

### 1. Selection of indicators

As the first step, suitable indicators from the National Indicator Framework on SDGs were identified and mapped with the targets. Guided by the NIF and the extensive consultations with Union ministries/departments and all States/UTs, NITI Aayog has constructed a list of 115 indicators, refining them wherever needed to aid comparison. To determine suitable metrics for inclusion in the Index, technically sound and quantitative criteria based indicators were chosen that had:

- ii. Relevance to the SDG targets
- iii. Alignment with the National Indicator Framework
- iv. Data availability at the national level for States and UTs from official statistical systems
- v. The consent of respective Ministries/ Departments
- vi. Data ownership, either administrative or survey, by Line Ministries
- vii. Sufficient data coverage, such that data for at least 50 percent of the States/UTs is available

The NIF, put together by MoSPI, served as the basis for selection of these indicators. Where State/UT level data was not available for NIF indicators, suitable proxy indicators were identified from official data sources. The NIF indicators for which data was not available at the State/UT level could not be included.

### 2. Consultation with stakeholders

The latest data on the selected indicators was collected in collaboration with the respective ministries and MoSPI. Several rounds of consultations with the ministries and States were also organised to arrive at suitable proxy indicators. The indicator refining and selection was preceded by intensive rounds of consultations with the primary stakeholders, namely, the States/UTs. The draft list of indicators was circulated to all States/UTs, and comments were received from them. Detailed workshops were conducted with several States, with Chief Secretaries, concerned senior officials, including planning secretaries,

and Heads of Departments. Some of the States where such workshops were conducted are - Uttar Pradesh, Chhattisgarh, Kerala, Karnataka, Meghalaya, Gujarat, Maharashtra, and Goa.

### 3. Summary of Indicators

In the SDG India Index 3.0, out of the 115 indicators, 75 are common to Index 2.0. Out of these, for 57 indicators, updated values have been used, compared to 2019. Again, out of the 115 indicators, 76 are completely aligned to NIF, 31 are derived from NIF, and 8 are constructed in consultation with the line ministries. 109 indicators were used for Index estimation; 5 indicators under SDG 14 were not included as they relate only to the 9 coastal States, while one indicator in Goal 10 has not been used for computation due to lack of comparability. In the case of indicators for which data was not available for all States/UTs, the missing cells were marked as "Null". These were not assigned any weightage in Index estimation.

### 4. Target setting

The next step was target setting for each indicator, once the required raw data was ready. A suitable target value for 2030 was set for each indicator. The targets set by the UN at the global level were adopted with respect to 74 indicators, for instance, the target of reducing Maternal Mortality Ratio (MMR) to 70 per 1,00,000 live births by 2030. For 28 indicators, targets set by Government of India were used. Benchmarks set by international development organisations or international standards were adopted for 9 indicators, including the World Health Organisation (WHO) target of 50 percent reduction of anaemia in women of reproductive age by 2025. For indicators with no specified quantitative target, the target has been set by deriving an average of top 3 States. For three of the five indicators under Goal 14, it is to be noted that the ideal value that can be set as a target is not fixed but falls within a range.

### 5. Normalisation of raw indicator values

The following step was normalisation of raw indicator values to arrive at normalised scores. The normalisation of indicator values to a standard scale of 0 to 100 was required to ensure comparability as different indicators had different ranges of values. For instance, while MMR is per

1,00,000 live births, poverty rate is measured as a percentage. In the normalised range of 0 to 100, 0 indicates lowest performance and 100 implies that the target has been achieved.

For indicators where higher the value means better the performance, for example, the proportion of institutional deliveries, the following formula was used:

$$x' = \frac{x - \min(x)}{T(x) - \min(x)} \times 100$$

Where, x = raw data value  
 min(x) = minimum observed value of the indicator in the dataset  
 T(x) = target value for the indicator  
 x' = normalised value after rescaling

For indicators where higher the value implies lower the performance, for instance, Infant Mortality Rate, the following formula was used:

$$x' = \left[ 1 - \frac{x - T(x)}{\max(x) - T(x)} \right] \times 100$$

Where, x = raw data value  
 max(x) = maximum observed value of the indicator in the dataset  
 T(x) = target value for the indicator  
 x' = normalised value after rescaling

Where the States/UTs had achieved beyond the target set, the normalised score was capped at 100.

Target values for indicators under goal 14 were not used to compute normalised score as for most of them the ideal value is not fixed but falls within a range. Raw data under this goal was therefore normalised as following:

$$x' = \frac{x - \min(x)}{\max(x) - \min(x)} \times 100$$

Where, x = raw data value  
 min(x) = minimum observed value of the indicator in the dataset  
 max(x) = maximum observed value of the indicator in the dataset  
 x' = normalised score after rescaling

### 6. Computation of State/UT scores

Computation of State/UT-wise score for each Goal followed normalisation. This was estimated as the arithmetic mean of the normalised values of all indicators under the Goal, for each State/UT. Equal weight was assigned to each indicator.

$$I_{ij}(N_{ij}, I_{ijk}) = \frac{1}{N_{ij}} \sum_{k=1}^{N_{ij}} I_{ijk}$$

Where  $I_{ij}$  = Goal score for State/UT i under SDG j  
 $N_{ij}$  = number of non-null indicators for State/UT i under SDG j  
 $I_{ijk}$  = normalised value for State/UT i of indicator k under SDG j

The Goal score  $I_{ij}$  for State/UT i under Goal j was then rounded off to the nearest whole number. Based on the Goal score, the States/UTs were classified into four categories under each Goal. Achiever: when the Index score equals 100; Front Runner: when the Index score is between 65 and 99, including both; Performer: when the Index score is between 50 and 64, including both; Aspirant: when the Index score is less than 50.

### 7. Computation of composite Index 3.0 score

The next step was the computation of composite Index 3.0 score for every State/UT. The composite score is the arithmetic mean of the Goal score for 16 Goals, for each State/UT, assigning equal weight to each Goal. This score is an indication of the overall position of the States/UTs in their journey towards achieving the SDGs. The States/UTs were again classified into the four categories based on their composite score.

$$I_i(N_i, N_{ij}, I_{ijk}) = \frac{1}{N_i} \sum_{j=1}^{N_i} I_{ij}(N_{ij}, I_{ijk})$$

Where  $I_i$  = composite SDG index score of State/UT i  
 $N_i$  = number of Goal scores for which State/UT i has non-null data  
 $I_{ij}$  = goal score for State/UT i under SDG j  
 $I_{ijk}$  = normalised value for State/UT i of indicator k under SDG j