

Progress on Children's Well-Being: Centring child rights in the 2030 Agenda

For every child, a sustainable future

Benchmarking SDG Indicators: Methods and Results

14th IAEG-SDG, Copenhagen, Denmark
October 25th, 2023

Context

- ❑ **The value of data is only realized when it informs narratives (data-analytics).**
- ❑ **Need to extract value of global databases to inform global, regional and national conversations** (either by illustrating methodological approaches and/or helping inform conversations on development priorities and what to do about them)
- ❑ **Focus in both the what and how.** Reproducible and scalable workflow using APIs and GitHub.

How do we assess progress on SDG indicators for children ?

Effort required to meet the target by 2030

Not all countries are in the same place

and

Results achieved in recent history

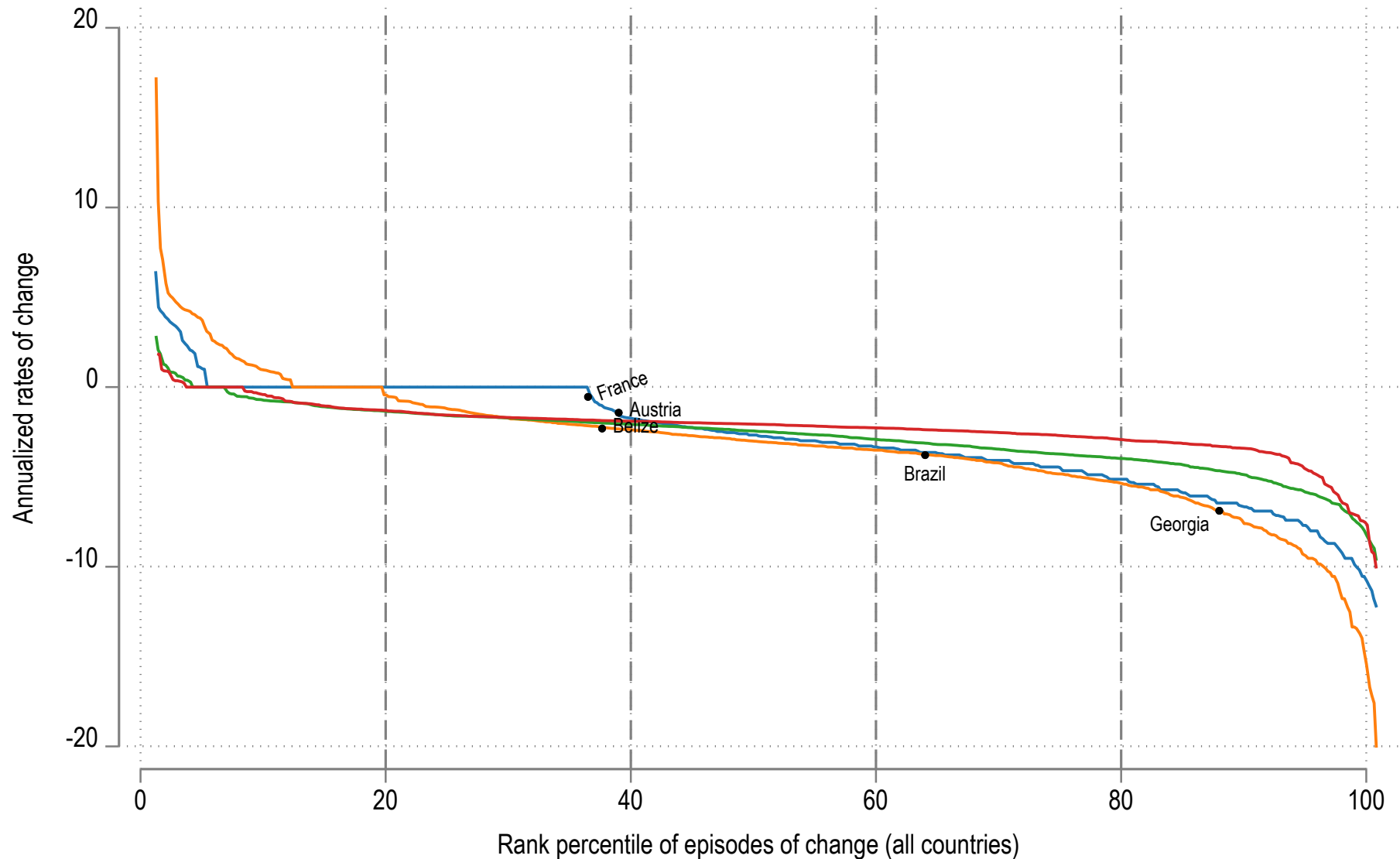
Some countries are performing systematically well across sectors.

Acceleration is possible, and we bring historical evidence.

Why and how did we benchmarking effort and progress?

- use of **percentile rank** to give meaning to both absolute values (latest value and indicator targets by 2030) and annualized rates of change (both historical and required to reach indicator targets by 2030).
 - Use the latest value available as of June 2023 for benchmarking values; and the observed progress in the last 20 years as a reference group to benchmark the observed and expected rates of change.
- provide a **framework to systematically track and compare progress** across different child-related SDG indicators globally.
 - need of a common metric to assess progress across 48 child-related SDG indicators, grouped around five domains.

Benchmark of the rate of change using a single indicator: Neonatal mortality (SDG 3.2.2)

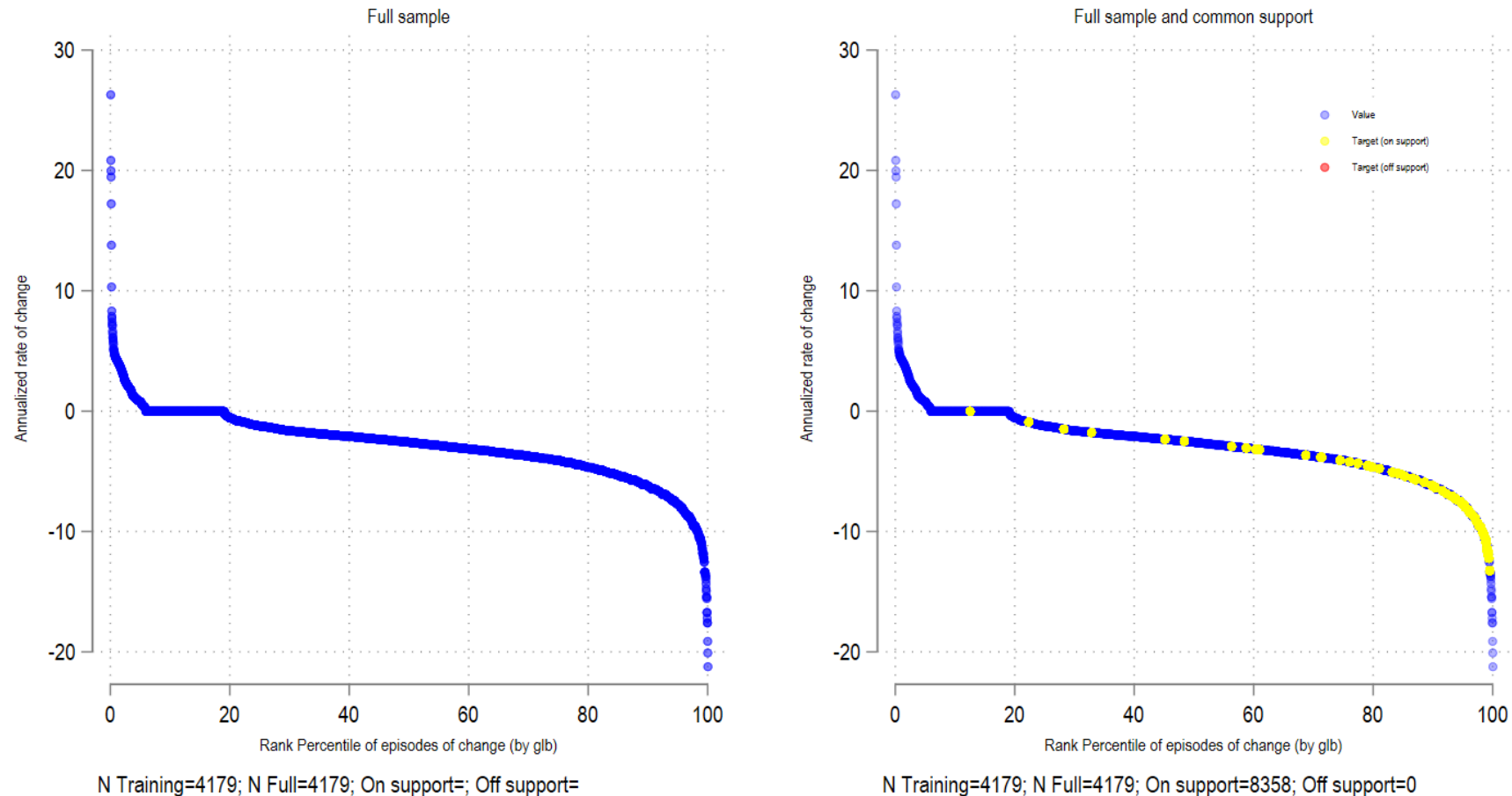


Notes: 4179 observations

<https://data.unicef.org/resources/sdg-report-2023/>

Benchmark of the **rate of change** using a single indicator: Neonatal mortality (SDG 3.2.2)

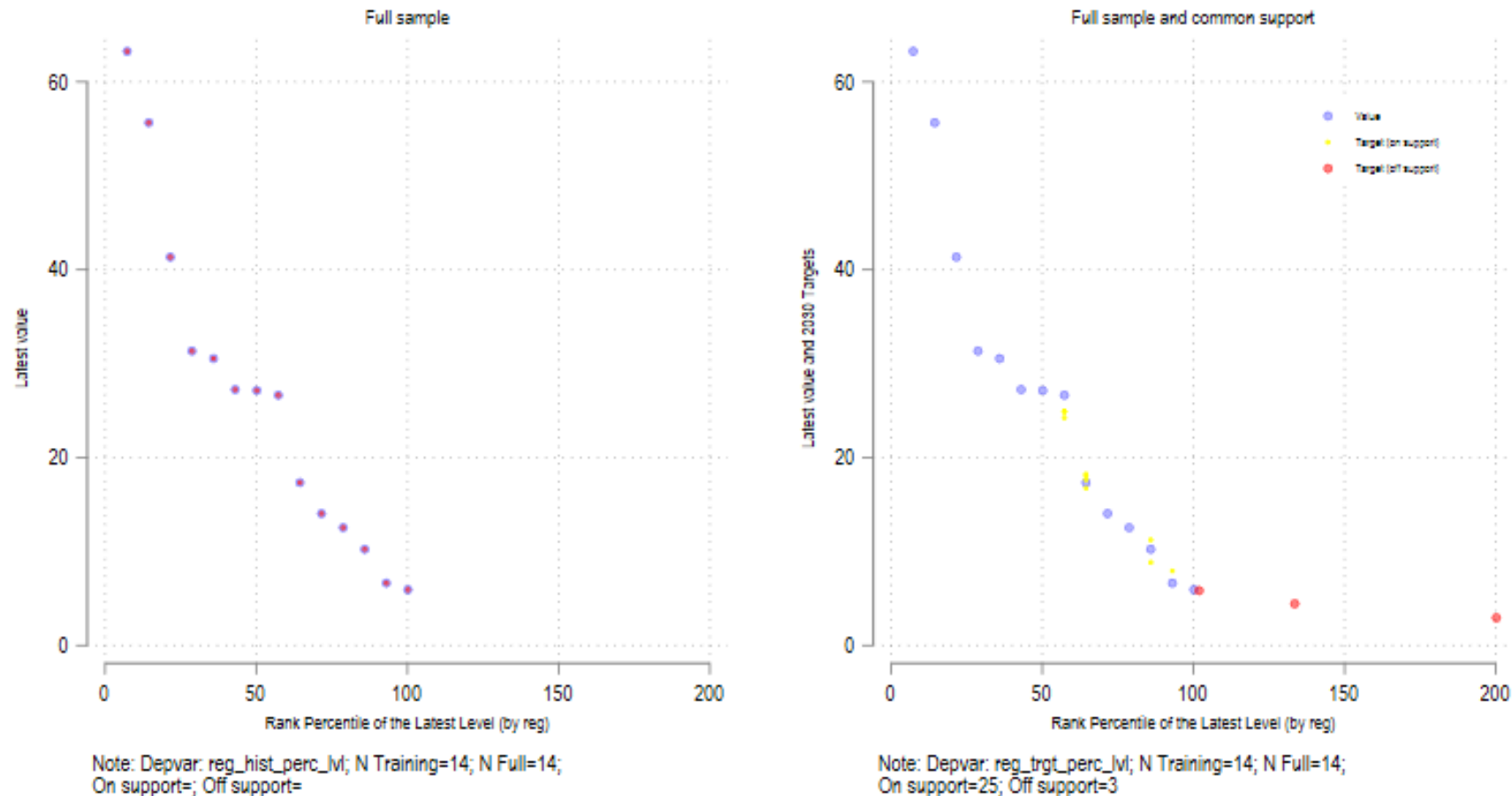
Neonatal mortality rate Benchmark Change (with common support) CM - Global



Notes: Mu Diff: 10.271 (pval: 0.000); KSmirnov D:0.503 (pval:0.000); <http://data.winef.org/twscms/Agg-report-2028/>; Indicator code: CME_MPRMO; Aggregation: glb; Indicator Direction: Negative

Benchmark of the **level** using a single indicator: Neonatal mortality (SDG 3.2.2)

Under-five mortality rate
Benchmark Level and Target (with common support)
CM - Central Asia and Southern Asia



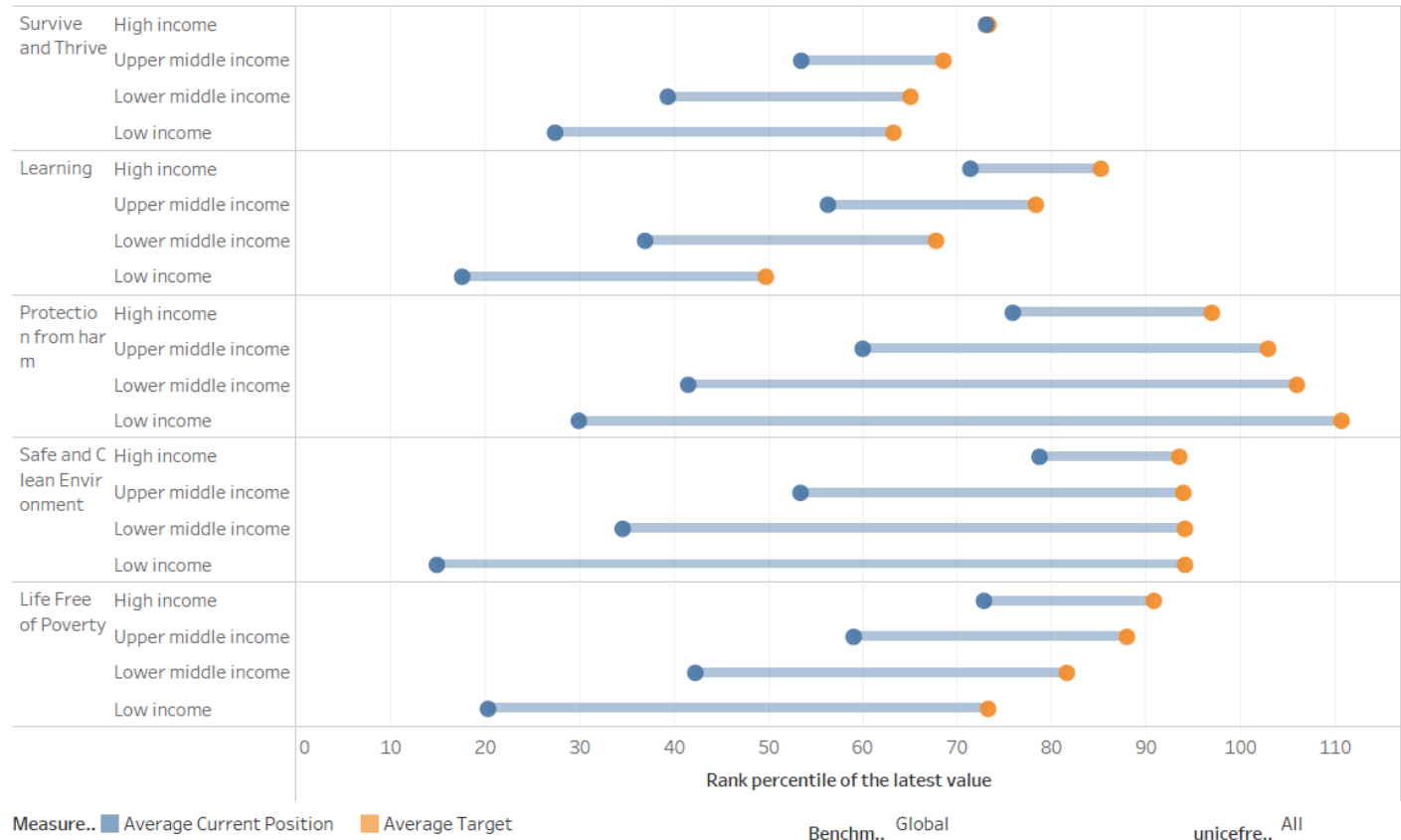
Notes: Mu Diff: -31.073 (pval: 0.028); KSmirnov D: 0.500 (pval: 0.060); Indicator code: CME_MRY0T4; Aggregation: reg; Indicator Direction: Negative
<https://data.unicef.org/resources/sdg-report-2023/>

Countries require very different levels of expected effort to reach their 2030 child-related targets

Benchmarking of 2030 country targets against where countries are today to show the required effort required to meet the target

- Blue dots show where the average country is, and the orange dot where they want to be by 2030
- The gap between the two indicates the level of **expected effort** required

Benchmarking where countries are and where they aim to be by 2030 by outcome area and income group Comparative benchmarking of current status and 2030 targets across outcome areas and income groups

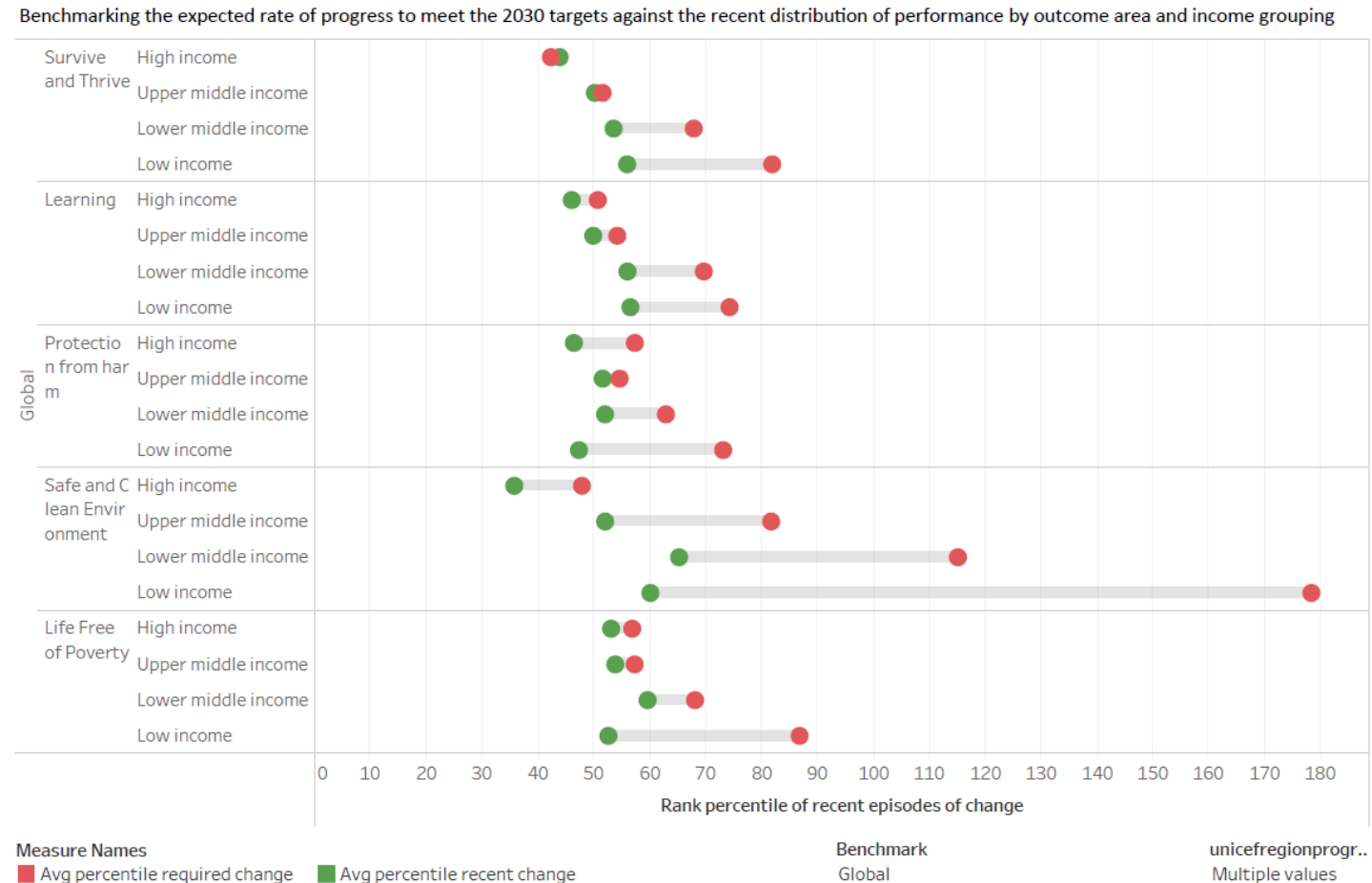


Note: Values can be above 100% if targets are above recorded history of countries/indicators highest level of performance as of today.

Historically countries have delivered different levels of results (green dots), and reaching the 2030 targets will require different degrees of acceleration (red dots)

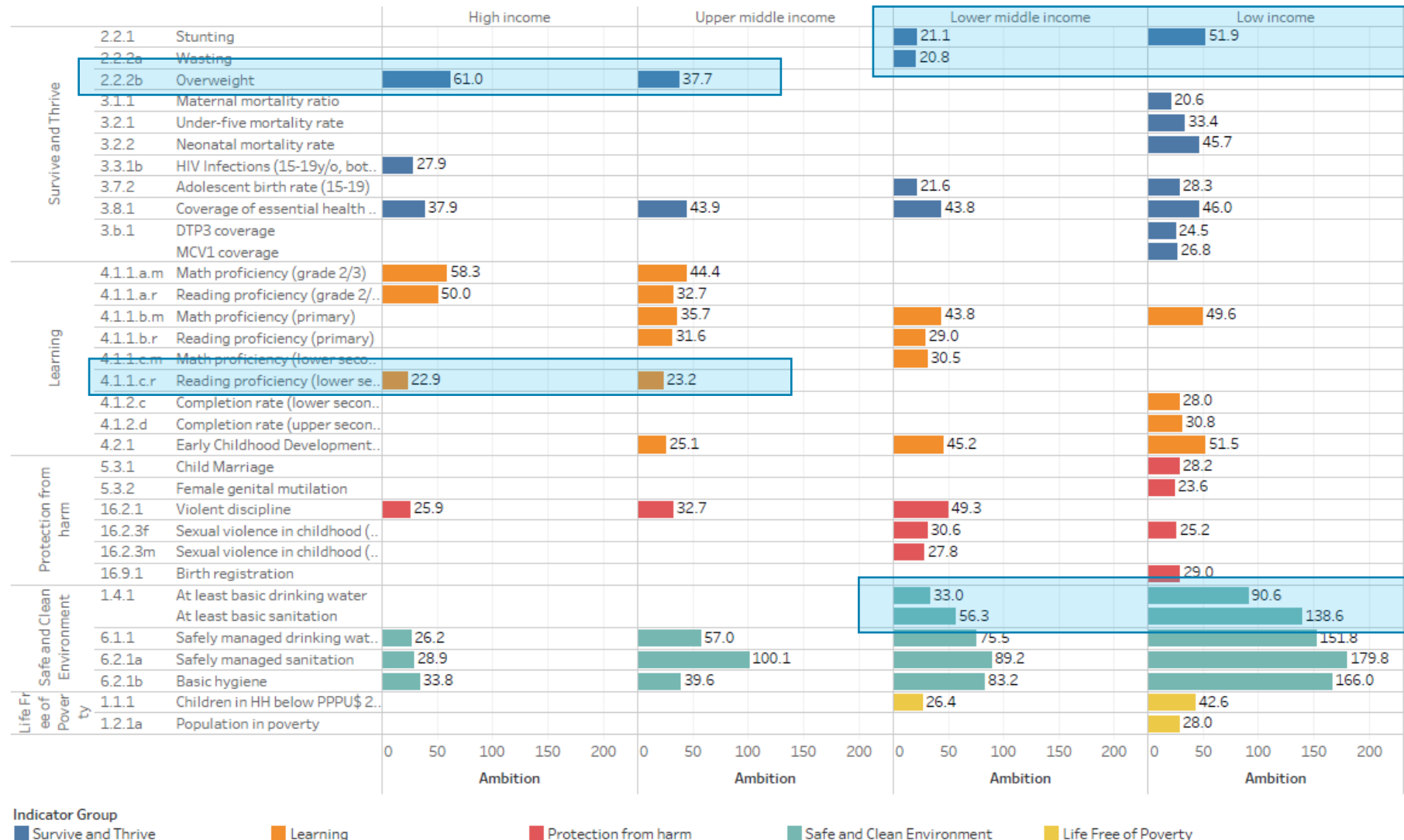
Benchmarking of acceleration required to meet the target against a country's recent rates of change – or how quickly progress has been accelerating.

- This chart shows rate of improvement
- Green dots show where the average country is, and the red dot the rate of change necessary to reach 2030 targets
- The gap between the two also indicates the level of ambition
- *In high income countries the green and red dot are very close*
- *In low-income countries reaching the target required significant acceleration no the rate of progress*



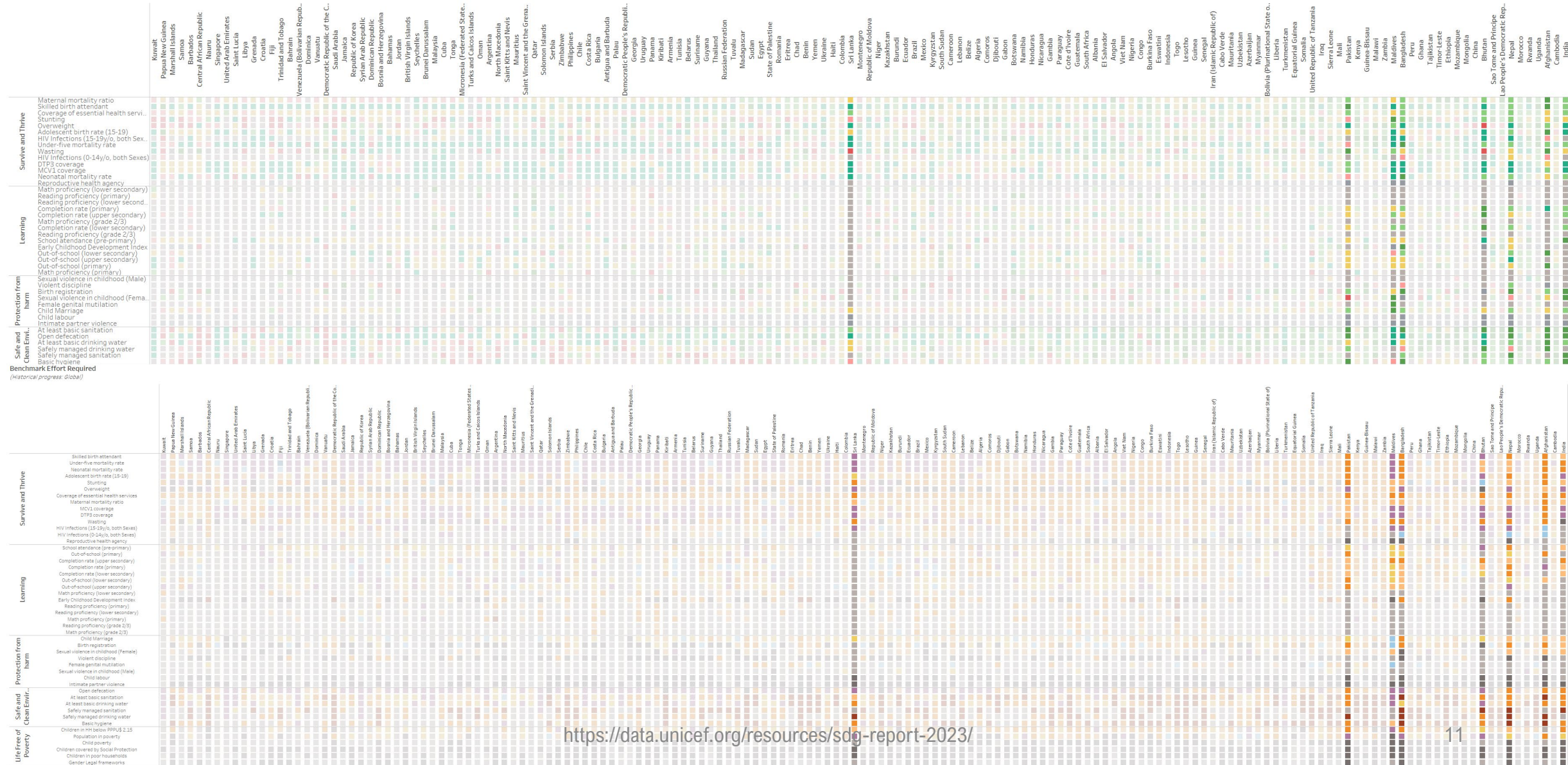
Note: This exercise helps countries understand where the targets can be met by doing more of the same, where the scaling up of what exists might suffice (i.e., more financing might be enough), and last but not least, where – given the required acceleration – they must consider ‘game-changers’

Many games changers needed are the same, however some differences can be identified across income groups and indicators



Progress on child-related SDGs (ROSA highlighted)

Benchmark recent progress
(Historical progress: Global)

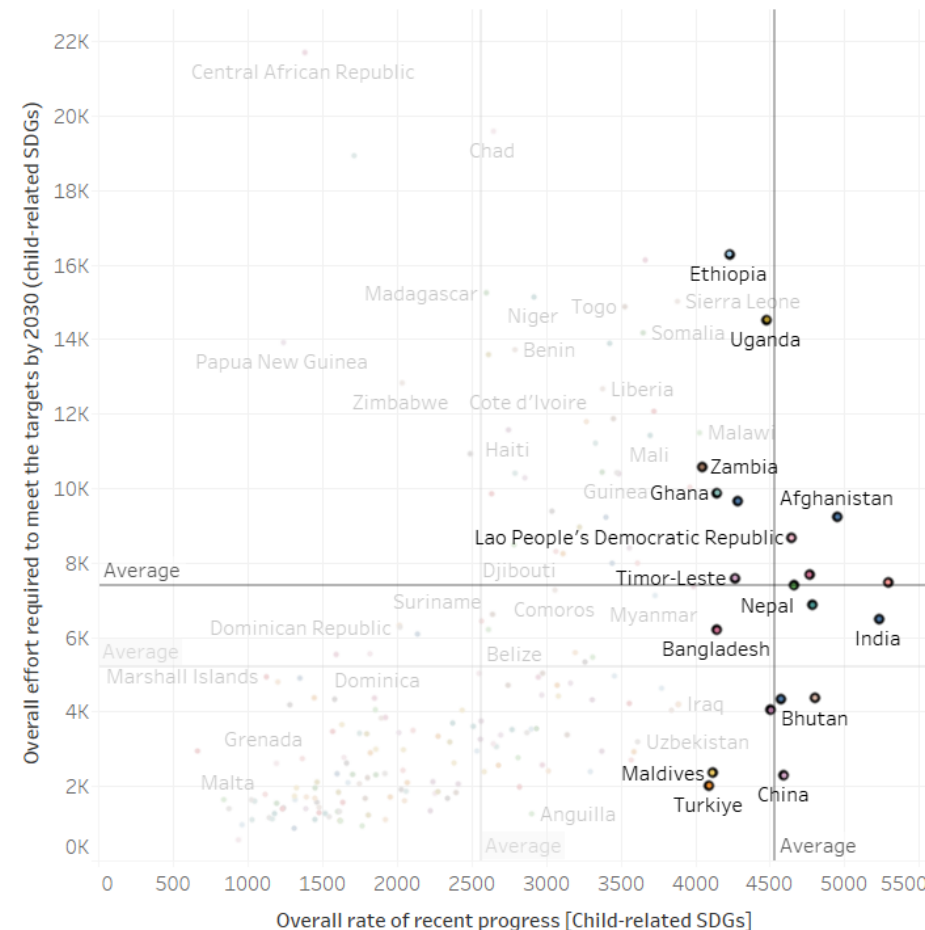


Identifying countries that have been systematically strong performers across multiple child-related SDGs around the world

Countries that show the strongest performance across indicators vary in how close they are to reaching targets.

Quadrant Analysis

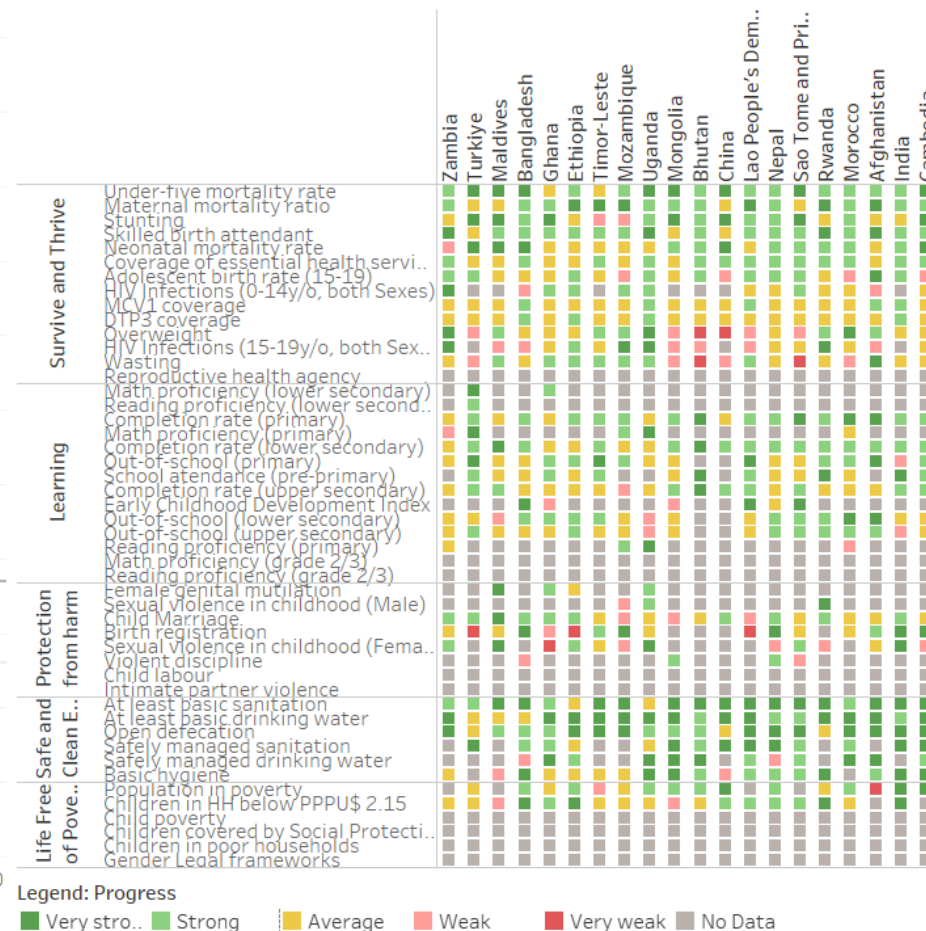
(select countries to highlight heatmap, Dissimilarity:2.0; Benchmark: Global)



Going forward, we can identify positive and negative deviant of systematic performance

Benchmark recent progress

(Historical progress: Global)



<https://data.unicef.org/resources/sdg-report-2023/>

How can this analysis be used? Country briefs



for every child

India

Benchmarking child-related SDGs

September 2023

Heatmaps of historical performance and effort required for India to meet its SDG targets by 2030

This country profile summarizes the status of progress towards the indicators (remaining effort required to meet the targets), and the recent progress of India on 48 child-related SDG indicators, and indicates its data gaps. These indicators are grouped into five outcome areas concerning children: Survive and thrive, Learning, Protection from harm, Safe and Clean environment, and Fair Chance in Life.

For a comprehensive view, India's performance is shown compared to three distinct benchmarks: (i) Global – where all countries are compared equally; (ii) By other Lower middle income countries; or, (iii) By others countries in Central Asia and Southern Asia region.

Detailed results of our analysis for India are presented below.

Figure 1 presents the heatmap to show the level of effort the country needs to perform to reach their child related SDG targets. Data on both the latest level of these indicators and historical performance are used as benchmarks. In this figure, blue means that the country has already met the target or is nearly achieving it; while light orange and dark orange indicate that the country is further away (off-track).

Figure 2 presents the heatmap of the country's performance on each of these indicators, using standardized metrics where a score of 0 denotes poor performance, and 100 signifies optimal performance. This heatmap indicates how strongly a country has been performing across these indicators, compared to an average of all countries, countries in their income group and countries in their region.

Figure 1. Effort required of child-related SDGs organized by sectors

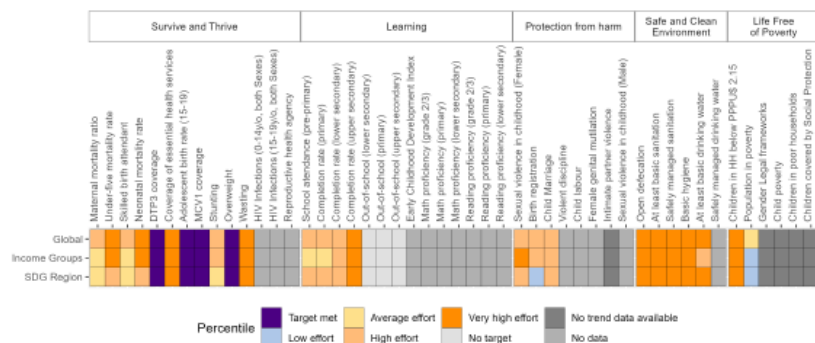


Figure 2. Historical performance of child-related SDGs organized by sectors

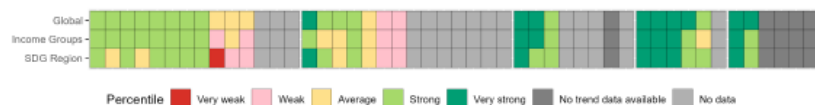


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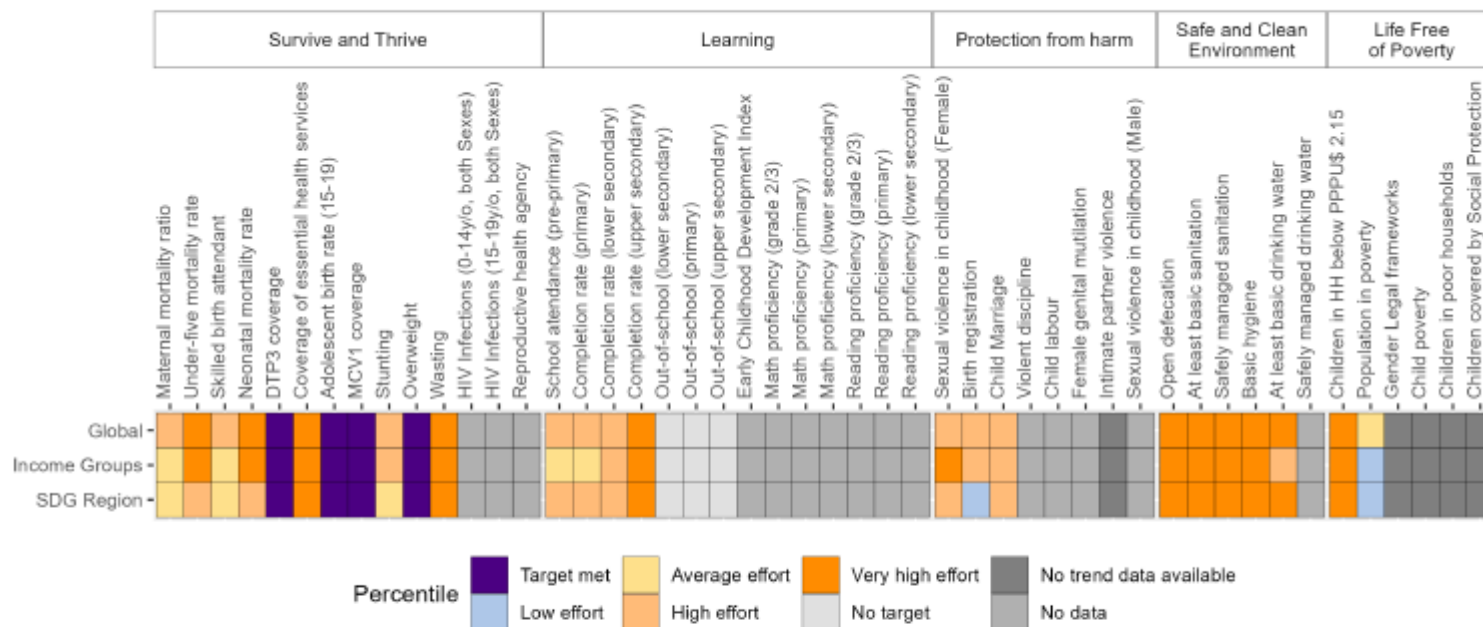
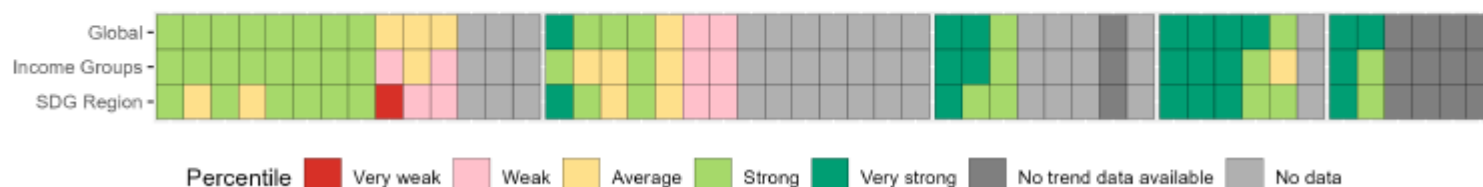


Figure 2. Historical performance of child-related SDGs organized by sectors



How can this analysis be used? Country briefs

Benchmarking of 2030 country targets against where **countries are today** to show the required effort required to meet the target

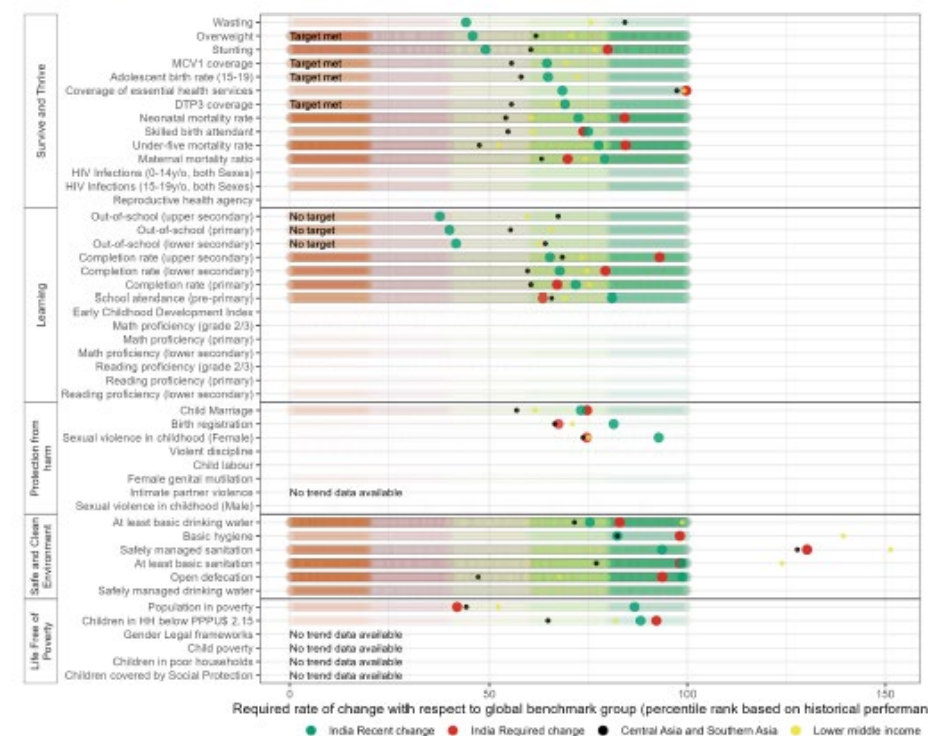
Figure 3. Benchmarking where the country is and where it aims to be by 2030



Source: UNICEF Chief Statistician Office using data from UNICEF Data Warehouse as of August 2023. For a global narrative using this methodology please see [UNICEF 2023 SDG Report](#). For more detailed information including indicator value and latest year available please visit our [Online India SDG profile at data.unicef.org/sdgs](#).

Benchmarking of acceleration required to meet the target against a country's **recent rates of change** – or how quickly progress has been accelerating.

Figure 4. Benchmarking the historical rate of progress and expected rate of progress to meet the 2030 target



Source: UNICEF Chief Statistician Office using data from UNICEF Data Warehouse as of August 2023. For a global narrative using this methodology please see [UNICEF 2023 SDG Report](#). For more detailed information including indicator value and latest year available please visit our [Online India SDG profile at data.unicef.org/sdgs](#).

We are also changing processes: the HOW is as important as the WHAT

Principles of reproducible and scalable analytics

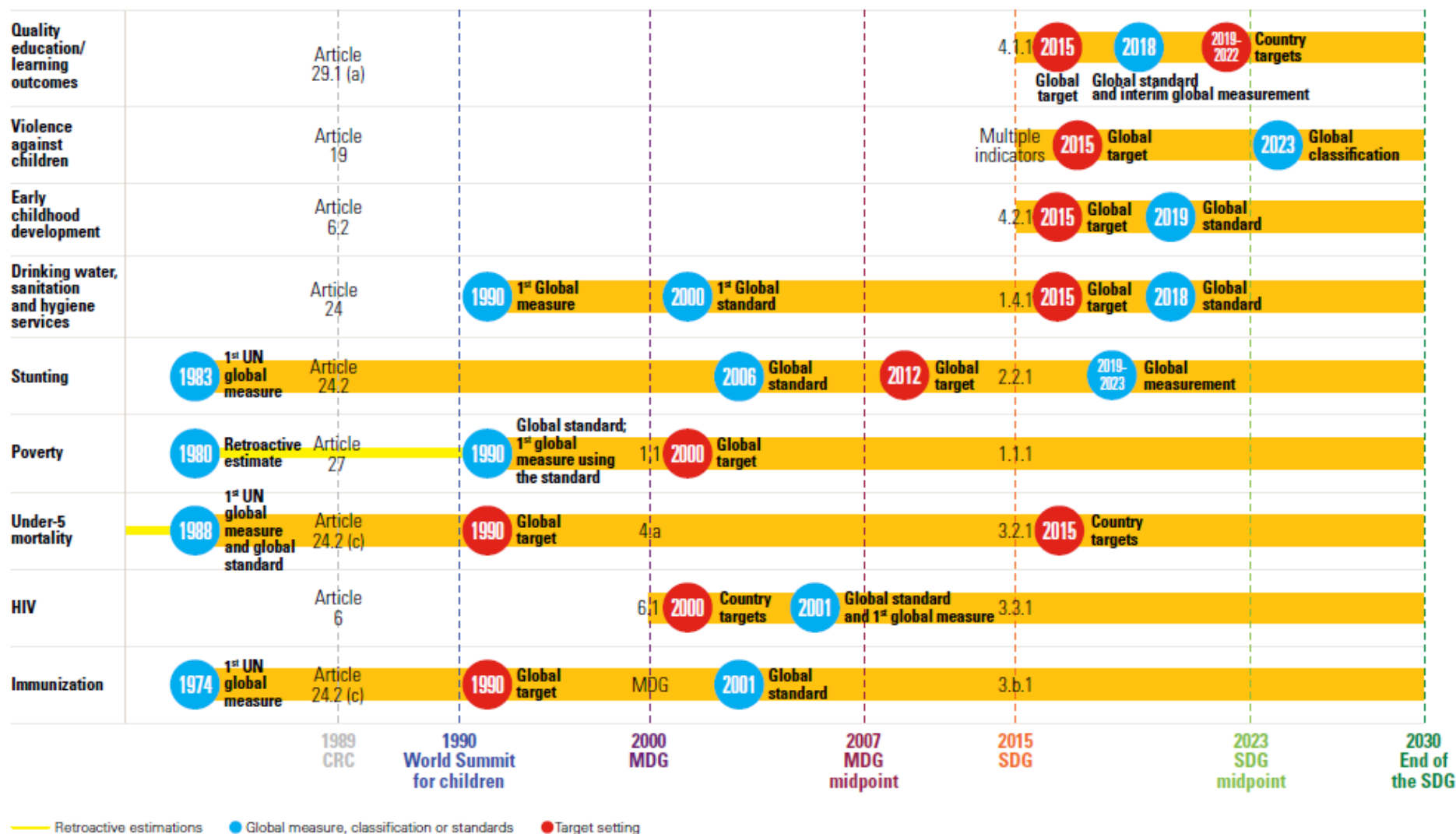
The screenshot displays the GitHub interface for the repository `unicef-drp / PROD-SDG_report_2023`. The repository is private and has 4 branches, 0 tags, and 738 commits. The commit history shows a merge of the 'dev' branch into 'main' by user `jpazvd` 2 days ago. The file list includes folders for documentation, data, benchmarking, and data visualization, as well as files for .gitignore, README.md, and R/Python scripts. The README.md file is selected, showing the title `PROD-SDG_report_2023` and the subtitle `PRODUCTION SDG Report 2023`. The right sidebar shows repository statistics: 1 star, 6 watchers, 0 forks, and 7 contributors. The language distribution is: HTML 44.3%, R 32.3%, and Stata 23.4%.

File/Folder	Description	Time
00_documentation	[doc] Metadata updated	3 weeks ago
01_data	[update] UNICEF Program region names change	last week
02_benchmarking	Merge branch 'dev' into main	2 days ago
03_dataviz	Merge branch 'dataviz' into QA	3 months ago
08_2pager	Merge branch '2pagrs' into dev	2 days ago
.gitignore	[repo] revised .gitignore	2 months ago
README.md	Initial commit	4 months ago
profile_PROD-SDG_report_2023.R	[doc] Markdown update	last month
profile_PROD-SDG_report_2023.do	[update] UNICEF Program region names change	last week
run_PROD-SDG_report_2023.do	[data] Adjust save command	3 months ago

Language	Percentage
HTML	44.3%
R	32.3%
Stata	23.4%

[unicef-drp/PROD-SDG_report_2023: PRODUCTION SDG Report 2023 \(github.com\)](https://data.unicef.org/resources/sdg-report-2023/)
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SDG process and the measurement of child wellbeing



Source:

1. The CRC articles mentioned in the visualization are not exhaustive. Please refer to the publication for the full mapping.

2. The years of key milestones are based on efforts by international organizations to develop global classifications, standards and methodologies to measure different dimensions of child well-being.

<https://data.unicef.org/resources/sdg-report-2023/>

Thank you