STATUS OF FOUNDATIONAL LEARNING IN NEPAL 2025

Tracking the progress of SDG 4.1.1(a) indicator through the Foundational Learning Assessment in Nepal

March 2026

International Common Assessment of Numeracy and Reading (ICAN-ICARe)

गल्ली-गल्ली

असर ASER NEPAL

PAL NETWORK
People's Action for Learning

Data Collection License No.: 2/2081/82 by the National Statistics Office (NSO)
Data Validation No.: 02/082/83 by the National Statistics Office (NSO)

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All personally identifiable information has been removed to ensure the privacy and confidentiality of participating children, households, and communities as per the research ethics. Data collection was conducted in accordance with established ethical standards, including informed consent from parents or primary caregivers.

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Kathmandu University
School of Education

June 10, 2026

Message from the Dean

It is a matter of immense institutional pride for the Kathmandu University School of Education (KUSOED) to be the primary academic and technical partner in Nepal for the implementation of the International Common Assessment of Numeracy and Reading (ICAN ICARe) 2025. As an institution deeply committed to educational transformation, equity and research excellence, KUSOED recognizes that addressing the crisis in foundational learning is the most critical prerequisite to reforming Nepal's school education ecosystem.

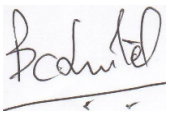
KUSOED's involvement in this landmark initiative has been comprehensive, spanning from the initial translation, piloting and contextualization of the assessment tools to training enumerators, managing field-level data collection quality assurance and contributing to the technical refinement of the final national report. Our faculty members and students have worked rigorously alongside the teams at ASER Nepal/Galli Galli, and PAL Network to ensure that this study meets the highest standards of academic and statistical integrity, as validated by the National Statistics Office (NSO).

The findings presented in this report are deeply alarming. For the first time in Nepal, we have a robust, household-based "population thermometer" that reveals a stark reality: more than 70% of our children completing lower primary school (Grade 4) have not reached the Minimum Proficiency Level (MPL) in foundational reading and mathematics combined. This massive baseline deficit offers an unvarnished, empirical explanation for why an overwhelming number of students face structural failure later in their Grade 10 and Grade 12 national examinations. The crisis does not originate at the secondary level; it begins when children fail to master foundational skills early in their schooling.

For the academic community, this report is not just a publication but a vital repository of knowledge. The comprehensive raw dataset generated through this survey is being made available to KUSOED's faculty and researchers. This open-access data repository offers an invaluable resource for our master's, MPhil and PhD scholars to conduct advanced psychometric modeling, contextual policy research and deep-dive analyses into the socio-economic and linguistic barriers affecting learning outcomes across Nepal.

For policymakers, local governments and development partners, this report serves as a call to immediate action. It shifts the discourse from mere classroom enrolment to actual classroom learning. I am confident that the insights, methodologies, and evidence detailed herein will serve as a foundational blueprint for designing evidence-based early-grade interventions, instructional reforms and multilingual pedagogies that ensure no child is left behind in Nepal.

I congratulate the research teams at KUSOED and ASER Nepal / Galli Galli for their tireless dedication to this research, and I extend my sincere gratitude to the PAL Network for their global technical stewardship. KUSOED remains steadfast in its commitment to transforming these insights into impactful policy dialogue and practice.



Prof. Bal Chandra Luitel, PhD
Dean
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नेपाल सरकार
प्रधानमन्त्री तथा मन्त्रिपरिषद्को कार्यालय
राष्ट्रिय तथ्याङ्क कार्यालय
फोन ४२४५९४६, ४२४५९४७, ४२४५९४८, ४२४५८४८, ४२४१८०१, ४२२८४०६
फ्याक्स: ९७७-१-२२७७२०
पो.ब.नं. ११०३१
रामशाहपथ
थापाथली, काठमाडौं

अनुसूची -५
(नियम १७ को उपनियम (३) सँग सम्बन्धित)
तथ्याङ्क सङ्कलन अनुमतिपत्रको ढाँचा

पत्र संख्या:
च.नं.:- तथ्याङ्क सङ्कलन अनुमति नम्बर: ०२/२०८१/८२ मिति २०८१/०६/१४

श्री गल्ली गल्ली,
सानेपा, ललितपुर-२, नेपाल।

विषय: तथ्याङ्क सङ्कलन अनुमति।

मिति २०८१।०५।२४ मा यस कार्यालयमा दर्ता भएको **आईक्यान आईकेयर सर्वेक्षण मार्फत दिगो विकास लक्ष्य ४ अनतर्गतको "विद्यालय उमेर समूहका सबै बालबालिकाहरुको आधारभूत सिकाईस्तर"** सूचक प्राप्त गर्ने उद्देश्यका लागि तथ्याङ्क सङ्कलन गर्न अनुमति माग भई पेस भएको दर्ता नम्बर ०२/२०८०/८१ को निवेदन उपर कारवाही हुँदा यस कार्यालयको मिति २०८१।०६।१४ को निर्णयानुसार देहायमा उल्लिखित शर्तको अधीनमा रही **Three Stage Stratified Sampling** विधि प्रयोग गरी तथ्याङ्क सङ्कलन गर्न अनुमति प्रदान गरिएको छ।

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निर्देशक

शर्त:

क) सर्वेक्षणको कार्यप्रगति प्रत्येक तीन महिनामा कार्यालयमा पठाउनु पर्नेछ।

ख) तथ्याङ्क सङ्कलन अनुमतिका लागि पेस गरेको समयतालिका बमोजिम कार्य सम्पन्न गर्नु पर्नेछ। यदि कुनै कारणवश समयमा काम सम्पन्न हुन नसक्ने भए आधार र कारण खुलाई नयाँ समयतालिका कार्यालयमा पेस गर्नु पर्नेछ।

ग) तथ्याङ्क सङ्कलन अनुमति माग गर्दा पेस्न गरेको अवधारणा तथा प्रक्रिया बमोजिम सर्वेक्षणको कार्य भए नभएको विषयमा कार्यालयले अनुगमन गर्न सक्नेछ।

नेपाल सरकार
प्रधानमन्त्री तथा मन्त्रिपरिषद्को कार्यालय
राष्ट्रिय तथ्याङ्क कार्यालय

फोन ५३४५५४६
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५३२५४०६

पत्र संख्या:
च.नं. :

पो.व.नं. ११०३१
रामशाहपथ,
थापाथली, काठमाडौं

मितिः २०८२/१२/१९

तथ्याङ्क प्रमाणिकरण नम्वरः ०२/०८२.८३

श्री गल्ली गल्ली,
ललितपुर-२, सानेपा, नेपाल।

विषयः तथ्याङ्क प्रमाणित गरिएको सम्वन्धमा।

यस कार्यालयमा **श्री गल्ली गल्ली**, ललितपुर-२ सानेपा ललितपुरले तथ्याङ्क संकलन अनुमति नम्वर ०२/२०८१/८२ को Three stage stratified sampling विधिबाट उत्पादित ICAN ICARE सर्वेक्षणबाट प्राप्त तथ्याङ्क प्रमाणित गरी पाउँ भनी दिएको निवेदनउपर कारवाही हुँदा तथ्याङ्क प्रयोगमा ल्याउन र नतिजा प्रकाशन गर्न उपयुक्त देखिएको हुँदा तथ्याङ्क ऐन २०७९ को दफा ९ र तथ्याङ्क नियमावली, २०८० को नियम २३ को उपनियम (४) वमोजिम तथ्याङ्क प्रमाणित गरी यो प्रमाणपत्र प्रदान गरिएको छ।

२०८२/१२/१९

उपप्रमुख तथ्याङ्क अधिकारी

PAL NETWORK
People's Action for Learning

Daykio Plaza| First Floor, Room 1.5 | Ngong Lane
P.O. Box 6183-00100 | Nairobi, Kenya

June 10, 2026

Commending ASER Nepal on the Launch of the 2025 ICAN–ICAR Country Report

On behalf of the People's Action for Learning (PAL) Network, I wish to extend my warmest congratulations to ASER Nepal and its leadership team, Rajib Timalsina and Gunjan Jha, and other collaborators in Nepal for the successful implementation and publication of the 2025 International Common Assessments of Numeracy and Reading (ICAN–ICAR) country report.

This report represents a milestone in Nepal's educational landscape. By reaching 3,820 households across 191 Enumeration Areas, ASER Nepal has not only generated robust evidence on the learning levels of Nepali children but has also ensured that the most marginalized, including out-of-school children and those with functional difficulties, are no longer invisible to policy.

For policymakers and government officials, this report offers a reliable "population thermometer" to measure progress toward Sustainable Development Goal (SDG) 4.1.1(a). Nepal is part of an elite cohort of 11 countries in the Global South that have pioneered a household-based model that not only meets the international reporting criteria but stays grounded in the realities of the country. The evidence provided here clarifies the distinction between schooling and learning, providing a historical baseline to track the effectiveness of national reforms and instructional interventions.

For the technical and academic community, the rigor of this study is a testament to ASER Nepal's commitment to scientific excellence. The assessment tools were built upon a shared item bank *"Strongly Aligned"* with the Global Proficiency Framework (GPF). The analysis utilized Item Response Theory (IRT) to ensure measurement invariance and the Pairwise Comparison Method (PCM) to calibrate local results against international Minimum Proficiency Levels (MPLs). Furthermore, the integration of the Washington Group Child Functioning Module provides a rare, disaggregated view of prevalence of functional disabilities among the surveyed children.

Nepal's contribution to this global initiative serves as a "proof of concept" for how South-South collaboration can reclaim agency in the global data architecture. The PAL Network stands firmly with ASER Nepal in advocating for the use of these data to drive targeted actions at the national level ensuring that every child in Nepal masters the foundational skills necessary for life-long learning.

We celebrate this achievement and look forward to our continued partnership as we work together to measure all, measure early, and measure well.

Sincerely,

Armando Ali
Chief Executive Officer
PAL Network Secretariat Nairobi, Kenya

Foreword

Over the past two decades, Nepal has made remarkable progress in expanding access to schooling. Primary school enrollment has increased from approximately 61 percent to near universal levels, ensuring that most children now enter the education system. Yet a critical question remains: to what extent is schooling translating into meaningful learning? Access alone does not guarantee that children acquire the foundational skills necessary for their development, well-being, and future participation in society. Understanding the current status of learning: who is learning, who is being left behind, and how learning progresses across different ages and grades, is essential for strengthening education systems. Despite ongoing investments and reforms, gaps persist in publicly available evidence on foundational literacy and numeracy, particularly at the population level and across diverse learning pathways.

Against this backdrop, this report presents the findings of the International Common Assessment of Numeracy and Reading (ICAN ICARe) 2025 in Nepal. The assessment is aligned with Sustainable Development Goal (SDG) Indicator 4.1.1(a), which measures the proportion of children achieving minimum proficiency in reading and mathematics. By linking national data to globally defined Minimum Proficiency Levels (MPLs), the report provides both an internationally comparable benchmark and a contextually grounded understanding of foundational learning. Recognizing the complexities of Nepal's education system, including grade–age mismatch, multilingual realities, and varied schooling trajectories, the report adopts both age-based and grade-based perspectives. In particular, it examines learning outcomes for 10-year-old children, enabling inclusion of both in-school and out-of-school populations, while also analysing performance in Grade 4, a critical point after lower primary education. Together, these approaches offer a more comprehensive view of how learning accumulates over time and across contexts.

The findings indicate that learning does occur as children grow older and progress through schooling. However, the pace of learning remains slower than expected, particularly in reading. Differences in learning outcomes associated with language, enrollment status, and geographic location highlight the multiple environments (schools, households, and communities) that shape children's learning experiences. This report is intended as a resource to support national dialogue, evidence-informed policy, and collective action. By presenting data through a globally comparable yet locally relevant framework, it contributes to ongoing efforts to strengthen foundational learning and to ensure that all children acquire essential skills at the right stages of their development.

We hope that the insights presented here stimulate reflection on how to accelerate learning, address early gaps, and align educational practice more closely with the lived realities of children across Nepal. Strengthening foundational learning is not only an educational priority, but it is fundamental to advancing equity, resilience, and long-term societal progress.

Rajib Timalsina

Acknowledgements

This report presents the findings of the ICAN ICARe assessment 2025 in Nepal and reflects the collective efforts of partner institutions, technical experts, field teams, local government representatives and support personnel at local levels. We gratefully acknowledge the leadership and technical guidance provided by PAL Network, whose global assessment standards, methodological frameworks, and advisory support informed the design, implementation, and reporting of the ICAN ICARe assessment.

We are indebted towards the National Statistics Office (NSO) for providing formal authorization for the ICAN ICARe national assessment 2025, which established its legal and institutional basis within Nepal's national statistical system, and for providing technical oversight for the survey implementation process. The oversight by NSO included review of assessment's objectives, indicators, sampling methodology, tools, and data collection protocols, providing technical guidance to ensure alignment with statistical standards, supporting data quality assurance through monitoring of training and data collection, verification of datasets, and technical review of data consistency and completeness and survey clearance.

The team acknowledges Gunjan Jha (Project Management Team Lead) for providing leadership and overall technical oversight across all phases of the assessment, including tool development and refinement, pilot testing, assessor training, field data collection planning and supervision, continuous monitoring, data quality assurance, data cleaning, analysis, and reporting. The team also acknowledges Manisha Gahatraj (Project Management Team) for her valuable contributions to the pilot implementation, field data collection, and monitoring activities. Their combined efforts ensured methodological rigor, smooth implementation, and the successful completion of the study.

We are particularly grateful for the institutional support provided by the Kathmandu University School of Education (KUSOED) and collaboration in field testing and piloting the survey, translation of the assessment tool, engaging students for enumeration, providing enumerator trainings, and overseeing quality assurance activities. We would like to especially recognize the role of Professor Dr. Balchandra Luitel, Dean and Associate Professor Dr. Binod Prasad Pant, Associate Dean of Kathmandu University School of Education, in substantiating the partnership and ensuring continual engagement throughout the survey. The ICAN ICARe assessment was made possible through the support of local government representatives from all 191 Enumeration Areas across seven provinces. We are deeply grateful towards municipal representatives and Ward-level officials who played a vital role in providing approval, helping identify and recruit local enumerators, and facilitating community access, household listing, and the overall survey process, without which it wouldn't have been possible to survey this scale.

We are very grateful to all of our Lead Trainers, Buddhi Ram Chaudhary, Govinda Mahat, Indra Mani Dahal, Jaya Koirala, Jeevan Sharma, Lalit Jung Shahi, Nimesh Shrestha, Puspa Raj Adhikari, Rajat Mani Hartamchhali, and Shakti Singh Paswan, for their critical work in making ICAN ICARe 2025 successful. They facilitated the recruitment of volunteer enumerators in each of their respective provinces, ensured their preparedness to survey by conducting enumerator trainings in the survey methodology, and supervised the data collection process to ensure data validity and quality. A citizen-led assessment (CLA) like ICAN ICARe relies on the efforts of many citizen volunteers. We would like to thank and recognize the crucial role played by all the 285 volunteer enumerators who went door-to-door and gathered data for the survey. Their professionalism and commitment ensured high-quality data collection across the EAs. Their careful adherence to assessment protocols and ethical standards was critical to the reliability of the findings presented in this report.

We also acknowledge the technical expertise from Dr. Binod Prasad Pant, Associate Professor - Kathmandu University, Deviram Acharya, Under Secretary - Education Review Office, Rajib Timalsina, Roshan Pokharel, and Chiranjibi Bhandari, for providing guidance on assessment frameworks, tool development, training design, data systems, and quality control processes. We are grateful towards Anaraj Tiwari, Muhammed Usman and team from PAL Network for helping our research team with data analysis processes. We are thankful to the support from NSO including Dhundiraj Lamichhane, Sharad Kumar Sharma, Arun Gautam, Jishnu Mohan Bhattarai, Binod Sharan Acharya, Anaraj Tiwari, Deenanath Lamsal, and Suman Gautam from National Statistics Office (NSO) supported us during sampling design, data validation and data analysis review. We are also grateful for the vital role played by the operational and support team, comprising of Bibek Bhandari, Ganesh Khatiwada, Laxmi Kumari Singh, Nabin Dahal, and Prabesh Raj Joshi, in training delivery, field coordination, monitoring, data management, and administrative support, enabling the timely and effective execution of activities across diverse contexts. We also gratefully acknowledge the vital support provided by local educators, students, social workers, youth volunteers, and organizations in the 191 different EAs for training, field coordination, and logistical arrangements, including accommodation, transportation, and venue support. Their local knowledge and assistance were essential to the successful conduct of the survey. Our designer and printer, Ram Kaji Khadgi and Amogh Dhakhwa, supported us in the layout and production of the material we needed to conduct this assessment.

We are thankful for the support from the Foreign, Commonwealth, and Development Office (FCDO), Echidna Giving, Hempel Foundation, Gates Foundation, and Australian Council for Education Research (ACER) for their support to the PAL Network, which made the implementation of this study in Nepal possible. Finally, we are deeply thankful to every child, parent, and guardian for their sincere participation in the survey, which helped generate data, strengthening the evidence on the status of foundational learning of children in Nepal. While this report reflects a collaborative effort, responsibility for the analysis, conclusions, and any remaining errors rests solely with Galli Galli / ASER Nepal.

The ICAN ICARe (2025) Nepal Research Team
Galli Galli (Non-profit) / ASER Nepal
9th March 2026

Executive Summary

Context

This report presents the findings of the International Common Assessment of Numeracy and Reading (ICAN ICARe) 2025 conducted in Nepal, providing nationally representative evidence on foundational learning outcomes. The assessment is aligned with Sustainable Development Goal (SDG) Indicator 4.1.1(a) and measures the proportion of children achieving globally defined Minimum Proficiency Levels (MPLs) in reading and mathematics. Implemented as part of the PAL Network's global assessment system, ICAN ICARe enables cross-country comparability while remaining responsive to Nepal's linguistic, geographic, and educational context.

The ICAN ICARe tools comprise standardized, one-on-one, orally administered assessments designed for children aged 5 to 16 years. These instruments assess foundational competencies through a structured progression of tasks that capture both early and more advanced skill development. The numeracy component (ICAN), consisting of 36 items, evaluates a range of domains including number knowledge, arithmetic operations, measurement, time, data interpretation, spatial reasoning, and pattern recognition. The reading component (ICARe), comprising 30 items, assesses listening comprehension, letter-sound knowledge, word reading, and reading comprehension across texts of increasing complexity, thereby capturing the developmental continuum from emergent literacy to independent comprehension.

The technical robustness of the ICAN ICARe tools has been rigorously established. The UNESCO Institute for Statistics (UIS) has confirmed to the PAL Network that the assessment meets the criteria required for reporting on SDG 4.1.1(a). In collaboration with the Australian Council for Educational Research (ACER), the PAL Network applied the Pairwise Comparison Method (PCM) to establish globally comparable proficiency thresholds, ensuring alignment with the Global Proficiency Framework (GPF) and international reporting standards.

In addition to learning outcomes, the assessment captures critical information on children's learning environments and functional difficulties. Data on child functioning were collected using the Washington Group Child Functioning Module, enabling analysis of inclusive education dimensions. The analytical framework incorporates advanced psychometric approaches, including Item Response Theory (IRT), and applies rigorous checks for Differential Item Functioning (DIF) to ensure measurement validity and fairness across key subgroups, including age, gender, and location. Together, these methodological features ensure that the findings are robust, comparable, and suitable for both national policy dialogue and global monitoring.

Reporting Framework and Methodological Approach

Overall, this report showcases foundational learning outcomes of children based on gender, age, and grade to reflect both international guidance and Nepal's educational context. In case of Minimum Proficiency Learning (MPL) reporting, this report has adopted a dual reporting framework, combining both age-based and grade-based perspectives to reflect Nepal's educational realities.

- **Age 10** is used as the primary reference point for international comparability and inclusion of both in-school and out-of-school children.
- **Grade 4** is used as the key grade-based benchmark, representing completion of lower primary education.

This approach captures learning outcomes across diverse schooling trajectories, including children affected by grade-age mismatch, late entry, repetition, or interrupted schooling. The analysis is disaggregated by key characteristics, including gender, enrollment status, location, and home language, to provide an equity-focused understanding of learning outcomes.

Age 10 and Grade 4 both represent a meaningful stage at which children have completed lower primary education and have had sustained exposure to foundational literacy and numeracy instruction. Reporting at this specific level also provides policy-relevant insights into learning outcomes within the formal school system and allows examination of learning achievement before transition into upper primary education. Together, the age-based and grade-based perspectives offer a comprehensive and inclusive view of foundational learning.

Key Findings on Foundational Learning

The findings of the first ICAN ICARe Assessment in Nepal indicate that while children in Nepal do acquire foundational skills as they grow older and progress through schooling, learning outcomes remain below expected levels, particularly in reading.

Among 10-year-old children,

60.78%
achieve MPL in mathematics

40.29%
achieve MPL in reading

Only 34.35%
achieve MPL in both domains

Among Grade 4 children,

54.08%
achieve MPL in mathematics

35.13%
achieve MPL in reading

Only 28.40%
achieve MPL in both domains

Across both age-based and grade-based measures, numeracy outcomes consistently exceed literacy outcomes, resulting in low combined proficiency levels.
Learning trajectories show a clear upward trend across age and grade, indicating cumulative learning over time. However, minimum proficiency is often reached later than expected, suggesting that the pace of foundational learning is slower than curricular and age-based standards.
The assessment reveals important disparities in learning outcomes across population groups:

- **Enrollment status:**

Children in school perform better than those not enrolled. However, even among enrolled children, only **36.84%** achieve proficiency in both domains, indicating that access does not guarantee learning. Among enrolled children, 56.01 percent achieved MPL in mathematics and 41.02 percent achieved MPL in reading, while 36.84 percent met minimum proficiency in both domains. Among non-enrolled children, 44.43 percent achieved MPL in mathematics, 25.59 percent in reading, and 23.41 percent in both subjects.

- **Gender:**

Differences are modest. Boys perform slightly better in mathematics, while girls perform marginally better in reading. Combined proficiency levels are similar.

- **Location:**

Children in urban areas perform somewhat better than those in rural areas, particularly in reading and combined outcomes, though the gaps are moderate.

- **Home language:**

This emerges as a significant factor. Children who do not speak Nepali at home are substantially less likely to achieve MPL, especially in reading, highlighting language-related barriers in early learning.
The results suggest that Nepal's education system supports incremental learning progression, with skills gradually accumulating over time. However, early mastery of foundational skills is not consistently achieved, leading to delayed attainment of minimum proficiency. Importantly, the findings reinforce that learning outcomes are shaped by multiple interconnected environments, including schools, households, and communities. While schooling plays a critical role, it is not the sole determinant of learning.

The ICAN ICARe findings provide a robust evidence base for strengthening foundational learning in Nepal and support monitoring of progress toward SDG 4.1.1(a). Key implications include:

- **Strengthening early-grade literacy** as a priority, given persistent gaps in reading
- **Accelerating foundational learning in early years** to prevent cumulative learning delays
- **Addressing language barriers** through multilingual and language-responsive approaches
- **Focusing on learning, not just enrollment**, to bridge the access–learning gap
- **Targeting disadvantaged groups**, particularly children in rural areas and non-Nepali-speaking households

Conclusion

The ICAN ICARe 2025 assessment offers an internationally comparable and nationally relevant snapshot of foundational learning in Nepal. While access to education has expanded significantly, the findings highlight a critical challenge: ensuring that children acquire essential literacy and numeracy skills at the right time. By providing population-level insights across age, grade, and context, this report contributes to ongoing national and global efforts to improve learning outcomes and ensure that every child develops the foundational skills needed for lifelong learning and participation in society.

Table of Contents

List of Acronyms

ACER	Australian Council for Educational Research
ACER UK	Australian Council for Educational Research – United Kingdom
ASER	Annual Status of Education Report
CEHRD	Center for Education and Human Resource Development
CGD	Citizen Generated Data
CLA	Citizen-Led Assessment
CLAs	Citizen-Led Assessments
CTT	Classical Test Theory
DC	District Coordinator
DCs	District Coordinators
DIF	Differential Item Functioning
EA	Enumeration Area
ELANA	Early Language and Literacy and Numeracy Assessment
FLN	Foundational Literacy and Numeracy
GPF	Global Proficiency Framework
ICAN	International Common Assessment of Numeracy
ICARe	International Common Assessment of Reading
ICAN ICARe	International Common Assessments of Numeracy and Reading
IRR	Inter-Rater Reliability
IRT	Item Response Theory
KUSOED	Kathmandu University School of Education
LPS	Learning Progression Scales
MPL	Minimum Proficiency Level
NPHC	National Population and Housing Census
NSO	National Statistics Office
PAL Network	People's Action for Learning Network
PCM	Pairwise Comparison Method
PMT	Project Management Team
PPS	Probability Proportional to Size
PSU	Primary Sampling Unit
QA	Quality Assurance
SDG	Sustainable Development Goal

SDG 4.1.1(a)	Proportion of children and young people achieving minimum proficiency in reading and mathematics
SME	Subject Matter Expert
SRS	Simple Random Sampling
TAG	Technical Advisory Group
ToT	Training of Trainers
UIS	UNESCO Institute for Statistics
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
WG-CFM	Washington Group Child Functioning Module

1

Introduction and Rationale

1.1 Background and Context: Foundational Learning

Across the world, education systems are struggling to ensure that children acquire foundational learning skills. School enrollment has increased in most countries where it was low a few decades ago. Improved enrollment rates, however, have not always translated into high-quality education or basic learning.[1] Recent global evidence indicates that, despite increased school enrollment, many students do not reach minimum proficiency in reading and numeracy by the time they complete Grade 4. Recent data from UNESCO's Institute of Statistics shows that four in ten students fail to meet the minimum proficiency levels in reading by the end of primary school. This means most students do not acquire foundational literacy by the time they are supposed to attain it. This is leading the global world to a 'learning poverty' defined by the World Bank as "being unable to read and understand a simple text by age 10."[2] This evidence highlights the depth of the learning crisis. Similar gaps exist at the minimum proficiency level in math/numeracy, where only 44% of the students attain minimum proficiency by the end of primary school. [3]

Recent global assessment efforts reflect the scale and urgency of this challenge. During 2024–2025, large-scale learning assessments reached more than 3.6 million learners across over 150 countries, with over 537,000 assessments focused specifically on literacy and numeracy, underscoring the growing global emphasis on measuring foundational learning outcomes at the population level.[4]

Millions of children globally cannot perform basic grade-level mathematical problems. Learning outcomes do not match even in places where access to education has expanded. Ensuring fundamental learning for all means of educational inclusion, equity, and social justice. Despite the increase in school enrollment, a disparity has remained between children who can read and those who cannot, even if they went to the same school, diminishing the function of the "great social equalizer," so essential to achieving education for all.[5] The system is struggling to align learning outcomes with school enrollment and transform schools into meaningful learning experiences.

These challenges intensified as the world battled through the COVID-19 pandemic. School closures disrupted learning for 1.6 billion learners worldwide, contributing to the learning loss.[6] Students in the early

1 Gove, A. K., & Wetterberg, A. (2011). The early grade reading assessment: Applications and interventions to improve basic literacy (RTI Press Book No. BK-0007-1109). RTI Press. https://doi.org/10.3768/rtipress.2011.bk.0007.1109

2 World Bank. (2021). Learning Poverty is a combined measure of schooling and learning. World Bank. https://www.worldbank.org/en/topic/education/brief/what-is-learning-poverty

3 UNESCO Institute for Statistics. (2023). UIS Data Browser: SDG Indicator 4.1.1 – Proportion of children achieving minimum proficiency levels in reading and mathematics. https://databrowser.uis.unesco.org/

4 Australian Council for Educational Research. (2025). ACER 2024-2025 Annual Report. https://research.acer.edu.au/ar/83/

5 Jamil, B. R., Hevia, F. J., Roy, I., Munene, I. I., Rose, P., & Sabates, R. (Eds.). (2023). Ensuring foundational learning: Insights from the Global South. PAL Network & Vitasta. https://www.researchgate.net/publication/376032257_Ensuring_Foundational_Learning_Insights_from_the_Global_South

grades and the underprivileged households suffered the most. The shift from in-person learning to online learning affected young children who relied on continuous guidance, routines, and classroom interactions. As a result, students in early grades and low-income households suffered significant loss in reading and numeracy. After the pandemic, when systems resumed, it became evident that the existing inequalities amplified the learning crisis, particularly in low- and middle-income countries. The capacity of the low- and middle-income countries was limited even before the pandemic. Remote learning didn't reach everyone uniformly, as children could not access online, radio, or television. The pandemic did not create a new learning crisis; it highlighted how fragile learning systems are, especially in the global south.

The global south thus faces an even wider gap between education access and learning outcomes. Although the enrollment rates of children in school have significantly increased over the past decades, many children often progress through or drop out of primary school without learning basic competencies. In many countries, students do not recognize letters and numbers. The global south faces these challenges due to limited infrastructure, instructional support, learning materials, and weak monitoring and assessment systems. These problems continue to undermine early-grade learning, with 81% of the students being unable to attain the minimum proficiency level.[7] This shows that even though schools have succeeded in enrollment, they haven't been able to ensure that learning takes place. Analyses of education systems across the global south show that foundational learning outcomes remain alarmingly low, with many children unable to master basic reading and numeracy skills during primary education. Piper and Dubeck (2024)[8] describe this as a systemic learning crisis affecting low-income contexts, where access to schooling has expanded faster than improvements in instructional effectiveness and learning achievement.

Evidence from the ICAN ICARe 2025 assessments illustrates the depth of this crisis: in most participating countries, fewer than 40% of children can read with comprehension or solve basic mathematics problems by age 10, and in three countries, this figure drops to below 10%. Even by age 12, less than half of children across these contexts demonstrate foundational competencies. These patterns reveal a persistent disconnect between rising school enrollment and actual learning outcomes (PAL Network, 2025).[9]

Nepal reflects many of these regional patterns but carries its own unique set of challenges. The education policies of Nepal have undergone multiple reforms and restructuring, shaped by constitutional commitments, federal restructuring, and national, global strategies. The Constitution of Nepal, 2015[10], has made education a fundamental right of every citizen, framing education as the core pillar of development through The Act Relating to Compulsory and Free Education 2018[11]. Nepal has strengthened the rights-based approach further through the National Education Policy 2019[12], ten-year SSEP (School Sector Education Plan) 2022/23-2032/33[13], all of which emphasize access, and improved learning outcomes. The national policy alignment and consistent effort from the government have brought some remarkable

6 UNESCO. (2020). Education: from school closure to recovery. https://www.unesco.org/en/covid-19/education-response

7 UNESCO Institute for Statistics. (2017). More than half of children and adolescents worldwide are not learning. UNESCO. https://www.unesco.org/en/articles/617-million-children-and-adolescents-not-getting-minimum-reading-and-math

8 Piper, B., & Dubeck, M. M. (2024). Responding to the learning crisis: Structured pedagogy in sub-Saharan Africa. International Journal of Educational Development, 109, 103095. https://doi.org/10.1016/j.ijedudev.2024.103095

9 PAL Network. (2025). The State of Foundational Learning in the Global South: 2025 Report — Data for Action on SDG 4.1.1(a) using ICAN ICARe Tools. Nairobi, Kenya: People's Action for Learning (PAL) Network.

10 Government of Nepal (2015). The Constitution of Nepal.

11 Ministry of Education, Science, and Technology (2018). The Act Relating to Compulsory Education and Free Education 2018, Kathmandu: Government of Nepal.

12 Ministry of Education, Science, and Technology (2019). National Education Policy 2019, Kathmandu: Government of Nepal.

13 Ministry of Education, Science, and Technology (2022). School Sector Education Plan 2022/23-2032/33, Kathmandu: Government of Nepal.

14 CEHRD. (2025). Flash 1 Report, 2081. Center for Education and Human Resource Development. https://cehrd.gov.np/content/14179/flash-1-report--2081/

outcomes in education in Nepal. According to CEHRD, in 2024/25, the gross enrollment rate at the primary level reached 130.5%.[14] It mirrors the sustained efforts of the government to ensure children have access to education at a foundational level.

However, despite the consistent effort from the Nepal government, the education system struggles to ensure children acquire foundational learning skills. The student enrollment has increased, but 61% of those students do not reach minimum proficiency in reading, and 63% in numeracy from age 7 to 14[15]. This indicates that a large proportion of children in Nepal progress through grades without having the basic foundational competencies required for their levels.

The learning gap is significant, especially in the geographically challenged areas of Nepal. According to the ASER 2022 report, out of 10 students studying in grade 3 and above, only 3 could read the story of grade 2, and only 8 out of 10 above grade 3 could recognize a 2-digit number in Karnali province of Nepal. Similarly, in the 2019 ASER Assessment in Madhesh province, only 16.7% of the children who completed grade 5 demonstrated a minimum proficiency level at Grade 3, and 39.7% of the children at grade 8 showed the 3rd grade level proficiency (ASER,2019).[16] Disparities further widen across socio-economic backgrounds and school types. Children from higher-income households and those attending private schools demonstrate significantly stronger foundational skills compared to children in public schools or from marginalized communities (ASER Nepal, 2022)[17]. These data reveal the deeper inequity present within the education system of Nepal.

The patterns also suggest that inequity does not persist because of a lack of policy endeavors. Nepal's foundational challenge is driven by the systemic bottlenecks that limit how learning occurs in the classrooms. To understand this challenge, it is important that we move beyond enrollment as an indicator of learning and start examining the learning outcomes at the grade level. In this context, Citizen-Led Assessment (CLA) and Citizen Generated Data (CGD), supported by government and international agencies like the PAL Network provides a crucial lens for understanding where and why the gap persists.

1.2 International Common Assessment of Numeracy and Reading (ICAN ICARe) 2025

The International Common Assessments of Numeracy (ICAN) and Reading (ICARe) represent globally comparable, low-cost, and scalable common assessment tools developed by the People's Action for Learning (PAL) Network. These assessments are designed to measure foundational learning skills in numeracy and reading for children aged 5 to 16 years across PAL Network countries. ICAN ICARe is an evolution of PAL Network's well-established Citizen-Led Assessment (CLA) model, which has a strong history of reaching children in their homes and has been implemented in over 15 countries, reaching over 9 million children. ICAN ICARe builds upon the experience and item banks of previous PAL Network initiatives, including the International Common Assessment of Numeracy (ICAN 1.0) developed in 2019 and the Early Language & Literacy and Numeracy Assessment (PAL-ELANA).

The People's Action for Learning (PAL) Network is a South-South partnership of organizations operating across 15 countries in Africa, Asia, and the Americas, dedicated to improving foundational literacy and numeracy (FLN). Recognizing that global education goals require approaches that reach all children,

15 UNICEF. (2022). Nepal education fact sheets 2022: Analyses for learning and equity using MICS data.
16 ASER Nepal. (2019). Annual Status of Education Report 2019 - A CONSULTATIVE REPORT (Province 2, Nepal). https://galligalli.org.np/wp-content/uploads/2025/04/4.-ASER-Report-2019-Province_Two_.
17 ASER Nepal. (2022). Annual Status of Education Report 2022 (Nepal). ASER Nepal. https://galligalli.org.np/aser-in-nepal/

including those who cannot yet read, attend school irregularly, or are out of school entirely, the PAL Network advanced the Citizen-Led Assessment (CLA), drawing on ASER's innovation in India and its organic spread across the global south.

CLAs at PAL Network offer a practical, community-driven, scalable approach designed to make children's learning visible in the Global South. The model's key characteristics strive to ensure inclusivity and relevance:

Inclusivity and Reach

Assessments are conducted in households rather than in schools, ensuring the inclusion of all children aged 5 to 16, regardless of their schooling status.

Methodology

The assessments are simple, oral, and administered one-on-one with each child. This makes them appropriate for children who are developing their reading skills.

Scale and Impact

Since 2005, CLAs have reached over 9 million children and involved nearly a million volunteers across three continents.[18] This model leverages the involvement of trained citizen volunteers (mobilized by civil society organizations) to catalyse citizen agency, bringing the state of children's learning to the forefront of policy and practice.

The PAL Network has been working with other international agencies to ensure that these assessments are aligned with the Global Proficiency Framework (GPF) and the Sustainable Development Goal (SDG) 4.1.1(a) reporting requirements as outlined by the Global Alliance to Monitor Learning (GAML) and the UNESCO Institute for Statistics (UIS). We believe that this alignment ensures that the data generated can contribute meaningfully to global education monitoring and advocacy.

The Annual Status of Education Report (ASER) was started by Pratham Education Foundation in India in 2005 as a simple community-based citizen led assessment tool to measure foundational literacy of school-aged children at the household level. Traditional CLAs such as ASER (in Asia) and Uwezo (in East Africa) were highly effective in measuring learning levels within their respective countries, intentionally designed around national curricula and local contexts. Because each country used methods and standards tailored to its own system, these traditional CLAs were not intended for cross-country comparison. In response, PAL Network developed the International Common Assessments of Numeracy and Reading (ICAN ICARe) as the latest evolution of the legacy CLAs, among a suite of common assessment initiatives to enable cross-country comparison and align with international metrics. These tools provide comparable, low-cost, and scalable tools to measure foundational learning skills in numeracy and reading for children aged 5 to 16 years. ICAN ICARe are rigorously designed to meet international requirements for education data.

PAL Network has worked to align ICAN ICARe with the Global Proficiency Framework (GPF) and meets technical requirements for reporting on Sustainable Development Goal (SDG) indicator 4.1.1(a), which

18 PAL Network. (2025). The State of Foundational Learning in the Global South: 2025 Report — Data for Action on SDG 4.1.1(a) using ICAN–ICAR Tools. Nairobi, Kenya: People's Action for Learning (PAL) Network.

measures the proportion of children in Grades 2/3 achieving at least a minimum proficiency level (MPL) in reading and mathematics. Following a comprehensive review and revision in collaboration with the Australian Council for Educational Research (ACER), both tools show alignment with the first four requirements under Criteria 1 relating to assessment alignment. The UNESCO Institute for Statistics (UIS) has officially confirmed that the ICAN ICARe tools meet the global reporting criteria for SDG 4.1.1(a) (UIS, 2024).

One of ICAN ICARe's advantages is the depth of its translation and adaptation process, which goes beyond direct translation. Across all participating countries, the tools were adapted into 18 languages by local item writers and reviewers to ensure local relevance and administered by enumerators from the same communities, making the assessment process accessible, fair, and rooted in local realities.

The ICAN ICARe 2025 rollout in Nepal was carried out by Galli Galli (Not-For-Profit). Galli Galli has been hosting the Annual Status of Education Report Nepal (ASER Nepal) since 2016 in Nepal, which is a citizen-led initiative that assesses foundational literacy and numeracy among children aged 5 - 16 years at the household level. Through partnerships with over 12 civil society organizations, INGOs, and local governments, ASER Nepal provides data-driven insights to address learning poverty, promote equity in education, and support evidence-based policy making for targeted interventions.

Existing Learning Assessment Landscape in Nepal

Nepal has a long history of learning assessment and education data collection, including tools such as **EGRA, EGMA, MICS,** national examinations, and administrative education statistics. While these instruments have generated valuable insights, the ICAN ICARe Nepal assessment fills several critical gaps in the existing evidence base.

EGRA and EGMA in Nepal have primarily been used as diagnostic tools, often within specific projects, districts, or intervention settings. They are generally curriculum-anchored, administered within schools, and designed to inform instructional improvement rather than population-level monitoring. Their results are not designed to be directly comparable across countries or over time for SDG reporting purposes. MICS provides nationally representative education indicators, including literacy and numeracy modules for selected age groups. However, these modules are not explicitly benchmarked to SDG 4.1.1(a) Minimum Proficiency Levels, and their learning measures are limited in scope, depth, and cross-national comparability. School examinations in Nepal measure curriculum attainment among enrolled students, but exclude out-of-school children and cannot be used to assess foundational learning at the population level.

Distinctive Features of the ICAN ICARe Approach

The ICAN ICARe Nepal assessment differs from the other instruments in several fundamental ways:

- It is household-based, capturing learning outcomes for both in-school and out-of-school children, thereby providing a more complete picture of foundational learning at the population level.
- It is explicitly aligned to SDG 4.1.1(a) through the use of Minimum Proficiency Levels (MPLs) derived using globally validated methodologies described in the ICAN ICARe 2025 Global Report.
- It employs globally comparable assessment frameworks in reading and numeracy, enabling cross-country comparison while remaining adaptable to local contexts.
- It integrates learning outcomes with contextual data on household conditions, language exposure, enrolment status, and parental characteristics, supporting equity-focused interpretation.

Previously Unmeasured or Under-Measured Dimensions

While MPL reporting represents the most significant measurement innovation introduced by ICAN ICARe in Nepal, it is not the only gap addressed by this assessment. The Nepal ICAN ICARe study introduces several dimensions that were previously absent or inconsistently measured at the national level:

- ICAN ICARe measures learning outcomes against globally defined MPLs, enhancing Nepal's ability to report directly on SDG 4.1.1(a) using internationally comparable standards.
- Existing school-based assessments systematically exclude children who are not enrolled, despite evidence that this group constitutes a significant share of children with the lowest learning outcomes.
- ICAN ICARe enables analysis of learning by age rather than grade alone, addressing the widespread grade–age mismatch in Nepal.
- The assessment allows examination of foundational learning outcomes in relation to home language versus language of instruction, an issue of relevance in Nepal that has not been systematically captured in prior national datasets.
- ICAN ICARe provides consistent disaggregation by gender, rural/urban location, enrolment status, and household characteristics within a single assessment framework, enabling coherent analysis of inequality in foundational learning.

1.3 Objectives and Scope of the Initiative

ICAN ICARe is designed to strengthen global foundational learning measurement and translate data into sustained educational policy impact. The assessment model builds directly on the successful legacy of the Citizen-Led Assessments (CLAs) pioneered by the PAL Network members.

The purpose of the ICAN-ICARe is multi-fold: to generate high-quality, comparable data from the Global South, to strengthen national capacity, ensure local ownership, and help turn learning measurements into a driver of systemic reform. A core objective is to focus on generating and scaling locally relevant evidence through simple, inclusive tools adapted to each country's context and implemented by trained local volunteers. Another objective is to ensure alignment with global standards, specifically the Global Proficiency Framework (GPF) and Minimum Proficiency Levels (MPLs) in reading and mathematics for children in Grades 2/3, so more low- and middle-income countries are equipped to produce comparable data and report on SDG 4.1.1(a).

Beyond data collection, the initiative seeks to communicate findings through accessible reports and visualizations to raise the visibility of FLN in the Global South and support remedial action and catalyze

citizen agencies to hold systems accountable.

The assessment is intentionally designed to balance technical rigor with contextual appropriateness for the Global South.

- **One-on-one administration at Household Level:** ICAN and ICARe assessments are fundamentally paper-based instruments, which means that volunteers assess each child at home using a printed assessment booklet for the tasks, while capturing all responses digitally in SurveyCTO. This oral, one-on-one format includes both in-school and out-of-school children and allows early skills to be observed directly.
- **Adaptive Design with Stop Rules:** ICAN ICARe incorporates "stop rules," which make the assessment adaptive. This ensures children who struggle with easier items are not asked harder ones, reducing fatigue and keeping the assessment within their ability range. ICAN advances to set 3 only if set 2 is passed; ICARe skips word items if letters are not mastered and skips comprehension if words are not mastered.
- **Parallel Booklets:** Two parallel booklets (Booklet 1 and Booklet 2) were designed to have identical difficulty levels, which is helpful when assessing multiple children within the same household.
- **Contextual information:** ICAN ICARe assesses children aged 5 to 16 years and gathers rich contextual data on children's family, household, community, and functional difficulties (using the Washington Group questions) to complement the academic results and help explain learning outcomes.

1.4 Analytical Framing

The analytical focus of the ICAN ICARe 2025 Nepal assessment is grounded in a population-level approach to measuring foundational learning in reading and numeracy. The assessment is designed to generate nationally relevant evidence on whether children (5-16 years) have acquired minimum foundational learning competencies, and how learning outcomes are distributed across population subgroups.

The analysis is contextualized to Nepal's education system, which is characterized by high linguistic diversity, persistent grade-age mismatch, variations in enrolment and attendance, and substantial geographic and socio-economic disparities. The assessment prioritizes descriptive, equity-focused analysis to support policy dialogue and monitoring of foundational learning outcomes, rather than evaluation of curriculum mastery, school performance, or individual learners.

1.5 Core Research Questions

A. What proportion of children in Nepal achieve minimum proficiency in foundational reading and numeracy in line with reporting requirements of SDG 4.1.1(a)?
B. How do these learning outcomes vary by age, enrolment status, type of school, grade attended, gender, geographic location, language context, and household learning environment?

1.6 Scope and Boundaries of Analysis

The analysis presented in this report is **descriptive** in nature. It does not seek to establish causal relationships or attribute learning outcomes to specific policies, programs, or interventions. Instead, the assessment aims to:

- Establish a baseline of foundational learning outcomes.
- Support evidence-informed discussion on foundational learning in Nepal.

Results should therefore be interpreted as indicators of population-level learning patterns and contextual associations.

1.7 Timeline

The ICAN ICARe initiative is structured as a multi-year effort to provide sustainable, longitudinal data at PAL Network. The 2025 assessment cycle is the first of two planned assessment cycles by 2030. This is intended to provide multiple rounds of data to track progress toward SDG 4.1.1(a). The effort of PAL Network family for over 18 months brought together 12 participating countries, technical partners, and thousands of community actors, moving step by step from global design to local adaptation, field validation, and large-scale implementation. Data for the 2025 cycle in Nepal was collected in August and September 2025, with all other participating countries from the PAL Network completing data collection by September 30, 2025.

See Appendix C for details.

2

Methodology

The methodology underpinning the ICAN ICARe 2025 assessment in Nepal builds on the established Citizen-Led Assessment (CLA) model, while incorporating rigorous statistical procedures to generate findings that are nationally representative and internationally comparable. The approach combines technical robustness with operational feasibility, enabling large-scale data collection in diverse and resource-constrained contexts.

A central feature of the methodology is the balance between standardization and contextual adaptation. While the assessment adheres to globally defined protocols to ensure comparability across countries, its implementation in Nepal reflects strong local ownership, linguistic diversity, and sensitivity to socio-cultural realities.

2.1 Sampling Strategy

The sampling strategy was designed to meet the technical and statistical requirements for reporting under SDG Indicator 4.1.1(a). It ensures that estimates of foundational learning outcomes are precise, representative, and inclusive of the full population of children within the target age range.

Target Population

The target population for the ICAN ICARe assessment includes children aged 5 to 16 years.
A defining strength of the methodology is its inclusive, household-based design, which ensures that all children within this age group are eligible for assessment regardless of school enrolment status. This approach enables the generation of population-level learning estimates, capturing both in-school and out-of-school children and thereby providing a more comprehensive picture of foundational learning in Nepal.

Sampling Design

The ICAN ICARe assessment employs a multi-stage, stratified probability sampling design, leveraging Nepal's national statistical framework to ensure full geographic and demographic representation.

- **Stage 1 and 2: Selection of the Primary Sampling Units (PSUs):** In the first stage, Primary Sampling Units (PSUs), defined as Enumeration Areas (EAs), were selected using a Probability Proportional to Size (PPS) sampling approach. Based on the *National Population and Housing Census 2021* of Nepal (National Statistics Office), the research team selected 191 wards out of a total of 6,743 wards. The selection ensured proportional representation across provinces and urban-rural strata, thereby capturing demographic and contextual variability.

In the second stage, each selected ward was further stratified into EAs through a mapping exercise conducted with the support of local government offices. All settlements within the selected wards were listed along with the number of households. From this listing, one EA per ward was randomly selected using the PPS method, resulting in a final sample of 191 PSUs.

- **Stage 3: Household Sampling:** Within each selected EA, households were selected using a standardized listing and systematic sampling procedure to ensure transparency, consistency, and representativeness. A standardized household sampling approach was used to select the 20 target (eligible) households within each Enumeration Area (EA). The Household Listing Method (Systematic Selection) was used to first generate a complete, updated list (frame) of all households within the EA. From this complete list, 20 households were then systematically selected for the survey.

Household listing and selection process

Before data collection, enumerators conducted a comprehensive household listing within each selected Primary Sampling Unit (PSU). All residential structures were visited, and each household was recorded on a standardized Household Listing Sheet. For every household, enumerators documented its status (open, locked, or no response), the name of the household head, and the presence of at least one eligible child aged 5–16 years who usually resided in the household. Only households that were accessible at the time of visit and contained at least one eligible child were retained in the sampling frame. Each eligible household was subsequently assigned a serial number in the order of listing.

Upon completion of the listing, enumerators determined the sampling interval (k) by dividing the total number of eligible households by 20. The first household was then selected randomly through a transparent draw conducted in the presence of community leaders and ward representatives. Using the calculated interval, enumerators systematically selected the remaining 19 households to yield a final sample of 20 households. The serial numbers of selected households were recorded on the Household Listing Sheet to ensure transparency and traceability. This systematic sampling approach facilitated an even distribution of selected households across the PSU, minimized enumerator discretion, and preserved the representativeness of households with eligible children within the study area.

Planned Sample Size and Coverage

The sampling design was calibrated to generate reliable national estimates of foundational learning outcomes. The measurement scale was determined based on statistical considerations to ensure adequate precision for key learning indicators, including disaggregated estimates.

- **191 Enumeration Areas (EAs)** were selected as Primary Sampling Units
- **20 households per EA** were targeted for assessment
- This resulted in an overall planned sample of approximately **3,820 households**

Quality Standards

Sampling and data collection were implemented in accordance with quality assurance standards developed at the PAL Network, which was aligned with UIS criteria for SDG reporting against SDG 4.1.1(a).

These included key quality standards like (i) sampling protocols, (ii) highlighting a minimum response rate of 70%; (iii) a maximum substitution threshold of 15%, with reserve EAs used only when necessary; (iv) application of sampling weights to account for differential probabilities of selection; (v) adjustment for cluster

effects in variance estimation; and (vi) reporting of effective sample sizes, including disaggregation by gender. These measures ensure that the resulting dataset is statistically robust, internationally compliant, and suitable for policy use.

A detailed description of the sampling framework is provided in Appendix A and B.

2.2 Assessment Design and Global Alignment

The design of the International Common Assessments of Numeracy (ICAN) and Reading (ICARe) reflects a deliberate effort to balance global comparability with contextual applicability, ensuring that the assessment meets the reporting requirements of Sustainable Development Goal (SDG) Indicator 4.1.1(a) while remaining feasible for implementation in diverse, low-resource environments.

Both ICAN and ICARe have undergone rigorous technical review, refinement, and validation processes to ensure alignment with the Global Proficiency Framework (GPF) and compliance with the measurement and reporting standards set by the UNESCO Institute for Statistics (UIS, 2025). This alignment enables the assessment to generate results that are not only nationally relevant but also internationally comparable.

Assessment Tool Development and Structure

The ICAN ICARe instruments were developed through an iterative process that builds on prior PAL Network assessment systems, particularly ICAN 1.0 and PAL-ELANA, and incorporates extensive field validation, psychometric analysis, and expert consultation. The technical consultations with partners like Pratham Education Foundation (India) the Australian Council for Educational Research (ACER) were crucial. At first, the PAL Network created an item bank. Item selection and refinement for ICAN ICARe 2025 were guided by:

- Empirical evidence from field trials and pilot studies
- Item response analysis to ensure appropriate difficulty progression
- Technical inputs from global partners.

This iterative design process ensured that the tools capture a continuum of foundational skills, ranging from early competencies to higher-order abilities required for minimum proficiency. The assessment was implemented across 18 languages globally, with country teams responsible for language adaptation. This approach ensures that children are assessed in languages they are familiar with, thereby minimizing linguistic bias and improving the validity of learning estimates

ICAN (International Common Assessment of Numeracy)

The International Common Assessment of Numeracy (ICAN) tool consists of 36 items designed to measure foundational mathematical competencies across key domains aligned with the Global Proficiency Framework (GPF). The assessment covers five distinct mathematical domains, ensuring comprehensive measurement across the GPF's foundational constructs.

The structure of the ICAN tool prioritizes Number and Operations, which constitutes 64% of all items, reflecting its central role in foundational numeracy. This domain assesses core competencies, including:

- Number recognition and comparison
- Basic arithmetic operations (addition, subtraction, multiplication, division)
- Problem-solving in both symbolic and word-based formats

The remaining non-Number domains (Measurement, Geometry, Statistics/Data Management, and Algebra/Patterns) collectively contribute the remaining 36% of the items, including:

- Measurement
- Geometry
- Data and Statistics
- Algebra and Pattern recognition

In terms of the breadth of coverage, items in the ICAN tool distribution ensure balanced domain coverage and support alignment with GPF subconstructs necessary for the SDG 4.1.1(a) criterion, covering:

- 10 out of 13 subconstructs at Grade 2
- 10 out of 11 subconstructs at Grade 3

Such breadth is essential to meet SDG reporting criteria for content coverage and depth. ICAN employs a structured adaptive assessment design that enhances both efficiency and measurement precision. The assessment is divided into three sets. Sets 1 and 2 are administered to all children regardless of their age or schooling status. Set 3 items are only administered based on a child's performance on corresponding items in Set 2. This "stop rule" mechanism ensures that children are assessed within their appropriate ability range to minimize respondent fatigue and optimize the assessment time without compromising measurement validity.

ICARe (International Common Assessment of Reading) Numeracy)

The International Common Assessment of Reading comprises 30 items designed to measure foundational literacy across a progression of skills from oral comprehension to independent reading. ICARe is structured to reflect the developmental progression of reading, with three core domains:

- Listening Comprehension
- Decoding
- Reading Comprehension

The distribution of items places strong emphasis on:

- Reading Comprehension (54%), assessing interpretation and retrieval of meaning
- Decoding (33%), assessing accuracy in recognizing letters, symbols, and familiar words
- Listening comprehension (13%) serves as an entry point, ensuring that children who are not yet able to read can still demonstrate foundational understanding through oral language.

The ICARe assessment follows a sequential administration structure, beginning with listening comprehension tasks, followed by decoding, and subsequently reading comprehension. The tool incorporates performance-based progression rules, including:

- Administration of advanced reading passages contingent on decoding performance
- Structured stopping rules to align item difficulty with learner ability. The assessment incorporates stop rules. For instance, the administration of later Reading Comprehension passages (L5 and L6) depends on the child's performance in earlier Decoding tasks (L3).

This design ensures that the assessment captures the full continuum of literacy development and the overall focus is to ensure that children are neither over-tested nor under-assessed. The ICARe tool meets global reporting requirements by including 30 GPF-aligned items, ensuring at least 10 Grade 2-level reading comprehension items, and covering both Grade 2 reading comprehension subconstructs. These features enable ICARe to meet UIS alignment criteria for SDG 4.1.1(a).

Translation and Adaptation

To ensure meaningful assessment across contexts, ICAN ICARe employs a rigorous translation and adaptation framework that bridges global standards with local linguistic realities. The ICAN ICARe assessments were administered in 18 languages, with each country team translating and adapting the tools into languages children use at home and in school. This process attempts that every child is assessed in a language they know best, reducing language barriers and allowing results to better reflect true learning levels. Initially, the test language of the tool was in English script (source language). In Nepal, the tools were translated and contextualized into Nepali through collaboration between Galli Galli and the Kathmandu University School of Education (KUSOED) during 2024-2025.

The work involved onboarding local item writers and reviewers with demonstrated expertise in early-grade learning, assessment, or curriculum design, and proficiency in both English and the target language. The primary goal was to ensure linguistic and cultural equivalence while critically maintaining the conceptual difficulty of the items across all contexts. Standardized quality assurance processes were maintained for cross-language comparability, primarily through Double Backward Translation. This method involved translating the source text into the Nepali language (Forward Translation). Subsequently, two independent translators translated the Nepali text back into the source language (Backward Translation). By comparing these independent back-translations to the source, reviewers ensured the equivalence and high quality of the final target language version. This focused on writing entirely new, equivalent items for tasks where direct translation or adaptation was not possible, such as for letter recognition and word reading items. This ensured that comparable challenge levels were preserved for reading comprehension texts.

Alignment with Global Standards (SDG 4.1.1a and GPF)

The ICAN ICARe tools were systematically aligned with the Global Proficiency Framework (GPF) to enable reporting against SDG Indicator 4.1.1(a). The development and scaling of the ICAN ICARe were technically driven to align the Citizen-Led Assessment (CLA) model with global measurement standards, ensuring the data's relevance for international reporting. This critical work, undertaken in collaboration with the Australian Council for Educational Research (ACER), focused on mapping the assessment content to the Global Proficiency Framework (GPF) and the reporting criteria set by the UNESCO Institute for Statistics (UIS). The core objective was to enable countries to report on SDG indicator 4.1.1(a), which tracks the proportion of children achieving minimum proficiency in reading and mathematics.

Following the technical review and subsequent revisions, both ICAN and ICARe achieved Strong Alignment status across all four requirements under Criterion 1 of the international reporting standards for SDG 4.1.1(a). This status affirmed that the tools meet the necessary requirements for test length, depth in the core domain, and breadth in both core and non-core domains at Grade 2. The alignment process concluded in Q1-2025 with ACER (UK)'s confirmation. This technical recognition affirms the robustness of the ICAN ICARe tools and their potential to serve as a credible, internationally recognized measure of foundational learning. A full breakdown of item-level alignment and domain coverage is provided in the technical report.

Benchmarking and Comparability

To ensure the learning outcomes reported by ICAN ICARe are credible, robust, and comparable at the international level, the initiative incorporated psychometric analyses and formal benchmarking processes. This advanced the Citizen-Led Assessment (CLA) model toward internationally recognized standards while maintaining its local relevance.

The initiative employed psychometric analyses, including both Classical Test Theory (CTT) and Item Response Theory (IRT) modelling, to uphold the reliability and fairness of the assessments across diverse populations. These analyses confirmed that both ICAN and ICARe primarily measure a single dominant construct (unidimensionality), demonstrated high internal consistency (e.g., Cronbach's alpha for both ICAN and ICARe exceed the UIS benchmark of 0.80), and provided their highest measurement precision around the target ability levels. Crucially, Differential Item Functioning (DIF) analysis confirmed that both instruments are largely invariant across key demographic groupings, showing no evidence of bias based on gender or location. Only test language showed evidence of DIF for some items, which was addressed to ensure equitable functioning across all assessed languages.

A critical step for transitioning country-specific data to globally comparable results was linking the ICAN ICARe scale to international reference points using the Pairwise Comparison Method (PCM). In collaboration with the ACER-UK, the PAL Network convened two PCM workshops in August 2025. Approximately 40 international experts used ACER's Signum platform to compare and calibrate ICAN ICARe items against Learning Progression Scales (LPS), generating Minimum Proficiency Level (MPL)-aligned benchmarks. This process fulfils the UNESCO Institute for Statistics (UIS) Criterion 6 on benchmark-based linking, ensuring that the reported proportions of children meeting foundational standards align with global benchmarks for SDG 4.1.1(a).

Details of these psychometric analyses are provided in the Technical Report.

Contextual Questionnaire and Disability Screening

The ICAN ICARe initiative is designed to provide a holistic view of children's learning outcomes by recognizing that assessment scores are deeply influenced by a child's environment and individual circumstances, including functional difficulties. This is achieved through a comprehensive set of Contextual Questionnaires that add essential depth to the assessment data, helping to unpack the "why" behind learning gaps. The questionnaires collect data at four distinct levels:

- **Community:** Completed by enumerators based on observation and local inquiry upon arrival, the VIF captures community infrastructure and services, such as the availability of roads, electricity, health facilities, and schools (including pre-primary classes).
- **Household:** This records information about the family's living conditions and material well-being, including demographics, household assets (like a computer or tablet), amenities (water source, electricity, toilet), languages spoken at home, and access to books/learning resources.
- **Parent:** This gathers data on the parents or guardians, focusing on their education level, employment/ income generation status, and who primarily assists the child with homework.
- **Child:** This records the individual child's demographic and educational background (age, sex, enrolment status, grade level, and access to learning materials).

To fulfil our commitment to inclusivity, the Child Information Format integrates the "Washington Group Short Set on Functioning" questions. This specialized module is designed to screen for functional difficulties among children across six key areas: seeing, hearing, walking, self-care, communication, and remembering. The data collected enables disaggregated reporting on the learning outcomes of children with functional difficulties, ensuring they are considered in foundational learning measurement efforts. While children with physical disabilities are included where assessment is feasible, the framework acknowledges the need for further adaptation to fully include children with severe sensory or cognitive impairments.

2.3 Pilot Testing

The ICAN ICARe 2025 field testing in Nepal was conducted to pilot assessment tools, field protocols, and quality assurance systems before national rollout, in collaboration with Kathmandu University School of Education (KUSOED). The field test aimed to assess the feasibility, clarity, and operational readiness of the assessment across both rural and urban municipality contexts. Training for rural and urban municipalities' field teams was conducted over three days (25–27 May 2025), followed by pilot data collection from 28 - 31 May 2025 in rural areas and 29 - 31 May 2025 in urban areas, with an additional recheck conducted on 9 June 2025 in field locations. In total, the pilot covered 20 Enumeration Areas (10 rural and 10 urban) with 491 households surveyed (278 rural, 213 urban) and 531 children assessed (319 rural, 212 urban).

Quality assurance mechanisms were integrated throughout the field test. Sixteen EAs (8 rural, 8 urban) were monitored during data collection, all 20 EAs underwent desk rechecks, and one EA was subject to a field recheck. These processes enabled early identification of implementation issues and supported timely corrective actions.

Field observations indicated that enumerator confidence and adherence to protocols improved over the course of the pilot, supported by team collaboration and early community engagement. At the same time, the field test revealed operational challenges, including application crashes, battery constraints, and intermittent network connectivity, which occasionally affected data submission. Enumerators also requested clearer examples and greater flexibility in SurveyCTO navigation, particularly for adaptive assessment flows. Isolated instances of protocol deviation were observed during early fieldwork and were addressed through on-site monitoring and feedback.

Overall, the pilot testing phase generated practical lessons that informed refinements to assessment tools, training content, SurveyCTO workflows, and quality assurance procedures, strengthening readiness for the full ICAN ICARe national rollout in Nepal.

2.4 Training and Field Implementation of National Rollout

The ICAN ICARe assessment in Nepal was implemented through a structured training cascade designed to ensure consistency, data quality, and standardized assessment practices across field teams. Training activities were conducted at multiple levels, beginning with national-level preparation of the Program Management Team (PMT), followed by Training Trainers (ToT) and Enumerator Trainings.

Program Management Team members received training on assessment objectives, sampling procedures, field protocols, ethical considerations, and the use of digital data collection tools. These sessions emphasized alignment with ICAN ICARe methodologies and international standards for measuring foundational literacy and numeracy. Trained PMT members, then led Training of Trainers for Master Trainers, focusing on assessment flow, administration of reading and numeracy tools, SurveyCTO data entry, application of skip patterns, and child-centered assessment practices.

Enumerator trainings were conducted using a combination of classroom-based instruction and field practice. Enumerators were trained on household listing, child selection procedures, informed consent, ethical engagement with children, and accurate administration of assessment tools. Practical field exercises were used to reinforce learning, followed by competency checks to ensure enumerators met required standards prior to deployment.

Field implementation followed the approved sampling plan and data collection protocols. Enumerators conducted household visits in sampled wards to identify eligible households and children, administer

assessments, and complete household questionnaires. All assessments were conducted through one-on-one interactions with children and were recorded digitally using SurveyCTO on mobile devices.

Field teams were supported by supervisors responsible for monitoring daily progress, verifying adherence to protocols, and addressing field-level challenges. Data quality was continuously monitored through built-in digital checks, review of submitted data, and regular communication between field teams and the central coordination team. Where data quality issues were identified, corrective measures (including follow-up checks and additional guidance) were implemented.

The combination of standardized training, supervised field implementation, and real-time data monitoring ensured that data collection was carried out consistently across locations and that the resulting dataset met required standards for reliability and validity.

2.5 Data Collection Process

Data for the ICAN ICARe national assessment in Nepal were collected through a household-based, nationally representative survey designed to measure foundational reading and numeracy skills among children aged 5 - 16 years, regardless of school enrolment status. This approach ensured the inclusion of both in-school and out-of-school children, allowing the assessment to capture population-level learning outcomes rather than school-based performance alone.

The survey employed a three-stage stratified sampling design, using the 2021 National Population and Housing Census as the sampling frame. In the first stage, wards were selected as Enumeration Areas (EAs) using Probability Proportional to Size (PPS), ensuring representation across all seven provinces and maintaining proportionality between urban/rural municipality areas. In the second stage, each selected EA was divided into settlement segments of approximately 80 - 150 households, from which one segment was randomly selected. In the third stage, enumerators conducted a complete household listing within the selected segment and used systematic random sampling to select 20 households per EA. All children aged 5–16 years residing in sampled households were eligible for assessment, while households without children were included for the collection of socioeconomic and infrastructure data.

Data collection took place between 12 August and 7 October 2025. Assessments were administered through one-on-one, paper-based reading and numeracy tasks, with responses recorded digitally using SurveyCTO on mobile phones and tablets. The digital platform incorporated built-in skip patterns, validation checks, time stamps, GPS coordinates, and enumerator identifiers, enabling real-time monitoring and reducing data entry errors. Alongside learning assessments, structured questionnaires were used to collect information on household characteristics, schooling status, language use, and learning environments.

A comprehensive quality assurance system was integrated throughout the data collection process. Enumerators underwent standardized training and competency screening prior to deployment. During fieldwork, data quality was monitored through multiple mechanisms, including field supervision, spot checks, inter-rater reliability (IRR) exercises, phone-based monitoring, and desk rechecks of submitted data. High household and child response rates (exceeding 90%) were achieved, and predefined replacement protocols were applied only in cases where sampled households were unavailable.

Together, these procedures ensured that the data collected were reliable, representative, and aligned with international standards, supporting robust reporting on foundational learning outcomes and SDG indicator 4.1.1(a) in Nepal.

2.6 Data Quality Assurance Plan (DQAP)

Data Quality Assurance (DQA) was planned to ensure accuracy, reliability, and ethical integrity of all ICAN ICARe 2025 data collected in Nepal.

Pre-Field Data Collection Quality Controls

- Standardized Training: All enumerators are trained through a common MToT-based module covering CLA approach, safeguarding, and SurveyCTO operations.
- Piloting: A one-day mock assessment conducted during the training in each training region to test patterns, GPS capture, and timing and overall process of surveys.
- Certification: Only participants achieving ≥ 60 percent on quiz + practical sessions deployed.

During Field Data Collection

- **Daily Monitoring:**
  - » District Coordinators reviewed data in the SurveyCTO dashboard every evening.
  - » PMT checked uploads for missing values, duplicates, and GPS mismatches.

- **Spot Checks & Back-Checks:**
  - » 10 percent random back-checks (phone or physical revisit).
  - » Supervisors observed at least one household interview per enumerator weekly.

- **Issue Resolution:**
  - » Detected issues entered in the Administration Issues Tracker.
  - » Corrective actions implemented within 24 hours; QA team confirmed closure.

- **Safeguarding Verification:**
  - » Random consent cross-checks performed by PMT/ Supervisors officers.
  - » Any safeguarding incident escalated to the PMT Director within 24 hours.

Post- Field Data Collection Quality Checks

- Logical consistency tests run in Stata and Excel during data validation and cleaning.
- Outlier detection (duration, scores, and enumerator averages) during data validation and cleaning.
- Final cleaned dataset accompanied by metadata log.

2.7 Data Processing & Analysis

Data processing and analysis for the ICAN ICARe 2025 assessment in Nepal were conducted using STATA and Microsoft Excel, following standardized procedures to ensure accuracy, consistency, and reproducibility of results. Survey data were processed in accordance with the approved sampling design, and sampling weights were applied to all analyses to ensure national representativeness and to account for unequal probabilities of selection and clustering effects inherent in the survey design.

Analytical outputs were disaggregated across key demographic and educational variables to enable equity-focused analysis and alignment with international reporting standards. Disaggregation variables included age, gender, grade level, enrolment status, school type, language spoken at home and rural/urban location. This disaggregation supports the examination of learning outcomes across population subgroups and facilitates comparability with national and global education monitoring frameworks.

Learning outcome indicators were defined in accordance with internationally agreed benchmarks. Minimum Proficiency Levels (MPLs) for reading and numeracy were established in alignment with SDG indicator 4.1.1(a), using the Global Proficiency Framework (GPF). Benchmarking and linking of assessment items to MPLs were conducted using the Pairwise Comparison Method (PCM). Thus, our analysis ensures that the reported proficiency estimates are comparable with global standards and suitable for international reporting and trend analysis.

2.8 Limitations

The ICAN ICARe 2025 assessment in Nepal has several methodological and contextual limitations that should be considered when interpreting the results. While the survey design and field protocols were implemented to maximize coverage, data quality, and representativeness, certain population groups, contextual factors, and external disruptions may have influenced data collection and learning outcomes in limited ways. These limitations do not invalidate the findings but indicate areas where caution is required in analysis and interpretation.

Coverage limitations: The assessment followed a residential household-based sampling approach. Therefore, children residing in institutional settings (such as hostels, monasteries, care homes, or other non-household arrangements) were not included in the target population. As a result, learning outcomes for these groups are not represented in the dataset.

Non-response bias: Overall non-response is assessed to be minimal. However, some degree of non-response may exist among migrant households or children who were temporarily absent during data collection. Despite follow-up visits and the application of replacement protocols, these cases may affect representativeness at very localized levels.

2.9 Ethical Considerations

The ICAN ICARe 2025 was carried out with the approval of the National Statistics Office as per the prevailing laws of the Government of Nepal. The ICAN ICARe 2025 assessment in Nepal was conducted in full adherence to established ethical principles governing research and large-scale household surveys involving children. Before any data collection, informed consent was obtained from parents or primary caregivers for both the household questionnaire and the child's assessment. Enumerators were trained to clearly explain the purpose of the assessment, the voluntary nature of participation, and the right of respondents to decline or withdraw at any stage without consequence.

Child protection and safeguarding were central to all field operations. Enumerators and supervisors adhered strictly to the Galli Galli Child Safeguarding Guidelines, which emphasize respectful engagement, age-appropriate interaction, and the prevention of any form of harm, coercion, or distress. Safeguarding protocols were integrated into enumerator training, field supervision, and monitoring processes, with clear procedures for reporting and escalating any safeguarding concerns through established supervisory channels.

Robust data protection and confidentiality measures were implemented throughout the data lifecycle. All personally identifiable information was removed from the dataset before analysis, ensuring that individual children and households could not be identified in analytical or reporting outputs. Access to raw and identifiable data was restricted to authorized personnel only, and all data was stored on secure servers with controlled access protocols to prevent unauthorized use or disclosure.

The assessment was implemented under national-level coordination and ethical compliance mechanisms consistent with approved ICAN ICARe protocols. Oversight arrangements ensure alignment with national requirements for data collection and with internationally accepted standards for ethical conduct, confidentiality, and responsible use of data in educational assessment and research.

3

Findings and Analysis

3.1 Reader's Guide to ICAN ICARe Results

Minimum proficiency levels (MPLs) and SDG 4.1.1(a)

Sustainable Development Goal (SDG) 4.1 focuses on ensuring that all children complete free, equitable and quality primary and secondary education that leads to effective learning outcomes. Within this goal, Indicator 4.1.1(a) reports the proportion of children in Grades 2/3 who achieve at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex. To enable comparable measurement across countries, the UNESCO Institute for Statistics (UIS) developed global Minimum Proficiency Levels (MPLs), which describe the essential foundational skills children should demonstrate by the end of lower primary. MPLs provide a common benchmark that allows countries to interpret whether children have mastered the minimum competencies needed for future learning and to track progress toward SDG 4.1.1(a).

The MPLs were established through a multi-year, international technical process led by UIS between 2018 and 2022. The resulting MPLs represent a global reference point for foundational learning and form the basis for determining whether children in the ICAN ICARe assessment are"at or above" the minimum proficiency standard (Australian Council for Educational Research, 2022).

Choice of grade and age for reporting

In alignment with Nepal's education system and international standards for household-based learning assessments (particularly guidance from the PAL Network) the reporting framework for Minimum Proficiency Levels (MPL) under SDG Indicator 4.1.1 adopts both grade-based and age-based reporting points. This dual framework ensures statistical robustness, policy relevance, and international comparability while addressing Nepal's contextual realities.

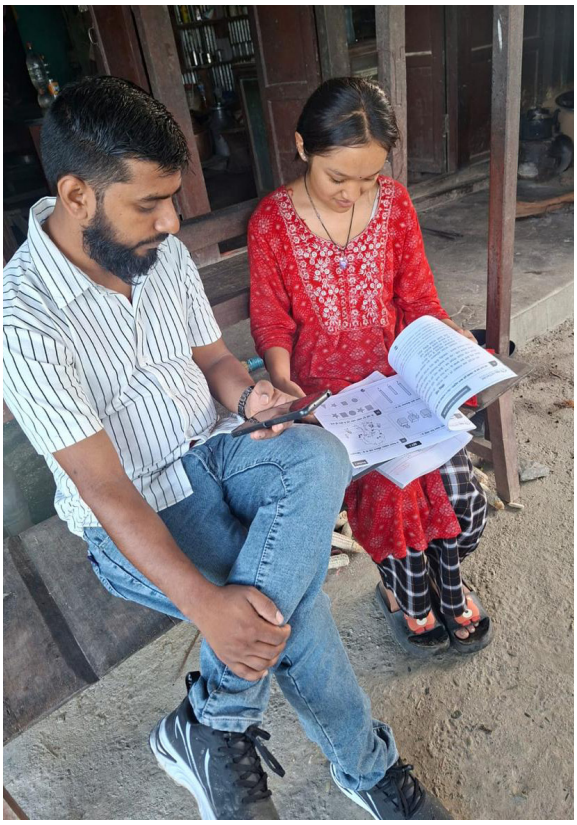
Grade 4 is adopted as the primary grade-based reporting point for SDG Indicator 4.1.1(a) in Nepal. Within Nepal's education structure, Grade 4 represents a stage at which children have completed lower primary education and have had sufficient exposure to foundational literacy and numeracy instruction. Grade 4 also corresponds to one year beyond the Grade 3 baseline (Grade 3 + 1 year), allowing for more stable measurement of minimum proficiency. This grade serves as a meaningful assessment checkpoint prior to transition into upper primary education. Reporting at Grade 4 strengthens the relevance of findings for school-based planning, curriculum review, and instructional policy.

Age 10 is selected as the primary age-based reporting point for MPL. This is consistent with PAL Network guidance providing a grade neutral benchmark that supports comparability across children who are below, at, or above their expected grade level, as well as children who are not currently enrolled in school. Age-

based reporting is independent of grade placement and captures learning outcomes regardless of enrollment status. This approach is particularly relevant for Nepal, where grade-age mismatch, late school entry, repetition, and interrupted schooling are prevalent. Age 10 aligns with international benchmarks commonly used in household-based assessments, enhancing cross-country comparability.

The combined use of grade-based and age-based reporting addresses Nepal's specific educational and statistical challenges. Grade-based reporting (Grade 4) captures learning outcomes among enrolled children and directly informs within-school and system-level policy decisions. Age-based reporting (Age 10) enables inclusion of out-of-school children, Comparisons across children with varied enrollment histories, and provides a more equitable measurement of learning outcomes independent of schooling trajectories.

Together, these reporting points provide a comprehensive and inclusive picture of learning achievement.



Definition of MPLs

To be aligned with the SDG 4.1.1(a) MPL in reading, an assessment must capture the Grade-2 skills described in the Global Proficiency Framework (GPF). UIS requires that reading assessments include at least 20 score points mapped to the GPF, of which a minimum of 10 score points must assess Grade-2 reading comprehension. This includes the two core subconstructs that define the MPL:

- Recognise the meaning of common words; and
- Retrieve explicit information from a Grade-2-level text.

The remaining score points may draw on precursor skills such as decoding, listening comprehension, or vocabulary development while still ensuring that Grade-2 reading comprehension remains the central construct. In practice, an MPL-aligned reading assessment must therefore determine whether children can accurately decode and understand simple text and extract basic meaning from it.

For mathematics, alignment to SDG 4.1.1(a) requires at least 20 score points linked to Grade-2 content in the GPF, with a minimum of 10 score points dedicated to the Number and Operations domain. Within this domain, assessments must include items representing at least three of the four Grade-2 subconstructs:

- Identify and count in whole numbers, and identify their relative magnitude,
- Represent whole numbers in equivalent ways,
- Solve basic operations with whole numbers, and
- Solve simple real-world problems involving whole numbers.

Assessments must also include a minimum of 10 items from non-number domains, such as measurement, geometry, statistics, or probability, to ensure broader curricular coverage, even though these items do not contribute to the MPL threshold. Together, these requirements ensure that an MPL-aligned mathematics assessment measures core foundational numeracy skills with an emphasis on number sense, basic computation, and simple problem-solving.

Interpreting MPL Cut-points: What It Means to Be Proficient in ICAN ICARe

To report ICAN ICARe results in line with global SDG 4.1.1(a) expectations, the assessments were linked to the international MPL benchmarks through the Pairwise Comparison Method (PCM). PCM is a standard-setting approach in which experts compare items in pairs to judge their relative difficulty and determine where each item sits in relation to the global MPL (UNESCO & ACER, 2025). In August 2025, PAL Network and ACER-UK convened approximately 40 international literacy and numeracy experts to apply this method to ICAN ICARe items. Through this process, MPL-aligned cut-points were established for both reading and mathematics, enabling ICAN ICARe to classify the proportion of children who meet or exceed the globally defined standard for foundational learning.

For reading (ICARe), the cut-point corresponds to the point on the scale where children reliably demonstrate Grade-2 reading skills—specifically, recognizing common grade-level words and retrieving a single piece of explicit information from a short, simple text, typically by matching a word or idea in the question to its equivalent in the passage. At or above this point, children can answer straightforward "who", "what", "when", or "where" questions when the relevant information is clearly stated, and not obscured by competing content. Being above the MPL therefore indicates that the child can read Grade 2-level texts (about 40 words in length) with understanding to extract basic meaning, reflecting the globally defined threshold for foundational literacy.

For numeracy (ICAN), the cut-point reflects the point on the scale where children reliably demonstrate the Grade-2 number and operations skills expected at the MPL. Children who meet the MPL can count, compare, and order whole numbers up to 100, and can solve basic addition and subtraction problems within 20 using objects, pictures, or number symbols. They can also work with simple multiplicative ideas, such as doubling small quantities or dividing a small group of objects into two equal sets. At or above this point, children show the foundational number sense, computation skills, and straightforward problem-solving abilities that mark the global threshold for minimum proficiency in mathematics.

In combination, proficiency on ICAN ICARe indicates that a child attains the minimum proficiency threshold in each construct separately, demonstrating the essential reading and mathematics competencies associated with foundational learning under SDG 4.1.1(a).

Methods of Computation

1. MPL Attainment Rate (Grade-Based)

Formula:

$$\text{MPL Attainment Rate (Grade 4)} = \left(\frac{\text{Number of Grade 4 children achieving MPL}}{\text{Total number of Grade 4 children assessed}} \right) \text{X } 100$$

Disaggregation by sex.

Source:
UNESCO Institute for Statistics (UIS) Metadata for SDG Indicator 4.1.1 (UNESCO, 2019).

2. MPL Attainment Rate (Age-Based)

Formula:

$$\text{MPL Attainment Rate (Age 10)} = \left(\frac{\text{Number of 10-year-old children achieving MPL}}{\text{Total number of 10-year-old children assessed}} \right) \text{X } 100$$

This measure includes:

- Children enrolled in any grade,
- Out-of-school children,
- Children who have never attended school.

Source:
PAL Network Assessment Standards and Metadata (PAL Network, 2020).

How MPL results are presented in this report

ICAN ICARe presents MPL results using a set of clear, visual summaries that show the proportion of children who are above the minimum proficiency standard in reading, mathematics, and both learning areas combined. Results are shown for age 10 and Grade 4, and are disaggregated by gender. Additional "learning trajectory" charts illustrate how the share of children reaching the MPL increases across ages and grades within each country. Together, these visuals allow readers to quickly understand overall performance levels as well as key inequalities in foundational learning.

Using MPL results for policy and programmes

These results help citizens, governments and partners identify which groups of children are furthest behind and at what stage learning gaps begin to widen. Nepal can use MPL data to track progress toward SDG 4.1.1(a), target interventions to specific ages or grades, prioritize support for disadvantaged populations, and monitor whether reforms such as curriculum changes, teacher training, or remedial programmes lead to improvements in foundational learning. By highlighting where learning recovery or acceleration is most urgently needed, MPL results provide a practical evidence base for national planning, budgeting, and programmatic action.

In the pages that follow, we will offer the evidence of achievement of minimum proficiency that we found in our study. It is tempting to attribute low learning outcomes to problems in schools. However, learning outcomes are not only a product of the work that schools do, they are the product of all educational opportunities that children experience in the places where they live, in their schools, in their neighborhoods, and in their households. Schools themselves often face great challenges (lack of monetary resources, capacity building, etc.) to carry over their mandates. If anything, these results should be a call for the society to demand for consistent efforts to increase and improve education opportunities for their children.

3.2 Learning Outcomes for 10-year-old Children

10-Year-Olds: Minimum Proficiency Levels

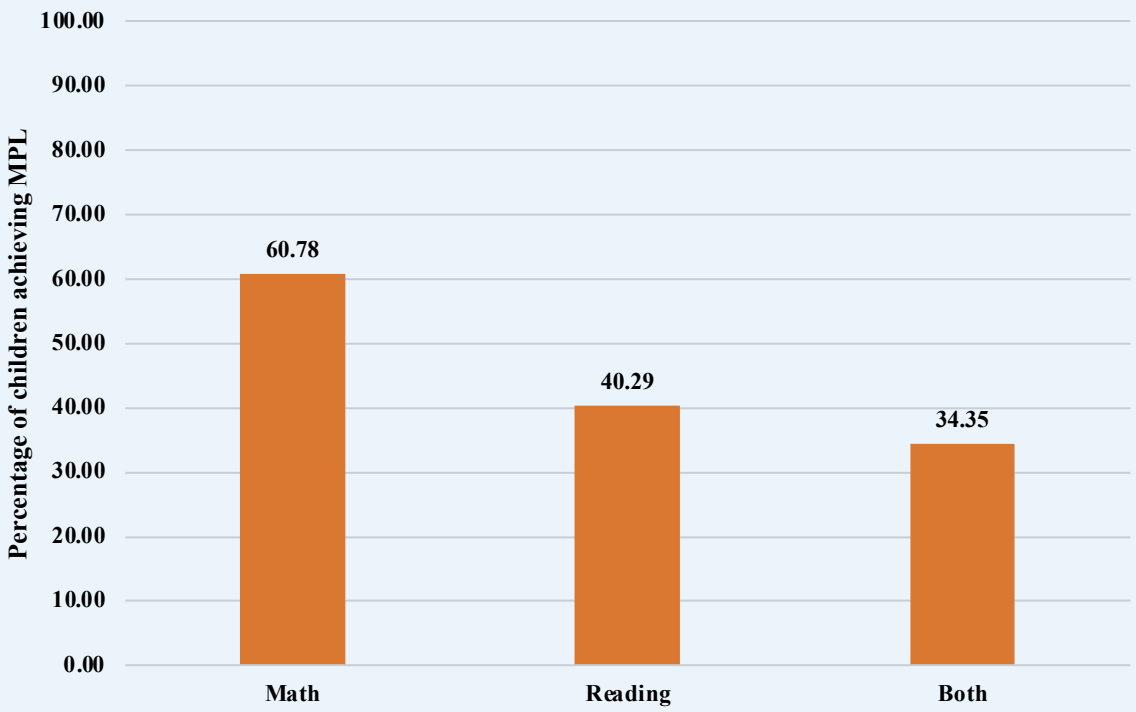


Figure 3.2.1: The percentage of children aged 10 years achieving the Minimum Proficiency Levels (MPL)

Figure 3.2.1 presents the percentage and estimated number of children aged 10 years who achieved the Minimum Proficiency Levels (MPL) in mathematics, reading, and in both domains combined.
Overall, 60.78 percent of 10-year-old children achieved MPL in mathematics, representing an estimated 402,370 children nationally (unweighted N = 278). In contrast, 40.29 percent achieved MPL in reading, corresponding to approximately 266,713 children (unweighted N = 181). When proficiency in both mathematics and reading is considered simultaneously, 34.35 percent of children met the required standards, representing an estimated 227,395 children (unweighted N = 155).

The gap between mathematics and reading proficiency indicates comparatively stronger performance in numeracy than in literacy at this age. The lower proportion of children achieving proficiency in both domains suggests that a substantial share of children who demonstrate minimum numeracy skills do not simultaneously meet minimum literacy requirements. These findings highlight the importance of strengthening foundational reading skills alongside continued support for numeracy development in order to improve overall learning outcomes among 10-year-old children.

10-Year-Olds: Minimum Proficiency Levels by Gender

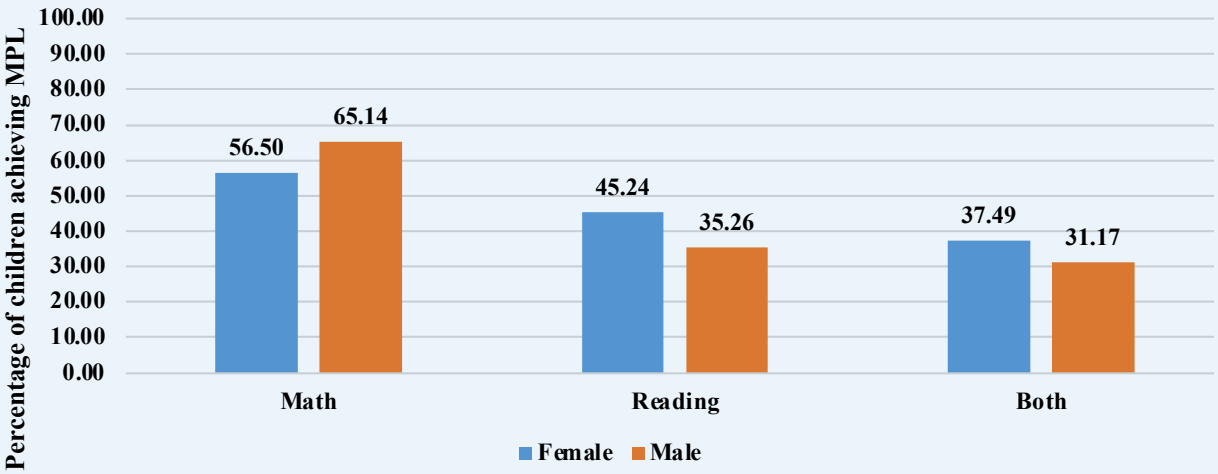


Figure 3.2.2: Percentage of Children aged 10 years Achieving MPL in Math, Reading and Both by Gender

Figure 3.2.2 presents the percentage, estimated population counts, and sample sizes of children aged 10 years who achieved the Minimum Proficiency Levels (MPL) in mathematics, reading, and in both domains combined, disaggregated by gender.

Overall, male children demonstrate higher achievement in mathematics, with **65.14 percent** reaching the MPL, representing an estimated **213,799 boys nationally** (unweighted N = 150), compared to **56.50 percent** of female children, or approximately **188,572 girls** (unweighted N = 128). In contrast, female children outperform male children in reading, with **45.24 percent** achieving the minimum proficiency benchmark, corresponding to an estimated **150,990 girls** (unweighted N = 102), compared to 3**5.26 percent** of boys, or approximately **115,723 boys** (unweighted N = 79).

When proficiency in both mathematics and reading is considered simultaneously, a higher proportion of female children (**37.49 percent**, estimated **125,106 girls**, unweighted N = 85) meet the required standards compared to male children (**31.17 percent**, estimated **102,289 boys**, unweighted N = 70).

The gender-disaggregated results indicate subject-specific differences in learning outcomes rather than a pronounced overall gender gap. While boys demonstrate relatively stronger performance in mathematics, girls show an advantage in reading proficiency. The differences observed in combined proficiency suggest that foundational learning challenges affect both genders, underscoring the importance of balanced instructional approaches that support the development of both literacy and numeracy skills for all children at this age.

10-Year-Olds: Minimum Proficiency Levels by Location

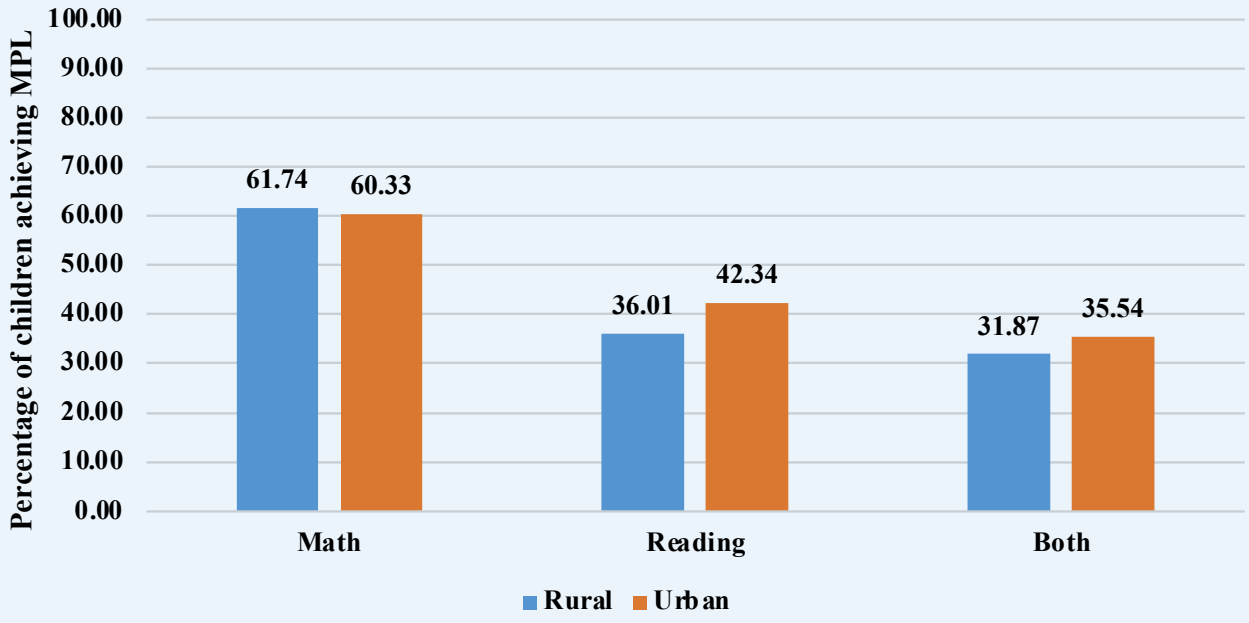


Figure 3.2.3: Percentage of children aged 10 years achieving MPL in Math, Reading and Both by Location

Figure 3.2.3 presents the percentage, estimated population counts, and sample sizes of children aged 10 years who achieved the Minimum Proficiency Levels (MPL) in mathematics, reading, and in both domains combined, disaggregated by rural and urban municipality location.

Overall, achievement in mathematics is similar across locations. In rural areas, **61.74 percent** of children achieved MPL in mathematics, representing an estimated **132,415 children** (unweighted N = 96), compared to **60.33 percent** in urban areas, corresponding to approximately **269,955 children** (unweighted N = 182). These results indicate broadly comparable numeracy outcomes at this age across locations.

In contrast, reading proficiency shows a clearer location-based difference. Among urban children, **42.34 percent** achieved the minimum proficiency benchmark, representing an estimated **189,484 children** (unweighted N = 126), compared to **36.01 percent** of rural children, or approximately **77,229 children** (unweighted N = 55).

When proficiency in both mathematics and reading is considered together, **35.54 percent** of urban children met the required standards, corresponding to an estimated **159,046 children** (unweighted N = 106), compared to **31.87 percent** of rural children, or approximately **68,348 children** (unweighted N = 49).

The results suggest that while foundational numeracy outcomes are broadly similar between rural and urban municipalities, differences persist in reading and in combined proficiency, with urban children

demonstrating relatively stronger performance in these domains. These patterns point to contextual factors associated with location that may influence literacy development and underscore the importance of continued efforts to strengthen reading outcomes, particularly for children in rural areas.

Age Learning Trajectories of achievement of MPL in Math, Reading, and Both

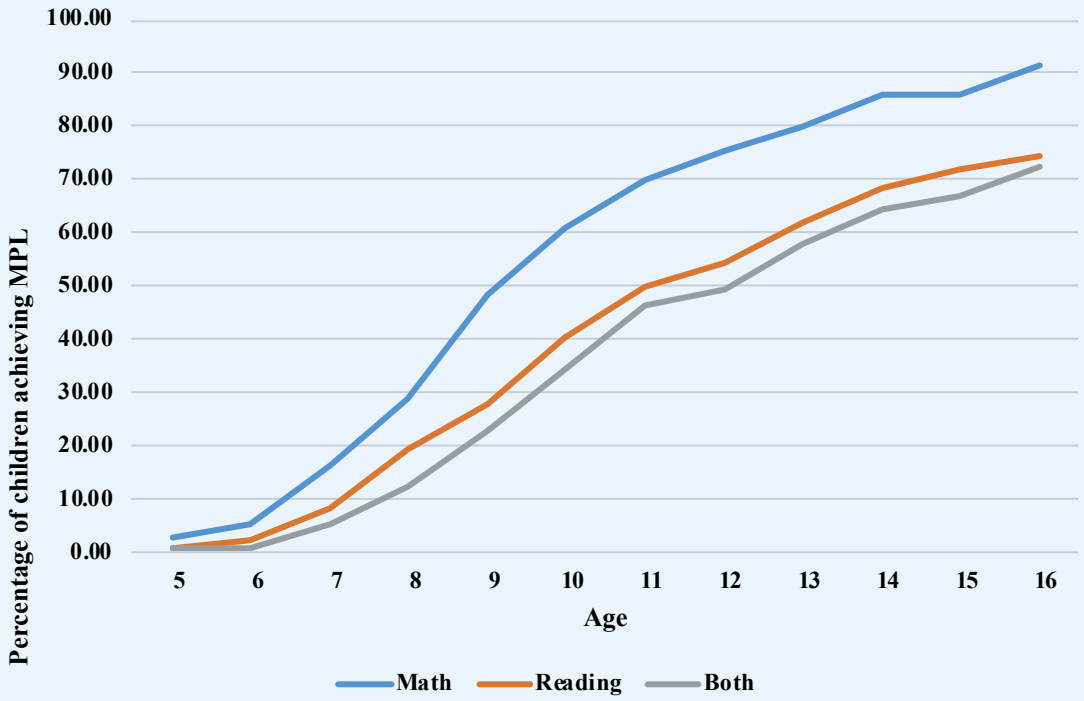


Figure 3.2.4: Age learning trajectories of achievement of MPL in Math, Reading and Both

Figure 3.2.4 presents age-wise learning outcomes in mathematics, reading, and combined proficiency based on cross-sectional data for children aged 5 to 16 years. The resulting learning trajectory should be interpreted as hypothetical rather than longitudinal, as it does not track the same children over time. Instead, it provides a snapshot-based profile of learning accumulation across ages, consistent with the approach used in RISE analyses of education system performance. Accordingly, interpretation focuses on the overall trend and shape of the trajectory, rather than on precise proficiency percentages at individual ages.

Across all ages combined, **55.58 percent** of children achieve MPL in mathematics (estimated **3,745,061 children**, unweighted N = 2,574), **40.46 percent** achieve MPL in reading (estimated **2,725,794 children**, unweighted N = 1,852), and **36.35 percent** achieve MPL in both domains (estimated **2,448,889 children**, unweighted N = 1,665).

The figure shows a clear upward trend in learning outcomes with increasing age across mathematics, reading, and combined proficiency. At age 5, only **2.46 percent** of children achieve MPL in mathematics (8,498 children; N = 6), while just **0.82 percent** achieve MPL in reading and in both domains (2,836 children; N = 2). Learning gains in the early ages remain modest, particularly in reading and combined proficiency.

From ages 9 to 12, learning outcomes improve more rapidly. In mathematics, proficiency increases from **48.36 percent** at age 9 (302,934 children; N = 210) to **75.56 percent** at age 12 (543,536 children; N = 373). Reading proficiency rises from **27.91 percent** (174,826 children; N = 119) to **54.08 percent** (389,075 children; N = 265) over the same age range. Combined proficiency increases from **22.49 percent** (140,880 children; N = 96) at age 9 to **49.47 percent** (355,908 children; N = 242) at age 12.

In the later adolescent years, proficiency continues to rise. Mathematics achievement reaches **85.74 percent** at age 14 (520,752 children; N = 356) and **91.24 percent** at age 16 (218,106 children; N = 150). Reading proficiency reaches **74.55 percent** at age 16 (178,215 children; N = 122), while combined proficiency rises to **72.62 percent** (173,608 children; N = 119).

From a system-level perspective, the trajectory indicates that minimum proficiency is achieved by the majority of children only in the mid-to-late teenage years. While learning accumulates steadily across ages, combined proficiency in both literacy and numeracy remains substantially lower than single-subject achievement throughout childhood. Consistent with RISE findings, this pattern reflects a system in which learning occurs progressively, but at a pace that is slower than age-based and curricular expectations.

Age Learning Trajectory by gender

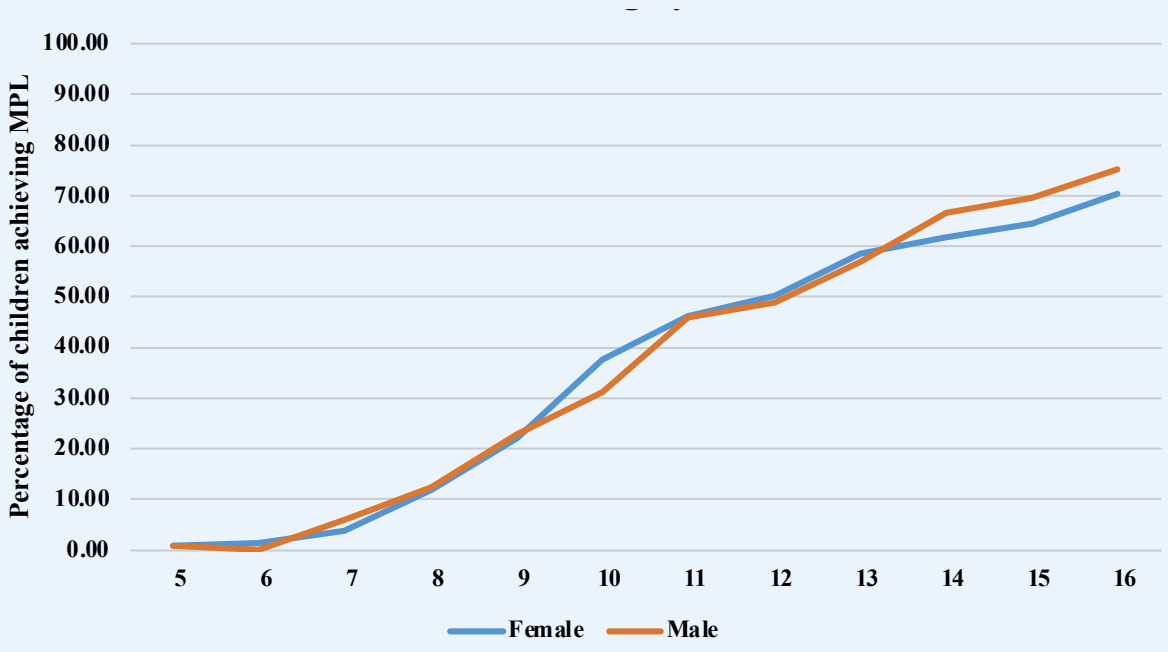


Figure 3.2.5: Age Learning Trajectories of Achievement of MPL in both Math and Reading by Gender

Figure 3.2.5 presents age-wise learning trajectories showing the percentage of children achieving the Minimum Proficiency Levels (MPL) in both mathematics and reading combined, disaggregated by gender. The trajectories are based on cross-sectional data and illustrate patterns of cumulative learning across ages rather than the progression of the same children over time.
Overall, **36.08 percent** of female children (estimated **1,185,462 children**, unweighted N = 805) and **36.60 percent** of male children (estimated **1,263,427 children**, unweighted N = 860) achieve combined minimum proficiency across ages 5 to 16, indicating broadly similar levels of achievement between genders at the aggregate level.

At the youngest ages, combined proficiency remains negligible for both girls and boys. At age 5, **0.87 percent of girls** (1,477 children; N = 1) and **0.77 percent of boys** (1,359 children; N = 1) achieve MPL in both domains. At age 6, combined proficiency is **1.46 percent among girls** (4,474 children; N = 3), while no boys achieve combined proficiency at this age in the sample.

From age 7 onwards, combined proficiency increases steadily for both genders. By age 10, **37.49 percent of girls** (125,106 children; N = 85) achieve combined proficiency compared to **31.17 percent of boys** (102,289 children; N = 70), indicating a temporary female advantage at this age. From ages 11 to 13, achievement levels between girls and boys remain closely aligned. At age 12, for example, **50.16 percent of girls** (169,243 children; N = 115) and **48.86 percent of boys** (186,665 children; N = 127) achieve combined proficiency.

In the later adolescent years, male children demonstrate slightly higher levels of combined proficiency. At age 14, **66.53 percent of boys** (217,374 children; N = 148) achieve MPL in both domains compared to **61.83 percent of girls** (173,509 children; N = 117). By age 16, combined proficiency reaches **75.19 percent among boys** (85,254 children; N = 57) and **70.31 percent among girls** (88,355 children; N = 62).

Overall, the trajectories indicate that achievement of minimum proficiency in both mathematics and reading increases steadily with age for both female and male children. Gender differences are modest and vary across ages, with a female advantage emerging around age 10 and a male advantage observed in later adolescence. The general similarity in trajectories suggests that foundational learning gains and challenges are broadly shared across genders, and that combined proficiency is achieved progressively over the course of childhood and adolescence rather than early in the schooling cycle.

Learning trajectory by age and location

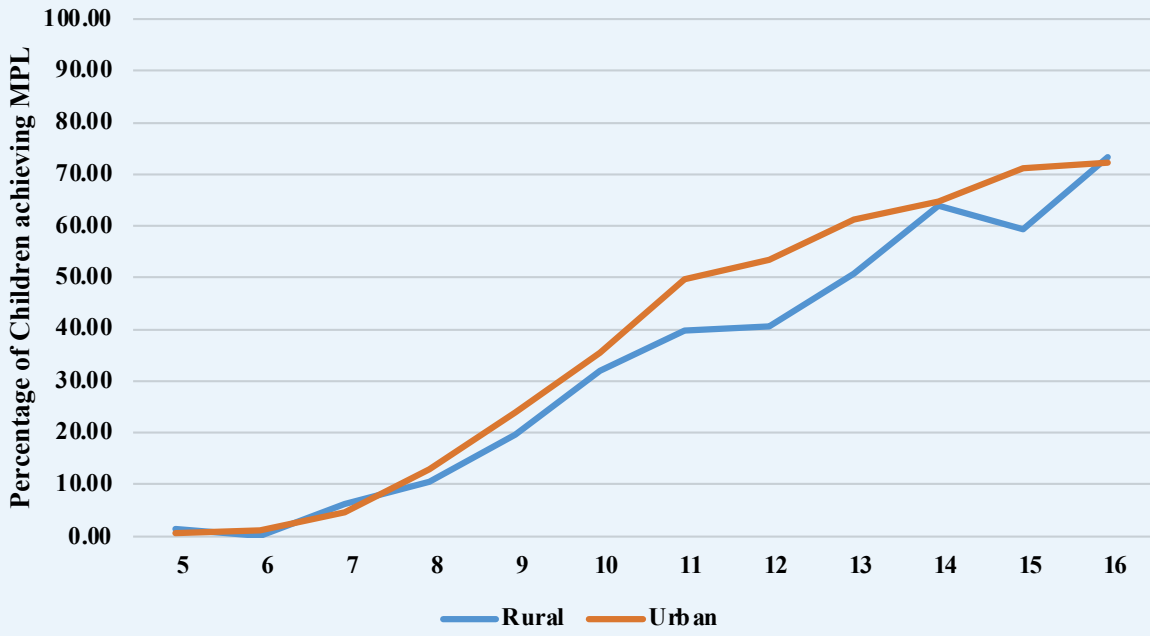


Figure: 3.2.6: Age learning trajectories of achievement of Minimum Proficiency Levels (MPL) in both mathematics and reading, by location

Figure 3.2.6 presents age-wise learning trajectories showing the percentage of children achieving the Minimum Proficiency Levels (MPL) in both mathematics and reading combined, disaggregated by rural and urban location. The trajectories are based on cross-sectional data and illustrate how combined proficiency accumulates across ages in different residential contexts.

At the youngest ages, combined proficiency is negligible in both rural and urban settings. At age 5, **1.49 percent of rural children** (1,359 children; N = 1) and **0.58 percent of urban children** (1,477 children; N = 1) achieve MPL in both domains. At age 6, no rural children achieve combined proficiency in the sample, while **1.21 percent of urban children** (4,474 children; N = 3) meet the benchmark.

From age 7 onwards, combined proficiency increases steadily in both locations. By age 10, **31.87 percent of rural children** (68,348 children; N = 49) achieve combined proficiency compared to **35.54 percent of urban children** (159,046 children; N = 106). The urban advantage becomes more pronounced during early adolescence. At age 12, **53.56 percent of urban children** (264,307 children; N = 177) achieve MPL in both domains, compared to **40.54 percent of rural children** (91,600 children; N = 65).

In later adolescence, the trajectories begin to converge. At age 14, combined proficiency reaches **63.84 percent among rural children** (131,398 children; N = 92) and **64.62 percent among urban children** (259,485 children; N = 173). By age 16, **73.25 percent of rural children** (59,110 children; N = 42) and **72.30 percent of urban children** (114,499 children; N = 77) achieve MPL in both mathematics and reading.

Overall, the trajectories indicate that while children in both rural and urban areas steadily acquire foundational skills with age, urban children tend to reach combined proficiency earlier, particularly between ages 10 and 13. The narrowing of the gap in later adolescence suggests partial convergence over time; however, the earlier urban advantage highlights the importance of strengthening foundational learning conditions in rural areas to accelerate early skill acquisition.

3.3 Learning Outcomes for Children in Grade 4

Children in Grade 4: Minimum Proficiency Levels

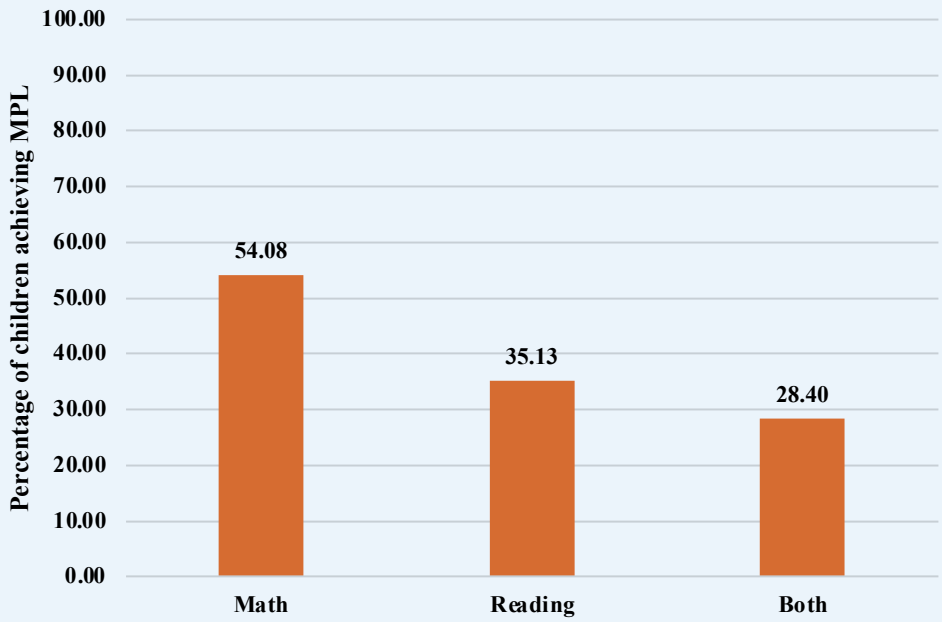


Figure 3.3.1: Percentage of children in Grade 4 achieving Minimum Proficiency Levels in Math, Reading and Both

Figure 3.3.1 presents the percentage of children in Grade 4 who achieved the Minimum Proficiency Levels (MPL) in mathematics, reading, and in both domains combined. Overall, **54.08 percent** of Grade 4 children achieved MPL in mathematics, representing an estimated **354,427 children** (unweighted N = 243). Achievement in reading is substantially lower, with **35.13 percent** reaching the minimum proficiency benchmark, corresponding to approximately **230,246 children** (unweighted N = 156). When proficiency in both mathematics and reading is considered simultaneously, **28.40 percent** of Grade 4 children meet the required standards, equivalent to **186,135 children** (unweighted N = 126).

The observed gap between mathematics and reading proficiency highlights persistent challenges in foundational literacy at the end of lower primary education. The relatively low proportion of children achieving proficiency in both domains suggests that a considerable number of learners who meet minimum standards in mathematics are unable to do so in reading at the same grade level. These findings underscore the importance of strengthening early-grade literacy instruction alongside integrated approaches to foundational skill development within primary education.

Children in Grade 4: Minimum Proficiency Levels by Gender

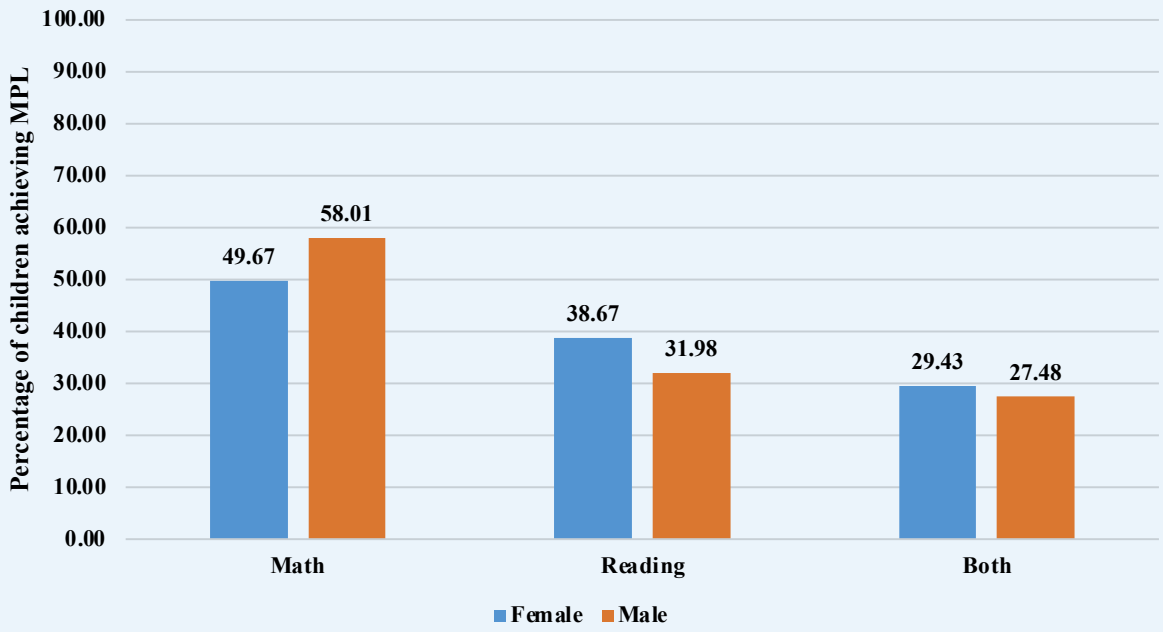


Figure 3.3.2: Percentage of children in Grade 4 achieving Minimum Proficiency Levels (MPL) in Math, Reading, and Both, by gender

Figure 3.3.2 presents the percentage of children in Grade 4 who achieved the Minimum Proficiency Levels (MPL) in mathematics, reading, and in both domains combined, disaggregated by gender.

In mathematics, **58.01 percent of male students** achieved MPL, representing an estimated **200,940 boys** (unweighted N = 138), compared to **49.67 percent of female students**, equivalent to 153,487 girls (unweighted N = 105). In reading, female students demonstrate higher achievement, with **38.67 percent** reaching the minimum proficiency benchmark (119,477 girls; unweighted N = 80), compared to **31.98 percent of male students** (110,770 boys; unweighted N = 76).

When proficiency in both mathematics and reading is considered simultaneously, achievement levels are similar across genders. 2**9.43 percent of female students** achieve MPL in both domains (90,949 girls; unweighted N = 61), compared to **27.48 percent of male students** (95,186 boys; unweighted N = 65).

The gender-disaggregated results indicate subject-specific differences rather than a pronounced overall gender gap in combined proficiency. While boys perform relatively better in mathematics and girls perform better in reading, the low levels of combined proficiency for both genders highlight shared challenges in achieving foundational skills by the end of lower primary education. These findings underscore the importance of balanced instructional approaches that support both literacy and numeracy development for all learners in the early grades.

Children in Grade 4: Minimum Proficiency Levels by Location

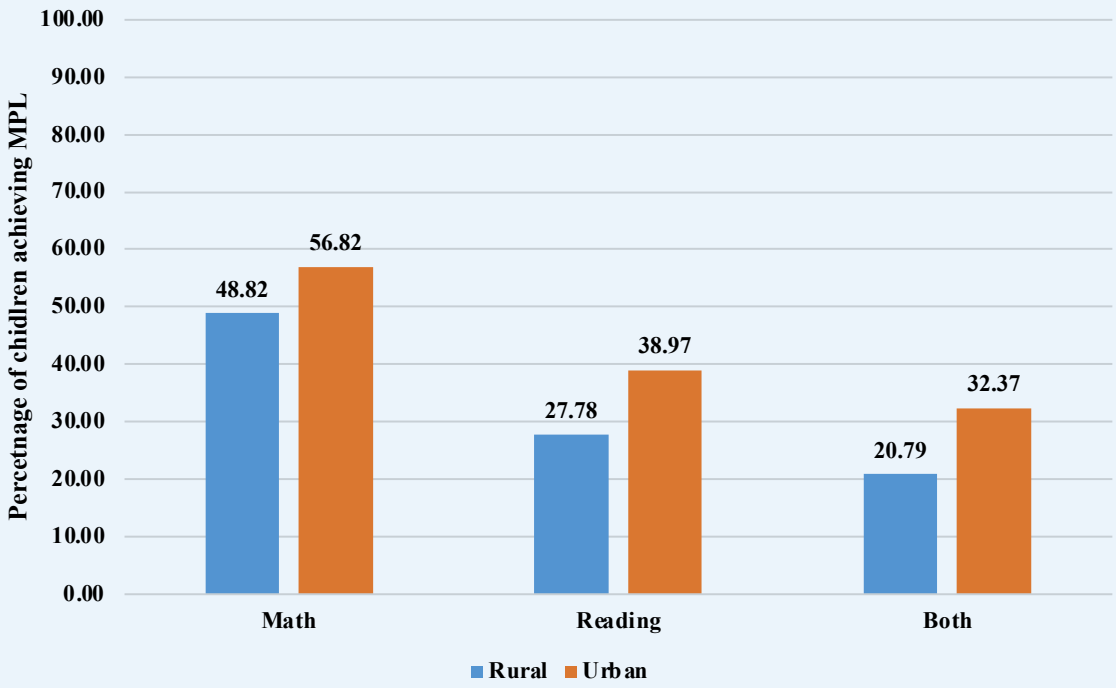


Figure 3.3.3: Percentage of children in Grade 4 achieving Minimum Proficiency Levels (MPL) in Math, Reading, and Both, by location

Figure 3.3.3 presents the percentage of children in Grade 4 who achieved the Minimum Proficiency Levels (MPL) in mathematics, reading, and in both domains combined, disaggregated by rural and urban location.

In mathematics, **30.95 percent of rural children** achieved MPL, corresponding to an estimated **109,695 children** (unweighted N = 80), compared to **69.05 percent of urban children** (244,732 children; unweighted N = 163). In reading, **27.10 percent of rural children** reached the minimum proficiency benchmark (62,405 children; unweighted N = 45), while 72.90 percent of urban children achieved MPL (167,842 children; unweighted N = 111).

When proficiency in both mathematics and reading is considered together, **20.79 percent of rural children** achieved MPL in both domains (224,675 children; unweighted N = 34), compared to **32.37 percent of urban children** (430,725 children; unweighted N = 92).

The results indicate substantial location-based differences in Grade 4 learning outcomes, particularly in mathematics and reading. Urban children demonstrate markedly higher levels of proficiency across domains. These disparities highlight the importance of targeted efforts to strengthen foundational learning conditions in rural areas to ensure more equitable early-grade learning outcomes.

Learning trajectories by grade

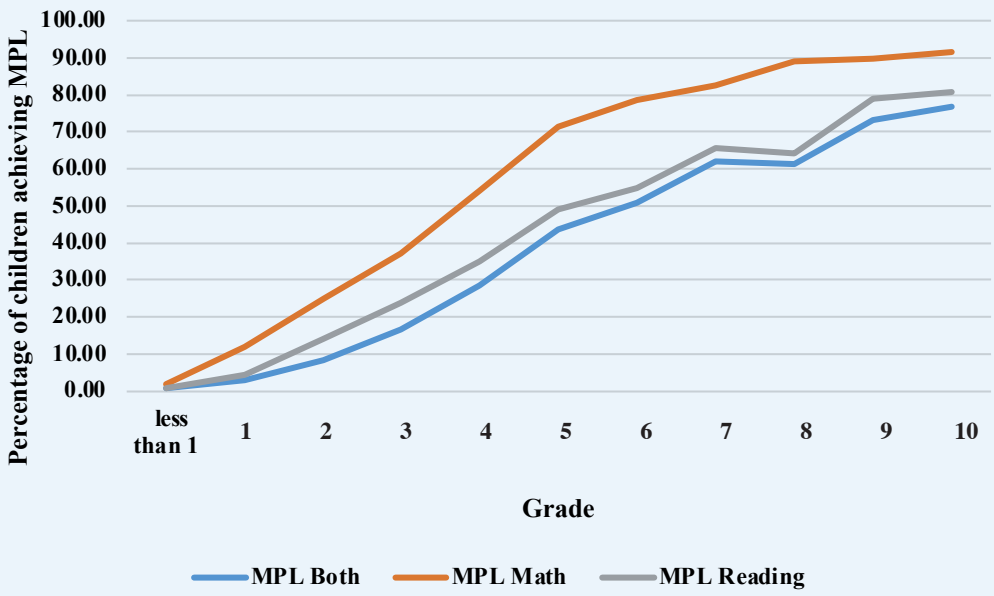


Figure 3.3.4: Grade Learning Trajectories of achievement of MPL in Math, Reading and Both

Figure 3.3.4 presents grade-wise learning outcomes in mathematics, reading, and combined proficiency based on cross-sectional data obtained from the survey, reported up to Grade 10. The resulting learning trajectory is hypothetical rather than longitudinal, as it reflects outcomes for different cohorts observed at different grades rather than the progression of the same children over time. Interpretation, therefore focuses on the overall trend, not on exact proficiency percentages at each grade.

The figure shows a **consistent upward trend** in learning outcomes with increasing grade, indicating cumulative learning as children progress through the education system. Learning gains in the early grades remain modest, particularly in reading, while mathematics proficiency increases more rapidly. Across grades, achievement in both mathematics and reading consistently exceeds combined proficiency, reflecting the requirement that children meet minimum proficiency thresholds in both domains simultaneously.

Minimum proficiency is not reached by the majority of children in the early grades, and combined proficiency is achieved by most children only in the later grades. By Grade 10, mathematics proficiency exceeds 90 percent, while reading and combined proficiency reach approximately four-fifths of children, indicating continued improvement but persistent gaps in earlier stages of schooling.

Overall, the grade-based trajectory highlights that while learning continues across grades, foundational skills, especially reading and combined proficiency, are acquired later than intended, underscoring the importance of strengthening early-grade learning to ensure timely attainment of minimum proficiency.

Learning trajectory by grade and gender

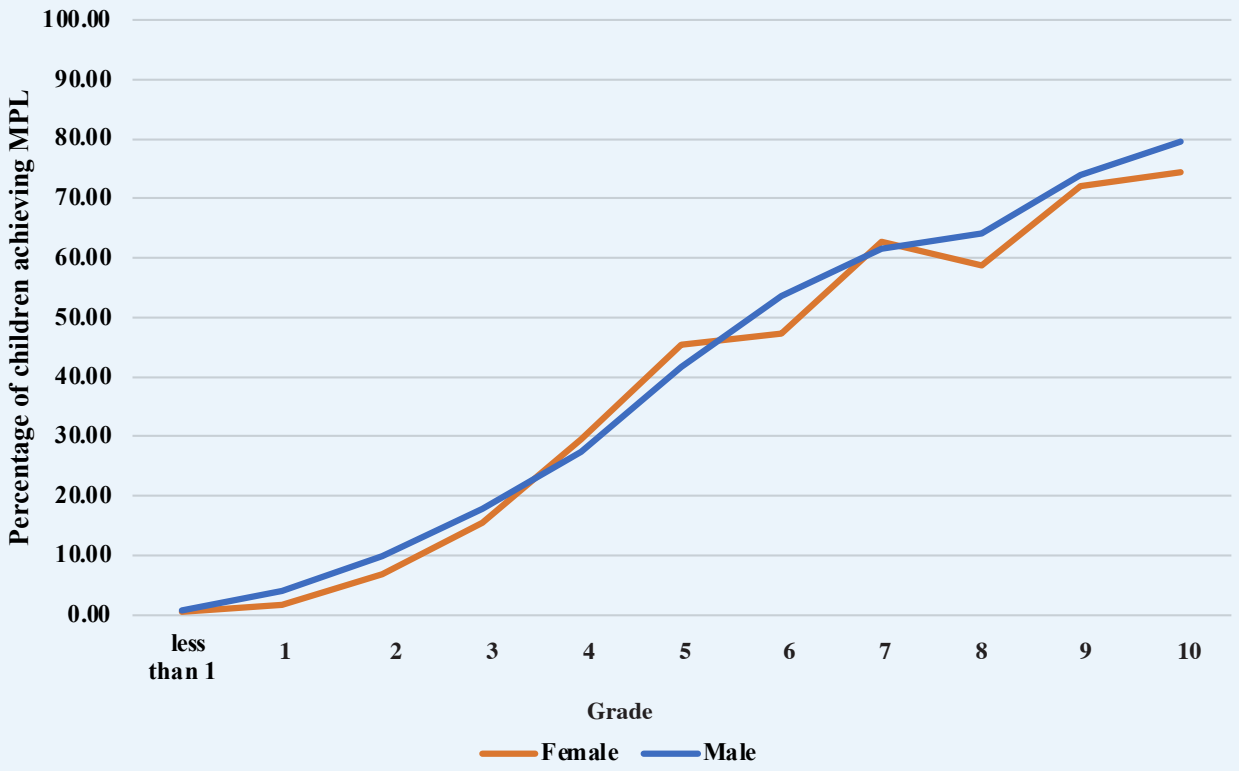


Figure 3.3.5: Learning trajectories of achievement of Minimum Proficiency Levels (MPL) in both reading and mathematics, by grade and gender

Figure 3.3.5 presents grade-wise learning trajectories showing the percentage of children achieving the Minimum Proficiency Levels (MPL) in both reading and mathematics combined, disaggregated by gender. Overall, combined proficiency increases steadily as children progress through grades, rising from **0.47 percent for girls** (1,477 children; N = 1) and **0.88 percent for boys** (2,995 children; N = 2) below Grade 1 to **74.51 percent for girls** (147,949 children; N = 101) and **79.51 percent for boys** (125,750 children; N = 84) by Grade 10. Across all grades combined, **36.08 percent of girls** (1,185,462 children; N = 805) and **36.60 percent of boys** (1,263,427 children; N = 860) achieve combined proficiency.

The shape of the curves provides insight into how foundational learning accumulates across the school cycle. In the earliest grades, including below Grade 1 and Grade 1, the curves remain close to the baseline, with combined proficiency ranging between approximately **0.5 and 4 percent**. This flat segment indicates that very few children achieve minimum proficiency in both domains during the initial years of schooling.

From Grades 2 to 4, the curves rise gradually. Combined proficiency increases from **6.77 percent for girls** (17,777 children; N = 12) and **9.84 percent for boys** (30,978 children; N = 21) in Grade 2 to **15.43 percent for girls** (43,090 children; N = 30) and **17.88 percent for boys** (55,211 children; N = 38) in Grade 3, reaching **29.43 percent for girls** (90,949 children; N = 61) and **27.48 percent for boys** (95,186 children; N = 65) by Grade 4. Although gains are evident, progress toward combined proficiency remains modest in early primary grades.

A more pronounced acceleration occurs between Grades 4 and 7. Combined proficiency increases from roughly **27–29 percent** in Grade 4 to **62.60 percent for girls** (190,102 children; N = 128) and **61.66 percent for boys** (180,101 children; N = 122) by Grade 7. This phase represents faster accumulation of foundational skills as more children begin to meet the minimum proficiency standard in both reading and mathematics.

Beyond Grade 7, the curves continue to rise, though at a more moderate pace. By Grade 9, **72.01 percent of girls** (159,430 children; N = 107) and **74.00 percent of boys** (175,542 children; N = 119) achieve combined proficiency. By Grade 10, levels reach **74.51 percent for girls** and **79.51 percent for boys**. Some fluctuations appear in Grades 11 and 12, where percentages remain high but weighted counts decline, reflecting smaller cohort sizes rather than systematic reversals in learning progression.

Overall, the learning trajectories highlight a system-level pattern: while foundational skills in reading and mathematics accumulate progressively across grades, combined proficiency is achieved relatively late in the schooling cycle. The broadly parallel trajectories for girls and boys indicate that learning gains and delays are shared across genders, reinforcing the importance of strengthening early-grade instruction so that children reach minimum proficiency earlier in their educational pathways.

Learning trajectory by grade and location

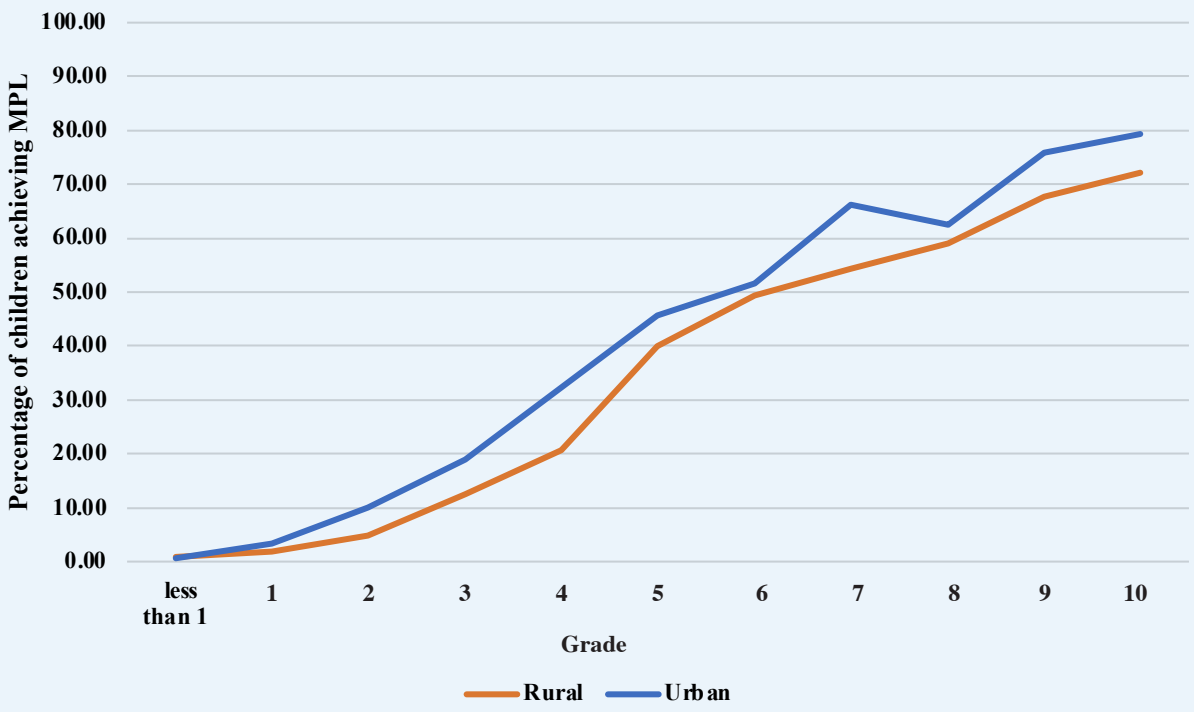


Figure 3.3.6: Learning trajectories of achievement of Minimum Proficiency Levels (MPL) in both reading and mathematics, by grade and location

Figure 3.3.6 presents grade-wise learning trajectories showing the percentage of children achieving the Minimum Proficiency Levels (MPL) in both reading and mathematics combined, disaggregated by rural and urban location. Overall, combined proficiency increases steadily across grades in both settings, though urban children consistently demonstrate higher levels of achievement.

In the earliest grades, combined proficiency remains very low. Below Grade 1, **0.83 percent of rural children** (163,921 children; N = 1) and **0.63 percent of urban children** (491,459 children; N = 2) achieve MPL in both domains. In Grade 1, proficiency rises modestly to **1.97 percent in rural areas** (220,959 children; N = 3) and **3.35 percent in urban areas** (372,503 children; N = 9).

From Grades 2 to 4, the gap between rural and urban trajectories becomes more evident. By Grade 4, **20.79 percent of rural children** (224,675 children; N = 34) achieve combined proficiency compared to **32.37 percent of urban children** (430,725 children; N = 92). This widening difference suggests that urban children tend to reach minimum proficiency earlier in the primary cycle.

Between Grades 5 and 7, learning accelerates in both locations. Combined proficiency increases to **40.04 percent in rural areas** (253,010 children; N = 71) and **45.60 percent in urban areas** (438,937 children; N = 132) by Grade 5, and further to **54.29 percent in rural areas** (200,295 children; N = 77) and **66.11 percent in urban areas** (395,481 children; N = 173) by Grade 7. The urban advantage persists throughout this phase.

In the upper grades, proficiency continues to rise. By Grade 9, **67.68 percent of rural children** (162,464 children; N = 77) achieve MPL in both domains compared to **75.98 percent of urban children** (296,162 children; N = 149). By Grade 10, levels reach **72.20 percent in rural areas** (129,028 children; N = 66) and **79.30 percent in urban areas** (227,686 children; N = 119). Although percentages remain high in Grades 11 and 12, weighted numbers decline substantially, reflecting smaller cohort sizes rather than learning reversals.

Among out-of-school children, **37.57 percent of rural children** (64,008 children; N = 18) achieve combined proficiency compared to **18.43 percent of urban children** (181,924 children; N = 27), indicating a different composition among non-enrolled children across locations.

Across all grades combined, **33.78 percent of rural children** (2,226,992 children; N = 533) and **37.61 percent of urban children** (4,510,682 children; N = 1,132) achieve MPL in both reading and mathematics. Overall, the trajectories highlight that while foundational skills accumulate progressively across grades in both settings, urban children tend to reach combined proficiency earlier and at higher levels throughout much of the schooling cycle. These findings underscore the importance of strengthening early-grade learning conditions in rural areas to reduce persistent location-based disparities.

3.4 Contexts of Learning

3.4.1 Summary of context

Age distribution by grade

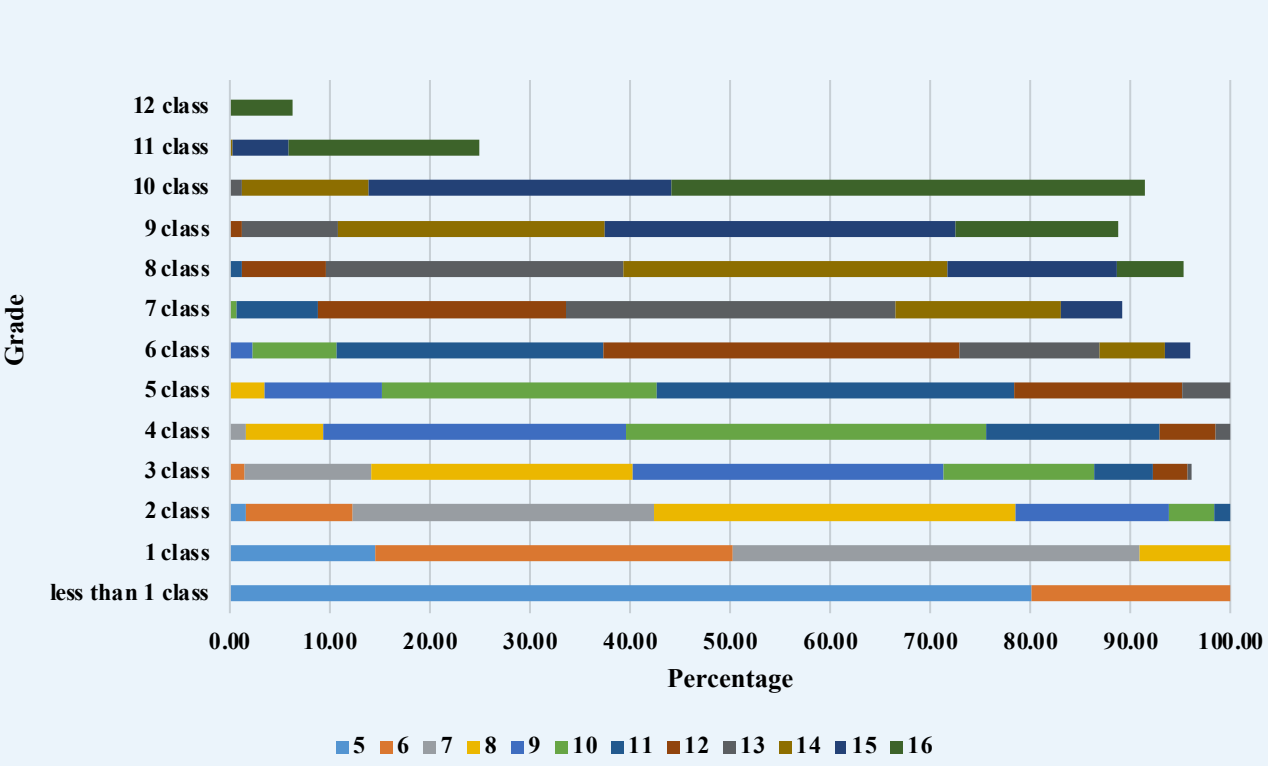


Figure 3.4.1: Age distribution by grade

Figure 3.4.1 presents the age distribution of children across grades, illustrating the relative share and number of children from different age groups within each grade. The stacked bar chart highlights both the extent of age heterogeneity within grades and the gradual concentration of ages as children advance through the education system.

In the lower grades, particularly below Grade 1 and Grade 1, there is substantial age dispersion. Below Grade 1, children aged 5 and 6 account for the largest shares (80.09 percent and 48 percent respectively), corresponding to approximately **276,387 five-year-olds** and **264,505 six-year-olds** (unweighted N = 193 and 183). However, older children aged 7 and 8 are also represented, reflecting delayed entry into schooling. Grade 1 similarly includes multiple age groups, with children aged 6 (35.66 percent; 196,522 children; N = 136) and 7 (40.72 percent; 211,112 children; N = 145) forming the largest shares, alongside younger and older children. This pattern underscores the prevalence of age-grade mismatch at the entry stage of primary education.

From Grades 2 to 4, age concentration begins to strengthen, though heterogeneity remains evident. In Grade 2, the largest shares are children aged 7 and 8 (30.15 percent and 35.99 percent, representing 156,332 and 211,109 children respectively). Grade 3 is dominated by ages 8 and 9 (26.10 percent and 31.09 percent), while Grade 4 shows strong concentration among ages 9 and 10 (30.29 percent and 35.98 percent,

corresponding to 189,728 and 238,151 children; N = 130 and 163). Despite this increasing alignment, younger and older children remain present within these grades, reflecting continued effects of late entry and grade repetition.

In the middle grades, particularly Grades 5 to 7, age distribution becomes more structured. For example, Grade 6 is largely composed of children aged 11 and 12 (26.58 percent and 35.63 percent, equivalent to 178,900 and 256,313 children; N = 123 and 174), while Grade 7 is dominated by ages 12 and 13 (24.81 percent and 32.82 percent). Although modal ages are clearer, meaningful proportions of children remain outside the expected age range, indicating that age-grade mismatch persists beyond the early grades.

In the upper grades, especially Grades 8 to 12, the distributions become increasingly concentrated among older age groups. Grade 9 is largely composed of children aged 14 and 15 (26.72 percent and 34.99 percent), while Grade 10 is strongly concentrated among ages 15 and 16 (30.28 percent and 47.29 percent, representing 158,332 and 113,045 children; N = 106 and 78). Grade 12 shows full concentration in the oldest age group (age 16), reflecting near-complete age alignment at the end of the schooling cycle.

The distribution of out-of-school children spans nearly all age groups from 5 to 16, with proportions ranging from approximately 2 to 5 percent across ages and a total of 245,931 children (unweighted N = 201). This indicates that exclusion from schooling occurs throughout childhood and adolescence rather than being concentrated at a single age.

Taken together, the figure reinforces two key patterns. First, substantial age heterogeneity characterizes the early and middle grades. Second, alignment between age and grade improves gradually in higher grades, particularly from lower secondary onwards. This visual evidence supports the importance of using both age-based and grade-based analyses to accurately interpret learning outcomes within a system where age-grade mismatch remains a persistent structural feature.

Age distribution of children in Grade 4

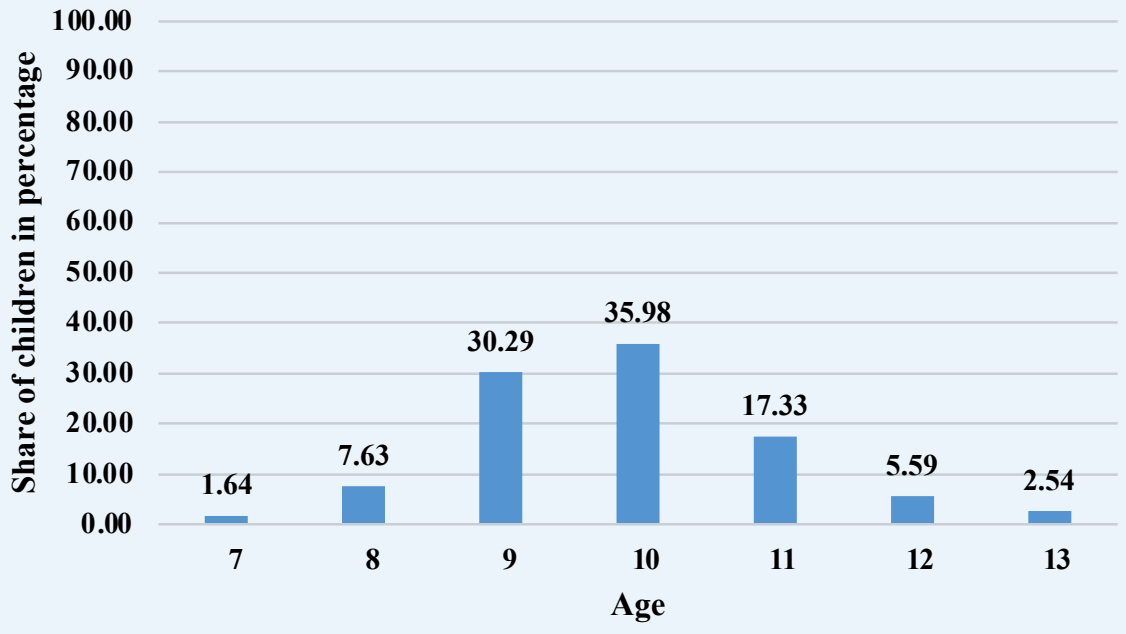


Figure 3.4.2: Age distribution of children in Grade 4

Figure 3.4.2 presents the age distribution of children enrolled in Grade 4, showing the share and number of children at each age within this grade. The graph highlights both the modal ages and the extent of age variation among Grade 4 students.

The distribution indicates that the majority of children in Grade 4 fall within the expected age range. Children aged **9 years (30.29 percent)** and **10 years (35.98 percent)** constitute the largest shares of the cohort, corresponding to approximately **189,728** and **238,151 children**, respectively (unweighted N = 130 and 163). Together, these two age groups account for over two-thirds of Grade 4 enrollment, suggesting that most children are progressing through the education system within broadly normative age expectations.

At the same time, the figure reveals notable age heterogeneity. A smaller share of children are younger than expected, including those aged **7 years (1.64 percent; 8,525 children; N = 6)** and **8 years (7.63 percent; 44,760 children; N = 32)**. Conversely, a meaningful proportion of children are older than the expected age for Grade 4. Children aged **11 years account for 17.33 percent** (116,622 children; N = 82), while **12-year-olds represent 5.59 percent** (40,195 children; N = 30), and **13-year-olds account for 2.54 percent** (17,419 children; N = 13).

Overall, while Grade 4 largely corresponds to the intended age group, a substantial minority of students are either younger or older than expected. This age diversity within Grade 4 underscores the importance of interpreting grade-based learning outcomes alongside age-based analyses, as children within the same grade may be at different developmental and learning stages due to variations in school entry age, repetition, or interrupted schooling.

Gender Distribution by Grade

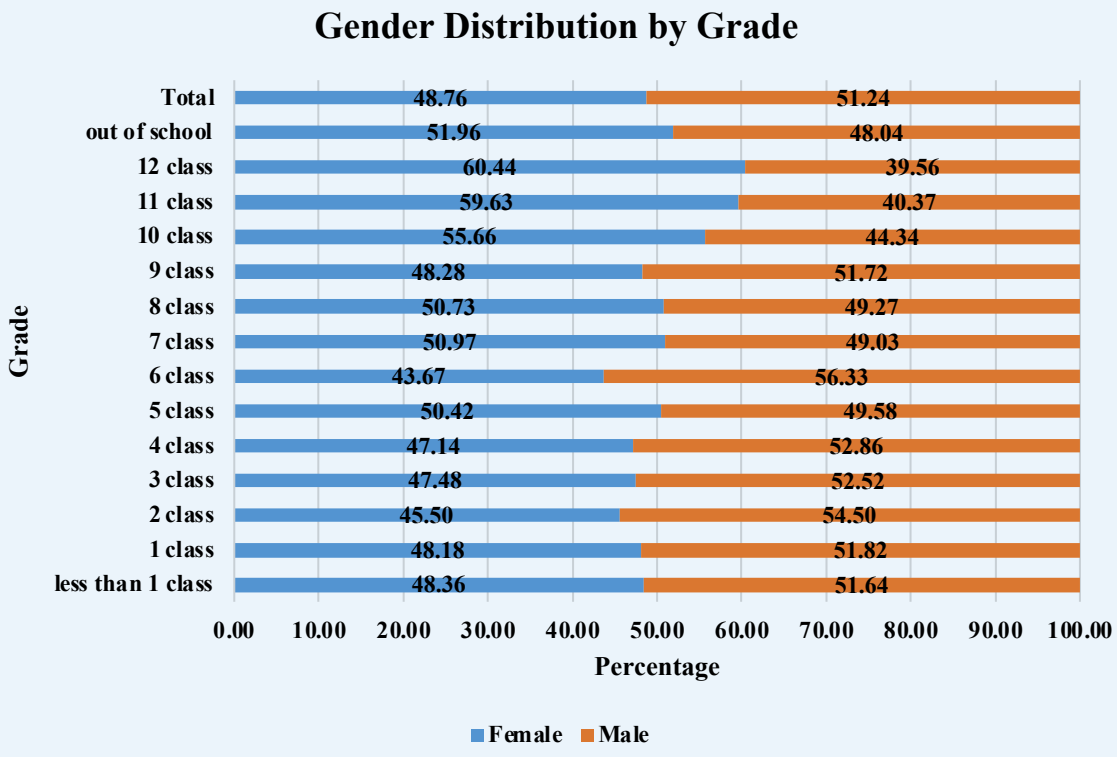


Figure 3.4.3: Gender distribution by grade

Figure 3.4.3 presents the gender distribution of children across grades, showing the proportion and number of female and male children within each grade, including out-of-school children and the overall sample. Overall, the gender composition of the sample is relatively balanced. Female children account for **48.76 percent** of all children (1,705,322 children; unweighted N = 2,291), while male children account for **51.24 percent** (2,039,739 children; unweighted N = 2,403).

In the lower grades, the distribution is broadly even, with a slight male majority in most grades. For example, in Grade 1, females constitute **48.18 percent** (21,921 children; N = 201) and males **51.82 percent** (48,678 children; N = 216). Similarly, in Grade 2, females represent **45.50 percent** (47,165 children; N = 181) compared to **54.50 percent** males (96,348 children; N = 218). Grade 4 also shows a modest male majority, with **47.14 percent female** (153,487 children; N = 215) and **52.86 percent male** (200,940 children; N = 241).

In the middle grades, gender distribution fluctuates but remains relatively balanced. Grade 5 shows near parity, with 50.42 percent female (235,614 children; N = 242) and 49.58 percent male (259,038 children; N = 236). Grade 6 shows a higher proportion of males (56.33 percent; 306,116 children; N = 255), while Grades 7 and 8 are again close to equal representation.

In the upper grades, a clearer shift toward female predominance is observed. In Grade 10, females account for **55.66 percent** (174,786 children; N = 136) compared to **44.34 percent males** (151,481 children; N = 106). This trend continues in Grades 11 and 12, where females represent **59.63 percent** (41,253 children; N = 31) and **60.44 percent** (9,006 children; N = 6), respectively.

Among out-of-school children, females account for **51.96 percent** (43,141 children; N = 101), while males represent **48.04 percent** (66,122 children; N = 96), indicating a slightly higher proportion of girls among children not enrolled.

Overall, while minor gender imbalances exist at specific grades, the system reflects broadly comparable participation of girls and boys across the schooling cycle. The shift toward higher female representation in the upper grades suggests differences in progression or retention patterns that merit further examination when interpreting learning outcomes by grade and gender.

Gender Distribution in Grade 4

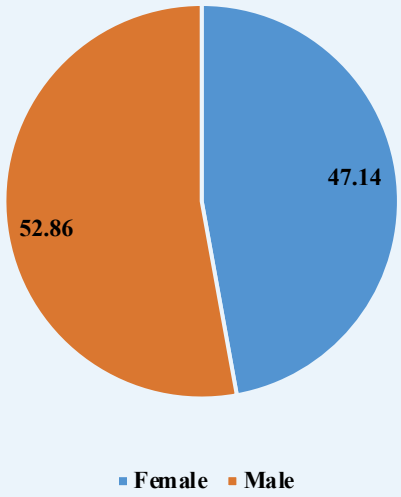


Figure 3.4.4: Gender distribution in Grade 4

Figure 3.4.4 presents the gender distribution of children enrolled in Grade 4. The pie chart illustrates both the percentage and number of female and male students within this grade.

Female children account for **47.14 percent** of Grade 4 enrollment, corresponding to approximately **153,487 children** (unweighted N = 215), while male children account for **52.86 percent**, representing **200,940 children** (unweighted N = 241).

The distribution shows a modest predominance of male students in Grade 4. However, the difference between female and male enrollment is limited in magnitude, indicating a broadly balanced gender composition at this grade level.

The relatively even distribution suggests that both girls and boys are participating in lower primary education at comparable rates by Grade 4. While a small male majority is observed, the gap does not indicate substantial gender-based exclusion at this stage. These findings provide important context for interpreting Grade 4 learning outcomes, as differences in achievement are unlikely to be driven by large disparities in gender representation within the grade.

3.4.2 School enrolment

Table 3.4.5: School Enrollment Rates Among Children

School Enrollment	Percentage
Currently not Enrolled	3.65
Currently Enrolled	96.35
Total	100.00

Table 3.4.5 presents the school enrollment status of children at the time of the survey, distinguishing between those who are currently enrolled in school and those who are not.

Overall, the vast majority of children are enrolled in school. An estimated **96.35 percent** of children are currently enrolled, representing approximately **6,491,743 children** (unweighted N = 4,497). In contrast, **3.65 percent** of children are not enrolled in school, corresponding to **245,931 children** (unweighted N = 197). The total weighted population represented in the assessment is **6,737,675 children** (unweighted N = 4,694).

The high enrollment rate indicates that access to schooling is broadly widespread among the assessed population. However, the presence of a small but meaningful proportion of children who are not enrolled underscores the importance of complementing enrollment-based indicators with measures of learning outcomes. As demonstrated elsewhere in the report, enrollment alone does not ensure the acquisition of foundational skills. These findings reinforce the need to assess both participation and learning when evaluating educational progress and system performance.

Table 3.4.6: Enrolment Status by School Type

Type of School	Percent
Government	51.34
Private	44.55
Other	0.46
Outside School	3.65
Total	100.00

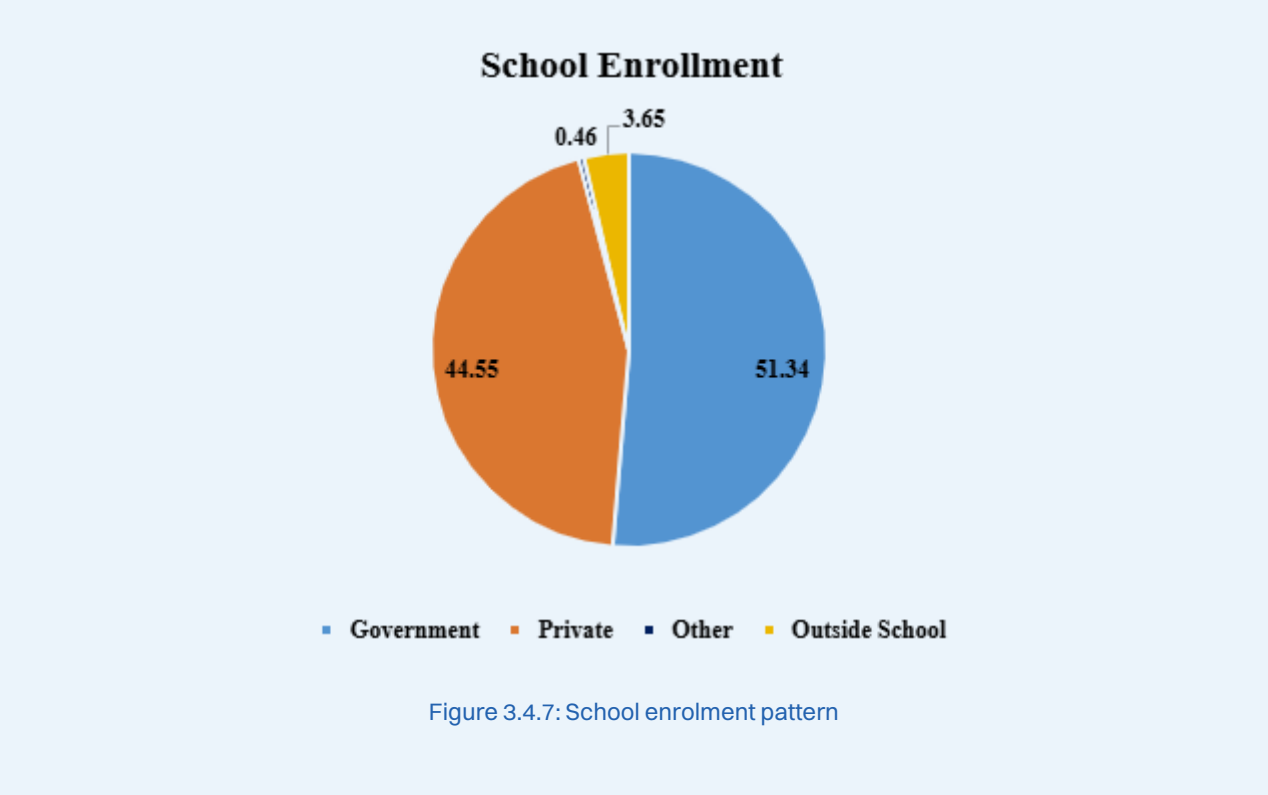


Figure 3.4.7: School enrolment pattern

Figure 3.4.7 presents the distribution of children by enrollment type, distinguishing between government schools, private schools, other types of educational institutions, and children who are not enrolled in school.

More than half of the children in the sample are enrolled in government schools, which account for 51.34 percent i.e. 2445 number of students out of total enrollment. Private schools also represent a substantial share, with 44.55 percent of children attending private institutions. A very small proportion of children (0.46 percent) are enrolled in other types of schools, reflecting limited participation in alternative or non-formal institutional arrangements. In addition, 3.65 percent of children are currently outside the school system.

The distribution highlights the central role of both government and private schools in providing education, with government schools serving a slight majority of students. The presence of children outside school, although relatively small, remains important for understanding learning outcomes at the population level and reinforces the value of household-based assessments that capture both enrolled and non-enrolled children.

School enrollment patterns across age by gender – Government schools

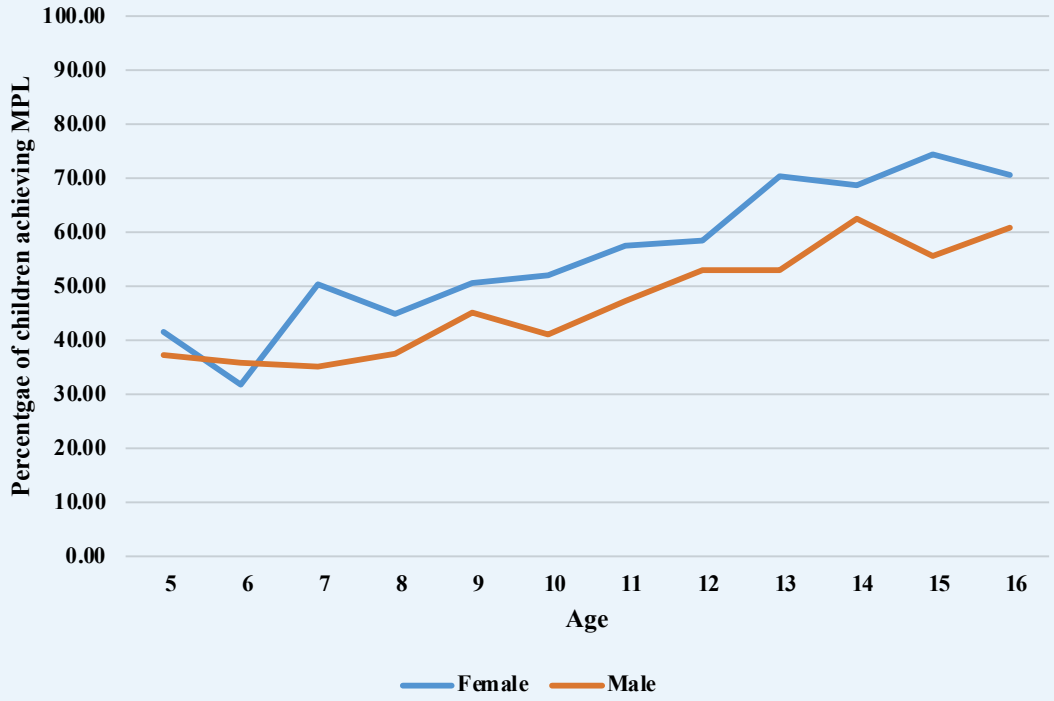


Figure 3.4.8: School enrollment patterns across age by gender – Government schools

Figure 3.4.8 presents the age-wise distribution of children enrolled in government schools, disaggregated by gender. The table reports the weighted percentage and number of children enrolled in government schools at each age, along with corresponding unweighted counts.

Overall, **55.89 percent of female children** (1,835,999 children; unweighted N = 1,300) and **47.02 percent of male children** (1,623,163 children; unweighted N = 1,145) are enrolled in government schools across ages 5 to 16, representing a total of **3,459,162 children** (unweighted N = 2,445). This indicates a higher overall reliance on government schooling among girls compared to boys.

At younger ages, government school enrollment is relatively lower for both genders. At age 5, **41.70 percent of girls** (70,544 children; N = 50) and **37.45 percent of boys** (65,881 children; N = 48) are enrolled in government schools. Enrollment declines at age 6 for girls (31.97 percent; 97,910 children; N = 71) while remaining slightly higher for boys (35.96 percent; 88,012 children; N = 63).

From age 7 onward, government school enrollment increases steadily. By age 9, **50.72 percent of girls** (155,911 children; N = 111) and **45.15 percent of boys** (144,075 children; N = 100) are enrolled in government schools. At age 10, enrollment rises to **51.98 percent for girls** (173,490 children; N = 124) and **41.05 percent for boys** (134,744 children; N = 96).

The upward trend continues through early adolescence. At age 13, **70.36 percent of girls** (241,354 children; N = 169) are enrolled in government schools compared to **52.93 percent of boys** (181,722 children; N = 129). At age 15, enrollment peaks at **74.33 percent among girls** (203,175 children; N = 141), while **55.57 percent of boys** (138,632 children; N = 97) are enrolled in government institutions.

By age 16, enrollment remains high for both genders, with **70.66 percent of girls** (88,793 children; N = 64)

and **60.82 percent of boys** (68,963 children; N = 47) attending government schools.

Overall, the age-wise distribution indicates a gradual shift toward government schooling as children grow older, with a consistently higher proportion of female children enrolled in government schools compared to male children from middle childhood onward. These patterns provide important context for interpreting learning outcomes by school type and gender across the schooling cycle.

School enrollment patterns across age by gender – Private schools

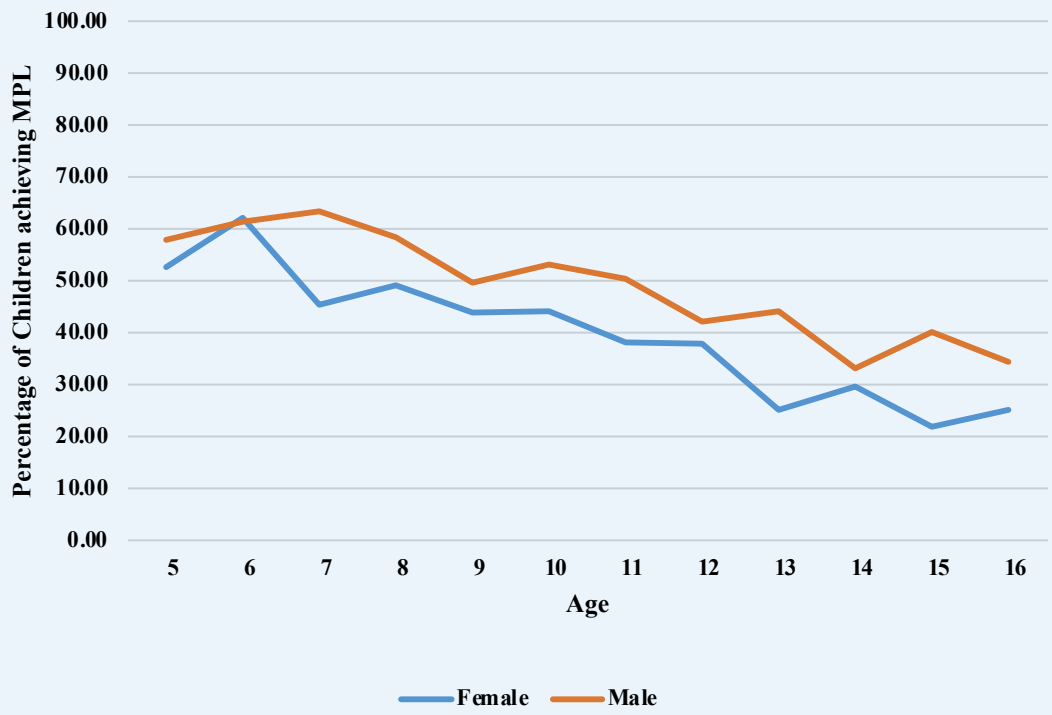


Figure 3.4.9: School enrollment patterns across age by gender – Private schools

Figure 3.4.9 illustrates age-wise enrollment patterns in private schools for children aged 5 to 16 years, disaggregated by gender. The table presents weighted percentages and numbers, along with corresponding unweighted counts.

Overall, **44.55 percent of children** are enrolled in private schools across ages 5 to 16, representing approximately **3,001,892 children** (unweighted N = 2,032). Enrollment is higher among boys (**49.11 percent; 1,695,610 children; N = 1,152**) compared to girls (**39.76 percent; 1,306,282 children; N = 880**).

At younger ages, private school enrollment is relatively high for both genders. At age 5, **52.70 percent of girls** (89,161 children; N = 61) and **57.88 percent of boys** (101,814 children; N = 71) are enrolled in private institutions. Enrollment remains high at age 6, with **62.21 percent of girls** (190,535 children; N = 128) and **61.47 percent of boys** (150,470 children; N = 103) attending private schools. This indicates strong reliance on private schooling in the early years.

From age 7 onward, private school enrollment begins to decline. At age 7, enrollment stands at **45.38 percent among girls** (110,510 children; N = 74) and **63.40 percent among boys** (174,336 children; N = 118).

By age 9, participation declines to **43.87 percent for girls** (134,828 children; N = 92) and **49.79 percent for boys** (158,861 children; N = 108).

The decline becomes more pronounced in early adolescence. At age 11, **38.08 percent of girls** (113,285 children; N = 76) and **50.31 percent of boys** (188,900 children; N = 127) remain in private schools. By age 13, enrollment falls further to **25.14 percent for girls** (86,235 children; N = 58) and **44.15 percent for boys** (151,574 children; N = 102).

In later ages, private school enrollment stabilizes at lower levels. Among girls, participation ranges between **21.86 percent and 29.64 percent** from ages 14 to 16, while among boys it remains higher, ranging between **33.10 percent and 40.10 percent**. By age 16, **25.08 percent of girls** (31,523 children; N = 21) and **34.32 percent of boys** (38,918 children; N = 25) are enrolled in private schools.

Overall, the trajectory highlights a clear age-related shift away from private schooling for both genders, with a sharper and earlier decline observed among female children. Boys consistently exhibit higher participation in private schooling from middle childhood onward. These patterns complement the government school enrollment findings and provide important context for interpreting learning outcomes by school type, age, and gender across the schooling cycle.

3.4.3 Household characteristics

Table 3.4.10 Condition of Roof

Condition of Roof	No roof	Finished roof	Natural or rudimentary roof
Percent	7.70	77.77	14.52
Weighted number	513,114	5,180,362	967,365
Unweighted number	326	2,916	578

Table 3.4.11 Condition of Outer Walls

	No wall	Finished wall	Natural or rudimentary wall
Total	12.42	66.53	21.05
Weighted number	827,601	4,431,156	1,402,084
Unweighted number	517	2,488	815

Table 3.4.12 Source of Lightings

	Source of lighting regularly used in the household				
	Electricity	Solar	Paraffin	Other	Total
Percentage	97.06	2.56	0.07	0.31	100.00
Weighted number	6,464,954	170,528	4,527	20,832	6,660,841
Unweighted number	3,699	105	3	13	3,820

Table 3.4.13 Source of drinking water

	Source of drinking water used regularly						
	Piped water	Handpump/ tubewell	Borehole	well	river/stream/ pond	Buy water	other
Percentage	61.57	29.68	0.83	3.70	0.58	2.97	0.67
Weighted Number	4,101,016	1,977,016	55,352	246,653	38,565	197,934	44,306
Unweighted number	2255	1244	33	142	21	101	24

Table 3.4.14 Percentage households with selected characteristics.

	Electricity Access	Toilet	Television	Radio	Four Wheeler	Two Wheeler	Bicycle	Mobile Phone	Smart Phone
Percentage	99.42	95.39	48.01	15.88	4.78	35.68	50.94	97.22	95.86
Weighted Number	6,427,484	6,354,077	3,197,697	1,057,976	318,193	2,376,327	3,393,223	6,475,835	6,207,832
Unweighted number	3677	3621	1783	592	175	1342	1993	3708	3540.00

Table 3.4.15 Percentage households with selected educational context variables.

	At least one member (other than the Child's parents who has completed high school	Access to children book	Additional reading materials	Access to computer/ laptop/tablet	Text book for current grade	take any paid tuition class?	Receives help for School HW in HH
Percentage	30.24	21.33	21.01	21.08	98.11	24.68	52.39
Weighted Number	2,014,326	1,420,651	1,399,282	1,404,013	6,368,905	1,662,897	3,400,715
Unweighted number	1124	785	779	761	4409	1157	2323

Table 3.4.16 Reporting on the frequency of storytelling to children in households

How often does someone in the household read or tell stories to child?			
	Percentage	Weighted no.	Unweighted no.
Never	77.71	5,235,968	3,653
Lessthan once a week	15.04	1,013,069	703
1-2 days per week	5.23	352,482	245
3-4 days per week	1.13	75,958	51
3-4 days per week	0.89	60,198	42
Total	100.00	6,737,675	4,694

Tables 3.4.10 to 3.4.16 provide contextual information on household living conditions, access to basic services, asset ownership, educational resources, and home learning practices among children included in the assessment. Together, these indicators describe the broader environment in which children grow and learn.

Overall, housing conditions appear relatively stable for most households. **77.77 percent** of households report having a finished roof (5,180,362 households; unweighted N = 2,916), while **14.52 percent** rely on natural or rudimentary roofing materials (967,365 households; N = 578), and **7.70 percent** report having no roof (513,114 households; N = 326). With respect to outer walls, **66.53 percent** of households live in dwellings with finished walls (4,431,156 households; N = 2,488), while **21.05 percent** rely on natural or rudimentary wall materials (1,402,084 households; N = 815), and **12.42 percent** report having no proper walls (827,601 households; N = 517). These patterns indicate that while the majority of children live in structurally adequate housing, a non-negligible share reside in more vulnerable conditions.

Access to basic utilities is high across households. Nearly all households report access to electricity (**99.42 percent; 6,427,484 households; N = 3,677**), and electricity is the primary source of lighting (**97.06 percent; 6,464,954 households; N = 3,699**). Smaller proportions rely on solar lighting (**2.56 percent; 170,528 households; N = 105**) or other sources. Access to sanitation is also widespread, with 95.39 percent of households reporting the presence of a toilet (6,354,077 households; N = 3,621). Drinking water is primarily obtained from piped sources (**61.57 percent; 4,101,016 households; N = 2,255**) and handpumps or tubewells (**29.68 percent; 1,977,016 households; N = 1,244**), while smaller shares rely on wells, purchased water, boreholes, surface water sources, or other alternatives. These indicators suggest generally favorable access to essential services, alongside diversity in water sources.

Ownership of household assets and media devices reflects variation in living standards. While mobile phone ownership is nearly universal (**97.22 percent; 6,475,835 households; N = 3,708**) and smartphone ownership is similarly high (**95.86 percent; 6,207,832 households; N = 3,540**), access to televisions (**48.01 percent; 3,197,697 households; N = 1,783**), radios (**15.88 percent; 1,057,976 households; N = 592**), two-wheelers (**35.68 percent; 2,376,327 households; N = 1,342**), bicycles (**50.94 percent; 3,393,223 households; N = 1,993**), and four-wheelers (**4.78 percent; 318,193 households; N = 175**) varies substantially. These differences reflect disparities in household wealth and access to information and media.

Indicators related to educational resources within the household suggest more constrained learning environments. While nearly all children report having textbooks for their current grade (**98.11 percent; 6,368,905 households; N = 4,409**), access to supplementary learning materials is limited. Only **21.33 percent** of households report access to children's books (1,420,651 households; N = 785), **21.01 percent** report additional reading materials (1,399,282 households; N = 779), and **21.08 percent** report access to a computer, laptop, or tablet (1,404,013 households; N = 761). Approximately **30.24 percent** of households (2,014,326 households; N = 1,124) report having at least one non-parent household member who has completed high school. About **24.68 percent** of children receive paid tuition (1,662,897 households; N = 1,157), while **52.39 percent** receive help with school homework from someone in the household (3,400,715 households; N = 2,323).

Home literacy practices, as reflected in storytelling or reading activities, appear limited. **77.71 percent** of households (5,235,968 households; N = 3,653) report never engaging in such activities. A further **15.04 percent** (1,013,069 households; N = 703) report doing so less than once a week.

Only small proportions report reading or storytelling one to two days per week (5.23 percent; 352,482 households; N = 245) or more frequently. This pattern indicates limited opportunities for early language exposure and informal literacy development within the home.

Taken together, these household characteristics indicate that while access to electricity, sanitation, textbooks, and mobile connectivity is widespread, access to enriched learning resources and consistent home literacy practices remains uneven. These contextual factors are important for interpreting learning outcomes, as they shape children's exposure to language, literacy, and numeracy beyond the classroom and contribute to variation in learning achievement observed in the assessment.

3.5 Relationship between Contextual Information and Learning Outcomes

In this section, we will focus on how some of the contextual information we analyzed in the previous section can help explain learning outcomes in the countries in this study. An important caveat in this analysis is that they are descriptive. Even if they point to suggestive relationships between relevant contextual variables and minimum proficiency achievement, we cannot interpret these relationships as being causal.

Learning outcomes by enrollment status

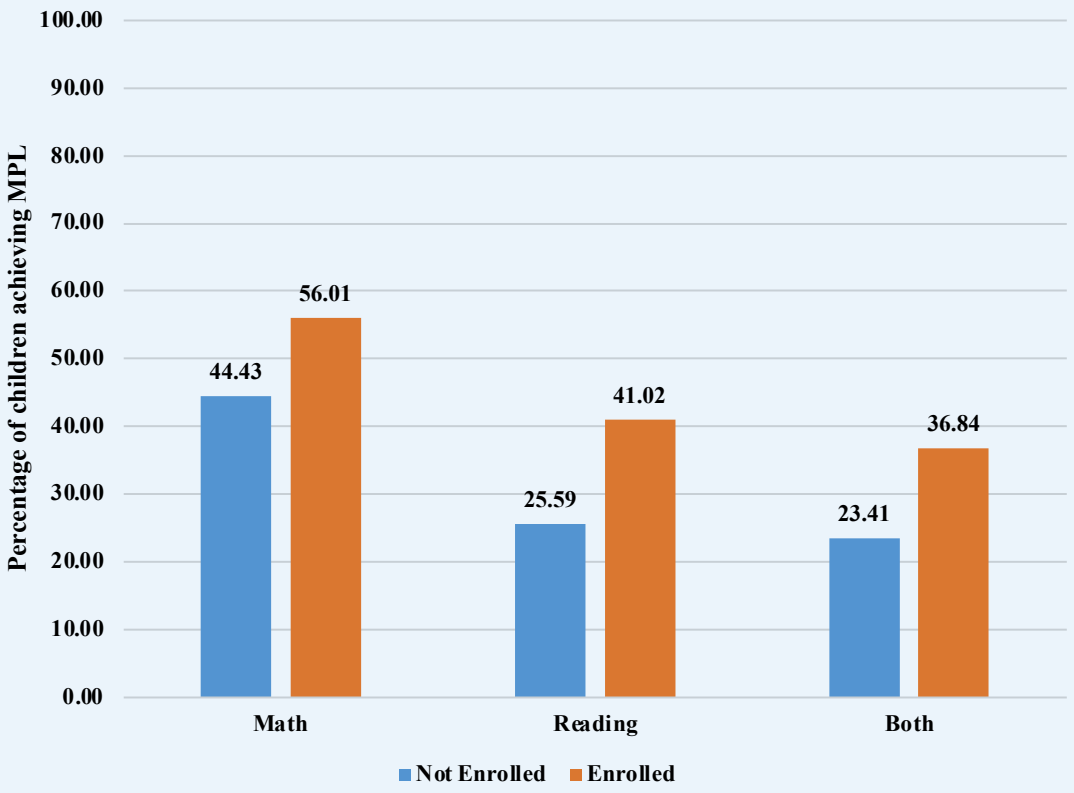


Figure 3.5.1: MPL achievement in Math, Reading, and Both by enrolment status.

Figure 3.5.1 presents the percentage and number of children achieving the Minimum Proficiency Levels (MPL) in mathematics, reading, and in both domains, disaggregated by enrollment status.
Children who are currently enrolled in school demonstrate higher levels of proficiency across all domains compared to those who are not enrolled. Among enrolled children, **56.01 percent** achieved MPL in mathematics, corresponding to approximately **3,635,799 children** (unweighted N = 2,486). In reading, **41.02 percent** achieved MPL, representing **2,662,851 children** (unweighted N = 1,803). When proficiency in both mathematics and reading is considered simultaneously, **36.84 percent** of enrolled children met the

minimum proficiency benchmark, equivalent to **2,391,305 children** (unweighted N = 1,620).

In comparison, among children who are not enrolled in school, **44.43 percent** achieved MPL in mathematics (109,263 children; unweighted N = 88), **25.59 percent** achieved MPL in reading (62,944 children; unweighted N = 49), and **23.41 percent** achieved MPL in both domains (57,584 children; unweighted N = 45).

While enrolled children consistently outperform non-enrolled children, the findings indicate that a substantial proportion of enrolled learners do not reach minimum proficiency, particularly in reading and in combined achievement. At the same time, the presence of measurable proficiency among non-enrolled children suggests that learning can occur outside formal schooling environments. Overall, these results highlight the importance of both school participation and learning quality, reinforcing the need to focus not only on access but also on strengthening instructional effectiveness to improve foundational learning outcomes.

Learning outcomes by gender (Overall)

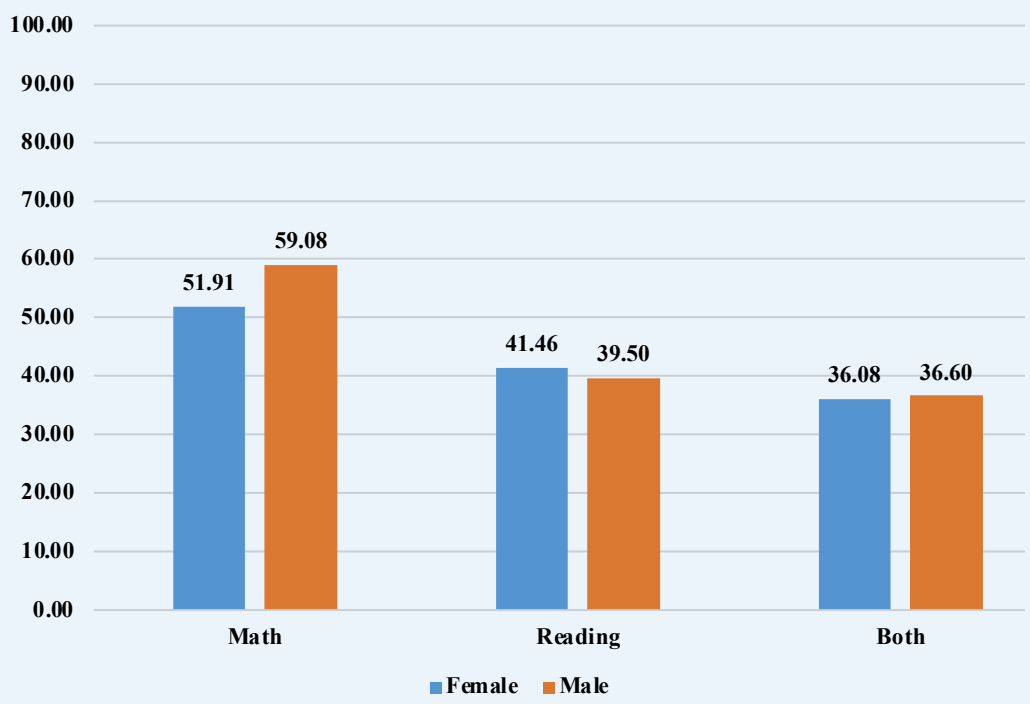


Figure 3.5.2: MPL achievement in Math, Reading, and Both by gender.

Figure 3.5.2 presents the percentage and number of children achieving the Minimum Proficiency Levels (MPL) in mathematics, reading, and in both domains, disaggregated by gender.

The results indicate moderate gender differences in subject-specific achievement. In mathematics, **59.08 percent of male children** achieved MPL, corresponding to approximately **2,039,739 children** (unweighted N = 1,405), compared to **51.91 percent of female children**, equivalent to **1,705,322 children** (unweighted N = 1,169).

In reading, female children demonstrate a slight advantage. **41.46 percent of girls** achieved MPL, representing **1,362,076 children** (unweighted N = 924), compared to **39.50 percent of boys**, or **1,363,718 children** (unweighted N = 928).

When proficiency in both mathematics and reading is considered simultaneously, achievement levels are very similar across genders. **36.08 percent of female children** achieved combined proficiency (1,185,462 children; unweighted N = 805), compared to **36.60 percent of male children** (1,263,427 children; unweighted N = 860).

Overall, the findings indicate no substantial gender disparity in combined foundational proficiency. While boys perform relatively better in mathematics and girls show a modest advantage in reading, the similarity in combined proficiency suggests that foundational learning challenges affect both genders in comparable ways across the system.

Learning outcomes by rural and urban municipalities

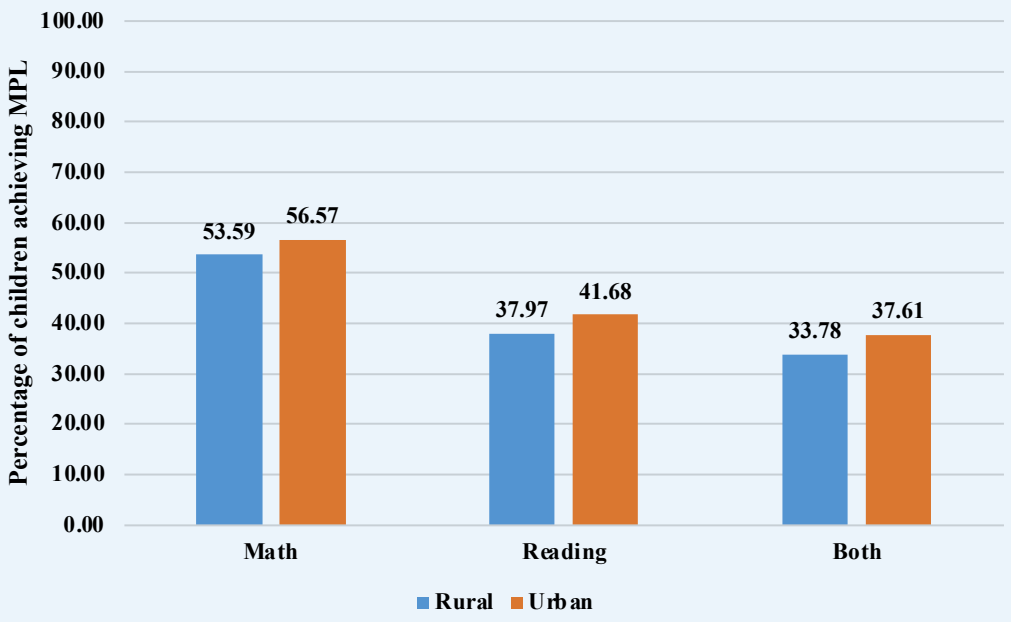


Figure 3.5.3: MPL achievement in Math, Reading, and Both by rural urban location.

Figure 3.5.3 presents the percentage and number of children achieving the Minimum Proficiency Levels (MPL) in mathematics, reading, and in both domains, disaggregated by rural and urban municipalities.

Children residing in urban areas demonstrate higher levels of proficiency across all domains compared to those in rural areas. In urban municipalities, **56.57 percent** of children achieved MPL in mathematics, representing approximately **2,551,588 children** (unweighted N = 1,719). In reading, **41.68 percent** achieved MPL, equivalent to **1,880,146 children** (unweighted N = 1,254). When proficiency in both domains is considered, **37.61 percent** of urban children met the minimum standards, corresponding to **1,696,547 children** (unweighted N = 1,132).

In rural municipalities, 53.59 percent of children achieved MPL in mathematics, representing 1,193,473 children (unweighted N = 855). Reading proficiency stands at 37.97 percent, equivalent to 845,648 children (unweighted N = 598). Combined proficiency in both mathematics and reading is observed among 33.78 percent of rural children, corresponding to 752,342 children (unweighted N = 533).

Although the urban-rural differences are moderate in magnitude, the pattern consistently favors urban children, particularly in reading and combined proficiency. The gap of nearly four percentage points in combined achievement reflects persistent location-based disparities in foundational learning outcomes and underscores the importance of strengthening instructional quality and early literacy support in rural areas

Learning Outcomes and home language

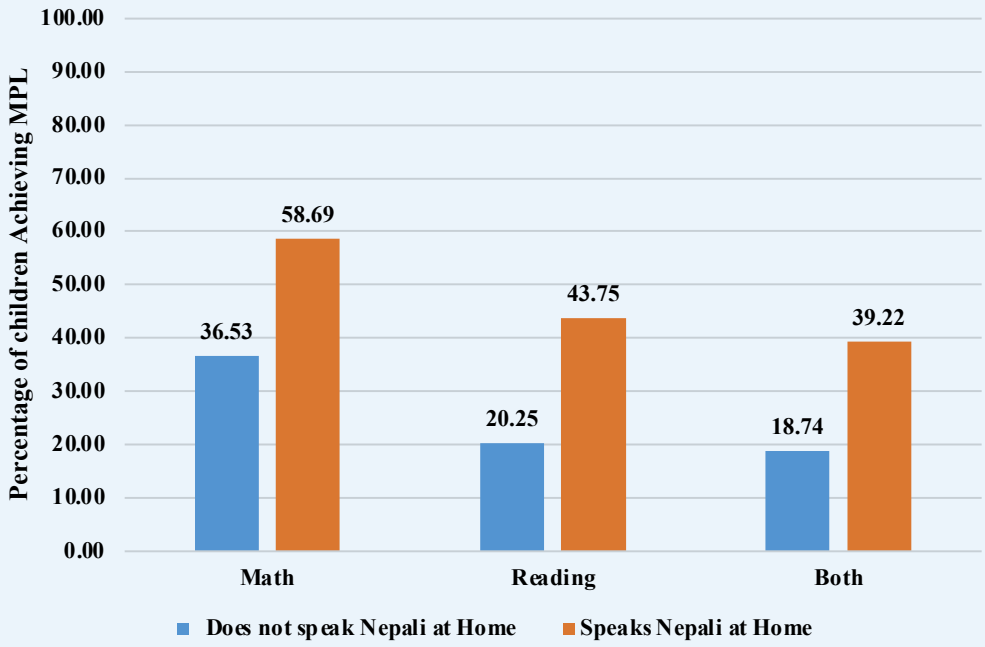


Figure 3.5.4: MPL achievement in Math, Reading, and Both by home language-test language correspondence.

Figure 3.5.4 presents the percentage of children achieving the Minimum Proficiency Levels (MPL) in mathematics, reading, and in both domains, disaggregated by whether Nepali is spoken at home.

Children who speak Nepali at home demonstrate substantially higher proficiency across all domains compared to children who do not speak Nepali at home. Among Nepali-speaking children, 58.69 percent achieved MPL in mathematics and 43.75 percent achieved MPL in reading, while 39.22 percent met the minimum proficiency levels in both subjects. In contrast, among children who do not speak Nepali at home, 36.53 percent achieved MPL in mathematics, 20.25 percent in reading, and 18.74 percent in both domains.

The pronounced differences, particularly in reading, indicate a strong association between home language and learning outcomes. These results highlight that children from non-Nepali-speaking households face greater challenges in achieving minimum proficiency, underscoring the importance of language-responsive instruction and support for multilingual learners.

3.6 Summary of Key Findings

The ICAN ICARe assessment provides an internationally comparable overview of foundational learning outcomes in Nepal, aligned with the global Minimum Proficiency Levels (MPLs) under SDG Indicator 4.1.1(a). The findings highlight clear differences between reading and numeracy outcomes, persistent gaps across population subgroups, and a consistent pattern in which learning outcomes lag behind high levels of school participation.

Patterns across reading and numeracy

Across both age-based and grade-based reporting, achievement in mathematics is consistently higher than in reading. Among children aged 10 years, 60.78 percent achieve the MPL in mathematics, compared to 40.29 percent in reading, while 34.35 percent achieve the MPL in both domains. A similar pattern is observed among children in Grade 4, where 54.08 percent achieve MPL in mathematics, 35.13 percent in reading, and 28.40 percent in both. These results indicate that foundational numeracy skills are more widely attained than foundational literacy skills, and that combined proficiency in reading and mathematics remains limited at both age- and grade-appropriate stages.

Timing and pace of learning

Learning trajectories by age and grade show that learning outcomes improve steadily as children grow older and progress through the education system. Proficiency levels increase across successive ages and grades in both reading and mathematics, indicating cumulative learning over time. However, the trajectories also show that minimum proficiency is reached gradually and often later than expected, particularly in reading and in combined proficiency. At younger ages and in early grades, very small proportions of children meet the MPL in both domains, and gains accelerate only in later grades. This pattern reflects a slow pace of foundational skill acquisition in the early years rather than a lack of learning altogether.

Consistent gaps across subgroups

Disaggregated results reveal systematic differences in learning outcomes across key subgroups. Enrollment is associated with higher proficiency, yet learning gaps remain substantial even among enrolled children: 36.84 percent of enrolled children achieve MPL in both domains, compared to 23.41 percent of children who are not enrolled. Home language is strongly associated with learning outcomes, particularly in reading. Children who do not speak Nepali at home achieve markedly lower proficiency, with only 18.74 percent reaching MPL in both domains, compared to 39.22 percent among children who speak Nepali at home. Urban children demonstrate higher proficiency than rural children across reading, mathematics, and combined outcomes, though the differences are modest in magnitude. Gender differences in combined proficiency are small overall, with broadly similar levels for girls and boys, despite subject-specific differences in reading and mathematics.

Early grades as a critical stage

The findings indicate that learning gaps emerge early and persist as children progress through school. By the end of lower primary education, fewer than one-third of children achieve minimum proficiency in both reading and mathematics. Learning gains in the early grades are modest, and children who fall behind at these stages tend to remain below minimum proficiency in subsequent grades. This pattern underscores the importance of early stages of schooling in shaping longer-term learning trajectories.

Household learning context

Household characteristics provide important context for interpreting learning outcomes. While access to basic infrastructure such as electricity, sanitation, and textbooks is high, access to supplementary learning resources and home-based literacy practices is limited. Relatively small proportions of households report access to children's books, additional reading materials, or digital learning devices, and most households report low frequency of activities such as storytelling. These conditions suggest that opportunities for learning outside school are constrained for many children.

Access–learning disconnects

School participation is high, with 96.37 percent of children reported as currently enrolled. However, high enrollment does not translate into widespread attainment of minimum proficiency. The coexistence of near-universal enrollment with low proficiency at expected ages and grades, alongside measurable learning among some out-of-school children, reinforces a clear disconnect between access to schooling and learning outcomes. The ICAN ICARe findings thus emphasize the importance of focusing not only on participation, but also on the pace and quality of learning, particularly in the early years.

4

Implications and Way Forward

4.1 What the Data Reveals

The household-based ICAN ICARe data indicate that learning trajectories of children (5-16 years) by age and grade display a consistent upward pattern, suggesting cumulative learning over time. However, the pace of learning is slow, and minimum proficiency is reached by many children only at later ages and higher grades than normatively expected. This pattern is observed in both age-based reporting (at age 10) and grade-based reporting (at Grade 4), pointing to a system-wide challenge related to the timing of learning rather than its complete absence.

Across all analyses, reading outcomes are consistently weaker than mathematics outcomes. A smaller proportion of children achieve minimum proficiency in reading, and combined proficiency in both domains remains limited as a result. This gap is evident across ages, grades, gender, enrollment status, location, and home language, indicating that foundational literacy is a central constraint within the learning system. While numeracy skills improve steadily, weaker literacy limits children's ability to achieve proficiency across learning domains.

The age- and grade-based learning trajectories presented are hypothetical profiles derived from cross-sectional data and are interpreted diagnostically rather than as individual learning pathways. The gradual slope of these trajectories, particularly in reading, and the late convergence toward minimum proficiency suggest that early learning gaps are not effectively closed as children advance through the system. As highlighted in RISE research, this pattern reflects limited system coherence, where curriculum progression and instructional practices move ahead of students' actual learning levels.

Enrollment in school is associated with higher learning outcomes, underscoring the importance of school participation. However, a substantial proportion of enrolled children do not achieve minimum proficiency, especially in reading, indicating that enrollment alone does not guarantee learning. At the same time, the presence of measurable proficiency among some non-enrolled children points to learning opportunities outside formal schooling, including within households and communities, with particularly notable performance in numeracy.

Differences in learning outcomes by gender and urban–rural location are present but relatively modest. Boys perform slightly better in mathematics and girls slightly better in reading, while combined proficiency is similar across genders. Urban children consistently demonstrate somewhat higher proficiency than rural children, particularly in reading and combined outcomes, suggesting persistent but moderate location-based disparities.

In contrast, home language is strongly associated with learning outcomes. Children who do not speak Nepali at home are significantly less likely to achieve minimum proficiency, especially in reading. This highlights language-related barriers in early learning and underscores the importance of language-responsive instruction and support for multilingual learners.

Overall, the data suggest that Nepal's education system supports additive learning, with skills accumulating over time. However, the slow pace of learning and the late attainment of minimum proficiency indicate that foundational skills are not consistently secured in the early years, limiting children's ability to benefit fully from later instruction. Strengthening early literacy, improving system coherence, addressing language-related barriers, and leveraging informal and community-based learning opportunities alongside formal schooling emerge as central priorities for improving learning outcomes.

4.2 The Contribution of ICAN ICARe as Tool

This cycle represents the maturation of PAL Network's second-generation tools, ICAN and ICARe, which extend and update the longstanding CLA model pioneered across the network. These tools retain the core principles that have defined citizen-led assessments for nearly two decades: household-based administration, one-on-one engagement with each child, and a commitment to visibility, inclusion, and simplicity. At the same time, they incorporate major advances in measurement design, language adaptation, comparability, and the alignment of proficiency standards with global frameworks.

The 2025 cycle demonstrates what the second generation of CLA tools was designed to achieve:

- the ability to generate internationally comparable data in low-cost, community-rooted ways
- the technical rigor required for reporting against SDG 4.1.1(a)
- the inclusion of out-of-school and hard-to-reach children
- the capacity for multilingual adaptation across diverse contexts
- the integration of household contextual factors that shape learning

This cycle marks a milestone for Galli Galli team as the PAL Network family. It illustrates how a shared technical standard, implemented across countries with very different education systems, can still remain locally grounded and responsive. It also confirms that community-driven assessment models and Citizen Generated Data (CGD) continue to provide meaningful insight in a world where learning inequalities are increasingly driven by factors outside the classroom.

4.3 Cost-Effectiveness Considerations

One of the persistent strengths of the CLA model has been its cost-effectiveness. This remains true in the ICAN ICARe cycle, where large-scale household implementation was achieved with modest investment relative to comparable learning assessments. The model leverages:

- local enumerator teams rather than high-cost specialist staffing
- simplified, paper-based tools that maintain rigor while reducing printing costs
- community mobilization approaches that reduce overheads
- open-source digital platforms for data capture
- a tiered cascade training approach that distributes capacity rather than centralizing it.

4.4 Implications for Policy, Programmes, and Collective Action

The ICAN ICARe large-scale household survey provides timely, policy-relevant evidence on foundational learning that complements administrative data and school-based examinations/assessments. By capturing learning outcomes for both enrolled and out-of-school children, the survey supports a more inclusive understanding of system performance and enables policy engagement focused on learning outcomes rather than participation alone.

The evidence on delayed attainment of minimum proficiency, particularly in reading, can inform national education strategies by highlighting the importance of early foundational learning and the timing of skill acquisition. Age- and grade-based MPL reporting allows policymakers to identify critical points of learning delay and to prioritize interventions in the early primary years. The strong association between home language and learning outcomes further supports the integration of language-responsive approaches into early-grade policy and programme design.

The alignment of ICAN ICARe with SDG Indicator 4.1.1(a) enables its use as a complementary data source for national and international reporting. Weighted, population-based estimates provide credible evidence for tracking progress toward minimum proficiency, particularly where administrative systems have limited coverage of learning outcomes. The inclusion of out-of-school children strengthens equity-focused reporting and helps identify groups at risk of being left behind.
Disaggregated results by age, grade, enrollment status, gender, location, and language background can be used by government and development partners to design and target programmes more effectively. The findings support interventions that strengthen early literacy, reinforce numeracy foundations, and address learning barriers related to language and geography. Evidence of learning among some non-enrolled children also points to the potential role of community- and household-based learning initiatives.

The household-based and Citizen Generated Data (CGD) nature of ICAN ICARe makes the data particularly useful for dialogue between government institutions and civil society organizations. Governments can use MPL-aligned findings for planning, monitoring, and evaluation, while civil society actors can apply the evidence to programme implementation, community engagement, and advocacy. A shared evidence base supports coordinated action around foundational learning goals.
The cross-sectional learning trajectories presented in this report illustrate patterns of learning progression across ages and grades. While not intended to represent individual learning pathways, repeated survey cycles may allow comparison of these patterns over time, providing contextual information to inform discussions on curriculum implementation, instructional support, and the timing of learning attainment.

4.5 Conclusion

This report has presented the findings of the ICAN ICARe assessment in Nepal, offering an evidence-based and internationally comparable view of foundational learning outcomes in reading and mathematics. By aligning assessment results with the global Minimum Proficiency Levels under SDG Indicator 4.1.1(a), and by adopting both age-based and grade-based reporting approaches, the study provides a comprehensive picture of learning achievement across diverse schooling pathways and social contexts. Learning trajectories of the Nepali children (5-16 years) by age and grade show steady improvement in both reading and mathematics, reflecting cumulative learning over time. This upward trend suggests that learning opportunities, whether within or outside formal schooling, do contribute to skill acquisition across childhood. At the same time, the findings highlight that minimum proficiency is often achieved later than expected, particularly in reading, and that combined proficiency in both reading and mathematics remains limited during the early and middle years of schooling. These patterns point to challenges related to the timing

and pace of learning, rather than to an absence of learning altogether, and underscore the importance of ensuring that foundational skills are secured earlier in children's educational journeys.

Disaggregated analyses further demonstrate that learning outcomes are shaped by a range of factors beyond grade progression alone. Differences associated with enrollment status, language spoken at home, location, and household context point to the multiple environments in which children learn—at school, within families, and in their communities. While school enrollment is associated with higher levels of proficiency, a substantial proportion of enrolled children do not reach minimum proficiency, particularly in reading, indicating that access to schooling must be accompanied by sustained attention to learning quality. At the same time, the presence of measurable learning among some non-enrolled children highlights the role of household and community-level learning opportunities. Importantly, gender differences in combined proficiency are modest, and urban–rural gaps, though present, are relatively small, suggesting areas where early and sustained attention may help prevent the gradual widening of inequalities over time.

The findings related to language spoken at home are particularly notable, as they reveal substantial differences in learning outcomes, especially in reading. These results draw attention to the importance of language environments in shaping early learning experiences and suggest that children's ability to access and benefit from instruction is closely linked to linguistic alignment between home and school contexts. More broadly, the findings reinforce the understanding that learning outcomes are influenced by a complex interplay of instructional, social, linguistic, and household factors, and that improvements in foundational learning require attention across this broader ecosystem.

Glossary of Terms

ACER (Australian Council for Educational Research)
An independent research organisation that provides technical expertise in assessment development, validation, psychometrics, and benchmarking processes related to learning measurement.

Adaptive design
An assessment structure in which tasks adapt to a child's performance using predefined stop rules, ensuring that children are not asked questions that are substantially beyond their demonstrated ability and reducing fatigue.

Assessment framework
A structured plan that outlines the purpose, content domains, skills, and methods used to evaluate student learning outcomes through an assessment.

Blueprint
An assessment design approach that ensures content and construct coverage requirements are met. For ICAN ICARe, the blueprint defines domains, subdomains, item types, and difficulty levels to ensure consistency and alignment with global standards.

Citizen Generated Data (CGD)
Data produced by citizens or civil society organisations, often through household-based approaches, that complement official statistics and contribute to policy dialogue and accountability.

Citizen-Led Assessment (CLA)
A household-based assessment approach designed and implemented by community members or civil society organisations to measure foundational learning outcomes among children, including those who are

out of school, with an emphasis on inclusivity and local engagement.

Combined proficiency
Achievement of the Minimum Proficiency Level in both reading and mathematics.

Contextual questionnaire
A set of questions administered alongside the learning assessment to collect information on household conditions, parental characteristics, language use, and other contextual factors associated with learning outcomes.

Differential Item Functioning (DIF)
A psychometric analysis used to examine whether assessment items function differently for specific subgroups of learners, such as by gender, region, or language background.

Early Language & Literacy and Numeracy Assessment (ELANA)
An initiative designed to assess foundational literacy and numeracy skills among children aged 4 to 10 in low- and middle-income contexts, using computer-based, multi-stage adaptive assessment designs.

Enumeration Area (EA)
The smallest operational geographic unit used for sampling, typically drawn from national census data and used as part of the national sampling frame for household-based surveys.

Field testing (pilot testing)
The process of trialling assessment tools, protocols, and procedures in real-world settings to evaluate their effectiveness and make necessary refinements prior to full implementation.

Foundational learning
The acquisition of basic literacy, numeracy, and socio-emotional skills that form the foundation for lifelong learning. These skills support cognitive development, social and emotional growth, and future participation in education, work, and civic life.

Global Proficiency Framework (GPF)
An international framework developed by the UNESCO Institute for Statistics that describes the minimum proficiency levels students in Grades 1 to 9 are expected to achieve in reading and mathematics for global reporting purposes.

Global South
A term commonly used to refer to developing regions, particularly in Africa, Latin America, and parts of Asia, where educational access and learning challenges are often more pronounced.

Inter-Rater Reliability (IRR)
A measure of the extent to which two or more raters or observers produce consistent scores or judgments when assessing the same responses.

Minimum Proficiency Level (MPL)
The globally defined benchmark representing the minimum level of knowledge and skills that children and young people are expected to demonstrate in reading or mathematics at specific stages of schooling, as used for SDG Indicator 4.1.1(a).

Monitoring and Recheck (M&R)

A quality assurance system involving supervision, desk review, and field verification to ensure the accuracy, consistency, and reliability of assessment administration and data collection.

PAL Network (People's Action for Learning Network)
A coalition of organizations working collaboratively to improve educational outcomes through citizen-led assessments, shared methodologies, and collective learning across countries.

Pairwise Comparison Method (PCM)
A standard-setting approach that allows countries to determine the benchmark on their assessments for meeting global minimum proficiency. Subject matter experts compare assessment items in pairs, referencing items already located on Learning Progression Scales.

Project Management Team (PMT)
The country-level team responsible for coordinating assessment implementation, training, monitoring, quality assurance, and data management.

Sampling frame
The complete list of all households or units in the target population from which the survey sample is drawn.

Stop rules
Predefined criteria used in adaptive assessments to determine when to stop administering items to a child once their difficulty threshold has been reached.

SurveyCTO
A digital data collection platform used for recording, storing, and monitoring ICAN ICARe assessment data during fieldwork.

Technical Advisory Group (TAG)
A group of technical experts and institutional representatives providing guidance on methodology, psychometrics, data quality, and alignment with global standards.

Training of Trainers (ToT)
A capacity-building approach in which Project Management Teams train master trainers, who then cascade training to field enumerators and supervisors.

UNESCO Institute for Statistics (UIS)
The official and trusted source of internationally comparable data on education, science, culture, and communication, and the United Nations agency responsible for collecting and verifying global education data and monitoring SDG 4 indicators.

APPENDIX A

Weighted and Unweighted Sample Distribution Tables

10-Year-Olds: Minimum Proficiency Levels

Table 4.2.1: 10-year-olds: Minimum Proficiency Levels

MPL Achievement in %			Weighted number of children			Unweighted number of children		
Math	Reading	Both	Math	Reading	Both	Math	Reading	Both
60.78	40.29	34.35	402,370	266,713	227,395	278	181	155

Table 4.2. 2: 10-year-olds: Minimum Proficiency Levels by Gender

	Percentage of children			Weighted number			Unweighted Number		
	Math	Reading	Both	Math	Reading	Both	Math	Reading	Both
Female	56.50	45.24	37.49	188,572	150,990	125,106	128	102	85
Male	65.14	35.26	31.17	213,799	115,723	102,289	150	79	70

Table 4.2. 3: 10-Year-Olds: Minimum Proficiency Levels by Location

	Percentage			Weighted number of children achieving MPL			Unweighted number of children achieving MPL		
	Math	Reading	Both	Math	Reading	Both	Math	Reading	Both
Rural	61.74	36.01	31.87	132,415	77,229	68,348	96	55	49
Urban	60.33	42.34	35.54	269,955	189,484	159,046	182	126	106

Age Learning Trajectories of achievement of MPL in Math, Reading and Both

Table 4.2. 4: Age Learning Trajectories of achievement of MPL in Math, Reading and Both

	Percentage of children achieving MPL			Weighted Number			Unweighted Number		
Age	Math	Reading	Both	No. of children achieving MPL in Math	No. of children achieving MPL in Reading	No. of children achieving MPL in Both	No. of children achieving MPL in Math	No. of children achieving MPL in Reading	Both
5	2.46	0.82	0.82	8,498	2,836	2,836	6	2	2
6	4.91	1.88	0.81	27,083	10,366	4,474	19	7	3
7	16.36	7.91	4.96	84,835	41,020	25,701	58	27	17
8	28.66	19.04	12.13	168,146	111,718	71,154	117	76	49
9	48.36	27.91	22.49	302,934	174,826	140,880	210	119	96
10	60.78	40.29	34.35	402,370	266,713	227,395	278	181	155
11	69.76	49.83	46.14	469,508	335,367	310,557	321	227	210
12	75.56	54.08	49.47	543,536	389,075	355,908	373	265	242
13	79.95	61.81	57.75	548,754	424,241	396,352	379	290	271
14	85.74	68.55	64.36	520,752	416,333	390,883	356	282	265
15	86.17	71.74	66.78	450,539	375,084	349,142	307	254	236
16	91.24	74.55	72.62	218,106	178,215	173,608	150	122	119
	55.58	40.46	36.35	3,745,061	2,725,794	2,448,889	2574	1852	1665

Age Learning Trajectory by gender

Table 4.2. 5: Age Learning Trajectory by gender

	Percent of Children		Weighted number		Unweighted number	
Age	Percent of Female Children	Percent of Male Children	Number of female children	Number of Male children	Number of female children	Number of male children
5	0.87	0.77	1,477	1,359	1	1
6	1.46	0	4,474	0	3	0
7	3.85	5.94	9,364	16,337	6	11
8	11.88	12.34	31,798	39,356	22	27
9	22.00	22.96	67,616	73,264	46	50
10	37.49	31.17	125,106	102,289	85	70
11	46.28	46.03	137,701	172,856	93	117
12	50.16	48.86	169,243	186,665	115	127
13	58.56	56.93	200,877	195,475	136	135
14	61.83	66.53	173,509	217,374	117	148
15	64.37	69.43	175,943	173,199	119	117
16	70.31	75.19	88,355	85,254	62	57
Total	**36.08**	**36.60**	**1185462**	**1263427**	**805**	**860**

Learning trajectory by age and location

Table 4.2. 6: Learning trajectory by age and location

	Percent of children achieving MPL		Weighted number of children achieving MPL		Unweighted number of children achieving MPL	
Age	Rural	Urban	Rural	Urban	Rural	Urban
5	1.49	0.58	1,359	1,477	1	1
6	0	1.21	0	4,474	0	3
7	6.19	4.48	8,880	16,821	6	11
8	10.56	12.98	21,725	49428	15	34
9	19.69	23.91	41,455	99,425	29	67
10	31.87	35.54	68,348	159,046	49	106
11	39.74	49.76	96,566	213,990	69	141
12	40.54	53.56	91,600	264,307	65	177
13	50.79	61.24	116,686	279,666	84	187
14	63.84	64.62	131,398	259,485	92	173
15	59.43	71.11	115,213	233,928	81	155
16	73.25	72.3	59,110	114,499	42	77

Learning Outcomes for children in grade 4

Table 4.3. 1: Children in Grade 4: Minimum Proficiency Level.

Percent of children achieving MPL			Weighted number of children achieving MPL			Unweighted number of children achieving MPL		
Math	Reading	Both	Math	Reading	Both	Math	Reading	Both
54.08	35.13	28.4	354,427	230,246	186,135	243	156	126

Table 4.3. 2: Children in Grade 4: Minimum Proficiency Level by Gender

	Percentage of children achieving MPL			Weighted number of children achieving MPL			Unweighted no. of children achieving MPL		
	Math	Reading	Both	Math	Reading	Both	Math	Reading	Both
Female	49.67	38.67	29.43	153,487	119,477	90,949	105	80	61
Male	58.01	31.98	27.48	200,940	110,770	95,186	138	76	65

Children in Grade 4: Minimum Proficiency Levels by Location

Table 4.3. 3: Children in Grade 4: Minimum Proficiency Levels by Location: Learning Trajectories by grade

	Math	Reading	Both	Math	Reading	Both	Math	Reading	Both
Rural	30.95	27.10	20.79	109,695	62,405	224,675	80	45	34
Urban	69.05	72.90	32.37	244,732	167,842	430,725	163	111	92

Table 4.3. 4: Learning trajectories by grade

	Percent of children			Weighted no. of children			Unweighted no. of children		
Grade	MPL Math	MPL Reading	MPL Both	Math	Reading	Both	Math	Reading	Both
less than 1 Grade	1.90	0.68	0.68	12,420	4,472	4,472	9	3	3
1	11.90	4.35	2.83	70,600	25,836	16,814	50	18	12
2	24.85	13.96	8.44	143,514	80,624	48,756	98	54	33
3	37.17	23.78	16.72	218,520	139,807	98,300	152	96	68
4	54.08	35.13	28.40	354,427	230,246	186,135	243	156	126
5	71.49	49.15	43.57	494,651	340,095	301,473	337	229	203
6	78.61	54.95	50.89	514,189	359,462	332,904	353	245	227
7	82.45	65.66	62.14	491,208	391,194	370,203	334	264	250
8	89.06	63.98	61.37	510,797	366,957	351,954	352	250	240
9	89.87	78.77	73.04	412,179	361,242	334,972	280	244	226
10	91.47	80.83	76.73	326,268	288,323	273,699	220	195	185
11	94.32	81.47	77.58	72,125	62,297	59,327	48	41	39
12	100.00	82.51	82.51	14,901	12,295	12,295	10	8	8
out of school	44.43	25.59	23.41	109,263	62,944	57,584	88	49	45
Total	**55.58**	**40.46**	**36.35**	**3,745,061**	**2,725,794**	**2,448,889**	**2,574**	**1,852**	**1,665**

Learning trajectory by grade and gender

Table 4.3. 5: Learning trajectory by grade and gender

	Percentage of children		Weighted no. of children		Unweighted no. of children	
Grade	Female	Male	Female	Male	Female	Male
less than 1 Grade	0.47	0.88	1,477	2,995	1	2
1	1.62	3.96	4,633	12,181	3	9
2	6.77	9.84	17,777	30,978	12	21
3	15.43	17.88	43,090	55,211	30	38
4	29.43	27.48	90,949	95,186	61	65
5	45.53	41.57	158,840	142,633	107	96
6	47.26	53.71	135,009	197,895	93	134
7	62.60	61.66	190,102	180,101	128	122
8	58.67	64.14	170,711	181,243	116	124
9	72.01	74.00	159,430	175,542	107	119
10	74.51	79.51	147,949	125,750	101	84
11	72.61	84.93	33,107	26,220	22	17
12	84.74	79.11	7,632	4,664	5	3
out of school	19.37	27.79	24,757	32,828	19	26
Total	**36.08**	**36.60**	**1,185,462**	**1,263,427**	**805**	**860**

Learning trajectory by grade and location

Table 4.3. 6: Learning trajectory by grade and location

	Percentage of children		Weighted number of children		Unwieghted no. of children	
Grade	Rural	Urban	Rural	Urban	Rural	Urban
less than 1 Grade	0.83	0.63	163,921	491,459	1	2
1	1.97	3.35	220,959	372,503	3	9
2	4.93	10.07	182,782	394,697	6	27
3	12.48	18.95	203,081	384,869	18	50
4	20.79	32.37	224,675	430,725	34	92
5	40.04	45.6	253,010	438,937	71	132
6	49.31	51.69	218821	435,306	77	150
7	54.29	66.11	200,295	395,481	77	173
8	58.97	62.5	184,403	389,114	77	163
9	67.68	75.98	162,464	296,162	77	149
10	72.2	79.3	129,028	227,686	66	119
11	63.92	81.89	18,316	58,152	8	31
12		89.95	1,232	13,669		8
out of school	37.57	18.43	64,008	181,924	18	27

Age Distribution by Grade:

	age of child												
Grade	5	6	7	8	9	10	11	12	13	14	15	16	Total
less than 1 Grade	80.09	48	12.79	7.32	0.83								100
1	14.55	35.66	40.72	14.94	3.8	3.47			0.18				100
2	1.57	10.73	30.15	35.99	15.43	4.42	2.46	0.42					100
3		1.53	12.6	26.1	31.09	15.09	5.85	3.39	0.4				100
4			1.64	7.63	30.29	35.98	17.33	5.59	2.54				100
5				3.44	11.78	27.43	35.65	16.82	6.13	1.95		0.62	100
6					2.24	8.46	26.58	35.63	13.94	6.58	2.53		100
7						0.69	8.14	24.81	32.82	16.55	6.14		100
8							1.17	8.48	29.67	32.38	16.9	6.68	100
9								1.19	9.57	26.72	34.99	16.34	100
10									1.21	12.69	30.28	47.29	100
11										0.22	5.69	18.97	100
12												6.23	100
out of school	3.78	4.08	2.09	4.58	4.54	4.46	2.83	3.67	3.54	2.9	3.45	3.87	100
Total	**5.33**	**8.17**	**7.67**	**8.65**	**9.27**	**9.82**	**9.93**	**10.64**	**10.13**	**9.11**	**7.74**	**100**	**100**

Weighted Number for Age Distribution by Grade													
Grade	5	6	7	8	9	10	11	12	13	14	15	16	
less than 1 Grade	276387	264505	66340	42954	5194								655380
1	50224	196522	211112	87610	23830	22957			1207				593462
2	5420	59112	156332	211109	96677	29254	16577	2999					577479
3		8408	65328	153084	194763	99883	39348	24374	2761				587949
4			8525	44760	189728	238151	116622	40195	17419				655400
5				20203	73803	181606	239926	121016	42068	11848		1477	691946
6					14019	55978	178900	256313	95690	39981	13246		654127
7						4598	54779	178458	225279	100542	32120		595776
8							7848	61019	203680	196645	88352	15974	573517
9								8579	65705	162313	182960	39067	458625
10									8283	77053	158332	113045	356713
11										1359	29757	45353	76468
12												14901	14901
out of school	13048	22497	10860	26883	28441	29531	19016	26437	24288	17639	18052	9241	245931
Total	**345079**	**551043**	**518498**	**586603**	**626454**	**661958**	**673015**	**719390**	**686379**	**607380**	**522819**	**239058**	**6737675**

Table 4.4. 1: Age Distribution by Grade

Unweighted Number for Age Distribution by Grade													
Grade	5	6	7	8	9	10	11	12	13	14	15	16	
less than 1 Grade	193	183	48	33	4								
1	36	136	145	63	18	18			1				
2	4	41	106	144	67	22	13	2					
3		6	46	106	134	71	28	18	2				
4			6	32	130	163	82	30	13				
5				15	51	124	163	86	30	8		1	
6					10	40	123	174	69	29	10		
7						3	38	121	153	70	23		
8							6	42	140	136	62	11	
9								6	45	109	124	28	
10									6	52	106	78	
11										1	20	30	
12												10	
out of school	10	18	9	22	23	24	15	22	19	14	14	7	
Total	**243**	**384**	**360**	**415**	**437**	**465**	**468**	**501**	**478**	**419**	**359**	**165**	

Age Distribution in Grade 4

Table 4.4. 2: Age Distribution in Grade 4

Age of child	Share of children in percentage		Weighted no. of children		Unweighted no. of children	
7	1.64	8,525	6	491,459	1	2
8	7.63	44,760	32	372,503	3	9
9	30.29	189,728	130	394,697	6	27
10	35.98	238,151	163	384,869	18	50
11	17.33	116,622	82	430,725	34	92
12	5.59	40,195	30	438,937	71	132
13	2.54	17,419	13	435,306	77	150

Table 4.4. 3: Gender Distribution by Grade

	Percentage of Children		Weighted number		Weighted number	
Grade	Female	Male	Female	Male	Female	Male
less than 1 class	48.36	51.64	4,431	7,989	221	240
1 class	48.18	51.82	21,921	48,678	201	216
2 class	45.50	54.50	47,165	96,348	181	218
3 class	47.48	52.52	88,152	130,368	196	215
4 class	47.14	52.86	153,487	200,940	215	241
5 class	50.42	49.58	235,614	259,038	242	236
6 class	43.67	56.33	208,073	306,116	200	255
7 class	50.97	49.03	239,413	251,795	208	200
8 class	50.73	49.27	247,975	262,822	203	194
9 class	48.28	51.72	190,904	221,275	150	162
10 class	55.66	44.34	174,786	151,481	136	106
11 class	59.63	40.37	41,253	30,871	31	20
12 class	60.44	39.56	9,006	5,895	6	4
out of school	51.96	48.04	43,141	66,122	101	96
Total	**48.76**	**51.24**	**1705322**	**2039739**	**2291**	**2403**

Gender Distribution in Grade 4

Table 4.4. 4:Gender Distribution in Grade 4

	Percentage of Children		Weighted number		Weighted number	
Grade	Female	Male	Female	Male	Female	Male
4 class	47.14	52.86	153487	200940	215	241

School Enrollment Rates Among Children

Table 4.4. 5: School Enrollment Rates Among Children

School Enrollment	Percentage	Weighted Number	Unweighted Number
Currently not Enrolled	3.65	245,931	197
Currently Enrolled	96.35	6,491,743	4497
Total	**100.00**	**6,737,675**	**4694**

Enrolment Status by School Type

Table 4.4. 6: Enrolment Status by School Type

Type of School	Percent	Weighted number of children	Unweighted number of Children
Government	51.34	3459162	2445
Private	44.55	3001892	2032
Other	0.46	30690	20
Outside School	3.65	245931	197
Total	**100.00**	**6737675**	**4694**

School enrollment patterns across age by gender – Government schools

Table 4.4. 7: School enrollment patterns across age by gender – Government schools

	Weighted Percentage		Weighted Number			Unweighted Number		
Age of child	Percentage of female children enrolled	Percentage of male children enrolled	Number of female children	Number of Male Children	Total no. of Children	Number of Female children	Number of Male children	Total no. of Children
5	41.70	37.45	70,544	65,881	136,425	50	48	98
6	31.97	35.96	97,910	88,012	185,922	71	63	134
7	50.49	35.13	122,939	96,614	219,553	88	69	157
8	45.05	37.46	120,572	119,482	240,055	86	86	172
9	50.72	45.15	155,911	144,075	299,986	111	100	211
10	51.98	41.05	173,490	134,744	308,233	124	96	220
11	57.48	47.41	171,026	178,041	349,066	122	126	248
12	58.58	53.10	197,653	202,839	400,492	139	143	282
13	70.36	52.93	241,354	181,722	423,076	169	129	298
14	68.64	62.48	192,632	204,159	396,792	135	141	276
15	74.33	55.57	203,175	138,632	341,806	141	97	238
16	70.66	60.82	88,793	68,963	157,756	64	47	111
Total	**55.89**	**47.02**	**1835999**	**1623163**	**3459162**	**1300**	**1145**	**2445**

School enrollment patterns across age by gender – Private Schools

Table 4.4. 8: School enrollment patterns across age by gender – Private Schools

	Percentage			Weighted Number			Unweighted Number		
age of child	Female	Male	Total	Number of female children	Number of Male Children	Total no. of Children	Number of Female children	Number of Male children	Total no. of Children
5	52.70	57.88	55.34	891,61	101,814	190,976	61	71	132
6	62.21	61.47	61.88	190,535	150,470	341,005	128	103	231
7	45.38	63.40	54.94	110,510	174,336	284,845	74	118	192
8	49.18	58.44	54.22	131,624	186,406	318,030	91	129	220
9	43.87	49.79	46.88	134,828	158,861	293,689	92	108	200
10	44.26	53.27	48.73	147,730	174,844	322,575	99	121	220
11	38.08	50.31	44.90	113,285	188,900	302,185	76	127	203
12	37.92	42.22	40.20	127,934	161,287	289,222	86	109	195
13	25.14	44.15	34.65	86,235	151,574	237,809	58	102	160
14	29.64	33.10	31.50	83,173	108,157	191,330	55	73	128
15	21.86	40.10	30.56	59,743	100,043	159,786	39	66	105
16	25.08	34.32	29.47	31,523	38,918	70,441	21	25	46
Total	**39.76**	**49.11**	**44.55**	**1,306,282**	**1,695,610**	**3,001,892**	**880**	**1152**	**2032**

Household characteristics

Table 4.4.2 Condition of Roof

Condition of Roof	No roof	Finished roof	Natural or rudimentary roof
Percent	7.70	77.77	14.52
Weighted number	513,114	5,180,362	967,365
Unweighted number	326	2,916	578

Table 4.4.3 Condition of Outer Walls

	No wall	Finished wall	Natural or rudimentary wall
Total	12.42	66.53	21.05
Weighted number	827,601	4,431,156	1,402,084
Unweighted number	517	2488	815

Table 4.4.4 Source of Lightings

	Electricity	Solar	Paraffin	Other	Total
Percentage	97.06	2.56	0.07	0.31	100.00
Weighted number	6,464,954	170,528	4,527	20,832	6,660,841
Unweighted number	3,699	105	3	13	3,820

Source of drinking water used regularly

Table 4.4.5 Source of drinking water

	Piped water	Handpump/ tubewell	Borehole	well	river/stream/ pond	Buy water	other
Percentage	61.57	29.68	0.83	3.70	0.58	2.97	0.67
Weighted Number	4,101,016	1,977,016	55,352	246,653	38,565	197,934	44,306
Unweighted number	2255	1244	33	142	21	101	24

Table 4.4.6 Percentage households with selected characteristics.

	Electricity Access	Toilet	Television	Radio	Four Wheeler	Two Wheeler	Bicycle	Mobile Phone	Smart Phone
Percentage	99.42	95.39	48.01	15.88	4.78	35.68	50.94	97.22	95.86
Weighted Number	6,427,484	6,354,077	3,197,697	1057,976	318,193	2,376,327	3,393,223	6,475,835	6,207,832
Unweighted number	3677	3621	1783	592	175	1342	1993	3708	3540.00

Table 4.4.7 Percentage households with selected educational context variables.

	At least one member (other than the Child's parents who has completed high school	Access to children book	Additional reading materials	Access to computer/ laptop/ tablet	Text book for current grade	take any paid tuition class?	Receives help for School HW in HH
Percentage	30.24	21.33	21.01	21.08	98.11	24.68	52.39
Weighted Number	2,014,326	1,420,651	1,399,282	1,404,013	6,368,905	1,662,897	3,400,715
Unweighted number	1124	785	779	761	4409	1157	2323

Table 4.4.8 Reporting on frequency of storytelling to children in households

	Percentage	Weighted no.	Unweighted no.
Never	77.71	5,235,968	3,653
Lessthan once a week	15.04	1,013,069	703
1-2 days per week	5.23	352,482	245
3-4 days per week	1.13	75,958	51
3-4 days per week	0.89	60,198	42
Total	**100.00**	**6,737,675**	**4,694**

Learning Outcomes by Enrollment Status

Table 4.4. 9:Learning Outcomes by Enrollment Status

	Percentage of MPL Achievement			Weighted number of MPL achievement			Unweighted number of MPL achievement		
Enrollment status	Math	Reading	Both	Math	Reading	Both	Math	Reading	Both
Not Enrolled	44.43	25.59	23.41	109,263	62,944	57,584	88	49	45
Enrolled	56.01	41.02	36.84	3,635,799	2,662,851	2,391,305	2,486	1,803	1,620

Learning Outcomes by gender (Overall)

Table 4.4. 10: Learning outcomes by Gender (overall)

MPL Achievement in Math, Reading and both by Gender				Weighted no. for MPL Achievement			Unweighted No. for MPL achievement		
	Math	Reading	Both	Math	Reading	Both	Math	Reading	Both
Female	51.91	41.46	36.08	1,705,322	1,362,076	1,185,462	1169	924	805
Male	59.08	39.50	36.60	2,039,739	1,363,718	1,263,427	1405	928	860

Learning Outcomes by rural and urban municipalities

Table 4.4. 11: Learning outcomes by Location

	Math	Reading	Both	Math	Reading	Both	Math	Reading	Both
Rural	53.59	37.97	33.78	1,193,473	845,648	752,342	855	598	533
Urban	56.57	41.68	37.61	2,551,588	1,880,146	1,696,547	1,719	1,254	1,132

Learning Outcomes and home language

Table 4.4. 12: Learning Outcomes And Home Language

	Percent of children achieving MPL			Weighted no. of children achieving MPL			Unweighted no. of children achieving MPL		
	Math	Reading	Both	Math	Reading	Both	Math	Reading	Both
Does not speak Nepali at Home	36.53	20.25	18.74	345,294	191,406	177,164	267	146	135
Speaks Nepali at Home	58.69	43.75	39.22	3,399,767	2,534,388	2,271,725	2307	1706	1530

APPENDIX B

Sample Design

The survey employed a three-stage stratified cluster sampling design that ensured proportional representation of Nepal's diverse geography and demographics while maintaining logistical efficiency. This multi-stage design enhanced precision and allowed for analysis at multiple disaggregated levels.

Stage 1 Stratification and EA Selection (EA-I)

At the first stage, primary sampling units (PSUs) were defined as wards, which served as Enumeration Areas (EAs). These EAs were selected using Probability Proportional to Size (PPS) based on the total number of households in each ward as per the 2021 National Population and Housing Census (NPHC). The selection process ensured equal representation across all provinces and maintained proportionality between urban/rural municipalities areas.

Stage 2 Settlement Segment Selection (EA-II)

Within each selected EA, settlements were grouped into segments of approximately 80 to 150 households. A single segment was then selected randomly using Simple Random Sampling (SRS). This segmentation helped manage fieldwork efficiently while retaining statistical validity.

Stage 3 Household Selection

Enumerators listed all households within the selected segment and applied systematic random sampling to select 20 households per EA. Every child aged 5–16 years in those households were included in the learning assessment.

The chosen design balanced representativeness and feasibility, following international best practices in large-scale assessments. The use of PPS minimized selection bias and ensured adequate representation of densely and sparsely populated areas, while the three-stage design reduced field costs without compromising precision.

Sampling Frame and Target Population

The sampling frame is drawn from the National Population and Housing Census (NPHC) 2021, conducted by Nepal's National Statistics Office (NSO). This census is the most comprehensive and up-to-date enumeration of households and population in Nepal and serves as the standard reference for all official national surveys.

The frame includes the total number of households, population size, urban/rural classification, and administrative identifiers. The smallest identifiable unit in the frame is the ward, treated as an Enumeration Area (EA). Geographic identifiers, including census codes and facilitate cross-verification and geospatial mapping.

Potential limitations of the census frame included underrepresentation in newly formed or migration-affected settlements. To mitigate this, field teams verified the selected EAs through local ward offices and use triangulation with community mapping and household listing exercises.

The target population for this survey included all children aged 5-16 in Nepal (68,92399 as per NPHC 2021). However, households are considered more stable units than individuals. Therefore, existing wards of local levels were used as Primary Sampling Units (PSUs) and households as Secondary Sampling Units (SSUs)1.

Sample Size

The sample was designed to be a representative cross-section of all households in Nepal, ensuring every household had an equal and known chance of selection. This was achieved by:

- Strictly applying random selection at every stage of sampling.
- Using sampling with probability proportionate to population size (PPS) at the Enumeration Area (EA) sampling stage. Existing wards of local levels was used as EAs for sampling.

A total of 3,820 households was sampled across 191 Enumeration Areas (EAs), ensuring representation across urban, rural, and provincial strata. The sample distribution is as follows:

- 126 EAs in urban areas, 65 in rural areas
- Total 191 EAs distributed across the seven provinces: 32 in Koshi, 40 in Madhesh, 40 in Bagmati, 16 in Gandaki, 34 in Lumbini, 11 in Karnali, and 18 in Sudurpaschim.

This sample size was designed to provide estimates with standard precision levels. With 20 households sampled per EA, a total of 191 EAs was sufficient to generate unbiased estimates of learning outcomes, achieving a standard error of ±5 percentage points.

The total sample size was determined using a clustered sampling formula to ensure statistical reliability while accounting for intra-cluster correlation and design effect. The formula applied was:
n = (Z_alpha^2 * p (1-p) * DEFF) / (se^2)
Where:
- Z_alpha = 1.96 (for a 95% confidence interval)
- p = 0.5 (proportion for maximum variance)
- DEFF = 1 + (b - 1) * rho
- b = 20 (households per cluster)
- rho = 0.07 (intra-cluster correlation)
- se = 0.05 (desired precision)
- Response Rate = 90%

This sample size allowed for subgroup analysis (e.g., urban/rural, boy/girl, assets quartiles) and helped safeguard precision. The ratio of children aged 5-16 was approximately 24 percent in NHPC 2021 (population aged 5-16 is 6,892,399). This assessment was not only based on the correspondence with household head or available adult respondent but also included the one-on-one assessment of children in the sampled households. Therefore, we factored in a response rate of 90% to inflate numbers of households to account for the possible low participation rates as per PAL network's international practices and standards. Therefore, the number of EAs was also inflated to adjust the possible low response and minimizing all kinds of sampling as well as response errors during the survey. The prior experiences and assumptions from the research team in consultations with other statisticians were used for parameters like inter-cluster correlation (ρ) and standard error (se).

Sampling Procedure

The survey employed a three-stage sampling scheme:

Stage 3.3.1: Stratification and Selecting EAs

Stratification was used to enhance precision and ensure that key subgroups are adequately represented. The population was divided into 14 explicit strata, representing the seven provinces (Koshi, Madhesh, Bagmati, Gandaki, Lumbini, Karnali, and Sudurpaschim) and the rural/urban domains within each province. This stratification approach captured geographic, demographic, and socioeconomic diversity across Nepal. Strata boundaries were defined using administrative divisions and census classifications, ensuring alignment with national statistical standards. Allocation within strata followed proportional stratification, meaning the sample distribution reflected the actual population share of each stratum as per the 2021 Census.

EAs (Existing wards) were randomly selected to ensure precise parameter estimates. Stratification was done based on geographical regions (provinces) and rural/urban classification, ensuring equal representation across provinces and urban/rural areas.

EAs were selected using PPS based on EA households' numbers in NHPC 2021 provided by the National Statistics Office (NSO). Random selection ensured equal representation among provinces and urban/rural stratums. For example, in Nepal's 7 provinces, PPS guaranteed each province received a proportion of EAs equivalent to its population contribution based on urban/rural distribution as well. This method prioritized EAs with larger populations for selection. To ensure proportional representation between urban/rural municipalities areas, allocated EAs for each province were distributed according to the urban/rural population distribution.

Stage 3.3.2: Segment of Settlements Selection

After final EA (ward) selection, settlements list was created by research team in collaboration with local stakeholders (ward representatives). Our team reached out to each ward which was selected in the first round, and made list of all settlement's segments inside that ward. The settlements were listed in chronological order of East to West direction inside ward constituency. This list included all settlements in segments within the ward. Settlements were grouped into segments with 80-150 households. After having the proper list of segments of all sampled EAs, one segment was randomly selected using a simple random number table.

Stage 3.3.3: Household Selection

The survey sampled households, not children. All children aged 5-16 residing in sampled households were included in the survey. The target population for this survey included all children aged 5-16 in Nepal (68,92,399 as per NPHC 2021). However, we were sampling the more stable units (households) than unstable units (individuals) randomly and including all children of target group living within the sampled households.

We selected 20 households from each sampled segment. To select 20 households randomly, enumerators listed all households in the chosen segment of the selected ward. This listing ensured an equal chance of participation for each household. Once the household list was complete, 20 households were randomly selected using systematic random sampling.

The response rate for the survey exceeded 90 percent. Field teams coordinated with local government representatives to inform communities about the assessment purpose and ensure cooperation. Community sensitization campaigns, including announcements through local ward offices, preceded field visits. Enumerators were trained in effective communication and consent protocols. Our data enumerators got support letter from each ward office or also got help from ward office representatives during household listing days for final household sampling. The written letter and/or involvement of local government representatives increased the trust and credibility for the survey and assessment days. Daily tracking of response rates through digital dashboards allowed real-time monitoring and corrective action to minimize non-response bias.

Weighting

Weighting was applied to ensure that estimates are nationally representative and account for unequal selection probabilities. The base weight will be the inverse of the overall probability of selection, combining PPS at the EA level and systematic sampling at the household level. Adjustments were made for non-response and calibrated against NPHC 2021 provincial population totals.

Design Effect

The Design Effect (DEFF) of 2.33 was used both in sample size calculation and variance estimation. This value is consistent with empirical findings from previous PAL Network surveys in countries with similar household clustering patterns. Weighted data was analyzed using STATA and Excel to compute accurate standard errors and confidence intervals.

Sample Size Calculation and Parameter Table

The calculation assumes moderate homogeneity among households within a cluster, requiring a smaller sample size within each EA. It also assumes heterogeneity among EAs across the country, necessitating a sufficiently large number of sampled EAs. Each ward in Nepal has a diverse range .of household numbers,

with an average sample size of 13 to 24,000 households per ward. The wards were divided into a map of settlements, and settlements were randomly selected.

We replaced the preceding household if any sampled household refused or became unable to participate in the survey. The calculation also adjusted for the ratio of children aged 5-16 to the total population is about 24 percent and the average household size is 4.37. Thus around 3820 households were sampled to include around 4801 targeted populations in sample.

This research included household survey of household facilities which might affect children's learning and then the learning assessment of children living in the households. To minimize various possible errors in sampling process and data enumeration process we inflated sample size as per PAL practice to ensure high quality evidence was generated.

Sample Size Calculation

Assumption for sampling purpose	Parameters
Number of Sampled HH in an EA (b)	20
Inter-cluster correlation (ρ)	0.07
Design Effect (DEFF)	2.33
Zα	1.96
Probability of success (p)	0.5
Probability of failure (q = 1-p)	0.5
Standard error (se)	0.05
Response rate	90%
Proportion children aged 5-16 years in total HH member	24%
Estimated Sample size (HH)	3,820
Estimated Sample size (Children 5-16)	4,006
Number of EAs	191

Probability and Weight:

The survey followed a **three-stage stratified sampling design**, with selection probabilities defined at each stage.

Stage 1: Selection of geographical units (P_1)
At the first stage, provinces and urban/rural strata were selected with **probability proportional to size (PPS)**, where size was defined as the **population aged 5–16 years**.
For each stratum RiiRij, where

- ii = province
- jj = urban/rural domain
-

the first-stage probability was calculated as:

P1(Rij)=Population aged 5–16 in sampled Rij∑Population aged 5–16 across all RijP1(Rij)=∑Population aged 5–16 across all RijPopulation aged 5–16 in sampled Rij

Stage 2: Selection of clusters / PSUs (P_2)
In the second stage, clusters (e.g., wards / enumeration areas) were selected within each selected RijRij using **systematic random sampling**.

P2=Number of clusters selected in RijTotal number of clusters in RijP2=Total number of clusters in RijNumber of clusters selected in Rij

Stage 3: Selection of households / children (P_3)
In the third stage, households (or eligible children aged 5–16) were selected within each sampled cluster using **simple random sampling**.

P3=Number of households (or children) sampled in the clusterTotal eligible households (or children) in the clusterP3=Total eligible households (or children) in the clusterNumber of households (or children) sampled in the cluster

Final sampling weight (W)
The **overall probability of selection (P)** for each observation is the product of the three stage-specific probabilities:
P=P1×P2×P3P=P1×P2×P3

The **sampling weight** used for analysis was calculated as the inverse of the overall selection probability:
W=1P1×P2×P3W=P1×P2×P31

These weights were applied during analysis to generate population-representative estimates.
To estimate the survey results, weight (1/P) was used as a raising factor.

Provincial and EA Allocation Tables

Province	Total EAs	Urban EAs	HH in Urban EAs	Rural EAs	HH in Rural EAs	Total HH
Koshi	EAs 32	EAs 20	HH 400	EAs 12	HH 240	HH 640
Madhesh	EAs 40	EAs 25	HH 500	EAs 15	HH 300	HH 800
Bagmati	EAs 40	EAs 30	HH 600	EAs 10	HH 200	HH 800
Gandaki	EAs 16	EAs 10	HH 200	EAs 6	HH 120	HH 320
Lumbini	EAs 34	EAs 20	HH 400	EAs 14	HH 280	HH 680
Karnali	EAs 11	EAs 6	HH 120	EAs 5	HH 100	HH 220
Sudurpaschim	EAs 18	EAs 10	HH 200	EAs 8	HH 160	HH 360
Total	**EAs 191**	**EAs 121**	**HH 2420**	**EAs 70**	**HH 1400**	**HH 3820**

APPENDIX C

Survey at a Glance

PMTs, Trainers, Supervisors, and Enumerator Trainings

Category	Number
PMTs	2
Master Trainers	15
Supervisors / District Coordinators (DCs)	13
ToTs held	1
Enumerator / Enumerator Trainings	10

Enumerator Demographics

Male	Female	Total	Avg. Age
161 (56%)	124 (44%)	285 (100%)	25-26

Education Levels of Enumerators

Category	Percentage
High School	50%
Graduate	44%
Above Graduate	6%

Monitored and Rechecked Locations

Category	Number
Total Field Monitored Villages	191
Total Field Monitors	26
Desk Rechecked Villages	191
Resurveyed	7 villages (3 after monitoring and field recheck, 4 after desk recheck)

ICAN ICARe Training and Data Collection Date

Training Type	Location	Training Date	Data Collection Dates
Master Training of Trainers	Naxal, Kathmandu, Bagmati	17 July – 20 July 2025	-
Enumerator Training	Malangwa, Sarlahi, Madhesh	11 Aug – 13 Aug 2025	13 Aug 2025 – 08 Sep 2025
Enumerator Training	Lamahi, Dang, Lumbini	15 Aug – 17 Aug 2025	18 Aug 2025 – 28 Sep 2025
Enumerator Training	Hattiban, Lalitpur, Bagmati	17 Aug – 19 Aug 2025	20 Aug 2025 – 21 Sep 2025
Enumerator Training	Butwal, Rupandehi, Lumbini	18 Aug – 20 Aug 2025	20 Aug 2025 – 28 Sep 2025
Enumerator Training	Gulariya, Bardiya, Lumbini	21 Aug – 24 Sept 2025	25 Aug 2025 – 14 Sep 2025
Enumerator Training	Dhangadi, Kailali, Sudurpaschim	23 Aug – 25 Aug 2025	26 Aug 2025 – 07 Sep 2025
Enumerator Training	Biratnagar, Morang, Koshi	23 Aug – 25 Aug 2025	26 Aug 2025 – 28 Sep 2025
Enumerator Training	Bandipur, Tanahun, Gandaki	29 Aug – 31 Aug 2025	01 Sep 2025 – 26 Sep 2025
Enumerator Training	Biratnagar, Morang, Koshi	05 Sept – 07 Sept 2025	08 Sep 2025 – 07 Oct 2025
Enumerator Training	Birendranagar, Surkhet, Karnali	07 Sept – 09 Sept 2025	10 Sep 2025 – 25 Sep 2025

Status of Total Household Approached by Research Team

S.N.	Name of Province	No of Closed Household	No of No Response Household	No of Open Household	Total No of Households
1.	Koshi	279	105	3,026	3,410
2.	Madhesh	111	28	3,059	3,198
3.	Bagmati	1,017	986	80	2,083
4.	Gandaki	197	119	1,874	2,190
5.	Lumbini	639	360	4,289	5,288
6.	Karnali	210	20	1,409	1,639
7.	Sudurpaschim	462	110	3,874	4,446
	Total	**2,917**	**1,728**	**14,911**	**22,254**

APPENDIX D

Personnel Involved in Survey

A. Research Core Team

Rajib Timalsina	Lead Researcher
Gunjan Jha	Researcher
Manisha Gahatraj	Research Assistant
Ankur S. Karmacharya	Research Assistant
Pranita Khanal	Research Assistant
Prokshani Ghimire	Research Assistant
Rajnish Pant	Communications Associate
Sangin BC	Finance Controller
Januka Gurung	Admin and Finance Support

B. Technical Support Team

Dr. Binod Prasad Pant	Associate Professor, Kathmandu University
Deviram Acharya	Under Secretary, Representative from Education Review Office
Roshan Pokharel	Adjunct Professor, Tribhuvan University
Chiranjibi Bhandari	Assistant Professor, Tribhuvan University

C. National Statistics Office (NSO) TEAM Involved in Review, Monitoring and Supervision

Dhundiraj Lamichhane	Deputy Chief Statistical Officer, National Statistics Office
Dr. Sharad Kumar Sharma	Deputy Chief Statistical Officer, National Statistics Office
Arun Gautam	Director, National Statistics Office
Binod Sharan Acharya	Director, National Statistics Office
Deenanath Lamsal	Statistical Officer, National Statistics Office
Suman Gautam	Statistical Officer, National Statistics Office

D. Provincial Lead Trainers

Rajat Mani Hartamchhali	Koshi Province
Shakti Singh Paswan	Madhesh Province
Indra Mani Dahal	Bagmati Province
Nimesh Shrestha	Bagmati Province
Govinda Mahat	Gandaki Province
Jeevan Sharma	Lumbini Province
Puspa Raj Adhikari	Lumbini Province
Lalit Jung Shahi	Karnali Province
Buddhi Ram Chaudhary	Karnali Province
Jaya Koirala	Sudurpaschim Province

E. Provincial Support Team

Mausam Koirala	Koshi province
Laxmi Kumari Singh	Madhesh province
Ganesh Khatiwada	Bagmati province
Bibek Bhandari	Bagmati province
Nabin Dahal	Bagmati province
Prabesh Raj Joshi	Sudurpaschim province

F. Enumerators

Province: Koshi

Aarshi Bhattarai	Laxmi Shrestha	Ronish Shiwakoti
Aashika Rai	Laxmita Adhikari Giri	Roshan Gupta Rauniyar
Aastha Chauhan	Lochan Khatiwada	Roshni Chaudhary
Aayush Rimal	Manju Pariyar	Samyog Dhimal
Ajila Yongya	Mukesh Karki	Sarita Shretha
AmarDip Paudel	Muskan Thakur	Saroj Pokhrel
Bhumika Limbu	Nabaraj Budathoki	Shagun Karki
Bibek Rana Magar	Niraj Kumar Kamat	Shambhu Magar
Bikash Babu Niraula	Pawan Katwal	Sharmila Bhattarai
Binod Karki	Prabhav Katuwal	Sisam Shrestha
Chudamani Paudel	Prabin Thapa	Sital Adhikari
Dilip Dahal	Pranita Pokhrel	Smriti Guragain
Dipen Karki	Prasanna Nepali	Soniya Sharma
Dipesh Mishra	Pratima Pokhrel	Sujashna Shrestha
Dipesh Shrestha	Prem Bahadur Bista	Sumnima Limbu
Durga Tolangi	Pujan Mudiyari	Tulashi Maya Gautam
Ganga Bishowkarma	Rachana Pakhrin	Ujjwal Dangi
Goma Dhungana	Ramesh Shretha	Yogindra Neupane
Kushal Bhattarai	Ronika Kumari Chaudhary	

Province: Madhesh

Ram Biswas Paswan	Mangal Dev Paswan	Prameshwor Singh
Aatish Singh Danuwar	Manish Kumar Paswan	Prekshya Dhungel
Asmita Kumari	Manjit Kumar Ram	Rajiv Raut
Bijay Kr. Paswan	Manjit Kumar Singh	Rakhi Kumari
Bipin Kumar Jha	Manju Kumari Singh	Ram Chandra Bhagat (Bhandari)
Dipendra Ray Danuwar	Manoj Kumar Paswan	Ram Pravesh Mahato
Gayabati Kumari	Mukesh Kumar Mishra	Ramita Kri. Singh
Kabita Chaudhary	Nirusha Kumari	Ramu Singh
Kajal Kumari	Pinki Kumari Devi	Rekha Kumari Koirin
Kopila Kumari	Poonam Kumari	Rohit Kumar Paswan
Mamita Kumari	Prabha Kumari Paswan	Rubi Kumari Jha

Sanjay Kumar Mukhiya	Sarita Kumari Paswan	Sunita Devi Paswan
Sanjiv Raut	Shankar Kumar Chaudhary	Sunita Singh Danuwar
Sarita Kumari Paswan	Sunil Singh Danuwar	Tribhuvan Singh

Province: Bagmati

Aditya Acharya	Kabita Kumari Raya	Sadhuram Khatiwada
Akshit Pokhrel	Kaushal Neupane	Salan Maharjan
Amar Tamang	Lalita Subedi	Samir Chaudhary
Anand K Jaishwal	Laxmi Gautam	Samir Tamang
Anisha Sapkota	Manjila Silwal	Sandhya Lamichhane
Anshika Bista	Nabaraj Shrestha	Sandip Ram
Arkid Khanal	Nitish Yadav	Sangya Shrestha
Aryan Poudel	Prabin Shrestha	Saurav Lamsal
Asmina Adkhira	Pranab Baral	Shreya Dhungana
Balaram Bhandari	Pransu Ghimire	Smarika Khatri
Bibek Khatiwada	Prem Basnet	Subresh Thakulla
Bijan Shrestha	Rajkumar Mainali	Sugam Pokharel
Bikesh Kushwaha	Rajkumar Pokhrel	Sujata Dhakal
Bishakha Bajracharya	Rashmika Thapa	Suman Kafle
Dil Bahadur Gurung	Richa suri	Surakchya Pokhrel
Dipesh Dhungana	Rohan Chaudhary	Sushila Maharjan
Dipshikha Ghimire	Rohan Thapa	Suvajit Shakya
Dorje Sherpa	Rojista Shrestha	Suwash Acharya
Gobinda Basak	Rojit Chaulagain	Swechhya Rana
Himshikha Timalsina	Rupesh Kumar Bhagat	

Province: Gandaki

Puspa Khadka	Prachand Shakti Gurung	Samyog Chandra Ghimire
Aayushma kafle	Pratap Dhakal	Santosh Mijar
Aditya Rasaili	Rajaram Bohora	Shiva Mahat
Anita Luitel	Ranjana Giri	Uma Khatri
Bina Regmi	Ritika Dhakal	
Kusum Khadka Chhetri	Rubina Gurung	

Province: Lumbini

Alisha G.C.	Gokarna Prasad Upadhayaya	Prem Kumar Yadav
Amit Kunwar	Govind Kurmi	Ranjana Kumari B.K.
Ankit Acharya	Harichand Harijan	Rupesh Singh Kurmi
Ankit Bhattarai	Kabita Nepali	Sagar Tharu
Arun Kumar Pasi	Kabita Pokherl	Sandesh Chaudhary
Babita Singh	Keshar Bahadur Khatri	Sashank Bashyal
Basu Dev Adhikari	Krishna Adhikari	Shobha Thapa Magar
Bharat Bahadur Oli	Krishna Bista	Sirajuddin Dhuniya
Bhawana Bhusal	Madhab Bhusal	Smriti Bashyal
Bikash Aacharya	Manoj Giri	Smriti Khadgi
Binita Chaudhary	Mayawati Kori	Subhadra Pokhrel
Biplov Pathak	MinBahadur Gautam	Sumitra Bhandari
Bishal Thapa Magar	Nisar Ahamad Musalman	Sunita Basnet
Bishnu Bhusal	Nischal Gayawali	Sunita Sharma
Dharma Raj Yadav	Nisha Rayamajhi	Suresh Raskoti
Dilu Khati	Pandabi Barakote	Sushil Bashyal
Dipak Sharma	Pooja Poudel	Swastika Oli
Ganesh Khadka	Prabin Pemi	Swostika Dumre
Ganesh Prasad Oli	Prakash Basnet	Tika KC
Gokarna Paudel	Prakash Upadhayaya	Tika Sunar
		Ujjala Kumari Budha

Province: Karnali

Barsha Saru	Indra B.C.	Prakash Budha
Belmati Saru	Kamal Bhattarai	Prakash Upadhayaya
Bharat Jaishi	Lokesh Nepali	Raju Shahi
Gokarna Prasad Upadhayaya	Nabin Oli	Sandesh Chaudhary
Gyani B.K.	Niranjan Dhakal	Sunita Pokhrel
Hasta Nepali	Pandabi Barakote	Suresh Raskoti
	Pradip Chand	Ujjala Kumari Budha

Province: Sudurpaschim

Aayusha Bhatta	Goma Dhakal	Pujan Bista
Amrita Chaudhary	Hima Kumari Sahi	Pushpa Budha
Anisha Ayer	Kapil Dev Bhatta	Rohit Chanara
Anju Chaudhary	Kishor K Bhatta	Saraswati Pant
Ankit Jaishi	Kuber Jaishi	Sirjana Joshi
Bhakta B. Budha	Kushal S. Bohora	Swastika Nepali
Bijay Rana	Madhumati Dangaura	Urmila Mijar
Bindu Pathak	Mina Rokaya	Uttam Sunar
Bipana Joshi	Mudhakar Ojha	Yojana Pathak
Deepak Baduwal	Nab Raj Bhatta	
Dil Prasad Jaishi	Pradip K Khadka	

G. Local Supporters

Province: Koshi

S.N.	Name	Designation	Office/Place
1	Dr. Chitra Kumar Limbu	Deputy Chairperson	Sirijunga Rural Municpality, Taplejung
2	Kalpana Adhikari	Head	Barun Multiple Campus, Khandabari, Sankhuwasabha
3	Surendra Thapa	Ward Secretary	Halesi Tuwachung -11, Ward Office
4	Yam Khadka Kafle	Politician	Sakela Rural Municipality-4, Khotang
5	Netra Bahadur Khatri	Ward Chair	Aamchok Rural Municipality-4, Ward Office
6	Santosh Rai	Student Leader	Aamchok Rural Municipality-4,
7	Pradip Yonjan	Ward Secretary	Dhankuta Municipality-2, Dhankuta
8	Subarna Limbu	Ward Secretary	Yangwarak Rural Municipality-5, Panchthar
9	Anwesh Thulung	Head, the Gaun Initiative	Ilam Municipality
10	Man Bahadur Parajuli	Ward Secretory	Mechinagar Municipality-3, Jhapa
11	Surendra Aryal	Ward Secretory	Arjundhara Municipality-6, Jhapa
12	Devi Phuyal	Ward Secretory	Kamal Rural Municipality-3, Jhapa
13	Arjun Kumar Chapagain	Ward Secretory	Gauradaha Rural Municipality-4, Jhapa
14	Duryodhan Gurung	Ward Chairman	Birtamod Municipality-10, Jhapa
15	Padam Adhikari	Ward Secretory	Haldibari Rural Municipality-4, Jhapa
16	Balaram Katuwal	Ward Chairperson	Chisankhugadhi Rural Municipality-6, Okhaldhunga
17	Ganesh Chaudhary	Ward Chairperson	Sundaraharaicha Municipality-7, Morang
18	Baburam Dhungana	Ward Secretary	Belbari Municipality-10, Morang
19	Gurudwara Singh Bhattarai	Ward Secretary	Kanepokharai Rural Municipality-3, Morang
20	Nara Bahadur Moktan	Ward Chairperson	Urlabari Municipality-9, Morang
21	Sharmila Kumari Thakur	Ward Secretary	Rangeli Municipality-7, Morang
22	Arjun Giri	Ward Chairperson	Biratnagar Metropolitan City-10, Morang
23	Basu Basnet	Ward Chairperson	Biratnagar Metropolitan City-3, Morang
24	Jiten Thapa	Ward Chairperson	Biratnagar Metropolitan City-4, Morang
25	Amish Baral	Owner	Kanchanjunga Banquet, Kanchanbari, Biratnagar
26	Khadka Gurung		Birtamod Municipality-10, Sunsari
27	Suren Tumrok		Birtamod Municipality-10, Sunsari
28	Saurab Khatiwada		Biratnagar Metropolitan City-3, Morang
29	Siddhartha Khadka		

30	Transit Education		Itahari-4, Sunsari
31	Dharma Chandra Thakur	Ward Secretary	Katahari Rural Municipality-5, Morang
32	Bibek Rai	Ward Chairperson	Dharan Municipality-10, Morang
33	Udwab Prasad Pokhrel	Ward Chairperson	Barahakshetra Municipality-6, Sunsari
34	Harun Ansari	Ward Chairperson	Bhokraha Narasimha Rural Municipality-4
35	Samim Ansari		Bhokraha Narasimha Rural Municipality-4
36	Bhakta Lama Tamang	Ward Chairperson	Itahari Sub-Metropolitan City-4, Sunsari
37	Gopal Khapangi Magar	Ward Secretary	Itahari Sub-Metrolitan City-20, Sunsari
38	Ajay Kumar Chaudhari	Ward Chairperson	Barju Rural Municipality-5, Sunsari
39	Mausam Koirala		Expert Education Consultancy, Itahari
40	Aayush Dhungel		Itahari
41	Prabhash Pokhrel		Dharan

Province: Madhesh

S.N.	Name	Designation	Office/Place
1	Buddha Lal Chaudhary	Ward Chairperson	Lalbandi Municipality, Sarlahi
2	Swostika Chaudhary	Student	Lalbandi Municipality, Sarlahi
3	Ramji Chaudhary	Social Worker	Lalbandi Municipality, Sarlahi
4	Shiv Prasad Paswan	Social Worker	Lahan Municipality, Siraha
5	Mamta Paswan		Karjanaha Municipality, Siraha
6	Sudama Hajara	Social Worker	Prasauni Rural Municipality, Bara
7	Patwari Paswan	Social Worker	Bara
8	Pramanand Sah Kanu	Social Worker	Birgunj Metropolitan City, Parsa
9	Lalan Sah	Social Worker	Birgunj Metropolitan City, Parsa
10	Shambhu Raut	Social Worker	Sakhuwa Prashauni Rural Municipality, Parsa
11	Ram Pravesh Paswan	Social Worker	Sakhuwa Prashauni Rural Municipality, Parsa
12	Raj Kishor Paswan	Social Worker	Sakhuwa Prashauni Rural Municipality, Parsa
13	Brij Lal Paswan	Social Worker	Sakhuwa Prashauni Rural Municipality, Parsa
14	Nand Lal Paswan	Social Worker	Parsa
15	Sher Bahadur Paswan	Social Worker	Parsa
16	Shekh Tajamul	Ward Chairperson	Ishnath Municipality, Rautahat
17	Rakesh Majhi	Student	Phatuwa Bijaypur Municipality, Rautahat
18	Jitu Baitha	Student	Baudhimai Municipality, Rautahat
19	Saroj Ji	Social Worker	Aurahi Municipality, Dhanusha
20	Pradip Kamati	Social Worker	Janakpur Sub-Metropolitan City, Dhanusha
21	Shankar Chaudhary	Social Worker	Janakpur Sub-Metropolitan City, Dhanusha

Province: Bagmati

S.N.	Name	Designation	Office/Place
1	Netra Kumar Manadhar	Lecturer	Kathmandu University School of Education
2	Sushila Maharjan	Government Teacher	
3	Rajendra Shrestha	Ward Chairman	Budhanilkantha Municipality -2
4	Shambhu Bhattarai	Ward Chairman	Budhanilkantha Municipality -12
5	Anil Acharya	Local scouts commissioner	Hetauda Sub Metropolitian City
6	Kedar Lamichhane	Ward member	Kakani Rural Municipality -8
7	Rabindra Pathak	Social Activist	
8	Nabina Shrestha		Tokha Municipality 11
9	Raj Kumar Mainali	Scout Member	

Province: Gandaki

S.N.	Name	Designation	Office/Place
1.	Son Bdr. Magar	Ward Chairman	Kabre, Parbat
2.	Harka Bahadur Hamal	Social worker	Vanjyang,Parbat
3.	Shiva kumar Shrestha	Ward chair	Bandipur R.M: 1 Tanahun
4.	Rajesh Poudel	News Reporter	Palungtar 4, Gorkha
5.	Mukunda G.C	Social worker	Gaindakot 1 Nawalpur
6.	Hari Bastola	Teacher	Phoolbari,11 kaski
7.	Bipin Ghimire	Farmer	Palungtar,4 Gorkha
8.	Rachana k.C	Student	Madhyabindu 1 Gudchari Nawalpur
9.	Sagar Magarati	student	Rainas, Lamjung

Province: Lumbini

S.N.	Name	Designation	Office/Place
1	Dasharath Ghimire	Member	FNJ Dang
2	Lok Bahadur Khadka	Social Worker	
3	Kamal Tharu	Ward Chairperson	Dangisharan-4
4	Balaram Khadka	-	-
5	Krishna Karki	-	Tansen-4, Palpa
	Hari Bastola	Teacher	Phoolbari,11 kaski
6	Amrit Giri	Journalist	Rupandhehi
7	Ganesh Gandharba	Student	Madhyabindu 1 Gudchari Nawalpur

Province: Karnali

S.N.	Name	Designation	Office/Place
1	Tapta Bahadur Poudel	Chairperson	Raptisonari R.M. Banke
2	Kalpana Sharma	Ward Chairperson	Kohalpur Municipality-11, Banke
3	Purna Bahadur Bhandari	Ward Chairperson	Khajura R.M.-3 Banke
4	Kaushal Kumar Dhobi	Ward Chairperson	Nepalgunj sub metropolitan-20, Banke
5	Krishna Chandra Morya	Ward Chairperson	Matehiya R.M.-5, Banke
6	Lal Bahadur Chaudhary	Ward Chairperson	Barbardiya Municipality-11, Bardiya
7	Mek Bahadur Gurung	Ward Chairperson	Madhuwan Municipality-8, Bardiya
8	Nim Bahadur Budha	Ward Chairperson	Kushe R.M -4, Jajarkot
9	Prem Bahadur Khatri	Ward Chairperson	Chhedagad -Municipality-12, Jajarkot
10	Kali Bahadur Yedi	Ward Chairperson	Patarasi R.M.-4, Jumla
11	Dipraj Mahatara	Ward Chairperson	Subhakalika R.M.- 8, Kalikot
12	Bam Bahadur Rawat	Ward Chairperson	Aathbis Municipality 1, Dailekh
13	Yam Bahadur B.C.	Ward Chairperson	Panchapuri Municipality 2, Surkhet
14	Pratiman Bankawal	Ward Chairperson	Lekabeshi Municipality 6, Surkhet
15	Dhimraj Jolmi Magar	Ward Chairperson	Barahatal R.M.-5, Surkhet
16	Binod Singh Bista	Ward Chairperson	Birendranagar Municipality 3, Surkhet
17	Dambar Bahadur Shahi	Ward Chairperson	Kumakh R.M.- 7, Salyan
18	Birbahadur Rana	Ward Chairperson	Chaurjhari Municipality 2, Rukum

Province: Sudurpaschim

S.N.	Name	Designation	Office/Place
1.	Janak Bahadur Saud	Ward Chairperson	Gauriganga Municipality-Ward 2
2.	Netra Prasad Khanal	Ward Chairperson	Lamki Chuha Municipality- Ward 1
3.	Ram Chandra Chaudhary	Ward Chairperson	Joshipur Municipality-1
4.	Bali Ram Chaudhary	Ward Chairperson	Tikapur Municipality-6
5.	Gajendra Shahi	Ward Chairperson	Dhangadhi Sub-Metropolitan City-5
6.	Aashef Kunwar	Ward Chairperson	Bhimdatta Municipality-1
7.	Gyanendra Bahadur Bahek Chhetri	Ward Chairperson	Dodhara Chadani Municipality-7
8.	Mahendra Bahadur Shahi	Ward Chairperson	Turmakhand RM-5
9.	Dil Bahadur Shahi	Ward Chairperson	Parshuram Municipality
10.	Dambar Bahadur Dhant	Ward Chairperson	Aalital RM-5
11.	Padam Bahadur Bohara	Ward Chairperson	BadhiKedar RM-5
12.	Prakash Bhandari	Ward Chairperson	Thalara RM-3

13.	Amar Bahadur BK	Ward Chairperson	Gaumul RM-4
14.	Tarka Raj Bhatta	Ward Chairperson	Dogadekedar RM-4
15.	Dharma Bahadur Singh	Ward Chairperson	Krishnapur Municipality-4
16.	Nam Singh Dhami	Ward Chairperson	Mangalsen Municipality-4
17.	Krishna Bahadur Khadka	Ward Chairperson	Badhimalika-6
18.	Chakra Bahadur Bam	Ward Chairperson	Purchaudi-2
19.	Raj Bahadur Ayer	Ward Chairperson	Dhangadhi-3
20.	Sumita Khadka	Youth	Dhangadhi
21.	Pratima Pariyar	Youth	Birendranagar
22.	Gopal Thapa	Youth	Dhangadhi
23.	Jeevan Thapa	Youth	Lamki

APPENDIX E

Codebook

S.N	variable_name	variable_option_label	value	value_label
1	hh_status	Household status	1	Locked
2	hh_status	Household status	2	Not responding
3	hh_status	Household status	3	Open (to survey)
4	hh_children	Does the HH have children (living regularly) in the age group 5-16 years?	1	Yes
5	hh_children	Does the HH have children (living regularly) in the age group 5-16 years?	0	No
6	hh06a	HH06a: Number of members regularly living in the household		
7	hh06b	HH06b: Do you speak Nepali at home?	1	Yes
8	hh06b	HH06b: Do you speak Nepali at home?	0	No
9	hh06c	HH06c: How often do you speak Nepali at home?	1	Always
10	hh06c	HH06c: How often do you speak Nepali at home?	2	Sometimes
11	hh06d	HH06d: Do you speak any other language at home? (ask this irrespective of the responses in HH06a and HH06b)	1	Yes
12	hh06d	HH06d: Do you speak any other language at home? (ask this irrespective of the responses in HH06a and HH06b)	0	No
13	hh07a	HH07a: What material the HH roofing is made of?	1	No roofing
14	hh07a	HH07a: What material the HH roofing is made of?	2	Finished roofing
15	hh07a	HH07a: What material the HH roofing is made of?	3	Natural or rudimentary roofing
16	hh07b	HH07b: What material the HH wall (external) is made of?	1	No walls
17	hh07b	HH07b: What material the HH wall (external) is made of?	2	Finished walls

18	hh07b	HH07b: What material the HH wall (external) is made of?	3	Natural or rudimentary walls
19	hh07c	HH07c: What is the source of lighting regularly used in the household:	1	Electricity
20	hh07c	HH07c: What is the source of lighting regularly used in the household:	2	Solar
21	hh07c	HH07c: What is the source of lighting regularly used in the household:	3	Paraffin
22	hh07c	HH07c: What is the source of lighting regularly used in the household:	4	Other
23	hh07d	HH07d: What is the source of drinking water used regularly in the HH:	1	Piped water
24	hh07d	HH07d: What is the source of drinking water used regularly in the HH:	2	Handpump/tubewell
25	hh07d	HH07d: What is the source of drinking water used regularly in the HH:	3	Borehole
26	hh07d	HH07d: What is the source of drinking water used regularly in the HH:	4	Well
27	hh07d	HH07d: What is the source of drinking water used regularly in the HH:	5	River/Stream/pond
28	hh07d	HH07d: What is the source of drinking water used regularly in the HH:	6	Buy water
29	hh07d	HH07d: What is the source of drinking water used regularly in the HH:	7	Other
30	hh07e	HH07e: Electricity connection	1	Yes
31	hh07e	HH07e: Electricity connection	0	No
32	hh07f	HH07f: Toilet/Latrines?	1	Yes
33	hh07f	HH07f: Toilet/Latrines?	0	No
34	hh07g	HH07g: At least one member (other than the child's parents) who has completed Form 4?	1	Yes
35	hh07g	HH07g: At least one member (other than the child's parents) who has completed Form 4?	0	No
36	hh07h	HH07h: Any children's books or other suitable reading materials for children, like story books besides the school textbooks?	1	Yes
37	hh07h	HH07h: Any children's books or other suitable reading materials for children, like story books besides the school textbooks?	0	No
38	hh07i	HH07i: Any other books or reading materials, like religious textbooks, newspapers, magazines, etc.?	1	Yes

39	hh07i	HH07i: Any other books or reading materials, like religious textbooks, newspapers, magazines, etc.?	0	No
40	hh07j	HH07j: Computer/laptop/tablet?	1	Yes
41	hh07j	HH07j: Computer/laptop/tablet?	0	No
42	hh07k	HH07k: Television?	1	Yes
43	hh07k	HH07k: Television?	0	No
44	hh07l	HH07l: Radio?	1	Yes
45	hh07l	HH07l: Radio?	0	No
46	hh07o	HH07m: Motorised 4-wheeler?	1	Yes
47	hh07o	HH07m: Motorised 4-wheeler?	0	No
48	hh07p	HH07n: Motorised 2-wheeler?	1	Yes
49	hh07p	HH07n: Motorised 2-wheeler?	0	No
50	hh07q	HH07o: Bicycle?	1	Yes
51	hh07q	HH07o: Bicycle?	0	No
52	hh07m	HH07p: Mobile phone?	1	Yes
53	hh07m	HH07p: Mobile phone?	0	No
54	hh07n	HH07q: Is it a smart phone?	1	Yes
55	hh07n	HH07q: Is it a smart phone?	0	No
56	ch02	CH02: What is child's age?	5	5 years
57	ch02	CH02: What is child's age?	6	6 years
58	ch02	CH02: What is child's age?	7	7 years
59	ch02	CH02: What is child's age?	8	8 years
60	ch02	CH02: What is child's age?	9	9 years
61	ch02	CH02: What is child's age?	10	10 years
62	ch02	CH02: What is child's age?	11	11 years
63	ch02	CH02: What is child's age?	12	12 years
64	ch02	CH02: What is child's age?	13	13 years
65	ch02	CH02: What is child's age?	14	14 years
66	ch02	CH02: What is child's age?	15	15 years
67	ch02	CH02: What is child's age?	16	16 years
68	ch03	CH03: What is child's sex	1	Female
69	ch03	CH03: What is child's sex	2	Male
70	ch04a	CH04a: Does the child have difficulty in seeing, even if wearing glasses?	1	No difficulty
71	ch04a	CH04a: Does the child have difficulty in seeing, even if wearing glasses?	2	Some difficulty

72	ch04a	CH04a: Does the child have difficulty in seeing, even if wearing glasses?	3	A lot of difficulty
73	ch04a	CH04a: Does the child have difficulty in seeing, even if wearing glasses?	4	Cannot do at all
74	ch04b	CH04b: Does the child have difficulty in hearing, even if wearing hearing aids?	1	No difficulty
75	ch04b	CH04b: Does the child have difficulty in hearing, even if wearing hearing aids?	2	Some difficulty
76	ch04b	CH04b: Does the child have difficulty in hearing, even if wearing hearing aids?	3	A lot of difficulty
77	ch04b	CH04b: Does the child have difficulty in hearing, even if wearing hearing aids?	4	Cannot do at all
78	ch04c	CH04c: Compared with children of the same age, does the child have difficulty in walking?	1	No difficulty
79	ch04c	CH04c: Compared with children of the same age, does the child have difficulty in walking?	2	Some difficulty
80	ch04c	CH04c: Compared with children of the same age, does the child have difficulty in walking?	3	A lot of difficulty
81	ch04c	CH04c: Compared with children of the same age, does the child have difficulty in walking?	4	Cannot do at all
82	ch04d	CH04d: Compared with children of the same age, does the child have difficulty with self-care such as feeding or dressing?	1	No difficulty
83	ch04d	CH04d: Compared with children of the same age, does the child have difficulty with self-care such as feeding or dressing?	2	Some difficulty
84	ch04d	CH04d: Compared with children of the same age, does the child have difficulty with self-care such as feeding or dressing?	3	A lot of difficulty
85	ch04d	CH04d: Compared with children of the same age, does the child have difficulty with self-care such as feeding or dressing?	4	Cannot do at all
86	ch04e	CH04e: Compared with children of the same age, does the child have difficulty in being understood by others using customary/usual language?	1	No difficulty
87	ch04e	CH04e: Compared with children of the same age, does the child have difficulty in being understood by others using customary/usual language?	2	Some difficulty
88	ch04e	CH04e: Compared with children of the same age, does the child have difficulty in being understood by others using customary/usual language?	3	A lot of difficulty

89	ch04e	CH04e: Compared with children of the same age, does the child have difficulty in being understood by others using customary/usual language?	4	Cannot do at all
90	ch04f	CH04f: Compared with children of the same age, does the child have difficulty in remembering things that s/he has learned?	1	No difficulty
91	ch04f	CH04f: Compared with children of the same age, does the child have difficulty in remembering things that s/he has learned?	2	Some difficulty
92	ch04f	CH04f: Compared with children of the same age, does the child have difficulty in remembering things that s/he has learned?	3	A lot of difficulty
93	ch04f	CH04f: Compared with children of the same age, does the child have difficulty in remembering things that s/he has learned?	4	Cannot do at all
94	ch05	CH05: Is child currently enrolled in any school or preschool?	1	Yes
95	ch05	CH05: Is child currently enrolled in any school or preschool?	0	No
96	ch06a	CH06a: In which grade / class child is currently enrolled?	0	Pre-Primary
97	ch06a	CH06a: In which grade / class child is currently enrolled?	1	Grade 1
98	ch06a	CH06a: In which grade / class child is currently enrolled?	2	Grade 2
99	ch06a	CH06a: In which grade / class child is currently enrolled?	3	Grade 3
100	ch06a	CH06a: In which grade / class child is currently enrolled?	4	Grade 4
101	ch06a	CH06a: In which grade / class child is currently enrolled?	5	Grade 5
102	ch06a	CH06a: In which grade / class child is currently enrolled?	6	Grade 6
103	ch06a	CH06a: In which grade / class child is currently enrolled?	7	Grade 7
104	ch06a	CH06a: In which grade / class child is currently enrolled?	8	Grade 8
105	ch06a	CH06a: In which grade / class child is currently enrolled?	9	Grade 9
106	ch06a	CH06a: In which grade / class child is currently enrolled?	10	Grade 10
107	ch06a	CH06a: In which grade / class child is currently enrolled?	11	Grade 11
108	ch06a	CH06a: In which grade / class child is currently enrolled?	12	Grade 12

109	ch06b	CH06b: What type of school child goes to?	1	Government
110	ch06b	CH06b: What type of school child goes to?	2	Private
111	ch06b	CH06b: What type of school child goes to?	3	Other
112	ch06c	CH06c: Is Nepali the official medium of instruction in this school?	1	Yes
113	ch06c	CH06c: Is Nepali the official medium of instruction in this school?	0	No
114	ch06d	CH06d: Does child have textbooks for the current grade?	1	Yes
115	ch06d	CH06d: Does child have textbooks for the current grade?	0	No
116	ch06e	CH06e: Has child ever repeated a grade in school?	1	Yes
117	ch06e	CH06e: Has child ever repeated a grade in school?	0	No
118	ch07a	CH07a: Was child ever enrolled in school?	1	Yes
119	ch07a	CH07a: Was child ever enrolled in school?	0	No
120	ch07b	CH07b: In which year child dropped out?	2015	2015
121	ch07b	CH07b: In which year child dropped out?	2016	2016
122	ch07b	CH07b: In which year child dropped out?	2017	2017
123	ch07b	CH07b: In which year child dropped out?	2018	2018
124	ch07b	CH07b: In which year child dropped out?	2019	2019
125	ch07b	CH07b: In which year child dropped out?	2020	2020
126	ch07b	CH07b: In which year child dropped out?	2021	2021
127	ch07b	CH07b: In which year child dropped out?	2022	2022
128	ch07b	CH07b: In which year child dropped out?	2023	2023
129	ch07b	CH07b: In which year child dropped out?	2024	2024
130	ch07b	CH07b: In which year child dropped out?	2025	2025
131	ch07c	CH07c: What was the last grade/class child completed before dropping out?	0	Pre-Primary
132	ch07c	CH07c: What was the last grade/class child completed before dropping out?	1	Grade 1
133	ch07c	CH07c: What was the last grade/class child completed before dropping out?	2	Grade 2
134	ch07c	CH07c: What was the last grade/class child completed before dropping out?	3	Grade 3
135	ch07c	CH07c: What was the last grade/class child completed before dropping out?	4	Grade 4
136	ch07c	CH07c: What was the last grade/class child completed before dropping out?	5	Grade 5

137	ch07c	CH07c: What was the last grade/class child completed before dropping out?	6	Grade 6
138	ch07c	CH07c: What was the last grade/class child completed before dropping out?	7	Grade 7
139	ch07c	CH07c: What was the last grade/class child completed before dropping out?	8	Grade 8
140	ch07c	CH07c: What was the last grade/class child completed before dropping out?	9	Grade 9
141	ch07c	CH07c: What was the last grade/class child completed before dropping out?	10	Grade 10
142	ch07c	CH07c: What was the last grade/class child completed before dropping out?	11	Grade 11
143	ch07c	CH07c: What was the last grade/class child completed before dropping out?	12	Grade 12
144	ch07d	CH07d: What was the main reason child dropped out?	1	Could not afford the fees
145	ch07d	CH07d: What was the main reason child dropped out?	2	School closed down
146	ch07d	CH07d: What was the main reason child dropped out?	3	Was not promoted so discontinued
147	ch07d	CH07d: What was the main reason child dropped out?	4	No school available nearby for the next grade
148	ch07d	CH07d: What was the main reason child dropped out?	5	Not interested anymore
149	ch07d	CH07d: What was the main reason child dropped out?	6	Other
150	ch07d	CH07d: What was the main reason child dropped out?	7	Don't know
151	ch08	CH08: Does child currently take any paid tuition class (coaching)?	1	Yes
152	ch08	CH08: Does child currently take any paid tuition class (coaching)?	0	No
153	ch09	CH09: Has child brought home any materials to read (other than school textbooks) from the school library or any other place in the last two weeks?	1	Yes
154	ch09	CH09: Has child brought home any materials to read (other than school textbooks) from the school library or any other place in the last two weeks?	0	No
155	ch10a	CH10a: Does anyone at home help child with their homework?	1	Yes
156	ch10a	CH10a: Does anyone at home help child with their homework?	0	No
157	ch10b	CH10b: Who helps child MOST often?	1	Father

158	ch10b	CH10b: Who helps child MOST often?	2	Mother
159	ch10b	CH10b: Who helps child MOST often?	3	Elder sibling
160	ch10b	CH10b: Who helps child MOST often?	4	Uncle
161	ch10b	CH10b: Who helps child MOST often?	5	Aunty
162	ch10b	CH10b: Who helps child MOST often?	6	Cousin
163	ch10b	CH10b: Who helps child MOST often?	7	Other
164	ch10c	CH10c: How often does someone in the household read or tell stories to child?	0	Never
165	ch10c	CH10c: How often does someone in the household read or tell stories to child?	1	Less than once a week
166	ch10c	CH10c: How often does someone in the household read or tell stories to child?	2	1-2 days per week
167	ch10c	CH10c: How often does someone in the household read or tell stories to child?	3	3-4 days per week
168	ch10c	CH10c: How often does someone in the household read or tell stories to child?	4	5-7 days per week
169	pt00	Who does child live with?	0	Neither
170	pt00	Who does child live with?	1	Mother
171	pt00	Who does child live with?	2	Father
172	pt00	Who does child live with?	3	Both
173	pt00	Who does child live with?	99	Same parents as the first child
174	pt01b	PT01b: Mother's age	number	Age group 18-80 year
175	pt01c	PT01c: Has the mother ever attended school?	1	Yes
176	pt01c	PT01c: Has the mother ever attended school?	0	No
177	pt01d	PT01d: What was the last class/grade she completed?	1	Primary School
178	pt01d	PT01d: What was the last class/grade she completed?	2	Secondary School
179	pt01d	PT01d: What was the last class/grade she completed?	3	Tertiary College
180	pt01d	PT01d: What was the last class/grade she completed?	4	University
181	pt01e	PT01e: Does the mother have an income-generating work/job?	1	Yes
182	pt01e	PT01e: Does the mother have an income-generating work/job?	0	No
183	pt01f	PT01f: what kind of income-generating job?	1	Agricultural or related work that is family/self owned

184	pt01f	PT01f: what kind of income-generating job?	2	Agricultural or related work that is owned by someone else (includes government and others)
185	pt01f	PT01f: what kind of income-generating job?	3	Non-agricultural work in a family/self owned enterprise
186	pt01f	PT01f: what kind of income-generating job?	4	Non-agricultural work in an enterprise owned by someone else (includes government and others)
187	pt02b	PT02b: father's age	number	Age group 18-80 year
188	pt02c	PT02c: Has the father ever attended school?	1	Yes
189	pt02c	PT02c: Has the father ever attended school?	0	No
190	pt02d	PT02d: What was the last class/grade he completed?	1	Primary School
191	pt02d	PT02d: What was the last class/grade he completed?	2	Secondary School
192	pt02d	PT02d: What was the last class/grade he completed?	3	Tertiary College
193	pt02d	PT02d: What was the last class/grade he completed?	4	University
194	pt02e	PT02e: Does the father have an income-generating work/job?	1	Yes
195	pt02e	PT02e: Does the father have an income-generating work/job?	0	No
196	pt02f	PT02f: what kind of income-generating job?	1	Agricultural or related work that is family/self owned
197	pt02f	PT02f: what kind of income-generating job?	2	Agricultural or related work that is owned by someone else (includes government and others)
198	pt02f	PT02f: what kind of income-generating job?	3	Non-agricultural work in a family/self owned enterprise
199	pt02f	PT02f: what kind of income-generating job?	4	Non-agricultural work in an enterprise owned by someone else (includes government and others)
200	pt01d	PT01d: What was the last class/grade she completed?	1	Primary School
201	pt01d	PT01d: What was the last class/grade she completed?	2	Secondary School

202	pt01d	PT01d: What was the last class/grade she completed?	3	Tertiary College
203	pt01d	PT01d: What was the last class/grade she completed?	4	University
204	ch00	Is the child available to start the assessment?	1	Yes
205	ch00	Is the child available to start the assessment?	0	No
206	sample	What sample of assessment are you using?	1	Sample 1
207	sample	What sample of assessment are you using?	2	Sample 2
208	l1.1	L1.1	0	0- No response/Don't know
209	l1.1	L1.1	1	1- Incorrect answer
210	l1.1	L1.1	2	2- Correct answer
211	l1.2	L1.2	0	0- No response/Don't know
212	l1.2	L1.2	1	1- Incorrect answer
213	l1.2	L1.2	2	2- Correct answer
214	l1.3	L1.3	0	0- No response/Don't know
215	l1.3	L1.3	1	1- Incorrect answer
216	l1.3	L1.3	2	2- Correct answer
217	l1.4	L1.4	0	0- No response/Don't know
218	l1.4	L1.4	1	1- Incorrect answer
219	l1.4	L1.4	2	2- Correct answer
220	l2.1	L2.1	0	0- No response/Don't know
221	l2.1	L2.1	1	1- Incorrect answer
222	l2.1	L2.1	2	2- Correct answer
223	l2.2	L2.2	0	0- No response/Don't know

224	l2.2	L2.2	1	1- Incorrect answer
225	l2.2	L2.2	2	2- Correct answer
226	l2.3	L2.3	0	0- No response/Don't know
227	l2.3	L2.3	1	1- Incorrect answer
228	l2.3	L2.3	2	2- Correct answer
229	l2.4	L2.4	0	0- No response/Don't know
230	l2.4	L2.4	1	1- Incorrect answer
231	l2.4	L2.4	2	2- Correct answer
232	l2.5	L2.5	0	0- No response/Don't know
233	l2.5	L2.5	1	1- Incorrect answer
234	l2.5	L2.5	2	2- Correct answer
235	l3.1	L3.1	0	0- No response/Don't know
236	l3.1	L3.1	1	1- Incorrect answer
237	l3.1	L3.1	2	2- Correct answer
238	l3.2	L3.2	0	0- No response/Don't know
239	l3.2	L3.2	1	1- Incorrect answer
240	l3.2	L3.2	2	2- Correct answer
241	l3.3	L3.3	0	0- No response/Don't know
242	l3.3	L3.3	1	1- Incorrect answer
243	l3.3	L3.3	2	2- Correct answer
244	l3.4	L3.4	0	0- No response/Don't know
245	l3.4	L3.4	1	1- Incorrect answer
246	l3.4	L3.4	2	2- Correct answer

247	l3.5	L3.5	0	0- No response/Don't know
248	l4.1	L4.1	0	0- No response/Don't know
249	l4.1	L4.1	1	1- Incorrect answer
250	l4.1	L4.1	2	2- Correct answer
251	l4.2	L4.2	0	0- No response/Don't know
252	l4.2	L4.2	1	1- Incorrect answer
253	l4.2	L4.2	2	2- Correct answer
254	l4.3	L4.3	0	0- No response/Don't know
255	l4.3	L4.3	1	1- Incorrect answer
256	l4.3	L4.3	2	2- Correct answer
257	l4.4	L4.4	0	0- No response/Don't know
258	l4.4	L4.4	1	1- Incorrect answer
259	l4.4	L4.4	2	2- Correct answer
260	l4.5	L4.5	0	0- No response/Don't know
261	l4.5	L4.5	1	1- Incorrect answer
262	l4.5	L4.5	2	2- Correct answer
263	l4.6	L4.6	0	0- No response/Don't know
264	l4.6	L4.6	1	1- Incorrect answer
265	l4.6	L4.6	2	2- Correct answer
266	l5_story_reading	L5. Has the child finished reading the story?	1	Yes
267	l5_story_reading	L5. Has the child finished reading the story?	0	No
268	l5_error	L5_Errors. How many mistakes the child made in reading the story?	number	number of errors

269	l5.1	L5.1	0	0- No response/Don't know
270	l5.1	L5.1	1	1- Incorrect answer
271	l5.1	L5.1	2	2- Correct answer
272	l5.2	L5.2	0	0- No response/Don't know
273	l5.2	L5.2	1	1- Incorrect answer
274	l5.2	L5.2	2	2- Correct answer
275	l5.3	L5.3	0	0- No response/Don't know
276	l5.3	L5.3	1	1- Incorrect answer
277	l5.3	L5.3	2	2- Correct answer
278	l5.4	L5.4	0	0- No response/Don't know
279	l5.4	L5.4	1	1- Incorrect answer
280	l5.4	L5.4	2	2- Correct answer
281	l5.5	L5.5	0	0- No response/Don't know
282	l5.5	L5.5	1	1- Incorrect answer
283	l5.5	L5.5	2	2- Correct answer
284	l6_story_reading	L6. Has the child finished reading the story?	1	Yes
285	l6_story_reading	L6. Has the child finished reading the story?	0	No
286	l6_error	L6_Errors. How many mistakes the child made in reading the story?	number	number of errors
287	l6.1	L6.1	0	0- No response/Don't know
288	l6.1	L6.1	1	1- Incorrect answer
289	l6.1	L6.1	2	2- Correct answer
290	l6.2	L6.2	0	0- No response/Don't know

291	l6.2	L6.2	1	1- Incorrect answer
292	l6.2	L6.2	2	2- Correct answer
293	l6.3	L6.3	0	0- No response/Don't know
294	l6.3	L6.3	1	1- Incorrect answer
295	l6.3	L6.3	2	2- Correct answer
296	l6.4	L6.4	0	0- No response/Don't know
297	l6.4	L6.4	1	1- Incorrect answer
298	l6.4	L6.4	2	2- Correct answer
299	l6.5	L6.5	0	0- No response/Don't know
300	l6.5	L6.5	1	1- Incorrect answer
301	l6.5	L6.5	2	2- Correct answer
302	n1	N1	0	0- No response/Don't know
303	n1	N1	1	1- Incorrect answer
304	n1	N1	2	2- Correct answer
305	n2	N2	0	0- No response/Don't know
306	n2	N2	1	1- Incorrect answer
307	n2	N2	2	2- Correct answer
308	n3	N3	0	0- No response/Don't know
309	n3	N3	1	1- Incorrect answer
310	n3	N3	2	2- Correct answer
311	n4	N4	0	0- No response/Don't know
312	n4	N4	1	1- Incorrect answer

313	n4	N4	2	2- Correct answer
314	n5	N5	0	0- No response/Don't know
315	n5	N5	1	1- Incorrect answer
316	n5	N5	2	2- Correct answer
317	n6	N6	0	0- No response/Don't know
318	n6	N6	1	1- Incorrect answer
319	n6	N6	2	2- Correct answer
320	n7	N7	0	0- No response/Don't know
321	n7	N7	1	1- Incorrect answer
322	n7	N7	2	2- Correct answer
323	n8	N8	0	0- No response/Don't know
324	n8	N8	1	1- Incorrect answer
325	n8	N8	2	2- Correct answer
326	n9	N9	0	0- No response/Don't know
327	n9	N9	1	1- Incorrect answer
328	n9	N9	2	2- Correct answer
329	n10	N10	0	0- No response/Don't know
330	n10	N10	1	1- Incorrect answer
331	n10	N10	2	2- Correct answer
332	n11	N11	0	0- No response/Don't know
333	n11	N11	1	1- Incorrect answer
334	n11	N11	2	2- Correct answer

335	n12	N12	0	0- No response/Don't know
336	n12	N12	1	1- Incorrect answer
337	n12	N12	2	2- Correct answer
338	n13	N13	0	0- No response/Don't know
339	n13	N13	1	1- Incorrect answer
340	n13	N13	2	2- Correct answer
341	n14	N14	0	0- No response/Don't know
342	n14	N14	1	1- Incorrect answer
343	n14	N14	2	2- Correct answer
344	n15	N15	0	0- No response/Don't know
345	n15	N15	1	1- Incorrect answer
346	n15	N15	2	2- Correct answer
347	n16	N16	0	0- No response/Don't know
348	n16	N16	1	1- Incorrect answer
349	n16	N16	2	2- Correct answer
350	n17	N17	0	0- No response/Don't know
351	n17	N17	1	1- Incorrect answer
352	n17	N17	2	2- Correct answer
353	n18	N18	0	0- No response/Don't know
354	n18	N18	1	1- Incorrect answer
355	n18	N18	2	2- Correct answer
356	n19	N19	0	0- No response/Don't know

357	n19	N19	1	1- Incorrect answer
358	n19	N19	2	2- Correct answer
359	n20	N20	0	0- No response/Don't know
360	n20	N20	1	1- Incorrect answer
361	n20	N20	2	2- Correct answer
362	n21	N21	0	0- No response/Don't know
363	n21	N21	1	1- Incorrect answer
364	n21	N21	2	2- Correct answer
365	n22	N22	0	0- No response/Don't know
366	n22	N22	1	1- Incorrect answer
367	n22	N22	2	2- Correct answer
368	n23	N23	0	0- No response/Don't know
369	n23	N23	1	1- Incorrect answer
370	n23	N23	2	2- Correct answer
371	n24	N24	0	0- No response/Don't know
372	n24	N24	1	1- Incorrect answer
373	n24	N24	2	2- Correct answer
374	n25	N25	0	0- No response/Don't know
375	n25	N25	1	1- Incorrect answer
376	n25	N25	2	2- Correct answer
377	n26	N26	0	0- No response/Don't know
378	n26	N26	1	1- Incorrect answer

379	n26	N26	2	2- Correct answer
380	n27	N27: Easy addition	0	0- No response/Don't know
381	n27	N27: Easy addition	1	1- Incorrect answer
382	n27	N27: Easy addition	2	2- Correct answer
383	n28	N28: Easy subtraction	0	0- No response/Don't know
384	n28	N28: Easy subtraction	1	1- Incorrect answer
385	n28	N28: Easy subtraction	2	2- Correct answer
386	n29	N29: Easy multiplication	0	0- No response/Don't know
387	n29	N29: Easy multiplication	1	1- Incorrect answer
388	n29	N29: Easy multiplication	2	2- Correct answer
389	n30	N30: Easy division	0	0- No response/Don't know
390	n30	N30: Easy division	1	1- Incorrect answer
391	n30	N30: Easy division	2	2- Correct answer
392	n31	N31: Difficult addition	0	0- No response/Don't know
393	n31	N31: Difficult addition	1	1- Incorrect answer
394	n31	N31: Difficult addition	2	2- Correct answer
395	n32	N32: Difficult subtraction	0	0- No response/Don't know
396	n32	N32: Difficult subtraction	1	1- Incorrect answer
397	n32	N32: Difficult subtraction	2	2- Correct answer
398	n33	N33: Difficult multiplication	0	0- No response/Don't know
399	n33	N33: Difficult multiplication	1	1- Incorrect answer
400	n33	N33: Difficult multiplication	2	2- Correct answer

401	n34	N34: Difficult division	0	0- No response/Don't know
402	n34	N34: Difficult division	1	1- Incorrect answer
403	n34	N34: Difficult division	2	2- Correct answer
404	n35	N35: Word-problem subtraction	0	0- No response/Don't know
405	n35	N35: Word-problem subtraction	1	1- Incorrect answer
406	n35	N35: Word-problem subtraction	2	2- Correct answer
407	n36	N36: Word-problem division	0	0- No response/Don't know
408	n36	N36: Word-problem division	1	1- Incorrect answer
409	n36	N36: Word-problem division	2	2- Correct answer
410	v01	V01: Is there tarmac/all weather road leading to the village?	1	Yes
411	v01	V01: Is there tarmac/all weather road leading to the village?	0	No
412	v02	V02: Is there public transport facility available to the village?	1	Yes
413	v02	V02: Is there public transport facility available to the village?	0	No
414	v03	V03: Does the village have access to electricity connection?	1	Yes
415	v03	V03: Does the village have access to electricity connection?	0	No
416	v04	V04: Does the village have any government/ public health clinic/hospital?	1	Yes
417	v04	V04: Does the village have any government/ public health clinic/hospital?	0	No
418	v05	V05: Does the village have any private health clinic/hospital?	1	Yes
419	v05	V05: Does the village have any private health clinic/hospital?	0	No
420	v06a	V06a: Does the village have any pre-primary schools or any school offering pre-primary grades/classes?	1	Yes
421	v06a	V06a: Does the village have any pre-primary schools or any school offering pre-primary grades/classes?	0	No

422	v06b	V06b: Which type of school(s) in the village offers pre-primary grades/classes? (Select all that apply)	1	Government/Public
423	v06b	V06b: Which type of school(s) in the village offers pre-primary grades/classes? (Select all that apply)	2	Private
424	v06b	V06b: Which type of school(s) in the village offers pre-primary grades/classes? (Select all that apply)	3	Other
425	v07	V07: Total number of schools in the village (write 0 if no schools)	number	
426	v07a	V07a: What type of school is this?	1	Government / Public
427	v07a	V07a: What type of school is this?	2	Private
428	v07a	V07a: What type of school is this?	3	Other
429	v07b	V07b: What is the lowest grade/class offered in the school?	0	Pre-Primary
430	v07b	V07b: What is the lowest grade/class offered in the school?	1	Grade 1
431	v07b	V07b: What is the lowest grade/class offered in the school?	2	Grade 2
432	v07b	V07b: What is the lowest grade/class offered in the school?	3	Grade 3
433	v07b	V07b: What is the lowest grade/class offered in the school?	4	Grade 4
434	v07b	V07b: What is the lowest grade/class offered in the school?	5	Grade 5
435	v07b	V07b: What is the lowest grade/class offered in the school?	6	Grade 6
436	v07b	V07b: What is the lowest grade/class offered in the school?	7	Grade 7
437	v07b	V07b: What is the lowest grade/class offered in the school?	8	Grade 8
438	v07b	V07b: What is the lowest grade/class offered in the school?	9	Grade 9
439	v07b	V07b: What is the lowest grade/class offered in the school?	10	Grade 10
440	v07b	V07b: What is the lowest grade/class offered in the school?	11	Grade 11
441	v07b	V07b: What is the lowest grade/class offered in the school?	12	Grade 12
442	v07c	V07c: What is the highest grade/class offered in the school?	0	Pre-Primary

443	v07c	V07c: What is the highest grade/class offered in the school?	1	Grade 1
444	v07c	V07c: What is the highest grade/class offered in the school?	2	Grade 2
445	v07c	V07c: What is the highest grade/class offered in the school?	3	Grade 3
446	v07c	V07c: What is the highest grade/class offered in the school?	4	Grade 4
447	v07c	V07c: What is the highest grade/class offered in the school?	5	Grade 5
448	v07c	V07c: What is the highest grade/class offered in the school?	6	Grade 6
449	v07c	V07c: What is the highest grade/class offered in the school?	7	Grade 7
450	v07c	V07c: What is the highest grade/class offered in the school?	8	Grade 8
451	v07c	V07c: What is the highest grade/class offered in the school?	9	Grade 9
452	v07c	V07c: What is the highest grade/class offered in the school?	10	Grade 10
453	v07c	V07c: What is the highest grade/class offered in the school?	11	Grade 11
454	v07c	V07c: What is the highest grade/class offered in the school?	12	Grade 12

APPENDIX F

Prevalence of Functional Difficulties Among Children

Introduction

This appendix presents findings from the Washington Group Child Functioning Module (WG-CFM), which was administered as part of the ICAN ICARe 2025 assessment to establish a baseline understanding of functional difficulties among children participating in the survey. The module provides an internationally comparable measure of disability based on everyday functioning rather than medical or clinical diagnosis, making it well suited for large-scale, household-based assessments. The results included here summarize the prevalence of significant functional difficulty across six domains and offer a reference point for future efforts to strengthen the inclusiveness of ICAN ICARe tools.

Overview of the Washington Group Child Functioning Module

The WG-CFM is a globally recognized standard developed by the Washington Group on Disability Statistics and UNICEF to measure disability among children aged 2–17 years. It focuses on how children perform key activities in their daily lives, capturing difficulties that may affect participation in schooling, communication, and learning. The module was integrated into the ICAN ICARe household questionnaire and administered to parents or primary caregivers for each child in the household.

Domains Assessed

The WG-CFM includes six core functional domains that are critical for learning and everyday participation:

1. Seeing: difficulty seeing, even with glasses
2. Hearing: difficulty hearing, even with aids
3. Walking: mobility challenges compared to peers
4. Self-care: challenges with feeding or dressing
5. Communication: difficulty being understood by familiar and unfamiliar people
6. Remembering: difficulty remembering or concentrating

Definition of Significant Functional Difficulty

Each domain uses a four-category response scale:

- No difficulty
- Some difficulty
- A lot of difficulty
- Cannot do at all

Consistent with Washington Group reporting standards, significant functional difficulty is defined as a response of:

- "A lot of difficulty"
- "Cannot do at all"

The estimates below refer to the proportion of children experiencing significant functional difficulty in each domain.

For each functional domain, ICAN ICARe 2025 presents the percentage of children reporting significant functional difficulty ("a lot of difficulty", or "cannot do at all") across six Washington Group domains for the children participating in the survey as follows: Seeing: 0.37%, Hearing: 0.35%, Walking: 0.35%, Self-care: 1.08%, Communication: 0.23%, Remembering: 0.37:

Notes on Interpretation

The WG-CFM does not diagnose medical disabilities; it identifies functional difficulties relevant to children's everyday participation and learning.

Prevalence reflects caregiver reporting, which may vary across cultural and linguistic contexts.
These estimates provide a baseline, not a full assessment of disability inclusion within education systems.
Estimates are not disaggregated by age or grade because ICAN ICARe's primary learning reporting frameworks (age 10, Grade 4, age trajectories) do not yet include disability-disaggregated MPL results.

Implications for Future ICAN ICARe Rounds

The 2025 WG-CFM data provide a foundation for strengthening the inclusiveness of ICAN ICARe in future cycles. The next rounds will focus on:

- Developing adaptations for children with visual, hearing, and communication difficulties
- Refining assessment procedures to improve accessibility
- Exploring reporting structures for disability-disaggregated learning outcomes
- Expanding collaboration with national ministries and disability organisations
- Integrating socio-emotional learning and other domains relevant to inclusive education

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