: Evaluation sample breakdown (by region)

Region	Treatment		Control		SG/ OOS
	Re-contacted (n=347)	Added samples (n=96)	Re-contacted (n=203)	Added samples (43)	
Rural	52.2% (52.5% at baseline)	32.3%	69.5% (64.8% at baseline)	69.8%	35.1% (36.6% at baseline)
Semi-urban	27.1% (28% at baseline)	32.3%	18.7% (22.8% at baseline)	20.9%	10.7% (11.4% at baseline)
Urban	20.7% (19.5% at baseline)	35.4%	11.8% (12.4% at baseline)	9.3%	54.2% (52% at baseline)

Table 16: Evaluation sample breakdown (by grade)

Grade	Treatment		Control	
	Re-contacted (n=347)	Added samples (n=96)	Re-contacted (n=203)	Added samples (43)
Grade 8	2.9% (37.5% at baseline)	12.5%	5.4% (40% at baseline)	23.3%
Grade 9	38.6% (37.5% at baseline)	87.5%	42.3% (40% at baseline)	72.1%
Grade 10	37.8% (25% at baseline)		50.3% (20%)	
Grade 11	0.9%		0.6%	

Table 17: Evaluation sample breakdown (by age)

	IS girls (689)	SG/ OOS (319)

Age	Treatment (n=443)		Control (n=246)		
	Re-contacted (n=347)	Added samples (n=96)	Re-contacted (n=203)	Added samples (43)	
12-13 years old	7.25% at baseline	1%	1% (6.4% at baseline)		
14-15 years old	33.1% (46% at baseline)	55.2%	29.6% (42.8% at baseline)	65.1%	
16-17 years old	48.1% (38% at baseline)	40.6%	48.8% (42.8% at baseline)	32.6%	0.3% (1.71% at baseline)
18-19 years old	16.4% (8.5% at baseline)	3.1%	17.7% (7.6% at baseline)	2.3%	15.4% (22% at baseline)
20 years or more	2.3% (0.25% at baseline)		3% (1.2% at baseline)		84.3% (76.29% at baseline)

Table 18: Evaluation sample breakdown of IS girls (by disability)

Sample breakdown (IS girls)	Treatment		Control		Household Survey Washington Group child functioning questions
	Re-contacted (n=347)	Added samples (n=96)	Re-contacted (n=203)	Added samples (n=43)	
Girls with disability	8.64%	6.25%	10.34%	4.65%	Child functioning questions
Difficulty seeing	1.72%	2.08%	1.47%	0%	Child functioning questions
Difficulty hearing	0.28%	0%	0%	0%	Child functioning questions
Difficulty walking or climbing steps	0.57%	0%	0%	0%	Child functioning questions
Difficulty in self-care	0%	0%	0%	0%	Child functioning questions
Speech difficulty	0%	0%	0%	0%	Child functioning questions
Difficulty learning things	0%	0%	0%	0%	Child functioning questions

Difficulty remembering things	0%	0%	0%	0%	Child functioning questions
Difficulty concentrating	0%	0%	0%	0%	Child functioning questions
Difficulty accepting changes in her routine	0%	0%	0%	0%	Child functioning questions
Difficulty controlling her behaviour	0%	0%	0%	0%	Child functioning questions
Difficulty making friends	0.86%	0%	0%	0%	Child functioning questions
The girl seems anxious, nervous or worried daily or weekly	4.03%	3.1%	7.38%	2.32%	Child functioning questions
The girl seems sad or depressed daily or weekly	3.45%	2.08%	3.94%	4.65%	Child functioning questions

Similarly, the table below presents disability prevalence among SG/ OOS girls.

Table 19: Evaluation sample breakdown of SG/ OOS girls (by disability)

Sample breakdown (SG/ OOS girls) n=319	**Disability prevalence**	**Household Survey Washington Group child functioning questions**
Girls with disability	8.77%	Child functioning questions
Difficulty seeing	0.31%	Child functioning questions
Difficulty hearing	0.31%	Child functioning questions
Difficulty walking or climbing steps	0.62%	Child functioning questions
Difficulty in self-care	0%	Child functioning questions
Speech difficulty	0.62%	Child functioning questions
Difficulty learning things	0%	Child functioning questions
Difficulty remembering things	0%	Child functioning questions

Difficulty concentrating	0.31%	Child functioning questions
Difficulty accepting changes in her routine	0.31%	Child functioning questions
Difficulty controlling her behaviour	0.31%	Child functioning questions
Difficulty making friends	0%	Child functioning questions
The girl seems anxious, nervous or worried daily or weekly	4.70%	Child functioning questions
The girl seems sad or depressed daily or weekly	3.13%	Child functioning questions

Table 20: Evaluation sample breakdown by study hours

	IS girls (689)			
Study hours	**Treatment (n=443)**		**Control (n=246)**	
	Re-contacted (n=347)	**Added samples (n=96)**	**Re-contacted (n=203)**	**Added samples (43)**
1 hour	5.8%	4.2%	15.2%	4.9%
2 hours	40.3%	57.3%	45.1%	68.3%
3 hours	26.8%	30.2%	31.1%	22%
4 hours or more	7.2%	8.3%	8.5%	4.9%

Table 21: Evaluation sample breakdown by time spent in household chores

	IS girls (689)	
HH chores hours	**Treatment (n=443)**	**Control (n=246)**

	Re-contacted (n=347)	Added samples (n=96)	Re-contacted (n=203)	Added samples (43)
1 hour	13.3%	16.7%	11.3%	16.3%
2 hours	40.6%	49%	43.8%	37.2%
3 hours	32.3%	20.8%	27.6%	37.2%
4 hours or more	13.8%	13.5%	17.2%	9.3%

Treatment and control group matching

As mentioned in the sampling framework, since the project used a random stratified sampling approach, whereby the random was first stratified into different groups (ethnicity, grade for IS girls and ethnicity, age group and marital status for SG/OOS girls) and then proportionate samples were selected from each group, the sample for all the sub-groups mentioned above are proportionate to the actual beneficiary population.

In terms of matching across treatment and control groups, midline samples follow the same trend of composition as in the baseline, as outlined in the tables above. For instance, in terms of location type, the greatest number of the samples in both treatment and control groups belong to rural region (52.2% treatment and 64.8% control), which is similar to the samples recorded at baseline. Similar trend of sample distribution can also be observed in the SG/ OOS group, where 35.1 percent of the samples belong to rural region, followed by 54.2 percent to urban region, similar numbers as observed at baseline.

The trend of sample distribution by grade also matches in a similar manner across treatment and control groups, where the greatest number of samples are currently studying in grades 9 and 10, following a significant decline in the number of samples in grade 8 as girls who were studying in grade 8 at the baseline have successfully transitioned into higher grade. Girls studying in grade 11 in the midline sample were in grade 10 at the baseline. However, most of the IS girls who were in grade 10 have completed their project intervention cycle and have migrated elsewhere from their hometown for studies or work, and could not be re-contacted at their respective schools. As a result of this, samples in grade 11 (present) are not representative of entire girls who transitioned from grade 10 last year to higher level. Considering this, these grade 10 samples have been excluded from any comparative analysis against treatment and control or through baseline to midline.

In terms of age, the samples match across treatment and control groups across all age-groups presented in the table above. The age categories follow a similar trend as observed in the baseline.

In terms of disability, as the set of seven Washington Group Questions had failed to record any disability among sample girls at baseline, it was advised by the GEC to use an extended set of 24 child functioning questions that includes questions surrounding mental wellbeing as well. As a result of change in the tool, slightly higher number of disabilities have been recorded at midline (nearly 10 percent for both treatment and control groups). However, outlined in the tables above, it should be noted that highest number of functional limitations have been reported in the psychosocial illness questions about anxiety, nervousness, sadness and depression either on daily or weekly basis. Other forms of physical limitations are still very low, as in the baseline. Similar trend was also observed among SG/ OOS groups, where 8.77 percent disability prevalence has been recorded.

Apart from all the key characteristics, time that the girls spend in household chores and studying have also been considered to explore the representativeness of sample. As a result of interventions to the treatment girls, their study time has increased while a decrease can be observed in their engagement in household chores. Although a similar trend can also be observed in control groups, 15.2 percent of the girls were still found to be studying less than an hour a day, against an unmatching 5.8 percent in the treatment sample. Similarly, while 17.2 percent of the control samples said they work four hours or more in their respective households every day, the number was slightly lower for IS girls (13.8%). Except these unmatching evidences, generally the trend of distribution of sample across treatment and control groups is similar.

Sample size, composition and matching conclusion

In light of the sample composition and discussions about the matching between control and treatment groups presented above, the sample size composition can be deemed as representative of the wider beneficiary population, especially as the trend of sample composition largely follows the same pattern as observed during baseline.

For qualitative information, the MEL guidance did not suggest the exact number of FGDs and KIIs but instead suggested that data should be collected until a point of saturation of information is reached. The point of saturation was determined where the researchers saw similar instances of information over and over again. In order to make certain that saturation is based on the widest possible range of data on the category, the researchers used STEM II baseline as a reference to plan and execute qualitative data collection. Qualitative data was collected from three separate locations representing rural, semi-urban and urban settlements within Kailali district. FDM referred to the sampling framework document, where the location of schools was specified, to select the areas and schools for collecting qualitative information. The schools were then selected randomly from each area.

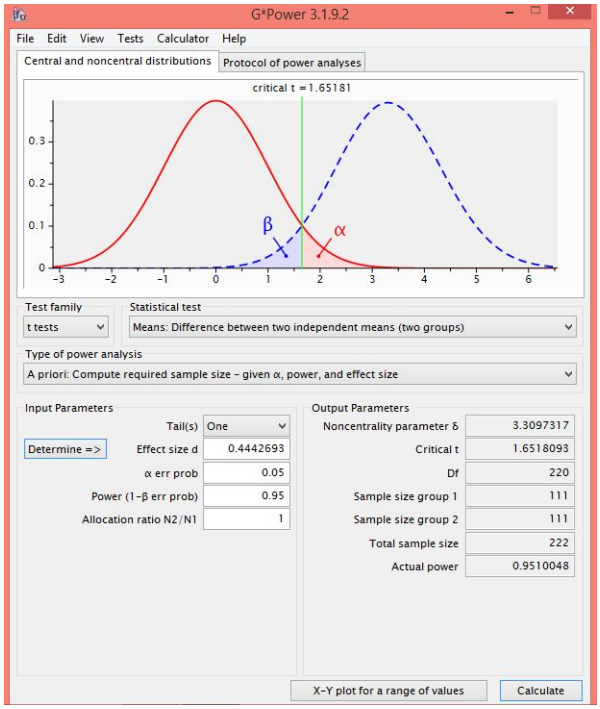
Adjustments

It should be noted that the effect size of the re-contacted samples is above 0.25, i.e. approximately 0.45 for both treatment and control groups. It shows that the learning results obtained from the sample achieved are statistically significant, and can still be considered representative of the entire population.

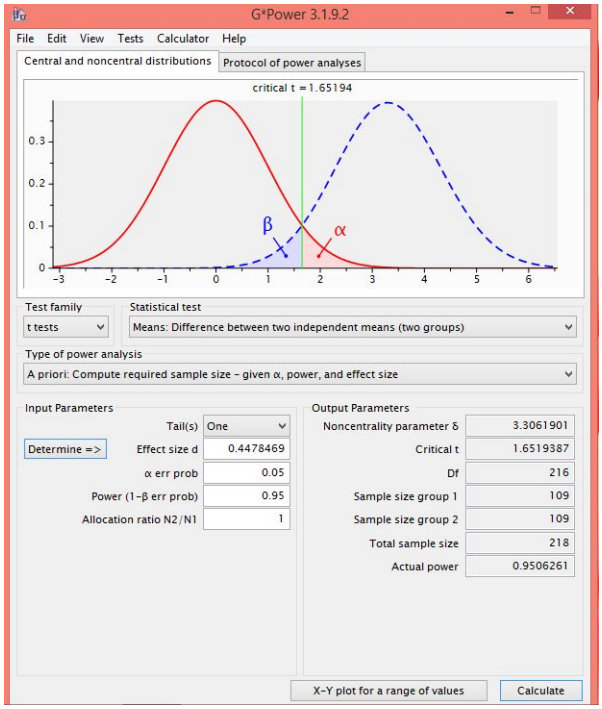
Apart from effect-size calculation, in order to ensure that results obtained from the sample achieved are reliable despite attrition recorded at midline, confidence interval at 95 percent confidence level for the regression using literacy and numeracy scores against treatment and control samples was administered. For both literacy and numeracy, both lower-bound and upper-bound confidence intervals are 95 percent or above. The relevant tables have been presented in the following section on 'learning and transition outcomes estimation'. In that light, no further sample adjustment or any form of control was required for midline data analysis.

Given below is the snap-shot of effect-size calculation. As we can see in the attachments below, the minimum statistically significant sample size for SeGRA would be 111 each for Treatment and Control. Similarly, for SeGMA, the minimum statistically significant sample size would be 109 each for both Treatment and Control. However, the sample we have achieved is 279 Treatment and 163 Control, which is higher than the above mentioned (effect size calculation). Hence, the effect size for SeGRA is 0.444 and for SeGMA, it is 0.447.

SeGRA



SeGMA



Contamination and compliance

There was no major evidence of contamination of samples, either from the project's own interventions having spill-over effects, or through external involvement in control groups having a significant impact on their learning and transition outcomes. A project official attributed the reason behind increased learning scores of control samples to regular government interventions and STEM interventions such as radio programmes and community-based activities that cannot be deliberately limited to only the treatment girls. "When we conduct any community-based activities, people from different places and backgrounds participate/attend," he said. "In that regard, there are a lot of indirect beneficiaries as well." Similarly, STEM's radio programmes are accessible to everyone from both control as well as treatment girls. Apart from this, no girl in the sample was found to have transferred to control school from the treatment or vice-versa.

Nevertheless, despite assumptions of contamination presented above, there is no clear evidence of how and to what extent the STEM's interventions affected learning and transition of control girls. As control girls and their respective households were only involved in learning tests and surveys respectively, there was no opportunity to interact with control girls for qualitative inquiries and explore their relationship with STEM's interventions in detail. Therefore, it is advisable to include a couple of consultations with control girls as well during the endline.

Meanwhile, during preliminary analysis of girls' survey, it was discovered that only a very few SG/OOS girls in the sample had taken STEM's training. The responses therefore were unable to tell the complete story of how STEM's trainings have helped girls in improving their lives. Therefore, after consultation with project team and the Fund Manager, it was decided that the qualitative consultations would be conducted with those SG/OOS girls who have already undertaken STEM's training. For this, a list of girls who had received the training was obtained from the project team and the respondents for FGD were randomly selected and approached from that list.

Learning and transition outcomes estimation

As already mentioned above, there is no hard evidence of contamination in the sample, even though the possibilities of control samples benefitting from general STEM activities like radio programs and community sensitization, cannot be ruled out. Likewise, in terms of balance, the data presented in above sections demonstrate a balance in the composition of treatment and control groups in the sample, as well as their key characteristics, barriers and grades. As there are no major differences in the key characteristics of control and treatment groups, the composition of sample does not have any starch irregularities or differences between their literacy and numeracy score. The distribution of sample proportion is in similar trends between both treatment and control groups.

In terms of additional samples topped up at midline to cover the attrition, the main report of the midline evaluation presents literacy and numeracy scores of the additional samples separately and does not take into account their scores while making cross baseline-midline comparison. No striking difference has been observed in any of the aspects of literacy and numeracy scores of samples added in the midline and the re-contacted samples. Also, the scores of additional samples

have not been considered to estimate any outcomes as the scores of additional samples have not been used for comparison.

As replacement was not done during the midline and learning test were not conducted with girls who had dropped out or were not in formal education the outcome estimation did not require controlling for any of these factors. In addition, the midline study also did not find any evidence of contamination that could be taken into account and hence used for controlling.

The numeracy scores did require recalculation and adjustment. This was necessary because one subtask in SeGMA test used during the baseline was dropped due to floor effect witnessed during the baseline. Likewise, in order to ensure comparison, the midline numeracy score did not include scores from five questions added in the subtask one of the SeGMA test during the midline. The numeracy outcome estimation was carried out using scores of only the comparable question. The maximum attainable score from these comparable questions was 20.

Given below is the full regression results for learning outcome. The regression estimation is conducted in line with the suggestion made in sections 5.6.4. and 13.6 of GEC-T MEL Guidance part 2.

Table 22: SeGRA DiD results

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	7.975	.281		28.351	.000	7.423	8.527
	TorC	.667	.398	.091	1.676	.094	-.114	1.447
	BorM	.607	.355	.080	1.710	.088	-.089	1.302
	Inter	.944	.501	.119	1.883	.060	-.040	1.929
a. Dependent Variable: SeGRA								

Table 23: SeGMA DiD results

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	4.796	.319		15.015	.000	4.169	5.423
	TorC	2.327	.452	.258	5.152	.000	1.441	3.214
	BorM	-.236	.403	-.025	-.587	.557	-1.027	.554
	Inter	2.204	.569	.227	3.870	.000	1.086	3.321
a. Dependent Variable: SeGMA								

For the learning estimations during the midline – presented in Table 24 (literacy) and Table 25 (numeracy) below- the learning score of girls who were in grade 10 during the baseline was removed considering the small sample size and also due to the fact that it is highly likely that this sample cannot be re-contacted for learning test during the end-line. Hence, to increase the robustness and comparability of the estimation during the end-line, the learning samples of the girls from grade 10 were removed.

To check the robustness of the estimation, regression analysis was done by controlling some of the midline variable where difference in proportion was observed between treatment and the control group. The result from the checks are provided in table 3 for SeGRA and table 4 for SeGMA. The regression models show that none of the characteristics had significant impact on the learning estimation.

The transition outcome is measured in Binary (Successful and Unsuccessful), hence no estimation is presented.

Table 24: Regression results for horizontal merged learning score (SeGRA)

Variable		Including baseline grade 10 girls for the analysis		Excluding baseline grade 10 girls for the analysis		Including baseline grade 10 girls for the analysis – Robustness models								
		Model 0		Model 1		Model 2		Model 3		Model 4		Model 5		
		Coefficients	P-value	Coefficients	P-value	Coefficients	P-value	Coefficients	P-value	Coefficients	P-value	Coefficients	P-value	
Treatment or Control		0.909	0.038	0.944	0.031	1.070	0.016	1.074	0.016	1.123	0.012	1.090	0.015	
School Location (Rural)														
School Location (Semi-urban)						-1.004	0.052	-1.002	0.053	-1.039	0.044	-1.065	0.040	
School Location (Urban)						-0.898	0.122	-0.894	0.126	-0.963	0.099	-1.045	0.077	
Study hours								-0.026	0.907	-0.034	0.878	-0.035	0.872	
Living without both parents										-3.263	0.073	-3.119	0.088	
Poor household: difficult to afford for girl to go to school												0.401	0.351	
Language difficulties: Language of Instruction different from mother tongue														
Constant		0.675	0.052	0.667	0.055	0.964	0.009	1.012	0.066	1.062	0.054	0.486	0.557	
R-squared		1.0%		1.1%		2.1%		2.1%		2.8%		3.0%		
Number of Observations		442		437		442		442		442		442		

Table 25: Regression results for horizontal merged learning score (SeGMA)

Variable	Including baseline grade 10 girls for the analysis		Excluding baseline grade 10 girls for the analysis		Including baseline grade 10 girls for the analysis – Robustness models									
	Model 0		Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Coefficients	P-value	Coefficients	P-value	Coefficients	P-value	Coefficients	P-value	Coefficients	P-value	Coefficients	P-value	Coefficients	P-value
Treatment or Control	d	0.000	2.204	0.000	2.197	0.000	2.153	0.000	2.100	0.000	2.115	0.000	2.114	0.000
School Location (Rural)														
School Location (Semi-urban)					-0.118	0.826	-0.150	0.781	-0.110	0.838	-0.098	0.855	-0.082	0.880
School Location (Urban)					0.159	0.793	0.107	0.861	0.182	0.764	0.217	0.724	0.236	0.702
Study hours							0.288	0.210	0.296	0.195	0.297	0.195	0.302	0.188
Living without both parents									3.525	0.063	3.463	0.069	3.410	0.075
Poor household: difficult to afford for girl to go to school											-0.174	0.697	-0.200	0.660
Language difficulties: Language of Instruction different from mother tongue													-0.165	0.738
Constant	2.282	0.000	2.327	0.000	2.285	0.000	1.754	0.002	1.700	0.003	1.950	0.024	2.021	0.023
R-squared	5.1%		5.1%		5.1%		5.5%		6.2%		6.3%		6.3%	
Number of observations	442		437		442		442		442		442		442	

Annex 4: Characteristics and Barriers

Table: Girls' characteristics (IS Girls)

	Intervention (midline)	Control (midline)	Source (Household and Girls School survey)	Remarks
Sample breakdown (Girls)				
Orphans (%) - Single orphans - Double orphans	Midline (baseline) 3.38% (--) 0.45% (--)	Midline (baseline) 2.84% (--) 0 (--)	PCG_11g PCG_13g	This information was not recorded at baseline
Living without both parents (%)	3.61% (4.1%)	7.31% (5.6%)	PCG_10g PCG_12g	
Living in female headed household (%)	24.77% (--)	26.42% (--)	HH_8	This information was not recorded at baseline
Married (%)	0.70% (0.50%)	0.81% (0%)	PCG_22g	
Mothers (%) - Under 18 - Under 16	 0% (0%) 0% (0%)	 0% (0%) 0% (0%)	PCG_23g	
Poor households (%) - Difficult to afford for girl to go to school - Household doesn't own land for themselves - Material of the roof (hay) - Household unable to meet basic needs - Gone to sleep hungry for many days in past year	 43.12% (57.9%) 6.32% (12.4%) 2.3% (2.8%) 17.38% (0%) 0.45% (0%)	 52.84% (57.3%) 7.31% (15.3%) 2% (1.6%) 18.7% (0%) 0.40% (0%)	 PCG_7enr PCG_11econ PCG_2econ PCG_5econ PCG_7econ	
Language difficulties: - Language of Instruction different from mother tongue (%)	 38.37% (59%) 0.67% (1.3%)	 41.9% (51.2%) 0.08% (0.8%)	 PCG_2enr PCG_3enr	

- Girl doesn't speak the language of instruction (%)				
Parental education - HoH/ primary caregiver has no education (%)	0.50% (28.4%)	0.08% (27.0%)	HH_13	
Total	**443**	**246**		

Table: Girls' characteristics (OOS/SG Girls)

	Intervention (midline)	**Source (Household and Girls School survey)**	**Remarks**
Sample breakdown (Girls)			
	Midline (Baseline)		
Orphans (%) - Single orphans - Double orphans	2.50% (--) 0.31% (--)	PCG_11g PCG_13g	This information was not recorded at baseline
Living without both parents (%) – *(For married SG/ OOS, father-in-law and mother-in-law were also considered as parents)*	0.62% (4.9%)	PCG_10g PCG_12g	
Living in female headed household (%)	60.4% (--)	HH_8	This information was not recorded at baseline
Married (%)	41.1% (38.3%)	PCG_22g	
Mothers (%) - Under 18 - Under 16	0% (1.5%) 0% (1.5%)	PCG_23g	Although there are OOS/ SG girls with children, they did not fall into this age bracket (under 18 and under 16)
Poor households (%) - Difficult to afford for girl to go to school - Household doesn't own land for themselves - Material of the roof (hay, mud) - Household unable to meet basic needs	31.3% (70.9%) 3.4% (10.3%) 1.3% (76.6%) 14.7% (0%)	PCG_7enr PCG_11econ PCG_2econ PCG_5econ	

- Gone to sleep hungry for many days in past year	0.30% (0%)	PCG_7econ	
Parental education - HoH has no education (%)	0.60% (36.6%)	HH_13	
Total	**319**		

Table 25: Potential barriers to learning and transition

	Intervention (Midline)	Control (Midline)	Source	Remarks
Sample breakdown (Girls)				
Home – community				
Safety:				
Fairly or very unsafe travel to schools in the area (%)	-- (--)	-- (--)	PCG_9	Not measured in likert scale at the baseline. There was a yes/no question
Doesn't feel safe travelling to/from school (%)	4.7% (2.1%)	0.97% (2.4%)	CS_W13s	
Parental/caregiver support:				
Sufficient time to study: High chore burden (strongly agree and agree, %)	92.78% (--)	78.04% (--)	PCG_26g	This information was not recorded at baseline
Doesn't get support to stay in school and do well (%)	1.8% (0.50%)	0.40% (1.6%)	HHG_7	
School level				
Attendance:				
Attends school half the time (%)	0% (0%)	(0%)	PCG_6enr	
Attends school less than half the time (%)	0% (0%)	(0%)	PCG_6enr	
Doesn't feel safe at school (%)	0.7% (0%)	0% (0%)	CS_W14s	
School facilities:				

No seats for all students (%)	1.6% (1.5%)	0.40% (1.2%)	CS_W5s	
Difficult to move around school (%)	0.20% (--)	0% (--)	CS_W6s	This information was not recorded at baseline
Doesn't have drinking water facilities	0% (0%)	0% (0%)	CS_W7s	
Doesn't have toilet at school	0% (0%)	0% (0%)	CS_W9s	
Doesn't have areas where children play/ socialise	0% (--)	0% (--)	CS_W11s	This information was not recorded at baseline
Teachers:				
Disagrees that teachers make them feel welcome	8.80% (1.5%)	7.31% (2.4%)	CS_WA	
Agrees that teachers treat boys and girls differently in the classroom	22.34% (5.25)	14.63% (3.6%)	CS_1s	
Agrees that teachers are often absent from class	35.66% (13.5%)	36.17% (8.4%)	CS_2s	
Total	**375**	**246**		

Furthermore, as suggested by DFID's Regional Education Advisor and FM's disability expert, the midline HH survey also had questions around girl's disability, in order to triangulate the disability information provided by the girls in the girls' survey. While the households were asked child functioning questions, the girls were administered the Washington Group questions on disability. As in the baseline, the disability prevalence was recorded at below 1 percent at the midline, hence disability has not been presented as a barrier in this report. Data on disability prevalence have been presented in Annex 3 and Annex 9.

Likewise, in terms of marital status, only two IS treatment girls – of 17- and 18-years of age respectively – reported they were married after baseline. Given the low number of girls who are married, marital status has not been considered a barrier in this case. Among the SG/ OOS girls, 131 girls out of 319 reported that they are married. Out of that, only eight girls are below the legal age of 20.

Annex 7: Project design and intervention

Table 26: Project design and intervention

Intervention types	What is the intervention?	What output will the intervention contribute to?	What Intermediate Outcome will the intervention will contribute to and how?	How will the intervention contribute to achieving the learning, transition and sustainability outcomes?
HH learning environment	● Family dialogue ● Life skills (LS) and Adolescent Sexual Reproductive Health (ASRH) classes	● Output 1 ● Output 4 ● Output 5	The interventions will contribute to IO 1 and 3. Family dialogue training to parents has been designed to narrow the HH gender roles that has been defined by the patriarchal thinking that blankets not just the project community but all of Nepal. The intervention touches upon two important themes – household roles and responsibility and decision making. With an increased realisation from parents on the harm that comes with overburdening the girls with HH chores, the project expects this intervention to lessen the HH chore burden of girls which should give them more time to study at home and attend schools. Likewise, classes such as LS and ASRH imparts knowledge to the girls, gives them a voice and confidence to share it with their family members and the power to negotiate.	Once the project helps create a more positive HH environment for girls through these interventions, girls will get more time to study at home and decrease absenteeism at school. This will help them learn better and get them promoted to a higher grade.
Community Initiative	● Fundraising campaign ● EGAP Campaign – Household door-to-door enrolment campaign ● Child Safeguarding Training	● Output 1	This intervention will contribute to IO 2 and 3. The fundraising campaign is initiated by SMC and PTA along with the community members to support the needs of the schools such as toilet facilities, sanitary pads, sports material, emergency fund for disaster or other infrastructure support as per need. This will help mitigate school based infrastructure barriers which otherwise can decrease enrolment and attendance as improper WASH facilities along with lack of sanitary pad is one of the barriers for the students to attend school regularly. This also complements the schools' effort to identify needs which feed into their SIPs. Similarly, through EGAP campaigns like Radio Messages, Street Dramas, Household door-to-door visits, posters and pamphlets, the project will disseminate information on the importance of girls' education, school enrolment, increasing attendance, lowering dropout, parental and community support, and gender equality. These activities will be led by girls in close support from the schools, parents, community members, DEOs office and the project team. Furthermore,	As these activities will be led by the project stakeholders themselves, this will help them feel a sense of ownership. Through increased advocacy for girls' education through EGAP Campaigns and Fundraising carried out by the parents, this will enable them to be a strong gatekeeper to quality education which will in turn contribute to better learning and transition of girls. Similarly, on many of these campaigns the project has and will continue to collaborate and support the initiatives of the local level government. This has also bridged a sustainable platform for the stakeholders (school and parents) to build a strong network with government agencies which can be continued even after the project phases out.

			the project conducts a one-day training on child safeguarding to the communities by advocating and sensitizing community on safety of children at school, community and home.	
Safe Space	● Self-defence training ● Child Safeguarding ● Girls' Clubs	● Output 4 ● Output 5 ● Output 1	These interventions will contribute to IO 2 and 3. Self-defence training will support the girls in raising their voices against any harassment and misconduct that can happen to them at school, community or home. The training will build confidence of the girls to handle any uncomfortable situations. The girls will attend schools more regularly if they feel safe. Similarly, child safeguarding training will give assurance to the parents to send their children to school and/or to increase their safe mobility. Likewise, girls' club for both IS and OOS girls is not just a platform for them to learn but also to connect with each other, share their feelings, ideas, dreams and hope, helping them to feel more emotionally and physically safe.	Where students are not guided, engaged or feel excluded or threatened, positive personal and academic results cannot happen. This results in both teachers and students feeling demoralized. With these interventions the girls are able to raise voices for themselves as well as for others during any instances of misbehaviour or harassment. With these trainings the parents will feel more secure about girls' safety which increase their mobility and independence. When girls feel both emotionally and physically safe, they are able to learn and transition better. The self-defence training has been highly appreciated by the local government which led to numerous dialogues on girls' safety between the project, community members, schools and local government. The local government has scaled up this training in other schools in the area and has put forth the agenda of creating a safe space for girls.
School governance	● Management for Quality Education (M4QE) ● Parents for Quality Education (P4QE0 ● "Our Voice" box ● School Management Committee and Parents Teachers Association meetings	● Output 2	These interventions will contribute directly to IO 2 which aims to enhance school management and governance structure by working with different stakeholders like parents, SMC, PTA, teachers and students. With training like M4QE and P4QE, they will help to clarify expectations between schools and their different stakeholders. The training provides them with information that will help them familiarised with the school structure and processes, and that SMCs and PTAs would become more efficient, effective, representative and regularly engaged. All these interventions have been designed for students, parents and school governing bodies to become a good gatekeeper by building their capacity and setting up a mechanism through "Our Voice" boxes to monitor and improve school governance.	After these interventions, the project expects the management committee to work towards improving the school environment and making these committees accountable towards their roles and responsibilities. With better functioning SMCs and PTAs in schools and a complaint handling mechanism in place it should create a child friendly learning environment which directly contributes to improved learning and success transitions. Furthermore, when STEM II closes out, a mechanism will have been set up, made functional and stakeholders empowered to continue using the tools and mechanisms established, demonstrating best practice and advocating for quality education for all.
Gender Friendly environment	● Educate Girls Alleviate Poverty (EGAP) Award	● Output 2 and 6	This intervention will provide essential infrastructure support to the schools which will support IO 3 and 2. These awards are mostly in the form of WASH facilities since STEM prioritises girls' toilets and potable water where these facilities were not in place in support of GON's Sustainable Development Goals on sanitation in schools. In cases where WASH facilities are already in good condition, another need will be identified by the schools and the project. The awards could only be received once the school has met certain criteria and the school had to work towards meeting	Many students, especially girls, miss out on classes due to inadequate school infrastructures like WASH facilities – clean and functioning toilets, running water, sanitary pad disposable bins, drinking water; classrooms – desks, chairs, blackboards; and boundary walls around the school premises. With the setup of quality infrastructure and safe spaces, it will boost the confidence of both parents and children to continue education which will contribute towards learning and transitioning of students and sustainability of these schools. Even in STEM Phase 1, these incentivising awards have proven highly effective in a clear sense of ownership

			these criteria. This builds a sense of ownership amongst the school authorities. By providing a school with better WASH and infrastructure facilities can motivate girls to attend schools regularly. Understanding the barriers to the disposal of sanitary pads in school, project has included incinerator for pad disposal in all schools as mandatory action.	and pride for the students, teachers and school management in their achievements of their award. When the project tried to unpack this through qualitative lens, a clear shift towards more internally cultivated and motivated behavioural change was identified.
Teaching and Learning	● Girls Club Facilitation Training ● Classroom Management Training ● Girls Club (GC)	● Output 3 and 5	These interventions will contribute to IO 3 and 5. The GCFs will be trained on applying student/child centred learning in both clubs and classrooms. The focus will be on using group work, discussions, and presentations, use of local resources for demonstration which teachers are unable to practice in regular class due to time, resources constraints and large class size. Similarly, Classroom management training has been designed to assist teachers with better classroom management so that the skills evidenced in Girls Clubs can be transferred to classrooms. The training focuses on two main areas - managing large and under-resourced classes and finding alternatives to corporal punishment to create a safe, dignified and rewarding teaching-learning space. Both of these interventions should improve the overall classroom environment and motivate the students to regularly attend school. This should contribute to IO 5. Moreover, the girls' clubs have been designed as a free and local model, and their link into student-friendly teaching methodology have led to the increase in girls' attendance, as well as directly contributing to improved understanding of the academic subject matter, helped forge a more supportive learning environment where teachers and students feel more intimately connected, has improved test scores, and encouraged more participatory and varied teaching and learning methods. This contributes directly to outputs 5 and 3.	These interventions are expected to result in considerable changes in girls' confidence, study time, improvement in scores, attendance and promotion rate which leads to increased learning as well as for the teachers to reflect on how they can both manage classes well, but also employ positive techniques and skills. This helps to increase learning and transition. To make this approach more sustainable, the project has encouraged teachers to share their learnings from the teachers training to other teachers, and also introduced the Friday study groups in which girls and boys come together to revise their weekly studies without the teacher. This was designed particularly to make this an after-school revision model and to ensure child-friendly teaching approaches are sustainable. Similarly, for the sustainability of good teaching and learning practices, the project has been carrying out intensive monitoring in transferring knowledge and skills to regular classes. This has helped the project to ensure that the knowledge and skills are being transferred for improving teaching quality in regular classes.
Learning Input	● Learning Center establishment	● Output 6	This intervention will contribute to IO 3. To increase girls' school attendance and improve the overall learning environment, learning centers with libraries, computer and science labs will be established in each school. This activity has been designed with a vision to reduce disparities in access to quality learning resources. The integration of libraries, computer and science labs in their educational course will help enhance the teaching-learning process and motivate the children to attend school regularly.	Access to libraries, science and computer labs will promote an enabling learning environment within schools to better support girls' access and transition rates within those formal institutions. With the inclusion of basic facilities like libraries, science and computer labs will promote learning for students by better teaching techniques and wider resources for students. This will help the girls to maintain regular and sustained attendance and improved learning.

Financial Literacy	● Youth Financial Literacy Training (YFLT) ● Workshop with GTF recipients	● Output 5	These interventions will contribute to IO 4. These activities are designed for OOS girls in order to build them with necessary skills to venture into job or business market. All the activities have been designed to improve the long term financial well-being of the OOS girls. The financial literacy classes will give these girls the foundational knowledge on income, expenditure, savings, loans, insurance, career and personal choices like marriage and education.	For the OOS population, under Learning the project has focused on Financial Literacy. Therefore, this intervention directly improves the financial knowledge of the OOS population. This leads to girls' increased acumen on personal and professional investment and also empowers them to set milestones and successfully transition. To make YFLT more sustainable, ToT was given to local young leaders and GTF partner staff who will then train the FLT participants. This will ensure that the ownership of the training is with the local communities.
Livelihood Opportunity	● Vocational Training (VT) ● Business Skills Development (BSD) Training ● Girls Transition Fund (GTF)	● Output 5	These interventions will contribute to IO 4. With the OOS/SG girls receiving VT, BSD and GTF it will help make them financially knowledgeable, viable and independent. They are not only able to financially support themselves and their families but this also boosts their confidence as capable individuals who are independent, able to make their own decisions and have a bigger voice in their family and community.	These interventions have been designed to help in the learning of non-formal education (vocational and business skills) of OOS girls. With the learning of these skills they are in a position to transition into safer and better livelihood opportunities – jobs or micro-enterprise. To make these activities sustainable, the project has been linking the OOS girls with each other to exchange information and experience and also provided a platform for these girls to network with the district chamber of commerce, municipal office and small and cottage industries. The project has also handed over the format of a business plan to the cooperates who work with the girls to prepare and finalize this. As for the GTF, its sustainability is firstly ingrained in the model itself through its revolving nature. It is further strengthened through the formation of the GTF management committee comprised of cooperative members, community leaders, parents of recipients, media, GTF recipients and local government bodies. The committee will work independently to manage and monitor the funds to ensure that the GTF continues to operate and disburse loans, and to avoid payment defaulting even after the project period.

Annex 8: Key findings on Output Indicators

Table 1: Output indicators

Logframe Output Indicator	Means of verification/sources	Collection frequency
Output 1: ***Parents attitudes are supportive towards formal and non-formal education of girls***		
Output 1.1: *Number of IS and OOS parents (M/F) who take part in activities around girls education supported by STEM II*	• Attendance list: disaggregated on the basis of gender, ethnicity and location from STEM activities (P4QE, Family dialogue, WLiE, EGAP Campaigns) • Qualitative tools: FGDs with parents • KAP module of household survey (from EE to triangulate)	• During the time of STEM activity intervention start up • Data compiled annually
Output 2: ***School stakeholders demonstrate awareness of and commitment to improving school conditions for girls***		
Output 2.1: *Number of schools using the "our voice" complaint box to register and address the complaints of school stakeholders*	• STEM monitoring report on “Our Voice Box” • Qualitative tools: FGDs with girls and school management	• Data collected and compiled Quarterly • As per the sensitivity of the issues, if the issue needs to be addressed as soon as possible than the monitoring can be done more than once in quarter
Output 2.2: *Number of schools that conduct 6 SMC meetings annually*	• SMC Meeting minutes • Qualitative tools: FGDs or KIIs with SMC	• As per the SMC meeting held • Quarterly from school • Data will be compiled annually
Output 2.3: *Number of schools that conduct 4 PTA meetings annually*	• PTA Meeting minutes • Qualitative tools: KIIs with SMC and PTA	• As per the PTA meeting held • Quarterly from school • Data will be compiled annually
Output 3: ***Teachers have access to child friendly teaching methodologies***		
Output 3.1: *Number of STEM school teachers who complete STEM teachers training*	• Attendance list of teachers training • Qualitative tools: KII with the participating teachers	• As per the STEM activity • Data will be compiled annually
Output 4: ***STEM girls are involved in activities which promote learning and self-efficacy***		
Output 4.1: *Percent of IS girls who attend at least 75 percent of one GC cycle*	• STEM monitoring record on GC attendance • GC spot checks • Qualitative tool: FGDs with In school(IS) girls	• Every quarter of GC cycle

Output 4.2: *Number of STEM school children (girls and boys) who participate in campaigns around girls education*	• Attendance record of campaigns • Qualitative tool: FGDs or KIIs with IS girls and boys	• As per STEM activities • Annually - the attendance list of girls and boys at both STEM and non-STEM activities will be compiled • Bi-annually - FGDs and KIIs
Output 4.3: *Number of IS girls who successfully complete STEM's Self-Defense training*	• Attendance record of the training • Qualitative tool: FGDs with IS girls	• As per the training given
Output 5: ***School leavers (OOS) have demand driven work readiness skills***		
Output 5.1: *Percent of OOS/SG girls who take part in STEM's YFLT or BSD or ASRH training and successfully get end of course certification*	• End of course certification list of YFLT, BSD and ASRH participants • FGDs and KIIs with YFLT, ASRH and BSD participants	• As per the training given • Data will be compiled bi-annually • FGDs and KIIs will be conducted bi-annually
Output 5.2: *Number of OOS/SG girls who successfully complete STEM's VT and get end of course certification*	• End of course certification of VT participants • KIIs with VT participants	• As per the training given • Data will be compiled annually • KII will be conducted after the completion of VT
Output 5.3: *Number of OOS/SG girls who start or expand their business through GTF loans*	• Cooperative record of GTF recipients • STEM II record of GTF recipients • Survey with GTF recipients	• Monthly record collected from the SACCOs • Quarterly updated in STEM II GTF database • GTF survey conducted annually
Output 6: ***Increased number of resources available for IS girls***		
Output 6.1: *Number of schools with library and/or computer lab*	• Gap Assessment tool • School Asset • Spot checks • KII with head teacher	• Bi-Annually

Table 28: Midline status of output indicators

Logframe Output Indicator	Midline status/midline values Relevance of the indicator for the project ToC	Midline status/midline values
Number and Indicator wording	What is the contribution of this indicator for the project ToC, IOs, and Outcomes? What does the midline value/status mean for your activities? Is the indicator measuring the right things? Should a revision be considered? Provide short narrative.	What is the midline value/status of this indicator? Provide short narrative.
Output 1: Parents attitudes are supportive towards formal and non-formal education of girls		
Output 1.1: Number of IS and OOS parents (M/F) who take part in activities around girls	**Contribution to ToC, IOs and Outcome:** The project is working towards increasing parental involvement in girls' education where parents not only have supportive attitudes towards girls' education but actually bring it into	**Midline value: 3,823 parents** **Disaggregation as per logframe:** **Gender:** 2,358F: 1,285M **Location:** Urban: 717

education supported by STEM II	practice. To achieve this the project organizes various activities like EGAP Campaigns for enrollment, attendance and retention, Parents for Quality Education training and Family Dialogue to engage parents for a common cause where they build essential skills and knowledge, facilitate strong partnerships within the group and advocate more effectively to become drivers of girls' education. ● Support to bring positive change in attitude and practice of parents towards promoting quality education for girls. ● Schools will function better as with more involvement of parents, schools can be made accountable for their actions. **Midline value and activities:** A total of 3,823 parents participated in activities around girls' education. Further disaggregation is as below: ● P4QE training at community level: 3,038 parents (1,976F: 1,062M) ● Family dialogue: 785 parents (562F: 223M) ● Total Female = 2,538; Total Male = 1,285 Considering the project had aimed to involve 1,000 parents in different STEM activities but instead 3,823 parents did, that is 382 percent above the planned target. This indicates that parents are reacting positively towards different STEM activities and want to support this cause. Similarly, the project had invited an equal number of female and male parents to these activities but as the numbers reflect both the activities have significantly more female participants than the male. This indicates that women who are otherwise confided into their house and have lower mobility as compared to their male counterparts believe in this cause and are advocating for this. When invited, many men said that they could not participate in these activities due to their prior work commitments. However, they encouraged women to participate and be involved in advocating for this cause. This shows that the parental support of both men and women is positive. **Revision:** ● No revision needed on the target even though the project has exceeded the endline target as in the next one year project will work with parents on activities like family dialogue round 2, EGAP campaigns, Women Leadership in Education. The majority of participants of these activities will be the same as the ones who had participated before midline so it might be double counted in endline.	Semi-urban: 1,142 Rural: 1,964 **Ethnicity:** Brahmin/Chhteri: 1,045 Tharu: 2,241 Dalit: 412 Janjati: 118 Other: 7 This year STEM II successfully completed P4QE training at the community level where they shared findings from the first two stages of the training, Family Dialogue was piloted and EGAP Campaigns (door-to-door, street drama, etc). A total 3038 parents (1,976F: 1,062M) attended the P4QE training and 785 parents (562F: 223M) participated in Family Dialogue training making the midline values of this indicator to be 3,823 parents. The project has exceeded the midline target by 2,823 parents. The project has not included the data for EGAP Campaigns to avoid double counting as mostly the parents from P4QE participated in the EGAP campaigns.

Output 2.1: Number of schools using the "our voice" complaint box to register and address the complaints of school stakeholders	**Contribution to ToC, IOs and Outcome:** Even though having a complaint mechanism in schools has been made mandatory by the government of Nepal it is not actually implemented in most government schools. Therefore, STEM II has been working with its project schools to instil values of accountability, transparency and educational excellence through the implementation of “Our Voice” boxes. Since baseline till now project has been working with students to increase their confidence on the functionality of the “our voice” box with head teachers continuously promoting the use of this box, and also with the school management, namely head teacher by setting up a committee (head teacher, student representative and teacher representative) responsible for handling complaints in a timely manner. ● Increases the confidence of stakeholders like children, parents and teachers on school management ● Creates a school environment that promotes child protection ● Increases the confidence of girls to raise their voice against the issues not just in school by beyond **Midline value and activity:** For the 2nd year of STEM II, 25 STEM schools have actually implemented the “our voice” complaint box system where students have raised administrative and academic concerns or complaints about various challenges and issues that they have faced *(**Academic** – need for extra classes, better teaching style, proper use of learning resources; **Harassment** - boys bullying junior students and girls; **Infrastructure** - repairmen of playground, insufficient fans in classroom; **WASH** - proper management of toilet facilities, drinking water in school and school area cleanliness)*. Most of the issues have been resolved while issues which demand huge amount of money and did not seem feasible to school have not been addressed. The project has succeeded in achieving not just the midline value for this indicator but also the endline value. In the next year, the project will work towards establishing this system in the remaining 5 schools and also continue the system in 25 schools. **Revision:** No revision needed	**Midline value: 25 schools** **Disaggregation as per logframe:** **Location:** Urban: 4 schools Semi-urban: 9 schools Rural: 12 schools A total of 25 STEM schools have used the “our voice” complaint box. The project along with the head teachers had oriented the management as well as the students on the use of “our voice” box. By midline it has been successfully rolled out in 25 schools which have received complaints, whereas in 5 schools the “our voice” box is there but the students have not been using it even after the orientation. Out of 5 schools, 2 are urban, 2 are semi-urban and 1 rural. When asked about the reason for not using the complaint box, 4 of the schools responded that the students communicate the complaints verbally. As for one school even though complaints are being dropped but they are not able to address it due to financial constraints.
Output 2.2: Number of schools that	**Contribution to ToC, IOs and Outcome:**	**Midline value: 29 schools** **Disaggregation as per logframe:**

conduct 6 SMC meetings annually	As per MoE Nepal's mandate, a public school should conduct a minimum of 1 SMC meeting every 2 months. However, public schools are not following this time frame and are only conducting meetings on an ad-hoc basis. The project has been working with the School Management Committees to conduct these meetings in a timely manner as without these meetings important agendas for the betterment of school will not be done in a democratic, timely, efficient and cost effective manner. The project has been training current SMC members and parents' leaders on the roles and responsibilities of SMC, conducting GAP assessment for schools, designing the SIPs in accordance to their school priority and building their leadership skills so that they can effectively lead the SMC meetings. ● Increase SMC member's knowledge on their roles and responsibilities, create a sense of ownership and make them accountable towards the school, which eventually promotes good governance of the school. ● Addresses concerns around child and gender friendly infrastructure and school environment, quality teaching, child protection and safety. **Midline value and activity:** 29 STEM schools have conducted 6 SMCs meeting annually. Initially when the target was set, in majority of the schools the meetings were conducted in an ad hoc basis, therefore the project targeted 20 schools for midline. But due to various programme activities, especially due to M4QE training and having this as one of the major EGAP UPGRADE criteria the project has been able to over achieve this criteria. As you can see in the detailed disaggregation in the cell on the right, even though the requirement is for 6 meetings, 27 schools (90 percent) have conducted more than 6 meetings, which is an extremely positive sign for this output. **Revision:** No revision needed	**Location:** Urban: 5 schools Semi-urban: 11 schools Rural: 13 schools A total of 29 STEM schools have conducted 6 SMC meetings annually. The midline target for this was 20 schools and endline target was 28 schools which means that the project has over achieved the target. Even for the 1 school that did not meet the target, the school conducted 4 meetings in the last one year. The detailed disaggregation is as follows: 25 meetings = 1 school 21 meetings = 1 school 20 meetings = 1 school 19 meetings = 2 schools 18 meetings = 1 school 15 meetings = 1 school 14 meetings = 2 schools 13 meetings =3 schools 12 meetings = 4 schools 11 meetings = 2 schools 10 meetings = 2 schools 9 meetings = 2 schools 8 meetings = 4 schools 7 meetings = 1 school 6 meetings = 2 schools 5 meetings = 1 school
Output 2.3: Number of schools that conduct 4 PTA meetings annually	**Contribution to ToC, IOs and Outcome:** Similar to the SMC mandate set by MoE, 1 PTA meeting is set as mandatory every 3 months. As seen in project's historic data, the awareness level of parents towards girls' education has increased but the engagement is significantly low, be it general visits or official meetings. therefore the project has been encouraging the parents to visit schools whenever they have free time, with or without agenda, and also run for PTA positions and to develop their confidence and leadership skills for them to voice their opinions in school forums and provide meaningful engagement. .	**Midline value: 18 schools** **Disaggregation as per logframe:** **Location:** Urban: 4 schools Semi-urban: 9 schools Rural: 5 schools A total of 18 schools conducted 4 PTA meetings annually. Which is 3 more schools than the midline target. The data is disaggregated as follows- 14 meetings = 1 school 11 meetings = 1 school

	● As the project builds parent's knowledge on their role in their childs' education and develops their skills to identify themes and gaps to become a gatekeeper of quality education for their children, the schools can be made more accountable on different aspects like child and gender friendly infrastructure and school environment, quality teaching, child protection and safety at school. **Midline value and activity:** 18 STEM schools have conducted 4 PTA meetings annually. The target for midline and endline was 15 and 25 schools respectively. The project has overachieved the target which is a very positive sign as it is an arduous task to actively involve parents in their childrens' education, especially daughter studying at a government school. As most parents think that their responsibility ends after enrolling their daughter to school but fail to comprehend their roles as the gatekeeper of accountability. As their involvement was minimal the PTA meetings were not conducted in a timely manner. However after attending STEM II trainings parents have said in qualitative survey that they have clarity on the roles and responsibilities of PTA especially the ones who attended P4QE training. The awareness level is higher in female parents than male. The meetings are conducted more regularly now in most schools and the schools have started informing the parents on these meetings through students, letters and telephone and most of the parents are invited for the meetings, even the ones who are not PTA members as guests. Overall the committees are active in all the school in comparison to the baseline, however, the level of activeness and involvement of parents is different in each school. However, the number looks encouraging and the project is confident to achieve the endline target. **Revision:** No revision needed	8 meetings = 3 school 6 meetings = 5 school 5 meetings = 2 school 4 meetings = 6 school 3 meetings = 5 school 2 meetings = 3 school 1 meeting = 4 school As you can see, 12 schools (40 percent) have conducted more than 4 meetings and 12 schools (40 percent) have conducted less than 4 meetings. The project will ensure that the 18 schools will continue organize PTA meetings, and work closely with 12 schools who have not met the target.
Output 3: Teachers have access to child friendly teaching methodologies		
Output 3.1: Number of STEM school teachers who complete STEM teachers training	**Contribution to ToC, IOs and Outcome:** Based on the baseline findings and historic data from the project it was found that girls were struggling to develop analytical skills in both literacy and numeracy. Thereafter the project focused on building teachers' capacity to use child centric teaching methodologies, managing classrooms and child protection. All these play a direct role in improving learning, transition, sustainability and IO5- student centred teaching methodology. ● Improve learning level of the students by introducing worksheets, group works, local resources for demonstration, using youtube and projectors to show	**Midline value: 532 teachers** **Disaggregation as per logframe:** **Gender:** 170 F: 362 M **Location:** Urban: 128 Semi-urban: 207 Rural: 197 **Ethnicity:** Brahmin/Chhteri: 361 Tharu: 138 Dalit: 16 Janjati: 15 Other: 2

	educational videos, establishing learning centers at schools and engaging students in learning through presentations, debate, essay writing and oratory competition etc. ● Promotes child safeguarding practice in schools **Midline value and activity:** ● STEM II has successfully completed GCF ToT to 51 teachers, GCF training to 136 teachers, Child Protection Training to 30 teachers and classroom management training to 463 teachers, ASRH ToT to Female community health workers and nurses, Math refresher training to 29 teachers leading the midline number to **532 teachers trained**. In KII conducted with the teachers they have said that these trainings are more effective than the government training as STEM trainings are better managed, opportunity for more interaction and sharing and provides opportunity to learn new teaching methodologies. The girls have also reflected this in their FGD by saying that the teaching methodology used by GCFs helps them understand the subject better. The Club-Classroom monitoring also revealed that transference of teachers' knowledge from these trainings is slowly happening from clubs to classroom. Boys have said in their KIIs that Math teachers are teaching the mathematical concepts and formula before working on the problem, the practice of which was not there before. The teachers have also started focusing on helping the weaker students and encouraging them to speak during classes, and are using group works, projectors and giving practical examples. **Revision:** No revision needed as the project will work with the same set of teachers in the next one year.	A total of 532 teachers (363 M: 170 F) have received STEM teacher's training which is 382 above midline target of 150 teachers. Further disaggregation is as follows, although some teachers have received numerous training: ● Girls' club facilitators ToT: 51 teachers (41 M :10 F) ● Girls club facilitators: 136 teachers (111 M:25 F) ● Child protection training: 30 teachers (29 M: 1 F) ● Classroom management training: 463 teachers (334 M: 129 F) ● Science lab management training: 30 (29 M: 1 F) ● Math Refresher training: 29 teachers (27 m: 2F) ● ASRH ToT: 29 F ● Best Practice Sharing workshop: 55 teachers (48 M: 7 F)
Output 4: STEM girls are involved in activities which promote learning and self-efficacy		
Output 4.1: Percent of IS girls who attend at least 75 percent of one GC cycle	**Contribution to ToC, IOs and Outcomes:** STEM offers after school revision clubs for IS girls which is also known as the Girls Clubs which offers academic support on English, Math, Science, Nepali, as well as bespoke Like Skills (LS) and Adolescent Sexual and Reproductive Health (ASRH) curricula. The clubs are intended to offer girls revision time outside classes, better learning environment and a safe space for networking and socialisation, building their self-confidence and self-efficacy, which then feedback into improved learning outcomes. ● Improvement in their overall learning – literacy and numeracy ● Better understanding of core schools subjects which the students have said they	**Midline value: 87 percent** **Disaggregation as per logframe:** **Grade** Grade 9: 1,723 girls Grade 10: 1,508 girls School graduate: 1,537 girls **Location:** Urban: 911 girls Semi-urban: 1,505 girls Rural: 2,352 girls **Ethnicity:** Brahmin/Chhteri: 1,657 girls Tharu: 2,354 girls Dalit: 567 girls Janjati: 165 girls Other: 25 girls **Age** 10-14 years: 1,227 girls

struggle in – English, Maths, Science, Nepali which should increase their promotion rate
- Encourages the girls to attend schools
- Marginalized girls demonstrate increased confidence, voice and influence at home, school and community through LS and ASRH classes
- Improvement in their overall self-efficacy and confidence

Midline value and activity:

- Two GC cycle has been completed during the midline evaluation point. The summary of which is as follows:

Grade	8, 9 and 10	9 and 10
Subjects Taught	English, Math, Science	English, Math, Science, Nepali LS ASRH
# of clubs	112	88
# of GCF	136	189
# of girls	4,355	3,151
% of IS girls enrolled in GC	97.8%	97%
% of girls with attendance rate greater than 75 percent	75%	87%
Average attendance rate	82.6%	87%

The project tracked the attendance of individual girls throughout the GC period in which 75 percent of girls had attendance rate of greater than 75 percent in Cycle One and 87 percent of girls in Cycle Two. This along with the average attendance rate at Cycle One and Cycle Two which is 82.6% and 87% respectively is very encouraging. Considering 97 percent of the girls in STEM schools have not only enrolled in these clubs but are also regularly attending highlights the usefulness of the clubs.

To support learning of the girls, the project ensures that the girls are attending the girls clubs and teachers are using child-centric teaching methodologies. For internal monitoring, the project conducts spot checks in these clubs, tracks individual girls and visits the home of the girls with 60 percent or lower attendance, pre-post test to gauge learning in the clubs, club to classroom teaching transference monitoring, FGDs with the girls and KIIs with the teachers and collects exam

15-19 years: 3,513 girls
20-24 years: 28 girls

81 percent of IS girls have attended at least 75 percent of two GC cycles. Further distribution of attendance for both GC cycle is as below:

- Cycle 1: 75 percent of girls attended at least 75 percent of one GC cycle
- Cycle 2: 87 percent of girls attended at least 75 percent of one GC cycle

In the qualitative survey conducted by the project girls said that the primary reasons for missing classes was being overburdened with household chores (70.5%) or due to their periods (29%) – they get cramps or they have to go home to change. The project exceeded the midline target by 37 percent (endline target by 6 percent) and is confident to achieve it in endline as well.

	scores and promotion rates. The pre-post test score (Maths: 3.7 pre and 7.2 post score out of 10; Nepali: 5.45 pre and 7.85 post score out of 10) reflects that the project is on track to improving the girls learning. This quantitative finding is further supported by FGD data from the girls in which they have reiterated that with an all-girls design of the clubs, small class size and opportunity to revise course content free of cost, they are now able to speak up during class in front of the teachers and boys, gain practical knowledge on the content and performing better than boys in terms of both academics and confidence. Boys in their KII have said that they now ask girls to share their learnings from the clubs and even approach the girls to learn from them. This clearly helps boost the confidence of the girls as they now have stepped up as a leader to a group who once they were very shy around. The boys have also reiterated that girls have started talking more both inside and outside of the class and have noticed a change in their talking style with girls being more confidence yet with the same level of kindness. **Revision:** No revision needed	
Output 4.2: Number of STEM school children (girls and boys) who participate in campaigns around girls education	**Contribution to ToC, IOs and Outcomes:** STEM II has designed and implemented various educational campaigns as community oversight and participation has proved to increase enrolment, attendance and learning. The project has organised campaigns against GBV and child marriage, celebrating women, youth, promoting enrolment, attendance, etc. ● Children demonstrate increased confidence, voice and influence at home, school and community ● Encourages parents and community members to increase their involvement in girls' education ● Increase the enrolment, promotion, attendance and decrease the dropout rate of students **Midline value and activity:** ● In various STEM II campaigns 4,601 students (girls and boys) from grade 8, 9 and 10 from 30 STEM schools participated. The number does not cover boys and girls from grades 7 and below, but the activity had participation from lower grade students, teachers and school management. ● The girls in the qualitative survey have said that they are personally advocating on issues around girls' education to parents and community members. Meanwhile, the boys have said that they have learned about current issues and are now able to speak in public, and have also shifted their	**Midline value: 4,601 students** **Disaggregation as per logframe:** **Location:** Urban: 1,197 students Semi-urban: 1,193 students Rural: 2,221 students A total of 4,601 (2,933F: 1668M) students participated in 16 days of Activism against Gender-Based Violence Campaign, Women's day and Youth day to galvanize action to end violence against women and girls around the world. The school held intra quiz, essay, debate competition

	perspective through street dramas wherein they now believe that boys and girls are both capable of doing the same thing so there should not be bias towards one particular group/gender. They have also been sharing and encouraging their parents to participate in awareness programs and educating their younger siblings on various issues. **Revision:** No revision needed as even though the project has overachieved the endline target, in the next one year the STEM campaigns will have the involvement of almost the same beneficiaries so the target will not be changed in order to avoid double counting.	
Output 4.3: Number of IS girls who successfully complete STEM's Self-Defense training	**Contribution to ToC, IOs and Outcomes:** Based on increasing number of sexual and physical abuse cases in Nepal and baseline findings about harassment from teachers, STEM II project intensively focused on raising awareness, designing community support system and building individual skills to have a safe and protective community for girls and women. One of the major activities that supports this initiative is Self Defense training which prepares and enables girls and women to deal with eve teasing, harassment, assault and abuse. The training prepares the girls and women with psychological, verbal and physical defense techniques. ● Creates awareness amongst the girls on issues related to child protection and safeguarding ● Ability to protect oneself and to deal with obstacles; increased mobility of the girls as a result new acquired confidence **Midline value and activity:** ● A total of 1,609 IS girls from grade 8, 9 and 10 participated in 3-day self defense training. We have overachieved the target, also the training was received extremely positively, not just by the girls but also by parents, schools and local government. After observing the STEM II Self-defence training, the local government have replicated with the same training in other government schools in their community. The project had limited budget for the first round of training, therefore only reached out to a small proportion of direct beneficiaries. However, in the coming year, the project plans to reach out to girls who did not receive the training in the first round. A girl in a post training FGD says "*Girls have become more aware about abuse and harassment cases around them. Post training,*	**Midline value: 1,609 girls** **Disaggregation as per logframe:** **Grade:** Grade 6: 4 girls Grade 7: 16 girls Grade 8: 179 girls Grade 9: 782 girls Grade 10: 571 girls Grade 11: 48 girls Grade 12: 9 girls **Location:** Urban: 314 girls Semi-urban: 483 girls Rural: 812 girls A total of 1,609 IS girls participated in self defense training. Further below is the classification of the participation by grade: ● Grade 6: 4 girls ● Grade 7: 16 girls ● Grade 8: 179 girls ● Grade 9: 782 girls ● Grade 10: 571 girls ● Grade 11: 48 girls ● Grade 12: 9 girls

	girls like me have started raising their voice and fighting back bullies and abusers. Now I move around the community more confidently and if someone teases me I know how to respond immediately, I now even have the capacity to physically fight back if need be." **Revision:** Since the project achieved the endline target by midline and with the increased interest on the training from the girls, the project proposes to adjust the endline target to 2,400 girls.	
Output 5: School leavers (OOS) have demand driven work readiness skills		
Output 5.1: Percent of OOS/SG girls who take part in STEM's YFLT or BSD or ASRH training and successfully get end of course certification	**Contribution to ToC, IOs and Outcomes:** The project has designed OOS girls club where they get YFLT, BSD or ASRH training to prepare them with basic financial literacy, business skills and ASRH knowledge. The three-course structure has prepared these girls to venture into various career opportunities by providing prerequisite knowledge for their career aspirations, boost their self-efficacy with clear indications that they not only have increased self-worth and confidence, but they now can envisage their futures through a more self-managed, aspiring and fulfilling lens. These clubs not only prepare them for their career and future but also provides them a safe space where they have non-judgemental conversations with each other where they can express themselves, share their life plans without fear. ● Increased career opportunities ● Safer life transitions ● Boosts their self-efficacy ● Increased confidence to voice their thoughts and have greater influence in home and community ● Help gain respect of their home and community **Midline value and activity:** 94 percent (894 girls) of OOS/SG girls who had enrolled in the club have successfully received an end of course certification (upon achieving more than 80 percent attendance). The midline value which was overachieved by 9 percent (overachieved endline by 4 percent) indicates that the girls are interested in these three courses, and the project is confident to achieve similar numbers for endline. Furthermore, the fact that none of the girls dropped out and only 6 percent got less than 80 percent attendance, which were largely due to family obligations and health issues reflects the girls' and project's belief in the effectiveness of these classes. **Revision:** No revision needed	**Midline value: 94 percent** **Disaggregation as per logframe:** **Age:** 15-19: 320 girls 20-24: 496 girls 25-34: 78 girls **Location:** Urban: 63 girls Semi-urban: 243 girls Rural: 588 girls **Ethnicity:** Brahmin/Chhteri: 123 girls Tharu: 724 girls Dalit: 42 girls Janjati: 5 girls **Marital status:** Married: 308 girls Unmarried: 586 girls **Motherhood status:** Have children: 165 girls In total 94 percent of girls received end of course certification from OOS GC – YFLT or BSD or ASRH classes. Further disaggregation based on class type are as follows: ● YFLT: 805 girls (94 percent) got certification out of 858 girls who had enrolled ● BSD: 771 girls (94 percent) certification out of 822 girls who had enrolled ● ASRH: 835 girls (95 percent) got certification out of 877 girls who had enrolled
Output 5.2: Number of	**Contribution to ToC, IOs and Outcomes:**	**Midline value: 391 girls**

OOS/SG girls who successfully complete STEM's VT and get end of course certification	The philosophy underpinning Vocational Training for STEM II is that when girls are provided with learning opportunities, they are allowed to emerge from the margins of society and out of poverty, transforming whole communities. By providing access to training opportunities, followed by either job opportunities or bespoke financing (GTF), STEM aspires to transition the OOS/SG girls into the job market to help them to lead more independent and economically viable lives. ● Increased career opportunities – better transition ● Boost their self-efficacy ● Increased confidence to voice their thoughts and have greater influence in home and community ● Help gain respect of their home and community **Midline value and activity:** The project conducted two rounds of vocational training for OOS/SG girls. In total 405 girls enrolled in vocational training courses, of which 391 girls (96.5 percent) obtained their end of-course certification and 14 (3.5 percent) dropped out. The project conducted post assessment of the girls after 3 months for the first round of VT where 51 percent of the girls were involved either in job or have started a business. The 6 month assessment will include Round 1 girls, and the 3 months assessment of Round 2 girls will be conducted in the coming months. The fact that just 3 months after the training 51 percent of girls who have obtained their end-of-course certificates, are now employed (either GTF loans or jobs) reflects the quality of the training. Therefore, the project is not just confident about achieving the endline target of providing VT to 450 girls but also helping these girls to successfully transition in life. **Revision:** No revision needed	**Disaggregation as per logframe:** **Age:** 10-14: 15-19: 61 20-24: 260 25-34: 70 **Location:** Urban: 27 Semi-urban: 140 Rural: 224 **Ethnicity:** Brahmin/Chhteri: 27 Tharu: 345 Dalit: 15 Janjati: 4 **Training type** Auto driving: 3 girls Beauty parlour: 65 girls Fast food cooking: 37 girls Hand embroidery: 68 girls Hojiyari: 33 girls Mobile repairing: 3 girls Shoe making: 9 girls Tailoring: 160 girls Vegetable farming: 6 girls Computer: 8 girls **Marital status:** Married:84 girls Unmarried: 307 girls **Mothers' status:** Have children: 48 girls In total 391 OOS/SG girls have successfully completed STEM's VT and got end of course certification. The project has overachieved the target by 141 girls. Further division based on round of VT is as below: ● 1st round: 103 girls ● 2nd round: 288 girls
Output 5.3: Number of OOS/SG girls who start or expand their business through GTF loans	**Contribution to ToC, IOs and Outcomes:** Before the establishment of the GTF by STEM II, the practice was that the unmarried girls were not eligible to receive loans from the local cooperatives. The main apprehension the financial market had was that the girls will marry and move to a different family or migrate somewhere else which means they will not have a family member to provide a guarantee against their loan. Only married women took loans and that too with a certain age criteria. However, with the introduction of GTF, not only was this gap met but the underlying assumption behind the existence of this gap was proved incorrect.	**Midline value: 158 girls** **Disaggregation as per logframe:** **Age:** 15-19 years: 11 girls 20-24 years: 86 girls 25-34 years: 61 girls **Location:** Urban: 14 girls Semi-urban: 85 girls Rural: 59 girls **Ethnicity:** Brahmin/Chhetri: 44 girls Tharu: 100 girls Dalit: 9 girls Janjati: 5 girls

	● Girls and women have increased access to financial resources ● Girls and women are financially sound and independent ● Girls and women have increased confidence, voice and influence at home, business and community **Midline value and activity:** In total 158 girls have received GTF loans to either start up or expand their businesses. This year the total loan amount was £172,286 wherein the project injected £87,125 to cooperatives and £85,161 came from the revolving fund. In the last two years, the project received around 204 loan applications, of which 15 recipients did not meet the criteria and remaining 9 applicants are yet to be monitored by the team. Of the ones that met the criteria 180 were selected based on aged between 16-34, drop out girl from 30 STEM school, exposure to STEM intervention such as YFLT, VT, BSD training and location. The remaining 22 applicants who have met the criteria will be considered for the next round of loans. In the first six quarters, 90 girls received loans through the revolving fund, However, starting from Quarter 7 onwards, the amount of loan applications started surpassing the existing funds as it was during that time that the first round of VT and OOS GC was completed and girls were ready to start or expand their business. Therefore the project injected the first batch of money for this phase. The project conducted Annual GTF Survey with 63 applicants in which 92 percent of the recipients have reported that their confidence in their own capacity has grown since they have established/expanded their GTF business. Data also shows that community norms and perceptions have shifted as a result of girls starting or expanding their businesses. 86 percent of the recipients reported that the community members have become more positive and respectful towards them after starting or expanding their business. Even within the HH, and 68 percent of the girls have reported an increase in their status and decision making power. Results from the survey also revealed that 87 percent of the girls can make the required monthly repayment, and 98 percent of the recipients have shared that they do not need to take on additional work in order to make these payments. This completely negates the concern that these loans financially overburdens these girls instead of benefiting them, on the contrary, 65 percent of the recipients feel empowered and comfortable after having taken GTF loans.	**Business type:** Animal farming: 16 girls Beauty parlour: 6 girls Cosmetic shop: 19 girls Cycle shop: 2 girls Electrical shop: 1 girls Fancy shop: 13 girls General store: 42 girls Hardware shop: 2 girls Mobile gallery: 3 girls Repairing shop: 3 girls Auto driver: 2 girls Shoes shop: 1 shop Snack shops: 21 girls Tailoring shop: 24 girls Vegetable farming: 5 girls **Dropout grade:** Grade 6: 3 girls Grade 7: 14 girls Grade 8: 15 girls Grade 9: 16 girls Grade 19: 107 girls Grade 11: 3 girls **Marital status:** Married: 97 girls Unmarried: 61 girls The midline status for number of girls who have either start up or expand their business was 158 recipients for either business startup or expansion. The project met the midline target of 100 girls/women to receive loans.

	Therefore, the project is confident to achieve the endline target of 250 girls who take GTF loans. **Revision:** No revision needed	
Output 6: Increased number of resources available for IS girls		
Output 6.1: Number of schools with library and/or computer lab	**Contribution to ToC, IOs and Outcomes:** The project has helped establish learning resource center comprising of computer lab, library and science lab which provides a good learning environment for students to use both traditional (books) and modern (computer and science labs) tools for learning. The purpose is to meet the needs of both teachers and students by providing materials and tools related to lecture/class design and learning which eventually helps promote learning outcomes and supports successful transition. ● Helps increase the learning scores of girls ● Helps increase the promotion rate of girls ● Improves the attendance of girls in schools ● Improves the quality of teaching and learning ● Supports to create a school environment that promotes quality education ● Encourages the OOS girls and community members to enrol their children into schools ● Motivates the girls to continue their education **Midline value and activity:** STEM had supported 30 schools with learning resource centre. 27 schools have already initiated the establishment of learning resource centre in their schools while the remaining 3 schools will complete it in the upcoming academic year. The project has completed orienting the schools on the use of the learning resource center. All 27 schools have said that they have already started incorporating the use of LRC in their teaching and learning in some way or the other. **Revision:** Change indicator wording from library and/or computer lab to Learning Resource Center. Adjust the endline target from 25 to 30 schools.	**Midline value: 27 schools** **Disaggregation as per logframe:** **Location:** Urban: 6 schools Semi-urban: 10 schools Rural: 11 schools In total 27 STEM schools have been supported with learning resource centre such as computer science lab and library. The project conducted a needs assessment of both computer lab and library which informed the level of support that was to be provided by the project. After the needs assessment the support provided was as follows- Computer lab = 15 schools Science lab = 12 schools Library = 3 schools

Table 3: Output indicator issues

Logframe Output Indicator	Issues with the means of verification/sources and the collection	Changes/additions

	frequency, or the indicator in general?	
Output 1: Parents attitudes are supportive towards formal and non-formal education of girls		
Output 1.1: Number of IS and OOS parents (M/F) who take part in activities around girls education supported by STEM II	No issues	Leave as it is
Output 2: School stakeholders demonstrate awareness of and commitment to improving school conditions for girls		
Output 2.1: Number of schools using the "our voice" complaint box to register and address the complaints of school stakeholders	No issues	Leave as it is
Output 2.2: Number of schools that conduct 6 SMC meetings annually	No issues	Leave as it is
Output 2.3: Number of schools that conduct 4 PTA meetings annually	No issues	Leave as it is
Output 3: Teachers have access to child friendly teaching methodologies		
Output 3.1: Number of STEM school teachers who complete STEM teachers training	No issues	Leave as it is
Output 4: STEM girls are involved in activities which promote learning and self-efficacy		
Output 4.1: Percent of IS girls who attend at least 75 percent of one GC cycle	No issues	Leave as it is
Output 4.2: Number of STEM school children (girls and boys) who participate in campaigns around girls education	No issues	Leave as it is
Output 4.3: Number of IS girls who successfully complete STEM's Self-Defense training	Suggestion = Change the endline target from 1,500 to 2,400 girls.	Since the project achieved the endline target by midline and with the increased interest on the training from the girls, the project proposes to adjust the endline target to 2,400 girls.
Output 5: School leavers (OOS) have demand driven work readiness skills		
Output 5.1: Percent of OOS/SG girls who take part in STEM's YFLT or BSD or ASRH training and successfully get end of course certification	No issues	Leave as it is
Output 5.2: Number of OOS/SG girls who successfully complete STEM's VT and get end of course certification	No issues	Leave as it is
Output 5.3: Number of OOS/SG girls who start or expand their business through GTF loans	No issues	Leave as it is
Output 6: Increased number of resources available for IS girls		
Output 6.1: Number of schools with library and/or computer lab	Suggestion = Change endline target from 25 schools to 30 schools Indicator Wording = The project proposes to change the indicator wording from "Number of schools with library	Since the project already exceeded the endline target, the project wants to establish learning resource center on all 30 schools. Instead of saying library and/or computer lab project wants to change it to Learning Resource Center. As project is providing these educational

	and/or computer lab" to "Number of schools with learning resource center"	resources based on the needs assessment, it can go beyond computer lab and library to science lab, quiet study place/space, etc.

Annex 9: Beneficiaries tables

Table 30: Direct beneficiaries

Beneficiary type	Total number project has reached to date	Target for Midline	Comments
Direct learning beneficiaries (girls) – girls in the intervention group who are specifically expected to achieve the learning outcomes in line with targets. If relevant, please disaggregate girls with disabilities in this overall number.	4,768	3240	In the project proposal the project had estimated to reach 3240 girls from grade 8, 9 and 10 from 30 STEM schools based on the enrolment number from phase 1 endline. However, in the second phase there were 1528 new enrolments across the three grades. Considering the project works in a blanket approach with IS girls, these 4768 girls received the IS intervention designed by the project.
Transition Beneficiaries (girls)- girls in the intervention who are specifically expected to achieve the transition outcome in line with targets.	6,880	2754 IS and 1320 OOS = 4074	In the proposal the project had estimated to work with 2754 IS girls and 1320 OOS girls leading to working with 4074 direct beneficiaries for transition. The project had considered attrition for both IS and OOS girls while estimating the number, 4074 for transition, however, the project was able to reach 6880 girls (4768 IS and 2112 OOS).
Note: The project works with 3 categories of girls. ***In School Girls****: Grade 8, 9 and 10 during baseline. Once the girls graduate from grade 10, the project does not follow up with girls who have enrolled in further education but provides support to girls who do not continue their education.* ***Out of School Girls****: Girls who have dropped out from grade 6 to 10 from 30 STEM schools from 2009 onwards.* ***School Graduates****: Girls who have graduated from grade 10* As there is movement across different groups, the number for each groups keeps on changing.			

Table 31: Other beneficiaries

Beneficiary type	Number	Comments
Learning beneficiaries (boys) – as above, but specifically counting boys who will get the same exposure and therefore be expected to also achieve learning gains, if applicable.	NA	NA
Broader student beneficiaries (boys) – boys who will benefit from the interventions in a less direct way, and therefore may benefit from aspects such as attitudinal change, etc. but not necessarily achieve improvements in learning outcomes.	7,094	These are the number of boys who are currently studying in STEM II schools from grades 1 to 10, who will benefit indirectly from the project through activities such as teacher training, EGAP infrastructure support, campaigns like the street drama, thematic events, radio campaigns and the STEM jamboree.

Broader student beneficiaries (girls) – girls who will benefit from the interventions in a less direct way, and therefore may benefit from aspects such as attitudinal change, etc. but not necessarily achieve improvements in learning outcomes.	5,614	These are the number of girls who are currently studying in STEM II schools from grade 1 to 8 who will benefit indirectly from the project through activities such as teacher training, EGAP infrastructure support, campaigns like the street drama, thematic events, radio campaigns and the STEM jamboree.
Teacher beneficiaries – number of teachers who benefit from training or related interventions. If possible /applicable, please disaggregate by gender and type of training, with the comments box used to describe the type of training provided.	532 (170 female and 362 male)	Total number of teachers trained: 532 ● Girls' club facilitators ToT: 51 teachers (41 M :10 F) ● Girls club facilitators: 136 teachers (111 M:25 F) ● Child protection training: 30 teachers (29 M: 1 F) ● Classroom management training: 463 teachers (334 M: 129 F) ● Science lab management training: 30 (29 M: 1 F) ● Math Refresher training: 29 teachers (27 m: 2F) ● ASRH ToT: 29 F ● Best Practice Sharing workshop: 55 teachers (48 M: 7 F) The numbers have been calculated after removing double counting. So 532 teachers have received training, with some teachers participating in multiple training. When double counting, the project has provided training to 794 participants.
Broader community beneficiaries (adults) – adults who benefit from broader interventions, such as community messaging /dialogues, community advocacy, economic empowerment interventions, etc.	8,972 (2,785 male and 6,007 female)	The community members were oriented on the program approach, child protection, and project activities such as parents for quality education, family dialogue, etc. The project has also broadcast 13 different jingles 3512 times which had an average audience of 84,892.

Table 32: Target groups - by school

School Age	Project definition of target group (Tick where appropriate)	Number targeted through project interventions	Sample size of target group at Midline
Lower primary			
Upper primary			
Lower secondary	√	3,231	375

Upper secondary			
Total:		3,231	375

**This includes only the IS treatment girls, who reported they were enrolled in a STEM II intervention school at midline (Those who appeared learning tests at midline).

Table 33: Target groups - by age

Age Groups	**Project definition of target group** (Tick where appropriate)	**Number targeted through project interventions**	**Sample size of target group at Midline**
Aged 12-13 (% aged 12-13)	√	299 (4.3%)	1 (0.1%)
Aged 14-15 (% aged 14-15)	√	2342 (34.0%)	168 (22.0%)
Aged 16-17 (% aged 16-17)	√	2069 (30.1%)	207 (27.2%)
Aged 18-19 (% aged 18-19)	√	830 (12.1%)	109 (14.3%)
Aged 20+ (% aged 20+)	√	1340 (19.5%)	27 (36.4%)
Total:		**6,880**	762

**This includes both IS as well as SG/ OOS girls.

Table 34: Target groups - by grade

School grade	**Project definition of target group** (Tick where appropriate)	**Number targeted through project interventions**	**Sample size of target group at Midline**
Grade 9	✓	1,723	Grade 8: 22 (4.96%) Grade 9: 218 (49.20%) Grade 10: 131 (29.57%) Grade 11: 4 (0.67%) Grade 10 graduates: 68 (15.57%)
Grade 10	✓	1,508	
Grade 10 pass out	✓	1,537	
Total:		4,768	443

**This includes those IS treatment girls (Grade 10 graduates) who took the SEE exam last year and are not currently enrolled in STEM intervention schools.

Table 35: Target groups - by marital status

Marital Status	Project definition of target group (Tick where appropriate)	Number targeted through project interventions	Sample size of target group at Midline
Married	✓	830 (12%)	3 IS girls + 131 SG/ OOS girls -- 134
Unmarried	✓	6,050(88%)	440 IS girls + 188 SG/ OOS girls -- 628
Total:		**6,880**	762

**This includes both IS as well as SG/ OOS girls.

Table 36: Target groups - by sub group

Social Groups	Project definition of target group (Tick where appropriate)	Number targeted through project interventions	Sample size of target group at Midline
Disabled girls (please disaggregate by domain of difficulty)	√	13 (0.2%)	4 (0.5%)
Orphaned girls			15 (1.96%) {single orphans} 2 (0.2%) {double orphans}
Pastoralist girls			
Child labourers			
Poor girls			
Other (please describe)			
Total:		**13**	17 [This number should be the same across Tables 32-35]

Table 37: Target groups - by school status

Educational sub-groups	Project definition of target group (Tick where appropriate)	Number targeted through project interventions	Sample size of target group at Midline
Out-of-school girls: have never attended school			
Out-of-school girls: have attended school, but dropped out	✔	2,112 (30.7%)	319 (41.8%)
Girls in-school	✔	3,231(47.0%)	375 (49.2%)
Girls graduated from grade 10 last year	✔	1,537 (22.3%)	68 (9.0%)
Total:		**6,880**	762

**This includes both IS as well as SG/ OOS girls.

Table 38: Beneficiaries matrix

Outcomes	Direct beneficiaries			Indirect beneficiaries				
	In-school girls (6-10 grade)	OSG (6-9 years)	OSG (18-25)	In-school boys	HT/Teachers	Parents	SMC/PTA	Local government
Learning	✔			✔	✔	✔		
Transition	✔	✔	✔	✔	✔	✔		
Sustainability	✔	✔	✔		✔	✔	✔	
IO 1: Attendance					✔	✔		
IO 2: Self-esteem and empowerment	✔	✔	✔					
IO3: Parental engagement	✔	✔	✔			✔		
IO4: Quality of teaching	✔				✔	✔	✔	✔
IO5: School management and governance	✔				✔	✔	✔	✔

Comments by external evaluator

The same samples during the baseline also constituted the sampling for midline. The sampling was done on the basis of target beneficiary numbers provided by MCN to FDM. Using a random stratified sampling approach, the sample was selected randomly from the target population. Apart from that, as there were chances of losing the sample girls from grade 10 as they might have shifted to another school or location after graduating from SEE, an additional sample of 104 treatment and 50 control girls from grade 8 was topped-up using the same sampling procedure. Most of these girls could be recontacted during midline evaluation, suggesting that the target beneficiary numbers were accurate. Among those who could not be recontacted are the girls who either migrated or shifted to another school after taking SEE exams last year. As most of these girls would have migrated outside the district for studies or work after the completion of their intervention cycle following SEE graduation, even the project does not track them thereafter on cases where girls have moved outside project area. Likewise, as some of the STEM intervention schools had already closed for vacation after the annual examination, when the data collection for midline evaluation was conducted, a number of girls had gone out of the district to visit their relatives, and hence could not be recontacted.

The fact that the project used a 'one-on-one' approach to calculate its target beneficiaries also lends a strong support to the authenticity and accuracy of the target beneficiary number. Since MCN's social mobilizers, who were based in each village, were responsible for recording the target girls by tracking them individually, the calculation of target beneficiary numbers has been achieved through a thorough process to ensure that all girls who were studying in grades 8, 9 and 10 did not miss out on the project intervention.

FDM's own enrolment data also further validates the target beneficiary number presented by MCN. During the midline data collection, FDM had calculated enrolment data from the schools as a part of the spot check process. As per this, the enrolment figure collected by FDM is very much similar to that of MCN. Some differences do appear since enrolment figures often increase/decrease after the first few months of school commencement. At times, new students are admitted even after 2 or 3 months of school commencement whereas at times, some students shift school to avail scholarship opportunities in other schools. Given below is the target beneficiary number collected by MCN and the enrolment figure collected by FDM.

Grade	**Target beneficiary number collected by MCN**	**Enrolment figure collected by FDM during midline evaluation**
Grade 8	1168	1160
Grade 9	1721	1715
Grade 10	1571	1581

In the case of SG/OOS girls, FDM supports MCN's argument that the SG/OOS population is highly mobile (having dropped out of school, they might move around in search of work) and their number presented in this report might change in the subsequent evaluation points. This was experienced by FDM during STEM I, where the sample size of SG/OOS changed throughout all the evaluation points. In this regard, updating the number annually through the social mobilizer is the most appropriate approach adopted by MCN.

Foundation for Development Management

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Annex 16: External Evaluator declaration

Name of Project: Supporting the Education of Marginalised girls in Kailali (STEM II)

Name of External Evaluator: Foundation for Development Management (FDM)

Contact Information for External Evaluator: Level II, JDA Complex, Bagdurbar, Sundhara, Kathmandu | Email: info@fdm.com.np | Contact no. +977 01 4263944

Names of all members of the evaluation team:

Team Leader: Dr. Shailendra Sigdel

Research Coordinator: Ankit Babu Adhikari

Researchers: Neha Uprety, Bhawana Sharma

Foundation for Development Management (FDM) certifies that the independent evaluation has been conducted in line with the Terms of Reference and other requirements received.

Specifically:

- All of the quantitative data was collected independently (Initials: SS)
- All data analysis was conducted independently and provides a fair and consistent representation of progress (Initials: SS)
- Data quality assurance and verification mechanisms agreed in the terms of reference with the project have been soundly followed (Initials: SS)
- The recipient has not fundamentally altered or misrepresented the nature of the analysis originally provided by FDM (Initials: SS)
- All child protection protocols and guidance have been followed (Initials: SS)
- Data has been anonymised, treated confidentially and stored safely, in line with the GEC data protection and ethics protocols (Initials: SS)

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Dr. Shailendra Sigdel

Managing Director, FDM

Team Leader, External Evaluation of STEM II Project

10/12/2019

Annex 17: Project Management Response

A. Project's response to key findings

The project was able to substantially increase both literacy and numeracy scores through generating conducive study environment at home, building self-efficacy of individual girls and creating an enabling school environment. To achieve this, the project parallelly worked with different stakeholders at system, schools and communities for sustainability, scale-up and replication. After baseline and through regular project monitoring, the project introduced activities such as family dialogue, self defense and adapted EGAP campaigns, In-School girls' club, teachers' training, classroom management training, helped address learning barriers to achieve learning outcomes.

However, the project will continue its work to improve analytical skills of students in both literacy and numeracy through incorporating enhancement of analytical skills in teachers' training while also promoting the habit of using library, enhancing comprehension skills as well as introducing activities such as essay writing, debates and literary competitions. From the implementation and evaluation findings, the project identified the transfer and use of knowledge and skills received by teachers through various training is minimal. The main reasons being the lack of motivation in teachers due to the low salary scale, job insecurity and lack of regular monitoring from the local government. Furthermore, inadequate school infrastructure, teaching resources, large class sizes, unplanned school closures all add to this problem. These problems will be addressed through consultation with the local government.

The project believes the desired learning achievement, positive transition and sustainability can be achieved with the current theory of change. The project has elaborated on the assumptions, in section 1 of the main midline report under the "Background to the Project".

B. Project's response to the conclusions and recommendations

NB: Mercy Corps' responses are marked in Italicized text below each of the External Evaluator's recommendations.

Learning

1. Girls attributed the main reason behind their improved literacy and numeracy performance at midline to their engagement in girls' club classes. They lauded the interactive learning methods used by girls' club facilitators. As a result of their engagement in girls' club classes, they have grown more confident in asking questions to the teachers not only in girls' club classes but also

in regular classes in the school. Apart from that, engagement in girls' club classes has reduced girls' household responsibilities such as cooking, cleaning and caring. Therefore, in light of these findings, girls' club classes are one of the most successful interventions of STEM II and it is recommended that project expands the volume of girls' club classes through collaboration with schools and local governments, introducing multiple subjects along with ample extracurricular activities.

The project has been working with program schools and local governments to influence the take-up of the girls' club approach for non STEM students and schools. The project will continue these influencing efforts. The project has also introduced "Friday Study clubs" for non-STEM grades in which the students, both girls and boys, come together to learn from each other. However, the project does not have the budget to replicate the same model in other grades or schools but will work to advocate for the replication of this model by the local government or schools. The project has prepared 'How-To' guides, videos and an intervention brief on the GC design and impact. The project will work on disseminating these and offer technical support to local governments, schools to replicate this model.

2. Despite a significant improvement in girls' literacy and numeracy performance, the girls were still found to be facing a lot of difficulties in essay writing (Subtask 3 of SeGRA). Taking this into consideration, the project is recommended to introduce specific interventions to enhance girls' analytical thinking, comprehension and written expression.

   The project will ensure that GC Nepali classes and even the regular Nepal classes focus on developing the writing skills of IS girls. The project has planned to conduct monthly essay writing, letter writing and oratory competition. The project will also provide various platforms such as the jamborees and skill-demonstration days where students can present their work. Additionally, with the library and learning centres now fully functioning, the project will work with teachers, head teachers and students to effectively utilize this medium for developing reading and analytical thinking skills. The project will further work on Teachers' Professional Development to build their capacities for engaging students in essay writing at schools and home.

3. Unlike the baseline, the midline evaluation showed some differences in teaching methods. Girls mentioned that teachers are using local materials, learning sheets, and interactive pedagogies. However, as all of this was not clearly evident during classroom observation, there is still room for improvement, where project can extensively focus on teachers training and further intervention to make the classroom environment more conducive for learning and interaction.

   The project believes that the use of tools to assess teachers using student-centered teaching methods is not completely justifiable as the judgement is made by observing just one class per school, but should be done over a period of time in each school. Secondly, the use of resources or

group work is subjective and dependent on the chapter taught that day. Therefore, while evaluating this component it is important not just to rely on a classroom observation tool but to also include qualitative data from students on the use of resources while teaching, group work and presentations during classes and KII with teachers on the use of resource centre by teachers for teaching and learning. However, the project will focus on strengthening student centered teaching methodologies in the remaining quarters.

Transition

4. On account of improved transition rates for both IS as well as SG/ OOS girls, the project's transition-oriented interventions can be deemed to have been successful. The fact that none of the girls in the sample dropped out from grades 8 and 9 even after their failure is an encouraging achievement, although repetition of grades is labeled as an unsuccessful transition. In order to retain these results until endline and beyond, it is important to focus on girls' performance in school as a number of stakeholders said failure in examination is still a major reason leading to girls' drop-out.

   The project would like to maintain its stance that girls not dropping out from school even after failing a grade is a positive sign, as the girls usually tend to drop out from schools after failing a grade due to shame or parents pressuring them to do so. The project would like to request the FM to rethink about defining this as an unsuccessful transition. The project will continue to work to improve the girls' promotion rate.

5. For the sustainability of transition achievements among IS girls, project should focus towards retaining higher education of the girls even after their graduation from SEE. In order to do so, project can engage with parents and provide them financial education trainings in efficiently managing funds for higher education.

   The Government of Nepal is focusing equally on NFE and FE of financially marginalized girls. Thus, the project does not wish to push the girls to pursue higher education of the girls but to orient them on both the options of NE and NFE and let the students decide on the paths that they want to pursue. In Family dialogue activity of the project, a session is devoted for HH budget management.

Sustainability

6. As the findings suggest, the project has achieved most of its desired results in line with targets set to frame sustainability. However, at the system level, the sustainability targets for midline were mostly mechanical and related to the signing of MoUs and sharing events with different stakeholders including local government. These could be expected to ensure sustainability in the

longer run. However, the project cannot guarantee at this stage if these mechanisms are operating well and in the right direction of sustainability. In this context, the sustainability targets for endline should include indicators that objectively measure the work and functioning of these mechanisms put in place by the project.

The project has proposed changes to the sustainability indicators and targets in section C below.

7. The external evaluators observed some instances where the girls' club facilitators have been replicating their improved teaching methods from girls' club classes into the regular school class-rooms. However, there is no mechanism to mandate the girls' club facilitators to transfer their knowledge and skills among other fellow teachers in their respective schools. Therefore, in collaboration with school management, STEM II can set up a mandatory provision for sharing of knowledge and skills among STEM and non-STEM teachers.

   The project cannot mandate such action, however, we have already started documenting best teaching practices from the STEM project which will be shared not just with STEM teachers but also to non-STEM teachers and other schools within the province. Additionally, STEM has been closely working with Nepal English Teachers Association Kailali (NELTA) and STEM has supported Nepali teachers from STEM schools to form an association like the NELTA which can provide a platform for sharing their best practices, challenges and continue peer-to-peer mentoring. Within STEM, the project also conducted learning sharing event between GCF and non-GCF from STEM schools.

8. In the changed context of governance, the entire education mobilization of the district falls under the responsibility of local governments. The local governments now have resources to invest in the development of multiple sectors including education in their respective areas. However, a serious gap in the technical capacity of local governments has been highlighted by a number of studies. In that regard, mechanisms of local government are an opportunity for the project to ensure sustainability of its activities. However, it is equally important for STEM II to engage with respective local governments in enhancing their technical capacities in engaging with schools, parents and community with a view to contribute to improved scenario of girls' education. Similarly, the project can also expand its outreach to beyond 30 selected schools through collaboration with the local government, providing it with adequate capacity and skills, for example SIP formation, teachers' training, etc. to scale and replicate STEM's interventions to other areas as well.

   As Nepal is transitioning into federal structure, it is in a historic position in which the government and the new constitution has given rights to the local government to frame policies, including the education sector, on their own. With these opportunities in mind while acknowledging current capacity gaps, STEM will work closely with local governments and the provincial government by

building their capacity in developing education policy, strengthen their technical capacity to improve teaching professional development, and create an enabling environment. Although the project can not assure the same support for the whole province because of time and budget constraints but will continue the engagement of local and provincial governments to scale and replicate best practices from STEM by offering technical support, sharing midline findings to the wider community, preparing a 'how to' note/policy brief and sharing it with local government agencies with which the project works and also other interested local government bodies in Province 7. Additionally, the project will continue to provide support in building the local government's executive team and education staff.

IO 1: Attitudes and behaviours

9. As stated in the findings section, the reduction in the amount girls are involved in household chores has resulted in their increased engagement in girls' club classes and project's activities outside home or school. As this has a direct impact on girls' learning, it is important for the project to be able to sustain this change in girls' household responsibilities. For this, the project will need to increase its dialogues and consultations with parents, encouraging them about the changes that have taken place in the last one year and communicating about its effect in girls' learning.

   The project conducts intensive dialogues with parents and students through the Family Dialogue activity. Since this activity has a big budgetary requirement, it will not be possible to expand this activity beyond 800-900 families planned by the project. Instead, the project has screened and selected the most vulnerable families on the basis of poverty, absenteeism and learning levels. For wider messaging around the reduction in household chores, the project is using radio jingles, door-to-door visits, EGAP campaigns, and empowering girls to spread this message. While disseminating the midline findings at the community level, the project will ensure that the reduction of household chores and its impact on girls' attendance and learning will be shared with the parents and wider community.

10. Findings from the midline evaluation show an increase in the number of parents visiting their daughters' school for various reasons. The project should sustain this change by maintaining the regularity of parents' teachers' meeting at school, school-based activities, cultural and recreational events to attract most of parents that are still not visiting the school on a regular basis.

    Yes, the STEM II project team plan to sustain this change through EGAP campaigns, Quality Education Training, Women Leadership in Education Training, Family Dialogue and school level events.

11. With regards to the project's gender sensitivity, a number of boys interacted with during qualitative discussions, mentioned that they are not included in any form of activities initiated by STEM II. Even though the project is primarily centered around girls' education, it is important to maintain a balance in order to make sure that it does not have any negative repercussions on the attitude of boys towards girls' education. Therefore, inclusion of boys in some specific sessions of girls' club classes or any other form of activities with possibilities of direct involvement of boys is advisable.

    The project has been inviting boys to participate in EGAP campaigns, school-level celebrations, jamborees, child protection orientations and the Friday study clubs. In addition, the project will also be conducting a Girls-to-Community event during which the girls will share their GC learning from LS and SRHR classes to boys who will then share the learning to the wider community through songs, dances, drama or other creative media. Apart from these activities, conducting boys' clubs will not be financially feasible as the project has not budgeted for this activity.

12. Following the baseline study, it was assumed that the reduction of girls' household chores will eventually result in increased study time inside home and hence the increased learning outcomes. The indicators for this intermediate outcome were also accordingly revised. However, as already mentioned above, the midline evaluation discovered that reduction of girls' engagement in household chores results in their engagement in girls' club and project activities outside the house, and does not necessarily mean that they would spend a lot of time studying within their own households. In this light, project is recommended to measure not just the study time within household, but also the hours they spend studying outside both school as well as household.

    The project agrees with this recommendation.

IO 2: School governance

13. Unlike baseline, midline evaluation came across a number of evidence where schools have been incorporating gender-friendly plans in their SIPs. However, these gender friendly plans are largely limited to the improvement of existing sanitation infrastructure. Aside that, project needs to orient the school management about the importance of allocating specific sports for girls, dedicated space to practice these sports along with necessary equipment. Likewise, the schools have also not yet realized the importance of a separate sick room, especially for the girls to rest during menstruation. This is particularly important also because some girls reported that they go home early when they are menstruating in the middle of a school-day.

    In order to create enabling environment for girls in schools, the project has planned to prepare a set of guidelines on creating an inclusive school environment which will focus on different themes

around governance. These guidelines will be shared with schools, LGs and other stakeholders which aimed to expand their services to girls and other vulnerable groups. However, most of the schools do not have adequate space for regular classrooms so the project will continue dialogue with school management and teachers to identify alternative ways to provide a safe space for students to rest. Mercy Corps will also work with other projects, clubs and the district sport association on girls' engagement through sports.

14. In order to sustain the sanitary pad distribution at school level, the project can collaborate with local governments. There are ample evidence of the schools' partnerships with local governments in other parts of the country as well, where the local governments have been providing funds for sanitary pad distribution to support girls' education. Apart from this, the project can also lobby with local governments to put other sustainable means of teaching quality improvement, such as ban on physical punishment, enforcement of government code of conduct for teachers, among others

The project has developed evidence-based practices to sustain the sanitary pad provision at school by building the capacity of schools to fundraise, allocate operation funds and helped link them with the local government. These practices will be continued for the greater sustainability of sanitary pad availability in schools, while the project has also planned to train OOS girls for making reusable sanitary pad as a social enterprise/livelihood, which will be more affordable, accessible and sustainable in the long run.

IO 3: Attendance

15. There has been a general increase in attendance rates of girls across baseline-midline. However, despite a reduction in absence rates in specific times of the year – Baisakh and Shrawan and Kartik – attendance rates of girls are still sharply declining in these months. The project can further work towards mitigating this challenge, even though attendance is not highlighted as a major challenge in their learning.

The project will continue promoting attendance through EGAP campaigns and did so during the months of Baishak, Shrawan and Kartik in 2019 after midline data collection. Since schools will close after Falgun/Chaitra due to the completion of the academic year, activities will not be implemented during these months.

16. The overall attendance rate at midline increased from 85.1 percent at baseline to 87 percent at midline. As the attendance rate achieved is already very high, the project can also seek to explore other areas of girls' education to intervene.

While the attendance rate is high, STEM II will continue to promote attendance within the targeted communities as a key priority, in conjunction with other sustainability activities as mentioned above.

IO 4: Financial literacy

17. Interventions on financial literacy has resulted in positive outcomes in SG/ OOS girls' transition. However, it is equally important to track the girls who received financial literacy training and observe how they utilize the training in their daily lives, either through employment or business. This can be done by organizing sharing events, follow-up trainings and one-to-one consultation using the social mobilizers.

The project tracks OOS girls every three months to check on their employment/transition status. It also conducts regular followup workshop with FLT/GTF recipients. However, not all OOS girls are available to attend these events due to their professional commitments and individual constraints. However, the project team will continue conducting sharing events and inviting OOS girls. The project will also continue conducting FGDs and KIIs with OOS girls to understand how the training contents are being utilized by the OOS girls, not just the ones who have received FLT but also GTF recipients, BSD trainees, Vocational trainees.

18. Financial literacy training to SG/OOS girls was followed by other life-skills interventions – vocational training, business skills development training and GTF loans. The girls who had already received these trainings demonstrated a highly positive attitude and confidence towards their own economic prospects. Some of them had actually initiated small business on their own. However, many girls at midline were found to have just started these trainings, hence could not shed any light on the benefits of the training. Apart from that, very few of the girls in the evaluation sample had taken these subsequent trainings provided by the project by midline. In this regard, the project is recommended to expand the outreach of these trainings and support to as many girls as possible by end-line and also look for possible options to scale and put in place the right mix of skills/ loans/ support groups and mentorship.

The project pool for OOS girls is 2,112 of which 805 have taken YFLT, 771 have taken BSD, 891 have taken VT and 158 have taken GTF. The project ensures to send the activity invitation to most of the OOS/SG girls but not everyone enrol in these trainings, due to lack of interest as well as due to time constraints. The project has a set quota available for each training so only girls who actually need the training, qualify and are interested are enrolled. Every quarter the OOS/SG girls are tracked and their status is updated.

The project will conduct another round of orientations to the OOS/SG girls on the available training opportunities but due to budgetary constraints it will not be possible to give these trainings to the entire OOS population.

IO 5: Teacher quality improvement

19. Trainings provided by the project to the teachers who take girls' club classes have yielded positive results. This was evident during interaction with girls as they lauded teachers' efforts in making the classroom environment more interactive in nature using local materials and resources available. Some of the girls even mentioned that similar practices in the girls' club classes are also replicated in the regular school classes. However, given a more rigid course structure and syllabus-oriented teaching in regular classes, teachers are still not practicing interactive pedagogies to the fullest in regular school classes. Same was found during classroom observation conducted by the external evaluators. In order to make the teachers internalize the process of interactive pedagogies and use of local materials in regular classes, they will need further training and materials.

    The project will continue to share best practices of GCFs in regular classrooms. For this, the project will produce a set of guidelines, named, "Teaching Mathematics - a Minimum Standard in partnership with Education Review Office's Mathematical Expert". After which the project will also orient and train the teachers on the same. Furthermore, the project regularly monitors club-to-classroom teaching transference of teachers which is also shared and discussed with the teachers for review and feedback immediately. This monitoring tool of the project shows that transference of teaching practices are indeed happening. However, we must also bear in mind the differences in class size, class time and resources in GC and regular classes. This implies that there is limited scope to fully replicate the teaching practices of GCs in regular classes, Instead, the project will promote the best-suited teaching methodologies and resources to teach in the classroom. Moreover, the teaching methodologies and resources used differ not just between different subjects but also between chapters of the same subject. Therefore, it is important to base the quality of teaching quality in not just one classroom observation per school but to multiple observations in one school which is triangulated by qualitative data of the students, as the qualitative information provided by the students and classroom observation score given by the EE do not seem to match.

20. Apart from that, in order to transform the entire teaching-learning practice within a school, it must be ensured that all the teachers follow the same standards of interactive and child-friendly methods and a blanket ban on physical punishment. In order to do so, all the teachers would have to be adequately trained. As already mentioned above, the project can collaborate with local government for these kinds of initiatives that require extensive efforts and resources.

Corporal punishment has been banned by the government for a long time but the practice still continues. With time, the forms of punishment has been changed i.e. physical to verbal. However, with the project working with the girls for the last 6 years, they are more confident now, have a stronger voice and are empowered to voice and report harassment cases or poor teaching quality. STEM will continue its work on transferring teaching skills from STEM trained teachers to non-STEM teachers within the schools. The project will also propose to work with the local government to reach beyond STEM schools on child protection and child-friendly teaching practices.

21. Most of the girls appraised the teaching quality of girls' club facilitators and even mentioned that some of the other teachers in their school are also following similar teaching methods in some of the lessons. The school teachers and head-teachers interacted with also stated that the girls club facilitators share their knowledge informally with other teachers of the school. However, this practice has yet to be institutionalized as there is no formal mechanism mandating this kind of sharing activities. In collaboration with the school management, the project should establish a mandatory mechanism to ensure transfer of knowledge and skills among girls' club facilitators and other school teachers.

The project feels that informal sharing of the teaching skills as reported by the head-teachers and girls' appreciation of the quality of teaching among GCfs, and the mention of transferring skills to non-trained teachers highlight the work already carried out in this area. The project will work with the schools to institutionalise the sharing by archiving the training content, workbooks, and other materials and resources. It will not be possible to establish a mandatory mechanism to ensure skill transfer between teachers but the project will continue to encourage the teachers and schools to do so.

C. Project response to gender, social inclusion and disability

In terms of gender accommodation in project activities, as STEM II's primarily aims at working to improve girls' education, it does not have activities that particularly focuses on boys, like boys club. Nevertheless the project's school-level intervention such as infrastructural support, teachers' training, friday study group, learning resource centers, campaigns, Jamborees, girl-to-community, among others, tend to support boys as well both in terms of learning and leadership. Notwithstanding because of the project's support modality that focuses on girls, during qualitative discussions some boys expressed their willingness to participate in project activities. According to the boys, learning support such as girls' club classes are the need for both girls as well as boys equally. Due to budgetary limitations to run boys clubs, the project has introduced a new approach for learning improvement which includes friday study group (for indirect girls and

boys beneficiaries from STEM schools), transfer of GC facilitator skills to regular classroom and provision of resource centre. These skills and resources will stay at schools and will positively impact every student, including boys.

STEM II has taken an inclusive approach to taking into account the local castes and ethnicities while selecting its beneficiaries. The marginalized Tharu ethnicity, which dominates the population composition in Kailali, is most represented in the beneficiary identification and the sampling for this study. However, marginalized girls belonging to different rural and urban settings within Kailali, girls belonging to other ethnicities including Dalit, Brahmin/Chhetri, among others have also been incorporated. As the project mainly works with in-school girls, there are already largely limited number of girls with disabilities enrolled in secondary schools. For this reason, disability representation among the project's beneficiaries is very low, which is has resulted in disability limited representation in the sample drawn for the purpose of this evaluation.

D. Proposed changes to the logframe by the Project

Indicators	Suggestion
Outcome 2: Transition Number of marginalised girls who have transitioned through key stages of education, training or employment (with sub-indicator for boys where reported)	The project strongly feels that the repetition of the same grade for the IS girls should not be considered as unsuccessful transition, but rather should be considered as successful transition as the girls have not dropped out from the school and are determined to stay in school and complete their education for a better future ahead. In addition, the project has a set quota for OOS girls' training, for 1000 participants for YFLT and BSD, 500 participants for VT and 350 recipients for GTF opportunities. The project has been reaching the target but unfortunately, the sample OOS girls have not shown much interest to participate in these trainings. Therefore, for the endline the project proposes to additionally measure the transition rate of OOS girls by comparing the transition rate of girls who get these trainings versus the ones who do not get these trainings, and not just comparing the transition rate between evaluation points.

Outcome 3: Sustainability **Indicator 1.1:** Number of Community Education Network (CEN) formed	The project proposes to change this indicator to: "Project provides technical support to local government to form CEN and builds their capacity to form education plans and policies"
Outcome 3: Sustainability **Indicator 1.2:** Number of targeted school visitors (School supervisors, community leaders, parents, SMC/PTA, project staff, etc.) visiting STEM schools reported by the head teachers.	The project proposes to change the endline target for this indicator to an average of 170 visitors per school from 300 visitors in total from 30 STEM schools (initial target for endline). As the target for the midline (150 parents visiting schools) for all 30 schools was achieved by a single STEM school, the project proposed to increase the targets as there were 166 visitors on average per school as per the midline findings.
Outcome 3: Sustainability **Indicator 2.2:** Number of schools practicing sharing of lessons learned and best practices with non-STEM teachers from their school.	For this indicator, the project suggests that the evaluators to not only emphasize formal sharing events but also to consider informal sharing between the teachers. The project will however focus on setting up a more formal sharing mechanism between teachers, establishing a repository of teaching materials, and archiving.
Outcome 3: Sustainability **Indicator 2.3:** Number of schools with inclusive infrastructure established and maintained.	The project proposes to change this indicator to: "Number of schools with access to safe and adequate levels of water, sanitation and hygiene services/facilities." Since inclusive infrastructure was clearly not defined and also because the project has been investing heavily in WASH, the project wants to have a more specific indicator around this. Target for endline: 28 schools
Outcome 3: Sustainability **Indicator 3.1:** Number of MoU signed by District and Local level Education Office in support of STEM II program	The project wishes to focus more on the work of the project with district and local education offices. Therefore, we propose to change the indicator wording to "Number of events jointly conducted by District and Local level Education office in support with STEM II program for enrolment, safeguarding and inclusive education."

	Target for endline: 20 events
Outcome 3: Sustainability **Indicator 3.2:** Number of RPs actively involved in STEM II programme.	The project proposes to change this indicator with "Number of Municipal education and executive board visiting STEM school" as there is no longer RPs available in the new structure of education system. Target for endline: 12 visits
Outcome 3: Sustainability Indicator 3.3: Number of key targeted stakeholders STEM II share its learning activities with.	The project proposes to remove this indicator as the project reports on this in every quarterly report as part of the workplan tracker.
IO Indicator 1.2: Average proportion of time per day girls spend to study at home	The project recommends capturing not only the time that girls spend studying at home but also anywhere outside of formal classes, such as the girls' clubs, group study at a friend's house, studying at school after school hours, and private tuition, etc. The proposed indicator would read as follows: "The average proportion of time per day that girls spend studying outside of formal classes" Target for endline: 3 hours per day per girl
IO Indicator 3.1: Percentage improvement in attendance rates	The project proposes to adjust the endline target to 88.1 from 90 percent as the project was not successful in achieving the midline target of 88.1 percent but only achieved 87 percent. Furthermore, as the IS beneficiaries for this last year are grade 10 girls who are preparing for their SLCs. The usual norm with grade 10 girls living in urban areas is to take private tuition classes instead of attending school in the last 2 months of the academic year due to the belief of tuition classes being more beneficial than regular classes in both public and private schools. Also, the project cannot intervene to increase the attendance as there are only 3 months remaining for this academic year to finish.

IO Indicator 5.1: Percent of STEM II teachers using student-centered teaching methodologies	For the next evaluation point, the project strongly recommends the EE to not just use the classroom observations to measure this indicator but also equally consider the findings from FGD with girls to evaluate this indicators. The weighted average of classroom observations and FGD findings should be used.
Output 4.3: Number of IS girls who successfully complete STEM's Self-Defense training	Since the project achieved the endline target by the midline and with the increased interest of girls' to get this training, the project proposes to expand the endline target to 2,400 girls from 1,500 girls.
Output 6.1: Number of schools with library and/or computer lab	Instead of using the nomenclature library and/or computer lab, the project wants to change it to Learning Resource Centre (LRC). As the project is providing these educational resources based on needs assessments, the needs may go beyond a computer labs, library or science lab, but may also include quiet study place/space, etc. Also as the project has already exceeded the endline target, the project proposes to change the endline target of establishing LRC in all 30 schools.