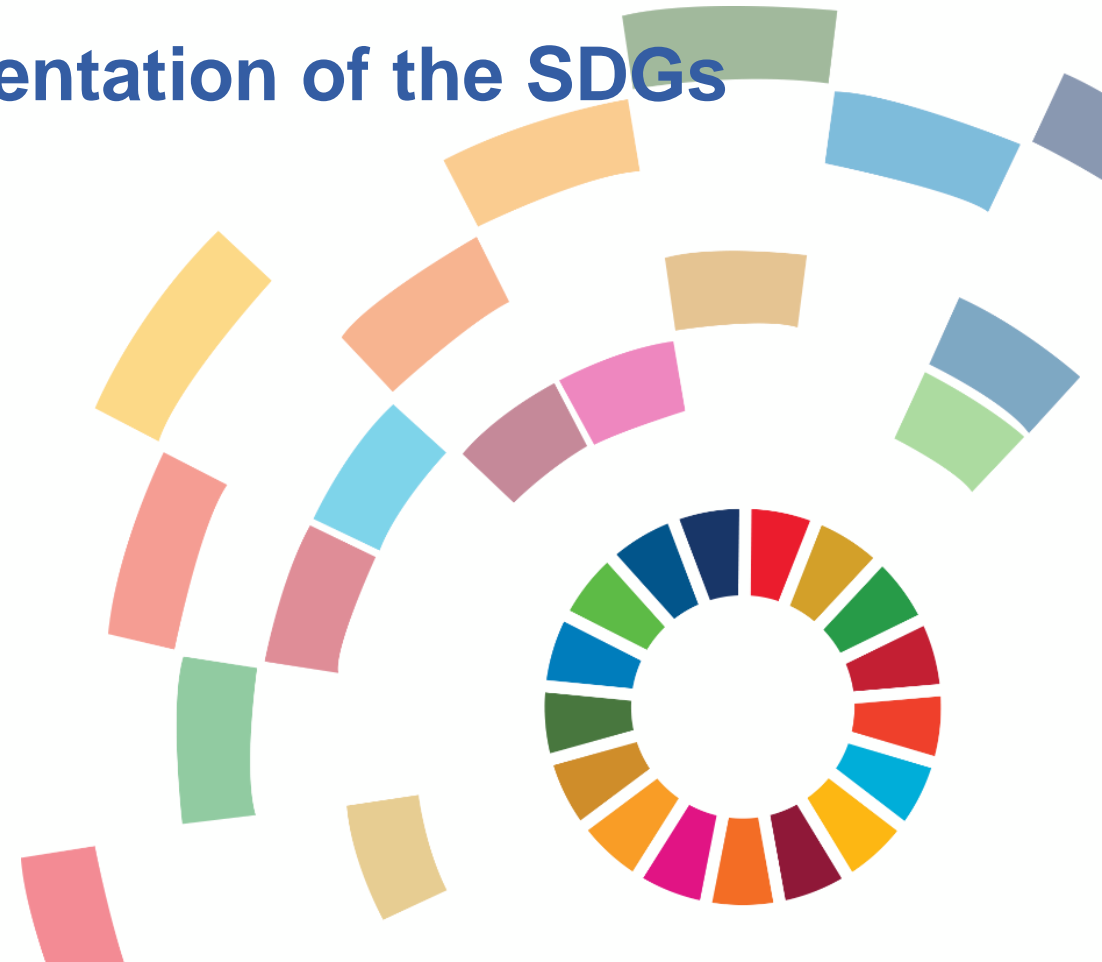


Leaving No One Behind

3rd South-East Asia Forum on Implementation of the SDGs
4 October 2019

Ermina Sokou

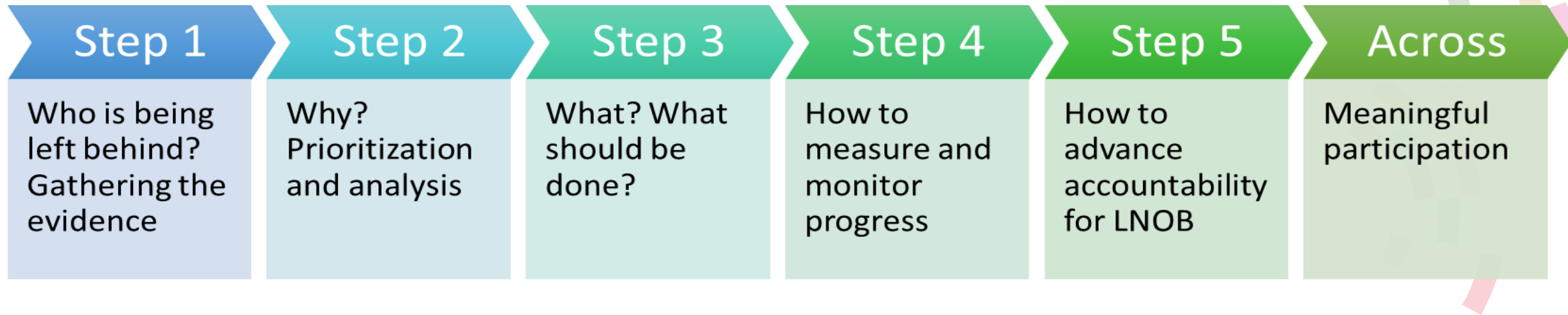
Social Development Division, ESCAP



Leaving No One Behind

- In the 2030 Agenda, member States pledged to leave no one behind
- Leaving no one behind (LNOB) means moving beyond assessing average progress, towards ensuring progress for *all* population groups at a disaggregated level
- LNOB is the central, transformative promise of the 2030 Agenda and its SDGs

A five-step methodology for LNOB at country level



Statistical tools for LNOB

- ❖ **Measuring inequality of opportunity (D-index)**
 - ✓ Average access masks unequal distribution
- ❖ **Identifying the furthest behind (Tree classification)**
 - ✓ Help direct policy interventions
- ❖ **Measuring gaps between population groups**
 - ✓ Are they significantly narrower?



Our basic assumptions

- ❖ **Access to fundamental services (opportunities) should be universal**
- ❖ **Individual circumstances & characteristics should NOT impact access**



Which opportunities have we studied?

Individual-based

- ✓ Education (secondary & higher)
- ✓ Malnutrition (stunting & wasting & overweight)
- ✓ Women's health (modern contraception & skilled birth attendance)
- ✓ Full-time employment

Household-based

- ✓ Safe drinking water
- ✓ Basic sanitation
- ✓ Clean energy (electricity & clean fuels)
- ✓ Ownership of a bank account

Which circumstances are we using?

Wealth: Bottom
40 or Top 60
households

Residence:
Living in rural
or urban area

Number of
children in the
household

Education level:
primary, secondary
or higher

Ethnicity, religion,
language

Age group:
15-24, 25-
49, 50+

Sex: male
or female

Marital Status:
single, married,
divorced

The D-index methodology

- Measuring inequality in access to any of the 14 identified opportunities
- Using combinations of circumstances to create distinct groups

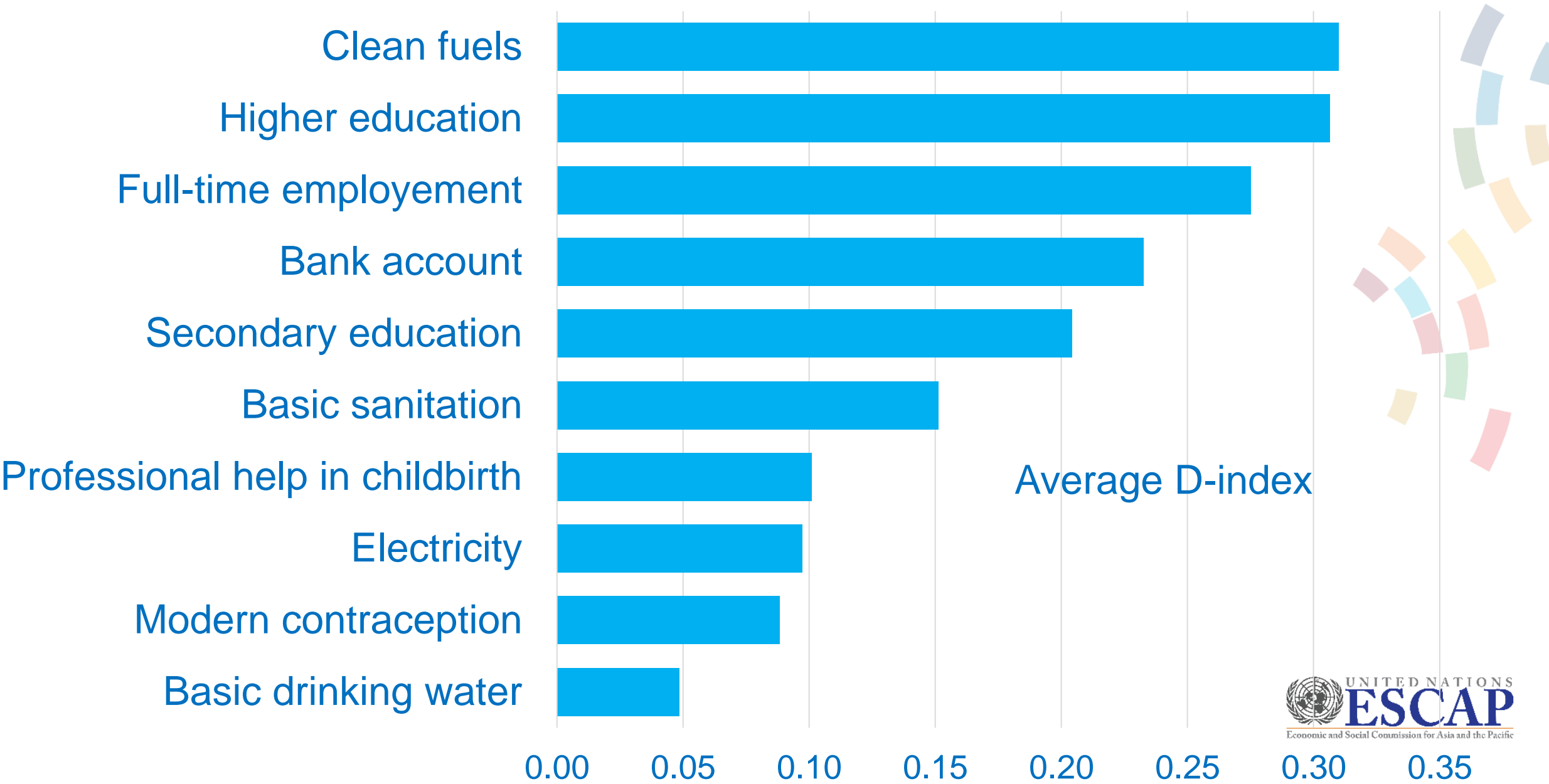
$$D = \frac{1}{2\bar{p}} \sum_{i=1}^n \beta_i |p_i - \bar{p}|$$

- Takes values from 0-1, similar to Gini
- D-index can be decomposed using the Shapley method

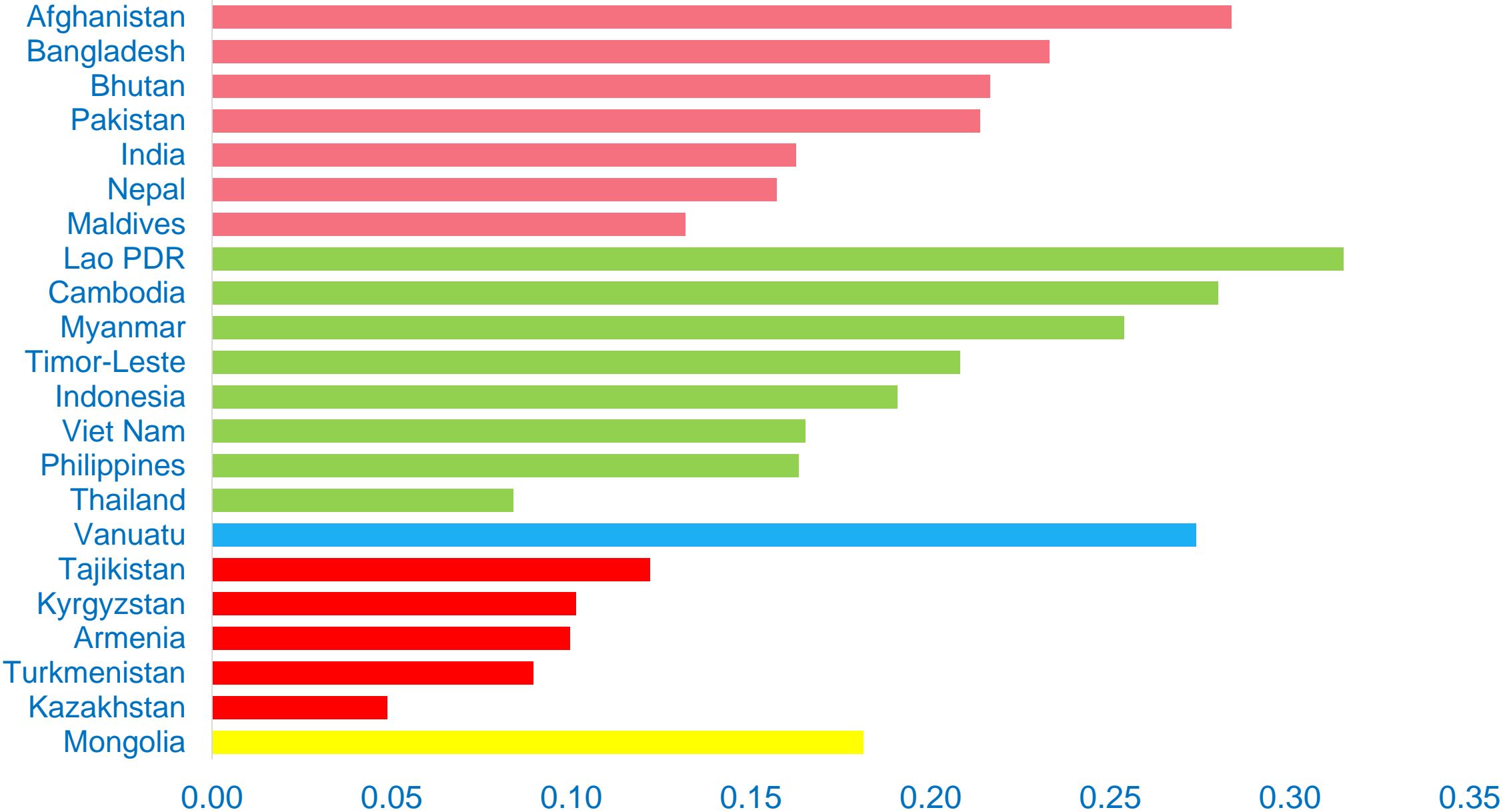
$$D_A = \sum_{S \subseteq N \setminus \{A\}} \frac{|S|! (n - |S| - 1)!}{n!} [D(S \cup \{A\}) - D(S)]$$

The contribution of characteristic A to the D-Index is given $M_A = \frac{D_A}{D(N)}$

Average inequality of opportunities in Asia-Pacific



Inequality of opportunity varies greatly by country



Classification tree methodology

- Is an algorithm that partitions the sample into different groups based on the circumstances chosen (e.g. gender, residence)
- The algorithm starts by searching for the first split (or branch) of the tree, calculating entropy, where entropy for j^{th} end node is defined as:

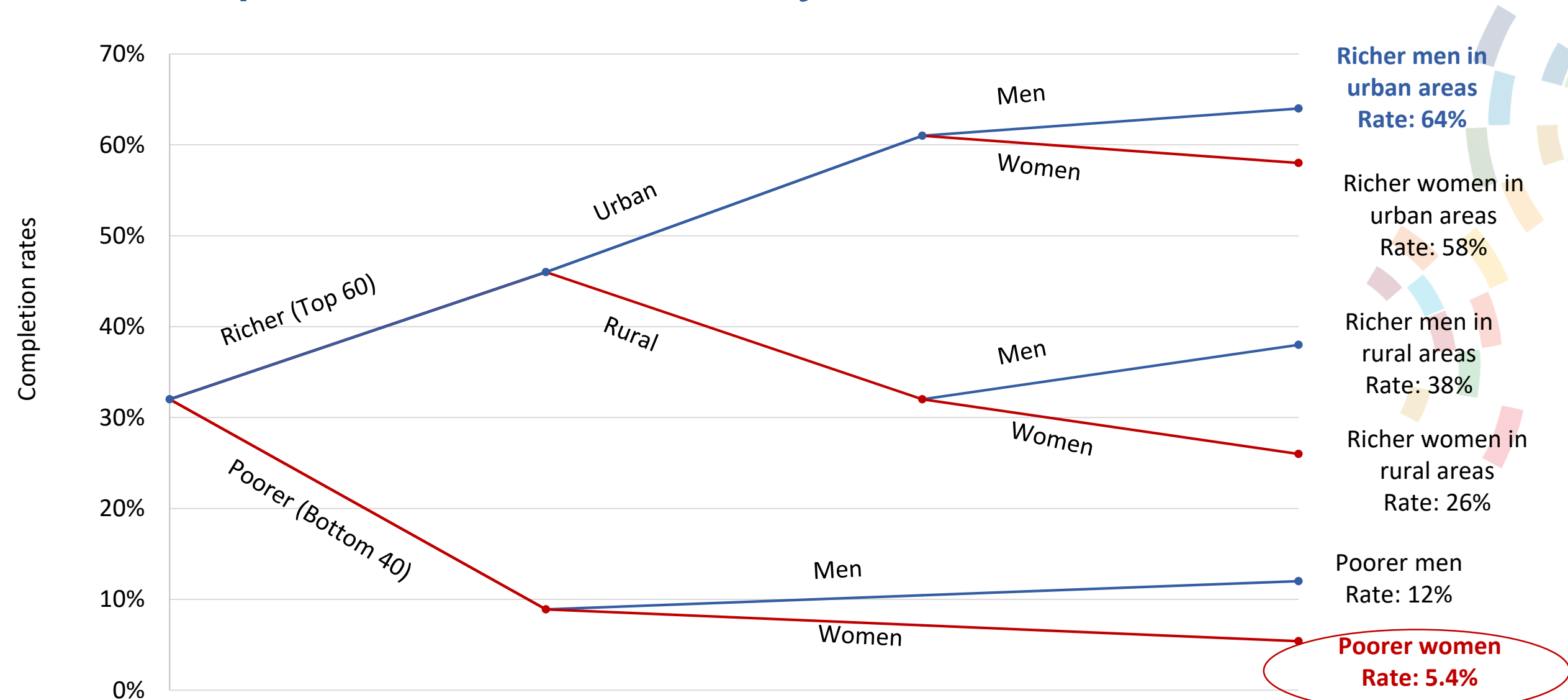
$$I_E(p_j) = -(p_j \times \log_2 p_j + (1 - p_j) \times \log_2(1 - p_j))$$

- The aggregated entropy for the entire tree is calculated by:

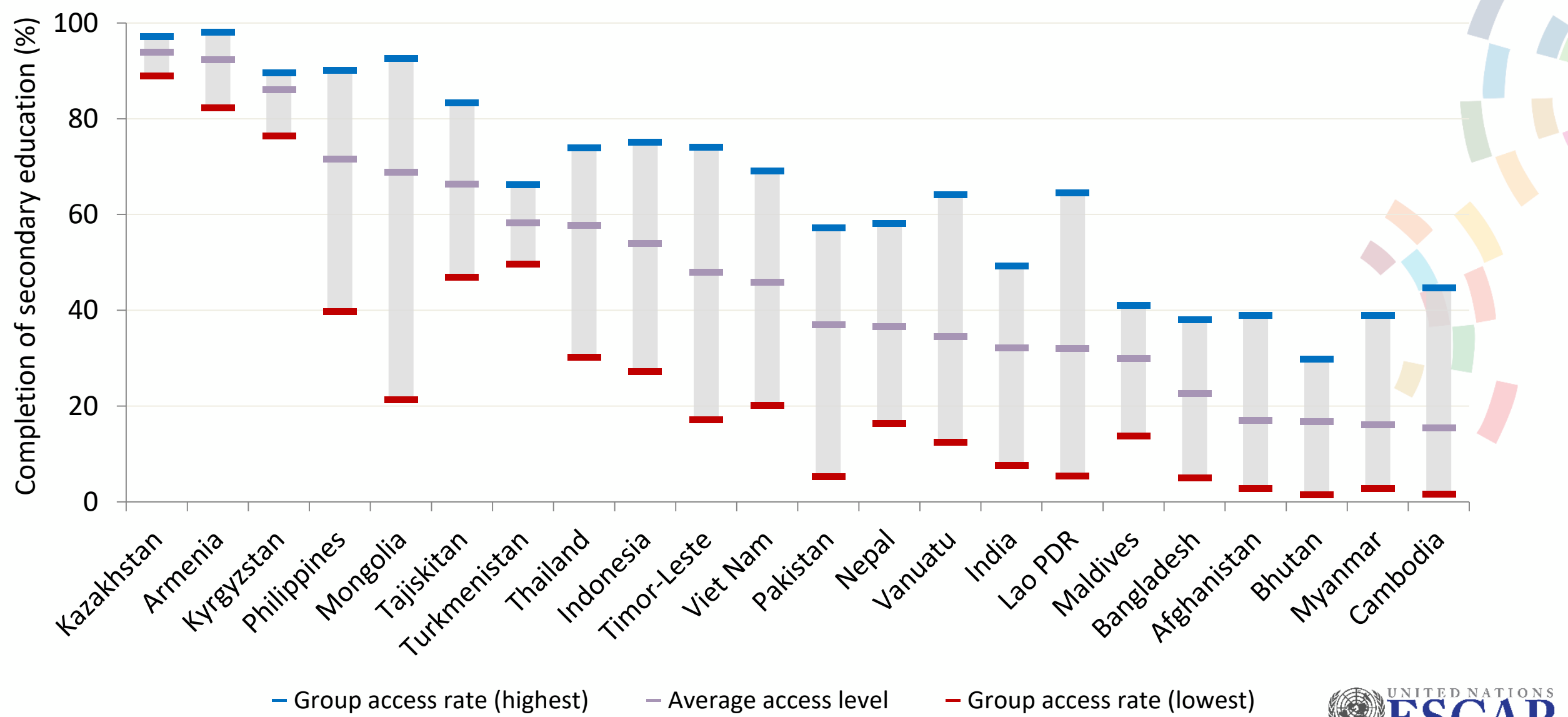
$$H(T) = \sum_{j=1}^m q_j \times I_E(p_j)$$

- Each time the sample is partitioned new end-nodes are generated and the entropy is calculated and compared to the entropy before the new partition. The algorithm continues until no more increments of entropy reduction (information gain) can be made by new partition.

Completion of secondary education in Lao PDR



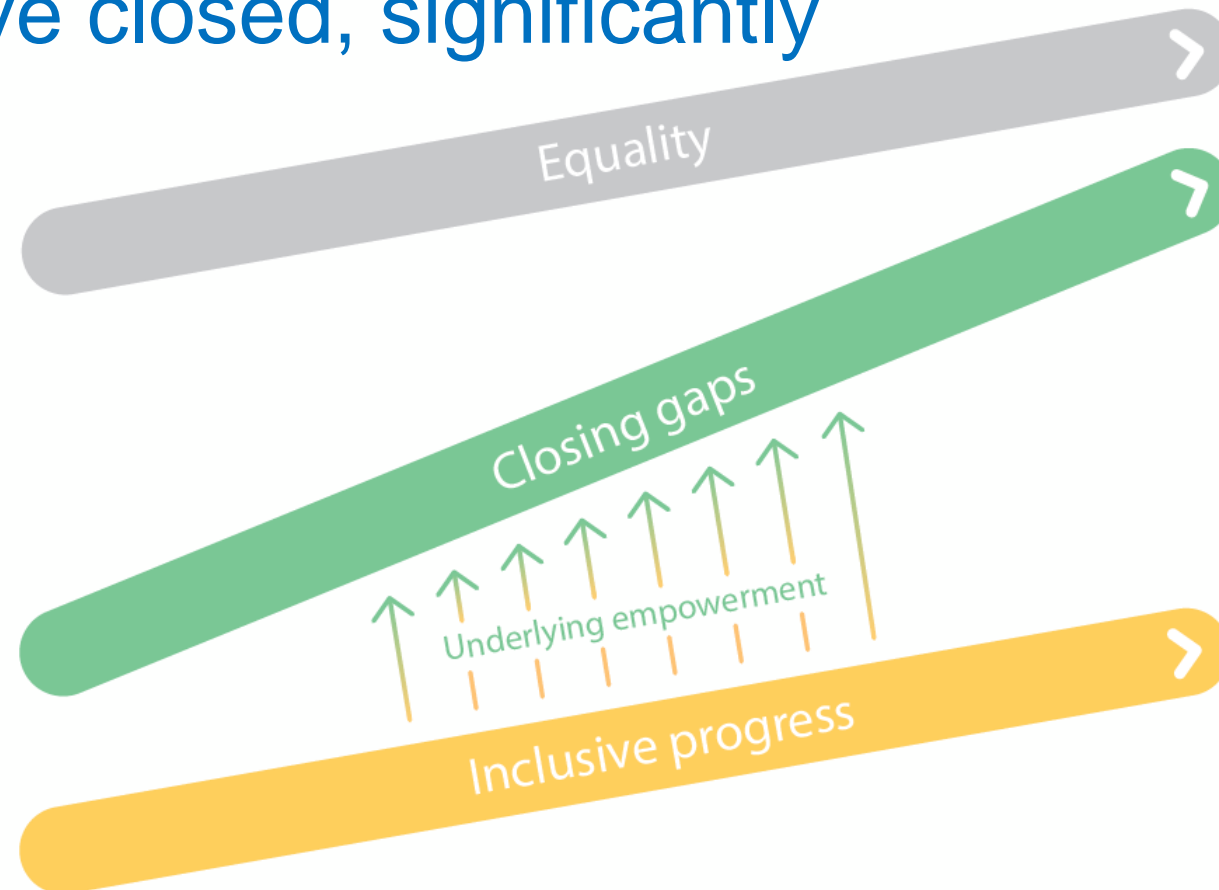
Completion of secondary education



Source: SDD elaboration based on latest DHS and MICS

Measuring progress by studying gaps over time

- Define advantaged vs. disadvantaged groups
- Measure access to an opportunity at 2 points in time
- Estimate if gaps have closed, significantly



Closing the gaps

Gap narrowing

No evidence of gap change

Gaps widening

Upward trend

1a



2a



3a



No evidence of trend

1b



*



3b



Downward trend

1c



2c



3c

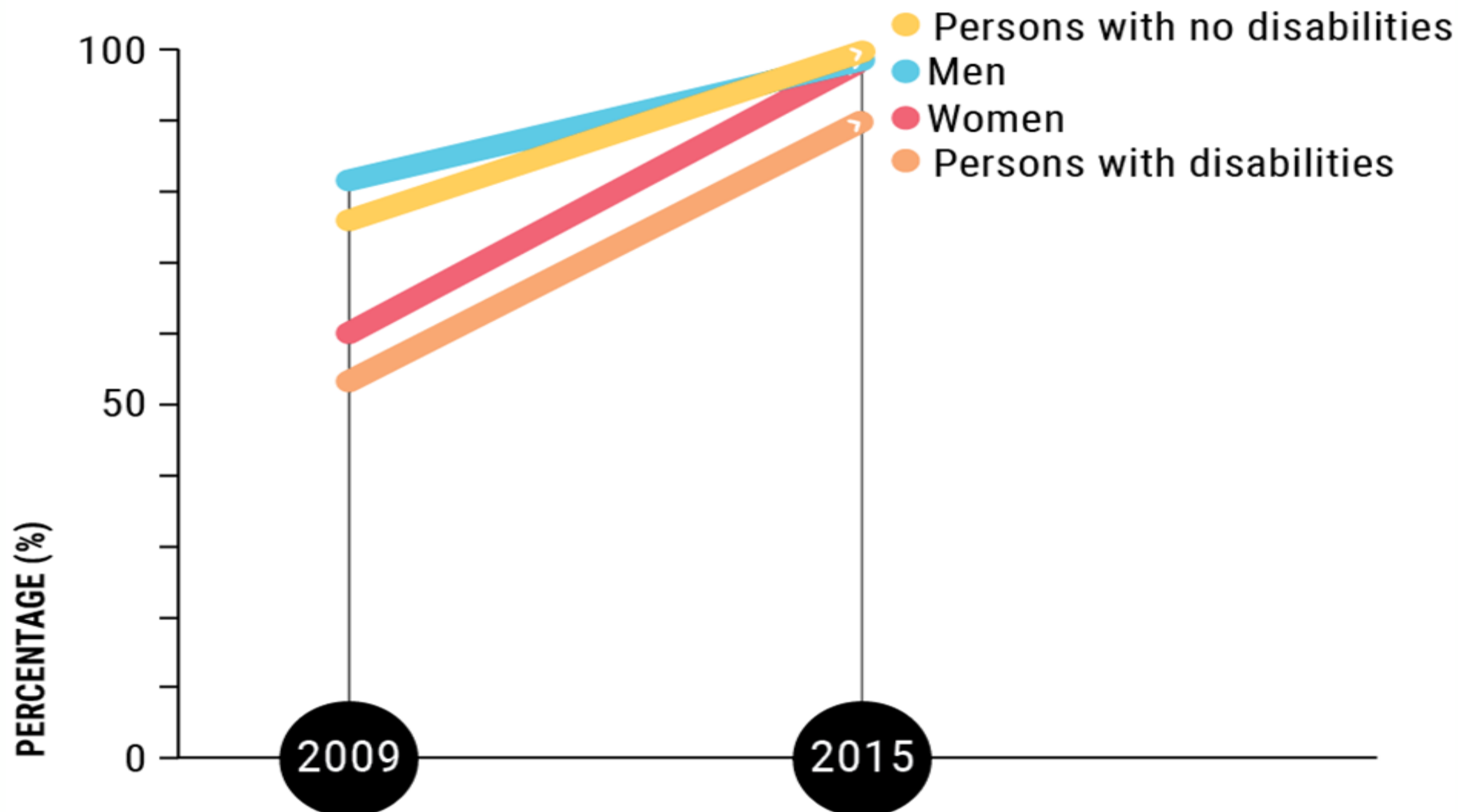


● Faster convergence

● Inclusive progress

● Regressing or growing apart

Malaysia: Percentage of population having access to education, 2009–2016



Accelerating development

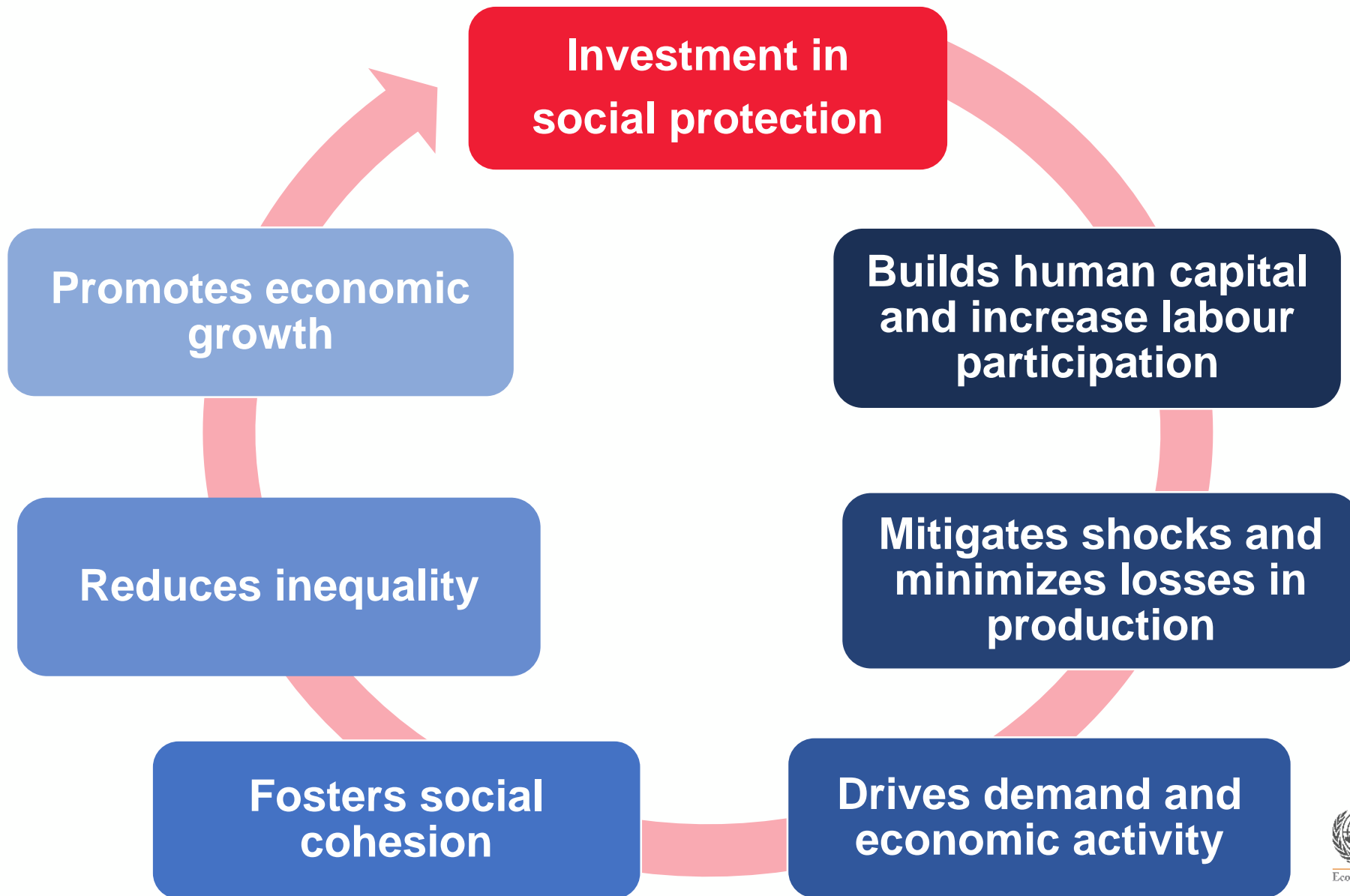
SDG Accelerator :

“.... social protection systems and floors, are likely to have multiplying impacts not only for that group but for broader society, across multiple goals and targets.”

Source: Leaving No One Behind, USDG Operational Guide (draft), 2019



Social Protection can help accelerate development

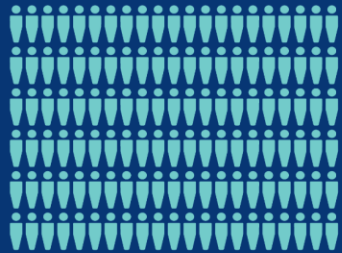


Social protection can help eliminate poverty



2020

PEOPLE IN THE REGION
LIFTED OUT OF POVERTY



126 million

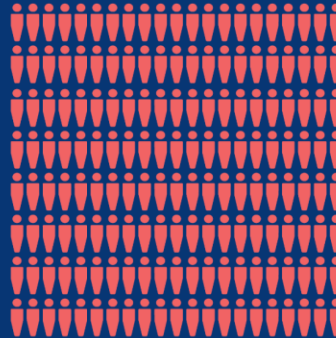
COUNTRIES ENDING POVERTY

- 1 Azerbaijan
- 2 Malaysia
- 3 Thailand



2025

PEOPLE IN THE REGION
LIFTED OUT OF POVERTY



167 million

COUNTRIES ENDING POVERTY

- 1 China
- 2 Mongolia
- 3 Turkey



2030

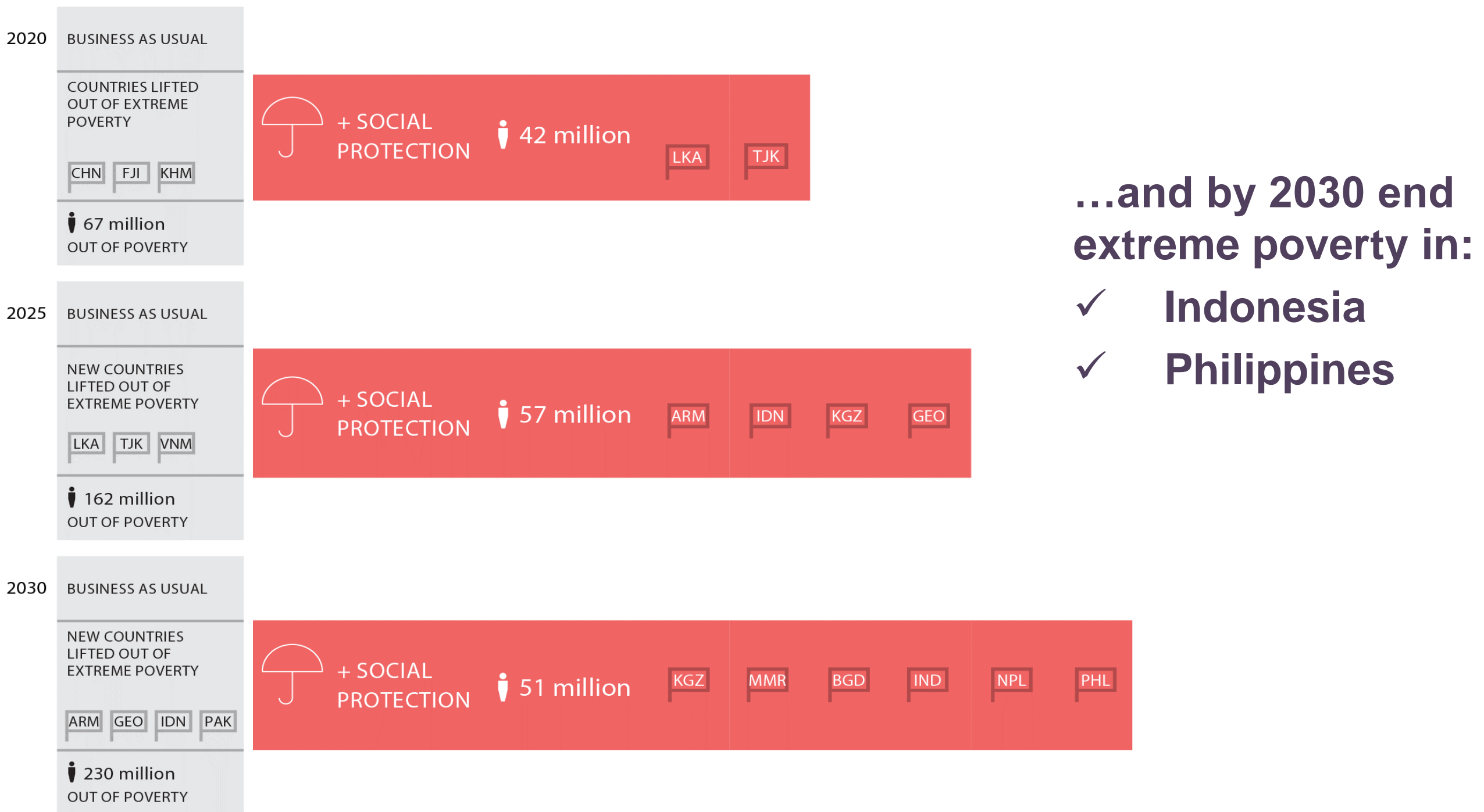
PEOPLE IN THE REGION
LIFTED OUT OF POVERTY



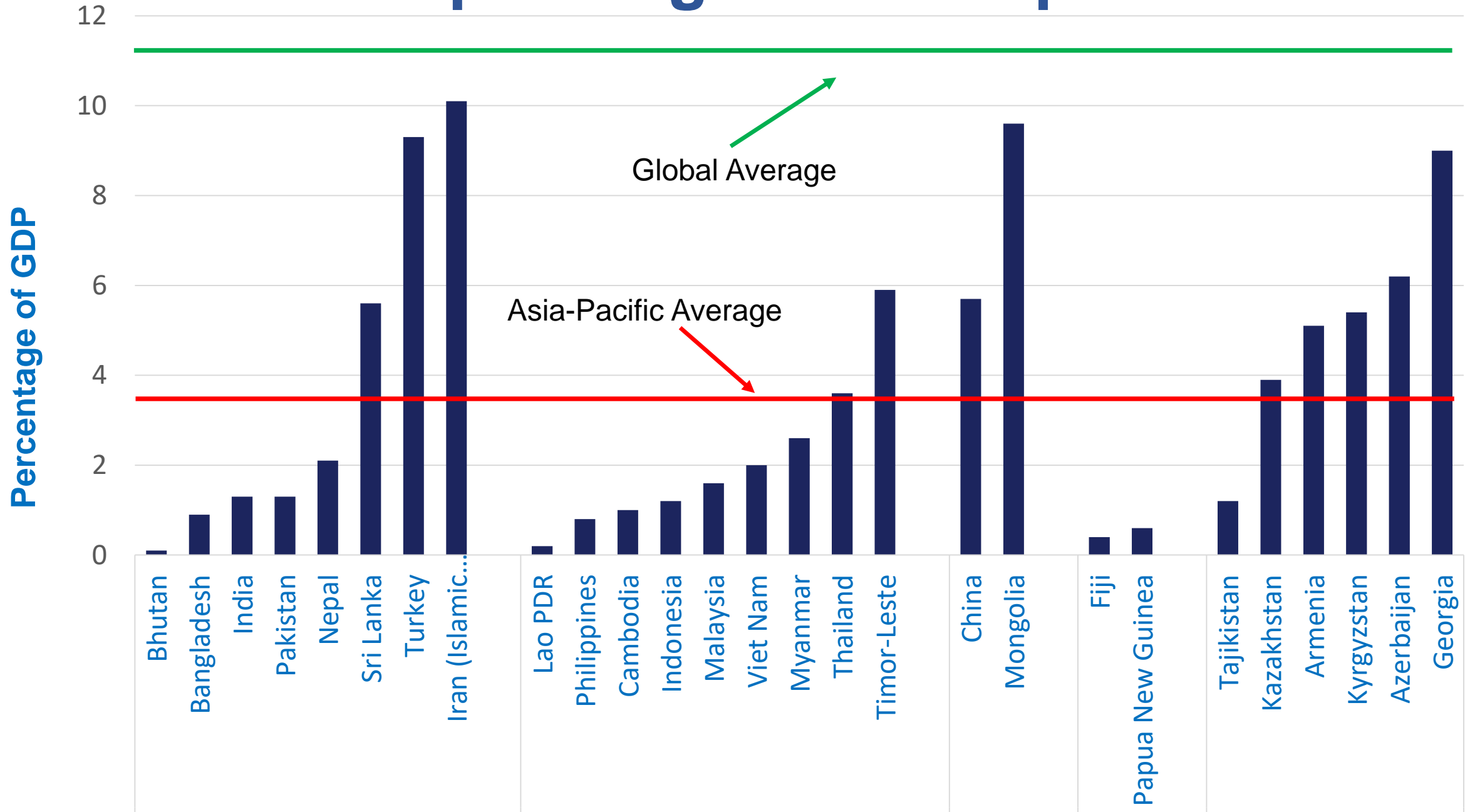
233 million

COUNTRIES ENDING POVERTY

- 1 Armenia
- 2 Fiji
- 3 Tajikistan
- 4 Viet Nam



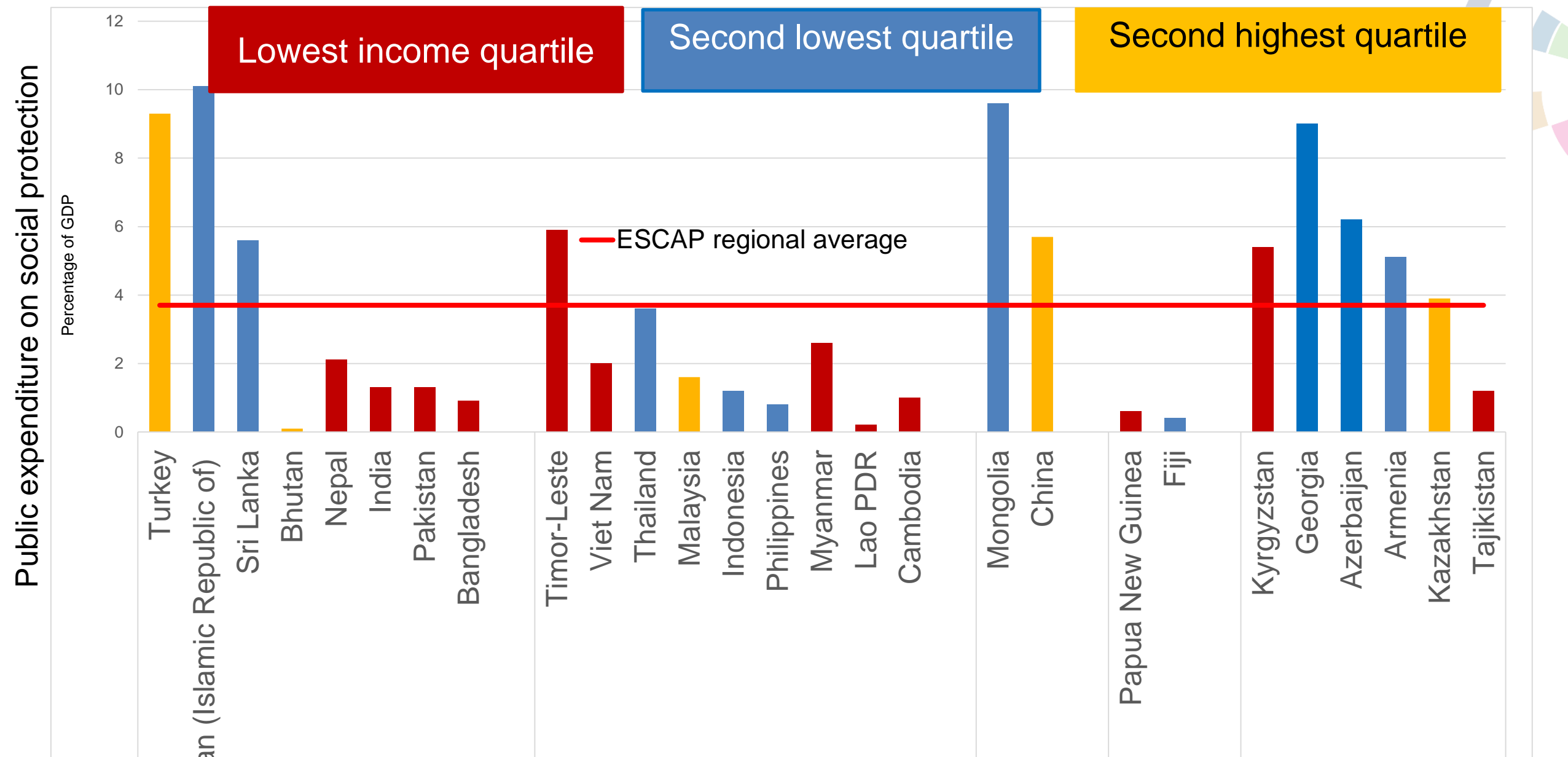
Public spending on social protection



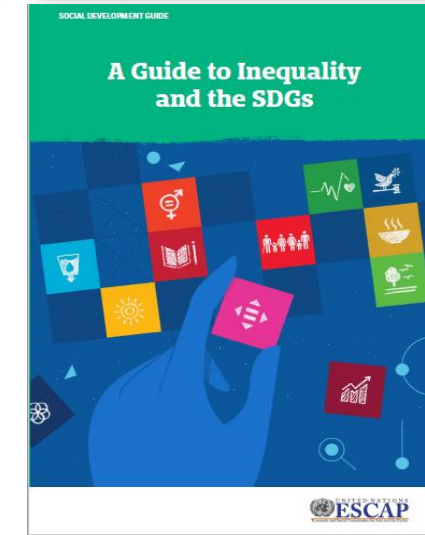
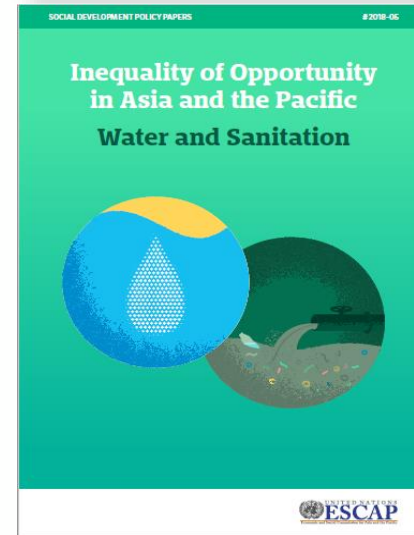
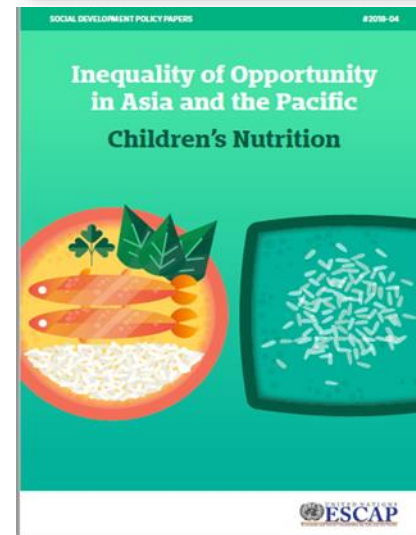
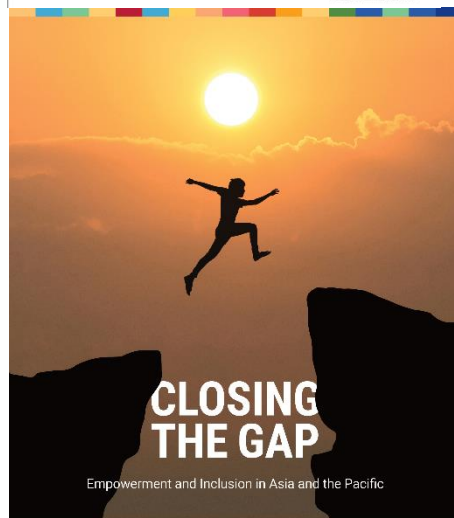
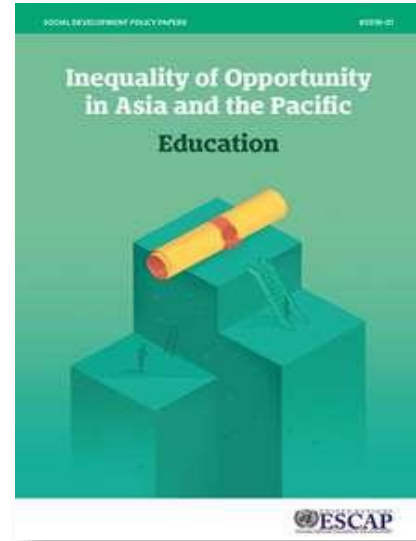
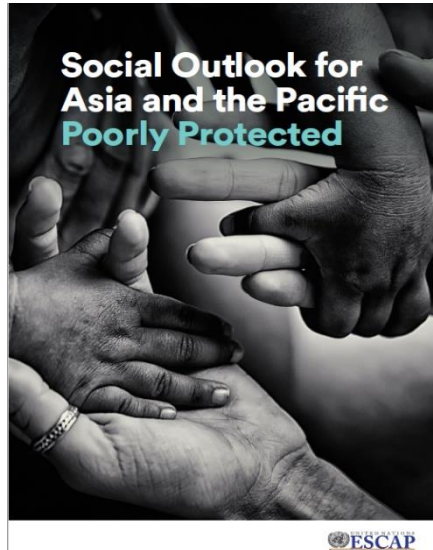
Is social protection inclusive in Asia & Pacific?

- ✓ Only 2 out of 10 unemployed receive benefits or support
- ✓ Only 3 out of 10 families with children receive benefits
- ✓ Only 3 out of 10 mothers receive maternity benefits
- ✓ Only 4 out of 10 people have access to health care
- ✓ Only 5 out of 10 older persons receive a pension
- ✓ Only 5 out of 10 persons with disabilities receive a benefit

An affordable investment across countries



www.unescap.org/our-work/social-development



Thank you

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