

For every child, a sustainable future

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for every child

Benchmarking SDG Indicators: Methods and Results

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

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

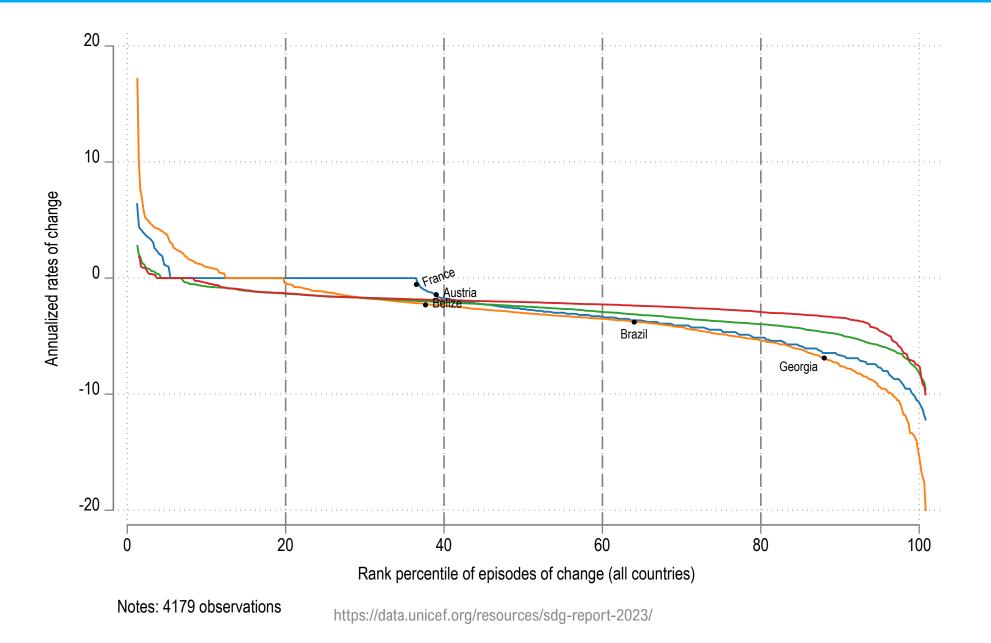
Results achieved in recent history

Some countries are performing systematically well across sectors. Acceleration is possible, and we bring historical evidence.

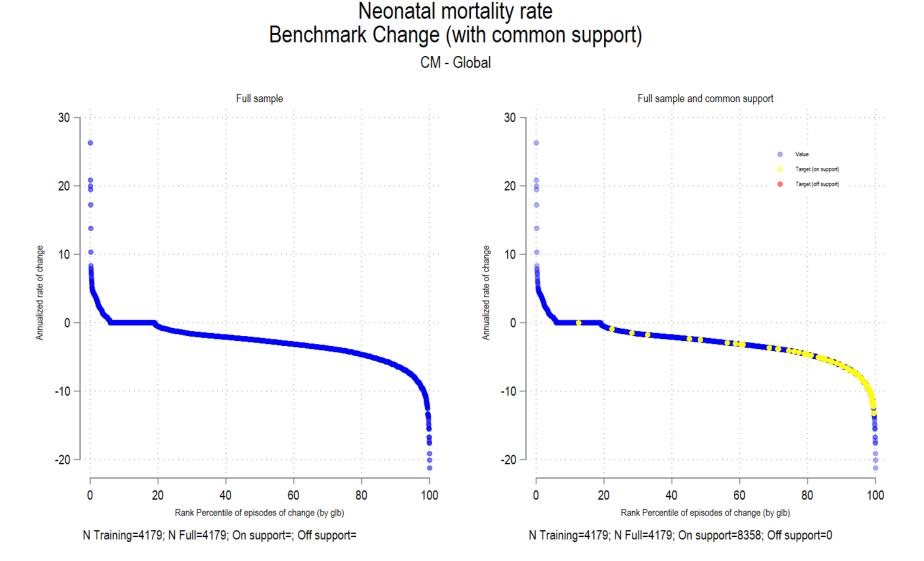
Why and how did we benchmarking effort and progress?

- 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 childrelated SDG indicators, grouped around five domains.

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



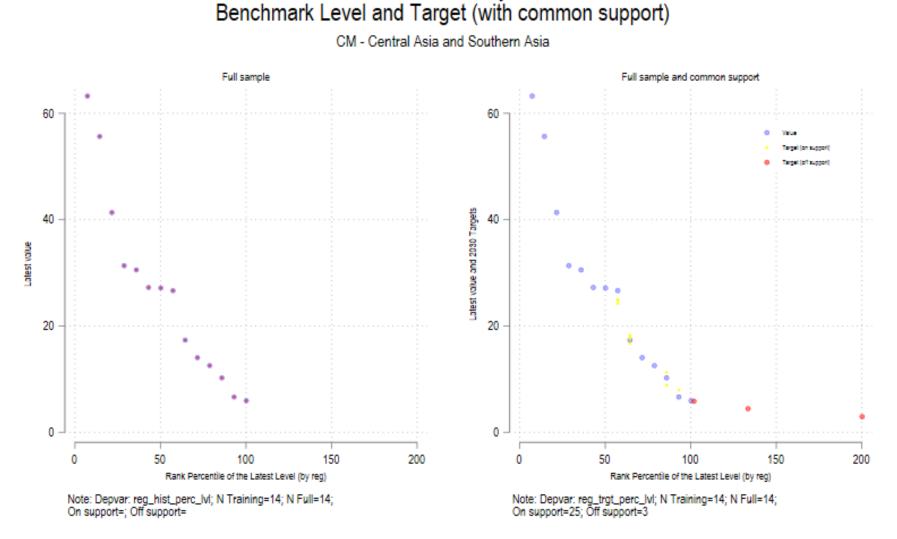
Benchmark of the rate of change using a single indicator: Neonatal mortality (SDG 3.2.2)



Notes: Mu Diff: 10.271 (pval: 0.000); KSmirnov D:0.503 (pvalicos000)a tadicatore for a for

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

Under-five mortality rate



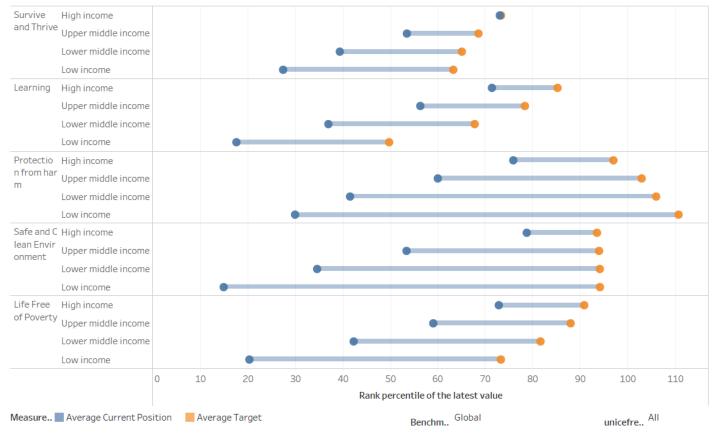
Notes: Mu Diff: -31.073 (pval: 0.028); KSmirnov D:0.500 (pval: 0.060); Indicator code: CME_MRY0T4; Aggregation: reg; Indicator Direction: Negative https://data.unicef.org/resources/sdg-report-2023/

Countries require very different levels of expected effort to reach their 2030 childrelated targets

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

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

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

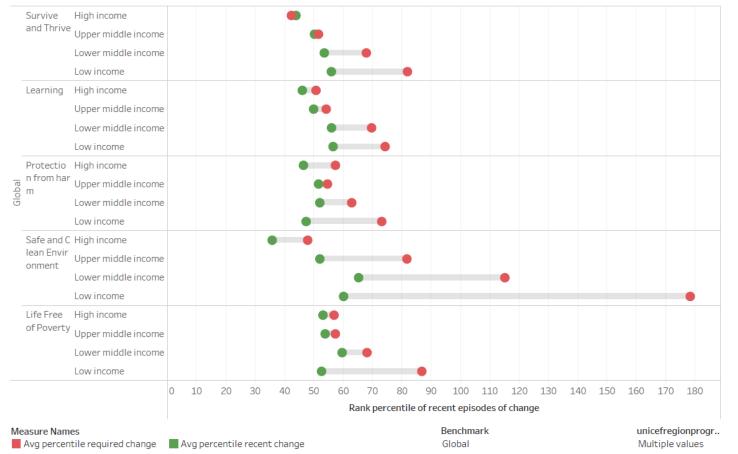


Historically countries have delivered different levels of results (green dots), and reaching the 2030 targets will require different degrees of acceleration (red dots)

- 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

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

Benchmarking the expected rate of progress to meet the 2030 targets against the recent distribution of performance by outcome area and income grouping

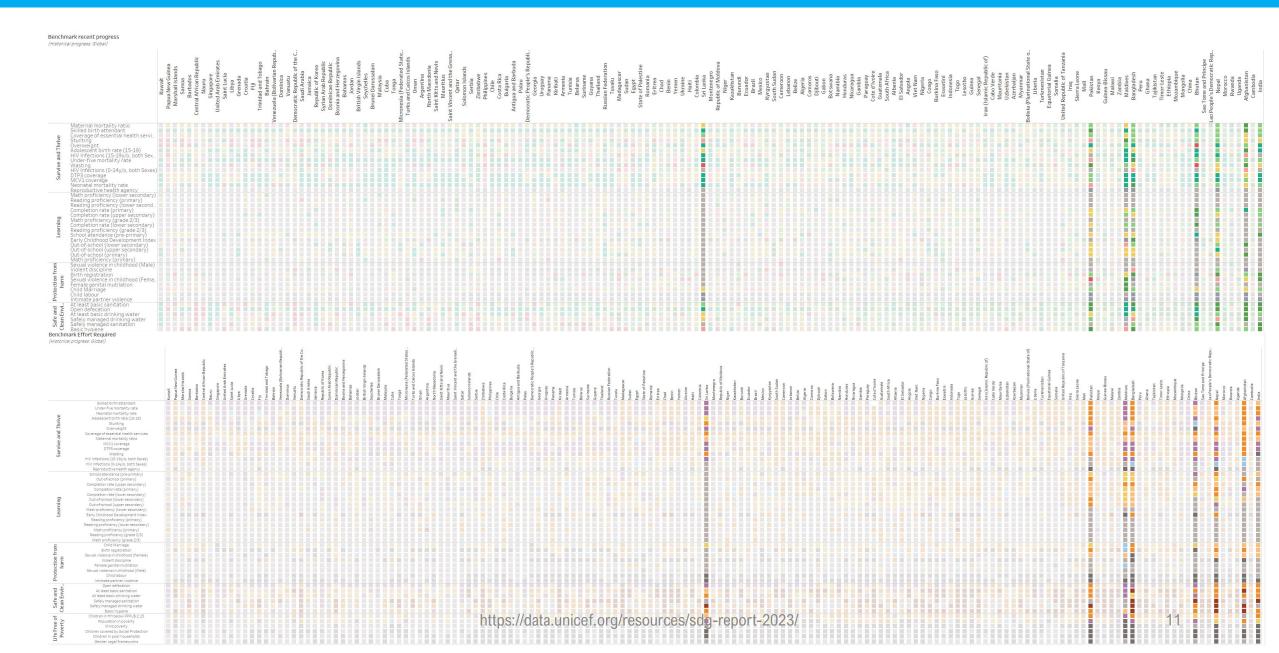


Note: This exercise helps countries understand where the targets can be met by doing more of the same, where the scaling up of what exists might suffice (i.e., more ginancing might be enough), and last but not least, where – given the required acceleration – they must consider 'game-changers'

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

| | | | | High ir | ncome | | | Upper | r middle in | come | | | ver middl | e income | 8 | | Low in | ome | |
|---------------------------------|-----------|--------------------------------|------|---------|-------|-----|---|-------|-------------|------|-------|------|-----------|----------|-----|------|--------|----------|-------|
| | 2.2.1 | Stunting | | | | | | | | | | 21.1 | | | | 5 | 1.9 | | |
| Survive and Thrive | 2.2.2a | Wasting | | | | | | | | | | 20.8 | | | | | | | |
| | 2.2.2b | Overweight | | 61.0 | | | | 37.7 | | | | | | | | | | | |
| | 3.1.1 | Maternal mortality ratio | | | | | | | | | | | | | | 20.6 | | | |
| | 3.2.1 | Under-five mortality rate | | | | | | | | | | | | | | 33.4 | | | |
| | 3.2.2 | Neonatal mortality rate | | | | | | | | | | | | | | 45 | .7 | | |
| | 3.3.1b | HIV Infections (15-19y/o, bot | 27.9 | Э | | | | | | | | | | | | | | | |
| | 3.7.2 | Adolescent birth rate (15-19) | | | | | | | | | | 21.6 | | | | 28.3 | | | |
| | 3.8.1 | Coverage of essential health | 37 | 7.9 | | | | 43.9 | | | | 43.8 | 3 | | | 46 | .0 | | |
| | 3.b.1 | DTP3 coverage | | | | | | | | | | | | | | 24.5 | | | |
| Protection from harm | | MCV1 coverage | | | | | | | | | | | | | | 26.8 | | | |
| | 4.1.1.a.m | Math proficiency (grade 2/3) | | 58.3 | | | | 44.4 | | | | | | | | | | | |
| | 4.1.1.a.r | Reading proficiency (grade 2/ | | 50.0 | | | | 32.7 | | | | | | | | | | | |
| | 4.1.1.b.m | Math proficiency (primary) | | | | | | 35.7 | | | | 43.8 | 3 | | | 49 | 9.6 | | |
| | 4.1.1.b.r | Reading proficiency (primary) | | | | | | 31.6 | | | | 29.0 | | | | | | | |
| | 4.1.1.c.m | Math proficiency (lower seco | | | | | | | | | | 30.5 | | | | | | | |
| | 4.1.1.c.r | Reading proficiency (lower se | 22.9 | | | | 2 | 3.2 | | | | | | | | | | | |
| | 4.1.2.c | Completion rate (lower secon | | | | | | | | | | | | | | 28.0 | | | |
| | 4.1.2.d | Completion rate (upper secon | | | | | | | | | | | | | | 30.8 | | | |
| | 4.2.1 | Early Childhood Development | | | | | | 25.1 | | | | 45.2 | 2 | | | 5 | 1.5 | | |
| | 5.3.1 | Child Marriage | | | | | | | | | | | | | | 28.2 | | | |
| | 5.3.2 | Female genital mutilation | | | | | | | | | | | | | | 23.6 | | | |
| | 16.2.1 | Violent discipline | 25.9 |) | | | | 32.7 | | | | 49. | 3 | | | | | | |
| | 16.2.3f | Sexual violence in childhood (| | | | | | | | | | 30.6 | | | | 25.2 | | | |
| | 16.2.3m | Sexual violence in childhood (| | | | | | | | | | 27.8 | | | | | | | |
| ā | 16.9.1 | Birth registration | | | | | | | | | | | | | | 29.0 | | | |
| 날리 | 1.4.1 | At least basic drinking water | | | | | | | | | | 33.0 | | | | | 90.6 | | |
| Safe and Clean Environment | | At least basic sanitation | | | | | | | | | | 56 | 5.3 | | | | | 138.6 | 5 |
| | 6.1.1 | Safely managed drinking wat | 26.2 | 2 | | | | 57.0 |) | | | | 75.5 | | | | | 151 | 1.8 |
| | 6.2.1a | Safely managed sanitation | 28. | Э | | | | | 100.1 | | | | 89.2 | | | | | | 179 |
| | 6.2.1b | Basic hygiene | 33 | .8 | | | | 39.6 | | | | | 83.2 | | | | | 1 | 166.0 |
| Life Fr ee of Pover ty | 1.1.1 | Children in HH below PPPU\$ 2. | | | | | | | | | | 26.4 | | | | 42. | 6 | | |
| ee of Pover ty | 1.2.1a | Population in poverty | | | | | | | | | | _ | | | | 28.0 | | | |
| | | | 0 50 | 0 100 | 150 | 200 | 0 | 50 | 100 1 | 50 | 200 0 | 0 50 | 100 | 150 | 200 | 0 50 | 100 | 150 | 20 |
| | | | | Ambi | | | Ĩ | 20 | Ambition | | | | Ambition | | | | | Ambition | |
| | oup | | 1 | | | | | | | | | | | | | | | | |

Progress on child-related SDGs (ROSA highlighted)



Identifing 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.

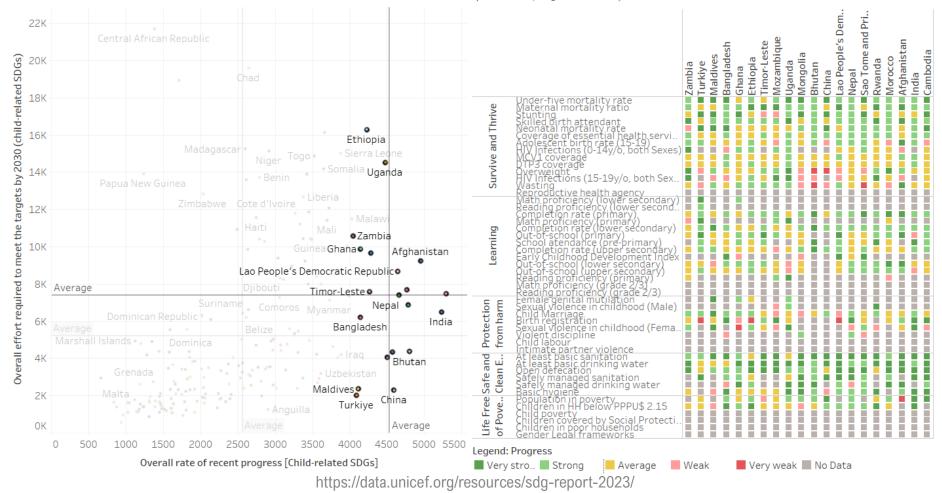
Quadrant Analysis

(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)



How can this analysis be used? Country briefs

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

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

India

Benchmarking child-related SDGs

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 childrelated 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.

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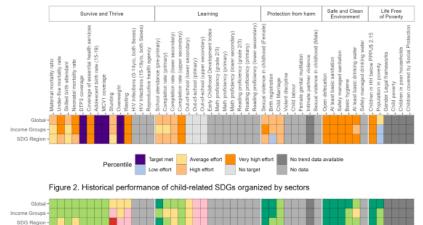
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For a comprehensive view, India's performance is shown compared to three distinct benchmarks: (i) Global where all countries are compared equally; (ii) By other Lower middle income countries; or, (iii) By others countries in Central Asia and Southern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





Global

Income Groups SDG Region

September 2023



Learning

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

Survive and Thrive



Target met

Low effort

Percentile



Average effort

High effort

Very high effort

No 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.

Link to all two pagers (link) https://data.unicef.org/resources/sdg-report-2023/

Safe and Clean

Environment

Protection from harm

No trend data available

No data

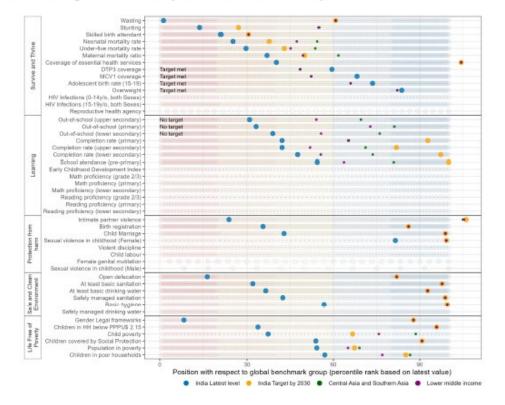
Life Free

of Poverty

How can this analysis be used? Country briefs

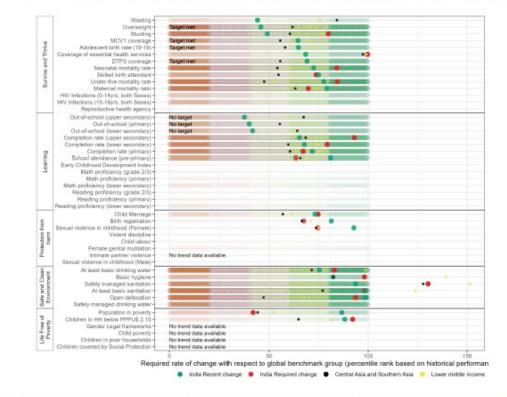
Benchmarking of 2030 country targets against where **countries are today** to show the required effort required to meet the target

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



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

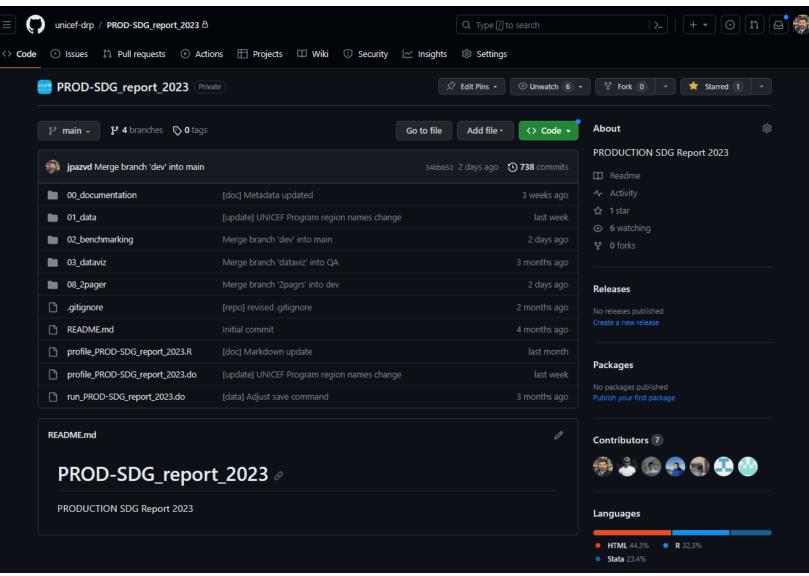


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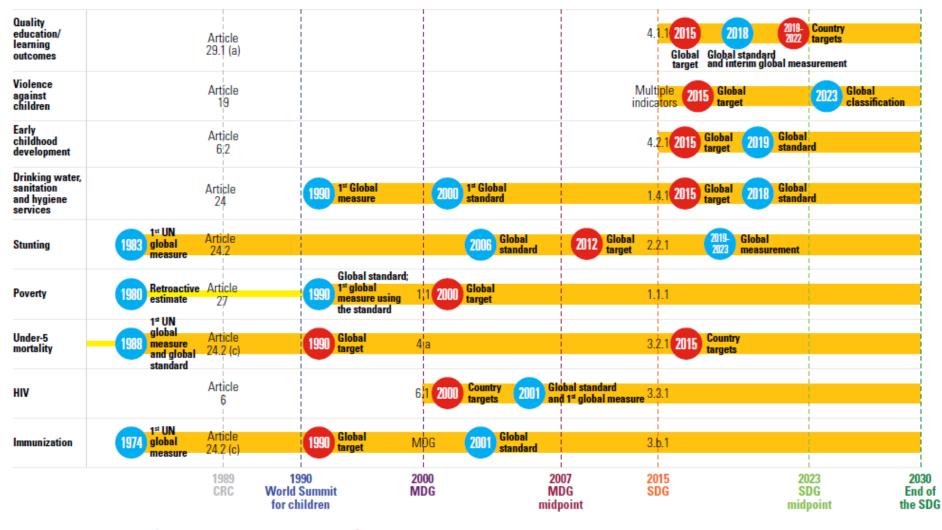
Link to all two pagers (link)

We are also changing processes: the HOW is as important as the WHAT Principles of reproducible and scalable analytics



unicef-drp/PROD-SDG_report_2023: PRODUCTION_SDG_Report_2023 (github.com)

SDG process and the measurement of child wellbeing



--- Retroactive estimations 🛛 🔵 Global measure, classification or standards 👘 🔎 Target setting

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.unicet.org/resources/sdg-report-2023/



Thank you

Wants.