PAL NETWORK
People's Action for Learning

ICAN

July 9, 2020

ICAN
International Common Assessment of Numeracy
Background, Features and Large-scale Implementation

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Nigeria

Nepal

Tanzania

Mexico

Pakistan

Citizen-Led Assessment (CLA) approach innovated in India in 2005

Adopted and adapted in other Global South contexts

People's Action for Learning (PAL) Network formalised in 2015, now comprising members in 14 countries across 3 continents

CLA approach is relevant for the Global South

Core features of CLAs:

- Conducted in **households** to include all children irrespective of schooling status

- Implemented **orally and one-on-one** as many children cannot read

- Cover **foundational learning** content taught in early primary classes

- Administer **simple-to-use tools, processes** and produce **easy-to-understand data** to ensure wider engagement

- Ensure **collaboration with local stakeholders** to create awareness and fuel local action

Global goal for education: SDG 4

- SDG 4 focuses on ensuring "inclusive and equitable quality education and lifelong learning opportunities for all."

- Within Target 4.1, the first indicator (SDG 4.1.1) tracks the "proportion of children and young people achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex"

  (a) in Grade 2 or 3 → **Critical to measure learning early so that corrective measures can be implemented**

- Robust and regular data on learning outcomes are needed over time and across countries

- Limited relevance of existing data to track progress towards SDG 4.1.1 for grades 2 or 3

ICAN - A comparable assessment for the Global South

The minimum proficiency level descriptor for numeracy under SDG 4.1.1 for class 2 or 3 requires students to demonstrate skills in number sense and computation, shape recognition and spatial orientation.

Overview of domains and tasks in the ICAN assessment tool

50%

NUMBER KNOWLEDGE

- Counting, comparing number of objects
- Number recognition
- Operations (without and with carry-over, borrow and remainder)
- Real world problems

50%

GEOMETRY

- Position and direction
- Shapes and figures

MEASUREMENT

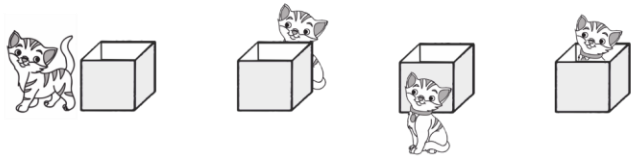- Length and capacity
- Time and calendar

DATA DISPLAY
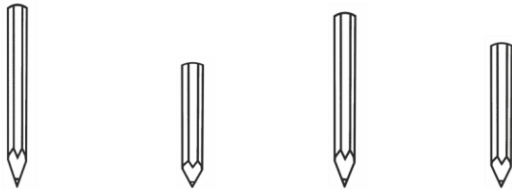
- Retrieving simple information

Sample tasks from the ICAN assessment tool

Space, shape and measurement tasks

Q1 In this picture, which cat is inside the box?

Q3 In this picture, which is the shortest pencil?

Q11 Which of these is a straight line?

Number knowledge tasks
(recognition, operation and word problems)

Q15 Recognize numbers.

3		2
	8	
0		9

At least 4 out of 5 numbers must be correct

Solve the following questions.

Q17

```
  4 6
- 2 1
------
```
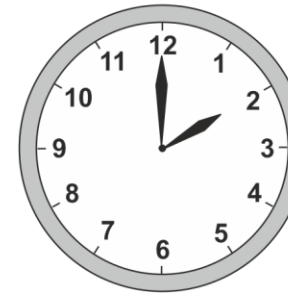
Q22

```
  7 8
- 2 9
------
```

Q25 Listen to the question carefully, solve and answer.

There were 43 children in the park. Out of these, 25 of them have gone home. How many children are left in the park now?
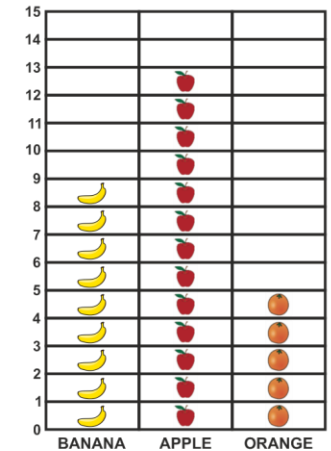
Applied tasks
(Telling time, telling day and date from a calendar, data display)

Q7 What is the time in this clock?

Look at the chart given below carefully.

Q5 How many apples are there?

Q6 How many more bananas are there than oranges?

Look at the calendar given below.

MARCH 2019

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Q9 What is the day on 5th March?

Q10 What is the date on the second Monday of March?

ICAN assessment tool is available in 11 languages on the PAL Network website

ICAN 2019: Large-scale household-based implementation

- Proof of concept - feasibility of using common tools across different country contexts

- ICAN 2019 retained all core features of the CLA architecture

- Translation, training, data collection procedures based on PAL Network's Data Quality Standards Framework (DQSF) in all participating countries

- Implementation by PAL member organisations in collaboration with local partners

Conducted in 13 countries
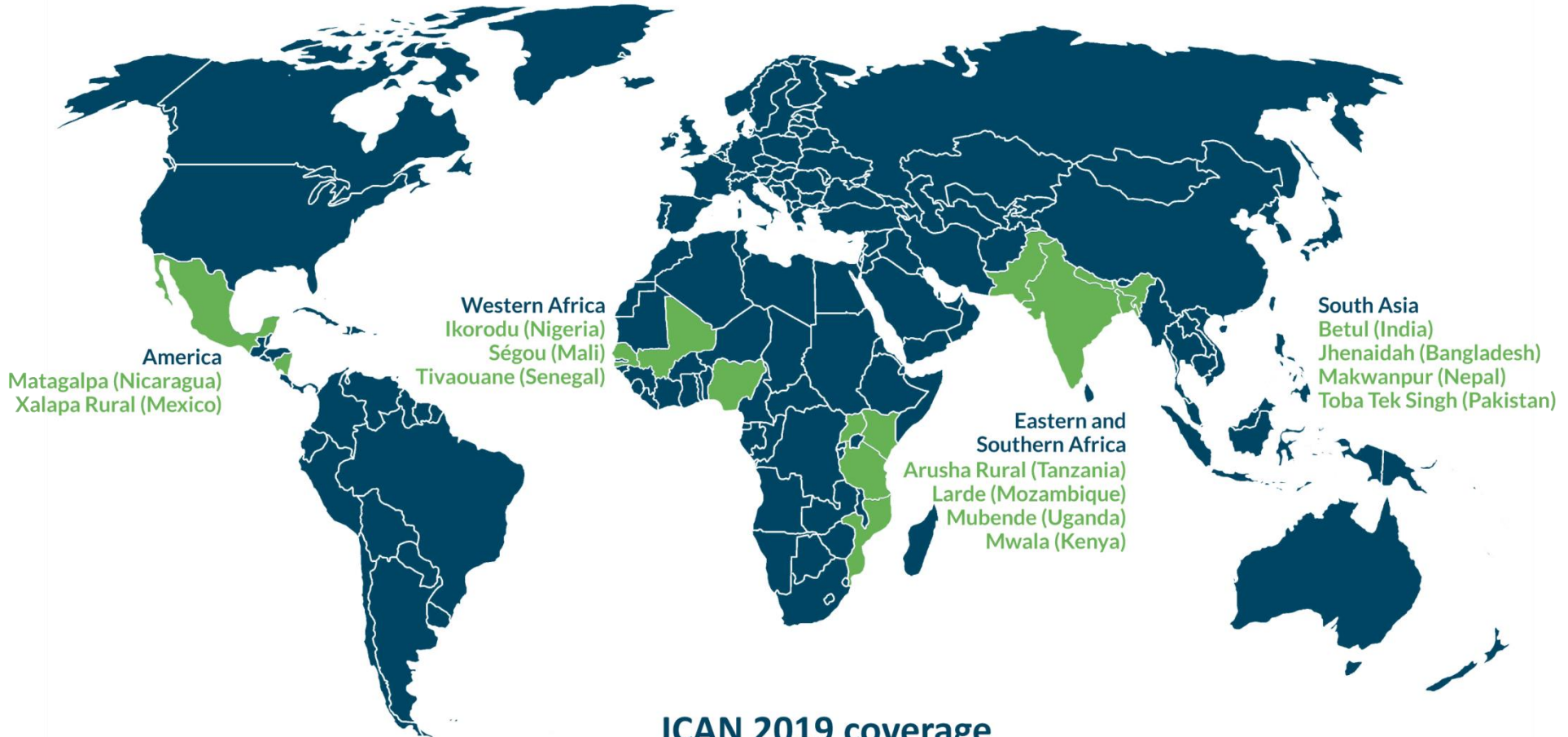60 randomly sampled rural communities in 1 district per country
District not an outlier in terms of learning outcomes

Administered in randomly sampled households to children in the age-group of 5-16 years

Each child assessed orally, one-on-one

ICAN 2019: sampled districts and reach

America
Matagalpa (Nicaragua)
Xalapa Rural (Mexico)

Western Africa
Ikorodu (Nigeria)
Ségou (Mali)
Tivaouane (Senegal)

**Eastern and
Southern Africa**
Arusha Rural (Tanzania)
Larde (Mozambique)
Mubende (Uganda)
Mwala (Kenya)

South Asia
Betul (India)
Jhenaidah (Bangladesh)
Makwanpur (Nepal)
Toba Tek Singh (Pakistan)

ICAN 2019 coverage

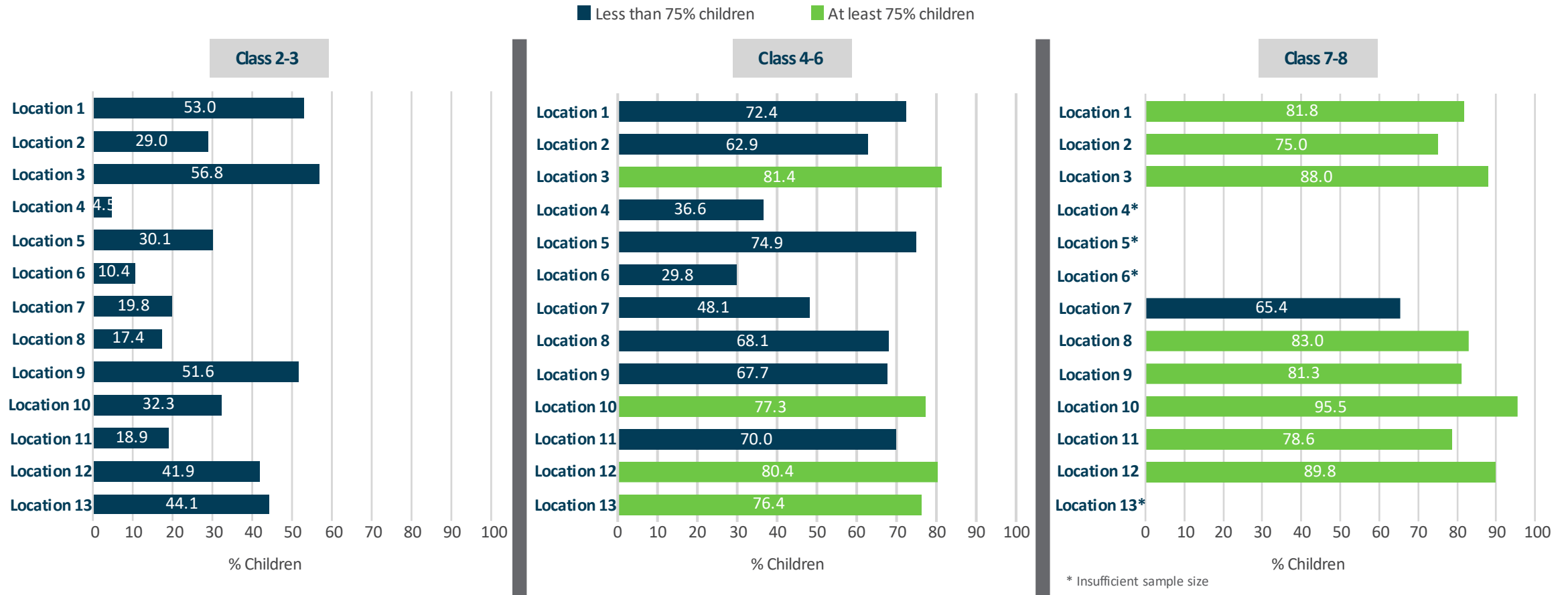| **3** continents	**13** countries	**13** rural districts	**779** communities	**15,000+** households	**20,000+** children

Illustrative findings from ICAN 2019

- Purpose of this round of implementation was to test feasibility across country contexts and to **showcase the kinds of comparisons that the use of ICAN on scale facilitates**

- In the ICAN 2019 Report, district names are anonymized as Location 1, Location 2, and so on while showing comparative analysis

Even 20 years after the MDGs, many primary school-age children are out of school

% Children age 6-10 enrolled in different types of schools and children not enrolled

Location	Government	Private	Other	Not enrolled
Location 1	78.2	18.4		2.0
Location 2	73.3	26.2		0.5
Location 3	89.4	10.4		0.2
Location 4	44.5	3.9		48.9
Location 5	98.9			1.1
Location 6	69.0			31.0
Location 7	70.3	29.2		0.5
Location 8	97.1	0.4		2.5
Location 9	29.4	70.1		0.4
Location 10	78.6	19.4		1.9
Location 11	56.7	5.0		36.3
Location 12	83.5	13.0		3.5
Location 13	38.0	53.3		5.7

% Children

■ Government ■ Private ■ Other ■ Not enrolled
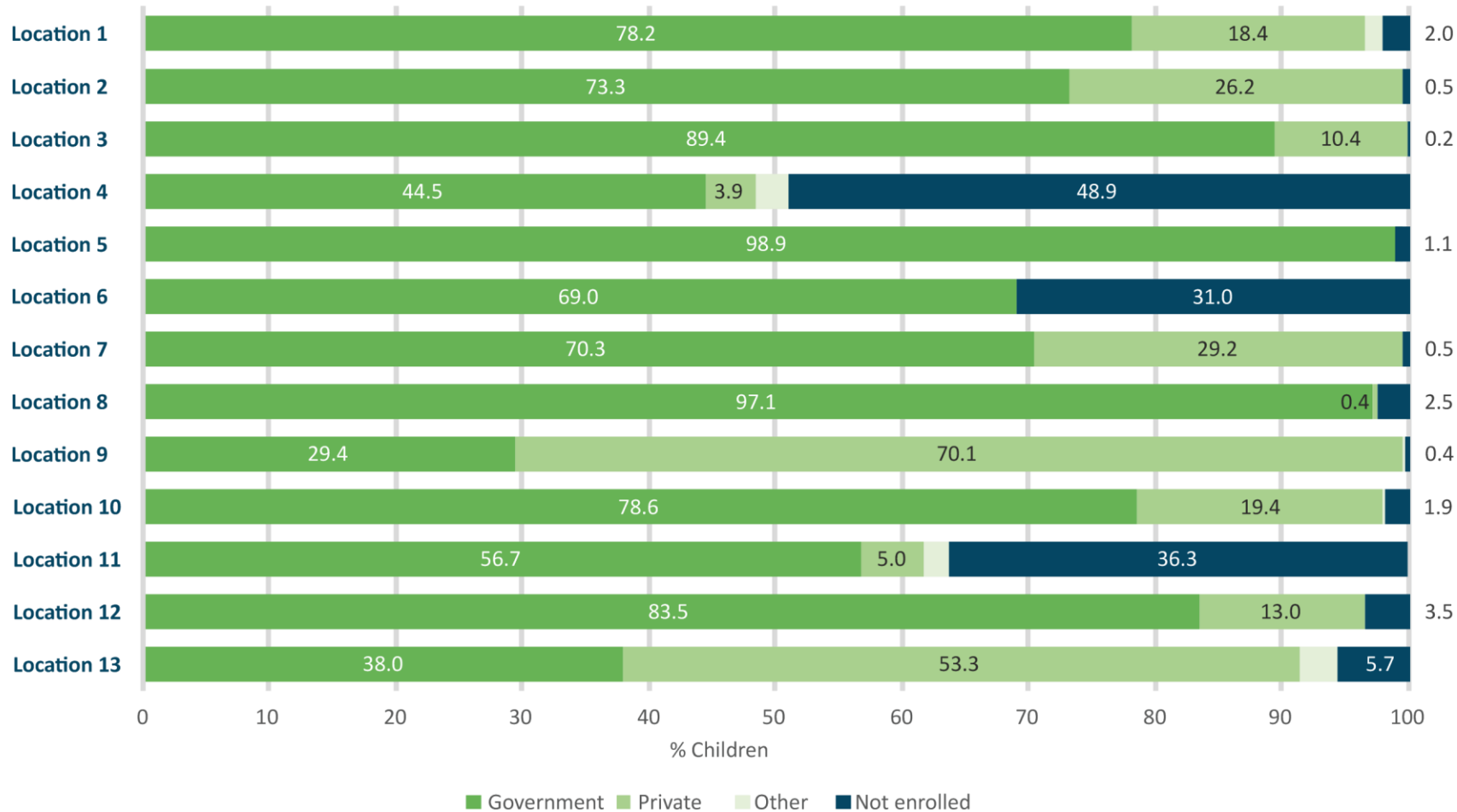
Because ICAN 2019 was a household survey, it generated information on enrolment patterns for children age 5-16

- In 3/13 locations, more than 3 in every 10 children age 6-10 are out of school

- There is enormous variation in the types of schools enrolled children attend

Out of school children __must__ be included in discussions on learning
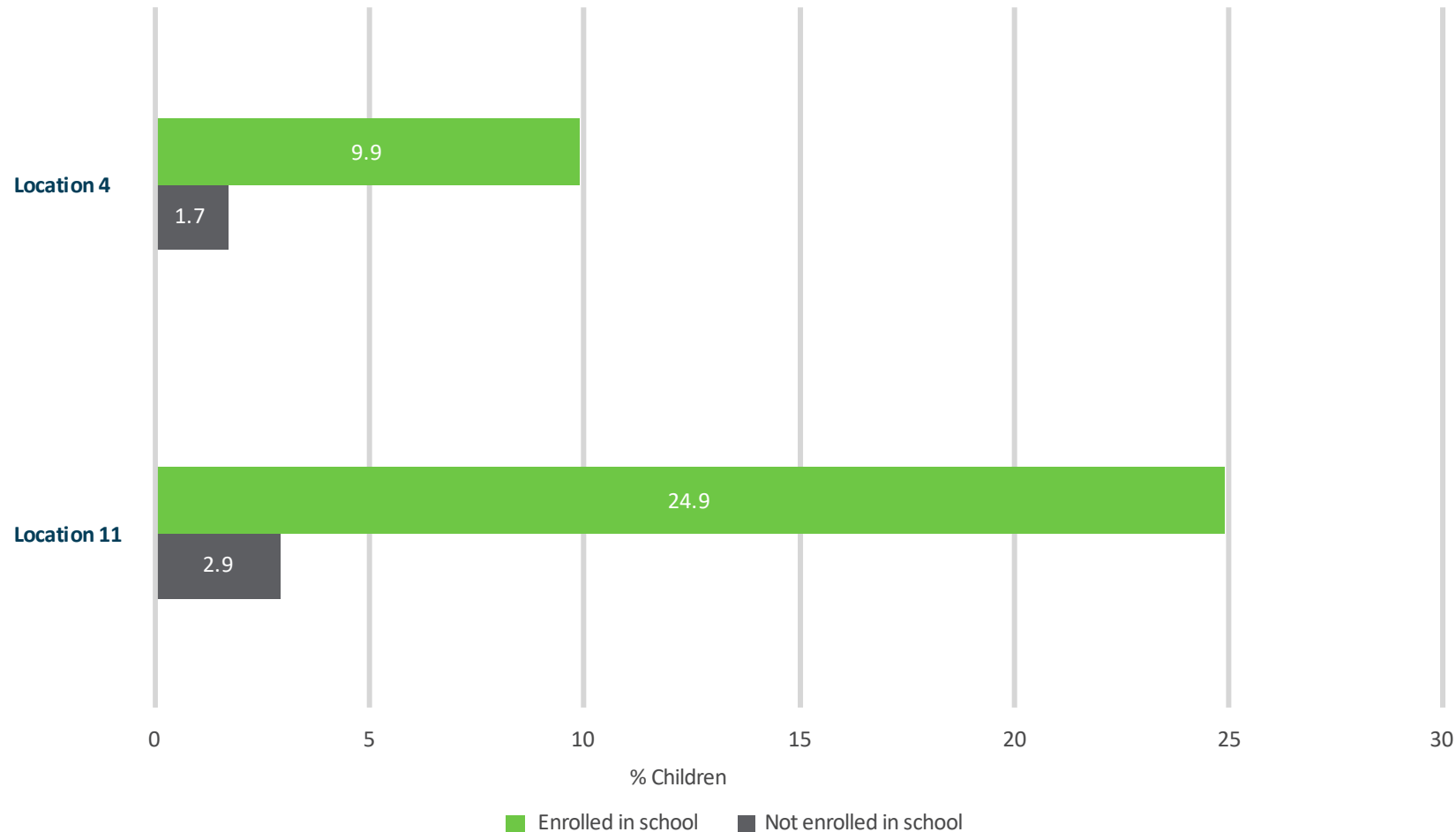
% Children age 8-10 years who can do a set of foundational numeracy tasks aligned to SDG 4.1.1 (a), by enrolment status

Location 4
- Enrolled in school: 9.9
- Not enrolled in school: 1.7

Location 11
- Enrolled in school: 24.9
- Not enrolled in school: 2.9

% Children

Legend: ■ Enrolled in school   ■ Not enrolled in school

SDG 4 is targeted to ALL children.

Because ICAN 2019 was administered in households, it assessed all children in the target age group of 5-16 years, irrespective of enrolment status.

Children age 8-10 years are usually enrolled in classes 3 to 5. There are large disparities among performance of children enrolled in school and those not enrolled.

As the clock ticks to 2030 . . .

We need less top-down and more granular measurements of foundational learning that can lead to rapid corrective action

ICAN is:

- Open source; currently available in 11 languages

- Most tasks are aligned to grade 3 level or lower of the UNESCO Global Proficiency Framework

- Suitable for use in both household and school settings

- Simple and quick to administer and understand, therefore easy to scale

PAL NETWORK
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For more information, please visit :

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