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Independent Evaluation of the Girls' Education Challenge Phase II - Value for Money of Educating the Most Marginalised GEC Girls

Annexes

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Acronyms

Aarambha	Accelerating Life Skills Literacy and Numeracy of Out of School Adolescent Girls
ABB	Activity Based Budgeting
ABE	Alternative Basic Education
AGES	Adolescent Girls' Education in Somalia
BCG	Bacillus Calmette-Guerin
CBE	Complementary Basic Education
CHANGE	Improving Access to Education in Ethiopia for the Most Marginalised Girls
CRS	Creditor Reporting System
DHS	Demographic and Health Surveys
EE	External Evaluation
EGMA	Early Grade Mathematics Assessment
EGRA	Early Grade Reading Assessment
ESWG	Evaluation Studies Working Group
ЕТВ	Ethiopian Birr
FCDO	Foreign, Commonwealth and Development Office
FGD	Focus Group Discussion
FM	Fund Manager
GBP	British Pounds
GDP	Gross Domestic Product
GEC	Girls' Education Challenge
GEC II	Girls' Education Challenge Phase II
GEC-T	GEC Transitions
GESI	Gender & Social Inclusion
GIEN	Girls Inclusive Education Network
GoN	Government of Nepal
НН	Household
HIV	Human Immunodeficiency Virus
ID	Identification
IE	Independent Evaluation
IFAL	Integrated Functional Adult Literacy

IGA	Income Generating Activity
IP	Implementing Partner
KEQ	Key Evaluation Question
KII	Key Informant Interview
LNGB	Leave No Girl Behind
MICS	Multiple Indicator Cluster Surveys
NPR	Nepalese Rupee
NPV	Net Present Value
ODA	Official Development Assistance
OECD-DAC	Organisation for Economic Co-operation and Development's Development Assistance Committee
005	Out of School
PEA	Political Economy Analysis
PiN	People in Need
QALY	Quality Adjusted Life Year
RDN	Research Design Note
REA	Regional Education Advisors
RQ	Research Question
SAP	Southern Academic Partners
SEQ	Sub Evaluation Question
SNNPR	Southern Nations, Nationalities and Peoples' Region
SPA	Senior Portfolio Adviser
SSA	Sub-Saharan Africa
SSI	Semi-structured Interview
ТВ	Tuberculosis
TEAM Girl Malawi	Transformational Empowerment for Adolescent Marginalised Girls in Malawi
ТоС	Theory of Change
TPP	Transition Pathway Provider
TVET	Technical and Vocational Education and Training
UIS	UNESCO Institute for Statistics
UK	United Kingdom
VfM	Value for Money

Annex A: Terms of Reference (TORs)

1. Background and purpose

The Girls' Education Challenge Phase II (GEC II) launched in 2017 and is operating through two funding windows: (1) Girls' Education Challenge-Transitions (GEC-T); and (2) Leave No Girl Behind (LNGB) with a commitment to support marginalised girls' learning through 41 projects delivered across 17 countries.

In September 2022, the Foreign, Commonwealth & Development Office (FCDO) approved **changes to the Terms of Reference (TOR) for the Independent Evaluation (IE) – the 'IE Refresh'.** This resulted in Study 6, which will have a focus on Value for Money (VfM).

During the refresh discussions, a VfM study focusing on the most marginalised groups supported through the projects in the LNGB Window was proposed. It was agreed that the IE Study Team would have to **work closely with the Fund Manager (FM)**, and in particular, the FM's VfM Advisor, Valsa Shah, to ensure there was no duplication and that the VfM study added value to the FM's VfM outputs and analysis.

In November 2022, the IE team produced a **Concept Note** for Study 6 which aimed to *Assess the VfM of educating the most marginalised GEC girls*. On 20 December 2022, the FCDO approved the Concept Note and requested the IE progress to the next Terms of Reference (TOR) stage.

The overall aim of this study is to evidence and understand the relative costs and benefits of targeting the "most" marginalised girls in the GEC.

The current evidence base on the value for money of education interventions, especially those focussed on girls' education, is narrow and focuses on published evidence from studies using randomised control trials, with cost-effectiveness analysis (e.g., World Bank "Smart Buys"). While these provide evidence of impacts and costs, and to the greatest extent possible allow for standardised comparisons of learning in financial terms, they do not speak to the wider issues facing donors or delivery partners – for example, who to target, and how to trade-off inclusion with costs.

In contrast to guidance notes on VfM in Education (<u>Global Partnership for Education, 2022</u>), the current evidence available on cost-effectiveness to improve girls' education and learning outcomes **does not sufficiently consider different types of marginalised groups i.e., it does not adopt an equity lens.** Consequently, education policy and programming decisions on how different marginalised groups should be targeted are usually not shaped by considerations of how the benefits of such support can be maximised relative to their costs for these specific groups.

The **purpose of this study** is to provide a greater breadth of evidence and insights into the 'value' of investing in the education of girls experiencing different types of marginalisation. This will be achieved by identifying and assessing the range of costs and benefits associated with reaching and supporting the GEC's most marginalised girls. We will provide a comparative assessment of the relative costs and benefits of reaching different types of marginalised girls categorised by specific marginalisation factors.

The **primary stakeholder audiences** for this study are the FCDO, including the GEC II Programme Team, FCDO Education Advisors and Regional Education Advisors (REAs); the FM and Senior Portfolio Advisers (SPAs), and project Implementing Partners (IPs). Additional primary **stakeholder audiences** include other international donors, agencies, government representatives and other like-minded stakeholders investing and working in girls' education more widely in order to inform 'pathways to scale' on girls' education with a strong equity focus.

It is proposed that this study **focuses on GEC projects in the LNGB Window** because it was purposively designed to target the "most" marginalised girls in the GEC – nearly all beneficiaries are out-of-school; and 17% of girls have a form of disability/ difficulty (UKAID, 2022h), as well as being severely marginalised due to other factors. In total there were 14 LNGB projects delivering across 10 countries (Afghanistan, Ethiopia, Ghana, Kenya, Malawi, Nepal, Pakistan, Sierra Leone, Somalia, and Zimbabwe). The extent to which we are able to assess the VfM of LNGB projects will to an extent depend on whether they had an impact on learning. However, in the research design phase, we will also explore the extent to which there is evidence that marginalised girls benefit more widely from accessing education beyond learning gains.

There are other benefits of focusing on the LNGB Window, including: there are more active LNGB projects to potentially sample as case studies than in the GEC-T Window during the study period, which helps mitigate the challenge of obtaining sufficient support, data and information from closed projects, although there is some evidence

on LNGB projects in the context of the VfM of EdTech and disability through the VfM studies produced by the FM, there is much more scope for analysis of LNGB projects; and the VfM study would build on and use the analysis and findings produced through the IE team's ongoing Study 5 (see *box* below) – *Education Pathways for Marginalised Girls beyond Formal Schooling* – which also focuses on LNGB projects.

LNGB portfolio review for IE Study 5 - Education Pathways for Marginalised Girls beyond Formal Schooling

Study 6 will use and build on the portfolio-level reviews conducted by the IE team for Study 5, including:

- **LNGB portfolio review** Study 5 focuses on projects in the LNGB Window because nearly all beneficiary girls are out-of-school and are being supported through accelerated education programmes, catch-up programmes, alternative education programmes, and CBE; and the projects were designed to specifically reach 'the most' marginalised adolescent girls (aged 10-19). For this study, the IE team collected and analysed the project documentation for all 14 LNGB projects, providing a 'portfolio-level' review of the key characteristics of projects' beneficiaries, interventions, expected outcomes and reported findings based on the Study 5 Research Questions. Additionally, it included examining and investigating pertinent contextual factors as identified and reported in project documentation.
- **Defining marginalisation** Part of the LNGB portfolio review including mapping the LNGB projects against 'markers of marginalisation' including school enrolment/ drop-out status; child marriage; teenage pregnancy; orphans/ looked after girls; extreme poverty; access to schooling; disabilities; and modern slavery.

2. Scope of Work

2.1. Study objectives

For the purpose of this study, the **definition of 'the most' marginalised** will be initially based on the categories defined and adopted by individual LNGB projects, as well as the marginalisation markers identified by the IE Team for Study 5. We will develop a set of comparable marginalisation markers to enable us to categorise marginalisation across the LNGB projects. This will require extensive consultation with the IPs to identify categories from their monitoring data and external evaluation (EE) datasets.

The objectives and research questions for the study have been framed in light of the **high-level Evaluation Questions set out in the overarching TOR of the IE** – specifically, this study seeks to assess the value for money of different approaches in relation to their impact with a particular reference to equity.

The proposed evaluation objectives for Study 6 are:

- Learning objective: To identify the "full" value of benefits (including difficult to measure benefits and those accruing to communities and education systems beyond those directly supported) generated by reaching the "most" marginalised girls in the GEC in different contexts; and to assess the comparative differences in costs and benefits in reaching different types of marginalised girls.
- Accountability objective: To assess the value for money of interventions reaching and benefiting the "most" marginalised GEC girls.

In the research design phase, we will explore the extent to which we are able to make evaluative VfM judgements for accountability purposes using alternative methodological approaches to using control group data, which LNGB projects do not have.

2.2. Study evaluation questions

The Key Evaluation Question (KEQ) for Study 6 is:

• **KEQ 1:** To what extent and how has the GEC LNGB window achieved value for money in reaching and supporting the most marginalised girls?

The Sub-Evaluation Questions (SEQs) are:

- SEQ 1.1: What are the costs of supporting the most marginalised girls?
- SEQ 1.2: What are the key benefits of supporting the most marginalised girls?
- **SEQ 1.3:** To what extent do the value of the benefits justify the cost of the GEC's support for the most marginalised girls?
- **SEQ 1.4:** To what extent and why do the relative benefits and costs vary by different types of marginalised girls?
- SEQ 1.5: What might explain differences in the relative benefits and costs between different projects?

2.3. Study approach

Our approach to the design and implementation of Study 6 will be underpinned by **working principles**, by which we:

- Do not duplicate the FM's portfolio-level VfM analysis and outputs on GEC Phase 2 produced by the FM's VfM Advisor (Valsa Shah) e.g., Value for Money: Cross-Portfolio and Fund Manager Analysis; Annual Report, which includes <u>annual cost per beneficiary data</u> (and benchmarks), the FM's annual (2021 & 2022) <u>VfM</u> <u>Scorecards</u> providing VfM scores at project and portfolio levels (UKAID, 2022*h*) (see *box* below). At the start of the Research Design Phase, we will carefully review all the VfM data and analysis that informed the development of the FM's outputs identified in the box below to inform our assessment of what is feasible. We will also engage the FM's VfM Advisor directly to discuss the analysis undertaken and to inform the development of our research approach and design.
- We will use these VfM analyses and outputs to inform our in-depth research and analysis.
- Work collaboratively with the FM, case study IPs and the FCDO across all stages of the study.
- Make use of all available relevant information, evidence and data generated by the FM, IE Team, and FCDO on the GEC and wider literature.
- Continually strive to add value to the FCDO's understanding of the VfM of the GEC and more specifically its support for the most marginalised girls.
- Add value to the wider literature on the VfM of marginalised girls' education programmes e.g., SMART buys (World Bank, 2020) assessments of education and learning and Building Evidence in Education's Cost Measurement Guidance Note (Walls et al., 2020) – recognising from the outset that we are unable to produce a 'Best Buys' cost-effectiveness study because of the limitations of the available cost and impact data.

FM's portfolio-level VfM analysis and outputs on GEC Phase 2

- Annual GEC project/ portfolio VfM scorecards the FM's VfM review entailed triangulating multiple sources of evidence and data to form the basis for a VfM score for every project in the LNGB and GEC-T portfolio. To undertake the scoring for the project scorecards, a rubric was developed to provide an overall rating of VfM for the project based on the VfM framework criteria. Each project was rated to achieve an overall score out of 5, based on 1 being very poor VfM and 5 offering excellent VfM for example, a project offering excellent VfM is likely to have a low-cost base, have been efficiently delivered with minimal wastage, be able to evidence strong outcomes and sustainability, with a relevant design which met the needs identified.
- Deep dive VfM assessment of projects focusing on disability the FM undertook a VfM assessment of five projects that specifically address the learning and transition needs for girls with disabilities. Overall, the study found that VfM was driven by balancing high-cost individualised, targeted interventions, such as assistive devices, with low-intensity and inclusive interventions at school. Projects that were able to address social stigma around disability through awareness raising alongside other social norms barriers offered better VfM then those that were not. Projects that also took continuous professional development approach to disability inclusion in teacher training also offered good VfM. Working with policy makers to sustain inclusive education was also a key to success and better VfM.
- A study on VfM drivers from technology-enabled activities of GEC projects this was published in February 2023, after the initial drafting of this TOR, and the relevance of its key findings will be incorporated into the next phase of this research study's design.
- A study on Scale and Replication this is due to be released in the first half of 2023 and the relevance of its key findings will be incorporated into the next phase of the research study's design.

The IE will seek to ensure complementarity with ongoing and planned VfM work (including work related to the LNGB) by the FM/ FCDO, through ongoing consultation to discuss which lines of inquiry may be duplicating efforts.

The evaluation will include both **portfolio-wide documentary and quantitative data analysis** across all 14 LNGB projects, where feasible; and **in-depth case studies involving 2-3 LNGB projects.** We will take a pragmatic approach to selecting the sample of 2-3 projects to ensure that the projects selected are able to provide the quality of cost and beneficiary data required to answer the Evaluation Questions; and are able to provide the time and level of engagement/ collaboration needed to effectively conduct the study.

Project sampling selection for in-depth case studies: We will develop shortlisting criteria in response to the Evaluation Questions to identify the selected projects where we will collect in-depth primary data. Sampling criteria may include any one or more of the following: availability of quantitative data; representation of geographical countries/ regions; potential sample size of girls, etc. Our sampling strategy will also consider IPs' willingness to engage in this type of study; the projects' status in terms of whether they are active, in an exit phase or closed; and their previous participation in IE Studies 4 and 5.

We will consult with the FM colleagues including SPAs and FCDO REAs to assess whether any particular IPs could be considered for inclusion/ exclusion in the study. Once the selection criteria and shortlist of projects have been developed, we will share these with the FCDO for their approval of the selected projects, prior to contacting the IPs.

Portfolio-wide approach

We will endeavour to make **full use of projects' quantitative monitoring and EE data** collected by their external evaluators to respond to the Evaluation Questions where appropriate. In Study 5, we identified 20 baseline datasets, four midline, and three endline datasets available from the LNGB projects' external evaluators via the FM. We will build on the assessment of the LNGB projects' data conducted for Study 5 to fully scope the availability and usability of these datasets. We intend to use good quality Activity Based Budgeting (ABB) data, that has underpinned the FM's VfM analysis. We will also continue to identify data for the projects for which information is currently not available and assess the extent to which gaps in projects' data would need to be mitigated by further primary data collection for the case study projects.

Documentary analysis will be undertaken across all 14 of the LNGB projects. This will build on the analysis undertaken for Study 5, which included baseline reports, Covid-19 response plans, monitoring reports, and EE reports.

Case-study approach

We will work closely with the case study IPs to **interrogate and analyse projects' cost data** in their activity-based budgets. This will involve working iteratively with IPs to recreate cost templates that differentiate beneficiary girls by their characteristics.

The study will set out to **systematically define and assess the different types of benefits realised from the support to LNGB beneficiary girls;** including learning outcomes and longer term and wider benefits realised among early cohorts supported by LNGB projects. The benefits considered will be both those accruing directly to the girls themselves as well as those accruing to the wider community. The benefits will be **compared with the overall costs incurred** by case study projects, the girls' households, and other supporting actors.

As far as possible, we will **quantify the magnitude of the benefits** and set out plausible estimates or ranges for their potential **monetary value** using a combination of primary and secondary data. We will also collect qualitative data to ensure that less tangible benefits that are harder to quantify are identified and clearly articulated to ensure that these types of benefits are not completely omitted through a purely quantitative assessment. Our primary and secondary research will identify the LNGB projects' contributions to the wider benefits experienced or perceived by their beneficiary girls and their communities. This will be particularly important given that the LNGB projects do not have control/ comparison groups.

For the **case study projects**, we will conduct primary quantitative and qualitative research with GEC beneficiaries, parents/ caregivers, teachers and community leaders, using methods such as beneficiary/ household surveys, focus group discussions, and key informant interviews.

In the research design phase, we will scope the feasibility of **constructing a comparison group** using available national secondary datasets e.g., using Multiple Indicator Cluster Survey (MICS) data, and Demographic and Health Survey (DHS) data. The availability of sufficiently granular and relevant data and its timing will be key considerations in deciding whether it will be possible to construct a comparison group from the secondary data. We will also consider using our primary research to qualitatively assess beneficiaries' and stakeholders' perceptions of the extent to which the benefits would have been realised anyway without the GEC's interventions and their perceptions on the value of the benefits relative to alternative support that could have been provided (e.g., Cash Transfers of equivalent value to the cost of the education).

This study will also include two cross-cutting themes throughout the design, analysis and reporting:

- **Political Economy Analysis (PEA):** This analysis will explore the political, economic, and socio-cultural environment and other wider **contextual factors** that may have influenced the value for money of the support provided to the LNGB's beneficiaries.
- Gender & Social Inclusion (GESI): This study will integrate a GESI lens throughout, with girls as the primary
 focus of this study. As far as possible, we will seek to identify and categorise the girls that projects targeted by
 specific marginalisation factors including any perceived differences in why these groups were targeted (and as
 such 'valued' more highly) compared to other groups of girls. This will include unpacking the theories of change
 and intervention strategies (for the case study projects) to clearly identify the different types of costs and cost
 drivers associated with reaching different types of marginalised girls.

3. Study design/ methodology

3.1. Research focus

The Evaluation Questions will frame our methodology for collecting evidence on **different types of quantifiable and non-quantifiable benefits** realised from the support to LNGB beneficiary girls as a return on the FCDO's investment in these projects. We will use the Research Design Phase to test the feasibility of carrying out various assessments (identified below) depending on the availability and structure of the cost and benefits data and the nature of the LNGB projects' designs.

Assessing the costs of supporting the most marginalised girls will involve:

- a) Analysing the case study projects' input costs and working closely with the IPs to explore the feasibility of breaking down the costs by different groups of marginalised girls. The cost analysis will consider differences in the projects' theories of changes and intervention strategies and the associated cost differences.
- b) Using surveys to assess the direct and indirect costs (including opportunity costs) incurred by stakeholders and beneficiaries.
- c) Exploring the relationship between costs for different groups of marginalised beneficiary girls (including controlling for country context, e.g. through cost benchmarking).

Examining the key benefits of supporting the most marginalised girls will involve:

- a) Identifying the range of benefits of supporting beneficiaries of LNGB projects.
- b) Considering how different categories of benefits could be quantified.
- c) Exploring the relationship between benefits and the different levels of marginalisation of beneficiary girls.
- d) Exploring the main drivers of key benefits.
- e) Assessing the differences in relative benefits and costs between different LNGB projects (and if the data allows for different interventions within the same project; and if the project theory of change/ design can be unpacked sufficiently to identify the costs of specific interventions).

Assessing the **extent to which the benefits justify the cost** of the GEC's support for the most marginalised girls will involve:

- a) Comparing the cost of supporting the girls with the potential value of the benefits.
- b) Assessing the relative balance between the costs and benefits from support to different groups of marginalised girls.²
- c) Comparing the relative benefits and costs with alternative support mechanisms, such as Cash Transfers (depending on the availability of data and project design).
- d) Assessing the extent to which the relative value of costs and benefits might be expected to change with the scale-up of projects.
- e) Analysing other programming implications, including whether the most valuable benefits could be achieved with a narrower range of costs and so, to the extent data allows, what relative balance of costs and benefits might be feasible for specific groups of marginalised girls.

3.2. Proposed data sources

As discussed above, the key data sources for this study include project documentation, project quantitative data (both external evaluator data and project monitoring data, to the extent possible), government data and documentary sources (education sector plans, costing models and, government budgets, and policy documentation); and primary qualitative and quantitative data collected by the IE (including key informant interviews with IPs, and in-depth fieldwork in selected contexts). The IE Team thoroughly reviewed all LNGB project documentation and monitoring and evaluation data for Study 5, which we will use to inform the research design for Study 6.

Table 1 summarises the research questions and proposed data sources.

Sub-Evaluation Questions	Portfolio/ Case Study Level	Proposed Data Sources
 What are the costs of supporting the most marginalised girls? 	Case studies	 Projects' finance/ cost data Project documents (Baseline Reports, Covid-19 Response Plans, monitoring reports, and EE reports)

Table 1: Sub-evaluation questions and proposed data sources

² Points a and b will be informed by qualitative data on benefits perceived by girls and their communities, as opposed to alternative support options.

Sul Qu	b-Evaluation estions	Portfolio/ Case Study Level	Proposed Data Sources	
			 Primary quantitative (Household (HH) surveys) and qualitative data (Key Information Interviews (KIIs)) 	
2)	What are the key benefits of supporting the most marginalised girls?	PortfolioCase studies	 Projects' quantitative data Project documents (Baseline Reports, Covid-19 Response Plans, monitoring reports, and EE reports) Primary quantitative (HH surveys) and qualitative data (KIIs) 	
3)	To what extent do the value of the benefits justify the cost of the GEC's support for the most marginalised girls?	Case studies	 Secondary data and evidence (so inform monetisation of benefits) Primary quantitative (HH surveys) and qualitative data (KIIs) Projects' finance/ cost data 	
4)	To what extent and why do the relative benefits and costs vary by different types of marginalised girls?	Case studies	 Projects' finance/ cost data Projects' quantitative data Project documents (Baseline Reports, Covid-19 Response Plans, monitoring reports, and EE reports) Primary quantitative (HH surveys) and qualitative data (KIIs) 	
5)	What might explain differences in the relative benefits and costs between different projects (and if data allows for different interventions within the same project)?	Case studies	 Project documents (Baseline Reports, Covid-19 Response Plans, monitoring reports, and EE reports) Primary quantitative (HH surveys) and qualitative data (KIIs) 	

3.3. Study design stages

The study design stage will commence following approval of this TOR (March 2023) and culminate in the submission of the final **Research Design Note** (Griffiths et al., 2023). The design stage will be iterative and includes the following phases (some of which may occur in parallel):

- a) **Desk-based review of documentation, EE evidence and data for all 14 LNGB projects** by building on the portfolio review and analysis conducted for Study 5. This will contextualise the study and inform the development of our sampling strategy, selection criteria and the selection of the 2-3 case study projects. It will also inform the design of the research methods and instruments and the extent to which we can categorise beneficiaries to differentiate the support they receive.
- b) **Rapid review of LNGB project budget data** held by the FM as early as possible to understand the opportunities and challenges associated with the way cost data are organised and categorised.
- c) **Review of LNGB quantitative data and analytical methods:** We build on the IE Team's review of internal monitoring datasets and EE data for Study 5 to assess the extent to which they can be used to inform this study, and the types of analyses possible with the available data.
- d) Contacting LNGB IPs: We will reach out to all 14 IPs involved in LNGB projects to invite them to participate in key informant interviews in addition to the shortlisted IPs where we will carry out in-depth, extensive primary data collection. Before reaching out to IPs, we will liaise with the IE Team conducting Study 5 who will also be contacting all IPs delivering LNGB projects to ensure we do not place too much of a burden on them. Active engagement from the case study IPs will support the IE team during the fieldwork, including developing and contextualising the research tools, identifying girls/ other key respondents, monitoring on-the-ground realities and situations, as well as promoting the uptake and dissemination of the study.
- e) **Project sampling selection for in-depth case studies:** We will purposively select 2-3 case study projects for our in-depth research using agreed selection criteria in response to the Evaluation Questions.

f) Finalisation of primary data collection methods: Based on the rapid review of evidence, the review of documentation and final project selection, we will finalise the research methods to be used for the primary data collection.

Following completion of the research design phase and selection of the case study projects, we work closely with the IPs for the IE team to **organise the cost data in a suitable format and structure** that enables us to differentiate the costs by different marginalised groups.

The **design of the research tools** will begin during the research design phase and continue following the submission of the Research Design Note. The final research tools will be submitted to the FCDO for approval in July 2023. This will include the following:

- Initial design of the research tools: We will design the research tools for each chosen method by IP, stakeholder group and context. While the tools will be individualised, we will endeavour to maintain a level of consistency to support the analysis stage. The design of the tools will be informed by the review of the project documentation, to triangulate the data/ findings.
- Review of tools by IPs and the Southern Academic Partners (SAPs): We will share the tools with the IPs and the SAPs³ to receive their feedback particularly around the framing of questions so that they are contextualised and culturally appropriate. Additionally, IP feedback will be valuable to ensure the tools align with IPs' learning priorities as well.
- **Development of ethical forms:** We will develop consent/ assent forms, in line with the GEC IE Ethical Research and Safeguarding Framework, for all respondents participating in in the data collection. Further details about these forms will be included in the Research Design Note.
- **Applying for in-country research approvals:** We will begin the process of applying for government research permissions once the countries for fieldwork are selected, including understanding the types of research permissions required. Once the fieldwork tools are approved, we will complete the process of applying for, and obtaining in-country ethical permissions.

3.4. Fieldwork

The fieldwork for primary data collection for the case study projects is expected to take place from **September to December 2023**. Timing will be dependent on which LNGB projects are selected for the case studies and any constraints or limitations we may need to accommodate to conduct research with their beneficiaries and stakeholders. For example, if an LNGB project has closed, and the IP is willing to participate in the study, then more time may be required to recontact the project's beneficiary girls if some time has elapsed since their engagement with the project's activities.

The fieldwork includes both training the data collection partners and the data collection, cleaning, and processing of transcripts. Primary data collection will take place with the support of contracted local data collection partners and managed on a day-to-day basis by the IE's Fieldwork Manager. The study team will remotely supervise and liaise with the Fieldwork Manager/ data collection partners throughout the data collection phase.

We anticipate that the following categories of **stakeholders** will be included for data collection:

- **LNGB project IPs:** We will work very closely with the case study IPs to identify, categorise and analyse the project costs they have incurred through different types of interventions and different groups of marginalised girls; also, to obtain their perceptions about the benefits realised by their target beneficiary girls and variations across different subgroups of marginalised girls.
- **Girls engaged by the projects:** Girls' perspectives will be an important focus of the study to obtain their perceptions about the most important benefits that they have realised as a result of the projects' interventions; and how and to what extent these vary by the type of marginalisation they face.
- **Parents/ caregivers:** To understand their perceptions and observation of the benefits realised by their girls supported by the GEC and their value to the individual girls, the household and the wider community; and of the direct and indirect costs associated with their education.

³ The specific SAPs that will be asked to review the tools for this study will be dependent on case study selection.

- **Community members/ leaders:** To understand their perceptions of the wider benefits (including spillover effects) and costs associated with the girls' education; and the reasons why the benefits may differ depending on the type of marginalisation girls face and the contexts in which they live.
- Educators: To understand educators' perceptions of the benefits and costs of supporting the most marginalised girls, the value added, and variations depending on the marginalisation factors affecting girls.
- Government representatives (district-level and national-level) from various sectors for case study projects: To understand the political economy and contextual factors (including policy) that influence the benefits and costs associated with supporting different types of marginalised girls supported by the case study projects.

To the extent possible, we will collect/ disaggregate data and analyses on indicators such as age and other intersectional characteristics (i.e., disability status; socio-economic status; location; orphan status; pregnancy status etc.). All primary data collected will adhere to the GEC IE Ethical Research and Safeguarding Framework (further described in *Section 4*). On completion of the fieldwork, a **Fieldwork Report** will be submitted to the FCDO by January 2024.

3.5. Analysis

This phase will include **analysing the cost data and the coding and analysis** of the primary qualitative and quantitative data collected, and analysis of the secondary data (quantitative and project documentation), where relevant. The analytical framework used to answer the Evaluation Questions will initially be developed during the Research Design Phase and further developed during the course of the research in an iterative manner.

3.6. Validation of emerging findings

This stage will include **consultations with key stakeholders** such as the IPs, the IE's SAPs and the Evaluation Studies Working Group (ESWG) to validate the findings and ensure they are factually correct.

3.7. Reporting

This will include the development of the key outputs of this study, including an emerging findings workshop with the ESWG, a final report, a webinar with the IPs, a policy brief and other possible communication outputs.

4. Research ethics

All activities conducted as part of this study will adhere to the guidelines for ethical research as per the **Ethical Research and Safeguarding Framework**, which is the overarching ethical framework for the IE (Tetra Tech, 2023).

The guidelines in the framework are developed to ensure that all primary research (involving individuals, stakeholders, or other programme stakeholders) is conducted ethically and safely. The study will give precedence to the rights and dignities of its participants in an effort to protect them from harm.

The Ethical Research and Safeguarding Framework is fully compliant with the guiding concepts and principles set out in FCDO's Evaluation Policy (2013) and FCDO's Research Ethics Guidance (2019); and the United Kingdom (UK) Data Protection Act (2018).

The research design note will include an ethical research and safeguarding section pertaining specifically to this study. The ethical permissions will be applied for and adhere to the Cambridge Faculty of Education ethics process.

The process of obtaining all required government research permissions for primary data collection will commence as soon as the projects are shortlisted, and the countries are selected.

5. Risk assessment and mitigation plan

Table 2: Risk assessment and mitigation plan

Risk	Likelihood	Impact	Mitigating Action	Impact following mitigation
 Engaging the right people in the Implementing Partner's project team – if we don't liaise closely with the right people in the IP's project team (for the case studies), then there is a risk that we won't be able to identify and analyse the project costs sufficiently accurately. From past experience, this needs to be done on a 1-2-1 basis, involving going through specific lines of costs and discussing how these should be split across different activities etc. This needs to involve a technical person in the IP team who understands how the projects delivered different types of activities, for what purpose and for whom. Potential impact is: Without 1-2-1 engagement with key IP staff, it is highly unlikely that the costs can be properly analysed on the basis of the ABB spreadsheets alone. A finance person would not know how staff time (for example) was generally allocated across different types of activities, whereas the technical lead would have a much better idea. Unable to split cross-cutting costs across required categories diminishing the usefulness of the cost data. 	High	High	Engage the right projects as early as possible for the case studies that have the capacity to work closely with the study team throughout the VfM study so that the right people can input as needed.	Moderate
 Limited project ABB data – project ABB data only exists for about the last two years of the GEC – previous to this, project budgets were organised by standardised cost categories that were not based on project activities. Potential impact: For GEC-T projects in particular (which started earlier than LNGB projects), none of the project cost data (not just the cross-cutting data) will be split by project activities for the period before ABB was introduced. It is already challenging to get good data when the costs are well organised. It will be very time consuming for the years when costs are not categorised and even if re-construction can be done it may not be as robust because it will be based on lots of assumptions that will have to be determined by the projects themselves retrospectively, which risks bias. 	High	High	 As above, select projects that are willing to engage closely with the IE Team and provide the required level of effort. Focus on projects (e.g., LNGB projects), that applied ABB sooner and to a greater extent than other projects. Where necessary make use of the cost data only for the years where it is more robust and make extrapolation assumptions for other years. It could still be feasible to split costs by activity with cooperation and reasonable time investment from the IPs. 	Moderate

Risk	Likelihood	Impact	Mitigating Action	Impact following mitigation
 Little evidence or information about the VfM of the GEC Phase 2 prior to 2021 – there is very little information about the VfM of the GEC before the FM's VfM Advisor started in January 2021. Before this, GEC project IPs were not required to assess their VfM through their EEs. Potential impact: Reduces the availability of secondary data/ evidence and information for the full lifetime of the projects. 	Moderate/ High	Moderate	 Retrospective data analysis and more primary research is needed to fill gaps in projects' VfM evidence base. 	Low
 All except 5 GEC projects (3 GEC-T, 2 LNGB) will have closed by October 2023 reducing the total population of projects willing and able to actively participate in the study. Potential impact: It would be very difficult to achieve the granular level of cost data analysis needed without the active participation of the case study projects. 	High	High	 Focus on LNGB projects because there are more LNGB projects than GEC-T projects active up to October 2023. Engage potential case study projects early on during the TOR development process. Could consider identifying those projects that will be continuing beyond the end of GEC 2 (e.g. through other funding sources) as a relevant sampling criterion because ultimately the projects being analysed may be more willing to participate; and more likely to respond to or react to any learning /recommendations that come out of the study (to the extent they implement the same/ similar projects in the future). 	Moderate

6. Workplan and expected deliverables

This section briefly describes the work plan and the deadline for each deliverable. The work plan has been designed to incorporate the time required for stakeholders to provide their feedback, as well as the subsequent time needed for the IE team to respond to comments and integrate feedback. A detailed work plan with the time required to meet each deliverable has been prepared separately.

Figure 1: Workplan

A nativity	Milestone	January-23				February-23				March-23				
Da	Date	2/1	9/1	16/1	23/1	30/1	6/2	13/2	20/2	27/2	6/3	13/3	20/3	27/3
Prepare draft TOR														
Review FM reports	31/01/2023													
Identify quantitative data available/ required	31/01/2023													
Prepare draft ToR	20/01/2023													
Team reviews draft TOR	01/02/2023													
Update ToR following review	07/02/2023													
Format ToR and finalise report for circulation to FCDO/ ESWG	10/02/2023													
Submit to FCDO/ ESWG for review	10/02/2023													
FCDO, ESWG comments in writing	17/02/2023													
Finalise detailed TOR														
Update ToR based on comments received	24/02/2023													
Team reviews 2nd draft TOR	27/02/2023													
Interim discussion with FCDO if required	27/01/2023													
Update ToR following discussion	03/03/2023													
Team reviews draft TOR	07/03/2023													
Update ToR following review	08/03/2023													
Format ToR and finalise report for circulation to FCDO	10/03/2023													
Submit Final ToR to FCDO	10/03/2023													

The key deliverables for each phase of the study, along with the dates by which we could receive FCDO approval, are listed in *Table 3*.

Table 3: Deliverables and milestone dates

Deliverable	Milestone Date
Terms of Reference	10 March 2023
Draft Research Design Note	28 April 2023

Deliverable	Milestone Date
Final Research Design Note ⁴	2 June 2023
Research Tools	31 July 2023
Fieldwork Completion Report	January 2024
Draft Report (FCDO, IPs, SAPs)	March 2024
2 nd Draft Report (FCDO, ESWG, IPs, SAPs)	May 2024
Final Report Submission	July 2024
Knowledge Products (e.g., learning/ policy brief(s), webinars)	September/ October 2024

⁴ The research design note (RDN) will present a more detailed and in-depth approach of how this study will be undertaken. The RDN will include a detailed methodology for the study, analytical framework to answer the research questions, methodology for defining what constitute VfM, discussion on how the political economy and GESI analysis will be done, ethics and safeguarding issues and a brief overview of data collection tools, among other aspects of the study.

7. Team composition

This study will be led by a core team under the guidance of the Principal Investigator and Lead Author (Hamish Colquhoun). The study will be supported by the Research Lead (Devanik Saha) and Qualitative Analyst (Zinnie Cowing). The study will be managed by the IE Programme Manager (Louise Cathro) and Assistant Programme Manager (Amy Macmillan). Additional support will be brought on as required to support data transcription, cleaning, coding, and analysis.

The quantitative data analysis will be led by the IE Synthesis Lead (Majo Ogando-Portela).

The PEA will be led by the IE Team Leader (Monazza Aslam) and Deputy Team Leader (Shenila Rawal).

Quality assurance processes will be overseen by the Programme Director (Simon Griffiths), Technical Director (Pauline Rose), Team Leader (Monazza Aslam) and Deputy Team Leader (Shenila Rawal).

Data collection, including enumerator training, fieldwork management and data quality assurance, will be managed by the IE Fieldwork Manager (Julia Midland). Local partners will be contracted to support with incountry data collection. Southern academic partners will also be engaged throughout the study – from the research design phase to the reporting phase – to provide analytical and advisory support to help inform and contextualise the research findings.

8. Stakeholder engagement

The IE team will engage with the following external stakeholders over the duration of the study as needed (where relevant, some of these stakeholders will be consulted through the Evaluation Studies Working Group (ESWG)):

- FCDO UK;
- FCDO REAs;
- GEC II Fund Manager;
- IPs;
- Beneficiaries of GEC II interventions and relevant local stakeholders; and
- Other bilateral and multilateral agencies collaborating with GEC II or otherwise operating in the same sectors or thematic areas.

Ongoing engagement with the IPs to receive their input and integrate their feedback is a critical element of this study. This will ensure we have identified relevant and up-to-date documentation and data for review, and that our findings are factually accurate. We will engage with IPs as per the *IP Engagement Plan* developed by the IE and refined on an ongoing basis as each of the studies are completed and learnings are identified.

Engagement with the case study project beneficiaries who will be sampled for primary data collection will be participatory to ensure they can meaningfully contribute to the study.

A communication strategy will be developed by the FM in collaboration with the IE team to promote the dissemination of the study and key outputs - particularly in-country/ amongst local stakeholders - and continued engagement with wider stakeholders.

Annex B: GEC II Theory of Change

The annex presents the GEC II Theory of Change (ToC). This was produced as part of the FCDO's GEC Phase II Business Case in 2016. The overarching purpose of the GEC II ToC at the fund level is to provide a high-level overview of the process of change (and causal pathways) the programme is intended to deliver and the links between these changes at output, intermediate outcome, outcome, and impact levels. It summaries the programme's rationale and forms the basis for its detailed design and delivery.

Figure 2: Theory of Change



Annex C: Project profiles

Ethiopia

Name of project:	Improving Access to Education in Ethiopia for Most Marginalised Girls (CHANGE)
Implementing partner:	People in Need (PiN)
Project length:	5 years and 3 months
Education focus:	10–19-year-old out-of-school girls

Marginalisation of focus: 100% out-of-school (63% never been to school (<u>UKAID</u>, 2021a)). Disability; Impacted by modern day slavery; Married; Young mothers; Live in extreme poverty; High chore burden. Data are not available on the proportion of beneficiaries with these characteristics, except for disability in the Southern Nations Peoples' Region (2.4% girls had a disability)

Number of girls targeted:	31,000 marginalised girls
Number of girls reached:	24,968 marginalised girls ¹
Total number of cohorts:	Three

Regions project worked in: The CHANGE project worked in four provinces: Afar, Amhara, Oromia and Southern Nations, Nationalities, and Peoples' Region (SNNPR). The ethnic conflict in Tigray started in November 2020 and lasted for more than two years, affecting the regions of Amhara and Afar. Protracted armed conflict in Southern Ethiopia (SNNPR and Oromia) caused periods with limited or no access to the project locations. The four regions the project worked in are amongst five of Ethiopia's 11 regions with the highest proportion of girls out of school (Education Policy and Data Centre, 2022). Afar and Oromia, in particular, are nomadic pastoral communities with high proportions of girls both out of school and who have never been to school. In recent years, communities in both these regions (and the SNNPR region) have been left extremely vulnerable to climate-induced conditions relating to prolonged drought which has affected close to 24 million people (<u>ACAPS, 2023</u>). In the project's Amhara region, further armed conflict erupted in April 2023 between Amhara regional forces and the Ethiopian government.

Background to project: The project was implemented by a consortium led by People in Need (PiN). PiN led the implementation in the SNNPR region, while implementation in each other region was led by a different consortium partner. The local partners that the project worked with in each of the four regions were Welthungerhilfe/ FSA (Afar region), Concern Worldwide (Amhara region) and Helvetas/ GPDI (Oromia region). The project largely tried to provide similar interventions in each region, but some flexibility as well as adaptations to different crises meant there was variation (e.g. in timetables and periods of enrolment for each cohort). Younger adolescent girls (aged 10-14 years of age) enrolled on the Alternative Basic Education (ABE) programme, while older adolescent girls (aged 15-19 years of age) enrolled on the Integrated Functional Adult Literacy (IFAL) programme. The CHANGE project offered girls who graduated from the ABE programme two transition pathways (formal schooling or Technical and Vocational Education and Training (TVET): For girls on the IFAL programme three transition pathways were offered (formal education, TVET, or self-help groups).

Where the study worked: This study collected data only in the SNNPR region. It conducted the pilot in Wonago woreda of the SNNPR region, and collected data for the actual study from Kochago, Yirgacheffe and Wonago woredas. The study collected data from 1,153 girls who were part of Cohort 3 where the approximate timeline of the intervention of the CHANGE project took place between June 2021 to August 2023 for the girls on the ABE course, and June 2021 to January 2023 for the girls on the IFAL course in that region).

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Malawi

Name of project: Girl Malawi)	Transformational Empowerment of Adolescent Marginalised Girls in Malawi (TEAM
Implementing partner:	Link Education International
Project length:	5 years and 3 months
Education focus:	10–19-year-old out-of-school girls
Marginalisation of focus: Pregnant (5%); Living in extrem High chore burden.	100% out-of-school (14% never been to school (<u>UKAID, 2020b</u>)). Disability (9%); e poverty; Orphan (58%); Married (16%); Young mothers (20%); Head of household;

5,000
5,250 (and 1,050 boys)
Three

Districts project worked in: The TEAM Girl Malawi project worked in three districts in the Central region (Dedza, Lilongwe, Mchinji). These three districts had an above average rate of girls' dropout, grade repetition, orphans and child-headed households (<u>UKAID</u>, 2020b). Dedza's education system was overstretched due to the migration of children from Mozambique and Mchinji had a chronic lack of teachers, with almost no provision for children with special needs. In Lilongwe girls are at higher risk of trafficking and sexual exploitation compared to elsewhere in the country (<u>UKAID</u>, 2020b).

Background to project: Link Education partnered with Theatre for a Change, CGA Technologies, Supreme Sanitary Pads, Concern Universal Microfinance Operations Microfinance Ltd to implement the project. The TEAM Girl

Malawi project offered girls who graduated from the programme four transition pathways to choose from: 1. Formal education, 2. Vocational education, 3. Safe Employment and 4. Return to current situation but with life skills.

Where the study worked: This study conducted the pilot in Dedza, and collected data from all three districts that the project worked in. It collected data from 1,108 girls who were part of Cohort 3 where the approximate timeline of the intervention of the TEAM Link project took place between January 2021 to September 2022).



Nepal

Name of project: Girls (Aarambha)	Accelerating Life Skills Literacy and Numeracy of Out of School Adolescent
Implementing partner:	People in Need (PiN)
Project length:	5 years 3 months
Education focus:	10–19-year-old out-of-school girls

Marginalisation of focus: 100% out-of-school. Married (99.5%); Young mothers; Living in rural areas. Forty three percent of girls were from Dalit caste (including both Pahad Dalit and Terai/ Madheshi Dalit), compared to 14% of national population (<u>Pariyar, 2022</u>). 99.5% of 15-19-year-olds supported were already married compared to 24% of 15-19-year-olds in the province as a whole (<u>Government of Nepal (GoN), 2020</u>). 78% of girls came from households where the household head with illiterate.

Number of girls targeted:	8,500 marginalised girls
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Number of girls reached: 9,497

Total Number of cohorts: Four

Districts project worked in: The Aarambha project worked in Bara and Rautahat districts, which are part of the Madhesh province which border India in South-East Nepal. Some of the municipalities in Bara border India which present particular socio-economic and cultural practices including cross-border marriages. Rautahat is the district with

the largest percentage of Muslims residing there. The Madhesh province as a whole is reported to have a higher incidence of gender-based violence (<u>United Nations Population Fund, 2023</u>), as well as below average performance on health and education indicators (<u>GoN, 2022</u>).

Background to project: The Aarambha project was implemented by PiN, and it partnered with two local organisations. These were Aasaman Nepal which managed the literacy and numeracy classes, and Societal Organisation District Coordination Committee which managed the training related to life skills and Technical and Vocational Education and Training (TVET). The Aarambha LNGB project offered project offered girls who graduated from the programme two transition pathways to choose from: 1. Formal education and 2. Vocational education.

Where the study worked: Data was collected from both Bara and Rautahat districts. The pilot data collection took place in Karaiyamani municipality, while data for the actual study was collected from four municipalities (Karaiyamai NP, Madhavnaryan NP, Baragadhi GP and Rajpur NP). The study collected data from 710 girls who were part of Cohort 3 where the approximate timeline of the intervention of the Aarambha project took place between November 2021 to July 2022).



collection

Table 4: Overview of CHANGE	TEAM Girl and	Aarambha	projects
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	Number of girls reached and beneficiary characteristi cs (direct)	Other key beneficiaries	Key barriers	Key Interventions⁵	Total FCDO budget (<u>GBP</u>)	Project locations	Length of project	Length of time at learning centre	Transition pathways
CHANGE (Ethiopia)	24,968 Out-of-school Had a disability. Were impacted by modern day slavery. Were married. Were young mothers. Lived in extreme poverty. Had a high chore burden.	ABE/ IFAL facilitators Community members Government officials Community action group members Primary caregivers	Poverty Household chores Distance to school Lack of potable water at school	During LNGB (at learning centre) Basic literacy and numeracy classes. Life skills classes. Training of LNGB educators, mentors, and facilitators. Material/ in-kind support for girls. Financial support for girls and their families. Psycho-social support for girls and their families. Creation of safe spaces for girls. Community sensitisation activities Community mobilizational training Construction of education spaces. Knowledge transfer activities with government officials. After LNGB project (transition period) Training of formal education teachers Remedial/ bridging classes Material/ innancial support for girls TVET Facilities Loan Groups for Girls	FCDO costs £7.8m	Four regions - Afar - Amhara - Southern Nations Peoples' Region - Oromia	5 years October 2018 – October 2023	Varied by region and cohort but on average: ABE – 23 months IFAL – 11 months ABE 4 hours per day; 5 days per week 80% literacy & numeracy instruction; 20% life skills IFAL 1 hour per day; 3 days per week 50% literacy; 50% life skills	ABE (girls aged 10- 14): Enrol into formal education or into TVET. IFAL (girls aged 15- 19): Enrol into formal education or into TVET or join a self- help group.
Team Girl (Malawi)	5,250 ⁶ Out-of-school Has a disability Pregnant/ breast-feeding Living in extreme poverty Orphan Married girls Young mothers Head of household High chore burden	Boys/ girls Teachers/ tutors Community members	School cost Food insecurity/ hunger Menstruation School safety Parent support Bullying	During LNGB (at learning centre) Basic literacy and numeracy classes. Life skills classes. Training and recruitment of LNGB educators/ mentors and facilitators. Material/ in-kind support for girls. Psycho-social support for girls and their families. Community mobilisers training. Household sensitisation rativities. Established self-help groups to provide girls with life skills. Construction of education spaces. Knowledge transfer activities with government officials. Childcare support for girls with children After LNGB project (transition period) Training of formal education teachers. Material/ financial support for girls. Support in finding vocational training/ employment. Employment-related Training for Girls. Material/ financial support for girls. Loan Groups for Girls.	FCDO costs £7.7m	Three districts Dedza Lilongwe (Urban) Mchinji	5 years and 3 months July 2018 – October 2023	24 months 4 hours per day; 5 days per week 80% literacy & numeracy instruction; 20% life skills	Re(enrol) in primary school at Standard 5. Enrol into vocational training (for six months). Transition into safe, fairly paid employment. Return to current situation with essential life skills.

⁵ This uses standardised intervention categories first set out in <u>Rose et al. (2023)</u> and therefore may not align to the intervention names used by the projects themselves. ⁶ The Malawi project also targeted 1,050 boys.

	Number of girls reached and beneficiary characteristi cs (direct)	Other key beneficiaries	Key barriers	Key Interventions⁵	Total FCDO budget (<u>GBP</u>)	Project locations	Length of project	Length of time at learning centre	Transition pathways
Aarambha (Nepal)	9,497 Out-of-school Married girls Young mothers Living in rural areas	Aarambha facilitators and mentors Teachers Women-led community networks Young male community members Families In-school boys + girls Government authorities	Safety issues Restrictions in mobility Parental attitudes Household chores Poverty	During LNGB (at learning centre) Basic literacy and numeracy classes. Life skills classes – financial literacy, family planning, self- efficacy. Training of female facilitators and mentors. Engagement with families. Recruit community change champions to combat harmful gender norms. Curriculum development and adaptation. Gender transformative workshops (with girls, boys, community, family members and government stakeholders). After LNGB (transition period). Gender responsive pedagogical training for teachers (formal track). Psychosocial counselling (formal track). Training of teachers at formal schools in gender responsive pedagogical training (formal track). Vocational skills training (vocational training track). Bridge/ catch-up classes (formal track). Cash and non-cash grants to girls/ girls' families to enable girls to pursue life plans (formal, vocational training track and post-transition to employment).	FCDO costs £5.8m	Two districts Bara Rautahat	5 years and 3 months November 2018 – February 2024	10 months 2.75 hours per day; 6 days per week 66% for literacy & numeracy instruction 33% for life skills	<u>Girls aged 10-19</u> : Formal schooling <u>Girls aged 15-19</u> : Vocational training

Annex D: Methodology and Projects Background

1. Research Design and Analytical Framework

1.1. Development of research design and questions

The research questions for this study were developed through an extensive iterative and consultative process conducted throughout the finalisation of the Terms of Reference (TORs) (*Annex A*) and the desk-based review. The study was guided by the key evaluation question which asked:

• **KEQ1:** To what extent and how have a sub-set of GEC LNGB Window projects achieved value for money in reaching and supporting the most marginalised girls?

The study focuses on six research questions which are as follows:

- SEQ 1.1: What are the costs of supporting the most marginalised girls?
- SEQ 1.2: What are the key benefits of supporting the most marginalised girls?
- SEQ 1.3: To what extent does the value of the benefits justify the cost of the GEC's support for the most marginalised girls?
- SEQ 1.4: To what extent and why do the relative benefits and costs vary by different types of marginalised girls?
- SEQ 1.5: What might explain differences in the relative benefits and costs between different projects (and if data allows for different interventions within the same project)?
- SEQ 1.6: To what extent are the findings for the three selected case study projects likely to be representative of the overall GEC LNGB portfolio?

1.2. Initial review of LNGB project documentation

An initial review of GEC II portfolio documentation from the 14 LNGB projects that are part of the LNGB window was conducted to better understand the background characteristics of the girls whom projects targeted, and the costs

A key purpose of the desk-based document review was to undertake a detailed mapping exercise of the project design. This was harvested from multiple project documents, including the theory of change, baseline, midline and endline evaluation reports. While undertaking this review it was clear that a portfolio wide VfM assessment was not going to be feasible. This was principally because the necessary data to inform judgements on benefits was not sufficiently available at the portfolio level. As a consequence, the study took the decision to focus on in-depth case studies of three LNGB projects to enable deeper analysis of the available secondary data in collaboration with the Implementing Partners as well as the collection of complementary primary data. SEQ 1.6 was added to assess the extent to which the findings from the case studies were representative of the LNGB portfolio as a whole. While the data to assess this was limited, it allowed for a comparison of unit costs per beneficiary across all projects alongside outcome data for a sub-set of projects where the quality of data was better.

1.3. Project selection

The three case studies selected for this study are: (1) PiN Ethiopia's "CHANGE: Improving Access to Education in Ethiopia for Most Marginalised Girls"; (2) Link Malawi's "Transformational Empowerment for Adolescent Marginalised Girls in Malawi" project ("TEAM Girls Malawi"); and (3) PiN Nepal's "Accelerating Life Skills, Literacy and Numeracy of Married Adolescent Girls" project ("Aarambha"). The key criteria for selecting these case studies were their continued implementation, willingness to engage in the study and the quality of their available data (further details on the selection process are provided in *Section 2.3*).

Within these projects, the following Cohorts were targeted:

- Ethiopia Cohort 2 (approximate intervention timeline of June 2021 to August 2023 for the girls on the ABE course in the Gedeo region, and June 2021 to January 2023 for the girls on the IFAL course in that region)
- Malawi Cohort 2 (approximate intervention timeline of January 2021 to September 2022)
- Nepal Cohort 3 (approximate intervention timeline of November 2021 to July 2022)

The case studies for Study 6 were selected from the 14 projects in the Leave No Girl Behind (LNGB) Window. Screening criteria was established with the intention of creating a long list of projects, which could then be converted into a shortlist using core criteria. Additional 'desirable' criteria were established to select from the shortlist were there to be sufficient case studies that met the core criteria to allow this. Scoring against the criteria were binary or classified simply as high /medium /low.

1.3.1. Screening Criteria

Screening criteria

• **Project still open:** The project had to still be active during the period that data collection was due to be carried out (September to December 2023). This was given the expectation that it would be significantly more challenging to carry out data collection if the project had already closed.

Core criteria

- Willingness and availability of the IP to engage in research: This is the most important core selection criterion. This willingness and availability were judged through direct discussion with the IPs in April & May 2023.
- Quality of available project data: There were three aspects relating to existing data that were important. First was how well the project had organised its cost data prior to 2021 (which is when the Fund Manager introduced standardised Activity Based Budgeting). The second was the extent to which the project collected good quality data regarding its own impact, including learning gains. Third was the quality of the project's data on the characteristics of its target beneficiary groups.

Desirable criteria

- Likelihood of project continuation: The study is likely to provide recommendations which could improve future implementation of case study projects. This would have greater value for those projects which are likely to continue beyond the financing period of GEC II.
- **Geographical and performance mix of projects:** If a sufficient project met the core criteria, it was considered beneficial for the case studies to come from a mix of different geographical contexts and potentially even different performance levels (i.e., projects with low /moderate /high impact based on available reported data).
- **Diversity from previous studies:** Projects selected for previous studies were considered more likely to have met the core selection criteria. However, the study deemed that if there are enough shortlisted projects to choose from, then those projects which had not been previously studied by the IE were to be prioritised to increase diversity.

Based on the above criteria, only four projects met the screening criterion, namely:

- 1) Ethiopia: People in Need CHANGE
- 2) Malawi: Link Education International Transformational Empowerment for Adolescent Marginalised Girls in Malawi (TEAM Girl Malawi)
- 3) Nepal: People in Need Accelerating Life Skills, Literacy and Numeracy of Married Adolescent Girls (Aarambha)
- 4) Somalia: CARE Adolescent Girls' Education in Somalia (AGES)

All other LNGB projects were closed by the point at which data collection for this study was planned. Each of these open projects was then assessed to check the extent to which they met the core and desirable criteria. The IPs for each of these four projects were contacted to discuss their suitability for the study as well as the feasibility of collecting primary data in their areas of operation. All four confirmed their willingness to participate in the study.

The extent to which each project met the criteria is set out in *Table 5* below. It had not yet been possible to establish whether the projects are likely to continue beyond their closing date through other funding. Although based on responses from other already closed LNGB projects (none of which have continued) the likelihood was expected to be low for all four. The performance mix was rapidly assessed through a consideration of the FM's VfM report – the most notable finding being that the Ethiopia project was considered to be under-performing due to a difficult implementing context (including civil conflict in the project's operating regions) and poor management.

Organisation	Project Name	SC1- Ongoing project implementation	CC1 – Willingness and availability to engage in research	CC2 – Quality of Available Data	DC1 – Likelihood of project continuation	DC2- Geographical and performance mix of projects	DC3- Diversity from previous studies
Ethiopia: People in Need	Improving Access to Education in Ethiopia for Most Marginalised Girls (CHANGE)	✓ (Closing date: October 2023)	~	Mixed	TBD	Sub-Saharan Africa (SSA) Weak performance	(Not included)
Malawi: Link Education International	Transformational Empowerment for Adolescent Marginalised Girls in Malawi (TEAM Girl Malawi)	√ (Closing date: October 2023)	\checkmark	Mixed	Unlikely	SSA Mixed performance	(Included in Study 4)
Nepal: People in Need	Aarambha - Accelerating Life Skills, Literacy and Numeracy of Married Adolescent Girls	√ (Closing date: February 2024)	\checkmark	Mixed	TBD	South Asia Strong performance	(Included in Study 5)
Somalia: Care International UK	Adolescent Girls' Education in Somalia (AGES)	✓ (Closing date: 2024)	\checkmark	Poor	TBD	SSA Strong performance	(Not included)

Table 5: Assessment of three shortlisted case study projects against the selection criteria

The Somalia AGES was excluded as a potential case study after further consideration. This was firstly due to the incompleteness of the project's monitoring data, its poor linkages with follow-up surveys, and overall poor data quality. These factors would have reduced the study's ability to draw on project data and triangulate primary data findings. Secondly, the focus of Study 6 was on the cost and benefits of reaching the *most* marginalised girls. The AGES project, on the other hand, primarily targeted urban girls and had a lower proportion of married girls and mothers as compared to the general population of girls aged 10-19 in Somalia as per the 2020 DHS.

The Malawi, Nepal and Ethiopia projects were selected as the case studies. These three projects all met the screening and core criteria for selection. They also ensured a good geographical mix. However, some of the project interventions in Ethiopia were in conflict-affected regions (e.g., Afar & Amhara) so data collection efforts focused on PiN's interventions in Southern Nations, Nationalities and People's Region (SNNPR), given the feasibility to carry out data collection there. This was also in-line with the project's plan for their latest endline evaluation.

The weakness in the study's choice of projects was that two of the three projects had already been included in previous studies. Whilst diversity from previous studies would have been a preference, this was not considered to be a major drawback given the significantly different focus of this study. Additionally, project's involvement in previous evaluations helped provide a helpful foundation for the data collection process. Where relevant, this study utilised the existing data collected by the previous studies from projects that had been used in previous evaluations. A conscious effort was made not to duplicate questions from previous studies to reduce the burden on respondents.

1.4. Research design, data collection and analysis

The study employed mixed methods, using both quantitative and qualitative data. It drew on a combination of primary and secondary data sources. Secondary data was used to directly address evaluation questions and to determine the primary data needed. Primary data collection involved surveys and semi-structured interviews with various relevant stakeholders. A multi-stage (cluster) sampling method was used to select a representative sample from the target population, which included girls who completed the course and did not drop out.

The Evaluation Questions frame the methodology for collecting evidence on **different types of quantifiable and non-quantifiable benefits** realised from the support to LNGB beneficiary girls as a return on the FCDO's investment in these projects. The methods identified below were carried out for the case study projects.

- 1) Assessing the costs of supporting the most marginalised girls involved:
 - a. Analysing the case study projects' input costs and working closely with the IPs to explore the feasibility of breaking down the costs by different groups of marginalised girls. The cost analysis considered differences in the projects' Theories of Change (ToCs) and intervention strategies and the associated cost differences.
 - b. Surveys to assess the direct and indirect costs (including opportunity costs) incurred by all stakeholders supporting delivery (including government and community partners not funded by the project, for example) and beneficiaries.
 - c. Exploring the relationship between costs for different groups of marginalised beneficiary girls (including controlling for country context, e.g., through cost benchmarking).
- 2) Examining the key benefits of supporting the most marginalised girls involved:
 - a. Identifying the range of benefits of supporting beneficiaries of LNGB projects. This was done through an analysis of secondary project data and through semi-structed interviews with stakeholders involved in the projects' design (e.g., FCDO, IPs, FM, Delivery partners), beneficiary girls and their caregivers. Our primary and secondary research identified the LNGB projects' contributions to the wider benefits experienced or perceived by their beneficiary girls and their communities. This was particularly important given that the LNGB projects did not have control /comparison groups.
 - b. **Considering the relative importance beneficiaries place on these benefits.** We collected qualitative data to ensure that less tangible benefits that are harder to quantify were identified and clearly articulated to ensure that these types of benefits were not completely omitted through a purely quantitative assessment.
 - c. Exploring the relationship between benefits and the different levels of marginalisation of beneficiary girls.
 - d. **Exploring the main drivers of key benefits.** Consideration was made of both the project activities which were most important to realise the benefits, but also the broader enabling factors, such as the economic and social context as well as the characteristics of the beneficiary population.
 - e. Assessing the differences in relative benefits and costs between different LNGB projects.
- **3)** Assessing the extent to which the benefits justify the cost of the GEC's support for the most marginalised girls involved:
 - a. Comparing the cost of supporting the girls with the potential value of the benefits (making judgements where benefits are in qualitative form).
 - b. Assessing the relative balance between the costs and benefits from support to different groups of marginalised girls.⁷
 - c. Analysing other programming implications, including whether the most valuable benefits could be achieved with a narrower range of costs and so, to the extent data allows, what relative balance of costs and benefits might be feasible for specific groups of marginalised girls.

The findings for these case study projects were then contextualised within the wider LNGB portfolio. At the portfolio level the only metric which was possible to assess equivalently for all LNGB projects was the unit cost per girl supported. In addition, for five of the 14 LNGB projects (i.e. two in addition to this study's three case studies) it was possible to consider the transition rate of girls into either formal education or employment. The study also analysed each project's existing data on benefits for girls beyond learning and transition, principally in terms of girls' "life skills"

⁷ With the exception of when literature states otherwise.

(defined differently by each project, but including sexual and reproductive health knowledge, self-esteem, selfconfidence, autonomy, empowerment within the household and general well-being). This data was not standardised across projects and was therefore challenging to reach cross-portfolio conclusions.

1.5. Review of secondary data sources

A substantial amount of data has been collected on the LNGB projects and their beneficiaries, and for different purposes. *Table 6* sets out the secondary data that was used for the study, with the level of use (whether this is for the whole portfolio, a subset of projects, or specifically for the case study projects) and the intended use.

Туре	Categories	Level of use	Intended use
Listing / Pre- baseline	Pre-baseline report	Case study projects	Understand the methods used for the initial identification of potential girls and how this was used to inform the set- up of the programs. Use this to give context on the practicality of identifying comparison girls for this study.
	Pre-baseline data	Case study projects	Explore the data that was collected (if any) during the pre- baseline, to see if this can help with the identification of comparison girls for this study, but this was of limited value.
	Questionnaires and forms	Case study projects	Understand the questions/methods used in collecting pre- baseline data by the case study projects.
Monitoring (reporting)	Quarterly project reports	Case study projects	Used to verify and triangulate information raised through other data sources.
	Quarterly trackers (finance, workplans, management information system, project log frame, project sustainability plan)	Portfolio	Used total beneficiary numbers and high-level project costs to estimate unit costs per girl for each project in the portfolio.
	Annual reports (annual workplan progress)	Portfolio	
Monitoring (beneficiaries)	Monitoring during programme pathway	Case study projects	Used beneficiary lists with the markers of marginalisation to inform the sampling of beneficiary girls.
	Tracking of transition outcomes	Case study projects + study 5 projects where transition data has already been processed	Project monitoring data on transitions was intended to inform analysis but data on actual transitions (rather than intended transitions) proved limited in practice.
Existing costing analysis	LNGB projects compilation	Portfolio	Used data compiled on LNGB projects during previous IE studies, such as categorizing of main intervention activities for each project, as well as information on beneficiary numbers and ages.
	Previous VfM Analysis	Portfolio	Used the underlying Excel underpinning the GEC portfolio VfM reports to understand the annual VfM scores.
VfM spotlight briefs	Learning briefs and GEC portfolio VfM reports for 2021, 2022 and 2023	Portfolio	Used to add context to the portfolio level considerations of unit cost per girl and annual VfM scores from the FM, as well as national benchmark costs for the case study projects.
External evaluation	External evaluation data	Portfolio	Used already compiled EE data from across the portfolio, to estimate learning outcomes progression among GEC-T control group girls.
	External evaluation reports	Case study projects	Used to identify and compare potential benefits in addition to those included in our quantitative surveys.

Table 6: Secondary data used and at what level of analysis

Туре	Categories Level of use		Intended use
	Questionnaires and	Portfolio	Used to inform the survey design, to align language used
	learning tools		for comparable questions.

1.6. Primary data (qualitative)

The qualitative sample methodology is set out below, covering the overall methodology choice, sampling units used, sampling sizes targeted, and any relevant adjustments made to the process for the final selection.

1.6.1. Location and Learning Centre selection

In each of the three countries, the IE team selected five locations from a list of project sites, using a purposive sample that took into consideration the following inclusion/ exclusion criteria:

- Learning Centre/ Classes where survey was being rolled out were excluded to avoid over-burdening girls;
- If possible, selected classes had at least 3 girls with disabilities;
- Both Accelerated/ Alternative Basic Education and Integrated Functional Adult Literacy (IFAL) classes were selected (for example in Ethiopia there was only one IFAL class, so this was selected);
- Location; and
- Mean age of class, to ensure that girl selection would cover a broad range of target ages.

1.6.2. Stakeholder selection

Data collection teams completed a total of 25 semi-structured interviews (SSIs) with beneficiary girls; 10 SSIs with parents/ caregivers of the girls; at least five SSIs with teachers/ trainers/ educators at the learning centres; and at least five SSIs with transition pathway providers (TPPs). This sample was the same for all three countries and was divided evenly amongst the five locations per country. Thus, in each country, five girl SSIs, two caregiver SSIs, one educator SSI, and one TPP SSI were completed at each of the five research locations.

Each country team also completed two focus group discussions (FGDs) with community members and two KIIs with downstream partners. The FGD sites were not pre-selected; the local team was asked to select one site in each geographic district to complete a total of two FGD per country. To complete the downstream partner interviews, the local data collection partner identified and contacted all partners that had supported the local IPs in implementing the GEC II programme.

Stakeholder type	Per project
Beneficiary girls	25 SSIs
Parents/ caregivers	10 SSIs
Community members/ leaders	2 FGDs
Teachers/ trainers/ educators	5 SSIs
TPPs	5 SSIs
Downstream partners	2 SSIs

Table 7: Final allocation of in-depth interviews and	focus group discussions for each country
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All girls not selected for quantitative research were included in the qualitative sample universe. Of the remaining girls in each location, respondents were selected from each class according to the following criteria:

• Age range (12-14; 14-16; 16-18; 18+) NB: girls under the age of 12 were excluded as some of the questions related to marriage and pregnancy especially were deemed too sensitive for girls under the age of 12.

• **Girls with disabilities were prioritised**, though girls that answered "cannot do at all" under the cognitive or hearing domains were excluded⁸.

Caregivers

Of the five girls selected in each sampling location, the local data collection teams selected two caregivers to interview. The two were selected using the following criteria:

- Adult girls selected for interview who were married and/ or lived in their own homes were immediately removed from the list as they presumably act as their own caregivers;
- Girls with 'additional' marginalization status (an orphan, has a disability, etc.) were prioritised; and
- If there were more than two girls with 'additional' marginalisation markers, two were selected randomly and their caregivers interviewed. If one of the two selected was unwilling or unavailable, another was selected from the list.

Transition pathway providers

TPPs were defined as those who had taught, trained, or employed the girls enrolled who had been enrolled on the LNGB projects, once they graduated onto their respective transition pathways. TPPs who were selected to take part in the study (teachers, vocational trainers, and employers) needed to be directly linked to the girls participating in the study. The local IPs aided the research teams in identifying and contacting these individuals.

Educators

Educators were selected to ensure these were the same as those who had taught the girls selected for this study. In most cases, only one or two educators had taught all the girls in each cohort at a given centre.

Community members

FGDs were comprised of community leaders, non-profit organisers, religious leaders, school administrators and other individuals who work with or support child, education, girls', and/or women's issues. The data collection partner in each country worked directly with the local IPs to identify eight to 10 individuals for each group.

1.6.3. Target and achieved sample

	Target cample	Achieved sample		
Research type	raiget sample	Ethiopia	Malawi	Nepal
SSI girls	25	25	25	25
SSI caregivers	SSI caregivers 10		10	10
SSI educators	5	6	9	5
SSI transition pathway provider	5	6	9	4
FGD community members	community 2 pers 2		3	2
Downstream partner Kll	2	1	2	4
Note: within these achieved quantitative sample totals, this included 1 girl in Ethiopia and 1 girl in Malawi who did not consent to participate in the survey.				

Table 8: Target and achieved sample, by country

⁸ This excluded 37 girls in Ethiopia (36 due to cognitive, 1 due to hearing) out of 606 girls – where this was out of girls in learning centres not already selected for piloting or quantitative surveys. This excluded 0 girls in Malawi and Nepal, out of 274 and 707 respectively.

Note: As displayed, the target sample was completed in both Ethiopia and Nepal. In Malawi, teams were unable to locate enough girls to complete the target sample due to a high rate of relocation. The team discovered that many of the girls that participated in GEC II programming had moved away from the sampling areas due to marriage or economic opportunities. Further, in many cases, these girls lived in rented homes and moved frequently, making them impossible to trace.

1.6.4. Data transcription

Transcription and narrative process

All qualitative interviews and FGDs were audio recorded with the consent/ assent of all research participants; transcription began as soon as the audio files were received by local partner staff.

Respondent-identifying information was anonymised during transcription. Where respondents' telephone numbers were taken, the database of contacts was detached from the responses. All audios and transcripts were assigned unique identifiers to maintain the confidentiality of the study participants.

All data collection partners employed transcription specialists fluent in both English and the local language of the interview. Members of the transcription teams attended the full enumerator training to ensure that they understood the context and intent of all research instruments.

All interviews completed in English were transcribed verbatim and verified by team supervisors, who listened to the audio files while reading the transcript to ensure quality transcription. Most interviews, however, were completed in local languages – Amharic and Gedeo in Ethiopia, Chichewa in Malawi, and Nepali and Bhojpuri in Nepal. For these interviews, the team translated to English while transcribing. As with the English language interviews, these transcripts were verified by supervisors who listened to the audio recordings while reviewing the translated transcripts. All transcripts were compared line-by-line against the original audio files. In addition, moderators reviewed each transcript to ensure they accurately represented what had been discussed during the interviews in all three countries.

SSIs completed with girls, caregivers, educators, and TPPs and all FGD transcripts included a photograph of a benefit ranking completed during the interview. All photos were reviewed by supervisors as part of the transcription process completed by local partners. Anything that was not clear or not translated into English was redone prior to final delivery. In some cases, individual transcripts did not include a photograph because there was no change over time to report. In these cases, a note from the interview was left for the transcription team in lieu of the photograph.

Transcripts were delivered to the IE team in batches to allow the team to review them, ensure anonymity and quality, and provide feedback to the local partners. Following feedback, the local partner submitted revised transcripts with all issues rectified. Final versions were organised and coded by the IE qualitative analysis team.

Transcript and narrative cleaning

All transcripts were proofread by the local partner staff and edited in line with project requirements to ensure a high level of accuracy. All personally identifiable information was removed during transcription to produce fully anonymised documents for delivery.

Prior to delivery to the IE team, all transcripts were reviewed the Fieldwork Manager. During initial quality assurance checks, the Fieldwork Manager reviewed each deliverable for anonymity, comprehension, defined local terms, and completion of all administrative and background details.

Verification

Transcripts were reviewed for accuracy by data collection partner management and supervisory teams, checking them line-by-line against the original audio files. This ensured that no content was lost in the transcription process and that translations were accurate.

1.6.5. Data analysis

All interviews were analysed using a thematic approach. Once the interview transcripts were made available for analysis, a coding framework was developed. As an initial step this involved the Independent Evaluation team for the study developing a coding framework based on the research tools. For this study, we developed a singular codebook for all transcripts, rather than developing codebooks for each stakeholder-specific transcript. This meant that when it

came to the analysis, we could examine what had been coded *across* stakeholders in each of the contexts (as well as across the three contexts).

1.7. Primary data (quantitative)

1.7.1. Design and data collection

Survey design and sampling approach

The team designed a quantitative survey to understand the benefits girls received from participating in the projects, their perceptions of these benefits, and any costs incurred. The survey covered multiple topics. The survey structure was consistent across countries but adapted for local contexts and translated into relevant languages.

A multi-stage (cluster) sampling method was used to select a representative sample from the target population, which included girls who completed the course and did not drop out, based on the monitoring data. In the Primary Clusters Selection, the smallest practical grouping where each girl received the intervention was selected. In Malawi and Nepal, this was at the learning centre level, and in Ethiopia, at the class level. Then, in the Survey Respondents Selection, girls within each primary cluster were randomly selected to be surveyed.

The sampling methodology details are provided in the Fieldwork Report (Tetra Tech International Development, 2024) and adhere to the LNGB Monitoring Evaluation and Learning Guidance by the Fund Manager.

Ethics and Safeguarding

The GEC Independent Evaluation Ethical Research and Safeguarding Framework forms the overarching ethical framework for all research and data collection protocols for the GEC II IE. These guidelines relate to the design, implementation and reporting of all activities conducted as part of IE. The Ethical Research and Safeguarding Framework is compliant with the guiding concepts and principles set out in the FCDO's Evaluation Policy (2013) and FCDO's Research Ethics Guidance (2011); the FCDO Ethical Guidance for Research, Evaluation and Monitoring Activities (2019); and UK Data Protection Act (2018).

Study 6 was conducted in a way that gave precedence to the rights and dignities of research participants and protected them from harm through:

- Developing ethics forms (including consent/ assent forms) and protocols with our local data collection partners and consulting with IPs participating in the research. More information on these can be found above in the Fieldwork Report (available separately).
- Training enumerators in the use of these forms and protocols and piloting them at the same time as piloting the research tools.

The inclusion of comprehensive, specialised training for working with marginalised populations and sensitive subjects for all enumerators, supervisors, and data collection partner staff. This training offered specific considerations for working with minors, for working with women and girls, and for working with people with disabilities and included instruction on sensitive interviewing methods (e.g., active listening, open-ended questions) and techniques for speaking with participants using the "Do No Harm" protocol.

Piloting

After piloting in each country, feedback was received from the fieldwork team, and the data was checked for key variables and open-ended questions, as well as a final open-ended question for the enumerator to add any general comments about the process. This was useful in helping to check understanding of the tools and the contexts of the survey process with the girls. Tweaks to the survey were made following the pilots, including raising the minimum age at which girls were asked certain questions (particularly regarding sexual health).

Collection modality

All data for the quantitative surveys was collected using a Computer Assisted Personal Interview programme called SurveyCTO. Throughout fieldwork, all surveys were uploaded to the cloud at the end of each fieldwork day. The incoming data was monitored, and relevant fieldwork statistics displayed on a dashboard to allow the Fieldwork Manager and data collection partners to easily monitor fieldwork progress. The number of open-ended was limited,

but where relevant, all open-ended questions entered in a non-English language and sent the responses to the data collection partners for translation, and some of these open-ended questions were then categorised into groups to enable further analysis.

Fieldwork results

In Ethiopia and Nepal, the target sample was successfully completed. In Malawi, however, the high rate of relocation among girls led to difficulties in meeting the target sample. Many girls had moved away due to marriage or economic opportunities and frequent relocations made them hard to trace.

Substitution was relatively low in Ethiopia and Nepal despite targeting earlier cohorts no longer receiving the main interventions, which helped measure long-term effects. In Malawi, substitution was more challenging (*Table 9*)

Table 9: The numbers of girls targeted versus the numbers reached for study, by country

Quantitative survey	Achieved sample			
	Ethiopia - ABE	Ethiopia - IFAL	Malawi	Nepal
Total targeted	978	175	1108	710
Total surveyed	978	175	908	710
Of which were replacements	118	8	199	118

T-tests on available indicators (age, disability status, district, marital status, children, employment, Dalit status, and household head illiteracy) showed no significant differences between surveyed girls and those who couldn't be found, except for a higher share of married girls in the surveyed group. There may be unmeasured characteristics that could introduce bias, as noted in the study's limitations.

Data cleaning

All the collected data from the survey was clean and recodify by Fab Inc using the Stata data analysis programme. All open-ended questions entered in a non-English language and sent the responses to the data collection partners for translation.

1.8. Data analysis

Overview

Data analysis methods and assumptions which are specific to different sections of the findings are covered in more detail later in this section. Methods and assumptions relevant across all sections are discussed here.

Programme participation and completion.

The quantitative survey data analysis utilised descriptive statistics and t-tests to scrutinise differences. Despite the survey targeting only girls who completed their participation in the project, the data collection revealed that some girls never attended the course at the learning centre or failed to complete it. A question checking this was introduced early on during data collection, following early feedback. Among the total sample (2,769), 97 girls who participated in the survey never attended the project, with 87 from Ethiopia and 10 from Malawi. These girls were excluded from the analysis.

The analysis encompassed all girls in the sample who participated in the project, irrespective of course completion. In total, the sample consisted of 2,672 girls. 396 of these girls were not asked about completion (because the survey tool was modified after some initial roll-out to add this question following the piloting of the qualitative surveys which found there to have been issues of girls not having completed the training despite being reported as completers by the project). Of the remaining 2,276 girls, 17% (387) did not finish the course. The breakdown by project is presented in *Table 10*.

Table	10: Participation	and completion	course rate by	oroject
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	Ethiopia - ABE	Ethiopia - IFAL	Malawi	Nepal
Girls who weren't asked about completion	334	62	-	-
Girls who answered they completed the course	443 (77% of the 576 to which this was asked)	59 (63% of the 93 to which this was asked)	685 (76%)	702 (99%)
Girls who answered they did not complete the course	133 (23% of the 576 to which this was asked)	34 (37% of the 93 to which this was asked)	212 (24%)	8 (1%)
Total girls sampled who participated in the project	910	155	897	710

Age data

We collected age data in our survey, and also added a question asking enumerators if in their opinion, whether the girl 'Appears to be younger than stated, 'Appears to be about the same age as stated', or 'Appears to be older than stated'.

Projects collected the girls' age data at the start when they enrolled them into the project as part of the monitoring data. This gives us reason to prefer to use age from the monitoring data from the projects, as we do in this report.

The projects did do some checks on age when they were enrolling, but Ethiopia did admit it's difficult and some girls could be underage. They also cautioned about judging age from appearance, since poor nutrition in the areas can mean that they can look younger than they are.

Malawi and Nepal both collected dates of birth as well, and Nepal even collected whether they verified the date of birth with an identification (ID) (which they did for almost two-thirds of girls (466 out of 710), and which form of ID they saw.

Looking at the date of birth for Malawi and Nepal and take the assumption that this is the source of truth (particularly given that in Nepal they note this has been verified with ID in two-thirds of cases (466 out of 710). Calculating their age at the time of the fieldwork from the date of birth, and then comparing this to the age the girl told us in our survey, we find that in Nepal for the girls whose ID was verified, only 35% (163 out of 466) answered correctly. 65% answered incorrectly (303 out of 466), of which over a quarter (84 out of 303) was incorrect by more than one year. Similarly in Malawi, out of all girls, only 34% (306 out of 897) answered correctly. 66% answered incorrectly (591 out of 897), of which 42% (246 out of 591) was incorrect by more than one year. This gives us reason to prefer to use the projects' own monitoring data on age (rather than the age data we collected in our quantitative survey), as we do in this report.

To enable comparison between interventions where there were differences in interventions between different age groups used by the projects (i.e. 10-14 and 15-19 in Ethiopia), the monitoring data age that was used for this distinction was used. Where relevant for comparison to secondary data, the age at the time of the monitoring data is projected forward to the age at the time of data collection.

1.9. Sample management

Across the three countries, a key challenge was in contacting, recruiting, and managing the sample of selected girls. The data collection partners aimed to mitigate sample substitution by working closely with the local IPs to contact and schedule the girls. Despite their efforts, as mentioned above, all three teams needed to substitute in order to obtain sample completion. Specific obstacles to sample completion included:

Project dropouts

Anecdotal feedback from the Ethiopia and Malawi pilots demonstrated that several of the girls had dropped-out of the project. Some had never actually attended the community-based education (CBE) classes despite initially being registered. As such, we included a question on whether girls had completed the project, and if not, how long they attended before dropping out.

These cases of dropout of sampled girls were contrary to the data reported by the projects. In each case, the data used for sampling appeared to be excluding girls known by the projects to have dropped out. In Ethiopia, the data provided contained an indicator for each girl labelled, 'positive dropout' where 'yes' referred to girls positively dropping out from the programme in order to re-enter formal schooling – it was not known at what stage this occurred – whilst 'dropout' referred to girls negatively dropping out of the programme for reasons other than to re-enter formal schooling. These were dropped for sampling and only girls who had 'no' for that indicator – implying they were believed to have completed the programme – were selected. Similarly, in Malawi, the IP provided two datasets, one full list and one labelled 'List of Learners Completing CBE programme'. Finally, in Nepal, again the IP provided two datasets, these contained different indicators but were merged, and re-sampling was carried out, in order to bring in an indicator 'compiled reason of dropout' and any girls confirmed as having dropped out were dropped from the sample.

Relocation

Many of the selected girls had moved away from the sampling area, either due to marriage or in search of employment. This was an issue in all three countries.

Harvest seasons

In Ethiopia, several sampled girls had relocated to other areas to participate in the coffee harvest. This issue impacted Wonago Woreda the most but was an issue in all research locations. The Nepal team also encountered numerous cases of girls that could not be located due to them relocating out of the area for harvesting. Further, many of the respondents that could be found had to schedule interviews for either very early in the morning or late in the evening before harvest activities began at 7am or after they ended at around 7pm.

Rented homes

In Malawi, the team found that in Lilongwe specifically, some of the girls selected for research lived in rented homes and had moved since registering for the project. The team was unable to find any information regarding their new locations, meaning these girls could not be traced and had to be substituted.

Street children

In Malawi, the team discovered that in Lilongwe, many of the girls recruited for participation in the TEAM GIRL programme had been street children with no traceable addresses. In most cases, these girls attended the project for a few days and then never returned and the team was unable to find them for interviewing. As a result of this and the aforementioned challenges of harvest seasons, relocation, and rental homes, the Malawi team was unable to complete the target sample despite attempting to contact every girl in the sample universe.

Severe disability

In all three countries, the teams encountered cases in which a girl selected for research was severely disabled, often with a cognitive disability. Protocols for working with girls with disabilities, as discussed during in-country training in all three locations, was to do their best to interview these girls, working with an interpreter or the caregiver to aid in communication as much as necessary. The reason for pursuing this strategy was to ensure that the most marginalised girls in each sample were not excluded due to their disability. In most cases, the teams were able to work with interpreters and caregivers and complete an interview. However, in two cases in Nepal, communication was impossible, even with the help of the caregivers (and these girls were replaced in the sampling).

1.10. Difficulty with the questionnaires

Feedback from the pilot in Ethiopia highlighted that very young girls (between the ages of nine and 10) did not understand the interview questions, particularly in the qualitative interviews. It should be noted that these girls were registered as being older in the IP's monitoring data, as the projects technically only target girls between the ages of 10 and 19, and the cohorts these young girls were part of started two years ago (i.e., they would have been seven to eight years old when they started the programme).

Additionally, the researchers felt that some questions, such as those about marriage, children and sexual and reproductive health, were inappropriate for such young girls. As such, we adjusted our sampling approach so that only

girls who were 12 and older were selected for qualitative interviews. For the quantitative surveys, only girls 12 and older received questions about marriage while only girls aged 14 and older were asked questions regarding sexual and reproductive health. Even with these changes, we found throughout fieldwork in all three countries that the girl respondents often had difficulty understanding and communicating. This was especially true for all questions regarding sexual and reproductive health, change over time and ranking of benefits. Interviewers often had to rephrase the questions several times and the girls would still respond simply by nodding or shaking their heads.

This challenge made it difficult for enumerators to stick to the original intention of the survey tools, which requires a high level of enumeration skill when respondents are not very communicative. It could be a consideration for future studies to adopt a significantly smaller qualitative sample size while investing in a higher enumeration cost. Although there would remain a limit on how much the quality of data could improve. An alternative adaptation would be to reduce the ambition of the survey tools in terms of what data can be collected qualitatively from adolescent girls in very marginalised contexts.

2. Methods of analysis by sections

2.1. Section 3.1. Cost of supporting the most marginalised girls

This section relates to the analysis used in the *Section 3.1*. which addresses Research Question (RQ) 1.1 "What are the costs of supporting the most marginalised girls?"

Due to the differences in the Ethiopia project's two interventions, we separated the cost calculations for ABE and Integrated Functional Adult Literacy (IFAL).

Total costs

The table below presents the key costs estimated in *Section 3.1* of the report, outlining how they were calculated and data sources they were drawn from⁹. We particularly highlight the project budget which focused on the FCDO-sourced spend, and total costs calculated from the additional outlined cost items.

Table 11: Calculation methods and data sources for key cost figures

Key costs estimated	Calculation	Data sources
Project budget	N/A	FM VfM Scorecard 2023 (April 2023 values)
		Project Budget data
		Confirmation of final budget in correspondence with project IPs
Co-finance from IPs and Sub- Contracted Organisations	N/A	Correspondence with project IPs
Estimated Total project cost	Sum total of the below cost categories	N/A
Estimated costs for girls and their households (including foregone income)	Direct and indirect cost incurred to girls minus cash grant received.	Survey and project documentation
Estimated value of government input to learning centre facilitator salaries	Discussed in more detail below.	Conversations with project IPs and ABB budget
		Project completion report
Estimated value of volunteered	Discussed in more detail below.	Conversations with project IPs
		ABB Budget
Estimated value of shared building use	Discussed in more detail below.	ABB Budget

Source: FCDO costs from project budget data; Beneficiary numbers from project websites; IP co-finance from IP KIIs.

Estimated value of government input to learning centre facilitator salaries

This reflects a share of learning centre facilitators being taken on to government payroll in Ethiopia. Page 21 of the Project Completion Report explains that out of 577 learning centre facilitators, 259 (45%) were taken onto government payroll by the end of the project. It's not clear exactly when they were taken onto government payroll, but KIIs with the IP suggested it occurred throughout the project duration and didn't just happen at the end. We therefore make the assumption that this, on average, occurred for half the duration of the project (11 quarters out of 22). For the amount, we estimate the salary of each facilitator, by taking the median of the cost of that line item each quarter, divided by the number of facilitators paid each quarter. We assume the government pays these facilitators the same rate as the project¹⁰. We multiply this estimated quarterly median salary, by the number of facilitators, by the number of quarters,

⁹ Information on costs was also collected using the primary qualitative interview data. This differentiated between direct and indirect costs, and between financial and inkind contributions. It should be noted that while the study did include a section on costs in the interview guides, the data presented for the study for Section 3.1 is derived entirely from the quantitative data.

¹⁰ Whilst it is not fully clear if the same salary was maintained, the language used in reports by the IP and in our KIIs with the IP does not suggest a change; e.g. the Q15 Report 'Annex C. Sustainability' (UKAID 2022f) describes this in terms of 'the government structure started covering the monthly salaries of... facilitators who are teaching girls enrolled by the project'.

to get the estimated government co-finance in Ethiopia. We split this between ABE and IFAL based on the number of girls enrolled.

Community contributions

Community contributions is made up of the estimated opportunity cost of community volunteered time, and of shared use of existing buildings in which to conduct the learning centre activities.

For the community volunteered time, we start from the estimated salary of each facilitator as an estimated cost of local time. We do this by taking the average of the cost of that line item each quarter, divided by the number of facilitators paid each quarter. We then expand the number of facilitators working each quarter in the ABB data (only available from Q12 onwards) to account for the whole duration of the project. Multiplying the number and the cost, we have an estimated extent of total costs of facilitators over the project. We then make a crude assumption of the extent of community support, estimating it at 25% of the total costs to facilitators in Ethiopia and Nepal, and 50% in Malawi. This was relatively arbitrary, as projects did not have exact data on volunteers' time, but each explained that community inputs were an important part of implementation. The higher Malawi assumption was made to reflect the more specific information provided by the IP about women in the community volunteering their time throughout the learning centre activities (20 hours per week split across 10-15 community members per learning centre) mentioned in *Section 3.1*, albeit the opportunity cost of their time is still estimated as lower than the facilitators.

For the shared use of existing buildings in which to conduct the learning centre activities, we have cost data on this for Nepal, so we use this as the basis of an estimate for the other two countries. In each country, we have budget lines for the central office rent and running costs. In Nepal, the learning centre rent is equivalent to 25% of the central office rent and running costs. We therefore assume a similar ratio in the other countries and multiply the central office rent and running costs by 25% to get to the estimated cost of the shared use of existing buildings in which to conduct the learning centre activities for Ethiopia and Malawi.

Cost per beneficiary

To estimate the cost per beneficiary and annual cost per beneficiary, we take into account the following:

- Total estimated cost
- Number of beneficiaries
- Cohort duration

A simple cost per beneficiary was calculated by dividing the total estimated cost by the number of beneficiaries reported by the FM. As the projects differ in their project intervention duration, we calculated additionally an annual cost per beneficiary, which takes into account the project intervention duration (typical duration of learning centre activities for sampled cohort¹¹). As such, the annual cost per beneficiary was calculated by firstly dividing the total estimated cost by the typical duration in years of learning centre activities for sampled cohort, then divided by the number of beneficiaries.

For Ethiopia, the total figures were reported in addition to reports by ABE and IFAL. The total figures take the weighted averages across cohorts and regions based on contact hours and the number of girls enrolled in ABE and IFAL (43% and 57%), with the exception of the duration for our sampled cohort, which we do just for the Gedeo region where we sampled.

Key cost	How do we attribute between ABE/IFAL
FCDO - Output 1	ABE/IFAL Total Contact Hours
FCDO - Output 2	ABE/IFAL Total Contact Hours
FCDO - Output 3	ABE/IFAL Number of Girls
FCDO - Output 4	ABE/IFAL Number of Girls
FCDO - Output 5	ABE/IFAL Number of Girls
FCDO – CA	ABE/IFAL Number of Girls
FCDO - M&E	ABE/IFAL Number of Girls
Co-finance	ABE/IFAL Number of Girls

Table 12: Distribution of Key Costs by ABE/IFAL Allocation

¹¹ This should be distinguished from the typical duration of learning centre activities per cohort, which takes an average of all cohorts of the projects.

Key cost	How do we attribute between ABE/IFAL
Costs to girls and households (including foregone income)	Calculated, first split out by the responses to the cost questions, and then multiplied by the number of ABE/IFAL beneficiaries
Estimated implied co-finance from government	ABE/IFAL Number of Girls
Estimated implied co-finance from community (volunteered time)	ABE/IFAL Number of Girls
Estimated implied co-finance from community (volunteered space)	ABE/IFAL Total Contact Hours

Source: Calculated using data from Activity Based Budgeting, number of beneficiaries and project information.

The costs were then compared with a benchmark spend and costs for the GEC-T projects. The benchmark spends used were:

- Government expenditure per secondary student.
- Official Development Assistance (ODA) per secondary student

The government expenditure per secondary student were calculated using the World Bank's figures for Government expenditure per student, secondary (% of Gross Domestic Product (GDP) per capita)¹² times GDP per capita (<u>World Bank, 2024</u>).

The ODA per secondary student was calculated by ODA to secondary education (from the Organisation for Economic Co-operation and Development's Development Assistance Committee (OECD-DAC) data for ODA) divided by the number of students enrolled in secondary (from UNESCO Institute for Statistics (UIS) for secondary enrolment) (OECD-DAC, 2024)¹³.

The educational context on each of the countries¹⁴ was considered to estimate its benchmark and whether girls could be expected to pay additional fees.

Project spending by categories

Spending data were drawn from the ABB. Unless stated otherwise, this is excluding the 'Others' category which includes M&E and Central Administration and can to some extent be seen as fixed, so as to focus on the allocable spend.

The budget was additionally regrouped to align with the intended benefits explored in *Section 3.2*. Broadly, this was done by the following mapping, and this is what was used when comparing across the portfolio of GEC-T and LNGB projects within this section. For our case study projects, where the Activity Based Budgets were examined in more detail, some manual adaptations were made to more accurately assign spending. This was particularly the case for spending within activities that are less clearly allocated, such as 'financial support' where the detail was important to categorise.

Table 13: Mapping of Activities to Benefit Categories

Activity	Benefit group
Community Engagement/ Advocacy	Community engagement
Disability inclusion	Literacy and numeracy skills
Economic Empowerment	Transition to work
Financial support	Literacy and numeracy skills
Girls' Learning	Literacy and numeracy skills
Girls' Lifeskills/ Empowerment	Life skills

¹² This indicator is from 2015/16 for these countries. We assume that the percentage remain similar but is multiply by the GDP per capita data from 2022 for each country.

¹³ OECD DAC data on the Creditor Reporting System (CRS) is used by international donors to report on Official Development Assistance (ODA) spending and how the ODA is intended to be used. The OECD CRS has included a clear line for secondary education from 2018, and the latest data available that has been reported is 2022. As ODA can vary year-to-year, we take the five-year average from 2018 to 2022, and we divide this by the number of students enrolled at secondary in each country from the UIS database.

¹⁴ Ethiopia: There are no entrance examinations at public schools. Education is tuition-free until grade 10, whereas upper-secondary students have to pay school fees. Therefore, the benchmark could be understated. Malawi: In 2018, the government abolished tuition fees for secondary schools. Nepal: Secondary school education is free (up to 10th grade).

Activity	Benefit group
Livelihoods/ transition to work	Transition to work
Physical School Improvement	Literacy and numeracy skills
Safety and Wellbeing	Safeguarding
Sector/ systems engagement	Government system support
T&L Quality Improvement	Literacy and numeracy skills

Table 14: Benefit Group

Table by benefit groups (mapped by authors), excluding other – for Q12 (May-Jul 2021) onwards				
Activity	Ethiopia	Malawi	Nepal	In particular, largest sub-activity (country in E, M, N)
Literacy and numeracy skills	52%	46%	23%	E: Classroom construction/ rehabilitation (32%). M: Teacher stipends (49%). N: Learner materials (37%).
Help rejoin formal school	10%	8%	16%	E: Scholarships (94%). M: School Management/PTA activities (100%). N: Cash transfers (76%)
Life skills	8%	15%	26%	E: Peer support groups (42%). M: Girls clubs (76%). N: Life skills sessions (80%).
Community engagement	8%	14%	9%	Community awareness rising (E: 53% M: 69% and N:100%).
Transition to work	10%	9%	12%	Cooperatives (caregivers/community) (77%), Work experience/internships (76%) and TVET (63%)
Government system support	4%	0%	11%	E, N: Work with local/district/national (89% and 72%).
Safeguarding	8%	7%	3%	E Safety/wellbeing specific training (59%). M: Safeguarding interventions (100%). N: Content development (71%).

Source: Calculated using data from Activity Based Budgeting.

Costs for girls and their households

The costs incurred to girls and their households include both indirect costs (earnings foregone) and direct costs (what girls need to pay to participate in the programme). It is additionally offset by the cash grants offered to girls by the projects.

The costs were estimated from the survey. For the foregone earnings, girls were asked 'Did you have to give up any income to attend the programme?' and providing the amount per month. Direct costs were estimated based on whether the girls reported paying fees to attend the programme (per month, term, year), paying for learning materials (one-off), food (per month), transportation (per month), or any other costs (one-off) and the amounts per period of time given in brackets. Lastly, girls were asked if they received cash grants, and for how much (one-off). The number of girls who reported spend on each item and the amount of money in Great British Pounds (GBP) (per month for time-based, one-off for others) is presented in the following table:

Table 15:	Costs for	[,] girls and	their	households
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Cost in terms of income, fees, material.	Ethiopia ABE		Ethiopia IFAL		Mal	awi	Nepal		
food, transportation, other costs.	Yes	Amount of money (GBP)	Yes	Amount of money (GBP)	Yes	Amount of money (GBP)	Yes	Amount of money (GBP)	
Did you have to give up any income generating to attend the programme?	8%	10.4	14%	15.3	22.9%	15.2	3.7%	9.1	
Pay any fees to attend the programme	1%	0.5	2%	2.7	2.5%	1.4	0.1%	1.0	
Buy any learning materials	11%	5.7	13%	6.3	7.1%	2.3	3.0%	3.8	
Lunch or food	13%	8.3	17%	8.7	1.9%	2.7	1.7%	13.6	
Transportation	13%	7.7	27%	6.7	6.2%	7.1	0.1%	10.3	
Any other cost	0%	14.7	3%	3.1	4.7%	6.5	1.3%	0.6	

Source: Calculated using data from this study's quantitative surveys of 2,672 case study project girls.

Aggregated spending for each cost category were calculated using information of the proportion of girls reporting each cost, average spending for girls reported in the cost, taking into account the duration for each expense¹⁵. The expenses and grants were added and adjusted to the actual number of beneficiaries. A small share (and small amount of costs) for lunch/food whilst attending the project were excluded, on the assumption that girls would still have had to eat even without the project.

Table 16: Estimated total costs for girls across all project girls

	ABE Ethiopia (GBP)	IFAL Ethiopia (GBP)	Malawi (GBP)	Nepal (GBP)
Forgone income	117,914	274,595	186,216	11,136
Pay any fees to attend the programme	1,017	13,260	4,292	110
Transportation	281	467,624	51,578	1,104
Buy any learning materials	6,879	11,672	867	1,065
Any other cost	690	1,148	1,597	71
Total cost declared	387,696	721,728	217,809	14,020
Cash Transfers	8,295	41,659	7,121	675,950
Total net cost	379,401	680,069	210,687	-661,930

Source: Calculated using data from this study's quantitative surveys of 2,672 case study project girls and Beneficiary numbers from project websites.

Comparing GEC-T and LNGB spending

The Fund Manager introduced ABB for the projects during the programme. ABB implementation commenced midway through 2021, specifically starting from Quarter 17/18 for GEC-T and Quarter 12 for LNGB. Consequently, certain projects do not have activity-specific data labels captured under ABB. Currently, complete data sets are accessible for analysis encompassing 12 out of 27 projects under the GEC-T window and all 14 projects falling within the LNGB window.

¹⁵ For those expenses that were incurred monthly (forgone income, fees, transport), the cost was multiplied by the total project duration (in months). The only exception was forgone income, which was only multiplied by the average number of months girls typically worked on this activity.

Table 17: Weight	ed Average Distri	bution of Activities i	in GEC-T and	LNGB Programmes
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	Weig (total activity budget d	Weighted Average vity budget divided by total project budget)				
Activity	GEC-T	LNGB				
Community Engagement/ Advocacy	5%	9%				
Disability inclusion	3%	3%				
Economic Empowerment	1%	3%				
Financial support	23%	16%				
Girls' Learning	10%	18%				
Girls' Life-skills/ Empowerment	16%	12%				
Livelihoods/ transition to work	5%	9%				
Physical School Improvement	2%	5%				
Safety and Wellbeing	10%	4%				
Sector/ systems engagement	7%	7%				
T&L Quality Improvement	17%	13%				

Source: Data provided by the Fund Manager.

2.2. Methods of analysis for Section 3.2. The benefits of supporting the most marginalised girls

This section relates to the analysis used in the Section 3.2. which addresses RQ 1.2 which asks, "What are the key benefits of supporting the most marginalised girls?"

To answer this, we first present girls' **ranking of benefits**. In both our quantitative and qualitative interviews, we asked about their own perceptions of the benefits they received from the projects, and which they perceived to be most important. They were first asked, 'from participating in [project name], did you benefit from the following' list of potential benefits. Of the benefits they named, they were then asked which were the three most important benefits, and finally which was the most important benefit.

Table 18: Ranking of top benefits by group age.

Ranking of Benefits Group		Total		Ethiopia		Malawi			Nepal				
		Mention	Тор 3	Top 1	Mention	Тор 3	Top 1	Mention	Тор 3	Top 1	Mention	Тор 3	Top 1
l la la ad inconstruction de literature		000/		1001	070/			2 221	=004	1001	000/	0.50/	4=04
Helped improve my ineracy	lotal	80%	75%	42%	67%	63%	33%	82%	76%	49%	90%	85%	45%
	10-14 years old	79%	75%	40%	68%	64%	34%	78%	73%	41%	91%	87%	47%
	15-19 years old	77%	71%	39%	60%	55%	26%	84%	77%	52%	87%	81%	39%
Helped me re-join formal	Total	55%	44%	22%	65%	57%	24%	40%	25%	13%	60%	52%	28%
schooling	10-14 years old	86%	70%	14%	89%	80%	28%	82%	67%	8%	86%	62%	7%
	15-19 vears old	83%	61%	14%	82%	59%	22%	84%	66%	11%	82%	59%	9%
	,												
Helped improve my numeracy	Total	85%	68%	15%	88%	77%	27%	84%	66%	11%	85%	61%	7%
	10-14 years old	68%	59%	32%	68%	61%	26%	61%	49%	31%	77%	67%	38%
	15-19 years old	33%	20%	8%	49%	31%	15%	33%	17%	7%	16%	13%	4%
Helped me increase my													
household's income through	Total	26%	15%	7%	21%	10%	3%	37%	19%	8%	20%	15%	10%
work or self-employment	10-14 years old	16%	7%	2%	18%	8%	2%	21%	9%	3%	8%	4%	2%
	15-19 years old	43%	28%	16%	36%	19%	8%	42%	22%	9%	51%	42%	30%
Helped me improve my financial													
knowledge and financial	Total	29%	11%	3%	25%	9%	2%	42%	18%	5%	20%	7%	3%
decision making	10-14 years old	23%	6%	2%	22%	8%	1%	30%	7%	3%	18%	5%	2%
	15-19 years old	38%	17%	7%	41%	17%	8%	47%	22%	6%	27%	12%	5%
Helped improve my well-being													
and my self-confidence and self-	Total	42%	14%	3%	32%	10%	2%	64%	25%	7%	29%	5%	1%
esteem	10-14 years old	40%	13%	3%	31%	11%	2%	62%	25%	6%	28%	4%	1%
	15-19 years old	45%	13%	4%	35%	8%	2%	65%	25%	7%	34%	7%	3%

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Banking of Benefits Group		Total		Ethiopia		Malawi			Nepal				
	Cicup	Mention	Тор 3	Top 1	Mention	Тор 3	Top 1	Mention	Тор 3	Top 1	Mention	Тор 3	Top 1
Helped me improve my		100/	4.504					= 4.04	4-04		4-04	1001	10/
health	lotal	42%	15%	3%	32%	14%	5%	51%	17%	3%	45%	12%	1%
	10-14 years old	38%	14%	3%	29%	13%	5%	42%	17%	3%	44%	12%	1%
	15-19 years old	49%	18%	4%	47%	23%	8%	54%	17%	3%	47%	14%	0%
Helped me to make decisions	Total	35%	13%	1%	23%	9%	1%	28%	6%	1%	53%	25%	2%
	10-14 years old	34%	15%	2%	22%	8%	1%	21%	7%	1%	60%	30%	3%
	15-19 years old	33%	12%	2%	34%	16%	3%	30%	6%	1%	36%	13%	1%
Helped me increase my													
household's income through	Total	14%	5%	1%	9%	3%	1%	11%	2%	1%	24%	12%	3%
money received	10-14 years old	12%	4%	1%	6%	2%	0%	11%	3%	1%	19%	8%	2%
	15-19 years old	23%	10%	3%	23%	7%	2%	11%	2%	0%	36%	20%	6%
Helped me to make decisions	Total	29%	10%	1%	18%	4%	1%	42%	19%	3%	28%	7%	0%
about my family planning	10-14 years old	20%	5%	1%	15%	3%	0%	22%	10%	2%	21%	3%	0%
	15-19 years old	42%	17%	3%	34%	12%	3%	49%	22%	3%	43%	18%	1%
Helped change the attitudes of													
my family and improve my role	Total	20%	2%	0%	18%	2%	1%	31%	3%	1%	10%	2%	0%
in the family	10-14 years old	17%	2%	0%	17%	2%	0%	22%	3%	0%	11%	1%	0%
	15-19 years old	23%	3%	1%	25%	4%	3%	35%	3%	1%	10%	2%	0%

Source: Calculated using data from this study's quantitative surveys of 2,672 case study project girls.

Notes: The table displays all the benefits that girls mentioned from the project. It displays the top three and top one benefits. Percentages are color-coded in various shades of blue, segmented into five categories, each representing a 20% range. Darker shades indicate higher percentages. The tables are ordered based on the top one benefit.

Next, we looked into estimating private income benefits and non-income benefits for girls and their households which derived information from both quantitative and qualitative data.

Conceptualising private income benefits for girls and their households

This section analyses the benefits related to education and employment outcomes.

1) Transition to education and employment opportunities

First, we estimated the proportion of girls transitioning to education or employment. To help contextualise the findings, we separated the transition outcomes by age group (10-14 and 15-19) and whether girls were working before and after the project.

Girls were considered in education if they are currently in formal education or TVET (either full-time or part-time). Following the International Labor Organisation's definition of employment, girls were considered employed if they worked for at least one hour during the last seven days for wage, salary, commission, tips, or any other form of payment.

2) Characteristics of employment that girls transitioned on to

To determine girls' employment characteristics, we asked a set of questions related to their work. In addition to this, we want to see whether these characteristics changed over time (comparing before and after the project). To do this, we categorised work before the project as the job the girls **had just before the [project name] started**. The timeline varies by project and cohort of interest. This was compared to the work that girls were currently doing at the time of the interview as work **after** the project. For the section, to prevent describing changes that would have otherwise naturally occurred as girls get older, we restricted the analysis to girls over legal working age.

3) Average earnings for working project girls estimated

One of the characteristics that were compared was <u>girls' earnings</u>. In line with the Labor Force Surveys, girls were asked first the period in which they received payment, and the amount they were paid in local currency.

However, there are concerns over the accuracy of earlier earnings. Despite high inflation rates during the intervention period in the three countries¹⁶, 24% of girls (81 in total) reported the same salary for both before and after the project. To ensure that we accurately capture changes in earnings, the analysis was restricted to girls who reported finishing their work before the project prior to 2023 and who reported different salaries before and after the project.

With this sample, we estimated hourly and monthly wages. While girls may receive payment in periods of days, weeks, or months, they do not necessarily work full-time during those periods. Therefore, we opted for hourly wage, calculated using actual hours worked to compare against the period reported¹⁷. To minimise errors due to reporting error, cases with implausible values were further dropped. These include where the earnings reported were significantly higher than the minimum wage¹⁸ or when salaries changed tenfold or more. From this, a monthly income was estimated based on the total number of hours the girls reported working in a month.

4) Changes in earnings

Although girls were also asked about their salary of the job they worked before the project, there are concerns over the accuracy of the answers given for earlier earnings, particularly given large inflation rates in recent years, and for the share of girls who reported working the same job before and after, a large share also reported the same salary years apart. To mitigate this and ensuring salary changes are accurately captured, we restrict the analysis of this section to girls who reported finishing their work prior to the project before 2023 and reported different salaries before and after. To ensure that changes are not driven by girls without any work experience before the project, we also

16 Inflation rates	based on the	e World Bank	, World Deve	lopment Indicators.	:

	CPI 2020	CPI 2023	Overall inflation rate
Ethiopia	155.1	333.1	114.8
Malawi	85.83	130.39	51.9
Nepal	132.38	155.36	17.4

¹⁷ Further 39 girls working before the project and 37 working after the project were dropped from this analysis as they chose 'Other' time period but fail to provide valid answers.

¹⁸ We dropped cases where the hourly salary is higher than the minimum daily wage. Decision was made to use the minimum wage of 2023 for salaries received both before and after the project. This was because when the minimum wage of 2020 was used, 61% of cases were dropped for girls working before the project. Instead, when the minimum wage of 2023 was used, only 6.3% of cases were dropped. Additionally, hourly salaries that increased or decreased tenfold for both studied periods were also dropped from the analysis (8 cases) as this is likely due to a registration error.

conducted additional analysis to include only girls who had worked prior to the project. Results are similar with those reported here.

Given these caveats in data quality, for girls that get paid, average hourly earnings for work changed only slightly from before the project. In Ethiopia, the mean hourly wage for project girls of legal working age is 28 Ethiopian Birr (ETB) after the project (GBP 0.46), from 30 ETB (GBP 0.434) before. The mean monthly wage for project girls of legal working age is 2,815 ETB after the project (GBP 43), from 3,062 ETB (GBP47) before

In Malawi, the mean hourly wage for project girls of legal working age is MWK 614 (GBP 0.53), from MWK 585 (GBP 0.51). In Malawi, the mean monthly wage for project girls of legal working age is MWK 42,610 (GBP 37), from MWK 44,505(GBP 39).

In Nepal, the mean hourly wage for girls who participated in the project is 64 Nepalese Rupee (NPR) (GBP 0.4), from 85 NPR (GBP 0.53). In Nepal, the mean monthly wage for project girls of legal working age is NPR 5,25(1 GBP 33), from NPR 7,375 (GBP 46).

5) Educational learning outcomes and participation

The Early Grade Reading Assessment (EGRA) and the Early Grade Mathematics Assessment (EGMA) were used for **learning outcomes** assessment across the three projects. EE data of the projects from Study 5 were used to estimate changes over time in learning. This implies the same methodological decisions including how aggregated scores were calculated from each subtask. For this, we restrict to panel sample of girls (including only girls who were recontacted), meaning that only results of girls in the Nepal and Malawi projects were reported as it was not possible to merge data across rounds for the Ethiopia project. The quantitative data on learning was complemented by interview data which sought to understand how girls and other stakeholders perceived how changes in learning outcomes has the potential to change girls' potential earnings in the future.

6) Hazardous conditions

The questions in MICS 6 are structured to evaluate whether children are involved in work under hazardous conditions, shedding light on the prevalent risky environments in which child labourers operate. If a child answers affirmatively to at least one of the specified conditions such as carrying heavy loads, working with dangerous tools or machinery, facing environmental risks like exposure to exposure to dust, fumes, or gas, extreme cold, heat, humidity, loud noise or vibration, work at heights, handling chemicals like pesticides, glues, or explosives the job is categorised as hazardous. This approach aims to capture a comprehensive picture of the work environment and conditions encountered by children engaged in labour activities.

7) Financial literacy

Financial literacy was presented based on the survey data and compared with secondary sources. It is important to note that secondary sources presented data from women aged 15 and above, which include older women than our sample. This was complemented by data collected through qualitative interviews which sought to understand further girls' use of bank accounts and other financial products.

Conceptualising non-income benefits for girls and their households

This section highlights various types of benefits for girls that are not directly related to their income.

1) Improved health knowledge and outcome

In contrast with private income benefits, it is difficult to measure change over time in terms of health knowledge and outcomes. To mitigate this, the survey was designed to align with secondary data sources in which the results of this section were compared with.

Health knowledge includes Tuberculosis (TB) and Human Immunodeficiency Virus (HIV) knowledge, while health outcomes include outcomes related to the girls' children (vaccination rates and incidence of sickness).

To estimate the vaccination rates and the incidence of diseases in the last two weeks among the children of the girls surveyed, the proportion of girls who responded "yes" for each vaccination/disease was considered against the total number of responses to that question. To calculate the total, the "yes" and "no" responses were added together, which may not always match the total number of children per project.

Interviews with stakeholders collected data on changes in girls' physical and mental health, and knowledge around these areas.

2) Delayed marriage and pregnancy

While delayed marriage and pregnancy are listed as one of the key benefits, they are difficult to measure and attribute to the project. To enable comparison, we separate girls who got married before, during, and after the project and compare the proportion in which they delay their marriage and pregnancy. The data collected when conducting interviews with girls and other stakeholders complemented this data by trying to understand whether there had been changes over the course of the project as to what the ideal age is that girls should get married/ have children, and the actors involved in decisions around this.

3) Improved well-being and social networks

Several measures of well-being were used including subjective perception of well-being. For the Malawi project, baseline EE data includes questions on the extent to which girls agree with ten statements related to self-confidence and self-efficacy. The scores were compared with girls' survey answers.

For social networks, girls were asked questions related to their number of friends, the frequency in which they go out of the house, and the frequency in which they see or speak with friends. To enable comparison, for each statement, they were asked "How, if at all, do you think [the frequency of each measure] has changed in the last [year corresponding to project intervention]?"

4) Changes in social norms and gender attitudes

For social norms, girls were asked the extent to which they agree with the following statements:

- More encouragement in a family should be given to sons than daughters to go to school.
- In general, the father should have greater authority than the mother in making family decisions.
- Girls should be more concerned with becoming good wives and mothers than desiring a professional or business career.
- There are some work roles better suited to men and some better suited to women.
- Childcare should be more of a woman's responsibility than a man's.

To enable comparison, for each statement, they were asked "How, if at all, do you think your perception to the previous statement has changed in the last [year corresponding to project intervention]?"

For qualitative data on benefits the data the study collected from interviews used the codebook presented in *Table 19* to analyse the data for *Section 3.2*.

Private income benefits						
Parent code	Child code					
Girls' earnings	Type of job/ Income Generating Activity (IGA)					
	How girl's job/ IGA compares to family member					
	How girl's job/ IGA compares to other similar girls in					
	community					
	Amount girl earns					
	Time girl spends doing non-wage activity/ IGA/ job					
	Satisfaction with job/ IGA and income					
Respondent's income increased	Employment					
	Self-employment					
Respondent's income decreased	Employment					
	Self-employment					
Respondent's income stayed the same	Employment					
	Self-employment					
Income higher than other girls	Employment					
	Self-employment					
Income lower than other girls	Employment					
	Self-employment					
Higher household contribution	Employment					
	Self-employment					
Lower household contribution	Employment					

Table 19: Codebook used for qualitative data analysis

Private income benefits						
Parent code	Child code					
	Self-employment					
Same household contribution	Employment					
	Self-employment					
Change in productivity (non-wage employment)	Employment					
	Self-employment					
Financial inclusion	Use of bank accounts					
	Use of other financial products					
Potential to increase income in the future	Related to formal education					
	Related to vocational training					
	Learning outcomes – numeracy					
	Learning outcomes – literacy					
	Learning outcomes – other					
Girls' influence and control over private income benefits	Actor involved in decision related to education					
	Actor involved in decision related to training					
	Actor involved in decision related to non-wage employment					
	Actor involved in decision related to IGA					
	Actors involved in decisions re spending money earnt					
Review of vocational training	Changes and benefit to girl's life					
	Factors that helped girls join vocational training					
	Challenges going into vocational training					
	Differences based on marginalisation markers					
Review of school	Completed all classes/duration of attendance					
	Satisfaction with teacher					
	Satisfaction with school					
	Changes and benefit to girl's life/skills					
	Changes and benefits to TPPs knowledge/skills					
	Factors that helped girls join school					
	Challenges joining/going to school					
Community attitudes and support to girls	Education					
	Vocational Training					
	Income generating activity					
Educator/ transition pathway providers attitudes and support to	Education					
girls	Vocational Training					
	Income generating activity					
Parent attitudes and support to girls	Education					
	Vocational Training					
	Income generating activity					
Spousal attitudes and support to girls	Education					
	Vocational Training					
	Income generating activity					

Parent code Child Changes in physical health Importance of physical health - importance of physical health	code perception Evidence of
Changes in physical health Importance of physical health - importance of physical health	perception Evidence of
importance of physical health	
Quality of physical health	
Changes in mental health Reports feeling worried or anxi	ous weekly or daily
Intensity and description of free	uent anxiety
Coping mechanisms	
Safeguarding Girls' Perceptions of safety at s	chool
Girls' knowledge of how to repo	ort problems
Community stakeholders adopt	ing safeguarding approaches
Changes in understanding of h	ow to/importance of
safeguarding	
Marriage perceptions Not married	
Actual age at marriage - self/gi	1
Actual age at marriage - boy	
Ideal age for marriage - girl	
Ideal age for marriage - boy	

Non income benefits				
Parent code	Child code			
	Doesn't want to get married			
	Actual actors involved in decision			
	Ideal actors involved in decision			
	Expected actors involved in decision			
	Ideal age at marriage for respondent's child specifically			
	Opinions on gender roles			
	Community attitudes and change			
Pregnancy and children	Description of children and pregnancies			
	Decision maker for pregnancy - actual			
	Decision maker for pregnancy - expected Use of family			
	planning - method			
	Use of family planning - decision-maker			
	Opinions on having children and pregnancy age			
	Community attitudes and change			
Happiness	Level of happiness			
Self-confidence (belief in ability or skills)	Changes in self-confidence			
	Benefits of change			
	Obstacles			
	Benefits of change to community			
	Factors contributing to this change			
Self-esteem (self-worth/ personal value)	Changes in self-esteem			
	Benefits of change			
	Obstacles			
	Benefits of change to community			
	Factors contributing to this change			
Self-efficacy (belief that goal can be achieved)	Changes in self-efficacy			
	Benefits of change			
	Obstacles			
	Benefits of change to community			
	Factors contributing to this change			
Empowerment	Control over decision making / process for decision making			
	Differences based on marginalisation markers			
	Girls' ability to influence decision making			
	Aspirations for the future			
Life chances for girls' children	Level of education for sons			
	Level of education for daughters			
	Change			
	Contributing factors to change			
	Marriage age for children			

Community benefits					
Parent code	Child code				
Changes in community attitudes and support to girls	Education				
	Vocational training				
	IGA				
Economic spillover	Girls sharing skills/ knowledge from education				
	Girls sharing skills/knowledge from vocational training				
Increased knowledge	Support mechanisms for girls				
	Use of support mechanisms				
	Community members' awareness of support mechanisms				
	New legislation/policy for girls' education				
	TPP/educator training				
	Other changes in knowledge/skills				
	Most important change/why				
Girls' contribution to community	Membership in clubs/groups				
	Volunteering				
	Involvement in crime				
	Environmental behaviours				
	Other changes in contribution to community				

2.3. Methods of analysis for Section 3.3. Valuing the benefits relative to the costs of the GEC's support for the most marginalised girls

This section relates to the analysis used in the *Section 3.3*. which addresses RQ 1.3 "To what extent do the value of the benefits justify the cost of the GEC's support for the most marginalised girls?"

To answer this question, we present six economic models designed to quantify the long-term benefits of the project focusing on learning, transition to education, transition to work, and the acquisition of life skills.

Overview

The quantification of the benefits is based on survey information (as reported in *Section 3.2*) of the extent of the benefits and proportion of girls receiving them. This is then extrapolated to the total girls in the project from all cohorts. For all models, this excludes girls who dropped out estimated from the project monitoring data, and for the model 'benefits from learning' this also excludes girls who dropped out estimated from our survey responses in addition. Where there are costs involved, the value is subtracted from the estimation.

An annual discount rate of 10% is applied to costs and benefits within each model, and the net present value calculated. For models relating to girls working, they are assumed to work for five years¹⁹.

The table below shows the formula of how each model is calculated and the assumptions made.

Model 1. Benefits from learning during the intervention

This model estimates the benefits based on girls learning improvements during the intervention. These learning improvements are modelled as economic returns for in terms of equivalent additional years of schooling, based on girls' learning score improvements during the project. These benefits consider private and social benefits. The following steps were taken to estimate this:

- **Calculate Improvement in Performance**: We first calculated the increment in the percentage of correct answers in the EGRA and the EGMA, based on the EE data. These tests were taken at the baseline and endline of the project in terms of average percentage points. For Malawi and Nepal, these are panel datasets of the same girls. For Ethiopia this is not possible and cross-sectional estimates are used.
- Equivalent in Years of Education: The annual improvement assumed in learning for girls in school is drawn from GEC-T data prepared for previous IE studies. In the GEC-T projects, girls from the control groups (i.e., that did not receive the GEC-T intervention) improved their percentage point learning score across EGRA and EGMA (evenly weighted) by 4.0%. Therefore, we divided the improvement in percentage points (above) by 4.0 to estimate the number of additional years of effective schooling for the girls.
- Estimate Beneficiaries: As explained in the overview, this is extrapolated to the total girls in the project from all cohorts, excluding girls who dropped out estimated from the project monitoring data. In addition, as the EE learning improvement estimates are calculated for girls at the endline of cohorts, we also exclude the estimated girls who did not complete the intervention based on our survey data.
- Calculate Monetary Benefits: We calculated the private income return to those equivalent additional years of schooling. For these we estimate the increase in annual earnings per girl²⁰ due to additional years of education, given a specific return rate per year of additional education based on the World Bank's (<u>Montenegro & Patrinos</u>, <u>2021</u>)²¹. It is assumed that the increased earnings are due to learning and not signalling effects. For this we considered the compound effect by raising the return rate factor to the power of the number of equivalent additional years studied.
- Social return: We assume that the social benefits are equivalent to the private benefit (McMahon, 2004).
- **Net present value:** It is assumed that girls do not immediately enter the workforce, instead a time lag is introduced based on an average of how long girls would be expected to return to school for (see Model 2), weighted by the share of girls expected to return to school, rounded to the nearest year. For the years during

¹⁹ With the exception of when literature states otherwise.

²⁰ Annual average income in GBP based on the survey. Ethiopia: GBP 576; Malawi: GBP 540; Nepal 408

²¹Although rates for each country are available for women based on different sources: Ethiopia (2014, UEUS): 13.0%; Malawi (2013, IHS): 19.9%; Nepal (2010, LSS): 10.2%, The global estimate for women of 11.7% is used to be relatively more conservative.

which it is projected that the girls will still be in school, only social benefits are estimated. After the girls finish school, they are assumed to go into work for ten years and private and social returns are estimated.

Table 20: Private returns to addition	al learning (in terms o	f equivalent years of schooling)
---------------------------------------	-------------------------	----------------------------------

	Source	Formula	Ethiopia ABE	Ethiopia IFAL	Malawi	Nepal
Average percentage point improvements in learning score across whole cohort duration (% Correct)	EE data from the case-study projects	(a) Increased score (equally weighted when combining EGRA and EGMA)	12	8	22	21
Average percentage point improvement in learning score (% Correct) in GEC- T control schools per year	EE data for GEC- T projects, prepared for IE Study 3	(b) Increased EGRA/ EGMA score per year (control girls)	4.0	4.0	4.0	4.0
Estimated equivalent benefit in terms of years of schooling	Calculation.	(c) = (a)/(b)(round ing down)	3	2	5	5
Baseline annual earnings per girl	Quantitative survey data.	(d) = From data	576	576	540	408
Rate of return used	Literature – Montenegro and Patrinos (2021)	(e) = From literature	11.7%	11.7%	11.7%	11.7%
Equivalent annual private income return per girl benefitting	Calculation	(f) = ((d)*(((1+(e)) ^(c)))-(d)	227	143	399	302
Equivalent annual private non-income and broader social return per girl benefitting	Literature – McMahon (2004)	(g) = (f)	227	143	399	302
Total beneficiaries	Project data and calculations	(h) = Total Beneficiarie s excluding estimated dropout (using monitoring data and survey data)	5,669	6,636	2,644	6,109
Total Private Income Returns for girls per vear	Calculation	(i) = (f) * (h)	1,285,305	946,713	1,055,487	1,842,471
Total non-income and social returns for girls per year	Calculation	(j) = (g) * (h)	1,285,305	946,713	1,055,487	1,842,471
Net Present Value (GBP)	Calculation	(k) = Net Present Value (NPV) of discounted benefits	16,585,047	12,215,991	13,029,978	21,809,657

Sources: Described in table above.

Model 2. Benefits from transition to education

This model estimates the benefits of girls who transition to further schooling. The economic returns of the additional years of schooling that girls pursue after returning to education are modelled. These benefits consider private and social benefits. The costs of additional years of schooling are also taken into account. The following steps were taken to estimate this:

- **Calculate the Beneficiaries**: We first calculated the number of girls who returned to school, based on the share of girls who did so in the survey sample. As explained in the overview, this is extrapolated to the total girls in the project from all cohorts, excluding girls who dropped out estimated from the project monitoring data.
- Calculate the number of additional years of schooling for girls: We estimate the average number of years
 the girls who transitioned into formal education could then be expected to complete. Here we take the grade of
 schooling that girls most commonly entered, and use the dropout rates for each country in each level
 (Government of Ethiopia, 2022; Government of Malawi, 2022; GoN, 2023; GoN, 2019)²² and transition rates
 between each level. We then add an additional weighting to assume that these girls are one-third more likely to
 dropout (such that if that estimates a girl would complete 3 additional years of schooling, we weight this down to
 2 years).
- Calculate Monetary Benefits: We calculated the private income return for those additional years of schooling. For these we estimate the increase in annual earnings per girl²³ due to additional years of education, given a specific return rate per year of additional education based on the World Bank's (<u>Montenegro & Patrinos</u>, <u>2021</u>)²⁴. For this we considered the compound effect by raising the return rate factor to the power of the number of additional years studied.
- Social return: We assume that the social benefits are equivalent to the private benefit (McMahon, 2004).
- **Total Cost Estimation**: The total costs are estimated based on the cost per year per girl to attend school.²⁵ The details of how this cost is estimated are explained in *Annex E, Section 1*. This is considered for the total girls of the project who return to school by the average years that we estimate that they return.
- **Net present value**: The costs of schooling apply whilst the girls are in school. For the years during which it is projected that the girls will still be in school, only social benefits are estimated. After the girls finish school, they are assumed to go into work for ten years and private and social returns are estimated.

	Ethiopia ABE	Ethiopia IFAL	Malawi	Nepal
Number of girls transitioning back into education [±]	5,958	5,576	1,653	5,122
Average number of additional years they studied [±]	2.0	2.0	4.0	4.0
Baseline annual earnings per girl ±	576	576	540	408
Rate of return used [¥]	12	12	12	12
Private Return on extra years of education per girl	143	143	301	227

Table 21: Transition to formal schooling after intervention

²² Annual dropout rate for Ethiopia 12.6% primary education and 11.3% in secondary education). Transition rate to secondary of 91% (so inverse is additional 9% dropout between those levels). Malawi: 6,1% in Primary Education and 7.3% in secondary education. Transition rate to secondary of 84% (so inverse is additional 16% dropout between those levels). Nepal: 3,1% primary education and 6,9% secondary. Transition rate to secondary of 81% (so inverse is additional 19% dropout between those levels).

²³ Annual average income in GBP based on the survey. Ethiopia: GBP 576; Malawi: GBP 540; Nepal 408

²⁴ The rates for each country are based on different sources: Ethiopia (2014, UEUS): 12.4%; Malawi (2013, IHS): 17.0%; Nepal (2010, LSS): 9.2%. The global estimate for women of 11.7% is used to be relatively more conservative.

²⁵ Formal school total cost per year (including costs to government, donors and households, plus opportunity costs for girls). The sources and calculations for this are explained in Section 3.1 and the Annex relating to Section 3.1. This results in estimates of: Ethiopia ABE: GBP 153, Ethiopia IFAL GBP 161, Malawi GBP 181, Nepal GBP 151

	Ethiopia ABE	Ethiopia IFAL	Malawi	Nepal
Non-income private and broader social return on extra year of education per girl	143	143	301	227
Total benefits per girl	285	285	602	454
Total Private & Social Returns for all girls per year	1,700,056	1,590,933	994,626	2,327,831
Formal school total cost per year (including costs to government, donors and households, plus opportunity costs for girls)	153	161	181	151
Total cost per girl across all years™	306	322	724	604
Total Cost per year of Extra Years in School for all girls transitioning into education	911,616	897,707	299,234	773,424
Net Present Value (GBP)	7,756,107	7,173,097	3,548,311	8,049,625

Source: [±] calculated using data from this study's quantitative surveys this study project girls.

* = <u>Montenegro & Patrinos, 2023</u>. Although rates for each country are available for women based on different sources: Ethiopia (2014, UEUS):
 13.0%; Malawi (2013, IHS): 19.9%; Nepal (2010, LSS): 10.2%, the global estimate for women of 11.7% is used to be relatively more conservative.

[™] World Bank's figures for Government expenditure per student, secondary (% of GDP per capita) times GDP per capita and ODA from OECD DAC data, and opportunity costs to girls from our survey data, see *Section 3.1* for more detail.

Model 3. Life skills - benefits to girls' children

This model evaluates the benefits obtained by the children of beneficiary girls through increased vaccination rates. We estimate how many children receive vaccinations (using our survey data) above the national average for various diseases and calculate their improvement in 'quality-adjusted life years' (QALYs) (<u>Sassi, 2006</u>). This indicates a health outcome measurement unit that combines duration and quality of life. The monetary benefit of these QALYs can be estimated. This is not calculated for measles for Malawi as the vaccination rate is lower than the national average. The following steps were taken to estimate this:

- Estimating beneficiaries: We consider the number of children each girl is expected to have, considering the national average of children per girl in that country based on World Bank data (World Bank, 2024). As explained in the overview, this is extrapolated to the total girls in the project from all cohorts, excluding girls who dropped out estimated from the project monitoring data.
- **QALYs gain**: For each disease for which children received vaccination (Bacillus Calmette-Guerin (BCG) and Measles), we estimated the number of additional children vaccinated compared to the national average. For every additional child, we estimated the number of QALYs gained using the estimate of each diseases impact on QALYs estimated in the literature (the results are presented in *Table 22*) (Panovska-Griffiths et al., 2018).
- **Net present value**: Finally, we added all the QALYs by project and estimated their monetary value based on rates from literature (<u>Pichon-Riviere et al., 2023</u>).

Definition	Formula	Ethiopia - ABE	Ethiopia – IFAL	Malawi	Nepal
Vaccination against Measles					
Difference in Vaccination rate ±	(a)=national vaccination rate - (share of children vaccinated / total children)	22%	22%		18%
Number of additional children vaccinated [±]	(b) =a*(mean children per women in the region * number of beneficiaries toggling dropout)	7,602	11,744		2,222

Table 22: QALY gains in GBP due to increase in children vaccination rate among mothers in the programme

Definition	Formula	Ethiopia - ABE	Ethiopia – IFAL	Malawi	Nepal
Vaccination against Measles					
Additional QALY gain [™]	(c)=b*(1-Qaly loss)*((1-e ⁻ ^{duration*discount time)} /discount time))	149	230		44
Value of QALY in GBP [¥]	= c * Economic value of QALY loss for each country	14,987	23,152		8,872
Vaccination against BCG					
Difference in Vaccination rate [±]	(a)=national vaccination rate - (share of children vaccinated / total children)	15%	15%	1%	9%
Number of additional children vaccinated [±]	(b) =a*(mean children per women in the region * number of beneficiaries toggling dropout)	5,183	8,007	137	1,086
Additional QALY gain [™]	(c)=b*(1-Qaly loss)*((1-e⁻ ^{duration*discount time)} /discount time))	698	1,078	18	146
Value of QALY in GBP	= c * Economic value of QALY loss for each country	70,204	108,447	1,858	29,798
Total QALY gains [¥]	=Total QALY gains from Measles vaccine + BCG	85,192	131,599	1,858	38,670

Source: [±] Calculated using data from this study's quantitative surveys this study project girls; [¥] <u>Pichon-Riviere et al., 2023</u>; [™] <u>Panovska-Griffiths et al., 2018</u>.

Model 4. Life skills - benefits of using contraception

This model evaluates the benefits obtained by preventing unplanned pregnancies among girls who attributed their knowledge of contraception to the project. We estimate the number of averted pregnancies based on the type of contraception method used and quantify them in terms of 'quality-adjusted life years' (QALYs). The following steps were taken to estimate this:

- Estimating Beneficiaries: We estimated the number of girls who reported using contraception methods.
- Estimating averted pregnancies: We estimated the proportion of girls in our sample using each type of contraception method (for girls using more than one method, the one with the lowest failure rate was chosen). Based on the failure rate of each method, we estimated the number of averted unplanned pregnancies. The total averted unplanned pregnancies were multiplied by the proportion of girls who reported learning about contraception in the programme.
- **QALYs gain**: We estimated the QALY gain for each unplanned pregnancy averted, starting from the estimate from the literature that 85% of women would get pregnant in a year if not using contraception, and subtracting the failure rate of each method of contraception (<u>Sonnenberg et al., 2004</u>). We utilised the QALY loss associated with unplanned pregnancy itself for this analysis.
- Net present value: Finally, the share of averted unplanned pregnancies associated with the programme was
 estimated in monetary value based on QALYs rates from external data (<u>Sonnenberg et al., 2004</u>) (results are
 presented in the *Table 23*).

	Formula	Ethiopia - ABE	Ethiopia - IFAL	Malawi	Nepal
Share of girls using contraception [±]	(a) = From survey data	n/a	13%	58%	8%
Share of girls that attributed the knowledge of contraception to the programme	(b) = From survey data	n/a	35%	30%	86%
Total girls using contraception who attributed it to the programme	(c) =Total beneficiaries * (a) * (b)	n/a	3,400	559	1,565
Averted unplanned pregnancies from learning contraception in the programme [¥]	(d) = sum ((c) * (85%-failure rate))	n/a	2,772	469	1,306

Table 23: QALY gains in GBP from using contraception

	Formula	Ethiopia - ABE	Ethiopia - IFAL	Malawi	Nepal
QALY gain	(e)=(d)*(1-Qaly loss)*((1-e ⁻ duration*discount time)/discount time))	n/a	1,928	326	908
Value of QALY gain in GBP [¥]	(f) = (e) * Economic value of QALY loss for each country		196,122	33,155	187,114

Source: [±] Calculated using data from this study's quantitative surveys; [¥] Sonnenberg et al., 2004

Model 5. Benefits of Reduced Physical Harm and Harassment (Life skills / Safeguarding)

This model evaluates the benefits obtained by girls who report feeling less physical harm, abuse, or harassment in the area where they live, in the years since the start of the project. We estimate the number of girls who share this feeling and quantify it in terms of 'quality-adjusted life years' (QALYs) using literature on the QALY benefit of reduced fear. The following steps were taken to estimate this:

- Estimating Beneficiaries: In the Gender-Based Violence section of our survey, girls were questioned about their perceptions of changes in physical harm, abuse, or harassment in their living environment over the past years since the start of the project. By calculating the number of girls who indicated a decrease in such incidents and subtracting those reporting an increase, we estimated the net change in the affected population. As explained in the overview, this is extrapolated to the total girls in the project from all cohorts, excluding girls who dropped out estimated from the project monitoring data.
- **QALYs Gain:** We estimated the QALYs gains for the net group of girls who feel safer.
- **Net Present Value:** Finally, we converted the QALYs to monetary value based on QALYs rates from external data⁻²⁶(results are presented in *Table 24*.

	Formula	Ethiopia - ABE	Ethiopia - IFAL	Malawi	Nepal
Share of girls feeling that physical harm, abuse, or harassment in the area where they live has decreased [±]	(a) = Girls perceived decrease in violence / Total girls in the survey	40%	46%	55%	65%
Total number of girls feeling physical harm, abuse, or harassment in the area where they live has decreased	(b) = (a) * Total girls beneficiaries excluding estimated dropout using monitoring data	3,291	5,904	1,949	4,042
Share of girls feeling that physical harm, abuse, or harassment in the area where they live has increase [±]	c = Girls perceived increase in violence / Total girls in the survey	8%	10%	27%	14%
Total number of girls feeling physical harm, abuse, or harassment in the area where they live has increased	d = c * Total girls beneficiaries excluding estimated dropout using monitoring data	660	1230	957	834
QALY gain (reduced fear) [¥]	e=(d)*(1-Qaly loss)*((1-e ⁻ ^{duration*discount time})/discount time))	3,083	5,531	1,826	3,786
QALY loss (increased fear) [¥]	f=(d)*(Qaly loss)*((1-e ^{-duration*discount} ^{time)} /discount time))	618	1,152	896	782
Economic loss of QALY in GBP	= (e –f)* Economic value of QALY loss for each country	247,966	440,493	93,503	510,250

Table 24: Economic Value of Quality-Adjusted Life Years (QALY) Associated with Perceived Violence Reduction in GBP

Source: [±] Calculated using data from this study's quantitative surveys this study project girls; [¥] <u>Heeks et al., 2018</u>.

Potential scope of spillover benefits

In assessing the overall impact and potential spillover effects of our initiatives, we explore four methods for estimating different potential spillover groups. This includes: girls who dropped out from the project, in-school girls in the local areas where the project was operating, male beneficiaries in Malawi, and potential spillovers through supported collaborative networks in Nepal. This is discussed in more detail in *Section 3.3.* of the main report.

Drop out girls: To estimate the number of dropout girls, we utilised the completion rate from our survey and project monitoring data to determine the total count of girls who dropped out.

In-School Girls in the community: Here we assume that all the out of schoolgirls are reached by the project, so the inverse of the out of school rate would reflect in schoolgirls in those areas. The calculation involved multiplying the inverse of the out-of-school (OOS) rate in those areas by the total number of girls in our project. This estimation was derived using the OOS rate for the closest available age group and the relevant region of each country.

Boys benefited: In the Malawi project, 1,250 boys directly benefited from the programme, alongside girl participants.

Girls Inclusive Education Network (GIEN) scale up: Through the GIEN partnership, the Nepal expanded the coverage from 22 local levels where they were working directly to 82 local levels. Here we include the girls reached by the project, and the in-school girls in the community estimated above. By combining these for the 22 local levels in which the project operated, we then extrapolate this figure to the 82 local levels (assuming a similar number of girls per local level).

Sensitivity Analysis

In carrying out this economic modelling, a number of assumptions are made. These assumptions are based on a range of sources including international literature, data from our analysis and secondary data. In order to ensure robustness and confidence in the modelling and the outputs that result from these assumptions, we conduct sensitivity analysis to show the effects of changes in some of the most relevant assumptions and compare the results to the default model described above.

In this sensitivity analysis we test six assumptions:

- 1. The private wage rate of return. Based on international literature (cited above), a rate of 11.7% is used in the default model. Here we test lower and higher values of 8% and 12%.
- 2. The non-income private and broader social rate of return. Based on international literature (cited above), this is estimated to be equivalent to 100% of the private wage rate of return in the default model. Here we test lower and higher values of 0% (so no non-income private and broader social benefits) and 200%.
- 3. Number of years for which girls achieve private income returns. Based on a deliberately conservative estimate of how many years girls will work for in their adult life, an assumption of 10 years of private income returns is used in the default model. Here we test lower and higher values of 5 and 15 years.
- 4. Extent of learning achieved by girls in control group schools. Based on the data from the control schools of GEC-T (cited above), a conservative estimate of 4.0% of learning gains was used in the default model. Here, we test the higher value by recalculating the 4.0% of learning gains which took place over an average duration of 18 months to an annualized rate of 2.67%. We also test the lower value by instead of using the overall average learning gains across all the samples, but by comparing to the mathematically closest deciles to the unweighted average of our projects baseline learning levels of 7.0%.²⁷ Note this is comparable to equivalent years of schooling for the higher test of 4/ 3/ 8/ 7 for Ethiopia ABE/ Ethiopia IFAL/ Malawi/ Nepal respectively, and for the lower test of 1/ 1/ 3/ 3.
- 5. Number of years for which girls continue in formal-schooling post transition. Based on our quantitative data of the typical grade girls have currently transitioned into, and secondary data of dropout rates at different education levels in each country, we estimated the typical number of years that girls would continue in formal-schooling after transitioning. We already applied a one-third reduction to our initial estimate based on the girls added risk of dropout due to marginalization. We therefore used 2 years for Ethiopia ABE, 2 years for

²⁷ This is useful as there is existing international evidence that learning gains may be easier to attain starting from a lower level of learning (Bau et al., 2021). The GEC-T data prepared for IE Study 3 does allow us to look into the different learning gains by decile groups based on the GEC-T baseline. This data doesn't give a clear trend that lower levels of learning lead to higher improvements and becomes affected by smaller sample sizes. Using the mathematically closest decile, which is the 4th decile for EGRA and the 2nd decile for EGMA, we see learning gains of 10% for EGRA and 4% for EGMA, equivalent to 7.0% on average. Again, this could be reduced from 18 months to 12 months for an annual rate, but to be conservative with the sensitivity analysis we stay at 7.0%.

Ethiopia IFAL, 4 years for Malawi and 4 years for Nepal in the default model. Here we test lower and higher values of that amount halved (1/1/2/2) and doubled (4/4/8/8).

6. Discount rate. Based on typical practice, 10% is used in the default model. Here we test at the lower and higher ends of the ranges proposed in FCDO economic appraisal guidance of 8% and 12% (a higher discount rate results in lower estimates so to keep in line with the methods above, we denote the 12% as the lower test).

The results of these tests are shown in Table 25 and Table 26 below.

Table 25: Sensitivit	v analı	vsis in	terms	of NPV i	n £GBP	millions
	,					

NPV (£m)		Ethiopia		Malawi	Nepal
		ABE	IFAL		
Default Model		24.7	20.1	16.7	30.6
1. Income ROR	Lower Test	15.9	13.2	10.3	18.8
	Higher Test	35.5	28.5	25.2	46.2
2. Non-Income (relative)	Lower Test	11.2	9.3	7.3	12.8
	Higher Test	38.1	31.0	26.1	48.4
3. Years of employment	Lower Test	14.7	12.1	10.0	18.1
	Higher Test	30.9	25.2	20.9	38.3
4. Comparative learning in control group schools	Lower Test	18.5	13.7	10.6	20.4
	Higher Test	39.2	27.3	28.8	50.8
5. Years of schooling	Lower Test	20.9	17.3	15.6	27.8
	Higher Test	30.0	25.8	18.4	33.8
6. Discount Rate	Lower Test	22.6	18.4	15.1	27.4
	Higher Test	27.1	22.1	18.6	34.3

Table 26: Sensitivity analysis in terms of NPV in Benefit/Cost Ratio

NPV (£m)		Ethiopia		Malawi	Nepal
		ABE	IFAL	_	
Default Model		403%	514%	204%	544%
1. Income ROR	Lower Test	260%	337%	126%	335%
	Higher Test	579%	727%	308%	821%
2. Non-Income (relative)	Lower Test	183%	237%	89%	227%
	Higher Test	622%	791%	319%	861%
3. Years of employment	Lower Test	240%	308%	122%	322%
	Higher Test	504%	642%	255%	682%
4. Comparative learning in control group schools	Lower Test	302%	350%	130%	363%
	Higher Test	640%	698%	352%	903%
5. Years of schooling	Lower Test	342%	441%	191%	494%
	Higher Test	490%	659%	225%	601%
6. Discount Rate	Lower Test	369%	470%	185%	487%
	Higher Test	442%	565%	227%	610%

The findings of the model are relatively robust in terms of the sensitivity analysis. In terms of 100% threshold Benefit/Cost Ratio, there is only case where one of the projects (Malawi) drops below this threshold. This is when non-income private and broader social benefits are excluded. In other situations, the projects' benefits typically continue to be many multiples higher than the costs, and to the similar degree as in the default model, with the Ethiopia IFAL and Nepal having the highest B/C ratio, followed by Ethiopia ABE and then Malawi.

2.4. Methods of analysis for Section 3.4. Costs and benefits according to different types of marginalisation

This section relates to the analysis used in the *Section 3.4*. which addresses RQ 1.4 "To what extent and why do the relative benefits and costs vary by different types of marginalised girls?"

As part of this research, we estimated costs and benefits for specific subgroups of marginalised girls. This includes girls with disabilities, married girls, Dalit girls, and girls who belong to a household with an illiterate head.

Defining marginalisation

Data on marginalisation were taken from project monitoring data.

1) Disability

The monitoring data for the Ethiopia and Malawi projects presents the data on disability in the typical Washington Group questions format (Washington Group on Disability Statistics, 2024), with for each domain of disability (using the short list of six domains), girls listed as either 'No, no difficulty', 'Yes, some difficulty', 'Yes, a lot of difficulty' and 'Cannot do at all'. In line with typical use, we present both the percentage that were listed as the latter two categories for any of the domains²⁸. Additionally, for the Ethiopia project, as we have the monitoring data for the SNNPR/Gedeo region, we make an assumption of a similar share of disability for girls in the other three regions.

The cost per girl for each of these groups was estimated based on activities specifically labelled under the category of disability inclusion (see *Table 27* below).

	Calculation	Ethiopia	Malawi
% Spent on disability (ABB budget data, Q12 onwards)	(a) = Activity "Disability inclusion"	1.03%	1.42%
Total FCDO budget	(b) = From Budget data	£ 7,781,100.00	£ 7,668,646.00
Amount spent on disability	(c) = (a)*(b)	£ 80,532.75	£ 109,276.41
Implied additional spend on disability of focus within other activities	(d) = ((b)-(c))*(a)	£ 79,699.25	£ 107,719.24
Cost per beneficiary for girls excluding disability spending	(e) = ((b)-(c) -(d))/ 'Total girl beneficiaries '	£ 305.23	£ 1,419.36
Estimated girls with disability	(f) = From Project_Monitoring Data	480	244
Additional cost per girl with disability	(g) = ((c)+ (d) /(f)	£ 333.82	£889.33
Cost per beneficiary for Girls with Disability	(h) = (e)+(g)	£ 639.04	£ 2,308.69
Increase in cost per beneficiary for Girls with Disability	(i) = ((h)/(e))-1	109%	63%

Table 27: Cost per girl with disability

Source: FCDO costs from project budget data; Beneficiary numbers from project data.

Due to small number of girls with disabilities, we were not able to conduct analysis by type of disability.

2) Marriage

Data on marriage was drawn from monitoring data and reported separately for girls aged 10-14 and 15-19. Many of the differences noted between married girls compared to those that do not appear to be more driven by differences in their age, than by the aspect of being married. We therefore split this into age categories to enable more nuanced analysis where possible. However, this still has challenges, particularly in the Nepal project where there is a huge jump in the monitoring data, where very few girls aged 14 or under are married, but this immediately jumps and there

²⁸ Some exploratory analysis was also considered looking at the percentage showing those listed as the latter three categories (i.e. including 'Yes, some difficulty'). This was only used for supporting analytical checks, to try and mitigate against the chances of small sample size.

are then very few girls aged 15 or over who aren't married. This means that the main grouping we can focus on with enough variation is between the marital status of girls aged between 15-19 in Malawi project, according to the monitoring data taken at the onset of the project.

3) Dalit ethnicity and girls who belong to a household with an illiterate head

These categories were only available for girls in the Nepal project. The Dalits ethnic groups include both Pahad Dalit and Terai/Madheshi Dalit.

Estimating benefits by different types of marginalisation

For benefits, different t-tests were conducted to analyse if there were significant differences in the benefits for the most marginalised girls. T-tests were conducted for different work outcomes, transition to school, financial literacy, delayed marriage, sexual health and family planning, social network, improved self-concept, health knowledge and outcomes, and ranking of benefits. Only results that were significant for each group are reported.

2.5. Methods of analysis for Section 3.5. Variances in costs and benefits between different projects

This section relates to the analysis used in the *Section 3.5*. which addresses RQ 1.5 "What might explain differences in the relative benefits and costs between different projects (and if data allows for different interventions within the same project)?"

The section draws from primary data collected, and the results from other sections of the report, as well as from conversations with the IPs and FM to help clarify the differences in costs and benefits among the countries.

2.6. Methods of analysis for Section 3.6. Representativeness across LNGB portfolio

This section relates to the analysis used in *Section 3.6.* which addresses RQ 1.6 "To what extent are the findings for the three selected case study projects likely to be representative of the overall GEC LNGB portfolio?"

Our three case study projects are part of 14 projects overall within the Leave No Girl Behind (LNGB) portfolio. To evaluate the extent to which the three case studies is representative of the portfolio, this section draws from the different secondary data sources, although data availability is a challenge. To compare data related to costs, we draw from the 2021, 2022 and 2023 VfM reports, and the underlying data, produced by the fund manager. To compare changes in learning outcomes and marginalisation characteristics, we draw from EE data.

Comparing costs

The section presented annual cost per beneficiary, which uses the same method of calculation as in *Section 3.1*, with total cost and number of beneficiaries drawn from VfM reports, and duration of the different projects drawn from project documents.

Comparing learning outcomes and marginalisation characteristics

Data from EEs were used to present learning outcomes and marginalisation characteristics by project.

Data availability differs by project as shown in Table 28 below.

Project	Baseline learning outcomes	Changes in learning outcomes	Married	Disability
Empowering a New Generation of Adolescent Girls with Education (Nepal)	Yes	Yes	Yes	No ³
STAGES + (Afghanistan)	No ⁴	No	No	No

Table 28: Projects included in the comparison

Project	Baseline learning outcomes	Changes in learning outcomes	Married	Disability
TEAM Girl (Malawi project)	Yes	Yes	Yes	Yes
Education for Life (Kenya)	Yes	Yes	Yes	Yes
Biruh Tesfa (Bright Future) for All (Ethiopia)	Yes	Yes	Yes	Yes
Supporting Adolescent Girls' Education (Zimbabwe)	Yes	No ⁵	No ⁶	Yes
Every Adolescent Girl Empowered and Resilient (Sierra Leone)	Yes	Yes	Yes	Yes
Closing the Gap (Pakistan)	Yes	Yes	Yes	Yes
Aarambha (Nepal project)	Yes	Yes	Yes	Yes
STAGE (Ghana)	Yes	Yes	Yes	No ⁷
CHANGE (Ethiopia project)	Yes	No ⁸	Yes	Yes
AGES (Somalia)	Yes	Yes	Yes	Yes
TEACH (Pakistan)	Yes	Yes	Yes	Yes
Marginalised no More (Nepal)	No ⁹	No	Yes	Yes

Source: EE data

3. Data coverage

This Annex has the dual purpose of a) highlighting the breadth of data available from the quantitative surveys, so as to potentially support other researchers in the future, and b) highlight the breadth of analysis that has been carried out, but which has not necessarily all been included in the final version of report, to try and ensure a concise, relevant final report.

The Annex presents the data available from the quantitative survey implemented in the three projects of LNGB. Additionally, it mentions some of the analysis that was carried out for some topics and sub-groups that has not been included in the main section of the report.

Survey

The survey primarily focuses on understanding the transition pathways, educational outcomes, and self-concept of girls in Nepal, Ethiopia, and Malawi. It aims to gather data on their educational status, vocational training experiences, household composition, decision-making processes regarding education, and self-perception. Where possible, the phrasing of the questions and responses was aligned with existing established surveys to enable comparison with secondary data such as DHS/MICS/Labour Force Surveys.

Topics of the survey:

Background Information:

- Country (Ethiopia, Malawi, Nepal)
- County/District
- Girl's transition pathway (formal schooling, vocational training, employment Link Malawi only)
- Transition outcomes (transitioned to formal schooling, vocational training, employment, did not transition, transitioned but dropped out)
- Age
- Programme ID
- Cohort
- Education status prior to joining the programme (never been to school, been to school but dropped out)
- Disability status (disabled, not disabled)

Demographic and Household Information:

- Age and appearance relative to stated age
- Household members (mother, father, siblings, extended family, partner/husband, children, in-laws, others)

Transition to Education and Vocational Training:

Current attendance to education

- Attendance in formal education or TVET in the past year(s)
- Current attendance status (full-time, part-time, not attending)
- Frequency of attendance (almost every day, most of the time, occasionally, rarely, never)
- Current grade or level in school or TVET
- Duration of TVET course
- TVET specialisation (agriculture, beauty, tailoring, cookery, traditional crafts, woodworking, electronics, automotive, others)

Education History:

• Highest grade attained

- Highest qualification/certificate attained (varies by country: Ethiopia, Nepal, Malawi)
- Involvement in the decision to join school/TVET
- Final decision-maker for joining and leaving school/TVET
- Perception of control over educational decisions (Ethiopia only)

Self-Concept:

- Self-efficacy statements (ability to solve problems, achieve goals, handle unforeseen situations, remain calm in difficulties, etc.) (Ethiopia only)
- Self-esteem statements (satisfaction with self, feelings of worth, confidence, respect for self, inclination to feel like a failure, positive attitude towards self) (Malawi only)
- Perception of self-happiness and life improvements.

Social Network and Activity:

- Close friends (number of close friends, change in the number of close friends over time)
- Social Interaction (change in frequency of leaving the house over time, frequency of interaction with friends and social groups (e.g., attending parties, joining clubs), change in frequency of interaction with friends and social groups over time)

Decision Making related to social life and leisure:

• Decision-Making Authority (Who has the final say?): in social outings and Leisure activities.

Delay Marriage and pregnancy

- Marital status (current and previous)
- Involvement in decisions related to marriage and pregnancy
- Final decision-maker for marriage and pregnancy
- Perception of ideal age for marriage and pregnancy
- Ideal number of children and authority regarding this (only Ethiopia)
- Reasons for postponing marriage and pregnancy

Children's Life Chances and Parental Engagement (if applicable):

- Child's health and vaccination history
- Children's development in the early years (engagement in various activities with the child, e.g., reading, playing games)

Social Norms:

• Statement agreements and change perception regarding gender roles related with: education peruse, parental authority, career develop vs. family roles, gender roles in work and childcare responsibility

Violence and Gender-based Violence:

- Statement agreements and change perception regarding gender roles related with: perception of violence, knowledge of where reporting
- Violence justification (domestic violence, physical punishment to children)

Sexual Health and Family Planning

Knowledge and practices

- Contraception knowledge and methods
- Sources of contraception information
- Belief about pregnancy from first sex (just Ethiopia)
- Current Contraception practice and methods

- Access to Family Planning Services
- Statement agreement regarding to refuse unwanted sex (Malawi)

Sexually Transmitted Diseases (STD) Knowledge (most of this section is just for Malawi):

- Prevention of STD with Condoms
- Awareness of HIV/Acquired Immune Deficiency Syndrome
- Knowledge regarding HIV Prevention and Transmission

Tuberculosis Knowledge:

• Knowledge related with TB diseases (if they are aware of it, how it spreads, curability and social stigma)

Decision Making Related to Sexual Activities:

• Understanding of decision-making processes regarding sexual intercourse and contraception. (individual and household involvement)

Transition to Employment:

- Exploration of employment status over a specified period, including wage and non-wage work.
- Identification of job-seeking behaviour within a defined timeframe.

Recording of work histories

• History of jobs: including job titles, tasks, duration, and payment methods.

Most Important Work: This section focused in the most important job held by girls after the project implementations (during the transition years)

- Determination of the primary occupation held during a specified period.
- Description of main tasks or duties associated with the most important work.
- Classification of employer types and payment methods.
- Evaluation of income stability and payment periods.
- Assessment of in-kind benefits received from employment.
- Recognition of occupational hazards and safety concerns.
- Inquiry into the presence of written employment contracts and their duration.

Work Prior to the Programme: This section focused in the most important job held by girls before the project implementations

- Inquiry into past work activities before the commencement of the programme.
- Evaluation of work duration, frequency, and hours per day.
- Description of job roles, employers, and payment methods.
- Quantification of average earnings and estimated costs of in-kind benefits.
- Recognition of in-kind benefits provided by employers and their coverage periods.
- Evaluation of occupational hazards and safety measures.
- Inquiry into the existence of written employment contracts and their durations.

Decision Making Related to Employment:

• Exploration of decision-making processes concerning employment matters (have a paid work and duration of paid work engagements).

Financial Literacy:

• Examination of current account ownership

- Assessment of individual capability to manage a bank account independently.
- Inquiry into personal savings behaviour

Decision Making Related to Spending Money:

• Investigation into individual or household involvement in decisions regarding significant purchases, daily expenses, and personal spending (like a household asset, daily needs good, money earn by her own)

Ranking of Benefits:

- Selection of the perceived benefits of programme participation by girls (out of 10 benefits).
- Identification of the top one and top three most valued benefits from programme involvement.

Costs:

- Examination of the time commitment and financial implications of participating in programme activities.
- Assessment of income forgone due to programme attendance and the seasonal nature of income-generating activities.
- Documentation of various costs incurred, including fees, educational materials, food, transportation, and other expenses.
- Inquiry into the sources of funding for meeting programme-related expenses.
- Recording any cash payments received from the programme.

General Survey Information:

- Identification of the primary language used during the survey administration.
- Assessment of the participant's comprehension level and any difficulties encountered during the survey.

Analysis of the survey

This report details the analysis of all questions from the survey. The analysis was conducted separately for each country and topic covered in the survey instrument. In addition to estimating general parameters for the entire survey sample, we conducted subgroup analyses to explore any potential variations in the project's impact on girls with specific characteristics.

Group analysis

To understand how the project impacted girls with different characteristics, we conducted subgroup analyses based on the project's interventions. If the project targeted a specific group (e.g., provided an intervention designed for them or have higher contact hours), we analysed the impact on that group. T-tests were performed for each subgroup with a 95% confidence level to assess statistically significant differences. As mentioned in *Section 3.4*, in some cases the absence of statistically significant differences between groups we'd expect to be more marginalised can also be interesting for analysis.

The sub-groups included for analysis:

- Age Groups: Two distinct age groups were analysed based on monitoring data:
 - Young/Older Girls: 0-14 years old and 15-19 years old.
 - Working Age Group (for work transition questions): Estimated based on legal working ages 15 in Ethiopia, 14 in Malawi and Nepal.
- **Girls with Disabilities**: Identified from monitoring data as having a disability. Further analysis was conducted for girls with minor and severe disabilities.
- **Marriage:** Girls who reported being married in the survey. Further analysis was conducted for younger girls (10-14) and older girls (15-19).
- **Motherhood:** Girls who reported giving birth in the survey. Further analysis was conducted for younger girls (10-14) and older girls (15-19).

Ethiopia-Specific Group:

- Project Type: Categorised based on participation in ABE or IFAL projects.
- **Control Group:** Girls in Ethiopia who did not participate in the project. This group was identified from the girls (selected from the monitoring data) who participated in the survey but then answered that they had never participated in the project.

Malawi-Specific Group

• Girls Breastfeeding: Girls who reported in the survey that they have children they are breastfeeding.

Nepal-Specific Groups:

- Dalit Girls: Identified from monitoring data as belonging to the Dalit caste.
- **Girls from Illiterate-Headed Households:** Girls living in a household where the head is illiterate. Further analysis was conducted for younger girls (10-14) and older girls (15-19).