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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ENDLINE EVALUATION OF SUPPORTING THE EDUCATION OF MARGINALIZED GIRLS IN KAILALI (STEM II) PROJECT

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FOUNDATION FOR DEVELOPMENT MANAGEMENT (FDM)
MARCH 2021

Acknowledgments

I wish to express my sincere gratitude to the STEM II project team for their support from the preparatory stages of the evaluation. Additionally, I also wish to express my gratitude to the programme team, Girls Education Challenge (GEC) and Ms. Mehroz Alvi for the continued support and assistance right from the planning stage. The support of the project's implementing partner as well Mercy Corps Nepal (MCN)'s district team has been very valuable in conducting the end-line evaluation.

The evaluation would not have been possible without the rigorous effort put in by the study team. I thank the enumerators as well as FDM's researcher Neha Uprety for her active involvement in the data collection. I would also like to thank Ankit Babu Adhikari for coordinating the project.

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.

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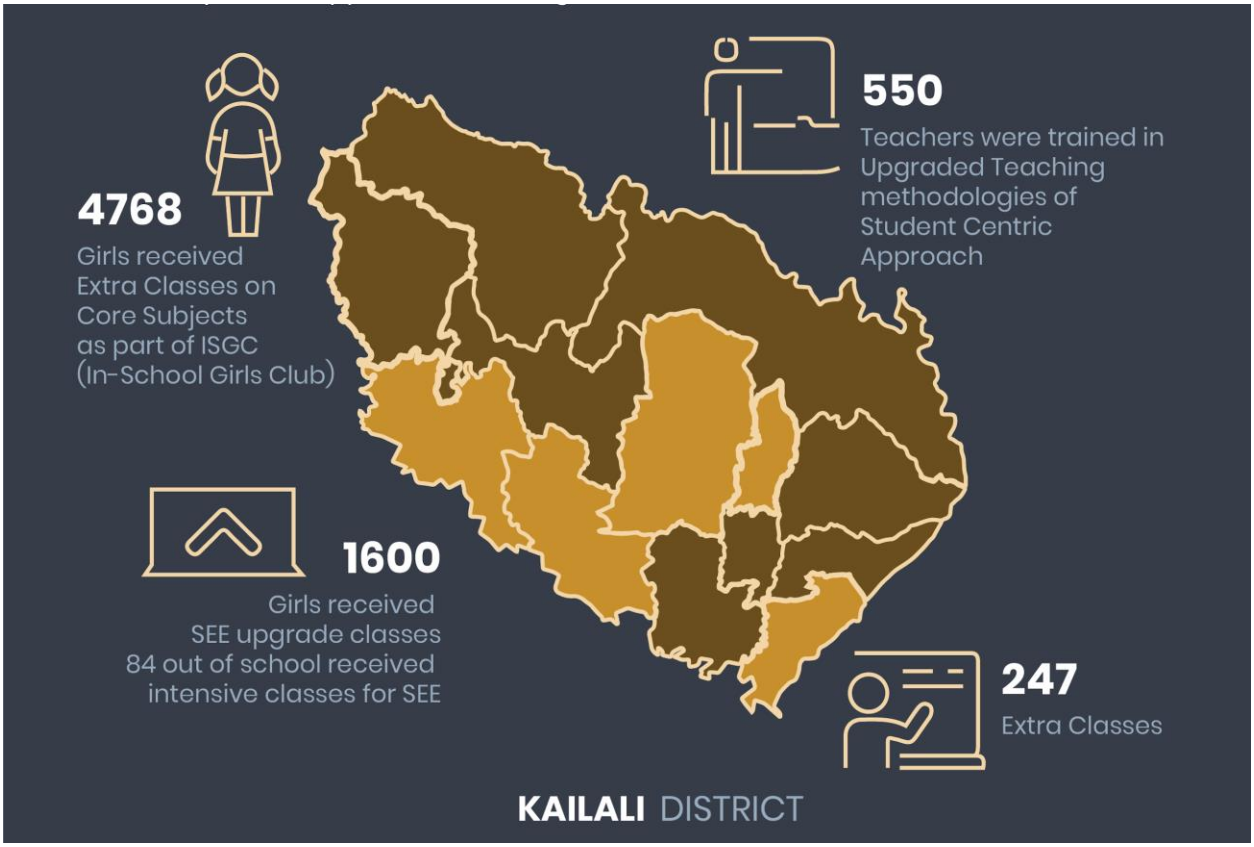
Abbreviations

ASRH	Adolescent Sexual Reproductive Health
BSD	Business Skills Development
EE	External Evaluator
EGAP	Educate Girls. Alleviate Poverty
FM	Fund Manager
GBV	Gender Based Violence
GEC	Girls Education Challenge
GTF	Girls Transition Fund
IO	Intermediate Outcomes
IS	In-school
OOS	Out of school
PSA	Public Service Announcement
SeGRA	Secondary Grade Reading Assessment
SeGMA	Secondary Grade Mathematical Assessment
SG	School Graduates
SSDP	School Sector Development Plan
SSRP	School Sector Reform Plan
STEM	Supporting the Education of Marginalized Girls in Kailali district
ToC	Theory of Change
YFLT	Youth Financial Literacy Training
VT	Vocational Training

EXECUTIVE SUMMARY

Background

The Supporting the Education of Marginalized Girls in Kailali district project (STEM II) built on the achievements of the first phase of the project (STEM I), which took an iterative approach to innovation, to refine a more holistic model that enables girls' access to, and utilization of, formal and non-formal education. STEM II's theory of change was 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 aimed to improve 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, namely teaching practices, safeguarding, self-confidence and gender sensitivity, that contribute to the achievement of the project's objectives.



The project primarily worked with in-school (IS) girls who were in grades 8 to 10 (aged 14 to 16) at the time of the project's phase 2 inception in 2017, out of school (OOS) girls who had dropped out from a STEM school (from grade 6 to grade 10 in phase I - 2013 to 2017) and also school graduates (SG), girls who had graduated from 2014 till date and were not enrolled in formal education. The project reached a total of 4,768 In-School girls, 881 School Graduates (SG) and

1,397 Out of School (OOS) girls through direct interventions, while also reaching 14,591 girls and boys indirectly at 30 STEM schools. The project rolled out several activities and interventions to support the lives of marginalized girls belonging to all three groups. For instance, IS girls received interventions to improve and enhance their literacy and numeracy skills, along with school-level infrastructural support such as computer labs, library and teachers' training among others. Similarly, financial literacy classes and vocational training, as well as from other life-skills interventions, were implemented for SG and OOS girls. STEM also supported the girls' transition to income generation via the Girls Transition Fund (GTF), which provided low-interest loans for girls to start a new business or expand an existing one. Along with direct interventions for girls, the project also provided training for teachers, to improve the quality of their teaching practices, with the main focus of the training being improved teaching methodologies, specifically using student centric teaching and learning methods, and training for school management for better school governance. Awareness programs on the importance of girls' education were also run for the parents. School infrastructure was built or repaired to ensure a better physical environment for all students to learn in. Additionally, academic support was also provided through girls' clubs (after school classes) in English, Maths and Science along with life skills training, self-defence training and ASRH education. These clubs also served as a safe space for girls, providing them a space to speak up and discuss topics away from boys.

Methodology

Foundation for Development Management (FDM) was contracted to conduct the longitudinal evaluation of STEM II, spreading the study across three points – baseline, midline and endline. The data collection for the baseline study was conducted in January 2018, while midline study was commissioned between February and March of 2019 and the endline evaluation between September and December, 2020. In terms of methodology, the study undertook a quasi-experimental approach involving comparison across intervention and control school girls. Likewise, a sequential mixed-methods design was adopted for data collection. While coming from midline to end-line, a number of changes were made to the evaluation design, in order to ensure that the study was in line with the changes made to the project log-frame. Some of the outcomes and IOs that were already achieved and sufficiently explored during the midline evaluation were closed, while introducing some new indicators to focus during the endline. Apart from those, some changes were also introduced taking into account the challenges put forth by COVID-19. All of the changes made in the evaluation design have been outlined in detail in Annex 2.

Learning outcomes

By the midline evaluation, the project had already achieved its literacy target by 115 percent and numeracy target by 266 percent. The DiD between treatment and control groups and across baseline and midline evaluations was 4.7 percent for literacy and 11.01 percent for numeracy, both the statistically significant achievements made through two years of project intervention.
Taking the midline results into account, and also considering that the IS cohort had already graduated from the secondary level and schools closed during data collection due to COVID-19, the learning outcome indicator was revised before the endline evaluation, shifting the focus from

literacy and numeracy scores to the change in girls' perception regarding their education. During the endline, a total of 86 percent of the girls demonstrated confidence about their improved learning performance, painting a bright picture of the overall learning outcome achievement of the project against 75 percent in the control group.

Some of the common examples of learning performance improvement highlighted by the girls included 'increased interest to learn', 'increased engagement in classroom activities', 'improved understanding of lessons in the classroom' and 'improvement in examination scores'. 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 the girls highlighted as drivers of their successful learning in the girls' club classes. Additionally, the project's continuous engagement with parents at the household level resulted in a shift in parents' attitudes towards girls' education – mainly in the form of girls' reduced engagement in household chores and increased study time. 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. Meanwhile, the endline evaluation also analysed girls' Secondary Education Exams[1] GPA grades (Grade Point Average[2]), where it was observed that the girls graduated from SEE board exams of 10th grade in 2020 with a mean GPA score of 2.50. It should be noted, however, that the SEE scores for 2020 were based on internal evaluation by the schools as SEE board exams were cancelled due to the outbreak of COVID-19 pandemic.

In terms of the impact of COVID-19 on learning, almost 90 percent of the girls said the pandemic may affect their future aspirations regarding higher studies or work. When asked what exactly is likely to affect them, most of the girls reported that they are starting to lose interest in the studies due to closure of schools for almost 9 months (April-November 2020). Other girls expressed concerns about the financial hardship that their families are facing due to COVID-19. Nevertheless, on a brighter note regarding the impact of COVID-19, girls demonstrated strong resilience to deal with the unprecedented problems brought about by the pandemic. More than 85 percent of the girls said they are capable of dealing with the current crisis and still be persistent on their dreams and aspirations for the future. For instance, FDM came across examples where some of the girls have started online learning through YouTube tutorials, peer-learning at the community level, attending radio classes run by STEM, among others. According

[1] SEE exams in Nepal are the national level examination of more than 300 thousand students every year. This government board examination has become an important part of life of a student as it determines students' educational career path. SEE (previously known as SLC – School Leaving Certificate Exams) is conducted every year by the Office of Controller of Examinations (OCE) under the Ministry of Education. It is the final examination in the secondary school system of Nepal. The first secondary grade board exams were held in 1934. Details about SEE here -- https://www.see.gov.np

[2] GPA is a number that indicates how well or how high a student has scored in courses on average. It's meant to score students (usually on a GPA scale between 1.0 and 4.0) during their studies and shows whether their overall grades have been high or low. This number is then used to assess whether a student meets the standards and expectations set by the degree programme or university. Details about GPA here -- https://www.edglossary.org/grade-point-average/

to a 2020 report[3], while 22.8 million people across Nepal now have internet access, only, 56 percent of internet users are using mobile data, with those figures likely skewed further by people using more than one SIM.

Transition[4] outcomes

At midline, an overall transition rate of over 95 percent was observed among the IS girls, which was a statistically significant 19.1 percent over and above the control group at midline, as a result of nearly two years of OOS interventions by the midline evaluation. The transition rate for SG and OOS girls significantly increased from about 30 percent at baseline to nearly 50 percent at midline. This meant that a greater proportion of IS girls from the treatment group graduated to a higher grade than from the control group, while a much higher proportion of SG and OOS girls were engaged in employment or business then expected at baseline.

Taking the midline results in account, the transition outcomes analysis model was revised before end-line evaluation. As all the IS girls had already graduated from their SEE board exams in 2020 before data collection, they were not included in the end-line transition cohort. Rather, the focus of the transition outcome at the endline was directed towards observing the effectiveness of different combinations of training and loan support that the project delivered to the OOS group. The effectiveness of different combinations of youth financial literacy training (YFLT), business skills development training (BSD), vocational training (VT) and girls' transition fund (GTF) loan, was observed in terms of girls' confidence, livelihood opportunities that they were able to access through STEM, decision-making ability in the household, girls' self-efficacy and agency. The endline findings demonstrated that the training combinations that included GTF loan support were generally effective in stimulating girls' confidence, livelihood opportunities, decision-making ability, self-efficacy and agency. Girls who received STEM's GTF loan alongside other training supports demonstrated encouraging evidence of their experiences, their outlook towards the future and agency to excel by further improving the quality of life by exploring more options and opportunities to engage in better employment, expand their already existing business or initiate a new business. This was evidenced with a number of cases that we observed during qualitative data collection, where the GTF recipients were found to be confidently spearheading their business and daily expenses, while also supporting their family's financial needs. However, as only 434 SG/OOS girls received GTF loans from the project, and 19 of them participated in the survey, findings relating to the GTF loan recipients offer interesting insights but the small number of recipients and respondents means that these observations cannot be widely generalised. This gap has however been fulfilled by a strong pool of qualitative evidence in the main report.

[3] https://thehimalayantimes.com/business/internet-access-in-nepal-crosses-22m

[4] At midline, a successful transition for IS girls was defined as graduating from grade 10, and for SG and OOS girls, a successful transition was being engaged in employment or business. The transition rate was therefore the percentage of girls who met these goals. At end-line, a successful transition among the SG/ OOS population was conceptualized in the form of girls' increased self-confidence, decision-making ability, agency, as a result of support provided by the project.

The COVID-19 crisis has had an immediate impact on the SG/OOS group. Almost 83% percent of the girls believe that the ongoing COVID-19 pandemic has affected or will affect their future aspirations regarding better livelihood opportunities or income generation. Girls also said that they may not get enough job opportunities in the future. 11.30 percent of the girls said they had to stop their businesses because of the pandemic and the subsequent lockdown. However, of the SG/OOS girls who had already started their own businesses, 64.06 percent demonstrated resilience against the secondary effects of COVID-19. Most of the girls (63.41 percent) believed that they are not the only ones affected by the COVID-19 and things would get back to normal in time. Similarly, 34 percent said they can develop their skills and train further to fit into the job market in the future.

Sustainability outcomes

At the endline, sustainability outcomes of the project were measured at three different levels - firstly, initiatives/decisions taken by school management to retain support received from STEM; secondly, the level of STEM's support to provincial/ local governments to develop education plans focusing on improvement of girls' education and safeguarding; and thirdly, best practices of STEM retained and supported by local governments.

The schools were found to have been continuously maintaining the infrastructure support, which paints a bright picture in terms of sustainability of STEM's achievements made through support to school infrastructure. In addition, out of the three treatment schools visited during the qualitative data collection, two have already replicated girls' club classes in the form of remedial classes, incorporating both girls as well as boys. The study also came across evidence highlighting the practice of knowledge and skills transfer between trained and non-trained teachers, mainly through subject committees consisting of teachers of particular subjects such as science, mathematics, English, among others. The schools have also become increasingly sensitive about safeguarding issues and child protection. The school stakeholders mentioned that they have started incorporating needs around gender-sensitive issues, such as maintenance of gender-friendly infrastructure, sanitary pad distribution, needs for sports equipment for girls, among others, as well as in the school improvement plan. As FDM interacted and assessed the capacity of schools to sustain achievements and efforts even without the help of STEM II, all of the treatment schools were found to be strong and capable in their own capacity. However, despite all the achievements in place, the immediate impacts of COVID-19 on schools, mainly due to the prolonged closure, was observed as a threat to continuation of child-friendly teaching practices, especially as teachers are currently under immense pressure to complete the curriculum on time. Also, the level of teachers' motivation, has also been largely affected due to loss of jobs/ employment and financial troubles caused by the pandemic. This is another area to look into in the immediate future at the school level.

After the first year of project intervention, Nepal underwent major governance reform with the implementation of federalism. This devolved STEM's engagement from one district to six new local government units. However, in a very short period of time, the project was able to put into practice its principle of adaptive management and established a cordial coordination relationship

with the local government units. Some of the notable efforts of the project in this regard included capacity building of the local governments in the formulation of education plans, policies, collaboration with schools, among others. By the time that the endline evaluation was conducted, five out of six local governments had their education plans in place, which incorporated key aspects of STEM's interventions around child protection, girls' education, inclusive education principles, school infrastructure reform, among many others. In addition, the project had shared key findings from its monitoring assessments as well as periodic evaluations with the local government, which has helped them in an evidence-driven planning process.

Mercy Corps has secured a respected place in the education cluster of provincial as well as federal governments. As the entire education sector was struggling to stand up on its feet during COVID-19 pandemic and subsequent lockdown, Mercy Corps participated and influenced the formation of several policies and guidelines for re-opening schools safely, safety measures, protection policies, among many others. The COVID-specific policies for re-opening schools, maintaining safety, among others, were found to be effective in terms of mainly resuming education halted by the pandemic for almost nine months in 2020. The project has also reached a total of 30 local governments in Sudurpaschim Province, sharing proven tools and interventions, and providing orientations. Moreover, Mercy Corps has been closely working with the provincial government on formulating a provincial education plan, focusing on inclusive education.

Despite encouraging commitments from the local bodies to sustain STEM's intervention models in the future, the commitments have still not taken the form of real actions, except some of the isolated examples highlighted in this report, such as the uptake of complaint handling mechanisms in not just the treatment but also the control schools. This is again closely associated with the impacts of COVID-19 and the most immediate needs of the education sector, i.e., to ensure smooth functioning of the academic year and completion of the designed course of study. As a result of the pressing needs of the hour, commitments from the provincial and local governments to retain the efforts of STEM II are likely to be delayed. However, as key elements of STEM's intervention models have already been included in the education plans of the local governments, activities are likely to resume in the future, once the governments address the immediate challenges brought about by COVID-19. Nevertheless, even if the pandemic had not appeared and badly affected the education sector, it would be too early to assess the level of retention of STEM's activities, especially since the data collection was done during December 2020 and the project is still at the final few months of implementation and is still carrying out some of its sustainability efforts.

Intermediate outcomes

The intermediate outcomes (IOs) for the endline included teaching practices, safeguarding, self-confidence, resilience against COVID-19 and gender sensitivity of different relevant stakeholders. The intermediate outcomes at both midline and end-line were selected with regards to their contribution to the achievement of the key outcomes – learning, transition and sustainability. Also, as the end-line data collection was conducted between September and December 2020

amidst the widespread impact of COVID-19 and subsequent closure of schools, school-based quantitative data collection was not incorporated in the evaluation design.

Under teaching practices, we analysed the practice of child-friendly pedagogy by different groups of teachers, e.g., STEM-trained girls club facilitators (GCFs) from treatment schools, non-STEM-trained teachers from treatment schools and control school teachers. The use of child-friendly teaching practices was found to be highest among the GCFs (82 percent), followed by non-GCF treatment school teachers (69 percent) and control school teachers (49.30 percent). The difference observed between different groups of teachers was statistically significant. Some of the common child-friendly methods adopted by the teachers include more group-work and classroom presentations, use of technology (computers, projectors, etc.), use of library resources in regular learning, extra-curricular activities, among others. The girls also identified 'lesser punishment' as a child-friendly teaching practice that the teachers use in regular classrooms. Meanwhile, as also highlighted in the sustainability section above, despite all the achievements concerning child-friendly teaching practices, the prolonged closure of schools due to COVID-19 has generated increased pressure among the teachers to complete the course on time and match with the academic calendar, which is likely to affect the continuation of child-friendly teaching practices in regular classes. Also, the level of teachers' motivation has also been affected by financial troubles caused by the pandemic.

With regards to safeguarding, the end-line evaluation assessed girls' awareness of different safeguarding threats and referral mechanisms in place, with more than 70 percent of the girls demonstrating awareness of harassment, abuse, gender-based violence and bullying. Girls were also highly aware of the different referral mechanisms in place. Some of the most common referral mechanisms girls were found to be aware of are their peers, parents, the complaint handling mechanism at school, NGOs and government-based referral services, among others. However, when it comes to sharing about safeguarding threats, girls generally prefer peers and parents as they still do not fully trust the confidentiality of the school-based complaint handling mechanisms. Moreover, as the complaint box is usually opened once or twice a week, girls think it cannot effectively address issues related to safeguarding, which warrant immediate action. Apart from the project's regular support, increasing media reports about gender-based violence and safeguarding issues throughout the country were also found to have contributed to girls' awareness of safeguarding threats and referral mechanisms in place.

The endline evaluation also established a linear relationship between increased awareness from girls about safeguarding issues and increased confidence in actually tackling threats whenever they are themselves faced with such situations. More than 95 percent of the girls demonstrated confidence in dealing with any forms of safeguarding threats. The main reason behind their confidence in handling adverse situations is STEM's in-school and out-of-school support, which included self-defence training, sensitisation about ASRH and community-level activities such as household dialogue and street drama.

The intermediate outcome around gender sensitivity explored the sensitivity of different stakeholders related with regards to the key gender barriers that are very common in the project

area, mainly in the form of gender-based discrimination. The purpose of this intermediate outcome is to gauge the level of readiness of different stakeholders - including parents, teachers, the overall school environment, and girls' male and female friends - to support the girls in their specific needs and aspirations with regards to freedom, mobility, studies, work or their personal life choices.

In that regard, teachers, the overall school environment and girls themselves, were found to be highly gender-sensitive. According to girls, teachers not only make sure that discriminatory practices between girls and boys do not exist in the classroom, but they also encourage girls to participate in classroom activities and school functions and competitions. Our findings show that the percentage of girls perceiving that teachers treat boys and girls differently in the classroom has reduced from 25 percent at the midline to 13 percent at the endline. Similarly, girls agreeing that the teachers make them feel welcome in the classroom increased from 84 percent at the midline to almost 100 percent at the endline. Likewise, schools visited during the course of this study were found to be gender-sensitive in terms of infrastructural provisions, which included separate toilets for girls and boys, WASH facilities, availability of free sanitary pads for girls, sports equipment for girls, among others.

At the household level, parents were also found to be generally sensitive towards the needs of their daughters, especially concerning education. For instance, girls have been relieved of their excessive engagement in household chores, which has increased their leisure time. For instance, midline findings showed that girls' engagement in household chores has reduced from 3.4 hours per day at baseline to 1.8 hours at midline. This resulted in girls' increased study time, combining hours spent by girls to study at home as well as engaged in girls' club classes. Moreover, with regards to girls' choices around education, parents were found to be widely supportive, as most of them said they will allow their daughters to study up to any level she wishes. However, there are certain nuances to highlight with regards to decision-making and distribution of household chores between members of the family, where the study highlights one particular area for improvement. For instance, most of the stakeholders, including girls themselves, said most of the crucial decisions about personal life such as marriage, further studies, among others, are still mostly taken by girls' parents, mostly the father. Similarly, although girls were able to reduce their involvement in household chores, the responsibility of household chores shifted towards other female members of the family, mostly overburdening the mother with extra work. The traditional gender roles are still a major social structure that are followed by both men and women in the targeted communities.

The boys that we interacted with at the school level demonstrated limited awareness and sensitivity towards girls' needs, aspirations and equality. Especially as they were not a part of STEM's direct beneficiaries, boys were deprived of certain interventions such as girls' club classes and other training that were exclusive to girls. As a result of this, while girls were found to be increasingly conscious and sensitive of issues regarding equality, freedom, gender-based harmful norms, etc., awareness about these same topics among the boys was found to be quite low. For instance, boys failed to recognize the different roles of men and women in a family as a problem that affects their lives. Most of the boys were found to have normalised these practices and are

not concerned about changing any of it. Moreover, a number of boys believed that it is fair for women to be engaged in domestic work while the men should be responsible for working outside. While girls may have been well-sensitized about these issues, unless their male counterparts realize these factors and are on the same page about addressing these problems, the social discrimination that exists on various levels and which act as a barrier to girls' education will persist. Crucially, as girls and boys both co-exist in the same community, the empowerment of girls alone would not be sufficient to bring about positive changes and equality. It is of utmost importance that the project, local government, schools and the community together work towards narrowing the gap of understanding and knowledge between girls and boys.

Conclusion

With regards to learning, evaluation findings have consistently highlighted the girls' club classes as an effective intervention under STEM which can be replicated and integrated into the design and implementation of future girls' education programmes. Beyond direct support provided to the girls through girls' club classes, it is equally important for the project to continuously engage at the household and community level, in order to make sure that enabling learning environment is maintained outside school as well. With regards to transition, STEM's engagement modality with the SG/OOS girls, through life-skills training to loan support, has proven to be successful in transforming the lives of marginalized girls in Kailali. Evidence from STEM can be useful in designing the future transition intervention modalities. As highlighted in this report, STEM's efforts in ensuring the sustainability of project's achievements by engaging with the local bodies is laudable. Apart from supports provided to the local governments and coordination sought as a part of the project's planned activities, STEM also supported the governments to revive the education sector affected due to COVID-19 pandemic in 2020 by formulating safety policies, guidelines and protocols, and facilitating implementation of the same at the government as well as school level. Similarly, STEM's adaptive management in transitioning from working with one district level authority to several newly formulated local governments provides learning surrounding approach and engagement modalities, which will surely feed for the development of similar programmes in the future.

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 evidence from STEM I which took an iterative approach to innovation, to refine a more holistic model that enables girls' access, and utilization of formal and non-formal education. STEM II aims to accomplish this by strengthening the enabling environment at home, school and community along with building individual resilience and agency of these girls. 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.

The end-line evaluation design of STEM II has been redesigned in line with the changes in the project's theory of change that were observed while coming from midline to end-line. First, most of these changes and the process of re-design account to the learning from midline as well as project's regular monitoring, where for instance, project's learning and transition intervention models were proven to be successful as all the targets were achieved. Second, some of the changes also account to the contextual factors relating to the COVID-19 pandemic. Third, especially with learning outcome measurement, changes were made also because the beneficiary IS girls, the last remaining batch of whom graduated from grade 10 this academic session, were no longer a part of project's ongoing interventions at the time end-line data was collected. The project's precise focus was on sustaining the impact and scaling up sustainability works in the last year of project implementation. All the changes made to the evaluation design considering these three factors briefly discussed here have been presented in detail in Annex 2.

Talking of changes, the learning outcome measurement, at end-line, did not follow the analysis of girls' literacy and numeracy scores. Taking the midline results into account[5], and also considering that the IS cohort had already graduated from the secondary level and schools closed during data collection due to COVID-19, the learning outcome indicator was revised before the endline evaluation, shifting the focus from literacy and numeracy scores to the change in girls' perception regarding their education. Similarly, transition outcome measurement was also slightly revised to observe the effectiveness of different combinations of trainings and support provided by STEM II to the SG/ OOS girls. Similarly, for the sustainability outcome, the end-line evaluation has focused its shift from output level observation of collaboration between project and different related stakeholders including government to the evidences of ownership, replication and scale-up as observed among different actors including schools, local government, girls themselves, among others.

[5] Learning targets set for midline were achieved by 265.95 percent for numeracy and 115 percent for literacy.

With regards to the intermediate outcomes, the end-line evaluation design has closed certain IOs and indicators and introduced some new IOs, based on the evidence from midline evaluation and the contextual changes resulting from the ongoing COVID-19 pandemic. The midline findings evidenced a significant reduction in the time spent by girls in household chores. As a result of this, girls were found to be devoting more time in their studies (also because they were approaching their SEE exams next year) not just at home, but in the girls' club classes, peer learning, tuition classes, etc. At end-line, the girls have already completed STEM's intervention cycle and have graduated from secondary level of education. Many are yet to join higher secondary level (due to ongoing COVID-19 situation). Therefore, measuring girls' study time at home was deemed irrelevant for the end-line evaluation by the EE, project team and the FM. Similarly, the intermediate outcome on school governance was also closed at end-line as the schools have remained closed for almost entire year. However, efforts made by teachers/ school-based stakeholders to avoid the impact of COVID-19 on learning has been explored through a separate indicator under a separate intermediate outcome on teaching practices. Similarly, attendance was deemed no longer a relevant IO as the STEM intervention girls have already graduated from school. Also, the schools have remained closed for a prolonged period due to the ongoing pandemic. Another midline IO – Financial Literacy – has been clubbed into the newer format of transition measurement through effectiveness of different combination of trainings, where we not just looked at financial literacy training, but also other training packages like vocational training, business skills development training, GTF loan support, among others. Apart from all these indicators closed, the end-line also revised the indicator on teacher quality improvement, especially because it was not possible to conduct classroom observation as the schools were closed due to COVID-19. Additionally, as the assessment of teaching quality was dependent on only one classroom observation per school, it was not found to be too effective during midline. For instance, although in the observation classroom, many teachers were not found to be using all of the required child-friendly teaching methods, during qualitative discussions and in the girls' survey, girls contradicted with the findings from classroom observation. For these reasons, the end-line rather explores the differences between teaching practices of STEM-trained and non-STEM trained teachers in the intervention schools; and the teachers in STEM intervention schools and in the control schools. Apart from it, end-line evaluation design introduced new intermediate outcomes to explore girls' awareness about safeguarding issues like harassment, abuse, bullying and GBV, and their level of self-confidence to deal with such adverse situations. The end-line also introduced a new intermediate outcome to observe the level of gender-sensitivity of different stakeholders related with girls. Lastly, as a cross-cutting theme, the end-line also extensively covers the impact of COVID-19 on IS and SG/ OOS girls, supports they received and the level of resilience they demonstrate to deal with the impacts of the pandemic.

1.1.1. Project participants

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) - 4,768 girls
- School Graduate (SG) - 881 girls

- Out of School (OOS) - 1,397 girls

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[6], 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, in order make sure some of the key data at end-line are comparable across the previous evaluation points. These girls participated in the girls' survey, answering the key evaluation questions related to learning outcomes and intermediate outcomes, namely – teaching practices, safeguarding, self-confidence, gender sensitivity and the impacts of COVID-19 on their learning. 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 enroll 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:

Table 1: Beneficiary grades and ages

	Grade/ Age	Baseline (2017-18)	Midline (2019-20)	Endline (2020-21)
IS girls	**Grade 8 (now SEE graduate year 2020))**	1,168 girls	1,723 girls	1,483 girls

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

	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	11-14 years: 497 15-17 years: 923 18-23 years: 60 24-34 years: 3
	Grade 9 (SEE graduate year 2019)	1,721 girls	1,508 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	11-14 years: 446 15-17 years: 992 18-23 years: 70 24-34 years: 0
	Grade 10 (now SEE graduate year 2018)	1,571 girls	1,537 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	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	12-14 years: NA
	Age group 2	15-17 years: 80	15-17 years: 81	15-17 years: 68
	Age group 3	18-23 years: 771	18-23 years: 816	18-23 years: 776
	Age group 4	24-32 years: 20	24-32 years: 29	24-34 years: 37
OOS	**Age group 1**	12-14 years: 5	12-14 years: 5	12-14 years: 13
	Age group 2	15-17 years: 39	15-17 years: 68	15-17 years: 170
	Age group 3	18-23 years: 607	18-23 years: 792	18-23 years: 923
	Age group 4	24-32 years: 282	24-32 years: 321	24-34 years: 291
	In total throughout the STEM life cycle: IS girls: 4768 girls SG girls:926 girls OOS girls:1397 girls	IS girls:4460 girls SG girls: 871girls OOS girls: 933 girls	IS girls: 4768 girls SG girls:926 girls OOS girls:1186 girls	IS girls:4528 girls SG girls: 881 girls OOS girls: 1397 girls

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, which include schools in the local governments outside of targeted schools in Kailali, and the control schools selected for the comparison across project intervention group, 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. As with the earlier evaluation points, the end-line evaluation design included both qualitative as well as quantitative surveys with both treatment as well as control groups.

1.1.2. 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 guidance from parents 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.

As the process of evaluation went on from baseline to end-line, the key barriers that were found to be pertinent in the context of Kailali's social, cultural and economic characteristics are 'limitations in parental support', 'restriction of mobility', 'girls' engagement in household chores', among others. A key barrier that emerged before end-line evaluation is the impact of COVID-19 on both IS as well as SG/ OOS girls. All of these pertinent barriers have been presented in section 2 of this report.

Qualitative findings during the 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-defense training for girls and other sensitization activities against safeguarding threats. Apart from that, the project conducted community campaigns against GBV through street dramas, EGAP rally and campaigns, jamboree and local level meetings with stakeholders, poster and pamphlet distribution at community, PSA at local radio stations and family dialogue focused on sensitizing the community about issues related to safeguarding and possible threats and mitigation mechanisms in place. The end-line evaluation covers this barrier by having two separate IOs focused on exploring girls' level of awareness on safeguarding threats and confidence to tackle these threats if placed in an adverse situation.

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 different sensitization interventions through family dialogues to parents and community stakeholders, disseminating information about government's scholarship provisions, and carrying out EGAP campaigns, youth day events, 16 days GBV event and fundraising 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 through Management for Quality Education (M4QE), thereby creating a sense of ownership of the school from the school management, teachers, students and the communities. The project also has Women Leadership in Education (WLiE) activity, which is conducted with female teachers, SMC and PTA members which advocate for women engagement in education for themselves and also for the girls.

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. The revolving nature of the fund ensures that even after the project closure the fund can be accessed by other marginalized girls in the community.

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.

The barriers carried over from baseline and midline to the end-line have been discussed in section 2 of this report. The pertinent and potential barriers have also been used for sub-groups analysis of all the outcomes and IOs.

1.1.3. Theory of change

Despite several changes in the ToC and subsequent evaluation design, STEM II's primary theory of change 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, is still the same. To achieve this, STEM II aimed at improving girls'

educational outcomes, increase their access to income-generating activities, and cultivated an enabling environment for sustainable changes for girls' empowerment.

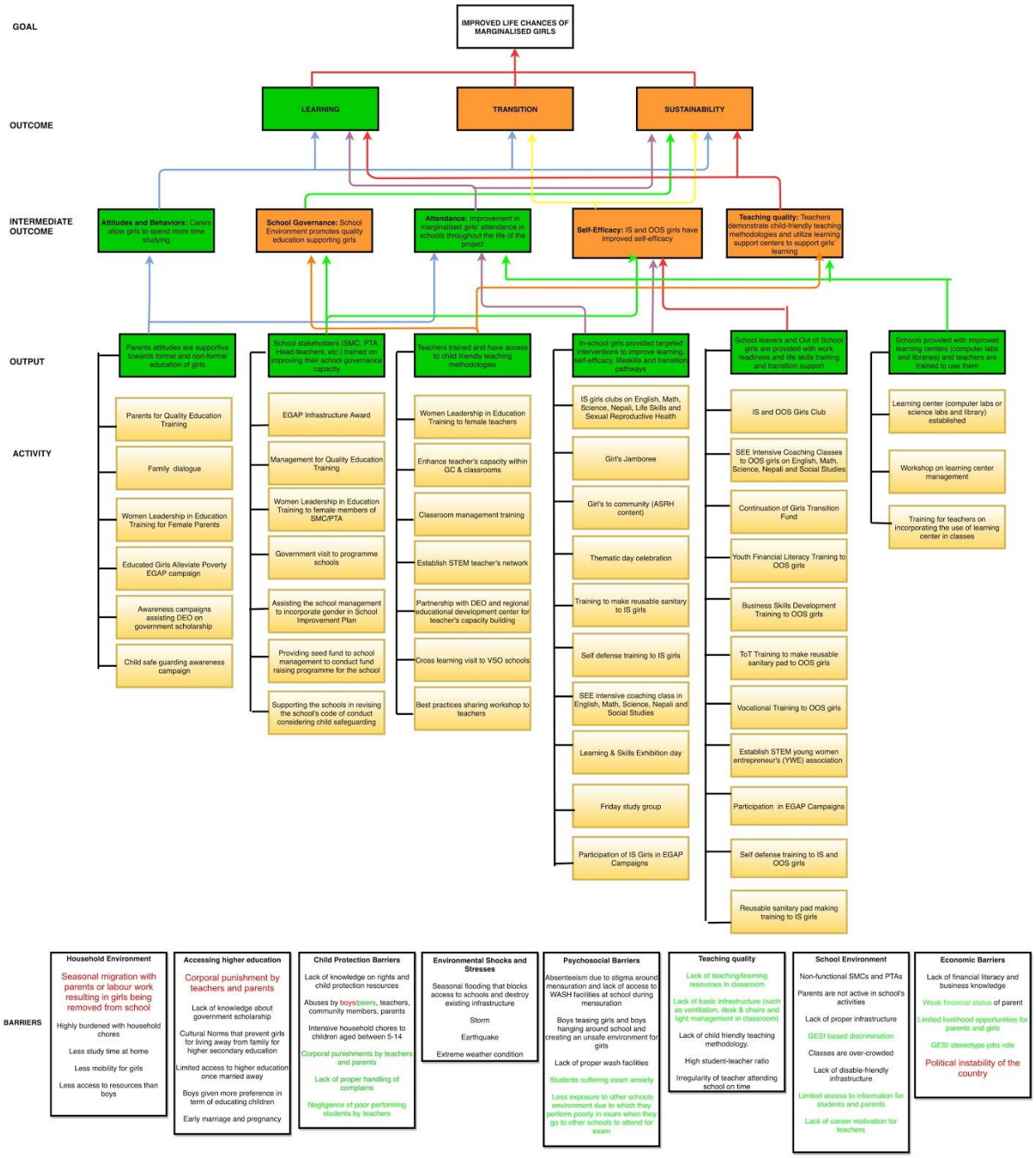
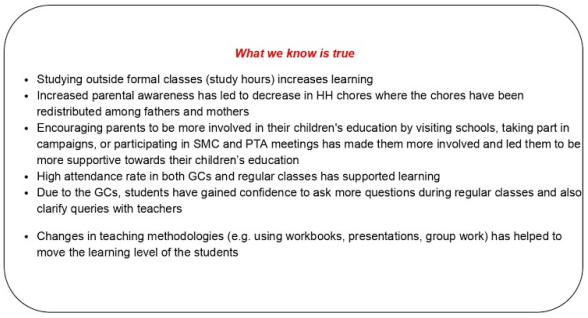
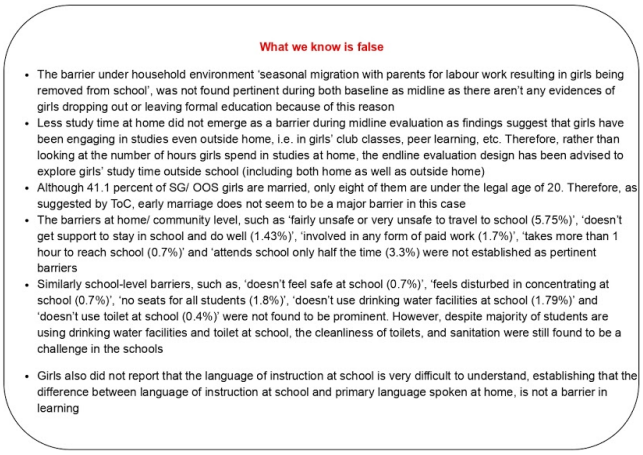


Figure 1: End-line theory of change





1.1.4. Assumptions

- With an 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 its 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 the girls.
- With a 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.

1.2. Project context

Nepal has witnessed notable improvement in the education sector, primarily, access to education in the past few decades. As of 2019, the rate of enrollment of children in primary education has climbed from 72% (in 2000) to 96% according to the World Bank Statistics. Additionally, The UNESCO Institute of statistics also reports that the literacy rate for adults (15 years and above) has increased from 21% (in 1981) to 68% (in 2018). The government of Nepal has designed and implemented several plans and policies for the greater inclusion of girls' education. Among these plans and policies, The School Sector Reform Plan (SSRP), implemented from 2009 to 2016 has made the most remarkable changes. With 'equity and social inclusion' defined as one of its primary objectives, the SSRP specified that it would focus on girls, women and children from educationally deprived groups to ensure their equal participation to attain equitable results. The SSRP also implemented several plans including scholarships for girls, a midday meal program, advocacy campaigns like 'Welcome to School' which guaranteed an improved learning environment at schools by partnering with I/NGOs.

The SSRP was followed up by the School Sector Development Programme (SSDP) (2017 - 2023) which also emphasized 'equity' as one of its key focus areas. The SSDP was designed with a purpose to ensure inclusivity and equity in the education system in terms of access, participation and learning outcomes with a special focus on reducing inequalities among and between groups having the lowest levels of access, participation and learning outcomes. Adhering to the SSDP, schools in Kailali have already started 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. The SSDP will also further these strategies to increase the access to secondary level education of students belonging to families with low socio-economic status by providing needs-based scholarships. After the promulgation of the new constitution, the government has prioritized education as one of its foremost responsibilities. It has directed the provincial governments to regard education as central pillar of newly formed provinces. The constitution 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.

Nevertheless, the onset of the COVID-19 pandemic is challenging the country's education system and threatening to push back the achievements gained by the existing plans and policies. After the outbreak of the novel corona virus, governments all around the world including Nepal enforced a nationwide lockdown from March 2020. In an attempt to curb the spread of the COVID-19, the schools all around the country were temporarily shut with few opening until November 2020. The pandemic not only crippled the economy of the Himalayan nation, but it also affected the education system which was already in a fragile state. It is imminent from past records that children mostly from the marginalized groups are hit the hardest when disaster takes place. The absence of tourism and remittances in the country has caused a stark rise in unemployment and poverty which has caused a negative effect in the education of children, especially girls. Education experts fear that the pandemic will deteriorate the anticipated

education outcomes, increase the dropout rates, and leave behind the most vulnerable students especially the marginalized girls.

As a consequence of the lockdown, almost 8.8 million students in Nepal were directly affected by the closure of school and universities as reported by UNESCO. Amongst the 9 million students, 11% were pre-primary, 28% were in primary, 39% in secondary and 5% in tertiary education. The unprecedented closure of schools paved the way for e-learning/digital learning platforms across the country. In the attempts of finding alternative methods to teaching, the government of Nepal introduced a range of options including the "Digital Education System" whereby students of Grade 6-10 would receive schooling through television. In this milieu, the Ministry of Education, Science, and Technology also developed a learning portal introducing various digital content like e-books, audio books, videos of classroom lessons and interactive learning games. These digital contents categorized according to grade and subjects and were supervised by the Nepal's Curriculum Development Center. The Ministry has also approved a 'Student Learning Facilitation Guideline 2077 through Alternative System" to compensate for the uncertainty of re-opening of schools.

Even though various efforts were made by the government to develop alternate learning system in digital platforms, it was not widespread across the country especially public schools. Many girls who went to these public schools belonged to the low-income families and disadvantaged groups in the rural areas that did not have access to television and internet. Kailali, a district in the far-west region of Nepal, also an intervention district of the STEM-II program, experienced similar challenges. The KIIs conducted with the IS girls, teachers, school management and local government also reflected that a majority of the students in Kailali could not access the e-learning platforms as many of them had migrated to their village homes in hills and had very minimum access to electricity and internet. Therefore, these alternative methods didn't prove to be as beneficial to the school going girls in Kailali. Additionally, the teachers in the public schools also faced similar problems regarding internet and connectivity and were unlikely to be trained in teaching virtual classes which was corroborated by KIIs with the teachers as well. With the shutting down of the schools and the absence of access to these digital learning methods, the girls from marginalized groups might never return to the schools increasing the chances of dropout rates.

Slowly but steadily, the schools in Kailali have started re-opening since early November in different shifts. With only 4 months remaining for the academic year to come to an end, the school administration is in a tight deadline to complete the curriculum before the final examinations. The government officials interviewed during the evaluation expressed concerns over re-building the education system in Kailali post-pandemic. The entire education system looms in uncertainty as the government itself is in a confused state of whether to push the academic year by a few months which would ultimately cast a ripple effect for the next few years.

COVID has slowed down the progress of girls' education in Kailali which had taken slow but positive strides over the past decade. With the newer challenges and complications brought about the pandemic, the development of marginalized girls needs supplementary work. After the midline evaluation, the project has worked largely on maintaining the sustainability of the project as it had been able to make remarkable changes in the learning and transition of the girls. Changes in

parental attitude towards girls' education, improvement in learning, OOS girls enjoying financial independence, school management working proactively towards the development of the school among many others have been noticed which can be attributed to the project's intervention. It has also been observed that girls are now experiencing reduced burden of household responsibilities which was reported in midline as well. Regardless of all these advancements, the girls' in the far west are still facing challenges in completing their education which has been amplified owing to the sharp increase in poverty, unemployment and early marriage brought about by the pandemic. The OOS girls are also bearing the brunt of the pandemic. The girls who were able to set up small shops with help of loans enabled by the project are now facing challenges in repaying the loan as their businesses were temporarily shut down by the pandemic. It was also observed that some schools had to bear the financial burden of disinfecting the entire school as some of them were used as quarantine centers.

As the STEM-II has reached its closing phase, it can be concluded that it has played an integral role in empowering the marginalized girls in Kailali. The evidences of these achievements have come across in all three points of evaluation- baseline, midline and end-line. The project that started out with the purpose of supporting girls by accessing education, and proper technical support in economic activities has been successful in helping the girls in most of these aspects. 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. STEM also cemented the girls' transition pathways to income generation. Along with direct interventions for girls both IS and OOS, it has provided trainings for teachers to improve their teaching quality and school management for better school governance. The extended nationwide lockdown hindered the continuity of the girls' club and peer learning. The project however was able to distribute COVID-19 safety materials and several educational materials for the girls which was deemed useful by the majority of girls. Additionally, it has also helped the OOS girls by extending the loan payback time and interest rate from 8 percent to 5 percent for girls who received STEM's GTF loan.

1.3. Key evaluation questions and role of the end-line

The quantitative data collection for end-line evaluation was conducted in October 2020 and qualitative data in December 2020 (the third year of project implementation) to explore and map changes observed among the beneficiaries from midline (February 2019), in line with the evaluation questions outlined in the M&E framework of the project. The closure of the school due to the pandemic and the prolonged lockdown pushed the end-line evaluation by a few months.

The external evaluator adopted a sequential mixed-method approach to conduct the end-line evaluation in order to explore answers to the evaluation questions. A complete presentation of total sample size and attrition has been included in Annex 2.

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 end-line evaluation report presents quantitative and qualitative findings together, where findings from quantitative exercises have been useful to explore deeper and confirm or challenge qualitative findings, and vice-versa.

The evaluation questions are designed to assess relevance, effectiveness, impact and sustainability of the project. The evaluation questions address all the outcomes and IOs mentioned in the log-frame, as the questions cover all the overarching aspects of the ToC. The evaluation questions have been redesigned based on the findings presented in midline and the efforts made by STEM-II to mitigate the impact of COVID-19 on girls' education. With an aim to explore answers to these evaluation questions, the end-line has explored the perception in change in learning, transition, sustainability, teaching practices, and cross cutting themes like safeguarding, self-confidence and COVID-19 and the learning resilience of girls.

There was a change in the proportion of the comparison sample IS girls in urban, semi- urban and rural areas due to various reasons which resulted in more girls from the control sample being in urban/ semi urban areas than the treatment sample. The analysis on learning perceptions was done for both cross sectional and panel samples and were similar. More details have been presented in Annex 3, 4 and Section 3.

As in the baseline and midline, the answers to these questions provide an assessment of how well the project activities are suited and contextual in achieving the outcomes and intermediate outcomes for the project. 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:

LEARNING

Evaluation question: How has the girls' perception on learning changed since baseline?

What it explores in the end-line: Girls' perception on any improvement in their understanding of lessons. Improvements in examination scores. What do girls perceive as key driving factors for improving their scores?
Rational/ explanation: Through learning assessment tools (SeGRA and SeGMA), the learning intervention model of the project was found to be effective during midline evaluation. Therefore, it was decided earlier among the EE, project and the FM that learning would be evaluated on the basis of girls' secondary level national exams (SEE). However, given the COVID-19 outbreak, the exams have been cancelled. In that light, the end-line evaluation will primarily focus on girls' perception about the changes in their own learning performance over the course of the project. Apart from that, the SEE exam results of the girls in sample have also been analyzed. Qualitative factors of these changes in the perception will be further explored through qualitative deep-dives, focusing on reasons behind any changes that have occurred, perception of parents, among others.

TRANSITION
Evaluation question: How have the STEM II training and interventions supported OOS/ SG girls in expanding their confidence, decision making, self-efficacy, livelihood opportunities and agency?
What it explores in the end-line: Look at financial status, empowerment level, living standard, change in self-efficacy and gender roles amongst girls who have taken different combinations of project support. Which combination of the OOS/ SG training packages (VT, YFLT, ASRH, BSD, GTF) are best suited to improve their confidence, decision making, self-efficacy, livelihood opportunities and agency?
Rational/ explanation: The end-line evaluation will not capture the transition of IS girls as the current education system of Nepal automatically upgrades girls from secondary to the higher secondary level. With regards to the OOS/ SG girls, STEM has a well-rounded OOS/ SG intervention with Business Skills Development Training, Vocational Training, Youth FLT, Adolescent Sexual and Reproductive Health and Girls Transition Fund. The end-line evaluation will therefore explore which combination of these OOS/ SG training are more effective for improved livelihood opportunities.

SUSTAINABILITY
Evaluation questions: 1) How likely is it that STEM's work will be sustained across all the layers – school and system, it has targeted? 2) Have there been any efforts (actual decisions, policies and budget) towards scaling the achievements made by projects in the intervention units by project stakeholders?
What it explores in the end-line: 1) Institutionalization of best practices of STEM by local government, 2) Level of ownership by system, school and community, 3) Project activities that had an impact and have been or can be scaled up by stakeholders with their available resources
Rational/ explanation: Indicator more at output level for ML and weak data so the project will focus heavily on this for the end-line with change in indicators. Also, midline was too early to capture sustainability but could only look at the direction the project moved towards sustainability. Since the project has invested and worked heavily on sustainability post midline and the project is towards its end, it is apt time to focus on this. Furthermore, what model worked/ did not work for the project can be used to either share with the government and wider stakeholders for possibilities of scale up, or generate learnings to inform future interventions - replication or scale-up.

TEACHING PRACTICES

Evaluation question: Is there a difference between the teaching practices of STEM teachers and, (i) non-STEM teachers in the same school and (ii) the teachers in control schools?

What it explores in the end-line: Teaching practices in regular class that generally include factors like child-friendly teaching methods - group work, presentation, class participation, peer learning, use of local resources, integration of resource centre, library and computer lab in learning, class decorum and management, and transfer of skills and expertise between STEM-trained and non-STEM-trained teachers.

Rational/ explanation: During baseline/ midline, teaching quality was assessed using classroom observation. However, as the classes are not running in the context of pandemic, end-line cannot assess the teaching quality. Instead, general teaching practices and the difference between teaching practices of STEM-trained teachers and non-STEM-trained teachers from both treatment and control schools will be explored. The end-line will study the difference in teaching practices and motivation of the teachers. Difference will be observed in terms of following key domains:

A) Use of child centred teaching methodologies
B) Teachers' motivation towards self-growth/ improvement
C) Sensitivity towards students' social-cultural background and learning levels

SAFEGUARDING

Evaluation questions: 1) How do girls perceive harassment/ bullying/ abuse/ gender-based violence? 2) Are the girls aware about referral mechanisms against harassment/ bullying/ abuse/ gender-based violence?

What it explores in the end-line: Girls' level of awareness and understanding about harassment/ bullying/ abuse/ gender-based violence; and the referral mechanisms in place

Rational/ explanation: Safeguarding as a cross-cutting issue that aligns with multiple outcomes and intermediate outcomes in the ToC.

SELF-CONFIDENCE

Evaluation questions: 1) How confident and equipped are the girls to handle any adverse situation such as harassment/ bullying/ abuse/ gender-based violence? 2) How confident and equipped are the girls in decision-making (personal and professional) and/ or to voice their opinion in front of peers, parents?

What it explores in the end-line: Girls' confidence and ability to handle harassment, bullying, abuse and gender-based violence and voicing their opinions in front of peers, teachers and parents.

Rational/ explanation: Self-confidence as a cross cutting issue that aligns with multiple outcomes and intermediate outcomes in the ToC.

EFFORTS OF STEM II TO MITIGATE THE IMPACT OF COVID-19 ON GIRLS' EDUCATION

Evaluation questions: 1) What impact did COVID-19 have on girls' education in Kailali? 2) What impact did COVID-19 have on small businesses of SG/ OOS girls? Did the outbreak of COVID-19 and its impact on businesses affect the self-esteem/ confidence of SG/ OOS girls? 3) How did STEM II respond to the outbreak of COVID-19 on girls? 4) How did teachers/ school stakeholders cope with the impacts of COVID-19 on learning?

What it explores in the end-line: Impact of COVID-19 on girls' education/ child protection in Kailali and measures taken by the project to mitigate those impacts.
Rational/ explanation: The unprecedented COVID-19 pandemic has disproportionately affected all the sectors, from education to small businesses. In this context, the impending end-line evaluation of STEM II should take into consideration the impacts of the pandemic on its programmatic areas and set goals surrounding especially the improvement of girls' education and livelihood opportunities for SG/ OOS girls. The end-line evaluation will therefore explore the impacts of the pandemic on programmes' core areas of intervention and will record any measures taken by the project to mitigate the degree of impact.

GENDER SENSITIVITY
Evaluation question: Did the project stakeholders demonstrate gender-sensitivity towards girls' education and transition?
What it explores in the end-line: 1) Which stakeholders were successful achieving the high gender-sensitivity status, and what forms of gender transformative practices are in place? 2) What factors supported/ hindered these stakeholders to achieve gender-sensitivity status?
Rational/ explanation: The end-line evaluation aims at exploring how the project contributed to the gender sensitivity of different stakeholders of STEM II. This will signify the level of gender-transformative approaches, practices and changes observed among different stakeholder groups.

2. Pertinent characteristics and barriers

This section presents the key characteristics and barriers that have been used for the sub-group analysis of different outcomes and intermediate outcomes in the following chapters of this report. The changes in characteristics and barriers since baseline and midline evaluation, and an intersection between them, along with the appropriateness of project's activities with regards to the pertinent characteristics and barriers have been presented in Annex 4.

For the IS girls, the characteristics taken into account are ethnicity, location, respective local governments, girls' marital status, education status of the primary caregiver and households with more than five family members. Likewise, the pertinent barriers at the household level for IS girls are limitation in support from family to stay in school and do well, IS girls who already have children and girls who are involved in household chores whole day. COVID-19 and its subsequent impact in learning emerged as a significant barrier during end-line. Impact of COVID-19 is therefore a major cross-cutting barrier that has been used to analyse different outcomes and intermediate outcomes throughout this report.

For SG/ OOS girls, the characteristics used for sub-groups analysis of outcomes and intermediate outcomes are ethnicity, respective local governments, girls' marital status, education status of the primary caregiver and households with more than five family members. Similarly, the pertinent barriers are restriction of mobility (girls not allowed to live outside the community for work/ business) and girls involved in household chores whole day. As with the IS girls, COVID-19 also impacted the SG/ OOS girls, hence the end-line evaluation identifies this pandemic as a key barrier.

In sub-group analysis of outcomes and IOs, no striking finding was observed in terms of characteristics and barriers as the pertinent characteristics and barriers have not made any major difference to the findings of outcomes and IOs.

3. Key outcome findings

3.1. Learning outcomes

The end-line evaluation of learning outcomes does not follow the literacy and numeracy scores analysis model as in the previous evaluation points. This is taking into account the midline results, and also considering that the IS cohort had already graduated from the secondary level and schools closed during data collection due to COVID-19. Moreover, by the end-line, the in-school beneficiaries of the project only included the baseline grade 8 girls, who graduated their secondary education exams before the end-line commenced. This group has the maximum years of IS intervention exposure -- 3 years and a year-long exposure after midline. Thus, this group was concentrated to measure learning as well as other IS interventions like teaching and learning, girls' club, self-efficacy, school infrastructure support like WASH, resource centers, among others.

As a result of prolonged impact of the COVID-19, the SEE exams were not held this year, and the girls were graded for secondary school examination by their respective schools on the basis of their internal exams score and other learning performance. The SEE grades of the treatment and control girls who participated in the end-line survey have been presented in the section 3.1.1.

In light of these contextual factors, the learning outcome for end-line evaluation was revised, where the external evaluators, project team as well as the Fund Manager have mutually agreed to shift the focus of learning outcome to observing any positive changes in the perception of girls regarding their learning performance since the midline. As stated above, what we know already from the previous evaluation points is that the project has been able to improve girls' literacy and numeracy performance. In that regard, the end-line evaluation of the learning outcomes rather explores if the project has been able to generate any positive perception shift in learning among girls.

As this macro-level watch over girls' perception on learning is a new outlook introduced to the learning outcome during end-line evaluation design, we do not have quantitative data from previous evaluation points to be compared against end-line findings. However, qualitative consultations were designed such as to take the girls to retrospective recall and compare how their perception may have changed from the past. Apart from that, the analysis below presents a control-treatment comparison generated from the end-line evaluation data.

3.1.1. Performance against indicator

Indicator: Percentage of girls who demonstrate positive changes in their perception about learning since midline

Table 2 below shows that a higher percentage of girls in the treatment group in comparison to the control group believe that their learning performance has improved since midline. While 86.30 percent of treatment girls said they believe their learning performance has improved, the percentage of the same is lower by a statistically significant 11 percent in the control group.

As shown in Figure 2, when asked what are the key improvements that the girls have noticed in their learning performance, the girls highlighted 'increased interest to learn', 'increased

engagement in classroom activities', 'improved understanding of lessons in the classroom' and 'improvement in examination scores'.

During both quantitative as well as qualitative consultations, treatment IS girls attributed their improvement in learning primarily to their engagement girls' club classes, provided by the project. The survey shows more than 65 percent of the girls agree that the girls' club classes helped them improve learning. Most of the girls said girls' club classes provided them with a friendly learning environment, where they felt comfortable to ask questions with teachers and clear their doubts in learning. Apart from that, the girls' club classes also acted as a lesson revision platform, where the girls got the opportunity to understand the subject better and perform well. As the project provided this extra class opportunity exclusively to the girls, the size of the girls' club classroom was relatively small in comparison to the regular school classes. This ensured that the girls could practice learning, interact with each other and participate in group work in a more comfortable environment.

> The regular classes in school are larger in student size and it is very noisy. Students seated in the last benches can hardly listen to the teachers. Also, especially as there are boys as well, we feel shy to stand up and ask questions to the teachers. All of this is not a problem in the girls' club classes.
>
> **- A treatment IS girl in Dhangadhi**

In that sense, the girls' perception about their improved learning performance is closely associated with the level of confidence and comfort that the girls built with their engagement in girls' club classes. For them, the girls' club did not just provide an extra input in terms of learning opportunities, but also a crucial support system that they could trust upon.

Conversely, the level of confidence and comfort cannot be observed on a similar scale among the control group. Even though the control schools also organized extra classes dedicated for SEE appearing students of grade 10, the extra classes were only as good as the regular classes, in terms of the size of the classroom, teaching methods adopted and materials used in learning.

> Our extra classes started a couple of months ahead of the pre-test examinations of SEE. The classes were helpful to revise our lessons, but nothing was done differently in the extra classes.
>
> **- A control IS girl in Dhangadhi**

Table 2: Perception of improvement[7] in learning performance since midline

	Treatment	Control
Yes	86.30%	75.30 %
No	13.70%	24.70%

[7] Improvement in learning performance defined as 'increased interest in learning', 'improvement in examination scores', 'improved understanding of lessons', among others.

The result is significant with a p value of 0.004

Source: Girls Survey | N=285 Treatment, 146 Control[8]

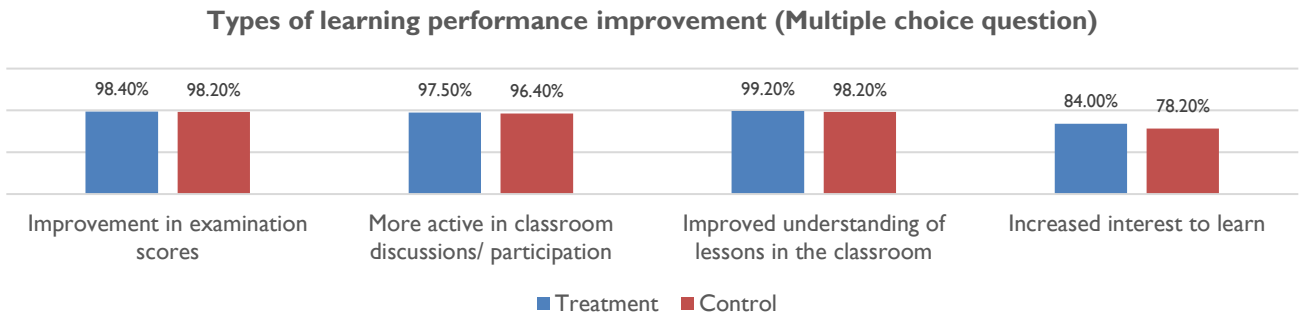


Figure 2: Types of learning performance improvement

Source: Girls Survey | N=246 Treatment, 110 Control

Even though the girls lauded the support they received from girls' clubs in improving their studies, according to a survey finding, most of the girls said they find regular classes more enjoyable than the girls' club. We explored this during our qualitative consultations, where it was observed that the girls find girls' club classes more focused on studies, while there is more space to chat with friends, enjoy the company of both boys as well as girls, indulge in other friendly activities, among others, in the regular school classrooms. However, the enjoyment component in the studies in regular school classrooms was found to be a result of girls' improved confidence and esteem, that stems from their engagement in the girls' club.

> It is true that we got to learn more in the girls' club classes. But when it comes to fun, regular classes in school are not too studious, we are free to talk with friends, share casual stuff, and enjoy a lot.
>
> **- A treatment girl from Dhangadhi**

[8] As significant proportion of control population made a shift from rural to urban locations from midline to endline, we ran the analysis for the recontacted (panel) control and intervention girls as well, considering this a caveat. Nevertheless, the results are similar for both the analysis – panel (104 control girls) and cross-sectional (146 control girls). Panel and cross-sectional results on learning perceptions included in Annex 3: Learning Outcomes.

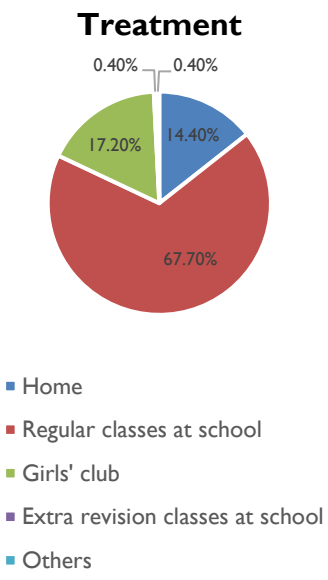


Figure 3: Where is it more fun to study? (Treatment)

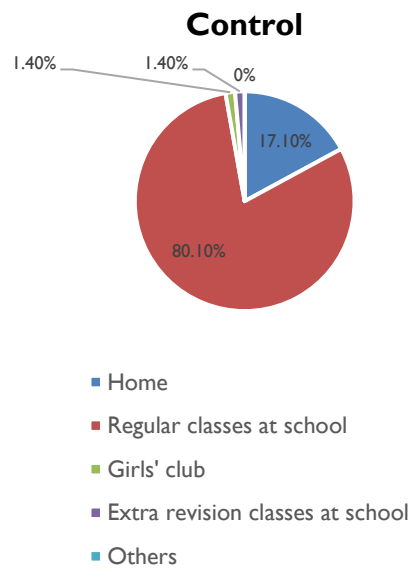


Figure 4: Where is it more fun to study? (Control)

Source: Girls Survey | N=285 Treatment, 146 Control

On a different note, in light of the interventions received by both treatment as well as control girls, especially ahead of their SEE exams of grade 10, the mean GPA score of both treatment and control girls is about 2.50. As already mentioned above, as a result of prolonged impact of the COVID-19, the SEE exams were not held this year, and the girls were graded for secondary school examination by their respective schools on the basis of their internal exams score and other learning performance. The head-teachers we interacted with in the course of this study said that as this was not foreseen, schools generally faced difficulties in marking the students for SEE, as many of them did not have detailed record of girls' overall learning performance, apart from their internal exams score. Out of 285 treatment girls, leaving aside the girls who had to repeat grade while transitioning from grade 9 to 10 due to low scores, 277 were in school last year, out of which 241 graduated from the SEE with a mean GPA score of 2.48. Likewise, out of 146 control girls, 144 were in school last year, out of which 126 graduated from the SEE with a mean GPA score of 2.55. The difference in mean of the GPA score of treatment and control girls is not statistically significant, with p value 0.319.

Apart from the girls' club classes, the girls also attributed their learning performance improvement to their decreased engagement in household chores. In a retrospective recall, the treatment girls interacted with in the course of this study said their involvement in household chores had decreased even before they reached class 10. Especially as grade 10 examinations are regarded with high importance in the context of Nepali education, where the SEE exams are also referred to as the 'iron gate', the students as well as parents alike tend to emphasize the studies of the students studying in grade 10. This reflects an indication of shift in parental and girls' attitude and practice towards gender roles and focusing more on education. This finding also aligns with the finding from midline, where it was evident that the number of hours that the girls were involved in household chores had significantly reduced. The control girls also said their involvement in household chores decreased last year as they were preparing for the SEE exams.

As shown in Figure 5, in terms of parental support, a greater number of girls in the treatment group (97.20 percent) in comparison to the control group (89.70%) said they receive support from parents to stay in school and do well in studies. Some of the common forms of support are 'moral encouragement', 'financial help', 'help with homework', and 'allocation of ample study time both in and outside home'. This difference is a result of the project's longstanding engagement with the parents of treatment girls, through household dialogues, community-level sensitization activities, among others. During qualitative discussions, parents of the treatment girls demonstrated an increased willingness to support further studies of their daughters by continuing to encourage them in learning with reduced household chores, financial support, among others. The same level of willingness to support and positive attitude could not be observed among the parents of control girls.

> It is unlikely that the girl may continue her studies, as she has had a long break after the SEE exams due to COVID-19. For now, she has been helping the family in household chores. I don't know what will happen in the immediate future.
>
> **- A parent of the control girl from Sukhad**

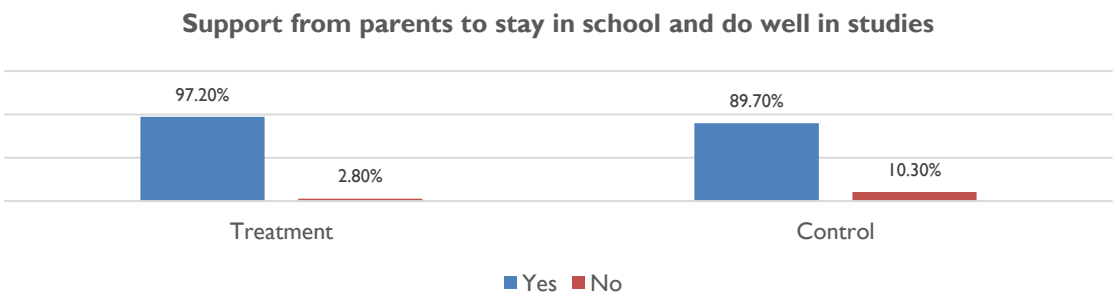


Figure 5: Support from parents to stay in school and do well in studies
Source: Girls Survey | N=285 Treatment, 146 Control

The same difference in the attitude of treatment and control parents can be observed in the finding presented in Figure 6 and 7 below, where a greater percentage of treatment girls, in comparison to the control group said, their parents helped them whenever they were faced with any difficulty in learning. Reflecting higher parental support in the treatment group in comparison to the control group, 18.70 percent of the girls said parents helped them during difficulty in learning, against 8.50 percent in the control group. This finding was found to be statistically significant with p value 0.001. Likewise, while 22.40 percent of treatment girls said they were helped by their older siblings, the percentage is lower in the control group at 7 percent.

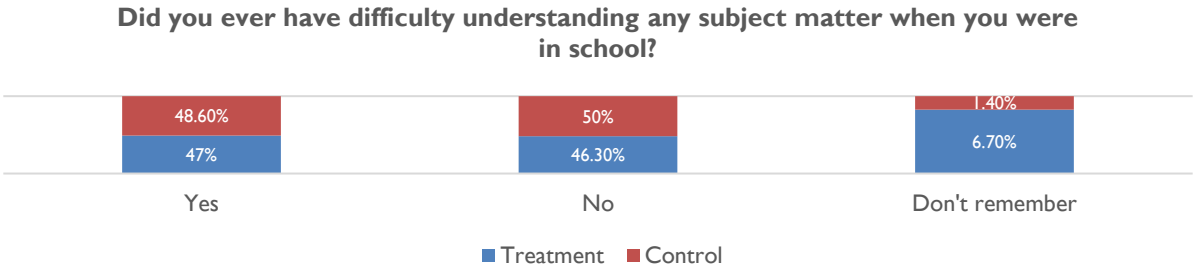


Figure 6: Did you ever have difficulty understanding any subject matter when you were in school?
Source: Girls Survey | N = 285 Treatment, 146 Control

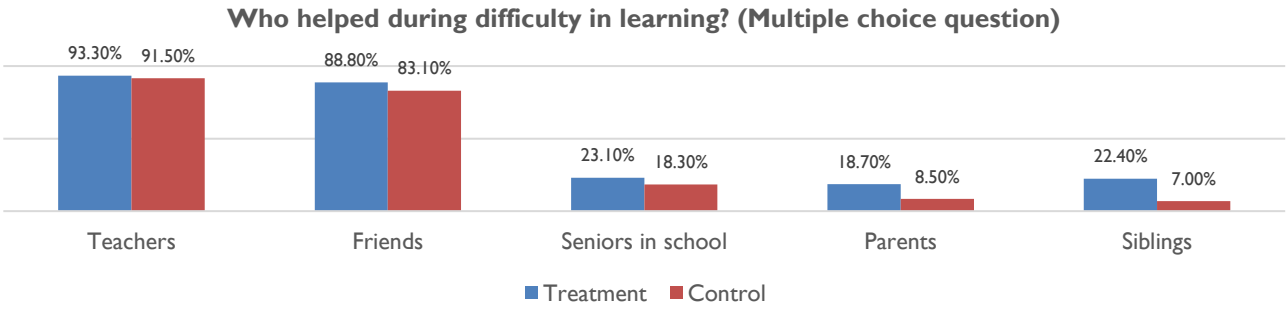


Figure 7: Who helped during difficulty in learning?
Source: Girls Survey | N = 134 Treatment, 71 Control

In terms of the girls' plans for the future, over 90 percent of both treatment and control girls said they want to continue/ re-join education, as they have now graduated from SEE. While 34.90 percent of the girls said they are willing to engage in formal employment, 10 percent said they want to initiate business.

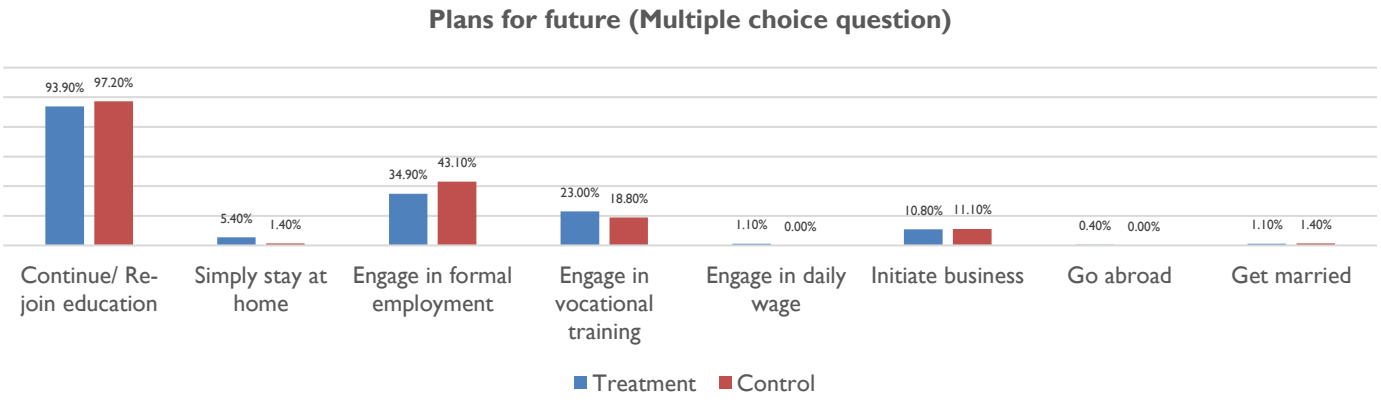


Figure 8: Plans for future
Source: Girls Survey | N = 285 Treatment, 146 Control

When asked what level of schooling the girl wanted to achieve, 68 percent said they want to study up to bachelors or master level. Only about nine percent of the girls in both treatment as well as control group said they want to study up to 10+2, which is higher secondary level, as per

the earlier government categorization. As of now, government's policy identifies education up to 10+2 as secondary schooling.

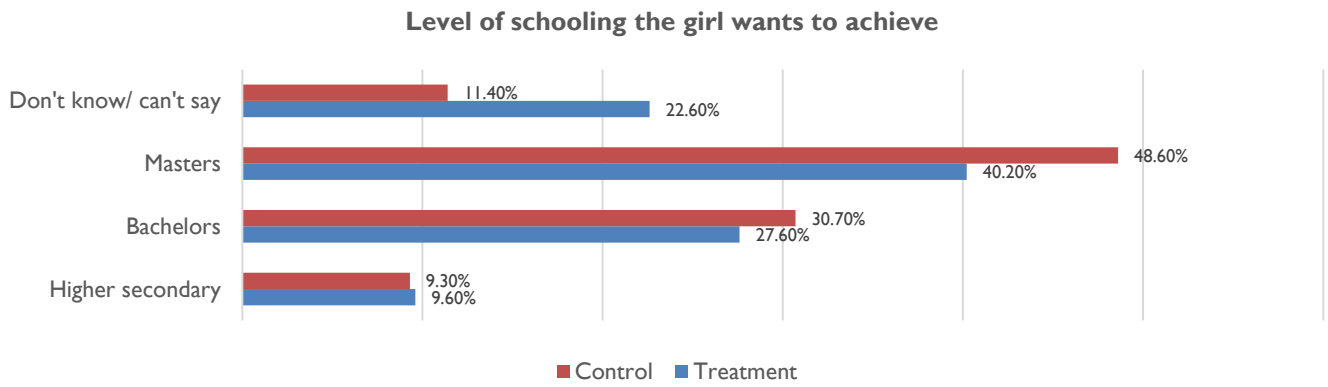


Figure 9: Level of schooling the girl wants to achieve
Source: Girls Survey | N = 261 Treatment, 140 Control

3.1.2. Sub-group analysis of the learning outcome

Tables 3 and 4 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. The key characteristics used to analyze girls' perception about their improved learning performance are: ethnicity, location, local government they belong from, marital status, primary caregiver/ head of household's level of education and households with more than five family members. Likewise, the household-level barriers such as girls' engagement in household chores, motherhood, household support, and the impact of COVID-19 on learning and future aspirations have been used to present an intersection between barriers and the learning outcome.

As we can see in Table 3, in terms of ethnicity, girls belonging to Dalit ethnicity have relatively lower perceptions of learning performance improvement, in comparison to other ethnic groups. The reason behind this can be attributed to the history of marginalization that Dalit communities have been facing in the cultural fabric of Nepali society. It can also be observed that perception about improved learning performance is generally higher in the treatment than control group.

Similarly, in terms of location, within the treatment group, girls' perception about learning performance improvement is lower in the rural communities in comparison to urban areas. As with ethnicity, it can be observed that perception about improved learning performance is higher in the treatment than control group. During qualitative consultations, it was found that the amount of household chores that the girls are expected to undertake is higher in the households from rural communities in comparison to the urban areas. This is mainly due to the extensive engagement of rural households in agricultural work and animal farming. While the parents of urban households were found to be largely engaged in paid jobs, rural parents were dependent on agriculture and animal husbandry. In the houses that keep animals, girls were found to be engaged in animal care and cleanliness. In terms of municipalities, perception about learning

performance improvement was found to be higher in the treatment, in comparison to the control group, across municipalities.

A lower number of treatment IS girls (3.50%) were found to have been married, of whom only 50 percent believed their learning performance has improved. On the other hand, the level of education of primary caregivers/ head of the households and size of the family both do not seem to be significantly affecting girls' learning performance in the treatment group. However, in the control group, a lower percentage of girls whose primary caregivers/ head of the households are not educated or those living in the family of more than five members demonstrated positive perceptions about their learning performance improvement. Qualitative consultations highlighted an increased level of parental awareness about girls' education and the need for more commitment in learning through reduced household chores and increased study time in the treatment group in comparison to control group, which explains why this potential barrier is not affecting the treatment girls as much as the control group.

Table 3: Cross-tabulation of key characteristics and learning performance improvement

	Treatment	**Control**
Ethnicity		
Brahmin (n = T 105, C 65)	91.43%	78.46%
Tharu (n = T 117, C 67)	87.18%	71.64%
Janajati (n = T 25, C 7))	80%	85.71%
Dalit (n = T 36, C 7)	72.22%	71.43%
Muslim (n = T 2, C 0)	100%	NA
Location		
Urban (n = T 60, C 35)	93.33%	91.43%
Semi-urban (n = T 75, C 68)	90.67%	73.53%
Rural (n = T 150, C 43)	81.33%	65.12%
Local government		
Tikapur (n = T 27, C 8)	96.29%	62.5%
Kailari (n = T 80, C 23)	90%	78.26%
Ghodaghodi (n = T 54, C 21)	85.18%	95.23%
Dhangadhi (n = T 80, C 78)	85%	75.64%
Gauriganga (n = T 17, C 7)	82.35%	71.42%
Bardagoriya (n = T 27, C 9)	74.07%	33.33%
Married		
Yes (n = T 10, C 0)	50%	NA
No (n = T 275, C 146)	87.63%	100%
Primary caregiver/ HoH without education (n = T 68, C 50)	86.76%	78%
More than 5 family members in the HH (n = T 172, C 93)	89.53%	77.41%

Source: Girls Survey | Household Survey

Similarly, in terms of barriers, only 50 percent of the girls who said they do not get support to stay in school and do well demonstrated positive perception about their learning performance improvement. Out of 10 IS girls from the treatment group who were married, three already had a child. The early motherhood seems to have had an impact on girls' learning performance as only 33.33 percent of them believed that their learning performance has improved. 80.48 percent of the IS girls from the treatment group said their learning performance has improved despite

their full-time engagement in household chores. The number is lower in the control group, at 68.18 percent.

Likewise, 86.61 percent of the IS girls from the treatment group who believed COVID-19 has affected/will affect their aspirations regarding work or studies demonstrated resilience towards their learning improvement. This number is lower in the control group, at 76.74 percent.

Table 4: Cross-tabulation of key barriers and learning performance improvement

	Treatment	Control
Household-level barriers		
Does not get support to stay in school and do well (n = T 8, C 15)	50%	46%
Mother (n = T 3, C 0)	33.33%	NA
Girl involved in household chores whole day (n = T 41, C 22)	80.48%	68.18%
COVID-19		
Believes COVID-19 has affected/ will affect future aspirations regarding work/ studies (n = T 254, C 129)	86.61%	76.74%

Source: Girls Survey | Household Survey

3.1.3. Impact of COVID-19 on learning

The COVID-19 pandemic categorically affected learning in both treatment as well as control schools. The schools remained shut from the early months of the new academic session of 2020 and also halted the final examination of the earlier academic session. STEM's beneficiary girls, who were awaiting SEE board exams around March-April, 2020, were affected as the exams got indefinitely postponed. After several months of delay, SEE exams were finally cancelled centrally by the government of Nepal and the girls were graded by their respective schools on the basis of their school performance, internal exam scores and attendance. Due to prolonged nation-wide lockdown, the girls were forced to stay home, halting their learning engagements in the girls' club, peer learning, among other activities.

In that light, almost 90 percent of the girls (89 percent treatment and 88 percent control) believed that the ongoing COVID-19 pandemic has affected or will affect their future aspirations regarding studies or work. When asked what exactly is likely to affect them, most of the girls (over 70 percent) reported that they are starting to lose interest in the studies due to the long gap in attending schools. Similarly, more than 25 percent of the girls expressed concerns about the financial hardship that their respective families are facing due to COVID-19. The finding was resonated by all the stakeholders interacted with in the course of qualitative discussions. Girls, parents, school-level stakeholders, government representatives, all stated that the COVID-19 has had a lasting impact on education.

> As the classes have remained closed for a long period of time, it is impossible to deliver full course in the curriculum. Things that are going to be missed in this academic session will have to be carried over to the next class next year. This is a transitional crisis that will continue for at least three years to come. Even though the classes resume soon on a full fledge, the impact of COVID-19 is here to stay.
>
> **- A head-teacher of a control school in Tikapur**

On a brighter prospect against the impact of COVID-19, as we can see in Figure 11 below, girls demonstrated strong resilience to deal with unprecedented problems brought about by the pandemic. More than 85 percent of the girls said they are capable of dealing with the current crisis and still be persistent on their dreams and aspirations for the future.

Most of the IS girls (nearly 70 percent) said they can start self-learning or with peers/ friends/ family/ siblings even if formal classes don't start immediately in a smooth functioning. During qualitative observations, the treatment IS girls were found to be in regular touch with their peers from the girls' club. Some of the girls said they discussed about learning options and further studies post SEE. Similarly, 22.10 percent girls from the treatment group and 14.20 percent from the control group said they can develop skills and train themselves to fit into the job market.

Most of the girls did not recognize online learning as a viable alternative in the immediate future, owing to lack of equipment as well as limited internet connection. However, they demonstrated an awareness about different sites that they can refer to for learning. The girls stated that they got this information from the radio learning programme aired by STEM II project to support learning during COVID-19. In areas that have proper access to the internet, girls were found to be starting to develop an interest in self-learning on the internet. A girl that we interacted with in Dhangadhi said she has started using learning from YouTube tutorials on her mobile phone, on a friend's suggestion.

I have my own mobile phone and I have been using internet for a long time already. I mostly watch songs, videos and movies on the internet. Recently, a friend of mine explored YouTube tutorials on basic accountancy. Since I am finding it difficult to understand an account lesson in college, I am planning to go home and explore how the tutorial can help me today after this interview.

- A treatment girl from Dhangadhi, who got enrolled in grade 11 recently

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Nevertheless, most of the other stakeholders, including girls themselves as well as teachers/ head-teachers said they do not see any possibility of smooth online delivery of lessons. Most of the school girls do not have their own mobile phones. Moreover, during COVID-19, a huge number of students are said to have temporarily shifted to their village houses, mostly in the hilly districts of far-western region. In such locations, even the students with mobile phones were unable to join online classes due to erratic internet facility. Likewise, many of the girls do not own their own smart phones, which they could use for online learning.

This is the problem of the whole country. It is true that schools have not been able to implement online learning as suggested by the government.

- An education officer in Sukhad

Treatment **Control**

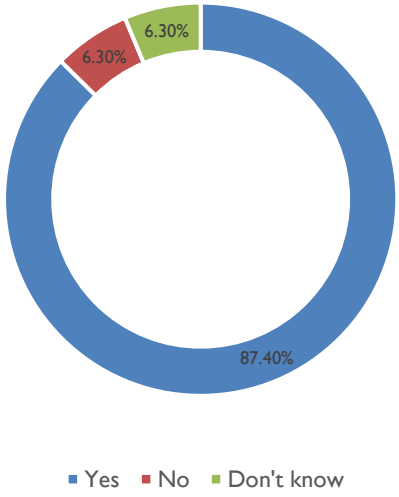

Figure 10: Treatment girls who believe they can be persistent on their dreams and aspirations for the future despite COVID-19

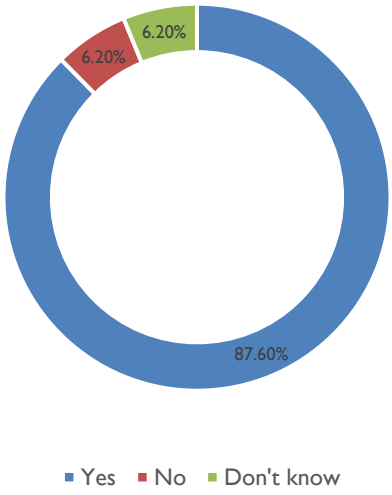

Figure 11: Control girls who believe they can be persistent on their dreams and aspirations for the future despite COVID-19

Source: Girls Survey | N = Treatment 254, Control 129

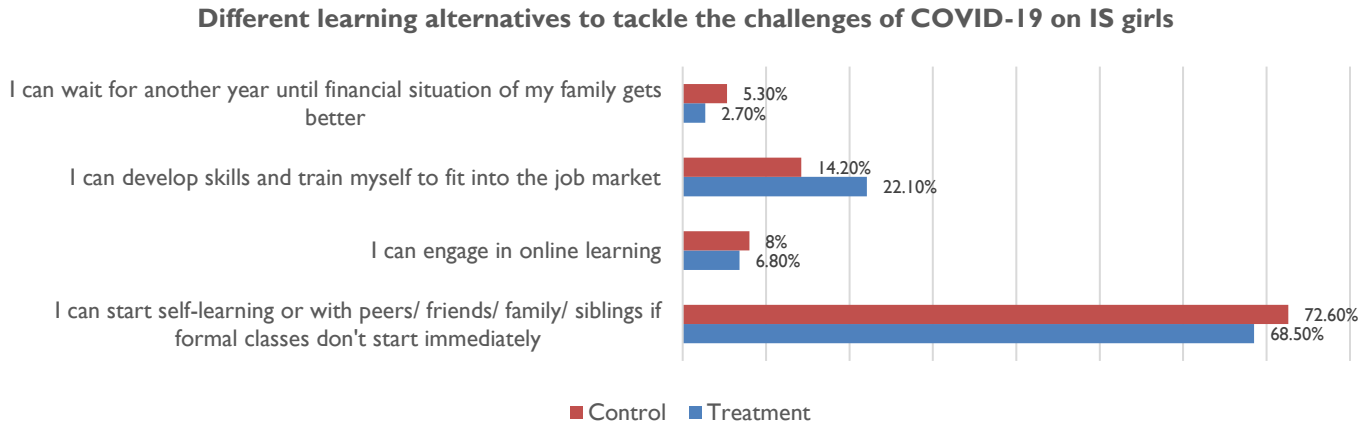

Figure 12: Different learning alternatives to tackle the challenges of COVID-19 on IS girls

Source: Girls Survey | N = 222 Treatment, 113 Control

Meanwhile, the project was found to have reached out to the beneficiary girls during the COVID-19 crisis, extending possible support activities. While 54.40 percent of the IS girls from the treatment group said they received support from STEM II to tackle problems that they faced in learning because of COVID-19, only over five percent girls from the control group said they received such support. During qualitative discussions, it was observed that girls generally perceive physical support such as distribution of study materials as the support received from project. A number of girls who were aware about radio classes did not know that the program was a part of the project.

In the treatment group, of those who received the support, 65.20 percent said they were provided with COVID-19 safety materials, followed by 32.30 percent, who also received study

materials from the project. Support provided during the time of crisis was found to have been useful, as only about four percent of the girls said they did not find the support so effective.

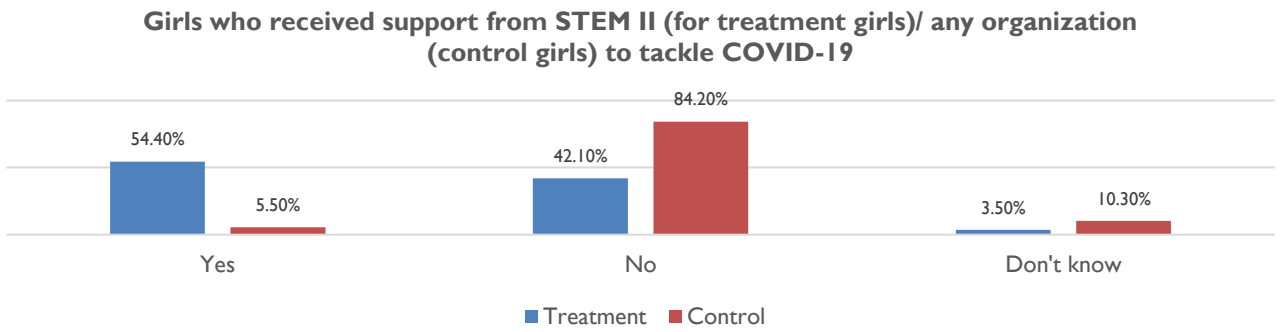

Figure 13: Girls who received support from STEM II (for treatment girls)/ any organization (control girls) to tackle problems that they faced in learning because of COVID-19
Source: Girls Survey | N = 285 Treatment, 146 Control

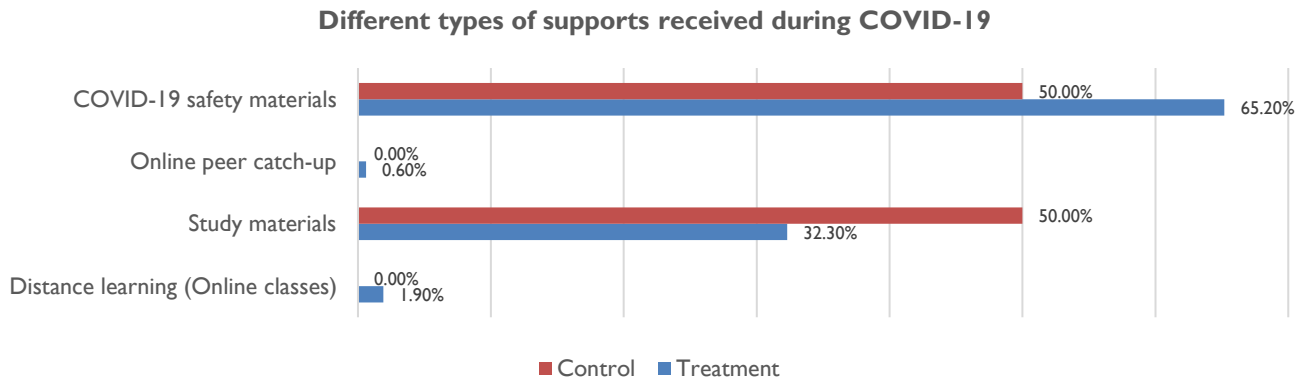

Figure 14: Different types of supports received during COVID-19
Source: Girls Survey | N = 155 Treatment, 8 Control

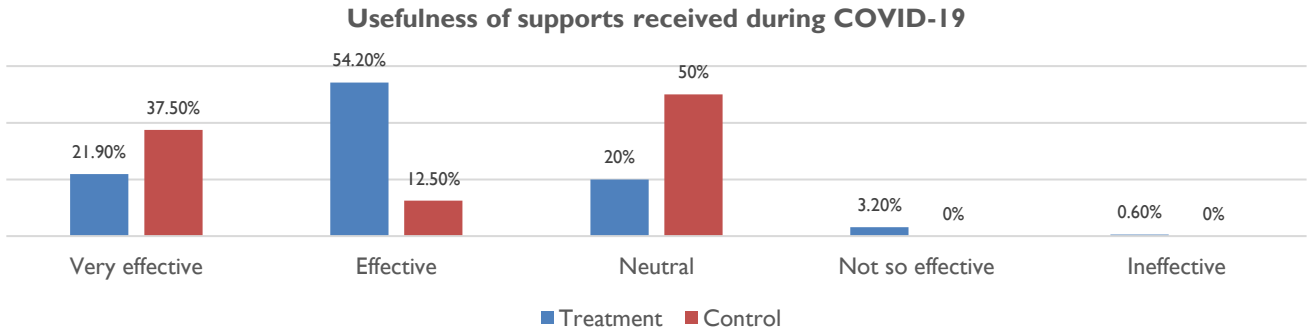

Figure 15: Usefulness of supports received during COVID-19
Source: Girls Survey | N = 155 Treatment, 8 Control

3.2. Transition outcome

The transition outcome was also re-designed at the endline. As agreed among the project team, external evaluator and the Fund Manager, the focus of transition outcome at end-line was directed towards observing the effectiveness of different combinations of training and loan support that the project delivered to the OOS group. The effectiveness of different combinations of youth financial literacy training (YFLT), business skills development training (BSD), vocational training (VT) and girls transition fund (GTF) loan, was observed in terms of girls' confidence, livelihood opportunities that they were able to avail out of STEM's support, decision-making ability in the household, girls' self-efficacy and agency.

Table 5: Total number of SG/ OOS beneficiaries who received economic support training packages and support from project

STEM Activity	SG/ OOS Recipients
YFLT	1069
BSD	1033
VT	560
GTF	434

Source: Project data

In line with this re-design, a new indicator to measure the percentage of girls who demonstrate increased confidence, decision-making ability, self-efficacy, livelihood opportunities and agency was introduced at the end-line.

3.2.1. Performance against indicator

Indicator: Percentage of girls who demonstrate increased confidence, decision making ability, self-efficacy, livelihood opportunities and agency; as a result of different training/ intervention combinations of STEM II (VT, YFLT, BSD and GTF)

An aggregate of 60 percent of OOS population in the sample demonstrated increased confidence, decision making ability, self-efficacy, livelihood opportunities and agency, as a result of different training/ intervention combinations of STEM II's economic development component/ OOS intervention (VT, YFLT, BSD and GTF).

Breaking it down by different combinations of the trainings and support received, Figure 16 below presents that the training combinations that include GTF loan support are generally effective in

stimulating girls' confidence[9], livelihood opportunities[10], decision-making ability[11], self-efficacy[12] and agency[13].

For instance, girls who have received all the trainings – YFLT, BSD, VT and GTF – demonstrated confidence, livelihood opportunities, decision-making ability, self-efficacy and agency, between 70 to 100 percent, which is better than that observed among girls who have received other combinations of the trainings. As the numbers with the reported 100 percent are very small, this should be considered as a caveat.

Although it can be clearly seen that confidence, livelihood opportunities and decision-making ability is similar across all groups, self-efficacy and agency can be found higher among the group that has also received loan support from STEM II.

This finding largely resonates with the finding from qualitative consultations, where girls who have received STEM's GTF loan demonstrated encouraging evidence of their life-changing experiences, their outlook towards future and agency to excel by further improving the quality of life by exploring more options and opportunities to engage in better employment, expand their already existing business or initiate a new business.

I started my tailoring business in Sukhad with the money I received in loan from the project. Initially, my family did not encourage me in this venture as I had to travel 45 minutes in bicycle to reach the shop in Sukhad. There were some community members that tried to convince my husband that I'd rather stay home as it was risky to travel long distance in bicycle every-day. However, as I had already started the shop, there was no option before my family to stop me from running it as otherwise they would have to pay the loan amount themselves. The shop picked up very well, and in no time, I started supporting family expenses with my income. I cleared the loan amount in just one year. I have employed a friend from my village at my shop, and the community members no longer try to discourage us travelling 45 minutes in cycle every-day to the shop. My life has changed in my terms.

- A girl in Sukhad

In another example, a girl whose family ran a small grocery shop in Tikapur, obtained STEM's GTF loan and expanded the family business by adding cosmetic products. With the remaining amount, she also initiated a poultry farm on her own land. Her example demonstrates how the

[9] CONFIDENCE: Competence to engage in employment in relevant area of skill/ expertise | Confidence to speak up if injustice is happening to the girl (any sort of discrimination such as unequal pay, opportunities, limited freedom, etc.) | Confidence to speak up if the girl sees any injustice happening to people around her

[10] LIVELIHOOD OPPORTUNITIES: Skilled enough to survive on her own earning | Believes she has equal livelihood opportunity as a male with similar skills | Believes she is knowledgeable about the available resources to pursue different livelihood opportunities

[11] DECISION-MAKING ABILITY: Parents have started to listen to her views when making decisions about her | Decision at the HH equally valued as male siblings | Able to take key decisions about her personal life including marriage | The girl can now plan and decide on when to have children | Believes she is the primary decision maker when it comes to her business

[12] SELF-EFFICACY: New General Self-Efficacy Scale by Chen, Gully, and Eden (2001)

[13] AGENCY: http://pubdocs.worldbank.org/en/487641466185525738/2016-05-31-Measuring-Womens-Agency.pdf)

support she received fueled her confidence, livelihood options, decision-making ability, self-efficacy and agency.

> I have taken STEM's beauty-parlour training as well. My next move would be to save some money from this business and start my own beauty-parlour. I have already talked about it with my husband, and he is very much okay.
>
> **- A girl in Tikapur**

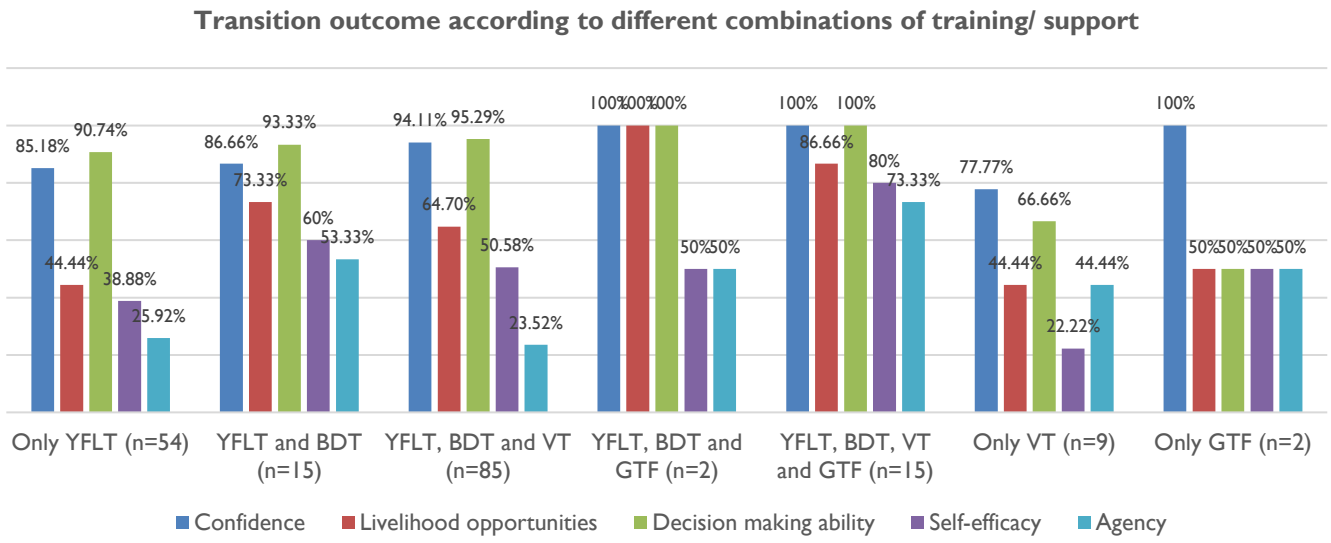

Figure 16: Transition outcome according to different combinations of trainings and supports received by SG/ OOS girls
Source: Girls Survey

3.2.1.1. Youth Financial Literacy Training (YFLT)

39.30 percent of the OOS girls surveyed were found to have taken YFLT. Of them, 97.30 percent girls said the YFLT has helped them increase their knowledge and skills. Likewise, 77.40 percent said the training has been useful in their professional and personal life, as they have learnt how to save more (54 percent), open a bank account (36.20 percent), calculate interest (49.20 percent), knowledge about financial institutions in their area (49.20 percent), family budget planning (30.30 percent), among others.

During qualitative discussions, girls who have taken YFLT said that the knowledge and skills they gained came to their use only when they took other supportive training such as BSD and VT, and either got employed somewhere or started their own business.

> Things that we learnt in YFLT were technical. Initially, I was not sure how or where I would use those skills and knowledge. Only when I started working at a tailoring shop after receiving vocational training from STEM, I started using the skills that I got through YFLT.

- A YFLT training recipient from Tikapur

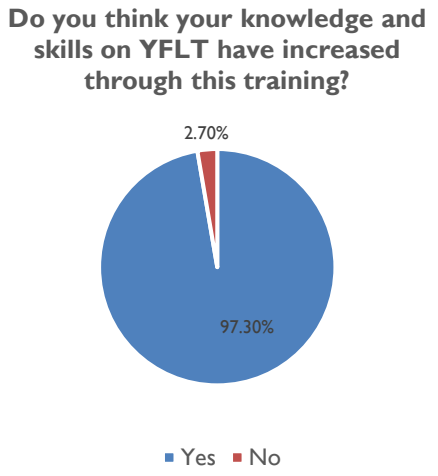

Figure 17: Do you think your knowledge and skills on YFLT have increased through this training?
Source: Girls Survey | N = 186

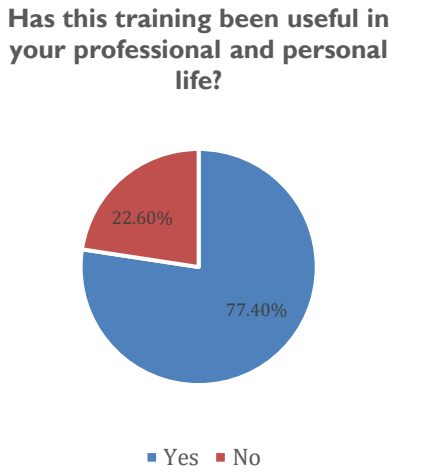

Figure 18: Has this training been useful in your professional and personal life?
Source: Girls Survey | N = 186

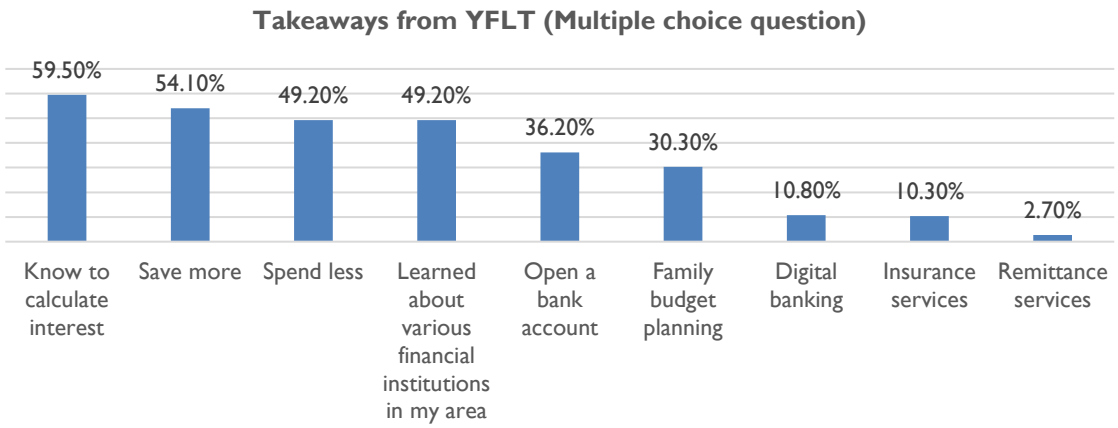

Figure 19: Takeaways from YFLT
Source: Girls Survey | N = 186

3.2.1.2. Business Skills Development Training (BSD)

About 35 percent of the girls in the sample were found to have taken BSD training from STEM II. Of them, 87.90 percent said the BSD is helpful in their current business or to start up a business/ or employment. While 50 percent of the girls who have taken BSD said they have not had the opportunity yet to use the training knowledge, but are hopeful about using it in the coming days, 22.40 percent said they have already started their own business, followed by another 20 percent who said they are currently thinking about possible opportunities to utilize the knowledge gained through BSD. A number of girls said their plan on using these skills by getting employed or starting their own venture got delayed in 2020 due to COVID-19.

A beneficiary from Sukhad said BSD was useful to her particularly because she got to learn how a woman like her can start and run a business. According to her, BSD also helped to boost her confidence, with regards to initiating a business. After taking BSD, she enrolled in a vocational training on cooking and started a restaurant.

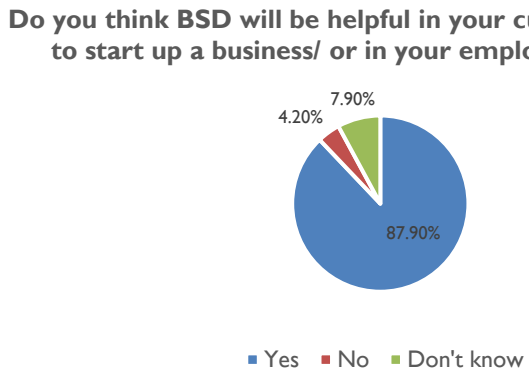

Figure 20: Do you think BSD will be helpful in your current business or to start up a business/ or in your employment or job?
Source: Girls Survey | N = 165

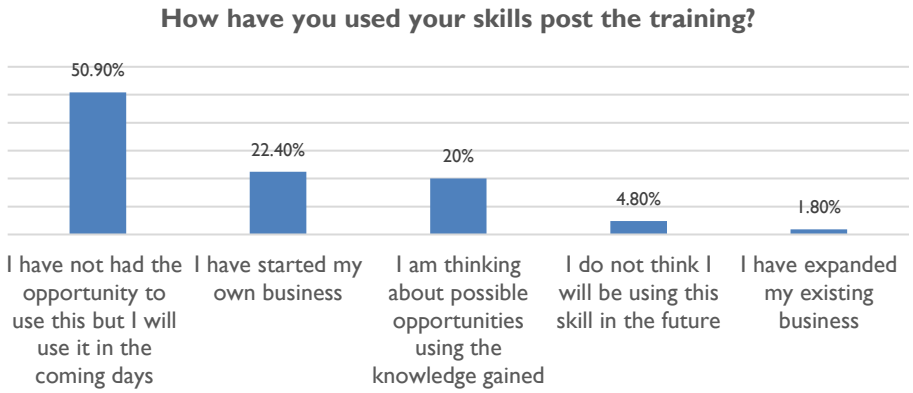

Figure 21: How have you used your skills post the training?
Source: Girls Survey | N = 165

3.2.1.3. Vocational Training (VT)

33.40 percent of the girls, meanwhile, said they have received different kinds of vocational training provided by the project. Another 10 percent of the girls have received vocational trainings provided by government institutions in their area. The most common forms of vocational trainings are beauty parlour, tailoring, embroidery, cooking, animal husbandry, among others. During STEM I, project had also included trainings on non-traditional trainings for women, such as mobile phones repairing, driving, among others. However, as these sectors are largely dominated by men, women faced difficulty in finding their place in such jobs, which questioned the effectiveness of the vocational training they received. As a result of this learning, trainings provided during STEM II were focused on the areas that women can easily get employed.

Out of the girls who received vocational trainings from STEM II, 23.40 percent said they plan on using skills obtained by starting up a business in the related area and 20.90 percent said they are currently exploring business options or job opportunities. Likewise, 46.80 percent said they don't expect to use the skill immediately, but it is always helpful to learn new skills. When we probed this further during qualitative discussions, girls who have not already started work or business after receiving the VT are relatively less confident about being able to utilize the skills in the future, in comparison to girls who had already started working somewhere or initiated their own business in the related area of skill/ expertise.

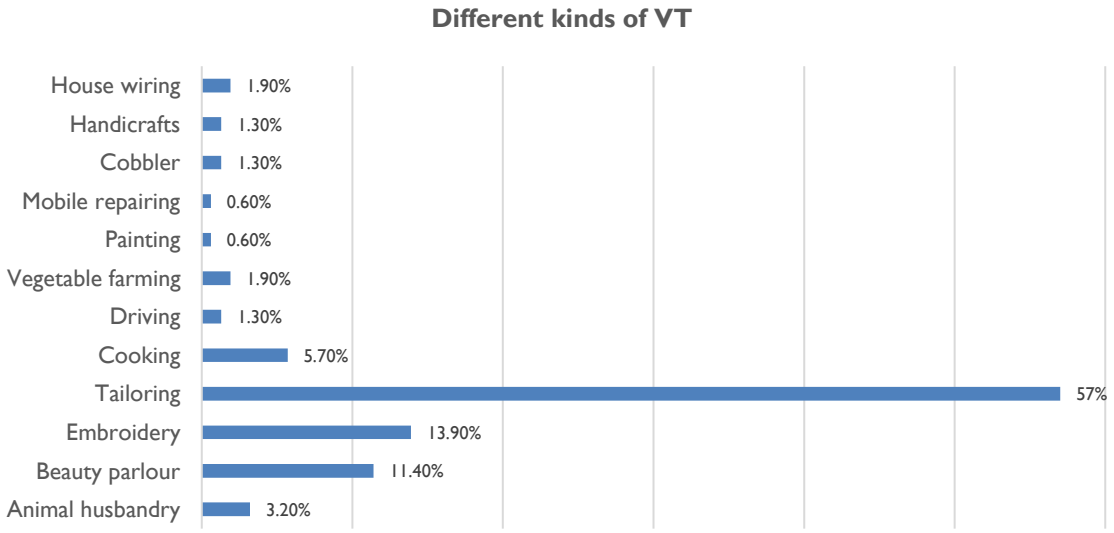

Figure 22: Different kinds of VT
Source: Girls Survey | N = 158

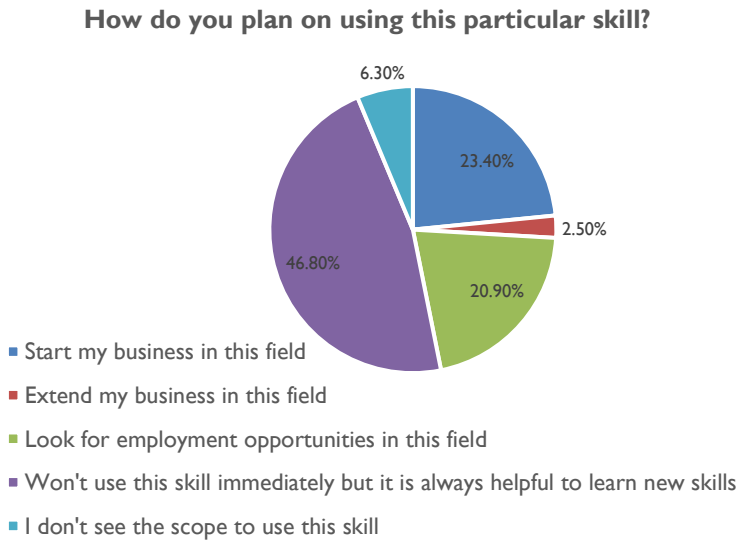

Figure 23: How do you plan on using this particular skill?
Source: Girls Survey | N = 158

When asked which aspect of the personal development the training helped to flourish, majority (63.90 percent) said the training helped their problem-solving skills to flourish, which is followed by self-esteem (33.50 percent) and networking (2.50 percent). Likewise, more than 75.30 percent of the girls who have received VT said the training will be helpful in their employment with increased career opportunities.

Meanwhile, during qualitative consultations, STEM's vocational training recipients said that of all the training combinations, VT is the most useful one as it provided them with employable skills which they could use for income generation.

> All of STEM's training are useful as the knowledge and skills we gain through YFLT and BSD come to use in our everyday lives. However, vocational training provided us with skills that can actually translate into income generation.
>
> My husband works as a driver, and during COVID-19 pandemic, he lost his job. As we ran out of regular source of income, I used my saving that I had managed to deposit in a bank with my job at an embroidery shop. If I did not have that saving, my family would have faced a lot of difficulty at the time of crisis. Now that the job has already resumed, we have started saving again.
>
> **- An OOS girl in Dhangadhi**

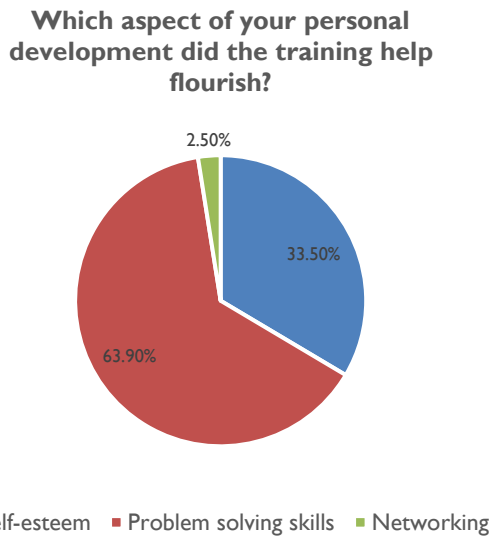

Figure 24: Which aspect of your personal development did the training help flourish?
Source: Girls Survey | N = 158

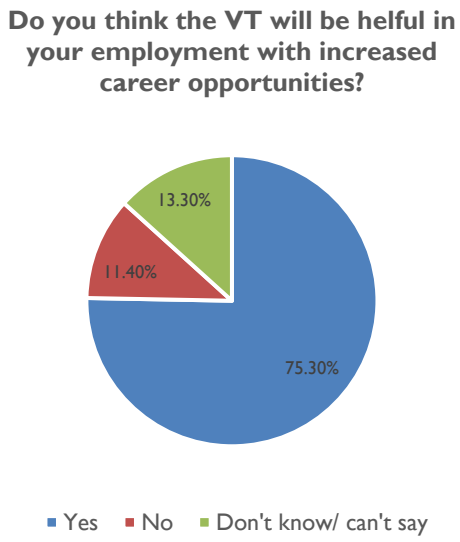

Figure 25: Do you think the VT will be helpful in your employment with increased career opportunities?
Source: Girls Survey | N = 158

3.2.1.4. Girls Transition Fund (GTF) loan support

A comparatively low number of girls were found to have taken GTF loan support from the project. Out of 7.80 percent of girls who have received the GTF support, 91.90 percent of the girls said they took the loan to start up a new business, followed by 8.10 percent who expanded

their existing business after taking the loan. This is mainly because of the limitations resulting from fixed budget availability with the project and the requirement to pay the loan back in given time. The period of the loan is estimated based on the amount of loan taken and the status of the girl. The loan period usually extends from one year to three years and loan payback for expansion business starts immediately after a month and for the startup businesses, they can repay the loan three months after they have started their business. The loan amount ranges from NPR. 30,000 to NPR. 250,000. Some of the most common forms of businesses that the girls are engaged in with the help of GTF loan support are grocery shops, animal husbandry, tailoring business, candle production, embroidery business, restaurants/ eateries, among others.

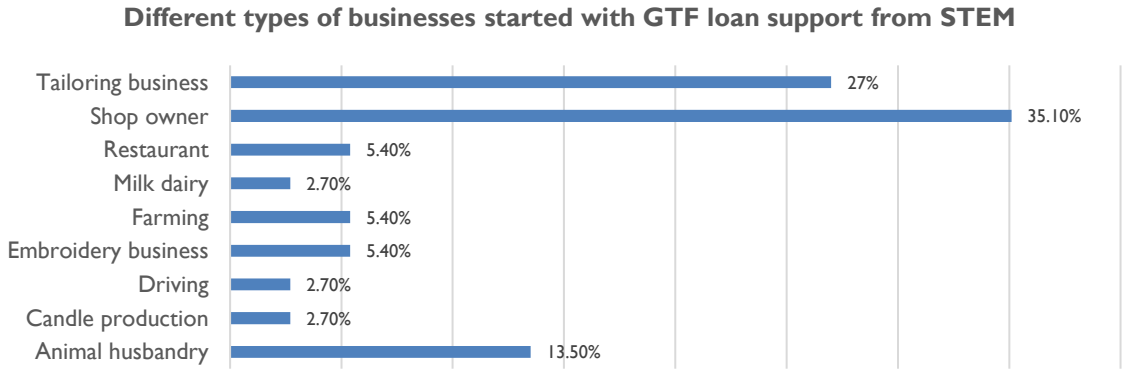

Figure 26: Different types of businesses started with GTF loan support from STEM
Source: Girls Survey | N = 37

86.50 percent of the girls who have received GTF loans to establish or expand their business expressed confidence in their own capacity. 94.60 percent said that opening and running a business has made them more confident with their family and community. Moreover, all (100 percent) of the GTF loan receivers surveyed reported to have gained more status and decision-making power within the household since they became a business owner. Meanwhile, 86.50 percent of the girls said they have been supporting their family financially. In terms of the income from business initiated/ expanded through GTF, more than 50 percent of the girls said their annual income is between NPR. 50,000 (313.057 GBP) and NPR. 100,000 (626.114 GBP) or above that[14].

GTF was found to be particularly helpful to the girls who did not have capital to initiate their business. As already discussed above, STEM's loan support not just provided these girls with capital to invest, but also the confidence and life-changing self-esteem and agency.

[14] 1 GBP = 159.715 NPR

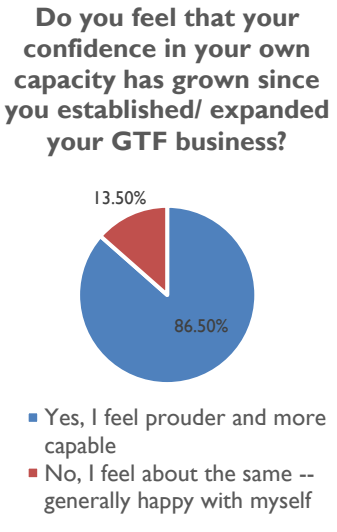

Figure 27: Do you feel that your confidence in your own capacity has grown since you established/ expanded your GTF business?
Source: Girls Survey | N = 37

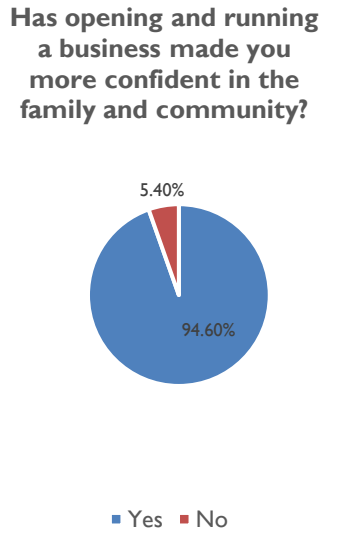

Figure 28: Has opening and running a business made you more confident in the family and community?
Source: Girls Survey | N = 37

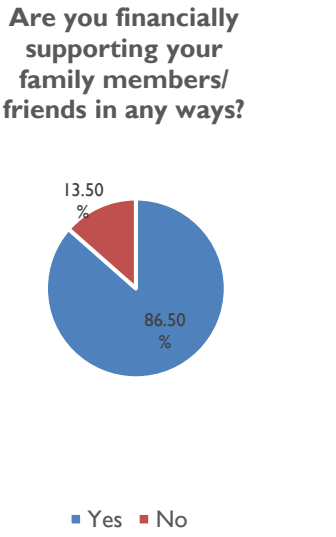

Figure 29: Are you financially supporting your family members/ friends in any ways?

Source: Girls Survey | N = 37

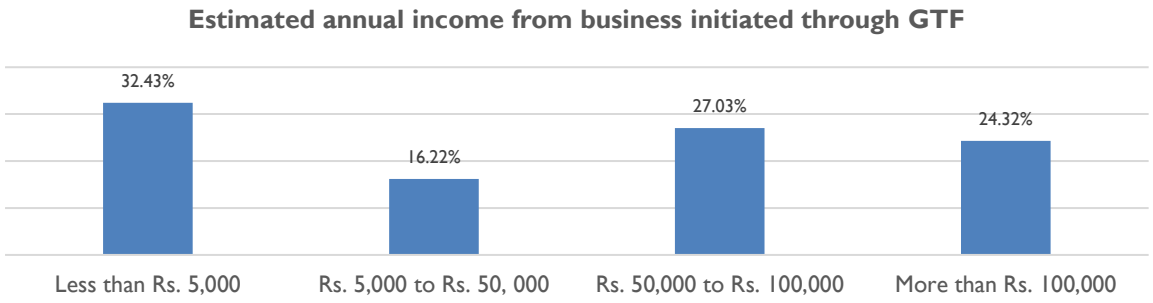

Figure 30: Estimated annual income from business initiated through GTF
Source: Girls Survey | N = 37

3.2.2. Sub-groups analysis of the transition outcome

Tables 6 and 7 below present the intersection between key characteristics and the confidence, livelihood opportunities, decision-making ability, self-efficacy and agency of the SG/ OOS girls. The key characteristics taken into account are girls' ethnicity, municipality, marital status, education level of the head of the household and family size. Likewise, the key barriers used to cross-tabulate the given domains of transition measurement are "households reporting girls' restriction of mobility", engagement in household chores and girls believing that the COVID-19 pandemic will have a lasting impact on their future aspirations regarding work or business.

In terms of ethnicity, confidence of the surveyed girls is all above 85 percent. Likewise, girls belonging to Brahmin ethnicity demonstrated relatively higher livelihood opportunities in comparison to the other ethnic groups (71 percent). In the Nepali caste/ ethnicity structure, Brahmins are placed in the highest order, whereby they leverage on most of the resources and opportunities available. This practice has historically marginalized people belonging to other castes/ ethnicities all over the country. The livelihood opportunities availed by Tharu and Dalit

girls stand at about 60 percent, followed by about 47 percent for girls belonging to Janajati ethnicity. The decision-making ability is highest among the Janajati girls (95 percent), followed by Tharu (76 percent), Brahmin (69 percent) and lowest in the Dalit group (50 percent). Dalit girls demonstrated highest self-efficacy at 90 percent, followed by Brahmin (69 percent), Tharu (62 percent) and Janajati (25.53 percent). Agency is comparatively lower among all ethnicities. While 30.85 percent Janajati girls demonstrated agency, the number stands at 20.69 percent and 21.59 percent of girls belonging to Brahmin and Tharu ethnicities respectively. Owing to a history of caste/ ethnicity-based marginalization in the Nepali community, Dalit girls demonstrated lowest level of agency at 5 percent.

In terms of municipalities that the girls belong to, all five domains of transition measurement were found to be performing on a similar scale, with agency standing out as the lowest performing domain. Likewise, marital status, education level of the head of the household and family size of the girls were also not found to be affecting their confidence, livelihood opportunities, decision-making ability, self-efficacy and agency.

Table 6: Sub-group analysis of transition outcome by characteristics

	Confidence	Livelihood opportunities	Decision-making ability	Self-efficacy	Agency
Ethnicity					
Brahmin (n = 58)	89.66%	70.69%	68.97%	68.97%	20.69%
Tharu (n = 301)	88.37%	60.13%	76.41%	62.79%	21.59%
Janajati (n = 94)	84.04%	46.81%	94.68%	25.53%	30.85%
Dalit (n = 20)	95.00%	60.00%	50.00%	90.00%	5.00%
Local government					
Bardagoriya (n = 37)	97.30%	75.68%	83.78%	59.46%	24.32%
Dhangadhi (n = 157)	83.44%	52.87%	74.52%	57.32%	17.83%
Gauriganga (n = 48)	89.58%	60.42%	68.75%	56.25%	18.75%
Ghodaghodi (n = 107)	92.52%	51.40%	85.05%	58.88%	30.84%
Kailari (n = 85)	84.71%	68.24%	82.35%	47.06%	24.71%
Tikapur (n = 39)	89.74%	64.10%	69.23%	74.36%	17.95%
Married					
Yes (n = 205)	88.29%	59.51%	88.78%	54.15%	24.88%
No (n = 268)	87.69%	58.21%	69.78%	59.70%	20.90%
Primary caregiver/ HoH without education (n = 149)	85.23%	58.39%	77.85%	55.70%	26.17%
More than 5 family members in the HH (n = 275)	88.36%	58.55%	80.00%	56.36%	20.73%

Source: Girls Survey | Household Survey

In terms of barriers, households reporting that the girls are not allowed to live outside the community for work/ business was found to be affecting girls' confidence, livelihood opportunities, decision-making ability, self-efficacy and agency, as all the domains are below 80 percent. Meanwhile, the other household-level barrier – girls' involvement in the household chores – was found to be affecting girls' livelihood opportunities and self-efficacy as both were found to be below 65 percent. Similarly, girls who believe that the COVID-19 pandemic has affected/ will affect their future aspirations regarding work or business, was found to be a barrier in girls' livelihood opportunities, self-efficacy and agency.

Table 7: Sub-group analysis by barriers

	Confidence	Livelihood opportunities	Decision-making ability	Self-efficacy	Agency
Household level barriers					
Restriction of mobility [Girls not allowed to live outside the community for work/ business] (n = 28)	75.00%	64.29%	78.57%	53.57%	14.29%
Girl involved in household chores whole day (n = 87)	93.10%	62.07%	80.46%	63.22%	25.29%
COVID-19					
Believes COVID-19 has affected/ will affect future aspirations regarding work/ business (n = 391)	87.98%	61.64%	81.59%	58.57%	24.81%

Source: Girls Survey | Household Survey

3.2.3. Impact of COVID-19 on transition

The COVID-19 crisis has had an immediate impact on the SG/ OOS group. 82.70 percent of the girls believe that the ongoing COVID-19 pandemic has affected or will affect their future aspirations regarding livelihood, income generation and better life. While 76.50 percent of these girls reported financial hardship being faced by their respective families as a key impact of the COVID-19, 12.30 percent girls said they may not get enough job opportunities in the future. Likewise, 11.30 percent of the girls said they had to stop their business because of the pandemic and subsequent prolonged lockdown.

Similar findings were echoed during qualitative discussions as well, where SG/ OOS girls said the major impact of COVID-19 was loss of income. The girls who had been able to keep some saving from their work or business prior to COVID-19 sustained their needs. However, the girls who were not yet engaged in any form of work or business expressed regret over not being able to support their families even at the time of crisis.

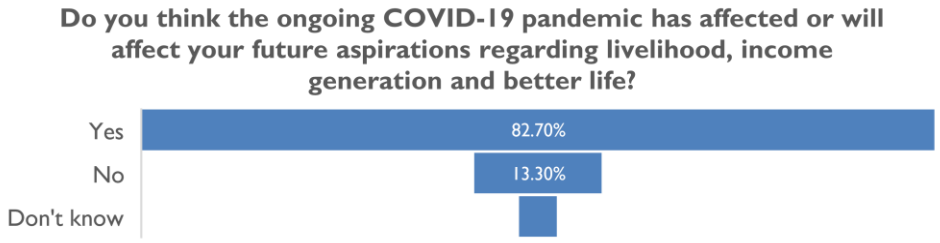

Figure 31: Do you think the ongoing COVID-19 pandemic has affected or will affect your future aspirations regarding livelihood, income generation and better life?
Source: Girls' Survey | N = 473

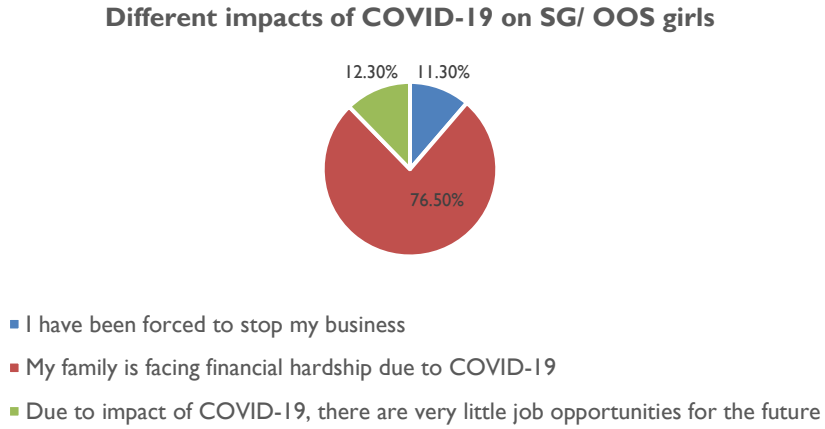

Figure 32: Different impacts of COVID-19
Source: Girls' Survey | N = 473

In comparison to the IS girls, the SG/ OOS girls demonstrated limited resilience in terms of their confidence in dealing with the problems they have been faced with due to COVID-19 crisis. Only 54.50 percent of the girls said they can deal with the problems and still be persistent in their dreams and aspirations for the future. Out of that, 77.50 percent of the girls believe that things will get back to normal in time as they are not the only one affected. 14.70 percent believe that they can develop skills and train to fit into the job market in the future.

Likewise, disaggregating the resilience among girls who have already started their own business, 64.06% of the girls demonstrated resilience. Out of them, most of the girls (63.41 percent) believed that they are not the only ones affected by the training and things would get back to normal in time. Similarly, 34 percent said they can develop their skills and train further to fit into the job market in future.

In terms of resilience, a difference was observed between the girls who have started work or business and the girls who are not engaged in any form of work or business. For instance, the girls who had been running their own business or working somewhere even before the pandemic had managed to save some money, which came of use at the time of crisis. Especially as they were able to contribute to the family in difficult times, their self-confidence and esteem was found to have increased. Even though a number of these girls lost their jobs or had to stop their business or during COVID-19, they were found to be more confident and with a positive outlook towards the future. A number of these girls have already returned to work or business as the crisis has eased a little bit recently.

On the other hand, the girls who were not engaged in employment prior to COVID-19 crisis are comparatively more negative about being employed somewhere in the immediate future and demonstrate limited resilience. According to them, it will be difficult to get jobs as they do not have any prior experience. Some of these girls also believed that there will not be as many jobs as before in the post-COVID-19 situation.

Table 8: SG/ OOS girls' resilience against COVID

	All SG/ OOS girls	SG/ OOS girls who have started their own business
Yes	54.50%	64.06%
No	17.80%	18.75%
Don't know	27.70%	17.18%
	N=473	**N=41**

Source: Girls Survey

Table 9: Different forms of resilience observed among SG/ OOS girls

	All SG/ OOS girls	SG/ OOS girls who have started their own business
I am not the only one affected. Things will get back to normal in time.	77.50%	63.41%
I can develop skills and train myself to fit into the job market	14.70%	34.14%
COVID-19 crisis can only delay my dreams, not cancel them all	5%	2.43%
I have a good support network of family and friends. These can be helpful in difficult times.	2.70%	0%
	N=258	N=41

Source: Girls Survey

Only 15.20 percent of the girls reported to have received support from STEM II to tackle problems that they faced due to COVID-19. As with the IS girls, the SG/ OOS girls also demonstrated an understanding that support refers to the physical help they received from the project. Apart from that, unlike the IS group, there was no dedicated online support like radio classes for the SG/ OOS girls. Out of that, 13.90 percent of the girls said STEM extended the loan pay-back time. 84.70 percent of the girls said they received COVID-19 safety materials from STEM. Meanwhile, out of 37 GTF recipients, 54.05 percent girls said they have received support from STEM II during COVID 19. Over 72 percent of the girls said these supports from the project were effective. A project official interacted with during the course of this study said none of the loan recipients were put under any pressure to keep paying back their loan installments during the time of crisis. Moreover, the loan interest was also reduced from eight percent earlier to five percent. An OOS girl in Sukhad confirmed this, appreciating the project's support and attitude towards them during lockdown.

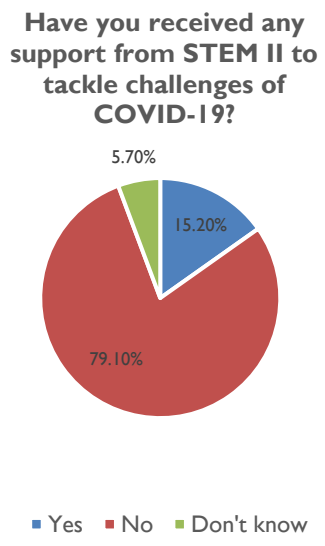

Figure 33: Have you received any support from STEM II to tackle challenges of COVID-19?
Source: Girls Survey | N = 473

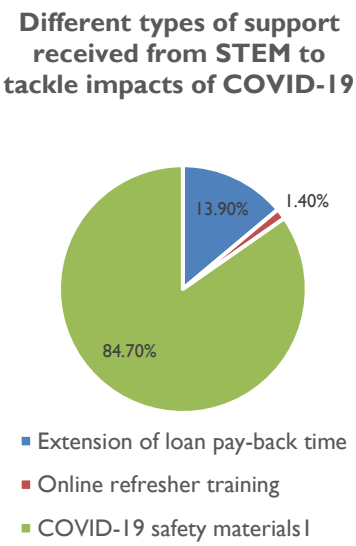

Figure 34: Different types of support received from STEM to tackle impacts of COVID-19
Source: Girls Survey | N = 72

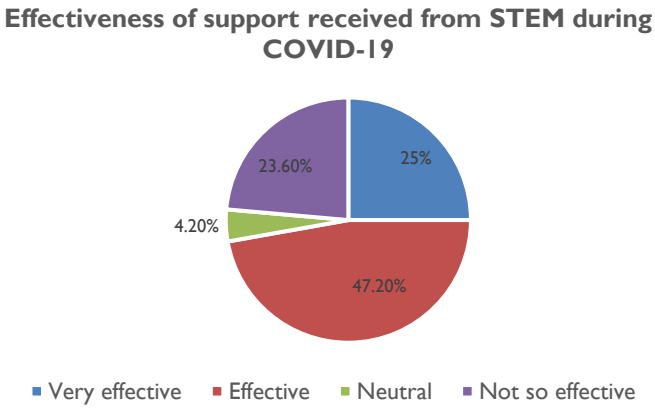

Figure 35: Effectiveness of support received from STEM during COVID-19
Source: Girls Survey | N = 72

3.3. Sustainability outcome

For the end-line evaluation, project sustainability has been measured by the extent to which STEM's work will be sustained across schools and government systems. The sustainability indicators for end-line have been redesigned around the ownership and scale-up of project activities by the relevant stakeholders at school and system level. The findings generated from this evaluation will aid in replicating or scaling up future interventions.

Table 10 below presents our rating of the school and government institutions, as mentioned in the indicators. The rating is based on evidence and our observations of the stakeholders' orientation towards sustainability of STEM's efforts and achievements. Explanation and the basis of rating and evidence have been presented in the following sections.

Table 10: Sustainability rating according to indicators

Sustainability indicators	Rating
Initiatives/ decisions taken by school management to retain support received from STEM II	High
Level of STEM II support to provincial/ local governments to develop education plans focusing on improvement of girls' education and safeguarding policies	High
Best practices of STEM II retained and supported by local governments	Medium

Source: Qualitative consultations

Indicator 1: Initiatives/ decisions taken by school management to retain support received from STEM II

At the school level, we came across several measures taken to retain the support received from STEM II. The infrastructure development interventions, such as classroom support, separate toilets for girls and boys, sanitary pad distribution and disposal facility, drinking water facility, among others, were found to be functioning well. The schools have been continuously maintaining these infrastructural supports, which paints a bright picture in terms of sustainability of STEM's achievements made through support to school infrastructure.

While the sustainability of infrastructure is largely visible, there is a lot of other nuanced evidence of sustainability. For instance, as the girls' club classes run by the project proved to be highly effective in improving the learning of girls, a number of schools have already started practicing remedial classes involving both boys as well as girls. These remedial classes are run outside of regular school hours. Although the prolonged impact of COVID-19 halted these remedial classes for the time being, the schools are keen on resuming these extra classes soon as the COVID-19 situation eases.

> In the immediate future, our remedial classes, which we learnt from STEM II, will not only support in learning performance improvement of the students. But we will also be able to cover up the curriculum that have been badly affected due to COVID-19 and subsequent lockdown. We have also been lobbying with the local government to support this effort in our school and replicate it in other schools as well.

- A head-teacher from Tikapur

A major finding from the midline evaluation was that schools do not have a functional mechanism for the transfer and sharing of skills and knowledge between trained and non-trained teachers. This was found to be hindering the sustainability of STEM's efforts towards improving teaching quality. However, the end-line evaluation came across evidence where some of the schools have developed a formal mechanism mandating the transfer and sharing of skills and expertise between different teachers. For instance, one of the treatment schools has formulated different subject committees, where teachers of a particular subject sit down together periodically and discuss different methods of teaching, innovative approaches towards child-centered learning, among others. Apart from that, most of the schools still practice sharing of learning and knowledge through trainings received in an informal structure, during discussions among teachers, staff-meeting of the school, among others.

Similarly, schools have become increasingly sensitive about safeguarding issues and child protection. The school stakeholders we interacted with in the course of this study mentioned that they have started incorporating needs around such sensitive issues, such as maintenance of gender-friendly infrastructure, sanitary pad distribution, needs for sports equipment for girls, among others, as well in the school improvement plan.

Earlier, school improvement plan used to be a kind of formality that we all found overburdening. After our exposure with STEM II, we slowly understood how a proper SIP can make the difference, not just in terms of receiving support from government and other institutions, but also prioritizing the areas of improvement at school-level. Even after the project phases out, our practice of taking SIP seriously and incorporating needs and voices of students, parents, teachers, among other related stakeholders, will sustain.

- An SMC chairperson from Dhangadhi

Despite promising evidence that demonstrates high level of ownership, replication and scale-up at school level, COVID-19 and its impact on education is a serious challenge that the schools are faced with of late. As mentioned above, schools have shown positive attitudes and readiness towards sustaining the efforts of STEM II. However, as completing the course hampered by several months of COVID-induced closure is the most immediate and pressing challenge ahead of schools, it is likely to push aside other priorities and achievements made by the project, such as child-friendly learning, improvement of school environment, inclusive education, among others. Also, the level of teachers' motivation, has also been largely affected due to financial troubles invited by the pandemic. This is another area to look into in the immediate future at the school level.

Lastly, when we went to the schools for quantitative and qualitative consultations during end-line evaluation, the treatment schools that have been closely working with the project so far, expressed some level of dependency on the project, as they expressed expectations of other similar projects and supports in the future. However, as we interacted and assessed the capacity

of school to sustain achievements and efforts even without the help of STEM II, all of the treatment schools were found to be strong and capable in their own capacity. For instance, the school-based stakeholders are largely aware and sensitized about the need for gender-friendly infrastructure, student-centered learning, child-friendly pedagogies, among many others. Even without a continued project support, the schools will sustain these activities in the future. Apart from that, some of the schools have also been collaborating with the local government to generate funds for the improvement of school infrastructure, implementation of strategies outlined in the School Improvement Plan (SIP), among others. While it is obvious for the schools to keep expecting support that they have been receiving, negative forms of dependency and incompetence in their own capacity was not observed in any of the STEM schools, which is a bright picture when viewed through the lens of sustainability.

Indicator 2: Level of STEM II support to provincial/ local governments to develop education plans focusing on improvement of girls' education and safeguarding policies

After the first year of project implementation, in 2017, Nepal underwent a major governance reform with the implementation of federalism. With new local governments in place, STEM's government engagement devolved from one earlier to six new local units. While this change in governance system brought about new challenges, it also introduced newer opportunities to work closely with the more powerful local government bodies and engage with them towards forming and acting upon education sector improvement from the very beginning.

Following this reform, STEM got up to the adaptive management principle and immediately revised its model of engagement with local bodies. Some of the notable efforts of the project in this regard is capacity building of the local governments in formulation of education plans, policies, collaboration with schools, among others. In this process, the project advocated to the government bodies to include and incorporate key achievements and activities into the education plans of each of the new local units. By the time the end-line evaluation was conducted, five out of six local governments had their education plans in place, which incorporated key aspects of STEM's interventions around child protection, girls' education, inclusive principles, school infrastructure reform, among many others. During qualitative consultations, some of these local governments were also found to have already started collaborating with project's treatment schools and supporting their efforts in continuing STEM's activities in different forms. As already mentioned above, a school in Tikapur has already started running remedial classes with the support of the local government. In another example, sanitary pad distribution has been owned up by all of the local governments. All of the schools that we visited during end-line evaluation said they have been receiving support from the local government for the distribution of sanitary pads.

Apart from that, the project has been rolling out the key findings from its monitoring assessments as well as periodic evaluations to the local government, which has helped them in an evidence-driven planning process. This is key to strengthening the capacity of local governments in evidence-based formulation of plans and strategies for education development.

> I highly appreciate STEM's effort in continuously feeding us with data and information, so that we could have evidence-based plans and strategies for the development of education sector as a whole. There are certain aspects related to continuation of remedial classes, inclusion of safeguarding and protection strategies in our education plan, among many others, that we learnt from this project.
>
> - An education officer in Dhangadhi local government

As a result of the project's continuous engagement with local governments and its contribution towards reforming the education sector in Kailali, Mercy Corps has secured a respected place in the education cluster of provincial as well as federal governments. As the entire education sector was struggling to stand up on its feet during COVID-19 pandemic and subsequent lockdown, Mercy Corps participated and influenced the formation of several policies and guidelines for re-opening schools, safety measures, protection policies, among many others. The COVID-specific policies for re-opening schools, maintaining safety, among others, were found to be effective in terms of mainly resuming education halted by the pandemic for about one year in 2020. Apart from that, the project has reached a total of 30 local governments in Sudurpaschim Province and shared proven tools and interventions, provided orientations. Moreover, Mercy Corps has been closely working with the provincial government on formulating provincial education plan, focusing on inclusive education.

In terms of challenges, as mentioned above, the prolonged closure of schools due to COVID-19 has brought completion of course and smooth functioning of the academic year as some of the pressing needs of the hour. Under these circumstances, the key challenge ahead of the project is to ensure that its activities and achievements made through STEM II are sustained on a longer run, warranting an immediate action and interventions from all related stakeholders as well as GEC towards this end.

Indicator 3: Best practices of STEM II retained and supported by local governments

As already mentioned above, the project's continuous engagement with local governments towards securing its activities and achievements in the girls' education sector for the longer run has resulted in promising prospects of sustainability through formation of policies, plans and guidelines. However, when it comes to bringing these commitments to practice, there still exists some gap. Although there are some evidence of local governments collaborating with some schools for the continuation of activities and achievements of STEM II, there is still a lot to be done in terms of replicating STEM's intervention models at a wider scale, not just in the schools in project area, but also outside the local governments where project was implemented.

This is again closely associated with the impacts of COVID-19 and the most immediate needs of the education sector, i.e., to ensure smooth functioning of the academic year and completion of the designed course of study. As a result of these pressing needs of the hour, commitments of the provincial and local governments to retain the efforts of STEM II, are likely to be delayed. However, as key elements of STEM's intervention models have already been included in the education plans of the local governments, activities are likely to see the light of day in future,

once the governments address the immediate needs of tackling against the challenges brought about by COVID-19. Nevertheless, even if the pandemic had not shown up or badly affected the education sector, it would be too early now to assess the level of retention of STEM's activities, especially as the project has not phased out yet.

Apart from the in-school intervention models, STEM II also came up with a unique and thoughtful model of intervention of SG/ OOS girls. With a view to expand the life chances and livelihood opportunities of SG/ OOS girls, the project exposed this group of beneficiaries to a longer-term engagement in several training packages which included financial literacy training, business skills development training, vocational training and finally the GTF loan support. This series of intervention aimed at readying the girls for the real-life challenges of livelihood and quality of life has turned out to be highly successful, as also highlighted in the 'transition' section of this report. There has been evidence of local governments supporting the recipients of STEM's vocational training with equipment for income generation, such as sewing machines for those who were trained on tailoring. Apart from that, since vocational training is also provided under the government's separate support programme for out of school girls, STEM II considered government's trainees as well as eligible candidates for receiving loan support from the project. This form of cross government-project support and collaboration is a best practice that should be retained and continued in the future as well.

Despite the evidence of collaboration and support between government and the project, we conclude that . STEM II has already reached out to most of the local governments in Sudurpaschim Province and provided training to more than 200 school teachers through NELTA and Math Teachers Association. Moreover, the project has provisioned for hard copy resources and distributed those in last quarter and also established an online knowledge management platform. GEC can integrate this learning into other projects as well and ensure a wide-scale dissemination and sharing of this learning from STEM II. STEM's theoretical understanding and principle behind the formation of such an intervention model involving girls in a series of training packages can still be communicated better with not just the local governments, but also at the provincial and federal levels

4. Key intermediate outcome findings

4.1. IO 1: Teaching practices

IO 1 – teaching practices, explores the extent to which the teachers use child-centered teaching methods, teachers' motivation towards self-growth/ improvement and sensitivity towards students' social and cultural background and learning levels.

During baseline/ midline, teaching quality was assessed using classroom observation. However, as the classes are not running in the context of pandemic, and also because STEM's beneficiary girls have already graduated from school, end-line assessment of teaching quality could not conduct classroom observation. Moreover, during midline evaluation major discrepancy was found between class observation data and qualitative information obtained through interaction with girls. For this reason, it was mutually agreed among the project team, external evaluator and the Fund Manager, to revise the IO and rather shift its focus on observing the difference in teaching practices between STEM-trained teachers and non-STEM-trained teachers of treatment schools and teachers of control schools. Apart from that, the end-line study also explores the practice of sharing knowledge and expertise among the teachers in intervention and control schools.

In order to assess teaching practices, a retrospective recall of the past one year was carried out with the girls who participated in the survey. They were asked to recall their learning memories when they were studying in grade 10, and express opinions about the teaching methods of different teachers. A similar pattern of inquiry was also followed during qualitative consultations. Apart from that, qualitative consultations were also carried out with STEM-trained and non-STEM-trained teachers, and different school-based stakeholders to gauge the extent to which sharing of knowledge and skills transfer between trained and non-trained teachers exist. As girls' response about the teaching practice is entirely based on how much they can recall their experience from past year, the analysis presented under this section should be considered a caveat, in a sense that there could be certain degree of recall bias in the viewpoint and perception of the girls.

4.1.1. Findings and interpretation

As we can see in Figure 36 below, a difference generally exists in the perceived teaching methods adopted by STEM-trained girls club facilitators (who also teach in respective schools) and other regular school teachers (who were not trained by STEM). For instance, 81.80 percent of girls reported that the GCFs (STEM-trained teachers of treatment schools) practice child-centered teaching methods. Likewise, while 69.10 percent of the girls said that non-GCFs (regular school teachers from treatment schools who were not trained by STEM) practice child-friendly teaching, only 49.30 percent of the control girls said their teachers practice child-friendly teaching in regular school classes.

Teachers who teach in the girls' club classes are very interesting, as they make our learning process fun. They divide students in groups and organize group presentations. Doing classwork in group is very much fun. The non-GCFs normally follow the lecture-based teaching.

- A girl from Dhangadhi

The same finding was reflected in qualitative discussions with teachers as well. The GCFs that we interacted with were elaborative about their teaching practices, approaches that they use to divide students in several groups and encourage them to participate by presenting their classroom activities in front of the whole class. On a superficial level, although the non-GCFs also stated they use 'child-friendly' pedagogies, when asked what were their approaches and methodologies in dealing with the students, they were unable to elaborate further.

Even though applying interactive teaching methods in the regular classes is not as comfortable as in the girls' club, mostly because of the large number of students, GCFs were found to have developed innovative ways to engage students in group-learning in regular school classes as well. The following case of a math teacher in a school in Tikapur demonstrates an example of it.

I usually group questions, according to different methods used in solving them. Then I divide the class into groups. One group of students engages in solving the problem using one method, while the other group of students solves problems using different method. Then I ask to volunteer one student each from all these groups to present the method in front of whole class. If there is any difficulty in the process, I intervene and explain the process further. As it is not possible to engage each student in classroom presentation, I find this way of grouping the types of mathematical problems effective.

- A GCF in a school in Tikapur

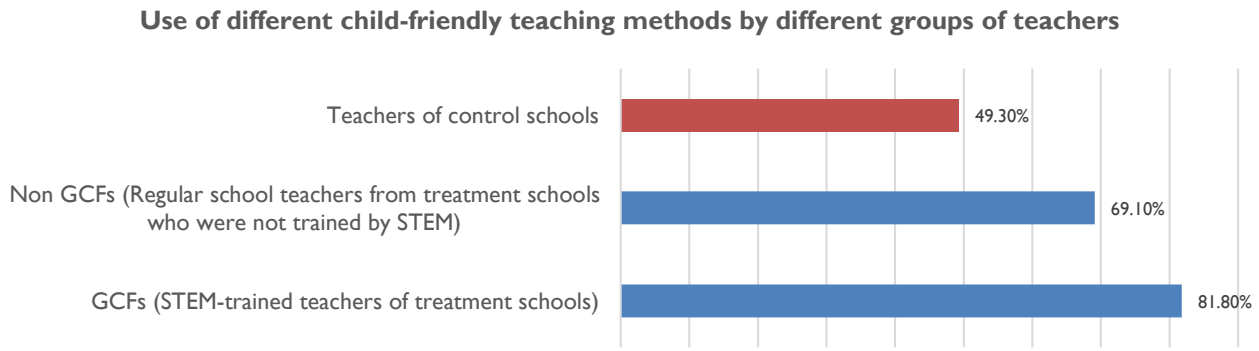

Figure 36: Use of different child-friendly teaching methods by different groups of teachers
Source: Girls Survey | N = Treatment 285, Control 146, SG/ OOS Girls 473

Those GCFs, non-GCFs and control school teachers who according to girls practice child-friendly methods in learning adopt common measures such as more group-work and classroom presentation, use of ICT (computers, projectors, etc.), use of library resources in regular learning, extra-curricular activities, among others. The girls also identified 'lesser punishment' as a child-friendly practice that the teachers use in regular school classrooms. As even some of the control school teachers have received trainings from government, according to 49.30 percent of control school girls who said their teachers use child-friendly teaching methods said the most common

measures taken by these teachers are group-work, use of library, ICT, lesser punishment, among others. Likewise, in terms of frequency, 47.20 percent girls said GCFs use these methods quite often in the classroom, 39.60 percent said non-GCFs and 45.10 percent control school teachers.

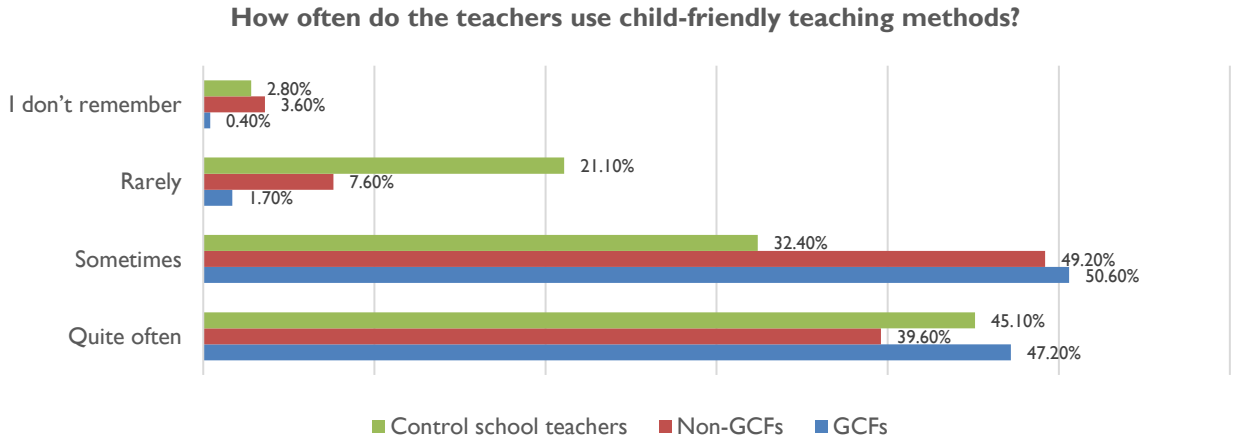

Figure 37: How often do the teachers use child-friendly teaching methods?
Source: Girls Survey | N = GCFs 233, Non-GCFs 197, Control school teachers 72

In terms of the relationship between teaching practices and learning outcomes, we have ample evidence from the midline evaluation as well end-line, arguing that the ways the teachers approach their students and respective lessons being delivered makes a difference in students' learning. As the teachers of girls' club classes are a lot more interactive and student-centered, this led to the improvement in literacy and numeracy performance of treatment girls, which we know from midline. While a gap was noticed in terms of transference of girls' club teaching practices to regular school classes, end-line finding suggests that the GCFs have been making an effort towards this direction, despite the challenges stemming from large classroom sizes and limited availability of teaching-learning resources, rigid course structure, among many others. However, when it comes to comparing the GCFs and non-GCFs, there still exists a similar gap that we highlighted even during mid-line. Some of the schools visited during the course of this study have been trying to mechanize the practice of sharing of knowledge between trained and non-trained teachers by forming subject-specific committees of teachers, where each committee is mandated to organize a sharing exercise once in every month. In another treatment school, sharing of knowledge and skills among the teachers generally takes place during staff meetings. However, although these mechanisms provide an encouraging prospect in the transfer of skills from trained to non-trained teachers, these mechanisms were not able to fully function this year due to COVID-19 and subsequent lockdown, which led to prolonged closure of schools.

Apart from that, with regards to the behaviour of teachers, the number of girls admitting that teachers treat boys and girls differently in the classroom has reduced from 24.79 percent in midline to 12.50 percent in end-line, which is statistically significant at p value 0.003. Similarly, girls agreeing that the teachers make them feel welcome in the classroom increased from 83.99 percent at midline to almost 100 percent at end-line. The absenteeism of teachers also decreased from 41.81 percent to 9.60 percent from midline to end-line.

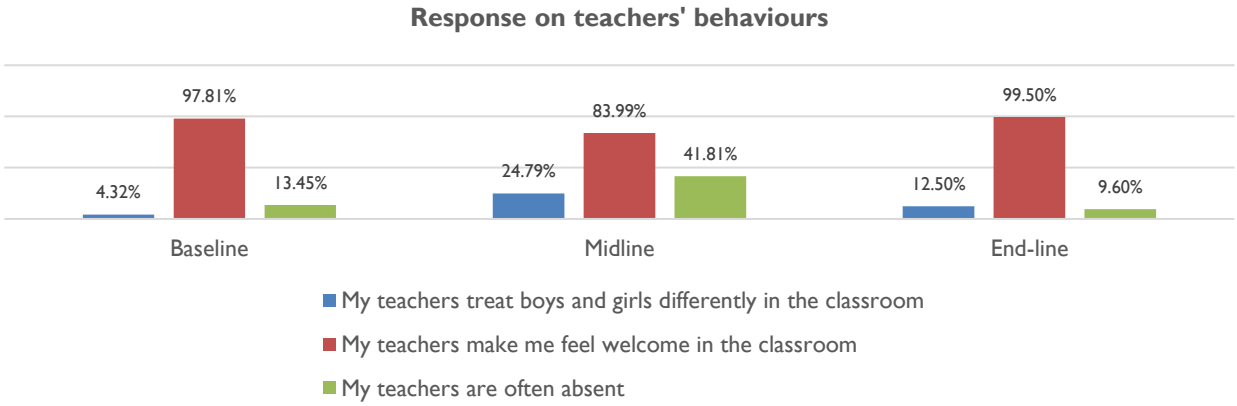

Figure 38: Response on teachers' behaviours
Source: Girls Survey | N = 285 Treatment

Meanwhile, while 54.40 percent of treatment girls said their teachers use "corrective measures" to reprimand students who get things wrong in a lesson, the percentage of same in the control group is 71.90 percent, reflecting a higher rate of punishment in the control schools in comparison to treatment schools. This percentage has decreased among IS girls as 64.7% of the girls had said during midline that their teachers use "corrective measures" to reprimand students who get things wrong in a lesson. According to girls, the most common forms of punishment are 'shouting' (82.60 percent), 'physical punishment' (45.10 percent) and 'detention' (2.10 percent).

4.1.2. Sub-group analysis of teaching practices

In terms of characteristics, as we can see in table 11 below, girls belonging to all ethnicities believe that GCFs generally practice more child-friendly teaching methods in comparison to the non-GCFs. This finding aligns with the general teaching practice trend as discussed above, where GCFs are better than the non-GCFs and treatment school teachers are generally better than the control school teachers. A similar trend can be observed while cross-tabulating the practice of using child-centered teaching methods across other characteristics such as location type and municipality. Similarly, in terms of girls' marital status, a greater percentage of unmarried girls stated that the teachers use child-friendly teaching methods across all groups.

Table 11: Sub-group analysis of teaching practices by characteristics of IS girls

	GCFs	Non-GCFs	Control school teachers
Ethnicity			
Brahmin (n = T 105, C 65)	85.71%	75.24%	50.77%
Tharu (n = T 117, C 67)	76.07%	59.83%	43.28%
Janajati (n = T 25, C 7))	88.00%	92.00%	57.14%
Dalit (n = T 36, C 7)	83.33%	69.44%	85.71%
Muslim (n = T 2, C 0)	100.00%	0.00%	NA%
Location			
Rural (n = T 150, C 43)	84.67%	75.33%	39.53%
Semi-urban (n = T 75, C 68)	85.33%	74.67%	51.47%
Urban (n = T 60, C 35)	70.00%	46.67%	57.14%
Local government			

Bardagoriya (n = T 27, C 9)	81.48%	92.59%	22.22%
Dhangadhi (n = T 80, C 78)	81.25%	66.25%	52.56%
Gauriganga (n = T 17, C 7)	70.59%	70.59%	57.14%
Ghodaghodi (n = T 54, C 21)	87.04%	77.78%	52.38%
Kailari (n = T 80, C 23)	86.25%	61.25%	39.13%
Tikapur (n = T 27, C 8)	66.67%	59.26%	62.50%
Married			
Yes (n = T 10, C 0)	70.00%	60.00%	NA
No (n = T 275, C 146)	82.18%	69.45%	49.31%
Primary caregiver/ HoH without education (n = T 68, C 50)	76.47%	64.70%	58.00%
More than 5 family members in the HH (n = T 172, C 93)	84.88%	70.93%	53.76%

Source: Girls Survey | Household Survey

Likewise, in terms of barriers, 75 percent of the girls who did not get support to stay in school and do well said GCFs use child-centered teaching methods; 62.5 percent of them stated non-GCFs also use child-centered teaching methods. 40 percent of the control girls said their teachers use child-friendly teaching methods. 33.33 percent of the treatment girls who are married and have children said their teachers use child-friendly teaching methods. A similar trend as with the general analysis above can be observed among the girls who are involved in household chores whole day, and those who believe COVID-19 has affected/ will affect their future aspirations regarding work/ studies.

Table 12: Sub-group analysis of teaching practices by barriers

	GCFs	**Non-GCFs**	**Control school teachers**
Household-level barriers			
Does not get support to stay in school and do well (n = T 8, C 15)	75%	62.5%	40%
Mother (n = T 3, C 0)	33.33%	33.33%	NA
Girl involved in household chores whole day (n = T 41, C 22)	85.36%	73.17%	40.90%
COVID-19			
Believes COVID-19 has affected/ will affect future aspirations regarding work/ studies (n = T 254, C 129)	83.07%	69.29%	49.61%

Source: Girls Survey | Household Survey

4.1.3. Impact of COVID-19 on teachers

The school-based stakeholders whom we interacted with in the course of this study stressed upon the impact of COVID-19 on teachers. As the schools remained closed for a period of over 10 months since the start of the pandemic, a number of teachers that are not appointed by the government, but hired by schools with their own resources were indiscriminately affected as the schools were not able to pay their full salary. According to a head-teacher from a control school in Dhangadhi, the teachers who have government appointment were not directly affected in terms of income as they received their salary is funded by the government. However, as most of the schools lost their source of income, which came in the form of contribution of parents of children

studying in the school, the teachers hired in schools' private capacity could not be paid their full salary. As the schools were not running during lockdown and also because most of the parents also saw a limitation in their regular income/ cash flow in the household, the contribution amount that the schools were generating from parents got cut-off throughout the period of closure due to COVID-19.

Our school has been running vocational training classes under CTEVT. We had managed to keep some saving from that, which we used to pay the teachers during the time of lock-down. However, there are a number of schools that do not have this capacity.

- A head-teacher from a control school in Dhangadhi

In terms of this impact on teachers, both control and treatment schools faced similar problems. A treatment school in Sukhad has been paying the non-permanent teachers their half salary in the past six months. The chairperson of the school management committee of this school informed that the school is soon running out of its savings. "We will be able to sustain for another couple of months. After that, if the schools do not resume completely, there will be no option left but to let the teachers go," he said.

Apart from the financial hardships, teachers were also found to be under tremendous pressure to complete their course of study in limited time before the board exams of this academic session.

Teaching and learning was in complete halt for all this period. We have reopened the school now, but the classes are running on an alternate-day basis for class 8, 9 and 10. If we call all the students on the same day, we don't have sufficient space to accommodate all students using physical distancing. Amid all this, we have no clue how this is going to be managed. Completing the course of study for this academic session is next to impossible. On top of everything, huge number of students are still in their villages and out of contact.

- A teacher from a treatment school in Tikapur

Given this situation of crisis, while the main priority of teachers is to complete the course structure proposed, all the child-friendly teaching processes, group-works, student participation in classroom, among others, were found to have lost the momentum.

The teachers seem to be coming to the school with half-mind, given all the pressures that they are facing right now. Use of interactive pedagogies and child-centered learning is not our immediate priority.

- A head-teacher from a treatment school in Dhangadhi

Therefore, while financial hardship is at one hand, it is a huge challenge ahead of the project to sustain all the achievements it has made with regards to the teaching practices. A local government official in Sukhad echoed this finding.

> Retaining the achievements made in teaching practices in the last few years is going to be a major challenge in immediate future. We have included this in our education plan as well.
>
> **- Local government official in Ghodaghodi Municipality, Sukhad**

Meanwhile, in terms of teachers' support to students during COVID-19 crisis, 27.70 percent of the treatment girls and 21.90 percent control girls said they received learning support or follow-up from school teachers when they were waiting for SEE exams after the lockdown started. However, much of this support was moral encouragement to keep preparing well for the SEE exams (61.50 percent) and follow-up about learning and studies through phone (51.30 percent). The schools or the teachers were not able to extend any form of direct learning support during lockdown. Only 9 percent of the treatment girls said they participated in online revision classes. As already explained in learning section above, online classes were not as effective as expected as the marginalized girls in Kailali lack mobile phones and internet facility. In this regard, technological advancement among the students could be a major area of intervention for the future. Even though there was no direct support from teachers or the schools, nearly 70 percent of the girls said the moral encouragement they received from teachers was helpful.

4.2. IO 2 - Safeguarding

The main purpose of IO 2 – Safeguarding is to assess the level of awareness on issues related to harassment, abuse, gender-based violence and bullying among IS treatment and control group and the SG/ OOS girls. Apart from the level of awareness on these issues, the IO also explores girls' knowledge about the referral mechanisms in place.

4.2.1. Findings and interpretation

As we can see in the table below, most of the treatment IS girls can identify or are aware about bullying (95.40 percent), followed by abuse (88.10 percent), gender-based violence (60.00 percent) and harassment (50.90 percent). Awareness of all of these inappropriate activities can be observed on a similar scale among the control school giArls as well, 93 percent girls are aware about bullying, 80 percent about abuse, 65.80 percent about gender-based violence and 45.90 percent about harassment. A similar trend can be observed among SG/ OOS girls as well. 95.80 percent of the SG/ OOS girls are aware of bullying, 82.20 percent on abuse, 65.30 percent of gender-based violence and 50.30 percent of harassment.

During qualitative consultations with all groups of the girls, it was observed that girls generally don't categorize inappropriate gender-based discriminatory activities against them as harassment, abuse, gender-based violence or bullying. Generally, they understand these issues as inappropriate activities that are practiced upon girls/ women. Treatment girls attributed their awareness about such 'inappropriate' activities against girls/ women to different project activities of STEM II, which included sensitization on ASRH, self-defense training, street drama, among other community-level sensitization activities. Meanwhile, control school girls stated that they participated in similar programs and activities implemented by other organizations in their school. For instance, a control school in Dhangadhi has similar ongoing intervention implemented by a different organization. The girls also said that issues about gender-based violence and girls' safety are also discussed in classes by teachers, specifically in subjects such as social science, moral science, health, among others. Apart from that, girls in general also attributed their knowledge safeguarding to the increasing number of reports on media about violence, rape, and abuse.

> The gender-based adversities are in the media almost every day. We keep on hearing about incidences of rape, violence against women and abuse happening throughout the country on the media.
>
> **- OOS girl in Tikapur**

Meanwhile, in terms of actual events where girls might have been harassed, abused or bullied, 16.50 percent of treatment IS girls, 26.70 percent control girls and 9.70 percent SG/ OOS girls said they know someone in their community or school who has experienced these adverse activities against them.

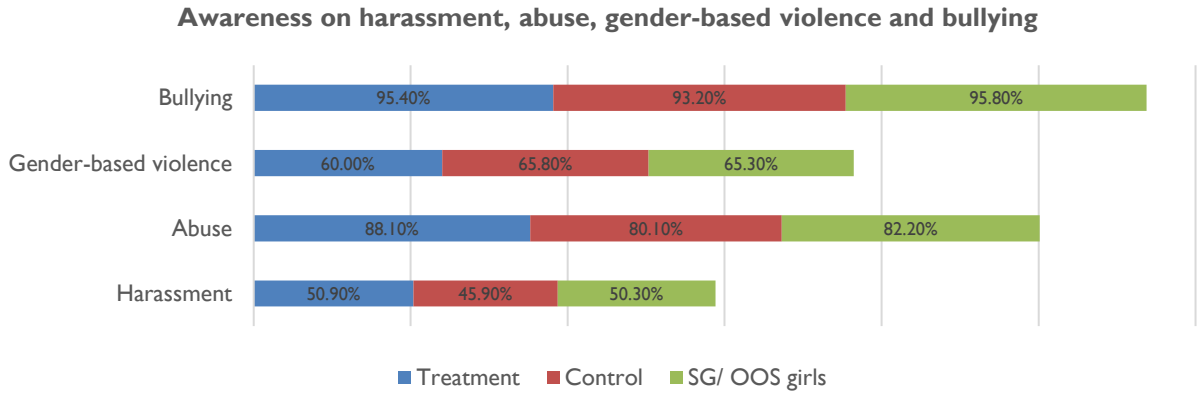

Figure 39: Awareness on harassment, abuse, gender-based violence and bullying
Source: Girls' Survey | N = 285 Treatment, 146 Control, 473 SG/ OOS girls

When asked what are the different types of 'inappropriate activities' they have noticed/ experienced in their schools or community, most of the girls (70.8 percent treatment, 81.80 percent control and 66.70 percent SG/ OOS girls) said they have heard of girls like themselves who had bad things said or been teased in an unpleasant way at home or community. Likewise, 25 percent of the treatment girls, 31 percent control girls and 41.70 percent SG/ OOS girls said they know someone who has had bad things said to their face or teased in an unpleasant way at school by teachers, staff, peers.

As mentioned above, the purpose of this intermediate outcome is also to observe girls' awareness of different referral mechanisms that the girls can rely on if they themselves experience or see someone else experiencing gender-based adversities. Majority of girls, i.e., from 95 to 99 percent, said they would speak to their parents, elderly, siblings and friends/ peers in their home, school or community. Likewise, from 85 percent to 90 percent of the girls belonging to both treatment as well as control groups said they would use the complaint box in their schools or talk to teachers/ head-teachers. Nearly 80 percent of the girls said they would complain to a government institution such as police, ward office. Likewise, 79.60 percent of treatment girls and 67.80 percent control girls said they would talk to people from NGOs/ project (social mobilizers) in their area. 84.90 percent of SG/ OOS girls said they would talk to people from NGOs, reflecting a higher level of comfort in talking/ dealing with social mobilizers, in comparison to the school-going girls. With this finding, the difference in the percentage between different groups of girls was not found to be statistically significant.

A similar trend of finding was also observed during qualitative discussions, as most of the girls that we interacted with said they would first talk to their parents, siblings or friends, even if anything bad happened against them at the school. This is especially because the girls still find it difficult to talk about sensitive issues regarding safeguarding with their teachers/ head-teachers, as the school structure is bound in a hierarchy and little room exists for the sharing of sensitive and emotional experiences. Similarly, the girls also expressed reluctance to opt for complaint box installed at the school. While the complaint boxes in control schools were usually found to be placed inside staff-room, in treatment schools, complaint boxes were placed in areas accessible to the students. However, according to the girls, complaint boxes are generally used to lodge

complaints about noisy classrooms, teachers' absenteeism and unpunctuality, missing blackboard accessories in the classroom, playground, sports equipment, among others.

> Last year, we dropped a complaint about teachers' unpunctuality in the classroom. One week later, when the committee saw that complaint, there was a staff meeting which was called by our head-teacher. After that, the teachers started coming to the classroom in time.
>
> **- A treatment school girl from Dhangadhi**

Girls were found to be generally believing that complaint boxes are not for topics as sensitive as safeguarding, as they do not have full trust upon the assurance of anonymity. Moreover, as the complaint box is usually opened in once or twice a week, girls think it cannot address issues related to safeguarding as it requires immediate action.

> All the teachers in the schools know us students at a personal level. Even if we do not write our names in the complaint box, they will easily recognize the person who wrote the complaint by hand-writing.
>
> Moreover, if there is any pressing issue on safeguarding, it warrants immediate actions. As the complaint box is usually opened once a week, it is unable to provide immediate protection.
>
> **- A treatment school girl from Tikapur**

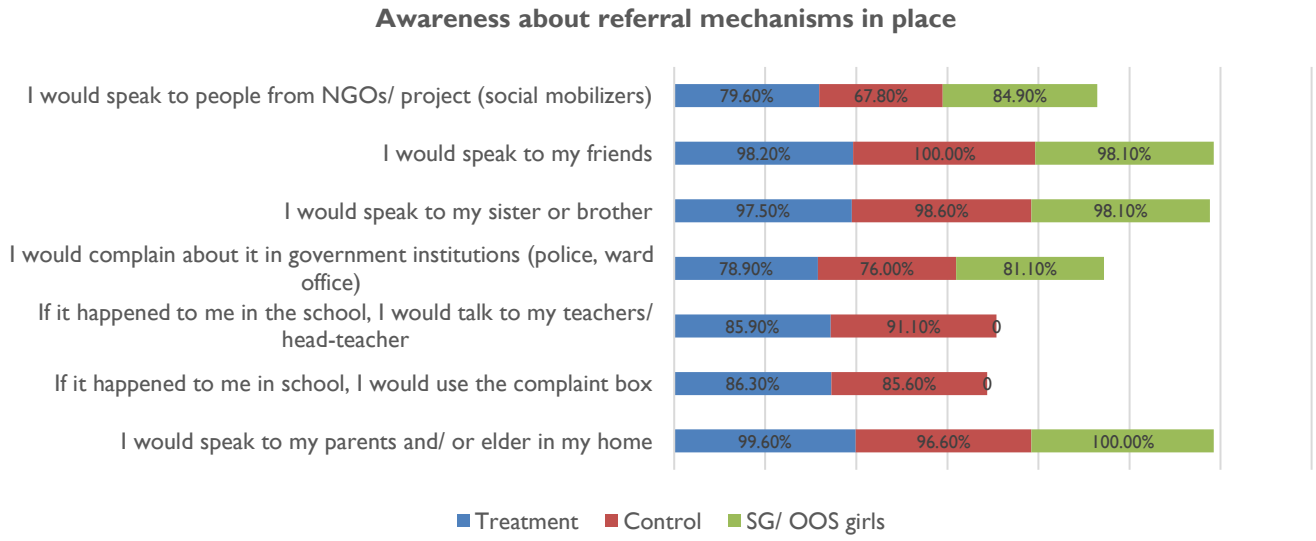

Figure 40: Who do you think you would speak to if something like the above-mentioned examples happened to you?
Source: Girls Survey | N = 285 Treatment, 146 Control, 473 SG/ OOS girls

Meanwhile, the girls who participated in the survey were asked if they are aware about the phone number of STEM II/ Mercy Corps where they can immediately complain about any inappropriate activities happening against girls in their community or school. Only 27 percent of the treatment

girls, 11 percent of control girls and 20.90 percent of the SG/ OOS girls said they are aware about it. 11.7 percent of the treatment girls, 50 percent of control girls and 14.10 percent of SG/ OOS girls, who demonstrated awareness about STEM's phone line have used the service so far. The limited awareness regarding this is a result of limited outreach of STEM's phone number at the community level.

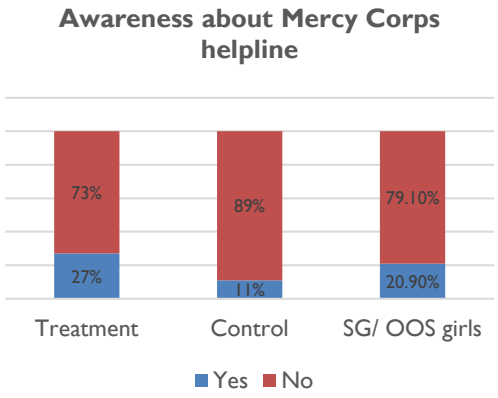

Figure 41: Are you aware about the phone number of STEM II/ Mercy Corps where you can immediately complain about any inappropriate activities happening against girls in your community/ school?

Source: Girls Survey | N = 285 Treatment, 146 Control, 473 SG/ OOS girls

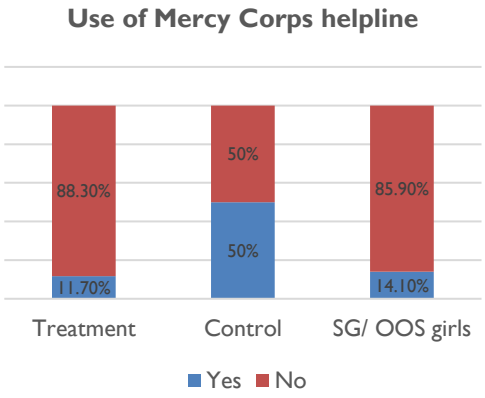

Figure 42: Have you ever used STEM's phone number to report anything (inappropriate activities against yourself, your friends or anyone in your community)?

Source: Girls Survey | N = 77 Treatment, 16 Control, 99 SG/ OOS girls

4.2.2. Sub-group analysis of safeguarding awareness

Table 13 below presents a sub-group analysis of girls' awareness about safeguarding issues and referral mechanisms. Out of the four safeguarding issues – harassment, abuse, gender-based violence and bullying – girls demonstrating awareness on more than one of these issues were considered as aware of safeguarding issues. Likewise, out of the seven referral mechanisms – parents, teachers/ head-teachers, complaint box at school, siblings, government institutions, NGO representatives and friends – girls demonstrating awareness of at least four referral mechanisms were considered aware about referral mechanisms.

In terms of ethnicity, girls' awareness was generally observed from 80 percent to 100 percent in treatment, control and SG/ OOS groups, across all ethnicities. A similar finding can be observed for the intersection between location, municipality, marital status, education level of the head of the household and family size, and girls' awareness about safeguarding and referral mechanisms. This reflects that the girls' characteristics do not determine their knowledge and awareness about safeguarding issues and referral mechanisms in place.

Table 13: Analysis of girls' awareness about safeguarding issues and referral mechanisms by key characteristics

	Treatment		Control		SG/ OOS girls	
	Safeguarding	**Referral mechanisms**	**Safeguarding**	**Referral mechanisms**	**Safeguarding**	**Referral mechanisms**
Ethnicity						

Brahmin (n = T 105, C 65, SG/ OOS 58)	85.71%	88.57%	78.46%	90.77%	91.38%	94.83%
Tharu (n = T 117, C 67, SG/ OOS 301)	88.89%	90.60%	89.55%	91.04%	87.38%	93.36%
Janajati (n = T 25, C 7, SG/ OOS 94)	92.00%	92.00%	85.71%	100.00%	96.81%	89.36%
Dalit (n = T 36, C 7, SG/ OOS 20)	86.11%	88.89%	85.71%	100.00%	90.00%	100.00%
Muslim (n = T 2, C 0, SG/ OOS 0)	50.00%	50.00%	NA	NA	NA	NA
Location						
Rural (n = T 150, C 43)	90.67%	96.00%	93.02%	93.02%	NA	NA
Semi-urban (n = T 75, C 68)	86.67%	85.33%	77.94%	88.24%	NA	NA
Urban (n = T 60, C 35)	80.00%	78.33%	85.71%	97.14%	NA	NA
Local government						
Bardagoriya (n = T 27, C 9, SG/ OOS 37)	77.78%	92.59%	100.00%	77.78%	89.19%	94.59%
Dhangadhi (n = T 80, C 78, SG/ OOS 157)	86.25%	91.25%	82.05%	89.74%	88.54%	96.18%
Gauriganga (n = T 17, C 7, SG/ OOS 48)	94.12%	100.00%	100.00%	100.00%	81.25%	83.33%
Ghodaghodi (n = T 54, C 21, SG/ OOS 107)	92.59%	88.89%	71.43%	100.00%	93.46%	92.52%
Kailari (n = T 80, C 23, SG/ OOS 85)	87.50%	92.50%	86.96%	91.30%	90.59%	92.94%
Tikapur (n = T 27, C 8, SG/ OOS 39)	85.19%	66.67%	100.00%	100.00%	94.87%	92.31%
Married						
Yes (n = T 10, C 0, SG/ OOS 205)	70%	100.00%	NA	NA	93.17%	94.15%
No (n = T 275, C 146, SG/ OOS 268)	88%	89.09%	84.24%	91.78%	87.31%	92.16%
Primary caregiver/ HoH without education (n = T 68, C 50, SG/ OOS 149)	82.35%	83.82%	86%	98%	87.91%	93.28%
More than 5 family members in the HH (n = T 172, C 93, SG/ OOS 275)	88.37%	92.44%	82.79%	91.39%	88.36%	92%

Source: Girls Survey | Household Survey

Table 14 below presents the intersection of different household/ community level barriers and girls' awareness about safeguarding and referral mechanisms in place. As with the characteristics presented above, no striking finding can be observed, as girls facing all the given barriers demonstrate similar scale of awareness about safeguarding issues and referral mechanisms in place.

Table 14: Analysis of girls' awareness about safeguarding issues and referral mechanisms by key barriers

	Treatment		Control		SG/ OOS	
	Safeguarding	**Referral**	**Safeguarding**	**Referral**	**Safeguarding**	**Referral**
Household/ community-level barriers						
Did not get support to stay in school and do well (n = T 8, C 15)	87.5%	75%	100%	46%	NA	NA
Restriction of mobility (n = T 2, C 7, SG/ OOS 28)	100%	100%	71.42%	100%	89.28%	82.14%
Mother (n = T 3, C 0, SG/ OOS 126)	100%	100%	NA	NA	95.23%	93.65%
Girl involved in household chores whole day (n = T 41, C 22, SG/ OOS 87)	85.36%	92.68%	63.63%	95.45%	90.80%	93.10%
COVID-19						
Believes COVID-19 has affected/ will affect future aspirations regarding work/ studies/ business (n = T 254, C 129, SG/ OOS 391)	87.79%	88.97%	82.94%	91.47%	90.71%	94.37%

Source: Girls Survey | Household Survey

4.3. IO 3 – Self-confidence

IO 3 – Self-confidence, builds on the previous intermediate outcome on safeguarding, where we observed girls' awareness about different forms of safeguarding challenges and referral mechanisms in place. Building on that, this intermediate outcome aims to gauge girls' level of self-confidence, when it comes to dealing with or tackling safeguarding adversities, making decisions about their personal and professional life, and/ or voicing their opinions/ concerns in front of family members, peers.

4.3.1. Findings and interpretation

Figure 43 below presents girls' response about which measures they would take if they are faced with any adverse situation posing threat to their safeguarding. Most of the girls, i.e., over 95 percent, demonstrated confidence in either immediately finding someone to share their problem and take suitable and/ or retaliating/ responding based on the situation against the people who are doing inappropriate things to them. This finding reflects a high confidence among girls belonging to treatment and control groups, and the SG/ OOS girls.

As already mentioned above, among IS treatment and SG/ OOS girls, the main reason behind their confidence in handling adverse situation is STEM's in-school and out-of-school support, which included self-defense training, sensitization about ASRH and community-level activities such as household dialogue and street drama. 63.90 percent of the IS treatment girls and 39.10 percent SG/ OOS girls said they have received self-defense training, which they can use against the potential perpetrators at the time of need. Meanwhile, control girls have also received similar support on safeguarding issues and self-defense from other different organizations and projects.

During qualitative discussions with girls, we came up with evidence demonstrating girls' confidence in dealing with adverse situations. For instance, a treatment school girl shared an example how the girls of her class took action against a teacher who misbehaved with her friend during an excursion visit organized by the school. This case demonstrates girls' confidence in dealing with the adversities.

Evidence of SG/ OOS girls who demonstrated confidence to seek independence and better livelihood, notwithstanding negative social norms (especially in the family of the in-laws and communities), as a result of trainings received, and businesses started.

This example presented multi-layered confidence of the girl, where she not only took decision for her better life, but also demonstrated preparedness against any legal battles that may turn up in the future. This shows that due to financial independence, she had strong self-confidence, efficacy and agency.

Figure 43: How would you respond if you are faced with any adverse situation threatening your safety?
Source: Girls Survey | N = Treatment 285, Control 146, SG/ OOS girls 473

As presented in the Figure 44 below, majority of girls said they are capable of making their own decisions. Nearly 80 percent of IS girls (both treatment as well as control), and over 85 percent of the SG/ OOS girls said they would take their decisions about professional and personal life, such as marriage, employment, higher studies, etc. themselves or through consultation with elders in the family.

However, our qualitative findings challenge this result as most of the stakeholders, including girls themselves, said most of the crucial decisions about personal life such as marriage, higher studies, among others, are still mostly taken by girls' parents, mostly father. The discrepancy between quantitative and qualitative findings can be attributed to self-reported bias in the quantitative survey, where most of the girls positively responded to this question.

> My daughter is free to take decisions about where to buy her clothes, meeting her friends and studying. But there are certain things about life that my daughter cannot decide for herself. For instance, when time comes, we, as parents, have to take the crucial decision about her marriage and future.
>
> **- A parent in Tikapur**

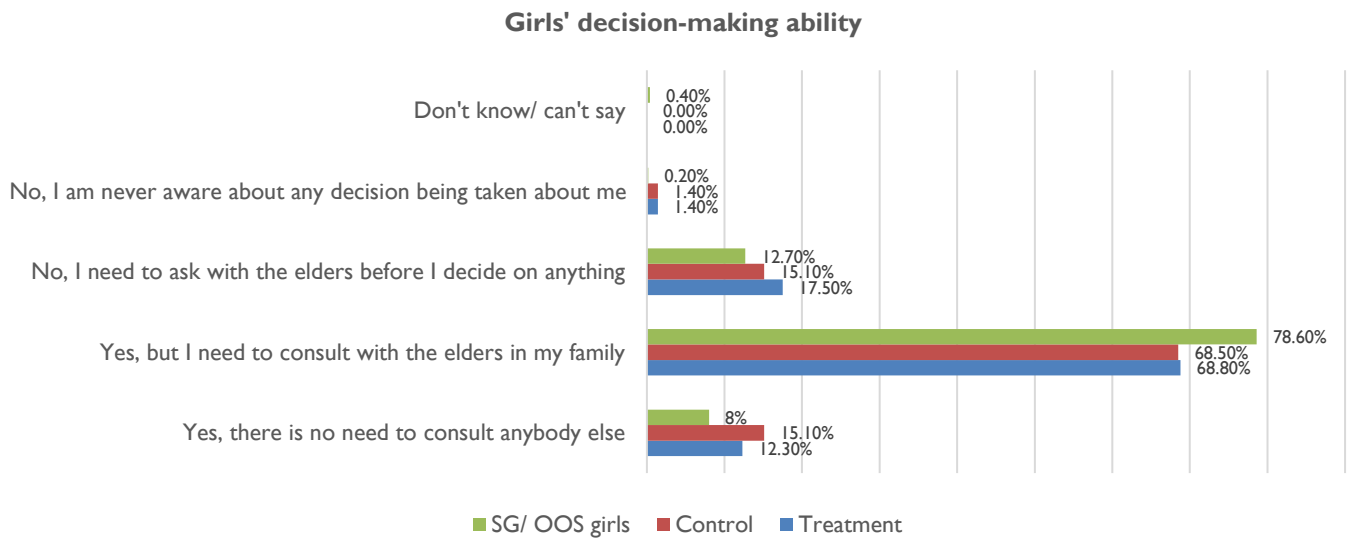

Figure 44: Girls' decision-making ability

Source: Girls Survey | N = Treatment 285, Control 146, SG/ OOS girls 473

Meanwhile, in terms of girls' confidence in talking or expressing their opinion in front of different stakeholders or at a common forum such as events, stage-shows, among others, only a negligible percentage of girls said they are shy to speak in front of anybody. Majority of girls belonging to treatment, control and SG/ OOS groups said they are most comfortable talking and expressing their opinions with female friends. Likewise, 73 percent treatment girls, 70.50 percent control and 85.20 percent SG/ OOS girls said they are confident sharing their concerns with parents, which is followed by siblings, at 50.5 percent, 60.30 percent and 65.10 percent respectively for the given three groups. Confidence in public speaking was seen higher among the treatment group in comparison to control girls.

Table 15: Who/ where are you confident to talk with to express your opinions?

	Treatment	Control	SG/ OOS girls
Female friends	97.50%	100.00%	97.70%
Male friends	15.10%	11.60%	27.10%
Siblings	50.50%	60.30%	65.10%
Community groups/ meetings	10.20%	4.80%	12.50%
Community events/ stage shows, public speaking	13.70%	5.50%	13.10%
Elders in the family	28.40%	26.70%	51.20%
Elders in the community	13.70%	4.10%	21.10%
Teachers/ head-teachers	20.70%	25.30%	11.40%
Parents	73.00%	70.50%	85.20%
I am very shy to speak in front of any of these groups/ individuals/ forums	0.40%	1.40%	1.10%

Source: Girls Survey | Treatment N=285, Control N=146, SG/ OOS girls N=473

4.3.2. Sub-group analysis of self-confidence

Table 16 below presents a cross-tabulation of girls' confidence in dealing with safeguarding threats according to their key characteristics. As a very high level of confidence was observed among

girls belonging to all the groups, none of the characteristics discussed in the table below seem to be affecting girls' confidence.

Table 16: Analysis of girls' confidence in dealing with safeguarding threats by key characteristics

	Treatment	Control	SG/ OOS Girls
Ethnicity			
Brahmin (n = T 105, C 65, SG/ OOS 58)	100.00%	100.00%	98.28%
Tharu (n = T 117, C 67, SG/ OOS 301)	98.29%	100.00%	97.67%
Janajati (n = T 25, C 7, SG/ OOS 94)	100.00%	100.00%	98.94%
Dalit (n = T 36, C 7, SG/ OOS 20)	91.67%	85.71%	100.00%
Muslim (n = T 2, C 0, SG/ OOS 0)	100.00%	NA	NA
Location type			
Rural (n = T 150, C 43)	97.33	100.00	NA
Semi-urban (n = T 75, C 68)	100.00	98.53	NA
Urban (n = T 60, C 35)	98.33	100.00	NA
Local government			
Bardagoriya (n = T 27, C 9, SG/ OOS 37)	100.00%	100.00%	97.30%
Dhangadhi (n = T 80, C 78, SG/ OOS 157)	98.75%	100.00%	97.45%
Gauriganga (n = T 17, C 7, SG/ OOS 48)	94.12%	100.00%	95.83%
Ghodaghodi (n = T 54, C 21, SG/ OOS 107)	100.00%	100.00%	100.00%
Kailari (n = T 80, C 23, SG/ OOS 85)	96.25%	95.65%	97.65%
Tikapur (n = T 27, C 8, SG/ OOS 39)	100.00%	100.00%	100.00%
Married			
Yes (n = T 10, C 0, SG/ OOS 205)	100.00%	NA	98.05%
No (n = T 275, C 146, SG/ OOS 268)	98.18%	99.32%	98.13%
Primary caregiver/ HoH without education (n = T 68, C 50, SG/ OOS 149)	98.52%	100%	98.65%
More than 5 family members in the HH (n = T 172, C 93, SG/ OOS 275)	98.23%	98.92%	97.81%

Source: Girls Survey | Household Survey

Table 17 below presents an analysis of girls' confidence in dealing with safeguarding threats according to the key barriers identified. As with characteristics, none of the barriers impact girls' confidence as girls facing all the barriers mentioned below demonstrate a confidence above 90 percent.

Table 17: Analysis of girls' confidence in dealing with safeguarding threats by key barriers

	Treatment	Control	SG/ OOS girls
Household/ community level barriers			
Did not get support to stay in school and do well (n = T 8, C 15)	100%	99.23%	NA
Restriction of mobility (n = T 2, C 7, SG/ OOS 28)	100%	100%	100%
Mother (n = T 3, C 0, SG/ OOS 126)	100%	NA	99.20%
Girl involved in household chores whole day (n = T 41, C 22, SG/ OOS 87)	97.56%	100%	97.70%
COVID-19			
Believes COVID-19 has affected/ will affect future aspirations regarding work/ studies/ business (n = T 254, C 129, SG/ OOS 391)	98.42%	99.22%	98.20%

4.4. IO 5 – Gender sensitivity

IO-5, gender sensitivity examines the sensitivity of different stakeholders related with the key GESI barriers which are very common in the project area, mainly in the form of gender-based discrimination. The purpose of this intermediate outcome is to gauge the level of readiness of different stakeholders, including parents, teachers, overall school environment, and girls' male and female friends, to support the girls in their specific needs and aspirations with regards to freedom, mobility, studies, work or their personal life choices.

During survey as well as qualitative discussions, a girl was initially briefed about her specific needs and aspirations, such as provision of girls' toilet in school, sanitary pads, freedom and mobility as boys in the community, equal participation in household decision making as boys and participation in different activities at the community level. The girls were asked to imagine all the needs that are relevant to them. After that, the girls were asked to talk about the sensitivity of different stakeholder groups towards their needs and aspirations. Apart from that, during qualitative discussions with each of these stakeholders, we explored the level of support they provide to the girls and their attitude towards inclusion.

4.4.1. Findings and interpretation

Table 18 below presents the gender sensitivity of different stakeholder groups. Apart from the survey finding, the table also includes a rating of each of the stakeholders based on qualitative findings, which are discussed below.

Table 18: GESI sensitivity of different stakeholders

	Treatment	Control	SG/ OOS Girls	Overall rating based on qualitative findings (For Treatment)
Parents	97.6%	95.9%	97.6%	Moderate
Teachers	94%	94.5%	NA	High
Overall school environment	86%	83.5%	NA	High
Girls	98.2%	97.2%	97.4%	High
Boys	61.1%	69.2%	64%	Low

Source: Girls Survey | Qualitative Consultations | N = 285 Treatment, 146 Control, 473 SG/ OOS girls

4.4.1.1. Parents

Survey finding shows that over 95 percent of the girls across all three groups believe their parents are sensitive towards their needs. However, qualitative findings suggest that although the attitude of parents towards girls' engagement in studies and work has changed over the years, there are certain aspects regarding freedom, mobility and decision making, in which parents are still not completely supportive to girls. When asked if they would allow their daughters to stay outside home in a different area/ district for work or studies, most of the parents expressed reluctance stating that it is not safe for girls to stay outside home. Parents of SG/ OOS girls, whose daughters are involved in work or business, said they allow the girls to go to office, if it is located nearby. We asked the parents in Tikapur if they would allow their daughters to travel as far as Dhangadhi every day, which is about three hours of drive. Answering this question, most of the parents said

they would think twice before taking this decision. Parents also demonstrated unwillingness to allow girls to rent an accommodation in Dhangadhi and work there. Likewise, when we asked the parents in Dhangadhi if they would be ready to send their daughter to Nepalgunj (a different district which is six hours drive from Dhangadhi) for work, most of the parents said they would send their daughter only if a family member is able to accompany her. We asked them if it would be the same with boys, the parents said boys can enjoy freedom of mobility more than girls, as their safeguarding is not as much of a problem as girls.

> A girl who has lived outside home alone is not viewed positively in the community. She can go wherever she likes with her husband after the marriage. Also, we keep on hearing the news of rape and violence everywhere in the country. Enjoying freedom and mobility like boys is not safe for girls.
>
> **- A parent in Dhangadhi**

In terms of changes observed in parents' attitude towards girls' education, it was evident that the time invested by girls in household chores has reduced significantly. Especially as the girls were preparing for their SEE exams last year, the parents of both treatment as well as control girls, encouraged them to spend more time studying than in household chores. However, as girls were able to release their pressure off their massive involvement in chores, the responsibility of household chores shifted towards other female members of the family, mostly overburdening the mother with extra work. This was validated by both quantitative and qualitative findings. 42 percent of the parents of IS treatment and SG/ OOS girls said the household works are mostly done by women members of the family, while men usually do not take upon the responsibility of works inside home. The traditional gender roles are still a major social structure that are followed by both men and women in the communities.

Meanwhile, when asked what they want their daughters to do in the future, 90 percent of both treatment as well as control girls' parents said they want their children to continue/ re-join education. While about 40 percent of the parents said they want their daughters to engage in formal employment, nearly 60 percent of the parents wish the same for their sons, reflecting an expectation triggered by the traditional gender roles. 27.40 percent treatment and 17.80 control parents said they want the girl to engage in vocational training. Likewise, 23.50 percent treatment and 17.10 percent control parents want their daughters to initiate business. Parents willing to get their daughter married soon are below 10 percent in both treatment as well as control group.

Table 19: Parents' aspiration regarding IS girls' future

	Treatment		Control	
	Girls	**Boys**	**Girls**	**Boys**
Continue/ Re-join education	90.20%	89.50%	90.40%	90.80%
Simply stay at home	3.20%	1.50%	4.10%	0.90%
Engage in formal employment	38.20%	55.50%	39.00%	56.00%
Engage in vocational training	27.40%	15.50%	17.80%	5.50%
Engage in daily wage	0.70%	0.50%	2.70%	0.90%
Initiate business	23.50%	23.00%	17.10%	19.30%
Go abroad	0.70%	4.00%	2.10%	1.80%

Get married	9.80%	11.50%	6.80%	12.80%
Don't know	2.50%	1.00%	4.10%	2.80%

Source: Household Survey | N = 285 Treatment, 146 Control

4.4.1.2. Teachers

The survey finding shows that nearly 95 percent of the girls believe their teachers are sensitive towards their needs in the schools. Qualitative consultations also support this finding as teachers were generally found to be equally sensitive towards both girls and boys. According to girls, most of the teachers who taught them in grade 10 last year encouraged girls to participate in the regular classes as well.

> In regular classes, we girls are normally shy to make presentations of our classwork. Whenever teachers asked to volunteer for a presentation, only the boys would go in front. Therefore, the teachers made it compulsory for a girl to make the presentation whenever there was a sharing. Gradually, girls also started volunteering for presentations themselves.
>
> **- A girl in Sukhad**

Some of the quantitative findings highlighted below also support the above argument. For instance, more than 80 percent of the girls disagreed that their teachers treat boys and girls differently in the classroom. Similarly, more than 95 percent of the girls said teachers' treatment of both girls and boys is equal when it comes to asking questions, paying attention, asking harder questions or even punishing sometimes.

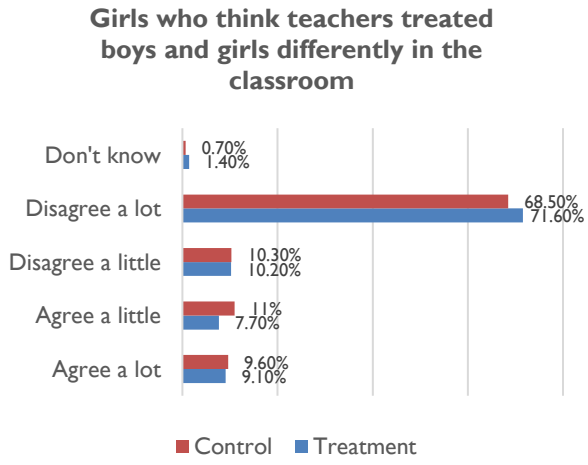

Figure 45: Girls who think teachers treated boys and girls differently in the classroom
Source: Girls Survey | N = 285 Treatment, 146 Control

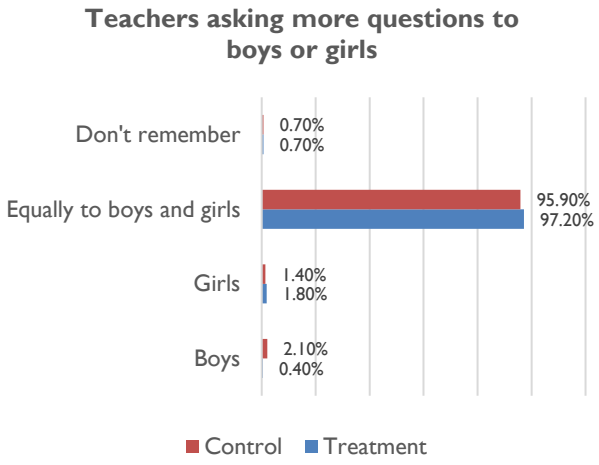

Figure 46: Teachers asking more questions to boys or girls

Source: Girls Survey | N = 285 Treatment, 146 Control

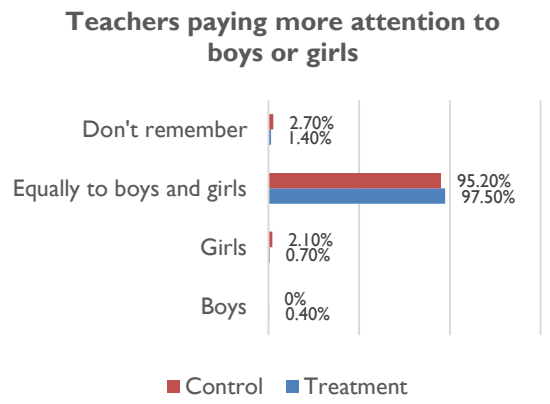

Figure 47: Teachers paying more attention to boys or girls
Source: Girls Survey | N = 285 Treatment, 146 Control

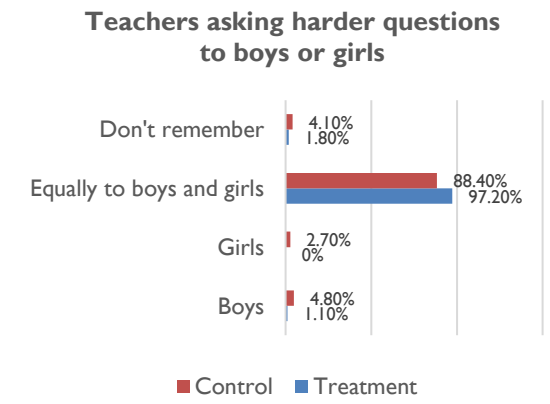

Figure 48: Teachers asking harder questions to boys or girls
Source: Girls Survey | N = 285 Treatment, 146 Control

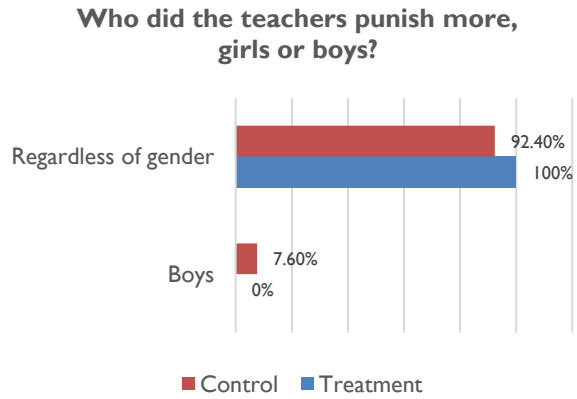

Figure 49: Who did the teachers punish more, girls or boys?
Source: Girls Survey | N = 285 Treatment, 146 Control

4.4.1.3. Overall school environment

As presented above, more than 85 percent of the girls said their school environment is generally sensitive towards their specific needs and requirements. We elaborated this during qualitative discussions, exploring different factors such as availability of clean drinking water, separate toilet facilities for boys and girls, WASH facilities, sanitary pads, play grounds, sports equipment among others. The girls did not express any serious concerns about the availability of any of these facilities in their school. Although the schools had not been properly functioning due to COVID-19 at the time this study was conducted, we enquired about all these different facilities with the girls as well as different school stakeholders including teachers, head-teachers, members of school management committee and parents-teachers' association. Based on the response of all these different stakeholders as well as our observation of school facilities, it can be concluded that schools provide a conducive inclusive environment for the studies. When asked how the overall school environment has changed over years, girls highlighted the availability of sanitary pads as a major development. Apart from that, girls also stated that they are encouraged to participate in sports and extra-curricular activities by the school management.

> A lot of things changed in my school from when I was in grade 8 until I passed the SEE. In the last year, sanitary pad was regularly available in the school, and girls' toilet and hand-washing facility had running water. Before that, whenever we had periods, as there was no water in the toilet, we had to go home. Apart from that, in the sports week of our school last year, our head-teacher encouraged girls to participate in outdoor sports like volleyball and cricket. Even before the sports week, the school had separate volleyball net and volleyball for the exclusive use of girls. Boys were not allowed to use that, as there was a separate set available for them.
>
> **- IS girl in Dhangadhi**

In the meantime, some of the control schools also demonstrated similar examples. In a school in Dhangadhi, the head-teacher informed that the school managed to generate some fund for infrastructural development by writing proposal to the social development ministry and some private banks in the area. The fund was used to repair the boundary wall, install WASH facilities in girls' and boys' toilets, buy sports equipment and buy accessories for Montessori. STEM II also supported the treatment schools on fund-raising activities. The funds collected from such activities were utilized on sanitary pad management, emergency fund established for disaster affected children, toilet maintenance with electric motor fitting for water supply, classroom maintenance such as installation of false ceiling, fans, windows, white boards and purchasing of sports materials and books for libraries. As these self-initiated fund-raising demonstrates some schools' capacity in sustaining the good practices, this should be encouraged and replicated in other schools as well, in collaboration with local government bodies.

4.4.1.4. Girls

As a result of their increased exposure to different project activities and support, girls were found to be widely aware, conscious and sensitive about their own aspirations, needs and requirements. As discussed throughout this report, the empowerment of girls can be seen not only in terms of learning achievement, but on multiple fronts such as safeguarding, self-confidence, transition,

involvement in income generating activities, among many others. Although there are some limitations regarding girls' freedom and mobility at the community level, girls are becoming increasingly confident that they can make a difference in their own lives in the future. While the restrictions at community level and limited mobility are deep-rooted norms in the social fabric, which will take time to completely change, the end-line evaluation came across some highly encouraging examples of how girls' have had some life-changing experiences, either by speaking against abuse, or by feeling empowered and respected through income generation. All in all, the transformation observed in the girls is an evidence of how their self-consciousness, self-esteem and confidence has increased, especially with regards to the issues concerning their own safeguarding, growth and development.

4.4.1.5. Boys

The boys that we interacted with at the school level demonstrated limited awareness and sensitivity towards girls' needs, aspirations and equality. Especially as they were not a part of STEM's direct beneficiaries, boys were deprived of certain interventions such as girls' club classes and other training that were exclusive to girls. As a result of this, while girls were found to be increasingly conscious and sensitive about the issues regarding equality, freedom, gender-based harmful norms that need to be broken, among many others, awareness about these same topics among the boys was found to be quite low. For instance, boys failed to recognize the different roles of men and women in a family as a problem that affects their life. Most of the boys were found to have normalized these practices and are hardly concerned about changing any of it. Moreover, a number of boys believed that it is fair for women to be engaged in the kitchen-works while the men should be responsible for working outside. When asked if girls' engagement in household chores from the small age affects their learning performance and other overall development, most of the boys disapproved of this idea, stating that it is not the household works that affect girls' studies, but the time that girls spend watching videos on mobile phones or TV. One of the boys who expressed this opinion was the son of a school-teacher.

Meanwhile, boys also said that the project should have identified its beneficiaries by analyzing the need of support, based on students' financial conditions and learning performance, rather than providing blanket support to girls.

> Some of the girls who are receiving support from STEM come from very good families and are also good in their studies. Instead of such girls, the project could have identified some more needy boys. Such kinds of interventions should not categorize boys and girls differently.
>
> **- A boy in Dhangadhi**

Such negative attitude about intervention for girls, and a largely limited knowledge and awareness about the problems in gender-based norms in the social fabric of their communities, is a gross finding among boys. While girls may have been sensitized well enough about these issues, unless their male counterparts realize these factors and come on a same page about addressing the problems, the social discrimination that exists on various levels is less likely to wane. Also, at a more direct level, as girls and boys both co-exist in the same community, girls' empowerment

alone would not be sufficient to bring about changes and equality. It is of utmost importance that the project, local government, schools and the community together work towards shortening the gap of understanding and knowledge between girls and boys.

5. Conclusion and recommendations

This section summarizes the key findings discussed in this report. The conclusion and recommendations have been broken down by different outcomes and intermediate outcomes.

Learning

As the IS cohort had already graduated from secondary school by the endline evaluation, and owing to the closure of schools triggered by COVID-19 pandemic during end-line data collection, learning measurement at end-line shifted its focus from literacy and numeracy tests to observing girls' perception about their learning performance improvement. A total of 86.30 percent of the girls demonstrated confidence about their improved learning performance, painting a bright picture of the overall learning outcome achievement of the project. Some of the common forms of learning performance improvement highlighted by the girls are 'increased interest to learn', 'increased engagement in classroom activities', 'improved understanding of lessons in the classroom' and 'improvement in examination scores'.

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. Apart from that, project's continuous engagement with parents at the household level also resulted in a shift in parents' attitude towards girls' education – mainly in the form of girls' reduced engagement in household chores and increased study time. 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.

Meanwhile, the end-line evaluation also analysed girls' SEE GPA grades, where it was observed that the girls graduated from SEE board exams of 10^{th} grade in 2020 with a mean GPA score of 2.50.

In terms of the impacts of COVID-19, nearly 85 percent of the girls who said COVID-19 may affect their future aspirations regarding work or studies demonstrated resilience against the pandemic, stating that they can tackle the challenges by actively engaging in self-learning through engagement with peers/ family/ siblings and acquiring skills and knowledge required to get employed in the future.

Given below are some key recommendations, which mainly focus on the uptake of learning outcome through replication and scale-up.

- Coordinate with schools and the local governments of project intervention areas to replicate the remedial classes, involving both girls as well as boys
- Coordinate with Sudurpaschim provincial government and the local governments in the province to replicate the remedial classes, involving both girls as well as boys
- Coordinate with the local governments to integrate and implement the gender and child-friendly policies through education plans

- Carry out lobbying exercise at the federal level, through sharing of findings and achievements of STEM II, and encourage the government to replicate the practice of girls' club and remedial classes at the national scale

Transition

Taking the midline results in account, the transition outcomes analysis model was revised before end-line evaluation. As all the IS girls had already graduated from their SEE board exams in 2020 before data collection, they were not included in the end-line transition cohort. Rather, the focus of transition outcome at end-line was directed towards observing the effectiveness of different combinations of training and loan support that the project delivered to the OOS group. The effectiveness of different combinations of youth financial literacy training (YFLT), business skills development training (BSD), vocational training (VT) and girls transition fund (GTF) loan, was observed in terms of girls' confidence, livelihood opportunities that they were able to avail out of STEM's support, decision-making ability in the household, girls' self-efficacy and agency. Findings demonstrated that the training combinations that include GTF loan support are generally effective in stimulating girls' confidence, livelihood opportunities, decision-making ability, self-efficacy and agency. Girls who received STEM's GTF loan demonstrated encouraging evidence of their life-changing experiences, their outlook towards future and agency to excel by further improving the quality of life by exploring more options and opportunities to engage in better employment, expand their already existing business or initiate a new business.

Majority of SG/ OOS girls said that COVID-19 has affected or will affect their future aspirations about better life through engagement in employment or business. Out of the SG/ OOS girls who have already started their own business, 64.06 percent demonstrated resilience against COVID-19. Out of them, most of the girls (63.41 percent) believed that they are not the only ones affected by the training and things would get back to normal in time. Similarly, 34 percent said they can develop their skills and train further to fit into the job market in future.

Given below are some of the key recommendations for the uptake of transition outcome through replication and scale-up:

- Ensure widespread information dissemination about the transition intervention model of STEM II, aimed at improving the lives and livelihoods of out of school girls through a series of trainings, backed up with loan support
- Periodic monitoring of the SG/ OOS girls who have initiated their own business with STEM's loan support
- As some of the local governments have recognized STEM-trained SG/ OOS girls as eligible to leverage government loans, replicate this practice at a wider level through coordination and lobbying

Sustainability

At end-line, sustainability outcomes of the project were measured at three different layers -- first, initiatives/ decisions taken by school management to retain support received from STEM II; second, level of STEM II support to provincial/ local governments to develop education plans

focusing on improvement of girls' education and safeguarding; and third, best practices of STEM II retained and supported by local governments.

In account of evidence generated, the first two indicators have been rated as 'high' by the end-line evaluation. Schools were found to have developed a sense of ownership towards the supports of STEM II, which included infrastructural support, remedial classes, teachers' trainings among others. Infrastructural support extended to the schools by the project are being regularly maintained and developed further by the schools. Similarly, some of the schools were found to have initiated remedial classes, incorporating girls and boys, with the help of local governments. This is an evidence of uptake from the girls' club classes, which has been found to be highly effective, as per the findings from midline and end-line evaluation. While midline evaluation had highlighted a gap in terms of knowledge and skills transfer among trained and non-trained teachers, this gap was found to have been bridged by the end-line, through subject committees and active practice of sharing knowledge and expertise among teachers during staff meetings and informal discussions. However, as the schools, that have recently opened after prolonged closure due to COVID-19 pandemic are currently pressurized by a challenge to complete the given course in time, sustaining the practice of child-friendly practices in the classroom, was found to be a threat to sustainability.

Apart from schools, project's continuous engagement with local and provincial governments has resulted in encouraging commitments from the local bodies in terms of sustaining project's achievements on the longer run. However, in the context of COVID-19, as there are more pressing needs to ensure regular functioning of the school, get in touch with students who have still not returned to school after prolonged closure, among others, there have been limited concrete measures to translate the commitment of local units into practice at a widespread level, not just in STEM intervention schools, but also in other areas of Kailali and other districts of Sudurpaschim province. Similarly, while project's efforts in improving the lives and livelihood of out of school girls has yielded some highly satisfying results, the intervention modality of phase-wise training engagement directing girls through financial literacy, business and vocational skills and loan support in the end to help girls start or expand their business/ work, has yet to be widely circulated in and outside the project intervention areas. Some of the local governments have recognized girls who have received STEM's training as eligible to receive further government supports. Similar efforts should be scaled up a wider level in the national context as well.

Given below are some of the key recommendations for further sustainability of the achievements of by STEM II:

- Widespread dissemination of STEM II achievements and findings at the national scale, involving federal government as well as provincial and local governments outside STEM's intervention areas/ region
- Especially as COVID-19 has emerged as an immediate challenge and a threat to sustainability of STEM's efforts and achievements, introduce a short-term intervention program, focused at regular engagement and lobbying with the local governments of STEM's intervention areas/ region

Intermediate outcomes

Teaching practices: IO 1, teaching practices, observed the difference in teaching practices of girls' club facilitators (GCFs) who were trained by the project, non-GCFs of the treatment school who did not receive project's direct training and control school teachers. Results demonstrate the use of child-friendly teaching practices is highest among the GCFs (81.80 percent), followed by non-GCFs (69.10 percent) and control school teachers (49.30 percent). This statistically significant finding

Under teaching practices, we analysed the practice of child-friendly pedagogy by different groups of teachers, i.e., STEM-trained girls club facilitators (GCFs) of treatment schools, non-STEM-trained teachers of treatment schools and control school teachers. The use of child-friendly teaching practices was found to be highest among the GCFs (81.80 percent), followed by non-GCF treatment school teachers (69.10 percent) and control school teachers (49.30 percent). The difference observed between different groups of teachers was found to be statistically significant. Some of the common child-friendly methods adopted by the teachers include more group-work and classroom presentation, use of ICT (computers, projectors, etc.), use of library resources in regular learning, extra-curricular activities, among others. The girls also identified 'lesser punishment' as a child-friendly practice that the teachers use in regular school classrooms. On an encouraging note, some of the schools were found to have formulated subject committees, ensuring sharing of skills and knowledge between different trained and non-trained teachers of a particular subject. Meanwhile, as also highlighted in the sustainability section above, despite all the achievements concerning child-friendly teaching practices, the prolonged closure of schools due to COVID-19, has generated increasing pressure among the teachers to complete the course on time and match with the academic calendar, which is likely to affect the continuation of child-friendly teaching practices in regular classes. Also, the level of teachers' motivation, has also been largely affected due to financial troubles invited by the pandemic.

Given below are some of the key recommendations for sustaining STEM's achievements in ensuring child-friendly teaching practices at the intervention schools:

- Coordinate with schools and local governments for the replication of the best practices of sharing of skills and knowledge among trained and non-trained teachers through subject committees
- Especially as prolonged closure of schools due to COVID-19 pandemic has demotivated teachers at many levels, initiate an engagement program dedicated for teachers' motivation and sustainability of child-friendly teaching practices in the classroom

Safeguarding and self-confidence: With regards to safeguarding, where end-line evaluation assessed girls' awareness about different safeguarding threats and referral mechanisms in place, more than 70 percent of the girls demonstrated awareness about harassment, abuse, gender-based violence and bullying. Girls were also found to be highly aware about different referral mechanisms in place. Some of the most common referral mechanisms girls were found to be aware on are peers, parents, complaint response mechanism (CRM) at school, among others. However, when it comes to sharing about safeguarding threats, girls generally prefer peers and parents as they still do not have full trust upon the assurance of anonymity while using the school-based CRM. Moreover, as the complaint box is usually opened once or twice a week, girls think

it cannot address issues related to safeguarding, which warrant immediate action. Apart from project's regular support, increasing media reports about gender-based violence and safeguarding issues throughout the country were also found to have contributed to girls' awareness about safeguarding threats and referral mechanisms in place.

The end-line evaluation also established a linear relationship through awareness about safeguarding issues to girls' confidence in actually tackling against threats whenever they are themselves faced with such situations. More than 95 percent of the girls demonstrated confidence in dealing or tackling with any forms of safeguarding threats. The main reason behind their confidence in handling adverse situation is STEM's in-school and out-of-school support, which included self-defense training, sensitization about ASRH and community-level activities such as household dialogue and street drama.

Some of the key recommendations to sustain the project's achievements with regards to safeguarding and self-confidence of girls are listed as follows:

- In order to ensure full utilization of CRM as an effective referral mechanism for girls against any safeguarding threats they may face at school, girls need to be able to develop complete trust upon the confidentiality and anonymity regarding the use of CRM. In doing so, it will be necessary to increase the confidence of girls in the process and increase their trust in the system
- Engage in dialogue with girls to sensitize them about the use of CRM
- As self-defense training has proven to be highly effective in increasing girls' confidence, a separate program can be designed as a refresher to girls' self-defense skills

Gender sensitivity: The intermediate outcome around gender sensitivity explored the sensitivity of different stakeholders related with the key GESI barriers which are very common in the project area, mainly in the form of gender-based discrimination. The purpose of this intermediate outcome is to gauge the level of readiness of different stakeholders, including parents, teachers, overall school environment, and girls' male and female friends to support the girls in their specific needs and aspirations with regards to freedom, mobility, studies, work or their personal life choices.

In that regard, teachers, overall school environment and girls themselves, were found to be highly gender-sensitive. According to girls, teachers not only make sure that discriminatory practices between girls and boys do not exist in the classroom, but they also encourage girls to participate in classroom activities and school functions and competitions. Likewise, schools visited during the course of this study were found to be gender-sensitive in terms of infrastructural provisions, which include separate toilets for girls and boys, WASH facilities, availability of free sanitary pad for girls, sports equipment for girls, among others.

At the household level, parents were also found to be generally sensitive towards the needs of their daughters, especially concerning education. For instance, girls have been relieved of their excessive engagement in household chores, which has increased their leisure time. Also, with regards to the education choice of the girls, parents were found to be widely supportive, as most of them said they will allow their daughters to study up to any level she wishes. However, there

are certain nuanced layers, with regards to decision-making and distribution of household chores between members of the family, where the study highlights an area of improvement. For instance, most of the stakeholders, including girls themselves, said most of the crucial decisions about personal life such as marriage, higher studies, among others, are still mostly taken by girls' parents, mostly father. Similarly, as girls were able to release their pressure off their massive involvement in the chores, the responsibility of household chores shifted towards other female members of the family, mostly overburdening the mother with extra work. The traditional gender roles are still a major social structure that are followed by both men and women in the communities.

The boys that we interacted with at the school level demonstrated limited awareness and sensitivity towards girls' needs, aspirations and equality. Especially as they were not a part of STEM's direct beneficiaries, boys were deprived of certain interventions such as girls' club classes and other training that were exclusive to girls. As a result of this, while girls were found to be increasingly conscious and sensitive about the issues regarding equality, freedom, gender-based harmful norms that need to be broken, among many others, awareness about these same topics among the boys was found to be quite low. For instance, boys failed to recognize the different roles of men and women in a family as a problem that affects their life. Most of the boys were found to have normalized these practices and are hardly concerned about changing any of it. Moreover, a number of boys believed that it is fair for women to be engaged in the kitchen-works while the men should be responsible for working outside. While girls may have been sensitized well enough about these issues, unless their male counterparts realize these factors and come on a same page about addressing the problems, the social discrimination that exists on various levels is less likely to wane. Also, at a more direct level, as girls and boys both co-exist in the same community, girls' empowerment alone would not be sufficient to bring about changes and equality. It is of utmost importance that the project, local government, schools and the community together work towards shortening the gap of understanding and knowledge between girls and boys.

Some of the key recommendations concerning gender sensitivity of different stakeholders are listed as follows:

- As there still are some areas of improvement with regards to the division of household chores among male and female members of the family, continuous engagement with the households through door-to-door dialogue will be necessary to ensure the households understand the importance of equal division of household chores
- Continuous community sensitization will be required to change parents' attitude about decision-making roles in the family
- As the study highlights a gap in terms of incorporating boys into a similar sensitization initiative as girls, a short-term project can be designed and implemented to increase boys' awareness about traditional gender roles, equality, equity and co-existence in a society
- Students with poor learning performance – both girls as well as boys – should be able to benefit from remedial classes such as girls' club. While replicating and scaling of such efforts, local governments as well as schools should be encouraged to include both girls and boys in such learning initiatives

Annex 1: Project design and intervention

Note: No MTRP for STEM II

Activity	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?	Start to end date of activity	Target beneficiaries (and numbers)
HH learning environment ● Family dialogue ● Life skills (LS) and Adolescent Sexual Reproductive Health (ASRH) classes ● Parents for Quality Education	● Output 1 ● Output 4 ● Output 5	Contributes to IO 5. Family dialogue training to parents has been designed to narrow the HH gender roles that have been rooted 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 and the male members take up chores at home. Similarly, P4QE raises awareness and encourages parents to be more involved in their daughters' education. 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, decrease absenteeism at school and improve their learning outcomes. This will help them learn better and get them promoted to a higher grade. As the project is working towards a behavioural change at the HH level where the HH members are actually practicing the changes in their roles and responsibilities and encouraging the girls to study by creating a conducive learning environment at home, and where girls also have greater aspirations for their lives and are working towards it, this change will be a sustainable one.	● **Family dialogue:** 28th January 2019-25th November 2019 ● **Life skills (LS) and Adolescent Sexual Reproductive Health (ASRH) classes**: 15th December 2017-15th February 2020 ● **Parents for Quality Education:** 14th February 2018-20th March 2018	● **Family dialogue:** 1794(1281 female and 513 male) parents ● **Life skills (LS) and Adolescent Sexual Reproductive Health (ASRH) classes**:4768 IS girls and 1097 OOS girls ● **Parents for Quality Education**: 3038 (1976

					female and 1062 male) parents
Community Initiative ● Fundraising campaign ● EGAP Campaign – Household door-to-door enrolment campaign ● Child Safeguarding Training/orientation	Output 1	Contributes towards IO 5. With these campaigns that are around girls' education, empowerment, gender equality, safety and harmful social norms which are led by parents it gives them a new perspective on these issues and they in turn start becoming advocates for such issues. They then are in the path towards becoming more gender transformative in their home and community.	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 for 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.	**Fundraising campaign:** 5th November 2018-12 December 2019 **EGAP Campaign – Household door-to-door enrolment campaign:** 17th April 2018 - September 2020 **Child Safeguarding Training:** 2nd January 2018-February 2020	**Fundraising campaign:** 3111 (1582 female and 1529 male) participants **EGAP Campaign – Household door-to-door enrolment campaign**: 6040 (3082 females and 2958 male0 participants **Child Safeguarding Training:** 7067(4411 female and 2656 male) participants

Safe Space ● Self-defence training ● Child Safeguarding training ● Girls' Clubs	● Output 4 ● Output 5 ● Output 1	Contributes towards IO 2,3 and 4. Self-defence training will support the girls in identifying and raising their voices against any harassment and misconduct that can happen to them at school, community or home. The training will build confidence in 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 study but also to connect with each other, share their feelings, ideas, dreams and hope, helping them to feel more emotionally and physically safe. This has also helped the girls build their resilience during COVID and be aware and prepared to tackle any form of abuse, harassment or GBV that came with the pandemic.	Where students are not productively guided, engaged or when they feel excluded or threatened they cannot learn and grow at their full potential both personally and professionally. 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 training parents will feel more secure about girls' safety which increases 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.	● **Self-defence training**: 6th January 2019- 19th September 2019 ● **Girls' Clubs**: 15th December 2017- 15th February 2020	● **Self-defence training:** 4514 girls ● **Girls' Clubs:** 4768 IS girls
School governance ● Management for Quality Education (M4QE) ● Parents for Quality Education (P4QE0) ● "Our Voice" box ● School Management Committee and	● Output 2	Contributes towards IO 1 and 5. With training like M4QE and P4QE, it not only looks at the overall governance and management of the school but also ensures that quality teaching is happening at the school and encourages parents to be more involved in monitoring teaching quality.	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	**Management for Quality Education (M4QE):** 13th May 2018- 26th September 2019 **"Our Voice" box:** Throughout the academic year	**Management for Quality Education (M4QE):** 1731 (798 female and 933 male)

Parents Teachers Association meetings		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. Through project monitoring data it was seen that the students were using the "Our voice" box to make their teachers more accountable towards their attendance, behaviour and teaching quality.	contributes to improved learning and successful transitions. Once the school has an "Our Voices" box or other referral mechanism set up and implemented and they practice developing good child-friendly SIPs through collaboration and discussions this should work towards making good governance sustainable.	**School Management Committee and Parents Teachers Association meetings:** Throughout the academic year	
Gender Friendly School Infrastructure ● Educate Girls Alleviate Poverty (EGAP) Award	● Output 2 and 6	Contributes towards IO 4 and 5. This intervention will provide essential infrastructure support to the schools in the form of EGAP awards. 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 was identified by the schools and the project. The awards could only be received once the school had met certain criteria and the school had to work towards meeting these criteria (criteria was designed to ensure a child friendly school environment). This builds a sense of ownership amongst the	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 and pride for the students, teachers and school management in their achievements of their award. When the project tried to unpack this through a qualitative lens, a clear shift towards more	● **Educate Girls Alleviate Poverty (EGAP) Award:** December 2018-May 2020	

		school authorities. Providing schools with better WASH and infrastructure facilities can motivate girls to attend schools more regularly. Understanding the barriers to the disposal of sanitary pads in school, project has provided an incinerator for pad disposal in all schools as mandatory action. Similarly, after COVID with the school reopening the project that ensured that the Infrastructure like classroom and WASH are in place in accordance to COVID safety standard. Similarly, additional handwashing stations have been installed in each school to increase access to handwashing.	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	Contributes towards IO 1. The GCFs have been trained on applying student/child centred learning in both clubs and classrooms. The focus was on using group work, discussions, presentations, use of local resources for demonstration. 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	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	● **Girls Club Facilitation Training:** July 2017- February 2020 ● **Classroom Management Training:** 3rd June - 22nd June 2018	● **Girls Club Facilitation Training:** 550 (372 male and 178 female) teachers ● **Classroom Management Training:** 463 (127 female and 336 male)

		alternatives to corporal punishment to create a safe, dignified and rewarding teaching-learning space. Both of these interventions have helped improve the overall classroom environment and motivate the students to regularly attend school. Transference of teaching practices from clubs to classrooms was also seen in the endline findings from FDM. 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.	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	Contributes towards IO 1. This activity has been designed with a vision to reduce disparities in access to quality teaching and learning resources for both students and teachers. The integration of libraries, computer and science labs in their educational course will help enhance the teaching-learning	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.	Learning Center establishment: October 2018-December 2018	**Learning Center establishment:** 15 computer labs, 12 science lab and 3 libraries with

		process and motivate the children to attend school regularly. Teachers are also encouraged to use the resource center for learning about different teaching methodologies, sharpening and updating their knowledge on the curriculum.	This will help the girls to maintain regular and sustained attendance and improved learning.		additional 628 books to 30 STEM schools
Financial Literacy ● Youth Financial Literacy Training (YFLT) ● Workshop with GTF recipients	● Output 5	These interventions will contribute to IO 3 and 5. These activities are designed for OOS girls in order to build them with necessary skills to venture into the 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. With these training the girls will also gain confidence in their capabilities to venture into the job market which is predominately captured by men.	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.	● **Youth Financial Literacy Training (YFLT):** May 2018- May 2019 ● **Workshop with GTF recipients**; January 2018- March 2020	● **Youth Financial Literacy Training (YFLT):** 1069 girls ● **Workshop with GTF recipients :** 310 girls
Livelihood Opportunity ● Vocational Training (VT) ● Business Skills Development (BSD) Training	● Output 5	Contributes towards IO 3 and 5 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	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	● **Vocational Training (VT):** August 2018- September 2020 ● **Business Skills Development (BSD)**	● **Vocational Training (VT)**: 560 girls ● **Business Skills Development (BSD)**

• Girls Transition Fund (GTF)		independent, able to make their own decisions and have a bigger voice in their family and community.	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 cooperatives 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 composed 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.	**Training:** May 2018- May 2019 • **Girls Transition Fund (GTF):** 1st April 2017- ongoing	**Training: 1033 girls** • **Girls Transition Fund (GTF):** 482 girls
COVID-19 Response	NA	Intermediate Outcome 4 When COVID hit the world and when Nepal slowly started seeing cases in March, we had a year of project implementation left. Our first though as a project was to ensure the wellbeing of the project participants. We then	All the support that the project has provided before and after covid has helped these girls to strengthen their resilience. With the support during the time of COVID the girls got the platform and support to continue their learning and transition into higher grade	March 2020 to current	11,710 1303 = **SEE classes through radio**

		conducted a series of 4 assessments starting 22 March to the end of lockdown 30 July. This started as initial check-in calls and later turned into a needs assessment. For the assessment we reached 1254 girls from rural, urban and semi-urban girls along with 582 other stakeholders ranging from teachers, parents and guardians, school management and private sector project partners. The survey majorly focused on the "well-being" of the girls along with topics like Covid Awareness, Psychological stress, Safeguarding, safe spaces, coping mechanism, Living conditions, Food security and market, Health and hygiene, accessibility to internet and feasibility of virtual learning, distance learning and access to resources. With this information the project did the following - **Information/ Awareness:** The project engaged in Risk Communications and Community engagement activities as part of its initial response to the growing threat of coronavirus in the project working areas. The project started airing four PSAs on preventive measures of COVID-19 through 9 local FMs in local	or fight the economic hardship for girls doing businesses or other income generating work.		1897= **Hygiene kit** 7214 = **Hand washing station** 1300 = **Hygiene kit**

		languages of Tharu, Rana tharu and Doteli. But with the extension of the lockdown, the project focused on messages on making productive use of time and taking care of children to support local communities cope with the changing times. As mentioned before, the second study also indicated that an alarming number 65% of girls did not know where to contact in case of harassment or any forms of abuse. The project doubled its efforts to provide toll free numbers, hotlines and contact persons of the project child safeguarding focal point to report cases of violence and abuse. The project also produced two radio programs on the issue to promote information on where to reach out if they face such problems in their communities. The project also distributed leaflets on the same to 30000 households in coordination with the local governments through their relief distribution programs. Through this, the project was able to reach 30,000 households and the most vulnerable communities in the project working areas. Such information was also disseminated during the distribution of hygiene kits to 2,000 project participants. Information flyers on psychosocial stress and contact of Mercy Corps safeguarding focal point and hotline and toll free numbers in case of harassment and abuse			

		were provided with the kit. The toll-free numbers and contacts were also printed in the hygiene kit bag provided by the project. In addition, Mercy Corps Nepal has also been successful in setting up its Community Accountability Reporting Mechanism (CARM) through which project participants and alike can provide feedback, suggestions, complaints on any issues regarding the organization and its work in the local communities. Project participants can report child safeguarding, harassment and abuse cases through this system as well. This mechanism has helped bring the voices of the communities to the fore where the project has been able to adapt project activities accordingly. Similarly, right information and awareness is critical during such a crisis period. As the focus started to shift towards basic necessities, it was evident that lack of right messaging, facts and spread of rumors did not help the situation. With awareness messages broadcasted through radio and disseminated through social network sites and distributed person to person, the project put its efforts on raising awareness on the preventive measures of COVID-19, wellbeing issues and required information to report abuse and violence. 70% and 76% of the respondents said that they listened to			

		the project messages through radio in the third and fourth assessment respectively. **SEE Classes, distance learning**: The project accelerated its efforts to provide SEE revision classes to grade 10 students in accordance to its contingency plans and the findings of the second assessment indicated the uncertainty of the exams was the main factor contributing to stress. The revision classes were disseminated through local FM stations as they are the most popular and accessible source of information in the region. A rapid assessment found that distance learning through mediums like the internet and TV was not feasible, as many students lacked internet access and hardware like laptops, smartphones, and televisions. The project selected teachers for the four core subjects (Maths, Science, English and Nepali) and recorded 15 hour-long sessions for each subject. The sessions were aired through three local stations that covered two districts of Kanchanpur and Kailali who have a reach of more than 500,000 listeners. The project aired the sessions starting June 5 in coordination with the provincial government and Good Neighbors International.			

		GTF loan interest reduction: As preparations for SEE were the biggest challenge for grade 10 school students, repaying their loan and sustaining business was the biggest challenge for Out-of-School girls. Many of the small businesses supported by the project through its GTF program and Vocational training program were affected by the lockdown. The project worked to decrease the repayment burdens on these entrepreneurs in coordination with the 6 local partner cooperatives to provide exemptions on late payment fees and reduced the loan interest from 8% to 5% only valid during the lockdown period. **Hand washing station at schools**: With the opening of schools the project has installed hand washing stations at each school for students to maintain good hygiene practices. So the project has been providing the participants with not just individual hygiene kit, mask, soaps, sanitizers, information through IEC materials, radios, handwashing stations, lower interest on loans, but also ensuring their psychosocial wellbeing through regular follow ups and information sharing.			

Annex 2: Endline evaluation approach and methodology

The following section discusses the changes incurred in the outcomes and intermediate outcomes and indicators measuring them, while arriving at end-line from midline.

Table 1: Changes in midline outcomes/ IOs and indicators

MIDLINE		
Outcomes/ IOs	**Indicators**	**Why was this outcome (indicator) closed/ changed for Endline**
Learning: Number of marginalised girls supported by GEC with improved learning outcomes	- Number of marginalised girls supported by GEC with improved literacy - Number of marginalised girls supported by GEC with improved numeracy	As the learning targets set for midline were overachieved by midline (by 265.97 percent for numeracy and 115 percent for literacy, it has already been proven by the learning intervention model of STEM II works well. Also, it would not be possible to administer the school-based SeGRA and SeGMA tools this time as the last batch of girls under STEM's intervention (Grade 8 girls during baseline) have already left the school after having graduated SEE level this year.
Transition: Number of marginalised girls who have transitioned through key stages of education, training or employment (with sub-indicator for boys where reported)	- Transition rate	Transition rates of both IS and SG/ OOS girls were overachieved during midline. Also, as per the new grading system in place, all the IS girls appearing SEE exams graduated this year and transitioned to the higher level. Therefore, measuring the transition rate of IS girls would not be necessary. With regards to the SG/ OOS girls, as the target for transition rate was overachieved in the midline, the project is more interested in exploring which combinations training and support are most effective in supporting the livelihood, confidence, decision-making, self-efficacy and agency of SG/ OOS girls. Indicator for this has been revised accordingly.
Sustainability: Project can demontsrate that the changes it has brought about which increase learning and transition through education cycles are sustainable: Performance against comprehensive sustainability scorecard (scores 1-4).	- Number of Community Education Network formed	CEN formed in five out six project intervention municipalities by midline evaluation
	- Number of targeted school visitors (VCPC members, Resource Person, community leaders, parents, etc) visiting STEM schools reported by HTs	1. Target overachieved during midline evaluation 2. Schools currently closed due to COVID-19
	- Number of schools making acceptable progress or above towards achieving their SIP - Number of schools practicing sharing of lessons learned and best practices with non-STEM teachers from their school - Number of schools with inlcusive infrastructure established and maintained.	The midline indicators were unable to aptly capture sustainability as they were mostly focused on the numbers rather than observing how well the schools have been retaining STEM's support. It was agreed between the EE, project team and the FM that endline should extensively focus on recording the level of ownership taken by schools on STEM's support. Also, the ongoing COVID-19 situation will restrict the EL from collecting school-based data regarding SIP and school observation as the schools is closed. The school-level sustainability indicator has been revised accordingly.
	- Number of MoU signed by District and Local level	Target overachieved. Indicator no longer relevant.

	Education Office in support of STEM II programme	
	- Number of RPs actively involved in STEM II programme	Owing to the recent changes in government education system, the position of Resource Person has been scraped and replaced by Section officers. Indicator no longer relevant.
	- Number of key targeted stakeholders STEM II share its learning/activities with	With the changes in the governance system in Nepal after the implementation of federalism, the project, which was earlier working with one unit is now engaged with a total six local governments. In that account, the number of sharing events was highly overachieved during the midline evaluation. This indicator is no longer relevant in the present context.
IO1: Attitudes and behaviors: Carers allow girls to spend more time studying	- Average proportion of time per day IS girls spend on unpaid domestic and care work - Average proportion of time per day girls spend to study at home	The midline findings evidenced a significant reduction in the time spent of girls in household chores. As a result of this, girls were found to be devoting more time in their studies (also because they were approaching their SEE exams next year) not just at home, but in the girls' club classes, peer learning, tuition classes, etc. At endline, the girls have already completed STEM's intervention cycle and have graduated from secondary level of education. They are yet to join higher secondary level (due to ongoing COVID-19 situation). Therefore, measuring girls' study time at home was deemed irrelevant for the endline evaluation by the EE, project team and the FM.
IO 2: School Governance: School Environment promotes quality education supporting girls	- Percent of STEM schools that identify girl's needs through gap assessment and incorporate into their SIPs	The EE, project team and the FM found this IO irrelevant for the endline evaluation as the schools have remained closed for the past six months already and there are no signs of schools reopening any soon. However, efforts made by teachers/ school-based stakeholders to avoid the impact of COVID-19 on learning will be explored through a separate indicator under Endline IO 4 (presented below).
IO 3: Attendance: Improvement in marginalised girls' attendance in schools throughout the life of the project	- Percentage improvement in attendance rates	IO not relevant for endline as the STEM intervention girls have already graduated from school. Also, the schools have remained closed for more than past six months due to ongoing pandemic.
IO 4: Financial Literacy: Marginalized OOS/SG girls are equipped with skills and knowledge that allows them to make informed financial decisions	- Percent of OOS/SG marginalized girls who get STEM's YFLT move to a higher learning level	IO closed for endline as the target was highly overachieved during midline evaluation. The assessment of YFLT was made during midline evaluation based on pre-post tests taken by the project during YFLT trainings delivered to SG/ OOS girls.
IO 5: Teacher quality improvement: STEM II teachers promote student centered teaching environment	- Percent of STEM II teachers using student-centered teaching methodologies	As the classes are not running currently due to COVID-19 situation, it will not be possible to conduct classroom observations, based on which teaching quality was measured during midline. Additionally, as the assessment of teaching quality was dependent on only one classroom observation per school, it was not found to be too effective. For instance, although in the observation classroom, many teachers were not found to be using all of the required child-friendly teaching methods,

		during qualitative discussions and in the girls survey, girls contradicted with the findings from classroom observation. For these reasons, the endline is rather willing to explore the differences between teaching practices of STEM-trained and non-STEM trainined teachers in the intervention schools; and the teachers in STEM intervention schools and in the control schools. One key factor to explore during the endline is the practice of sharing knowledge and expertise among the teachers in intervention and control schools.

Table 2: Endline outcomes/ IOs and indicators

ENDLINE		
Outcomes/ IOs	**Indicators**	**Rationale behind revision**
Learning: Changes in girls' perception on learning since midline	- Percentage of girls who demonstrate positive changes in their perception about learning since baseline	Through learning assessment tools (SeGRA and SeGMA), the learning intervention model of the project was found to be effective during midline evaluation. Therefore, it was decided earlier among the EE, project and the FM that learning would be evaluated on the basis of girls' secondary level national exams (SEE). However, given the COVID-19 outbreak, the exams have been cancelled. In that light, the end-line evaluation will primarily focus on girls' perception about the changes in their own learning performance over the course of the project. Qualitative factors of these changes in the perception will be further explored through qualitative deep-dives, focusing on reasons behind any changes that have occurred, perception of parents, among others.
Transition: STEM's support in increasing the SG/ OOS girls' confidence, decision making, self-efficacy, livelihood opportunities and agency	- Percentage of SG/ OOS girls who demonstrate increased confidence, decision making ability, self-efficacy, livelihood opportunities and agency; as a result of different training/ intervention combinations of STEM II (VT, YFL, BSD and GTF)	The end-line evaluation will not capture the transition of IS girls as the current education system of Nepal automatically upgrades girls from secondary to the higher secondary level. With regards to the OOS/ SG girls, STEM has a well-rounded OOS/ SG intervention with Business Skills Development Training, Vocational Training, Youth FLT, Adolescent Sexual and Reproductive Health and Girls Transition Fund. The end-line evaluation will therefore explore which combination of these OOS/ SG training are more effective for improved livelihood opportunities.
Sustainability: The extent to which STEM's work will be sustained across all the layers -- school and system -- that it has targeted. Evidence of this will be generated through the level of ownership and measures/ efforts undertaken (actual decisions, policies and budget) towards scaling the achievements made by STEM by different stakeholders	- Initiatives/ decisions taken by school management to retain support received from STEM II - Level of STEM II support to provincial/ local governments to develop education plans focusing on improvement of girls' education and safeguarding policies - Best practices of STEM II retained and supported by local governments	Most of the midline indicators were output oriented. Therefore, they were unable to capture the project's direction towards sustainability in a true sense. In that light, the endline evaluation will focus on ownership and scale-up of project activities by school and system-level stakeholders. Also, midline was too early to capture sustainability but could only look at the direction the project moved towards sustainability. Since the project has invested and worked heavily on sustainability post midline and the project is towards its end, it is the right time to focus on this. Furthermore, what model worked/ did not work for the project can be used to either share with the government and wider stakeholders for possibilities of scale up, or generate learnings to inform future interventions - replication or scale-up.
IO1: Teaching practices: Teachers of STEM intervention schools	- Percentage of girls who report	During baseline/ midline, teaching quality was assessed using classroom observation. However, as the classes are not running in the context of pandemic, end-line cannot assess

who practice child-friendly teaching methods	teachers use child-friendly teaching methods in formal classes	the teaching quality. Instead, general teaching practices and the difference between teaching practices of STEM-trained teachers and non-STEM-trained teachers from both treatment and control schools will be explored. The end-line will study the difference in teaching practices and motivation of the teachers. Difference will be observed in terms of following key domains: ● Use of child centred teaching methodologies ● Teachers' motivation towards self-growth/ improvement ● Sensitivity towards students' social-cultural background and learning levels
IO 2: Safeguarding: IS girls are aware about harassment/ bullying/ abuse and GBV and referral mechanisms in place	- Percentage of girls who demonstrate awareness about harassment/ bullying/ abuse and GBV - Percentage of girls who demonstrate awareness about referral mechanism in place	Safeguarding as a cross-cutting issue that aligns with multiple outcomes and intermediate outcomes in the ToC
IO 3: Self-confidence: Girls are confident and equipped to handle any adverse situation such as harassment/ bullying/ abuse/ GBV; and, decision-making (personal/ professional) as well as in terms of voicing their opinions in front of peers, parents	- Percentage of girls demonstrating confidence in handling adverse situation such as harassment/ bullying/ abuse/ GBV - Percentage of girls who demonstrate confidence in decision-making about their personal and professional life as well as in terms of voicing their opinion in front of peers, parents	Self-confidence as a cross cutting issue that aligns with multiple outcomes and intermediate outcomes in the ToC
IO 4: COVID-19: Impacts of COVID-19 on girls' learning; small businesses of SG/ OOS girls and their confidence; and efforts made by different stakeholders to cope with these impacts	- Level of resilience of IS girls to cope with the impact of COVID 19 on learning - Level of resilience of OOS/ SG girls to cope with the impact of COVID 19 on small businesses, psychological stress, job opportunities - Measures taken by STEM II to mitigate the impacts of COVID-19 on its interventions - Measures taken by teachers/ school stakeholders to cope witht the impact of COVID-19 on learning	The unprecedented COVID-19 pandemic has disproportionately affected all the sectors, from education to small businesses. In this context, the impending end-line evaluation of STEM II should take into consideration the impacts of the pandemic on its programmatic areas and set goals surrounding especially the improvement of girls' education and livelihood opportunities for SG/ OOS girls. The end-line evaluation will therefore explore the impacts of the pandemic on programme's core areas of intervention and will record any measures taken by the project/ given stakeholders to mitigate the degree of impact.
IO 5: Gender sensitivity Transformation: Project stakeholders including	- Number of stakeholder groups (girls, parents, community members,	The end-line evaluation aims at exploring how the project contributed to the gender sensitivity of different stakeholders of STEM II. This will signify the level of gender-transformative

girls, parents, schools demonstrate gender sensitivity	school-based stakeholders, local government, etc.) that demonstrate gender sensitivity	approaches, practices and changes observed among different stakeholder groups.

Labeling the groups

The table below outlines and describes the two direct beneficiary groups that will be referred to throughout this annex and the report. It further displays which groups have a control group. Since these groups received different interventions, they will be referred to separately throughout the document.

Table 3: Labelling of the groups

Group name	Acronym	Description of group	Control group?
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
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

Evaluation methodology

In account of the changes made to the outcomes/ IOs and respective indicators for end-line evaluation, the end-line research design does not have the quasi-experimental element involving the analysis of learning scores comparison between treatment and control groups across different evaluation point. For the same reason, the end-line does not strictly follow cohort tracking, where in order to ensure statistical significance of the sample size, a replacement strategy has been adopted to compensate for some of the missing samples. Therefore, even though the sample was tracked from baseline and midline, as end-line evaluation also undertook a replacement strategy, the evaluation design and all the analysis conducted also follow the essence of cross-sectional analysis. The endline sample does not include girls who were in grade 9 and 10 during the baseline as they have already completed the project's intervention cycle in the previous year and are not being tracked anymore. High attrition was observed among this group of girls during the midline, as they were found to have migrated elsewhere for work or studies after completing the project's intervention cycle and graduating from grade 10 (secondary level).

With regards to the SG/ OOS group, as the endline evaluation seeks to observe the effectiveness of different combinations of trainings and support provided to the girls, sample was revised using the existing sampling framework, whereby a statistically significant sample size of girls who have taken different combination of trainings and support was derived. The total sample size was proportionately divided among girls who have received different forms of support from STEM II.

Table below presents a detailed outline of the methodology used for endline evaluation of STEM II.

Table 4: Methodology for outcomes

<table>
<tr><th colspan="4">Learning</th></tr>
<tr><th>Evaluation questions</th><th>What will it explore?</th><th colspan="2">Methodology</th><th>Rationale/ explanation</th></tr>
<tr><td rowspan="3">How has the girls' perception on learning changed since baseline?</td><td rowspan="3">Girls' perception on any improvement in their understanding of lessons. Improvements in examination scores. What do girls perceive as key driving factors for improving their scores?</td><td>Primary respondents</td><td>IS Girls, Parents, Teachers</td><td rowspan="3">Through learning assessment tools (SeGRA and SeGMA), the learning intervention model of the project was found to be effective during midline evaluation. Therefore, it was decided earlier among the EE, project and the FM that learning would be evaluated on the basis of girls' secondary level national exams (SEE). However, given the COVID-19 outbreak, the exams have been cancelled. In that light, the end-line evaluation will primarily focus on girls' perception about the changes in their own learning performance over the course of the project. Qualitative factors of these changes in the perception will be further explored through qualitative deep-dives, focusing on reasons behind any changes that have occurred, perception of parents, among others.</td></tr>
<tr><td>Type of data</td><td>Quantitative (Girls survey), Qualitative (Key Informant Interview)</td></tr>
<tr><td>Comparison data</td><td>.No comparison data from baseline/ midline (No learning assessment for end-line evaluation)
.Control-Treatment comparisons of the girls' and parents' perception on learning will be made</td></tr>
<tr><th colspan="4">Transition</th></tr>
<tr><th>Evaluation questions</th><th>What will it explore?</th><th colspan="2">Methodology</th><th>Rationale/ explanation</th></tr>
<tr><td rowspan="3">How have the STEM II training and interventions supported OOS/ SG girls in expanding their confidence, decision making, self-efficacy, livelihood opportunities and agency?</td><td rowspan="3">Look at financial status, empowerment level, living standard, change in self-efficacy and gender roles amongst girls who have taken different combinations of project support. Which combination of the OOS/ SG training packages (VT, YFLT, BSD, GTF) are best suited to improve their confidence, decision</td><td>Primary respondents</td><td>OOS/ SG girls</td><td rowspan="3">The end-line evaluation will not capture the transition of IS girls as the current education system of Nepal automatically upgrades girls from secondary to the higher secondary level. With regards to the OOS/ SG girls, STEM has a well-rounded OOS/ SG intervention with Business Skills Development Training, Vocational Training, Youth FLT, Adolescent Sexual and Reproductive Health and Girls Transition Fund. The end-line evaluation will therefore explore</td></tr>
<tr><td>Type of data</td><td>Quantitative (Girls survey), Qualitative (Key Informant Interview)</td></tr>
<tr><td>Comparison data</td><td>.No comparison data from baseline/ midline (Evaluation question introduced during end-line)
.No control samples for SG/ OOS girls</td></tr>
</table>

	making, self-efficacy, livelihood opportunities and agency?			which combination of these OOS/ SG training are more effective for improved livelihood opportunities.
Sustainability				
Evaluation questions	**What will it explore?**	**Methodology**		**Rationale/ explanation**
.How likely is it that STEM's work will be sustained across all the layers - school, community and system, it has targeted? .Have there been any efforts (actual decisions, policies and budget) towards scaling the achievements made by projects in the intervention units by project stakeholders?	.Institutionalization of best practices of STEM by local government .Level of ownership by system, school and community .Project activities that had an impact and have been or can be scaled up by stakeholders with available resources	**Primary respondents**	Provincial government, Local Government, School Management, Teachers, Parents, Cooperatives and Project staff	Indicator more at output level for ML and weak data so the project will focus heavily on this for the end-line with change in indicators. Also, midline was too early to capture sustainability but could only look at the direction the project moved towards sustainability. Since the project has invested and worked heavily on sustainability post midline and the project is towards its end, it is apt time to focus on this. Furthermore, what model worked/ did not work for the project can be used to either share with the government and wider stakeholders for possibilities of scale up, or generate learnings to inform future interventions - replication or scale-up.
		Type of data	Qualitative (Key Informant Interview)	
		Comparison data	No comparison data from baseline/ midline	

Table 5: Methodology for intermediate outcomes

Teaching practices				
Evaluation questions	**What will it explore?**	**Methodology**		**Rationale/ explanation**
Is there a difference between the teaching practices of STEM teachers and, (i) non-STEM teachers in the same school and (ii) The teachers in control schools?	Teaching practices in regular class that generally include factors like child-friendly teaching methods - group work, presentation, class participation, peer learning, use of local resources, integration of resource centre, library and computer lab in learning, class decorum and management, and	**Primary respondents**	IS Girls	During baseline/ midline, teaching quality was assessed using classroom observation. However, as the classes are not running in the context of pandemic, end-line cannot assess the teaching quality. Instead, general teaching practices and the difference between teaching practices of STEM-trained teachers and non-STEM-trained teachers from both treatment and control schools will be explored. The end-line will study the difference in
		Type of data	Quantitative (Girls survey), Qualitative (Key Informant Interview)	
		Comparison data	.Girls' response about teaching practices will be compared from baseline/ midline .Is there a difference between the teaching practices of STEM teachers and, (i) non-STEM teachers in the same school and (ii) The teachers in control schools?	

	transfer of skills and expertise between STEM-trained and non-STEM-trained teachers.			teaching practices and motivation of the teachers. Difference will be observed in terms of following key domains: .Use of child centred teaching methodologies .Teachers' motivation towards self-growth/ improvement .Sensitivity towards students' social-cultural background and learning levels
Safeguarding				
Evaluation questions	**What will it explore?**	**Methodology**		**Rationale/ explanation**
.How do girls perceive harassment/ bullying/ abuse/ gender-based violence? .Are the girls aware about referral mechanisms against harassment/ bullying/ abuse/ gender-based violence?	Girls' level of awareness and understanding about harassment/ bullying/ abuse/ gender-based violence; and the referral mechanisms in place	**Primary respondents**	IS girls, SG/ OOS girls	Safeguarding as a cross cutting issue that aligns with multiple outcomes and intermediate outcomes in the ToC.
		Type of data	Quantitative (Girls survey), Qualitative (Key Informant Interview)	
		Comparison data	.No comparison data from baseline/ midline as there were no perception-oriented questions about safeguarding .The end-line evaluation will explore how well the control schools have been managing the complaint mechanisms. Consultations with school-based stakeholders of control schools	
Self-confidence				
Evaluation questions	**What will it explore?**	**Methodology**		**Rationale/ explanation**
.How confident and equipped are the girls to handle any adverse situation such as harassment/ bullying/ abuse/ gender-based violence? .How confident and equipped are the girls in decision-making (personal and professional) and/ or to voice their opinion in front of peers, parents?	Girls' confidence and ability to handle harassment, bullying, abuse and gender-based violence and voicing their opinions in front of peers, teachers and parents.	**Primary respondents**	IS girls, OOS/SG girls	Self-confidence as a cross cutting issue that aligns with multiple outcomes and intermediate outcomes in the ToC.
		Type of data	Quantitative (Girls survey), Qualitative (Key Informant Interview)	
		Comparison data	.Self-esteem of OOS/ SG girls with regards to their decision-making ability and their household respect will be compared across midline/end-line .Self-esteem of IS girls, with regards to handling adverse situations as mentioned in the questions above will	

			be compared across midline/end-line and treatment and control schools	
Efforts of STEM II to mitigate the impact of COVID-19 on girls' education				
Evaluation questions	**What will it explore?**	**Methodology**		**Rationale/ explanation**
.What impact did COVID-19 have on girls' education in Kailali? .What impact did COVID-19 have on small businesses of SG/ OOS girls? Did the outbreak of COVID-19 and its impact on businesses affect the self-esteem/ confidence of SG/ OOS girls? .How did STEM II respond to the outbreak of COVID-19 on girls? .How did teachers cope with the impacts of COVID-19 on learning?	Impact of COVID-19 on girls' education/ child protection in Kailali and measures taken by the project to mitigate those impacts.	**Primary respondents**	IS girls, SG/ OOS girls, project staff	The unprecedented COVID-19 pandemic has disproportionately affected all the sectors, from education to small businesses. In this context, the impending end-line evaluation of STEM II should take into consideration the impacts of the pandemic on its programmatic areas and set goals surrounding especially the improvement of girls' education and livelihood opportunities for SG/ OOS girls. The end-line evaluation will therefore explore the impacts of the pandemic on programme's core areas of intervention and will record any measures taken by the project to mitigate the degree of impact.
		Type of data	Quantitative (Girls survey), Qualitative (Key Informant Interview)	
		Comparison data	.No comparison data	
Gender sensitivity				
Evaluation questions	**What will it explore?**	**Methodology**		**Rationale/ explanation**
Did the project stakeholders demonstrate gender sensitivity?	Which stakeholders demonstrated gender sensitivity? What factors supported/ hindered these stakeholders?	**Primary respondents**	Girls, parents/ family members, teachers, boys, community members	The unprecedented COVID-19 pandemic has disproportionately affected all the sectors, from education to small businesses. In this context, the impending end-line evaluation of STEM II should take into consideration the impacts of the pandemic on its programmatic areas and set goals surrounding especially the improvement of girls' education and livelihood opportunities for SG/ OOS girls. The end-line evaluation will therefore explore the impacts of the pandemic on programme's core areas of intervention and will record any measures taken by the project to mitigate the degree of impact.
		Type of data	Quantitative (Girls survey/ HH survey), Qualitative (Key Informant Interview)	
		Comparison data	.No comparison data	

Sample

IS girls sampling

As per the end-line design, the girls who were in grade 8 during the baseline were only tracked during end-line evaluation. There are two different categories in the sample for both treatment as well as control groups, i.e., BL-ML-EL and ML-EL. While BL-ML-EL group was tracked since baseline, the ML-EL group contains girls who were added in the sample during midline evaluation. Apart from that, an additional sample has been added in order to ensure that the sample is statistically significant during end-line evaluation.

Stratified random sampling was adopted to draw the additional from the total beneficiary list of in school girls. The sampling was stratified based on respondents' location and ethnicity. Crossing three survey locations (rural, semi-urban and urban), and four ethnicity (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. A similar process was followed to generate additional sample during midline evaluation as well.

Given below are the sampling criteria used for IS girls.

Table 5: Sampling criteria for IS girls

Total IS population (BL Grade 8)	1168
Confidence level	95%
Margin of error	+/- 5%
Sample size	289
Attrition (13%)	38
Total IS sample size (Treatment)	**327**
Total IS sample size (Control) [Ratio of 2:1]	**164**

Using the given sampling criteria, the following sample size for both treatment and control groups was achieved.

Table 6: IS girls sampling

IS GIRLS			**Remarks**
TREATMENT	BL-ML-EL	138	Girls being tracked since baseline
	ML-EL	97	New girls added in the sample during midline
	EL	92	New girls added in the sample during endline to ensure sample size is statistically significant
	Total	**327**	
CONTROL	BL-ML-EL	80	Girls being tracked since baseline
	ML-EL	42	New girls added in the sample during midline
	EL	42	New girls added in the sample during endline to ensure sample size is statistically significant
	Total	**164**	
Total IS Girls		**491**	
Total IS Girls' Household		**491**	
Total IS sample - (Girst + Household)		**982**	

SG/ OOS girls sampling

As per the endline design, Outcome 2 - Transition aims to explore effectiveness of different combinations of training and support provided by the project. In that account, cohort tracking of SG/ OOS girls will not be done at EL. Rather,

girls who have taken different combination of trainings and support provided by STEM have been randomly selected from the project's master-list of beneficiaries. In order to ensure that sample is significantly distributed among groups who have received different combinations of trainings, sample size was revised as follows:

Table 7: Sampling criteria for SG/ OOS girls

Total SG/ OOS population	1318
Confidence level	95%
Margin of error	+/- 5%
Sample size	**298**
Attrition (13%)	**39**
Total SG/ OOS sample size	**337**

Using the given sampling criteria, following sample size for the SG/ OOS girls was achieved.

Table 8: SG/ OOS girls sampling

SN	Combination of different trainings	Total no. in the project's master list	Sample size
1	Only YFLT	31	8
2	YFLT and BDT	614	165
3	YFLT, BDT and VT	363	98
4	YFLT, BDT and GTF	42	11
5	YFLT, BDT, VT and GTF	43	12
6	Only VT	62	17
7	Only GTF	101	27
		1256	**338**
8	None		**169**
Total (SG/ OOS Girls)			**507**
Total (SG/ OOS Households)			**507**
TOTAL SG/ OOS SAMPLE			**1014**

Sampling for qualitative data for end-line

Considering the ongoing COVID-19 pandemic and requirements to maintain physical distancing throughout the endline evaluation period, it has been agreed among the external evaluator, project team and the fund-manager that Focus Group Discussions (FGD) would be avoided. Instead, all the key stakeholders that were engaged in FGDs during previous evaluation points were individually interviewed in Key Informant Interviews (KII). Purposive sampling was used to select the respondents for the KIIs.

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. The project's social mobilizers were asked to coordinate with school head-teachers for the selection of one IS girl per school. Other girls interviewed were snowballed based on the suggestions of the first IS girl who was called upon by the school head-teacher. A similar process was followed for the sampling of SG/ OOS girls and their respective parents at the community level.

Table 9: Sampling for qualitative data

Summary of qualitative consultations planned				
SN	**Individual interviews**	**Treatment**	**Control**	**Themes covered**
1	IS girls	**3** (Covering rural, semi-urban and urban areas, across different ethnicities.)	**2**	Learning | Teaching practices | Safeguarding & Self-confidence | GESI sensitivity | Multi-faceted

				impacts of COVID-19 (learning, safe-guarding, self-confidence, etc.)
2	SG/ OOS girls	**7** (Covering all seven training combinations and across rural, semi-urban and urban areas)	**2**	Transition | Safeguarding & Self-confidence | GESI Sensitivity | Impacts of COVID-19
3	IS girls' parents	**3** (Covering rural, semi-urban and urban areas)	**- 2**	GESI sensitivity | Impacts of COVID-19
4	Boys	**3** (Covering rural, semi-urban and urban areas)	**-**	Education | Housework (GESI sensitivity) | Impacts of COVID-19
5	Provincial/ Municipal/ local education office	**3** (Covering rural, semi-urban and urban areas)	**-**	Education | Sustainability | Impacts of COVID-19
6	Teachers	**6** (Two teachers – one GCF and one non-GCF – each in three schools covering rural, semi-urban and urban areas)	**2**	Girls' education | Teaching practices of GCFs and non-GCFs | Impacts of COVID-19
7	Head-teachers	**3** (Covering three schools in rural, semi-urban and urban areas)	**2**	Girls' education | Teaching practices of GCFs and non-GCFs | Impacts of COVID-19 | Sustainability
8	SMC members	**3** (Covering three schools in rural, semi-urban and urban areas)	**1**	Girls' education | Teaching practices of GCFs and non-GCFs | Impacts of COVID-19 | Sustainability
9	PTA members	**3** (Covering three schools in rural, semi-urban and urban areas)	**1**	Girls' education | Teaching practices of GCFs and non-GCFs | Impacts of COVID-19 | Sustainability
Total no. of consultations		**35**	**10**	**-**

To check for data saturation, the FDM researchers analyzed the qualitative data collected everyday by listening to the recorded clips. For each of question in KII, key words and key issues were noted down. When the researchers collected data the following day, they checked whether new issues and key words were coming up. At the point when repetitive information was coming out from KIIs, it was understood that data saturation has been achieved. Furthermore, FDM also ensured sequencing wherein quantitative data was collected in the first phase of data collection. After analyzing the quantitative results, the external evaluator designed qualitative consultations, considering all the emerging findings and gaps in quantitative data.

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 of the report template provided by GEC were specifically incorporated in the endline evaluation.

Culture and capacity: FDM maintained a gender-balanced research team in endline 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 endline data collection, 10 were female and most of them had prior involvement in STEM I evaluations as well as STEM II baseline and midline 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 endline 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 endline 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[15], 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 endline evaluation, as explained in detail in GESI section above.

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

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.

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. In the context of COVID-19, all precaution measures were undertaken. Physical distance was be maintained during all interviews, both quantitative as well as qualitative. Any form of physical contact with the respondents was also avoided. FDM also provided all the respondents with masks and sanitizers before interviews.

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.

Field data collection plan during pandemic

Adhering to the principle of 'do no harm' FDM staffs and representatives complied with following guidelines issued by WHO during field level data collection for assignments.

- All the FDM staffs/representatives carried sanitizers, masks and gloves for their use. Respondents were also provided with sanitizers for use and masks before interview.
- The interviews were carried out in open spaces maintaining physical distancing of 6 feet.
- Mass gathering and gathering around crowded places were avoided.
- It was clearly communicated prior data collection that the staffs/ representatives showing symptoms in the field would not be allowed to further engage in data collection and would comply with the government mandated guideline. However, no such situation was faced with throughout the process of data collection.
- Researchers were provided proper orientation on COVID-19 so that they were able to make informed decision on where and how to conduct the interview.

- Personal details of respondents including name, address and phone numbers were recorded.
- For travel and movement, FDM strictly discouraged the use of public vehicles. The private vehicles were sanitized before and after use. The vehicle was used strictly by the research team only.
- FDM conducted field visits in the locations ensuring the availability of separate accommodation.
- FDM reviewed the government directives prior to the field visit to study locations.
- After field visits, FDM staffs were mandated to stay in self-isolation for 14 days.

Use of control group

The project team and external evaluator strongly feel the need to use control group for end-line evaluation of STEM II. Firstly, in account of the changed context due to outbreak of COVID-19 pandemic, the approach and modality of end-line evaluation has changed a lot from baseline and midline. As a result of this, there are several areas where comparable data between the evaluation points will be missing. Therefore, if the end-line evaluation skips control group, a number of evaluation areas, as outlined in the evaluation questions, will not have any basis for comparison, limiting the evaluation's key purpose to explore how well the project achieved its set objectives.

Secondly, the end-line evaluation aims at generating evidences that will be helpful for the local government and other stakeholders to scale-up project activities. In that light, it is crucial for the government and responsible bodies at the local level, to be able to clearly see the difference between government's existing interventions aimed at improving girls' education. Since the girls in the control group have been receiving regular government support, there comparison with STEM intervention girls will help the government bodies in understanding how things can be done differently in order to obtain best outcomes in the future. This is exactly how STEM's legacy will be scaled up at a wider level.

While the external evaluator and the project team are convinced that the use of control group for end-line evaluation is important, it is equally important to take into consideration the ongoing COVID-19 pandemic and restrictions surrounding mobility and easy access to respondents. Since STEM was implemented in a single district, i.e., Kailali, same group of local enumerators can be mobilized for data collection with both treatment and control groups. Like in previous evaluation points, enumerators can track the samples individually at household level for both treatment and control groups. No extra strategies will be necessary to track the control group; neither will the enumerators have to travel to separate location for data collection with girls belonging to control group. Also, as the same set of enumerators from baseline and midline evaluations, who are locally based in different parts of Kailali district, will be deployed for data collection, tracking the households will not be much of a problem as enumerators working on specific data collection clusters will already be acquainted with locality, villages and household addresses.

Therefore, the external evaluator and the project team both believe that integration of control group in the end-line evaluation is not only important, but also largely viable in the context of ongoing pandemic.

Midline data collection process

Pre-data collection

In line with all the changes and adaptations made to the endline evaluation before data collection, and the sampling measures taken which has been discussed in the above sections, following tools were developed in the pre-data collection phase.

QUANTITATIVE

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 endline was adapted from the baseline and midline 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 and midline, 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 household survey was piloted during enumerators' training conducted before data collection. Further explanation of how the piloting has been conducted has been discussed in the section "piloting" below.

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 and midline 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.

PILOTING: As the schools were closed when quantitative data collection took place for the endline, school-based piloting in Dhangadhi was not possible, as during earlier evaluation points. However, in order to make sure that the questions were tested and errors corrected before the beginning of actual data collection, on the second day of enumerators training, each enumerator was asked to conduct at least two household and girls survey each at their own respective locations. The enumerators piloted the questions with random respondents (school-going girls and their parents). The piloting of questions did not bring out any major concerns about the structure of the survey and clarity of questions. However, enumerators pointed out that Nepali translation of the questionnaire had certain complex words, which the girls would not easily understand. Such words and sentences in the survey were replaced with easier options, based on the suggestions of enumerators themselves. Apart from that, enumerators also highlighted a few discrepancies with the skip-logic maintained in the flow of questions in the mobile-based data server. All of these errors were carefully checked and addressed before the data collection began.

QUALITATIVE

Qualitative inquiries during endline 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.

Owing to the COVID-19 situation during data collection, the qualitative exercise, this time, avoided group discussions. Rather, the stakeholder groups, including girls and parents, who were earlier interviewed in groups, were individually interviewed for end-line, as prior agreed between FM, project team and external evaluator. The interviews were organized in such a manner that the findings from the qualitative consultations could compliment the emerging findings from quantitative surveys. The gaps highlighted through quantitative analysis were explored through qualitative deep-dives, while keeping the discussions intact with the logical framework and changes/ adaptations made to the outcomes, intermediate outcomes and relevant indicators.

A list of the stakeholders interviewed and tools used has been outlined in the Table 10 above.

ENUMERATOR SELECTION AND ORIENTATION

A total of 16 enumerators were locally hired by FDM. Enumerators who were involved in data collection during the baseline and mid-line were re-contacted for the endline evaluation. For enumerators who were involved earlier, but were unable to participate in data collection for endline, additional enumerators were hired through a rigorous process. Individuals with prior experience in mobile-based data collection were given priority.

All the qualitative consultations were conducted by FDM researchers who had been deployed from the office in Kathmandu. The research coordinator also took part in qualitative data collection. Both the researchers who engaged in qualitative consultations had at least 5 years of experience in interviewing respondents 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 two-and-a-half-day rigorous training was provided to the enumerators. The table below was the tentative orientation schedule:

Table 10: Enumerators training schedule

Time	Activity
Day 1	
9:30 am – 10:00 am	Tea/ snacks
10:00 am – 10:30 am	Introduction and attendance
10:30 am – 10:45 am	Introduction to STEM project
10:45 am – 11:00 am	Objectives of the study
11:00 am – 12:00 pm	Guidelines on child protection/ sensitivity
12:00 pm – 1:00 pm	Lunch
1:00 pm – 2:00 pm	Team formation and field planning
2:00 pm – 2:30 pm	Tea break
2:30 pm – 3:30 pm	Instructions on approaching control schools, SG/ OOS sample and contingency measures to follow
Day 2	
9:30 am – 10:00 am	Tea/ snacks
10:00 am – 10:30 am	FDM's enumerator guidelines/ Data collection during COVID-19
10:30 am – 11:15 am	Guidelines on disability sensitivity
11:15 am – 12:30 pm	Administering girls survey
12:30 pm – 1:45 pm	Lunch
1:45 pm – 2:45 pm	Administering household survey
2:45 pm – 3:00 pm	Tea break
3:00 pm – 5:00 pm	Piloting in Dhangadhi
Day 3	
9:30 am – 10:00 am	Tea/ snacks
10:00 am – 10:30 pm	Feedback from piloting
10:30 pm – 11:30 pm	Lunch
11:30 pm onwards	Field mobilization

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

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 September, 2020 until first week of October, 2020. 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 third week of December, 2020.

For the quality of quantitative data, enumerators were provided a two-and-a-half-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 second day of the training, the enumerators were asked to test the tools in their own location. A school-based piloting could not be conducted for end-line as the schools were closed due to COVID-19. 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.

For the data collection, enumerators were divided across three different clusters by locations of sample schools. Based on enumerators' performance during the baseline and midline, 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 the household level at their respective communities. The girls were first contacted on their or their parents' mobile phones. In case where both girls and parents could not be found at the same time at the house, enumerators re-visited the household later and conducted the survey. 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 and replace the sample with another girl meeting similar characteristics as the missing girl.

Likewise, 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 per the end-line design. The qualitative data collection was conducted in the second and third week of December 2020.

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.

Given below is a summary of the sample achieved during end-line evaluation.

Table 11: Summary of sample and attrition

Groups	Baseline	Midline			Endline		
		Sample size	Sample achieved	Attrition	Sample size	Sample achieved	Attrition
IS Girls (Treatment)	400	504 (400 BL + 104 added sample)	375 (279 BL + 96 added sample)	10.61% (considering added sample) 30.25% (not considering	327	285	12.84%

				added sample)			
IS Girls (Control)	250	300 (250 BL + 50 added sample)	206 (163 BL + 43 added sample)	34.8%	164	146	10.97%
SG/ OOS Girls	350	350 BL	319	8.85%	507	473	6.7%

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

- Some of the girls who graduated from Grade 10 this year have completed the project's intervention cycle and have moved out of the district. Some of these households were found to have shifted to their respective villages (ancestral home) due to slack period in business invited by the COVID-19 pandemic.

- 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.

Post data collection

As no learning tests were conducted during end-line evaluation, there were no paper-based data this time. For the electronically collected data, 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 and midline in order to ensure comparison, wherever applicable. 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 endline data were being cleaned, they were sorted according to different criteria, such as ordering same as the baseline/ midline, 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.

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, 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.

QUALITATIVE ANALYSIS

The qualitative data, on the other hand, was collected by the researchers using a recording device. The entire consultations were recorded only after permission was acquired from the respondents at the start. Each of the recorded consultations were then copied to computers where they were named and given a date (the date on which the interview 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 previous evaluation points as well as the endline 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. Following are the key 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 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 endline data collection and limitations of the evaluation design

Table 12: Challenges and mitigation strategy

S.N.	Challenge	Type of Challenge	Mitigation strategy
Pre-data collection			
1	Difficulty in school-based data	Methodology/ Evaluation design	In account of the ongoing closure of schools due to COVID-19 pandemic, and also aligning with the findings of previous evaluation points, the endline

	collection due to COVID-19 closure		evaluation does not include learning tests, which would otherwise require the enumerators to track all the girls in school itself. For this reason, the girls and their households will be tracked at the community-level, using the contact list from previous evaluation points. Only qualitative consultations were organized with school-based stakeholders like teachers, head-teachers and SMC/ PTA members, who can also be tracked at community level, if it is not possible to meet them at school.
2	Challenges in re-contacting girls who appeared SEE examinations last year and have left the school already	Attrition (Sampling)	This challenge was observed during mid-line evaluation as well. However, as the end-line evaluation design has undergone a series of changes, whereby there are no strict requirements for cohort tracking, a replacement strategy was adopted to replace girl in the missing sample with another girl meeting similar characteristics.
3	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.
4	Self-	Data collection	A challenge encountered in terms of self-reported

	reported bias		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 observations conducted 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	Closure of schools due to COVID-19 during quantitative data collection	Attrition (Sampling)	Envisioning this challenge in the pre-data collection phase, the endline evaluation was designed in a different manner, where school-based data collection, which mainly included SeGRA and SeGMA tests, were avoided. This was also justified as all of the literacy and numeracy targets had been overachieved during midline. As a result of this change, girls were contacted at the household level.
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 the same community where the enumerators belong from.
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.
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 endline data with baseline due to two 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. This challenge was mitigated in the data cleaning process by matching the unique IDs and identifying the questions that require comparison for endline 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	Limited cross-evaluation comparison between baseline-midline-endline	Data analysis	All of the outcomes – learning, transition and sustainability – have undergone major changes at end-line. Moreover, apart from IO 1 (teaching practices), all of the intermediate outcomes used for end-line were newly introduced during the process of evaluation design. As a result of these changes, learning section does not have any comparison of literacy and numeracy data across baseline-midline-endline. However, a comparison of SEE results of the treatment and control IS girls has been made. Similarly, the transition outcome also does not have any comparison against previous evaluation points, as endline undertook a completely new approach to measure an indicator which is more focused on looking at the effectiveness of different combinations of trainings and support provided to the girls. The endline analysis does not calculate the transition rates as during the midline evaluation. Similarly, for the intermediate outcomes – safeguarding, self-

			confidence, impacts of COVID-19 and resilience, and gender sensitivity – no comparative data is available across the evaluation points. However, a comparison of treatment and control groups has been presented in the report. The intention behind all these changes is to make sure the end-line evaluation would not be re-iterating the known findings from previous evaluation points; and also to make sure the data collection process was smooth given the context of pandemic. Nevertheless, as comparative data across evaluation points is missing for most of the outcomes and intermediate outcomes, this should be considered as a caveat in the main report.

Representativeness of the learning samples, attrition and matching of intervention and comparison groups (where learning test data has been collected)

This section has not been included in the annex as no learning test was conducted during end-line evaluation.

Tables 11, 12, 13 and 14, presented below, include the evaluation sample breakdown by different categories/ characteristics. In terms of age, owing to natural process of aging, the girls who were in lower age-groups in the previous evaluation points have now shifted towards higher age categories. For IS group, highest number of girls belong to the age category 16-17. As the IS sample composition for endline includes the girls who were at grade 8 when the project started, this is a shift from 12-13 years age category over the past three years. A similar trend can also be observed for SG/ OOS population, as the girls who were in 16-17 years of age group at the beginning of the project, are now more than 20 years old. In terms of disability, since STEM II works with secondary grade girls in school, disability prevalence has been found to be very low among this group since baseline. The disability prevalence has remained at around 1 percent in overall since baseline as well as midline for both IS as well as SG/ OOS girls. Similarly, in terms of location, highest number of IS girls come from rural communities, followed by semi-urban and urban locations. The distribution of sample across rural, urban and semi-urban locations follows a similar trend in all three evaluation points.

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 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 qualitative consultations 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 and midline 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.

~~**Table 11: Evaluation sample breakdown by age (IS Girls)**~~

Table 13: Evaluation sample breakdown by age (IS Girls)

	Treatment	Control

12-13 years	0.70%	0.70%
14-15 years	4.60%	9.60%
16-17 years	53.70%	65.10%
18-19 years	32.60%	21.20%
More than 20 years	8.40%	3.40%
	285 (100%)	146 (100%)

Table 14: Evaluation sample breakdown by age (SG/ OOS girls)

12-13 years	0.20%
16-17 years	5.50%
18-19 years	9.10%
More than 20 years	85.20%
	473 (100%)

Table 15: Evaluation sample breakdown by disability (IS Girls)

	Treatment	Control
Difficulty seeing	2.10%	8.90%
Difficulty hearing	0.40%	1.40%
Difficulty walking/ climbing steps	0.40%	0.70%
Difficulty remembering things or concentrating	2.10%	2.70%
Difficulty with self-care	0.40%	1.40%
Difficulty communicating	1.75%	6.84%
Any serious illness in the last year	8.80%	8.20%

~~Table 14: Evaluation sample breakdown by disability (SG/ OOS Girls)~~

Table 16: Evaluation sample breakdown by disability (SG/ OOS Girls)

Difficulty seeing	1.90%
Difficulty hearing	1.30%
Difficulty walking/ climbing steps	0.84%
Difficulty remembering things or concentrating	1.70%
Difficulty with self-care	1.10%
Difficulty communicating	1.90%
Any serious illness in the last year	8.50%
	473 (100%)

Table 17: Evaluation sample breakdown by level of functioning difficulty (IS Girls - Treatment)

	No difficulty	Some difficulty	A lot of difficulty	Cannot do at all	Don't know
Do you have difficulty seeing, even if you are wearing glasses?	97.90%	2.10%	0%	0%	0%
Do you have difficulty hearing, even if you are using a hearing aid?	99.60%	0%	0.40%	0%	0%
Do you have difficulty walking or climbing steps?	99.60%	0%	0.40%	0%	0%
Do you have difficulty remembering things or concentrating?	97.90%	1.80%	0.40%	0%	0%
Do you have difficulty with self-care such as washing all over or dressing?	99.60%	0%	0.40%	0%	0%
Using your usual language, do you have difficulty communicating: for example, understanding or being understood?	97.90%	1.40%	0.40%	0%	0.40%
N=285					

Table 18: Evaluation sample breakdown by level of functioning difficulty (IS Girls - Control)

	No difficulty	Some difficulty	A lot of difficulty	Cannot do at all	Don't know
Do you have difficulty seeing, even if you are wearing glasses?	91.10%	5.50%	3.40%	0%	0%
Do you have difficulty hearing, even if you are using a hearing aid?	98.60%	1.40%	0%	0%	0%
Do you have difficulty walking or climbing steps?	99.30%	0.70%	0%	0%	0%
Do you have difficulty remembering things or concentrating?	97.30%	2.70%	0%	0%	0%
Do you have difficulty with self-care such as washing all over or dressing?	98.60%	1.40%	0%	0%	0%
Using your usual language, do you have difficulty communicating: for example, understanding or being understood?	91.80%	5.50%	1.40%	0%	1.40%
N=146					

Table 19: Evaluation sample breakdown by level of functioning difficulty (SG/ OOS Girls)

	No difficulty	Some difficulty	A lot of difficulty	Cannot do at all	Don't know
Do you have difficulty seeing, even if you are wearing glasses?	98.10%	1.50%	0.40%	0%	0%
Do you have difficulty hearing, even if you are using a hearing aid?	98.70%	1.30%	0%	0%	0%
Do you have difficulty walking or climbing steps?	99.20%	0.20%	0.60%	0%	0%
Do you have difficulty remembering things or concentrating?	98.30%	1.70%	0%	0%	0%
Do you have difficulty with self-care such as washing all over or dressing?	98.90%	1.10%	0%	0%	0%
Using your usual language, do you have difficulty communicating: for example, understanding or being understood?	98.10%	1.70%	0%	0.20%	0%
N=473					

Table 20: Evaluation sample breakdown by region/ location (IS Treatment)

Rural	44.80%
Urban	22%
Semi-urban	33.20%
N=285	

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 outcomes. As we can see that the perception of girls about their learning performance improvement since midline is higher with statistical significance in the treatment in comparison to control girls, no evidence of contamination in learning outcome was observed. Only 6.8 percent of control girls said they received learning support in the form of scholarship and tuition from outside school (local governments, NGOs).

The transition outcome at the end-line focused on the effectiveness of the project's training and intervention packages to SG/ OOS girls. As there is no control group for the SG/ OOS population, contamination is not a relevant issue to discuss for the end-line transition outcome. With regards to sustainability, the evidence of efforts made by the local government does not exclusively apply to the treatment schools. However, as the policy reforms, and

inclusive educational plans of the local governments will help in sustaining project's achievements on a longer run in the future, the spillover effect of this was not observed among the control schools by the end-line data collection.

With regards to the intermediate outcome on teaching practices, a number of control school girls also stated that their teachers have been using child-friendly methods in the classroom. This is a result of non-STEM training that is provided to the government school teachers by the government. Moreover, all the secondary level teachers are essentially trained before they join the teaching services.

Control girls demonstrated significant awareness and confidence in dealing with safeguarding threats that they may be faced with. We explored this finding categorically during our qualitative consultations. It was observed that issues related to safeguarding threats and protection is also a part of regular school curriculum in several subjects. Awareness and confidence in tackling safeguarding threats also stems from girls' increasing access to the internet and social media, where safeguarding issues and incidents make headlines every now and then. Apart from that, 11.10 percent of the control girls said they received support/ training/ orientation about different safeguarding threats from other organizations. Different forms of supports in this regard include 'orientations about different forms of violence and abuse', 'fight back training', and 'training and orientation on referral mechanisms'.

Apart from that, the project's community-based activities such as radio programmes cannot be deliberately limited to only the treatment of school girls. According to a project official, some of STEM's community-based activities such as street drama are attended by people from different places and backgrounds. Such community-based activities may also have had some spillover effect in the control group, although any striking evidence of that was not observed throughout the course of this study. Apart from this, no girl in the sample was found to have transferred to control school from the treatment or vice-versa.

Annex 3: Learning Outcome Data Tables

Learning Outcome Indicator: Percentage of girls who demonstrate positive changes in their perception about learning since midline

Table 20: Beneficiary grade and age

Beneficiary grade and age				Remarks
	Baseline	**Midline**	**Endline**	
Grade	Grade 8 (285)	Grade 9 (285)	Grade 10 (285)	The learning cohort at endline included only the baseline grade 8 girls, as other girls from the higher grades completed the project intervention cycle and graduated from SEE two to three years ago.
Age	10-11 years (2) 12-13 years (13) 14-15 years (153) 16-17 years (93) More than 18 years (24)	11-12 years (2) 13-14 years (13) 15-16 years (153) 17-18 years (93) More than 19 years (24)	12-13 years (2) 14-15 years (13) 16-17 years (153) 18-19 years (93) More than 20 years (24)	

Table 21: Improvement in learning performance since midline

	Treatment	**Control**
Yes	86.30%	75.30%
No	13.70%	24.70%
The result is significant with a p value of 0.004		
N=285 Treatment, 146 Control		

The above analysis was rerun for the panel data since the proportion of the control sample in different regions changed from ML to EL. The results were similar:

Table 22: Perception about learning performance improvement of the intervention sample

	Perception about learning performance improvement intervention sample	
	Yes	**No**
Recontacted (229)	86.89%	13.10%
Cross-sectional (285)	86.30%	13.70%

Table 23: Perception about learning performance improvement of the control sample

	Perception about learning performance improvement control sample	
	Yes	**No**
Recontacted (104)	75.00%	25.00%
Cross-sectional (146)	75.30%	24.70%

Table 24: Types of learning performance improvement

	Treatment	**Control**
Improvement in examination scores	98.40%	98.20%
More active in classroom discussions/ participation	97.50%	96.40%
Improved understanding of lessons in the classroom	99.20%	98.20%
Increased interest to learn	84.00%	78.20%
N=246 Treatment, 110 Control		
Difference between treatment and control not statistically significant, with p values 0.570, 0.992, 0.893 and 0.288 for the given four variables respectively.		

Analysis of SEE GPA score

Apart from girls' perception about their learning performance improvement, the endline evaluation also recorded GPA score of the girls who participated in the survey. The survey included a question where we asked girls the GPA scores they obtained in their SEE in 2020.

The mean GPA score of both treatment and control girls is about 2.50. As a result of prolonged impact of the COVID-19, the SEE exams were not held this year, and the girls were graded for secondary school examination by their respective schools on the basis of their internal exams score and other learning performance. The head-teachers we interacted with in the course of this study said that as this was not foreseen, schools generally faced difficulties in marking the students for SEE, as many of them did not have detailed record of girls' overall learning performance, apart from their internal exams score. Out of 285 treatment girls, leaving aside the girls who had to repeat grade while transitioning from grade 9 to 10 due to low scores, 277 were in school last year, out of which 241 graduated from the SEE with a mean GPA score of 2.48. Likewise, out of 146 control girls, 144 were in school last year, out of which 126 graduated from the SEE with a mean GPA score of 2.55. The difference in mean of the GPA score of treatment and control girls is not statistically significant, with p value 0.319.

Annex 4: Characteristics and Barriers

This section explores the changes in key characteristics and barriers of sampled IS and SG/ OOS girls across different evaluation points. The barriers and characteristics discussed here were identified during baseline, based on the project's theory of change[16].

Table 25: Characteristics of IS girls

Characteristics (IS Girls)							
	Treatment			Control			Source
	Baseline	Midline	Endline	Baseline	Midline	Endline	
Ethnicity							
Brahmin/ chhetri	35.85%	35.86%	36.80%	NA	40.68%	44.50%	Girls' Survey BI-2-Girl's ethnicity
Tharu	50.46%	45.69%	41.10%	NA	49.01%	45.90%	
Janajati	2.31%	6.38%	8.80%	NA	1.96%	4.80%	
Dalit	11.38%	12.07%	12.60%	NA	8.33%	4.80%	
Muslim	NA	0%	0.70%	NA	0%	0%	
Ethnicity-wise difference in the treatment group not found statistically significant, with p value more than 0.05							
Location							
Rural	57.23%	55.86%	44.80%	NA	70.09%	29.50%	Girls' survey Intro 5-Location type
Urban	16.76%	19.48%	22.00%	NA	11.29%	24.00%	
Semi-urban	26%	24.66%	33.20%	NA	18.62%	46.60%	
Location-wise difference in the treatment group not found statistically significant, with p value more than 0.05							
Household characteristics							
Girls living without both parents	3.19%	3.45%	0%	5.60%	7.31%	0%	Household Survey BI-7.a-Do both the parents of the girl stay with the girl?
Married	0%	0.60%	3.50%	0%	0.81%	0%	Girls' Survey BI-3-Are you married?
Primary caregiver/ head of household has no education	28.20%	17.60%	22.80%	27.00%	28.4%	34.20%	Household Survey BI-4-What is your level of education?
Households having 5 or more than 5 members	77.61%	76.40%	54.73%	NA	NA	63.70%	Household Survey BI-5-How many family members normally live and eat their meals together in this dwelling?
Difference in household characteristics not found statistically significant, with p value more than 0.05)							

[16] The tables presented in this annex are based on the cross-sectional analysis of both treatment and control samples

Table 26: Barriers of IS girls

Barriers (IS Girls)							Source
	Treatment			Control			
	Baseline	Midline	Endline	Baseline	Midline	Endline	
Household-level barriers							
Doesn't get support to stay in school and do well	0.87%	1.43%	2.80%	1.60%	0.40%	10.3%	Girls' Survey L-5-Did you get support from your parents/ caregivers to stay in school and do well in your studies?
Mother below the age of 18	1.50%	0%	0%	NA	NA	0%	Girls' Survey BI-1-Girl's age BI-3.a-Do you have children?
Girl involved in household chores whole day	77.32%	13.80%	9.80%	NA	NA	15.1%	Household Survey GT-12-How much time does the girl typically spend on a normal day on doing all these things?
Difference in household-level barriers not found statistically significant, with p value more than 0.05							
COVID-19							
Believes COVID-19 has affected/ will affect future aspirations regarding work/ studies	NA	NA	89.10%	NA	NA	88.4%	Girls' Survey L-9-Do you think the ongoing COVID-19 pandemic has affected/ will affect your future aspirations regarding work or studies?

As presented in the table 1 above, distribution of sample across different ethnicities has remained constant across all three evaluation points. The sample consists of highest number girls belonging to Tharu ethnicity, followed by Brahmin/ Chhetri, Janajati and Dalit respectively. Likewise, in terms of location type, highest number of IS girls come from rural communities, followed by semi-urban and urban locations. The distribution of sample across rural, urban and semi-urban locations follows a similar trend in all three evaluation points, among the treatment cohort. Meanwhile, the control cohort has seen a shift of significant number of girls from rural to semi-urban and urban areas. When we probed the reason behind this change, it was found that some control communities in the areas in Tikapur earlier considered rural underwent the construction of road and market area expansion towards the end of 2019. Although this does not make a solid evidence point for a location transforming from rural to semi-urban/ urban locations, it can be noted as a possible explanation. Furthermore, it should also be recognized as a methodological limitation worth caveating the relevant analysis presented in the endline report. The panel distribution for the comparison sample across rural, semi-urban and urban areas is provided below:

Table 27: Panel distribution for the comparison sample across rural, semi-urban and urban areas

	Control	Source

	Baseline	Midline	Endline	
Rural	NA	70.09%	41.34%	Girls' survey Intro 5-Location type
Urban	NA	11.29%	26.92%	
Semi-urban	NA	18.62%	46.60%	

The household characteristics considered are 'girls living without both parents', 'married girls', 'household head having no education' and 'households having five or more family members'. As we can observe in the table above, number of married girls has increased from 0.60 percent at midline to 3.50 percent at end-line evaluation. With increasing age, some of the girls who were in grade 8 during baseline were found to have been married by the end-line. During qualitative inquiry, we found that some girls got married after their completed their SEE last year. Similarly, girls living in households having five or more family members has decreased significantly from over 75 percent in both baseline and midline to 54.73 percent at end-line. This reflects an increasing trend of families' migration from rural locations to urban and semi urban areas for better work opportunities.

Meanwhile, in terms of household-level barriers, 2.80 percent of the IS girls stated that they don't get support to stay in school and do well. This number has slightly increased from previous evaluation points. The financial impact of COVID-19 on households was found to be a major reason behind this, when we explored it during community-based qualitative discussions with households. Apart from that, girls' engagement in household chores, a major barrier envisioned by the project, has significantly reduced from 77.32 percent at baseline to 13.80 percent at midline to 9.80 percent at end-line, highlighting commendable effort of the project towards this end.

COVID-19 and its subsequent impact in learning emerged as a significant barrier during end-line, as 89.10 percent of the IS girls said they believe COVID-19 has affected/ will affect their future aspirations regarding work/ studies. Impact of COVID-19 is therefore a major cross-cutting barrier that has been used to analyse different outcomes and intermediate outcomes throughout this report.

Meanwhile, as most of the schools were closed for a prolonged period at the time of data collection for end-line evaluation, and also because the beneficiary population of STEM II had already graduated from Secondary Education Examination (SEE) before end-line, the school level barriers such as lack of cleanliness of toilets, availability of sanitary pad disposal facility, teaching quality, among others, have not been explored by the end-line evaluation.

Table 28: Characteristics of SG/ OOS girls

Characteristics (SG/ OOS girls)				Source
	Baseline	Midline	Endline	
Ethnicity				
Brahmin/ chhetri	14.57%	14.11%	12.30%	Girls' Survey BI-2-Girl's ethnicity
Tharu	76.57%	78.37%	63.60%	
Janajati	1.71%	2.51%	19.90%	
Dalit	7.14%	5.02%	4.20%	
Muslim	0.00%	0.00%	0.00%	
Difference in ethnicity-wise distribution of SG/ OOS girls not found statistically significant, with p value more than 0.05				
Household characteristics				

Girls living without both parents	5.32%	8.15%	0%	Household Survey BI-7.a-Do both the parents of the girl stay with the girl?
Married	38.87%	41.10%	43.30%	Girls' Survey BI-3-Are you married?
Primary caregiver/ head of household has no education	38.24%	25.40%	33.40%	Household Survey BI-4-What is your level of education?
Households having 5 or more than 5 members	87.14%	82.10%	55.17%	Household Survey BI-5-How many family members normally live and eat their meals together in this dwelling?
Difference in household characteristics of SG/ OOS girls not found statistically significant, with p value more than 0.05				

Table 29: Barriers of SG/ OOS girls

Barriers (SG/ OOS girls)				**Source**
	Baseline	**Midline**	**Endline**	
Household-level barriers				
Restriction of mobility for work/ business	NA	2.51%	3.60%	Household Survey GT-10-Are girls allowed to go/ live outside the community (migration) for work?
Girl involved in household chores whole day	97.17%	75.54%	22.40%	Household Survey GT-12-How much time does the girl typically spend on a normal day on doing all these things?
Difference in household barriers of SG/ OOS girls not found statistically significant, with p value more than 0.05				
COVID-19				
Believes COVID-19 has affected/ will affect future aspirations regarding work/ studies	NA	NA	82.70%	Girls Survey T-2-DO you think the ongoing COVID-19 pandemic has affected or will affect your future aspirations regarding livelihood, income generation and better life?

As with IS girls, in terms of ethnicity, there was no major change in the distribution of sample. Highest proportion of the sample belonged to Tharu ethnicity, followed by Brahmin/ Chhetri, Janajati and Dalit ethnicities. The household characteristics – 'girls living without both parents', 'married', 'household head without education', and 'households having five or more members' – have also observed slight changes. For instance, during end-line evaluation, none of the girls were living without both of their parents. This can be seen in relation with COVID-19, where a number of people working abroad or in India returned home due to prolonged lockdown. Likewise, as a result of aging, the percentage of married girls has increased from 41.10 percent to 43.30 percent from midline to end-line. In another major change observed in the characteristics, girls living in households with more than five family members has decreased at end-line by about 30 percent

in comparison to mid-line. As with the IS girls, this is a result of increasing trend of migration of families from rural to urban and semi-urban areas for better work opportunities.

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

At the community level, girls' excessive involvement in household chores emerged as one of the major barriers to girls' learning during both baseline as well as midline evaluations. STEM's effort towards mitigating this barrier has been commendable as girls' engagement in household chores has significantly reduced – from over 75 percent of the girls involved in household chores for more than three hours every-day at baseline to less than 10 percent at end-line. In that regard, project's interventions acting upon the 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. This finding was also supported by our qualitative finding. Most of the girls that we interacted with stated their learning environment at home has significantly improved in the past couple of years, mainly because the parents have become more supportive, allowing for more leisure time and reducing their engagement in the household chores, which mainly included kitchen affairs and care work.

At the school level, earlier periodic evaluations highlighted lack of cleanliness and sanitary pad disposal facility as pertinent barriers. The end-line survey did not specifically collect data around school information, as most of the schools were closed due to COVID-19 and STEM's beneficiary population had already graduated from school level several months prior to the data collection. However, questions surrounding these barriers were included in the qualitative discussions with girls as well as school-based stakeholders. The evaluators found an evidence of increased cleanliness of toilets, water facility, and availability of free sanitary pads and disposal facility, reflecting the project's efforts in mitigating the barriers related to school infrastructure and facilities. Evidence concerning this have also been discussed in this report under relevant outcomes/ IOs, as well as in the midline evaluation report..

A key barrier that was unprecedented and emerged only during end-line evaluation is the COVID-19 pandemic. As we see in the tables presented in the section above, majority of both IS as well as SG/ OOS girls stated they have been affected by COVID-19, either in terms of education or work/ business. As this situation was totally unprecedented and out of project's planned activities, there was little that the project could do to support girls' education and transition amidst pandemic and the subsequent lockdown. Nevertheless, the end-line evaluation came across compelling evidences where project was found to have supported the girls in their education during lockdown by distributing education materials, COVID-19 safety materials like masks, sanitizers, among others. Apart from that, the project also aired radio program informing the girls about different possibilities of online learning. A number of girls that we interacted with during qualitative consultations highlighted radio as a helpful medium for learning during the pandemic. This has been further elaborated under 'learning outcomes' section in this report. Project's support in reducing the impact of COVID-19 among SG/ OOS girls was found to be even more effective. Apart from the distribution of COVID-19 safety materials like masks and sanitizers, project extended the loan payback time and interest rate from 8% to 5% for the girls

who had taken project's GTF loan. As a result of project's support in mitigating the impacts of the pandemic, both IS as well as SG/ OOS girls demonstrated high resilience.

4.2. Intersection between barriers and characteristics

This section presents an intersection between key characteristics and barriers of IS and SG/ OOS girls separately. As identified in sections above, the key characteristics of IS girls to look at are ethnicity, location type, marital status, primary caregivers without any education and households having more than five family members. Likewise, key barriers identified for the IS girls are 'girls who do not get support to stay in school and do well', 'girls involved in household chores more than three hours a day (whole day)', and 'girls who believe COVID-19 has affected their futural aspirations regarding work/ studies.

Across all the ethnicities, location type, girls whose primary caregivers are uneducated and those who belong to the family that has more than five members, below 10 percent of girls stated they do not get support to stay in school and do well. None of the married girls said they do not get support to stay in school and do well. Similarly, out of 41 IS girls who are involved in household chores for more than three hours every day, 20 belong to Brahmin/ Chhetri ethnicity, 13.58 percent Tharu and 9.37 percent Janajati. The cross-tabulated value is similar for all the other characteristics, i.e., between 10 to 20 percent. As already discussed above, the major unprecedented barrier that was observed during the end-line was the impact of COVID-19 on girls. Out of 254 IS girls who said the COVID has affected their future aspirations regarding work/ studies, more than 80 percent of the girls who share the given characteristics face this barrier.

Table 5 below presents the intersection between barriers and characteristics of SG/ OOS girls. Out of 28 girls who face restriction of mobility for work/ business, 10 percent belong to Dalit ethnicity, followed by Brahmin/ Chhetri (8.62 percent), Tharu (6.31 percent) and Janajati (2.12%). Likewise, 6.82 percent of the married girls, 4.02 percent of the girls whose primary caregiver are uneducated and 7.27 percent of girls who live in the household with more than five family members, face this restriction. Similarly, between 15 to 20 percent of the girls sharing the given characteristics were found to be involved in household chores for more than three hours every day. As with the IS girls, COVID-19 is a major barrier identified for SG/ OOS girls at midline, as more than 80 percent of the girls who belong to different categories of characteristics presented below said the pandemic has affected their future aspirations regarding work/ business.

Table 30: Intersection between key characteristics and barriers of IS girls

BARRIERS	CHARACTERISTICS				
	Ethnicity (n = Brahmin/ Chhetri [105], Tharu [117], Janajati [25], Dalit [36])	**Location (n = Rural [150], Semi-urban [75], Urban [60])**	**Married (n = 10)**	**Primary caregiver having no education (n = 68)**	**Households having more than 5 family members (n = 172)**
Doesn't get support to stay in school and do well (n = 8)	Brahmin/ Chhetri: 4.11% Tharu: 7.60% Janajati: 3.12%	Rural: 3.62% Urban: 4.21% Semi-urban: 8.39%	0%	5.08%	5.28%

	Dalit: 2.32%				
Girls involved in household chores more than three hours a day (whole day) (n = 41)	Brahmin/ Chhetri: 20% Tharu: 13.58% Janajati: 9.37% Dalit: 0%	Rural: 17.61% Urban: 20% Semi-urban: 6.99%	10%	16.94%	12.45%
Girls who believe COVID-19 has affected their future aspirations regarding work/ studies (n = 254)	Brahmin/ Chhetri: 91.76% Tharu: 85.32% Janajati: 90.62% Dalit: 90.69%	Rural: 86.01% Urban: 88.42% Semi-urban: 93%	80%	87.28%	87.54%

Table 31: Intersection between characteristics and barriers of SG/ OOS girls

BARRIERS	**CHARACTERISTICS**			
	Ethnicity (n = Brahmin/ Chhetri [58], Tharu [301], Janajati [94], Dalit [20])	**Married (n = 205)**	**Primary caregiver without education (n = 149)**	**Households with more than 5 family members (n = 275)**
Restriction of mobility for work/ business (n = 28)	Brahmin/ Chhetri: 8.62% Tharu: 6.31% Janajati: 2.12% Dalit: 10%	6.82%	4.02%	7.27%
Girls involved in household chores more than three hours a day (whole day) (n = 87)	Brahmin/ Chhetri: 13.79% Tharu: 18.93% Janajati: 19.14% Dalit: 20%	15.60%	16.10%	18.90%
Girls who believe COVID-19 has affected their future aspirations regarding work/ business (n = 391)	Brahmin/ Chhetri: 82.75% Tharu: 81.72% Janajati: 92.55% Dalit: 50%	86.82%	83.22%	83.27%

Furthermore, as suggested by FCDO's Regional Education Advisor and FM's disability expert the end-line 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 and midline, the disability prevalence was recorded at below 1 percent at the end-line, hence disability has not been presented as a barrier in this report. Low disability prevalence can be referenced to the initial targeting strategy in STEM I, which focused on girls who had completed primary level of schooling, meaning that the girls with disability may already have dropped out.

All of the key characteristics and barriers discussed in this section have been used for the sub-group analysis of all the outcomes and intermediate outcomes discussed in the endline report.

Annex 7: Beneficiaries tables

This annex should be completed by the project.

Describe the project's primary target groups in terms of age range, grades, country/region, characteristics, and expected exposure to interventions over the course of the project.

Provide the targeted number of girls' beneficiaries and the monitoring data that support this number (for example, in-school population numbers, number of schools, number of communities etc.). Describe the method for calculating the number, and any assumptions made.

Describe how the project defines educational marginalisation for its context and how this definition was applied to selecting beneficiaries. What proportion of direct beneficiaries are estimated as still meeting this definition of educational marginalisation (if known) and how has this been verified?

Did boys receive project interventions? How were these boys selected?

Please fill in the tables below. Individuals included in the project's target group should be direct beneficiaries of the project. The tables should show if numbers changed from baseline to endline and why.

Table 7.1: Direct beneficiaries

Beneficiary type	Total project number	Total number of girls targeted between midline and endline	Comment
Direct learning beneficiaries (girls) – girls in the intervention group who are specifically expected to achieve learning outcomes in line with targets. If relevant, please disaggregate girls with disabilities in this overall number.	4768	1,483	For learning outcome, the project had targeted to work with girls from grade 10 from 30 STEM schools. Thus this 1483 target is grade 10 IS girls that the project planned to enroll in Girls Club. The project had completed 3 life cycles of a girls club supporting 4768 girls in their learning performance. .
Transition Beneficiaries (girls)- girls in the intervention who are specifically expected to achieve the transition outcome in line with targets.	7046 IS Girls = 4768 SG Girls = 881 OOS Girls = 1397	3761 IS Girls = 1483 SG Girls = 881 OOS Girls = 1397	4768 IS girls that project provided direct learning support through the Girls Club. Of the 4768 Girls, 3240 Girls worked with the project from phase 1 and 1528 Girls are new girls who joined STEM school in either of the three working grades during the project period. 881 SG girls have been with STEM from phase 1. Of the 1379 OOS girls 547 girls are new in this phase as they either did not take any training from STEM 1 even if

			they were in the OOS population or they migrated to the project areas in this phase who had dropped out from grade 6 to 10 from other schools (non T or C) but had similar marginalized characteristics as STEM's OOS population.

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 group keeps on changing.

Table 7.2: Other beneficiaries (Total over lifetime of the project)

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.	7,377	These are the number of boys who were 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, learning resources 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.	7,214	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, learning resources 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.	550 (178 female and 372 male)	Total number of teachers trained: 550 • 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) • GCF to non-GCF sharing workshop: 550 (372 M: 178 F) • Refresher training to GCF: 194 (120 M: 74 F) The numbers have been calculated after removing double counting. So 550 teachers have received training, with some teachers participating in multiple training. When double counting, the project has provided training to 1424 participants.
Broader community beneficiaries (adults) – adults who benefit from broader interventions, such as community messaging /dialogues, community advocacy, economic empowerment interventions, etc.	12,901 (4,614 male and 8,287 female)	The community members were oriented on the program approach, child protection, and project activities such as parents for quality education, family dialogue, fundraising program, enrolment campaign etc. The project has also distributed covid awareness posters and pamphlets to 30,000 HHs and broadcast 13 different jingles 3512 times during the second year and 8,912 radio jingles during the third and fourth year of STEM II which had an average audience of 198,750. Likewise, the project had also aired an interactive television program which featured the learning and challenges of the project along with live discussion from the project's stakeholders as well which had an average audience of around 1million.

- Tables 7.3 to 7.6 provide different ways of defining and identifying the project's target groups. They each refer to the same total number of direct beneficiary girls, but use different definitions and categories. The numbers in the first two rows should refer to the status at the start of the project, e.g. project worked with 500 out of school girls at the start of GEC-T (whose status may have changed over time to in school).
- The last row can only be populated if survey or learning data was collected at the endline. Again the total number of girls in the last row of the tables should be the same

– these are just different ways of identifying and describing the girls included in the sample.

Table 7.3: 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 endline
Lower primary			
Upper primary			
Lower secondary	√	1,723	285
Upper secondary			
Total:		1,723	285

Table 7.4: 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 endline
Aged 6-8 (% aged 6-8)			
Aged 9-11 (% aged 9-11)	√		
Aged 12-13 (% aged 12-13)	√	302(4%)	2 IS, 1 SG/ OOS
Aged 14-15 (% aged 14-15)	√	2347(33%)	13 IS
Aged 16-17 (%aged 16-17)	√	2082 (30%)	153 IS, 26 SG/ OOS
Aged 18-19 (%aged 18-19)	√	927 (13%)	93 IS, 43 SG/ OOS
Aged 20+ (% aged 20 and over)	√	1388(20%)	24 IS, 403 SG/ OOS
Total:		**7,046**	

Table 7.5: 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 endline
Disabled girls (please disaggregate by domain of difficulty)	√	**13 (0.1%)**	**1.05%**
Orphaned girls			
Pastoralist girls			
Child labourers			
Poor girls			
Other (please describe)			
Total:			

Table7.6: 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 endline
Out-of-school girls: have never attended school			
Out-of-school girls: have attended school, but dropped out	√	**2278 (32%)**	
Girls in-school	√	**1723 (24%)**	**285**
Girls graduated from 2 cycle of grade 10	√	**3045 (43%)**	
Total:		**7,046**	

Comments from External Evaluator

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.

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. The endline evaluation design re-sampled the SG/ OOS population as per the change in the evaluation design to measure their transition. The number of beneficiaries provided by the project are reliable as no discrepancy was noticed while approaching the girls selected randomly from project's master list of the beneficiaries


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