How Many Children and Young People Have Internet Access at Home?

Estimating Digital Connectivity During the COVID-19 Pandemic

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CONTEXT

- **Global Learning Crisis:**
  - In the pre-COVID-19 era, 617 million children and adolescents worldwide cannot read or perform basic mathematics. In Sub-Saharan Africa, 87% of students are considered as "learning poor", unable to read simple sentences in late primary school.
- **Serious impacts of the COVID-19 pandemic on Education**
  - C19 has caused the largest mass disruption of education in history and worsened the global learning crisis.
  - In April 2020, 1.6 billion students in more than 190 countries were affected by school closures
  - About 1/3 students or 463 million students globally could not be reached by broadcast- and internet-based remote learning programs.
  - Global school closures could result in a loss of US$10 trillion in lifetime earnings for this generation of children.
- **A "new" essential – access to the internet**
  - The COVID-19 pandemic has turned access to the Internet things into an essential human right in terms of the educational, social and professional needs of children and young people.

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APPROACH

- Plenty of data on internet use for different age groups, but internet utilization can take place from a school, workplace, or via mobile phone
- In our study, we focused on
  - **Individual level data**: Learning takes place at the individual level. Household composition differ from high-income to low income countries.
  - **Access to fixed internet at home**: mobile networks are not best suited for remote learning.
  - **Disaggregation**: by specific age groups (0-25 yrs, 15-24 yrs, 3-17 yrs), regions and national income levels as well as individual characteristics (wealth, location of house, gender etc).

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METHODOLOGY

- The availability of fixed internet connection at home was estimated for the following groups:
  - Children and young people (age 25 or younger)
  - Youths (15-24 years old)
  - School attendance age (approx. 3-17 years old, based on ISCED)
- MICS, DHS and national household surveys were used as a data source
- The estimate was produced for 87 countries worldwide that cover more than 80% of global 0-25 yrs population
  - Data allow for producing the representative global and regional estimates for all UNICEF regions, except for Western Europe and North America
- The country values were aggregated by the WB country income groups and UNICEF regions using population-weighted averages, i.e., the most populous countries had the highest influence on the resulted estimate

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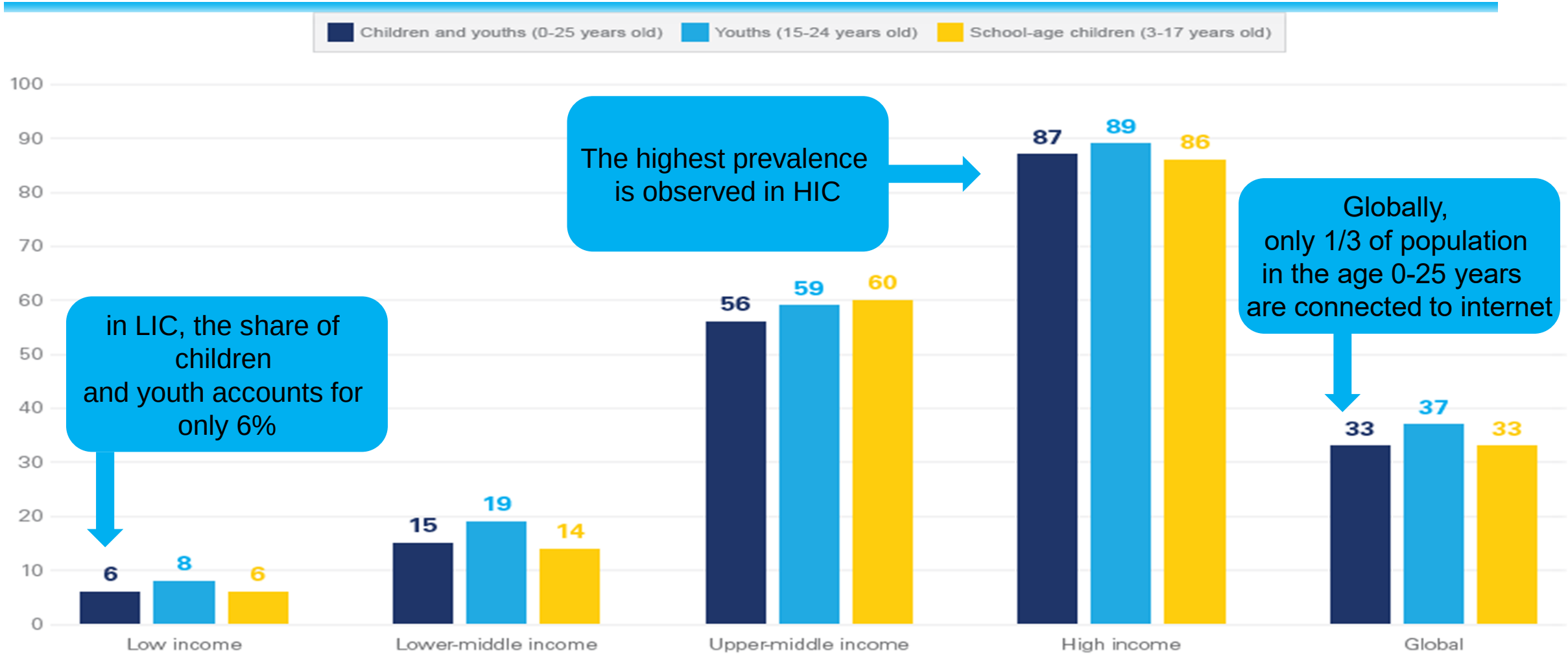
CONNECTIVITY BY COUNTRY INCOME GROUP



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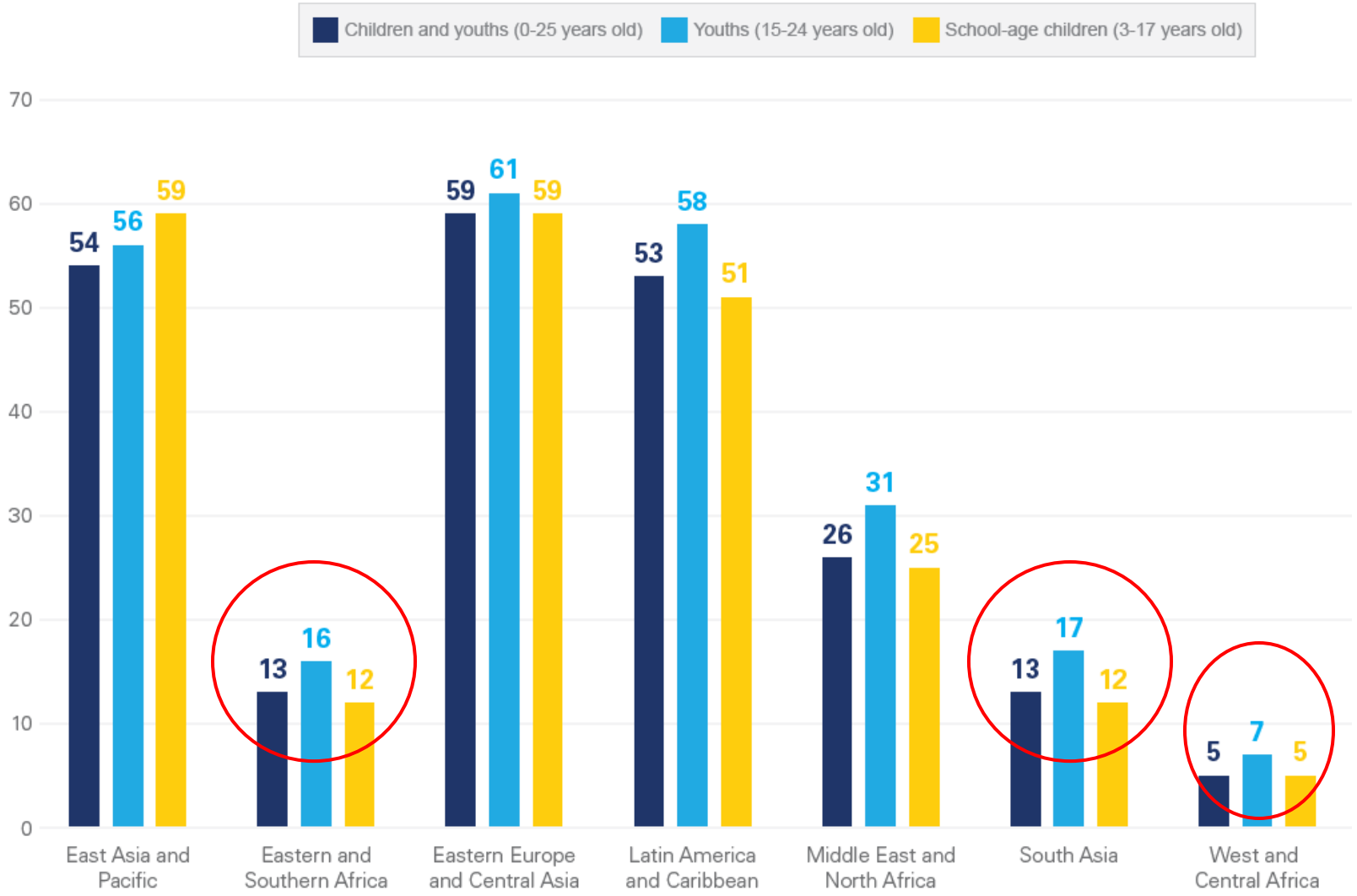
REGIONAL DISPARITIES IN CONNECTIVITY



- Sub-Saharan Africa and South Asia demonstrate the lowest connectivity
- In such regions as Eastern Europe and Central Asia, East Asia and Pacific, and Latin America and Caribbean internet access at home for all age cohorts accounts for more than 50%

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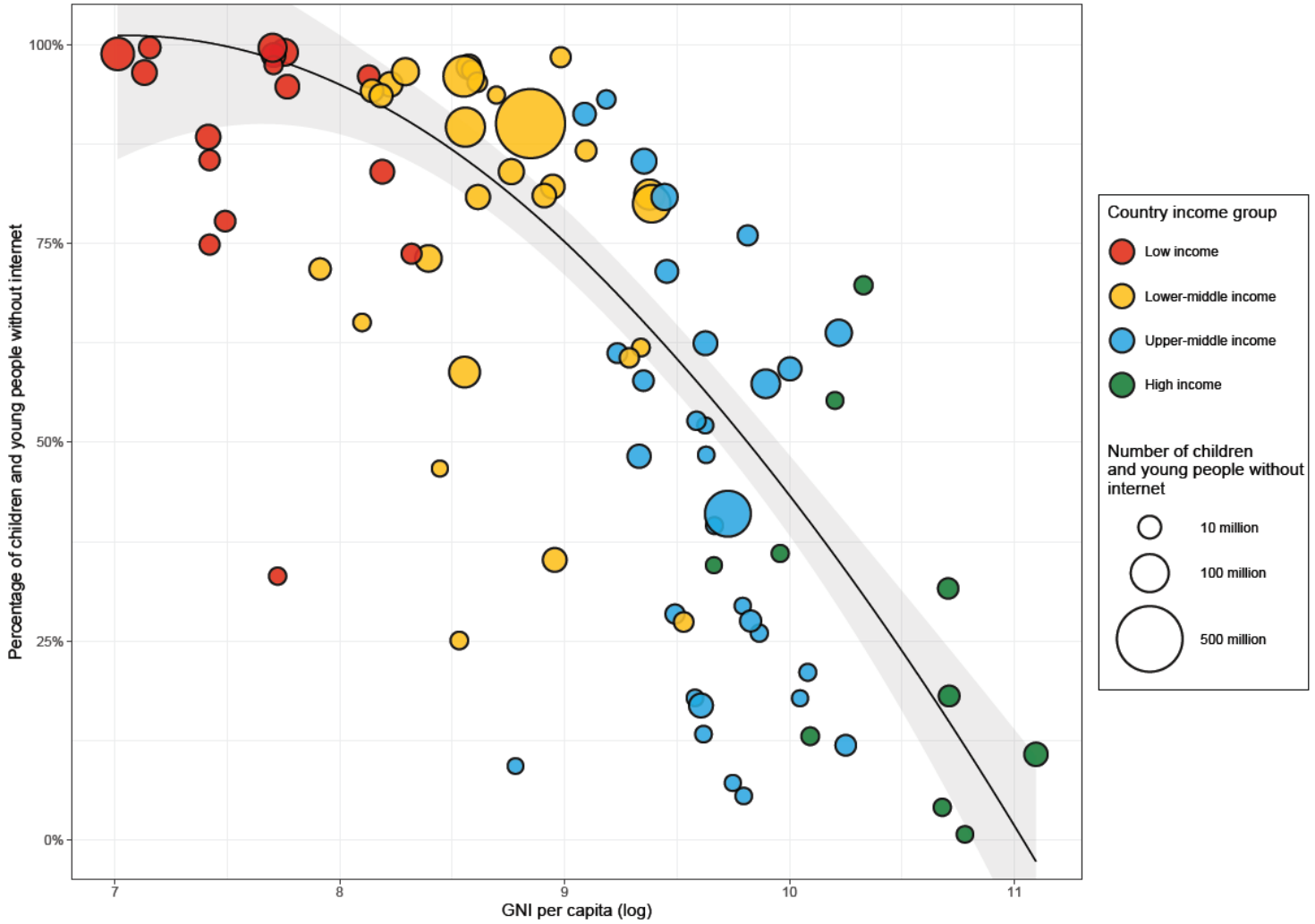
DIGITAL CONNECTIVITY AND ECONOMIC DEVELOPMENT



- The strong downward trend between GNI per capita and share of children and young people without internet
- I.e., digital connectivity is in many ways a function of country's income

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URBAN-RURAL DIVIDE (1)

Only 25% of rural children and youths in the age 25 years or younger have access to internet globally, in opposition to 43% of those living in

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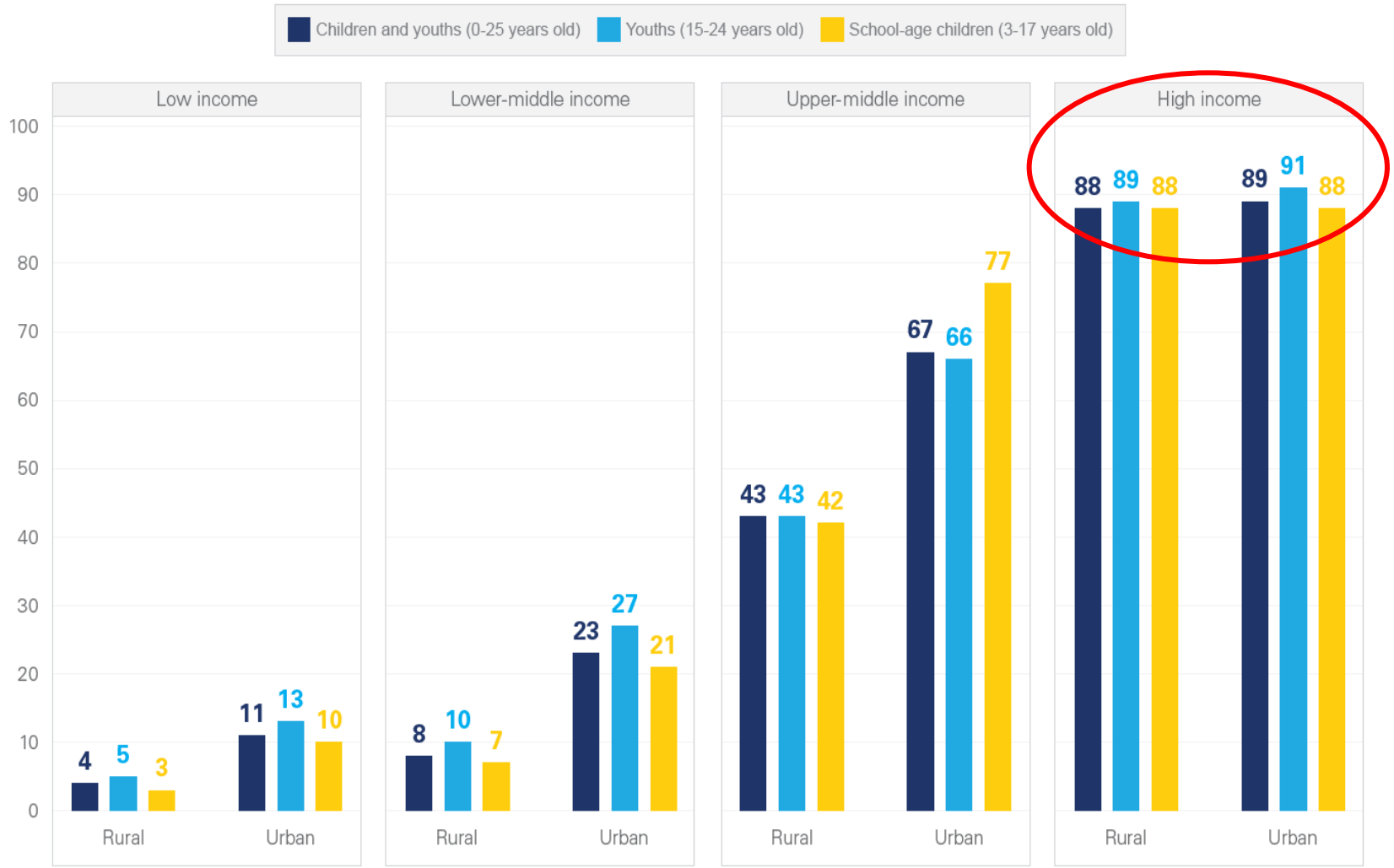
URBAN-RURAL DIVIDE (2)



Urban/rural disparity is not visible in high-income countries, which makes it a function of country's income level

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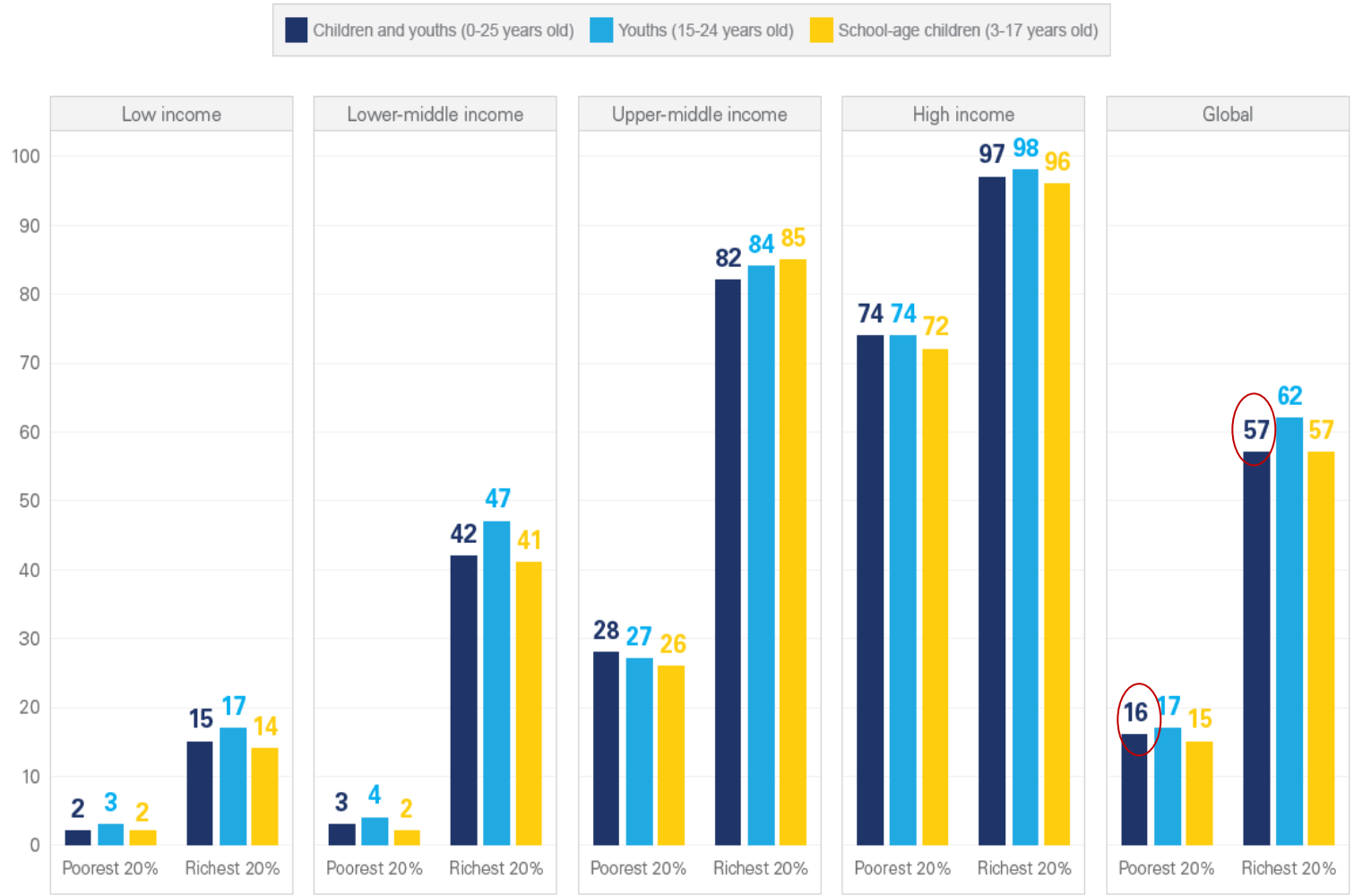
WEALTH DISPARITIES



- Globally, about 60% of the children and youth from the richest families have internet access at home against 16% of the poorest ones.
- With the growth of the country income, the disparities also tend to increase
- The largest are found in the UMIC where they account for more than 50% between the poorest and richest
- They become less sharp in the HIC

In the regions like West and Central Africa, Eastern and Southern Africa, and South Asia internet access amongst poorest 20% of children and young people is almost non-existent

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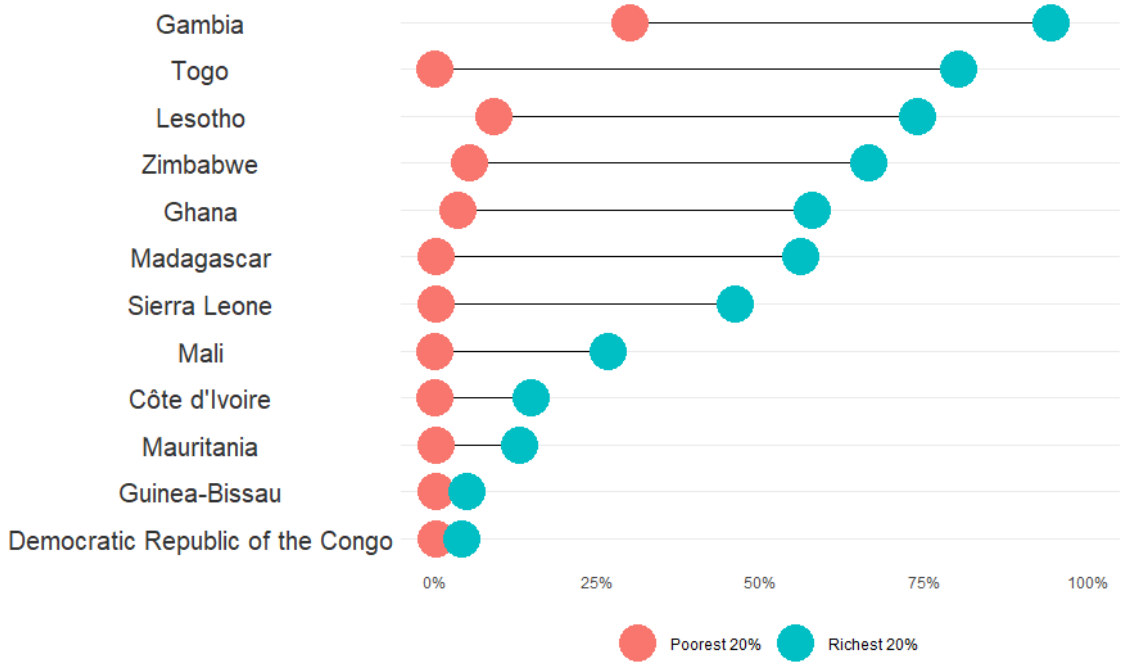
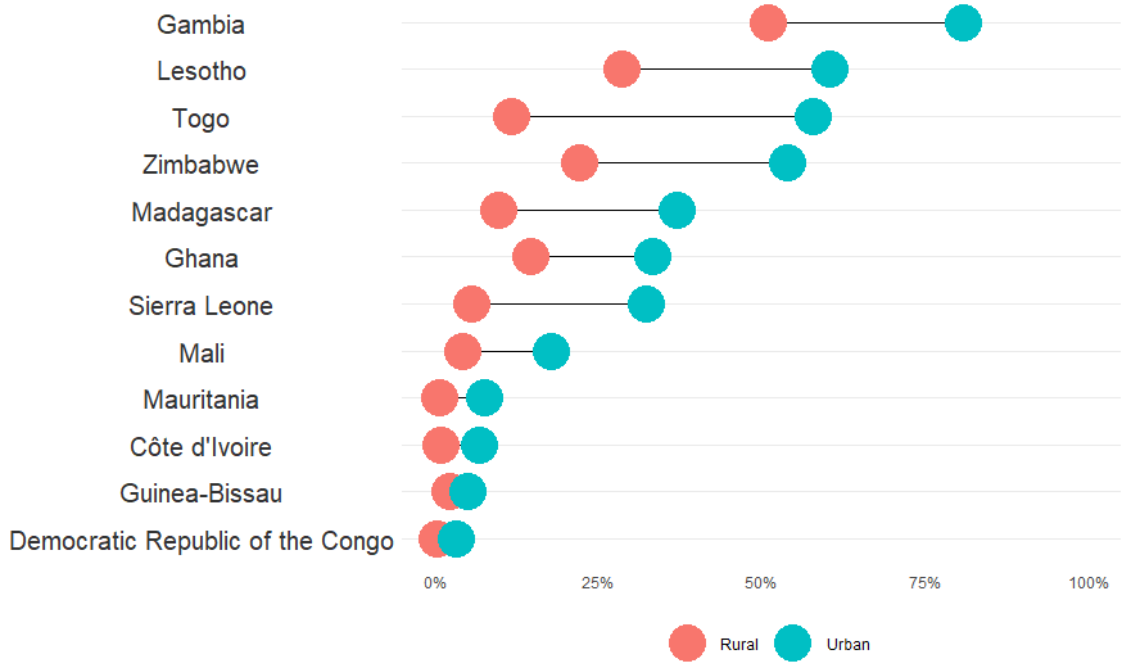
DIGITAL DIVIDE by WEALTH AND LOCATION





- For the youths (15-24 yrs), the most critical situation is observed in the countries of Sub-Saharan Africa
- Internet access at home is almost non-existent for the poorest 20%, undermining their life chances
- Rurality is another strong driver of inequalities in digital connectivity

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IMPLICATIONS

- **Low digital connectivity undermines the potential for children and young** people to succeed in school, work and life and gain necessary skills and knowledge needed to succeed in an increasingly digital world
- **Internet access** for children and young people **is highly inequitable** and the impact of disparities across the socio-economic lines is critical
- With education systems investing in hybrid and remote learning due to the COVID-19 pandemic, it is increasingly clear that the **lack of connectivity is a barrier** that will prevent children and young people from accessing effective and interactive forms of learning going forward.
- **Efforts should be put to significantly expand internet access** in homes, communities and schools

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Thank You

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