Institute for Statistics
Technical Cooperation
Group

TCG 21 June 2021 Meeting
Consultation

The Secretariat of the TCG convened its Members to a meeting on **21 June 2021** to present the most recent activities and developments on the implementation of the SDG 4 Thematic Indicator Framework. The TCG Members and observers invited were briefed on the following topics:

1. **TCG progress and update on benchmarks** Member States, regional organizations and partners in all regions have been actively collaborating to implement the regional benchmarking process and discuss indicators for regional benchmarking, which will take into consideration the disparities across regions and guide countries in setting benchmarks at the national level.
2. **Equity benchmarks** In October 2020, the TCG approved a technical and political process for setting benchmarks. However, the seventh benchmark indicator on equity remained to be discussed in greater detail. Since then, options have been explored and were presented to the TCG Members.
3. **Regional/global aggregates** So far, such aggregates have been reported for 5 of the 12 SDG 4 Global Indicators. This year at the 2021 UNSG SDG Report, regional and global aggregates will be reported for almost all SDG 4 indicators for the first time. Yet, an agreement must be reached on the definitions and methodologies for regional averages for most SDG 4 indicators.

This consultation seeks the TCG voting Members agreement on two general topics: benchmark indicator on equity and regional/global aggregates. Votes will be counted as stipulated in the TCG Rules for Voting.

1. Benchmark: indicator on equity

In August 2019, the sixth meeting of the Technical Cooperation Group (TCG) on SDG 4 indicators endorsed seven indicators to be benchmarked in fulfilment of the commitment made in paragraph 28 of the framework for Action for countries to set intermediate benchmarks. While six of the seven indicators were well defined, the seventh indicator, which was meant to focus on equity, was left to be determined at a subsequent stage. The seventh (virtual) TCG meeting in October 2020 approved a technical and political process for setting benchmarks, which have since been implemented. For the purpose of making this decision, two short papers were submitted:

- A paper An Equity Benchmark for SDG 4: Options for Discussion: A Brief for The Technical Cooperation Group was prepared to address the outstanding gap on the seventh benchmark, offering a range of options for discussion.
- Following the discussion, another short document was prepared by the statistical service of the Ministry in charge of education in France.

1.1. Which underlying indicator/measure should be used as benchmark indicator for equity?

More details on each of the five options are presented in **Table 1**.

- Option 1: Gender gap of the secondary completion rate
- Option 2: Gender odds ratio of the secondary completion rate
- Option 3: Gender parity index of the secondary completion rate
- Option 4: Residual of a regression on the parity index on the secondary completion rate
- Option 5: Standard deviation of the secondary completion rate by survey cluster
- Option 6: none of the above

Table 1 – Benchmark indicator on equity: options proposed

Option		Benchmark setting	Advantage	Disadvantage
1	Gender Gap of secondary completion rate	• Values set for completion rate. • The change on the gap can be predicted based on average trends. • The proposed equity benchmark level will assume a trend faster than the predicted one.	• Very simple and easy to understand. • Maintains focus on gender equality.	• The gap is not an SDG 4 measure/indicator
2	Gender odds ratio of secondary completion rate	• Values set for completion rate. • Levels and trends are more difficult to interpret	• Easy to compute. • Only positive values (≥0) • No ceiling effect.	• The odds ratio is not an SDG 4 measure/indicator • Difficult to interpret • Can give very high levels of inequity when rates for subgroups are close to 100 %

OPTION		BENCHMARK SETTING	ADVANTAGE	DISADVANTAGE
3	GENDER PARITY INDEX OF SECONDARY COMPLETION RATE	• Values set for completion rate. • The change on the gender parity index can be predicted based on average trends. • The proposed equity benchmark level will assume a trend faster than the predicted one.	• Maintains a compact set of indicators related to each other. • Relatively transparent.	• Difficult to interpret trends. • Ceiling effect • Correlation with average (when average closer to 100 %, ratio closer to 1) • Differences depending on whether we observe the result or its opposite
4	RESIDUAL OF A REGRESSION ON THE PARITY INDEX ON THE SECONDARY COMPLETION RATE	• A regression of the gender parity index on the completion rate will generate the predicted level of the index at each level of the completion rate. The equity benchmark level will be proposed assuming that progress towards the global trend will be faster than average.	• Need to focus on countries with disparities higher than average.	• Difficult to interpret.
5	STANDARD DEVIATION OF SECONDARY COMPLETION RATE BY SURVEY CLUSTER	• No clear benchmark setting process; 2 alternatives: 1. Values set with reference to minimum observed value among all countries, which all will need to reach. 2. Regression of standard deviation on the completion rate will lead to the residual identifying countries that are more unequal than predicted.	• Characteristic-free measure (variation across enumeration areas).	• Survey cluster design may differ substantially between countries, affecting interpretation.

COMMENTS:

With reference to the points raised in the paper submitted to the TCG Members as a background document, several questions were raised during the discussion, which are listed below:

- What do we want to measure exactly? Is inequality decreasing in a given country over time or is inequality increasing in one country relative to another?
  To show some countries are doing better than others, we need to define the question in a way that is fair – sometimes even location can be unfair making some countries look more unequal.
- Focus on sex as it is one less debatable characteristic and there are interesting variations across countries and we want to draw attention to how countries could accelerate their progress to be more equal.

- Do we want to choose just one equity indicator?
- How will we communicate the equity benchmark?
- Regionalization will be inevitable. Regional benchmarks will facilitate this challenge.
- Ask countries or regions what are the foremost challenges in equity they face, then start construction of an indicator?
- Technical remark: overlapping with remaining 6 indicators among the 7 benchmark that have been identified: completion rate, similar to the early leavers, it will be an in depth look into an indicator that appears otherwise. The seventh indicator is an extension of one of the remaining six, is that ok? We have to be explicit: new or trying to go deeper in the indicators that is the remaining six indicators.
    - Strength in selecting an existing indicator – inclined to select one we have.
    - In regional benchmark meetings, so far, equity and interest in having equity is there – all regions are concerned. And people ask when it will be defined political appetite for it.
- The question of equity is not the same in some countries. To calculate same indicator and calculate gender parity on the same indicator will be an issue. There is also socioeconomic parity; it's not because they are less comparable at the international level. Having an indicator for a (disadvantaged) population with clear definition is important.
- Some flexibility will be needed because issues will be of different order but the framing, if possible, should try to organize the conversation in terms of equality of opportunity especially for the learning dimension.
- Agree on 3 dimensions (socioeconomic status, gender, urban/rural), then we compute and adjust SDG 4.1.1 a, b, c to use a measure of inequality among the students who are below the MPL. This could be brought in if we think of a framework – they could be practically computed, according to what the data allows us to do.
- For the severity, we do need a continuous indicator but for scenario of measures equity adjusted coverage rates, you can still work in a binary space – work for discrete variables.
    - https://www.worldbank.org/en/topic/poverty/lac-equity-lab1/equality-of-opportunities/hoi-pisa
    - https://elibrary.worldbank.org/doi/full/10.1596/978-1-4648-0786-2_ch2
- MEETING CHAT: Based on literature, inequity due to sub-national region (e.g., province) is as large as inequality caused by SES. In any sectors, this variable is not normally used to analyse equity. However, this variable can offer one of a few entry points to inform public finance policy to address inequality going beyond urban-rural disparities. I am just wondering if there is any discussion about equity around sub-national disparities.
- The paper shows a valuable analysis – econometric. If we stick to option 1, can we calculate not a ratio of rates, like we have done, but a difference of rates? Odds ratios can also be calculated if we want to avoid other problems, especially since we know countries do not compare in the same way if you compare one variable and the opposite variable.
- Choosing a measure that requires micro data from household surveys or learning assessments is not a problem, it could be an opportunity as we can build capacity in country to use this data and do this type of analysis. To engage in this kind of capacity, make the code available in Stata/R and use this data for capacity beyond the traditional indicators we currently have.
- Methodology we plan to use should be clearly stated.

- Dimensions of equity in the SDG is not just gender, urban/rural … the question is do we want to use a methodology that would enable a multivariate analysis of equity, such as regression based? It could also be useful for countries. There is also the need to make a compromise between what is good for analysis but not as an indicator for advocacy and decision-making, where the need is for a simple and clear basic measure.

2. Regional and global aggregates

In March 2021, UNDESA assembled a task team in order to harmonize and improve existing methodologies, share experiences and best practices in calculating aggregates, provide guidance to other international and regional organizations, and make the methodology used transparent. Currently, different methodologies are being used by different international agencies, for instance with respect to the use of population or income estimates, weights, country grouping classifications, and the handling of missing data. As part of the work in progress, the task team has agreed to start mapping custodian agencies' current practices and to do a stock-tacking on how the different issues are addressed.

The seventh TCG meeting in October 2020 touched upon the issue of regional/global aggregates but only addressed two partial issues related to aggregates based on survey data and it therefore did not look comprehensively at the full set of issues related to regional/global aggregates for all indicators and the decisions that are needed to report on them – those were discussed during the TCG Meeting of 21 June 2021 and are presented in SDG 4 Indicators Regional/Global Aggregation Methodology: A Brief for the Technical Cooperation Group, and subject to the current consultation.

The options below are presented by group of indicator.

2.1. Indicator 4.1.1 - Learning assessment data-based indicators

2.1.1 What type of population weight should be used?

- Option 1: School-age population
- Option 2: Enrolment

2.1.2 Which approach should be done when data is missing?

- Option 1: Assume a country has a regional value.
- Option 2: Impute missing values based on other information. The statistical model and the variables used for imputation will be clearly documented and reported to TCG.

2.1.3 What is the minimum representation to report the regional/global aggregate?

- Option 1: 50% of countries
- Option 2: 50% of population

2.1.4 What is the reference period used to report the regional/global aggregate?

- Option 1: Past 5 years
- Option 2: Past 7 years
- Option 3: Past 10 years

2.2 Indicator 4.1.2 – Survey based indicators

2.2.1 What type of population weight should be used?

- Option 1: Cohort size (10-14 year old for primary, 15-19 year old for lower secondary, 20-24 year old for upper secondary)
- Option 2 School-age population for a given age group, i.e., UIS data specifically, which is consistent with the out-of-school rate indicator.

2.2.2 Which approach should be done when data is missing?

- Option 1: Assume a country has the regional value from countries for which information is available.
- Option 2: Impute missing values based on other information. The statistical model and the variables used for imputation will be clearly documented.

2.2.3 What is the minimum representation to report the regional/global aggregate?

- Option 1: 50% of countries
- Option 2: 50% of population

2.2.4 What is the reference period used to report the regional/global aggregate?

- Option 1: Past 5 years
- Option 2: Past 5 years with nowcasting

2.3 Parity indices

2.3.1 What type of population weight should be used?

- Option 1: Median of **countries**, i.e., average over individual countries' parity index
- Option 2: Mean of **populations**, i.e., aggregate populations and divide the 2 groups.

2.3.2 What is the minimum representation to report the regional/global aggregate?

- Option 1: 50% of countries
- Option 2: 50% of population

2.3.3 What is the minimum representation to report the regional/global aggregate?

- Option 1: 50% of countries
- Option 2: 50% of population

2.4 1.a.2 – Finance indicators

Refer to paper Filling the data gaps for Expenditure Data - Proposal from the UIS TCG Secretariat for more details on the proposed options.

2.4.1 What type of population weight should be used?

- Option 1: Median of countries, i.e., average over individual countries
- Option 2: Mean of spending volume, i.e., public expenditure or GDP

2.4.2 Which approach should be done when data is missing?

- Option 1: Median of countries, i.e., assume country has the regional value.
- Option 2: Impute missing values based on other information. The statistical model and the variables used for imputation will be clearly documented.

2.4.3 What is the minimum representation to report the regional/global aggregate?

- Option 1: 50% of countries in the region
- Option 2A**:** 50% of total government expenditure in the region.
- Option 2B:
  - ≥60% of total general government expenditure in PPP$ in the region: publish
  - <60% and ≥33% of total general government expenditure in PPP$ in the region: publish as 'UIS estimate'.
  - <33% of total general government expenditure in PPP$ in the region: do not publish.

2.5 – Confidence intervals and disaggregation

The following question is related to indicators 4.1.1, 4.1.2 and 4.2.2.

Should the indicators 4.1.1, 4.1.2 and 4.2.2 be disaggregated for urban/rural region and bottom/top quintile?

- Option 1: Aggregates for urban/rural and bottom/top quintile
- Option 2: No aggregates for urban/rural and bottom/top quintile