

Estimating Child Development Index in India at the District Level – A Methodology

No. 370

17-February-2022

Ritu Mathur, Namrata Jaitli and Amarnath H.K.



**National Institute of Public Finance and Policy
New Delhi**

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Abstract

The 2030 Agenda for Sustainable Development calls for transforming our world and working towards the future we want. The future we want will, to a large extent, be driven by the youth and the children of today. The survival and development of children to their full potential is essential for building a peaceful, prosperous and sustainable planet. Sustainable development starts with investing in each child. The rights of the child to survival and development, non-discrimination and freedom from all forms of violence are critical for building strong and harmonious communities.

For India, it is particularly important to invest in children now. As per the Economic Survey 2018-19¹, India's demographic dividend will peak around 2041, when the population share of working-age (20-59 years) is expected to hit 59 per cent. The Government of India has been focussing on building human capital through investing in education for all, healthcare and skilling. Any slip-up will lead to sub-optimal leveraging of the demographic dividend with severe socio-economic consequences.

There are vast inter-State and intra-State differentials in the status of children. It is important to be aware of regions and districts that do not fare as well as others to facilitate appropriate prioritisation of resources. A first step in this direction is to be able to assess the status of children for all the districts of the country on the basis of globally accepted methodology.

This paper uses the methodologies adopted by Save the Children for two of its global indices for ranking countries on the status of children, adapts it to the India context proposing an India Child Development Index (ICDI).

Key Words – Children, Child Development Index, district level estimation, district level data, SDG, Save the Children

Ritu Mathur is an independent development consultant. Namrata Jaitli is Director - Policy & Programme Impact, Save the Children India. Amarnath HK is Associate Professor and Head, Public Finance Information System (data bank) at National Institute of Public Finance and Policy (NIPFP). The views expressed are of the authors and not of their respective institutes. The authors are thankful to Alka Singh, former GM – Policy & Advocacy, Save the Children India for her support in initiating and completing the first phase of the paper and Shivani Bhaskar, Manager and Policy Advocacy, Save the Children, India for coordinating all aspects during the drafting and finalisation of the paper and Meha Mathur, media person, for her support in data verification.

Corresponding Authors: Ritu Mathur: ritumathurwork@gmail.com, and Amarnath H K: hk.amarnath@nipfp.org.in

¹ [Economic Survey 2018-19, Ministry of Finance](#), Government of India, 2019

INTRODUCTION

Children are the future of all communities and nation. The future we want will be driven by the children of today. An all-round and appropriate development of children is critical for the future well-being of all societies. The survival and development of children to their full potential is essential for building a peaceful, prosperous and sustainable planet. For India, at an inflection point of demographic transition, it is extremely urgent and vital to focus and invest on holistic well-being and development of children over the next decade.

Governments across the world, including in India have formulated various laws, Acts, policies and programmes aimed at protecting child rights and for holistic development of children. Monitoring from the grass-roots level on child rights and development is critical to have a snapshot of the current status, to ascertain the progress and to understand the lacunae leading to corrective action. For the purpose of better targeting and prioritising limited resources, it is important to identify pockets of deprivation. In the Indian context, given the diversity and heterogeneity in pace of development, it is vital to drill down to at least till the district level for a comparative analysis to trigger action at the local level. However, the means of monitoring progress on child rights and child development in an integrated manner, particularly at the sub-State level are beset with a number of challenges.

This paper is an attempt to conceptualise a composite index on child development relevant to the Indian context by applying a suitable globally accepted methodology that can be used for comparing status of children across all the districts of India.

In support of monitoring SDG Goal 4.2, “By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education”, UNICEF has conceptualised an Early Childhood Development Index 2030 (ECDI2030). The ECDI2030 captures the achievement of key developmental milestones by children between the ages of 24 and 59 months. This is based on primary survey for which data is collected through Multiple Indicator Cluster Surveys (MICS).² Mothers or primary caregivers are asked 20 questions about the way their children behave in certain everyday situations, and the skills and knowledge they have acquired. Behaviour data for children is not available in India at the district level and hence this methodology cannot be used for district level estimation.

World Vision India, in partnership with Pathfinder International India, OP Jindal School of Banking and Finance, Poverty Learning Foundation and the University of Melbourne released second edition of its Child Well-Being Report in 2020. It uses 99 indicators to measure status of children’s well-being at the district level for nine domains - life, bodily health, bodily integrity, senses, imagination, thoughts, emotions, practical

² Loizillon, A., N. Petrowski, P. Britto and C. Cappa (2017). Development of the Early Childhood Development Index in MICS surveys. MICS Methodological Papers, No. 6, Data and Analytics Section, Division of Data, Research and Policy, UNICEF New York, 2017.

reasons, affiliation, play and control over one's environment. The nine domains identified are critical – however they are a combination of tangible/measurable domains as well as intangible and difficult to measure domains. Secondly, as has been proven through the success of many global indices such as the Human Development Index, a composite index with limited number of indicators is a powerful advocacy tool and is simpler to communicate.

Save the Children has conceptualised two composite indices to track the status of children over a number of dimensions -a Child Development Index and an End of Childhood Index. The Child Development Index (CDI) and the End of Childhood Index (EoCI) have some common thematic focus. Both the indices focus on measuring children's health, nutrition and education. The End of Child Index additionally measures critical factors that influence children's emotional, physical and social well-being, that is, child work, marriage, reproductive burden and violence against children. The CDI is estimated using three indicators³ whereas the EoCI is estimated using eight indicators.⁴

The approach and methodology adopted by Save the Children for developing the two indices is better suited to be adapted for presenting district level comparison in the Indian context. This paper proposes a methodology for estimating an India Child Development Index (ICDI) by adapting the methodology adopted by Save the Children for estimating the CDI and EoCI.

The India Child Development Index (ICDI) provides a summary measure of children's progress on multiple dimensions of the rights of the child – health, nutrition, education, and protection. It focusses on providing status of performance of all the districts in India on ICDI for the year 2015.

The year 2000 marked the signing of the Millennium Declaration by Heads of States across the world and in 2015 the Heads of States signed the 2030 Agenda for Sustainable Development. The India Child Development Index thus provides a baseline for the Sustainable Development Goals at the district level. It can be used to track progress of children and identify geographies and sectors that need attention till 2030 - the target year for achieving the Sustainable Development Goals (SDGs). Since children of today are the future of tomorrow, the ICDI provides an important pointer on the gaps that need to be bridged for SDGs to be met.

³ The Child Development Index - Holding governments to account for children's wellbeing, Save the Children, 2008

⁴ Stolen Childhood – End of Childhood Report, Save the Children, 2017

1. METHODOLOGY

a. **Conceptual framework** – As mentioned earlier, the conceptual framework of ICDI is based on the global indices conceptualised by Save the Children – the Child Development Index and the End of Child Index.

b. **Coverage** – The ICDI can be computed for all the 640 districts of India canvassed by the Office of the Registrar General and Census Commissioner of India as part of Census 2011. The data source for ten of the twelve indicators being used to compute district level ICDI is either NFHS-IV or Census 2011 and both these data sources provide data for 640 districts.

It is, however, acknowledged that there are more than 700 districts at the time of writing this paper (2019). Additionally, it is to be noted that names of some of the districts have been changed since 2011. However, for the purpose of this paper, in order to retain consistency with the names used in the data sources, the names as mentioned in Census 2011 have been used.

c. **Indicators** –

The Child Development Index uses the following indicators –

- i. Health: Under-five mortality rate
- ii. Nutrition: Percentage of under-fives who are moderately or severely underweight
- iii. Education: Percentage of primary school-age children who are not enrolled in school.

The End of Child Index has indicators for each of the “enders”. The indicators are –

- i. Health – Under 5 mortality rate
- ii. Nutrition – Child stunting
- iii. Education – Out of school children, adolescents and youth (%)
- iv. Children and work – Child labour (%)
- v. Child marriage - Adolescents currently married or in union (%)
- vi. Children having children – Adolescent birth rate (%)
- vii. Children and violence – Population forcibly displaced by conflict (%); Child homicide rate (%)

The India Child Development Index uses the same theoretical framework as that of the Child Development Index and End of Child Index and adapts the indicators following the criteria given below –

- i. Relevance to the national context
- ii. Data availability at the district level from reliable public sources
- iii. Ownership of the data by the government
- iv. Adequate data coverage (for more than 80 per cent of districts).

The challenges in estimating composite indices at the district level cannot be understated. This is primarily owing to lack of availability of reliable data at the district level. Therefore with little deviations in Health domain all other indicators remain the

same. This paper uses national level data sources that are government owned. Given below is a discussion of the indicators selected for each of the domain in light of availability of data and their relevance to the Indian context.

- **Health** – Both the global indices (CDI and EoCI) use under five mortality rate as the indicator for measuring health.

However, there is lack of data on under five mortality rate at the district level from administrative sources, nationally accepted surveys or the Census⁵. In the absence of official statistics on infant/under five mortality at the district level, proxy indicators are being used for computing health indices at the district level.

One of the main reasons for the popularity of many of the global composite indices is their simplicity as they present one single summary measure for multiple and complex facets of development. In identifying proxy indicators for under five mortality rate which is an outcome of multiple factors related to functioning of health system service delivery, gender equality, provision of basic services such as clean water, sanitation and pollution free environment; a similar approach was adopted. The effort has been to focus on minimum number of key indicators covering aspects of protection, prevention and cure of children from causes that contribute to morbidity among children below five years of age.

Research indicates that –

- More than 55 per cent of deaths in children aged 0-4 years can be attributed to prematurity and low-birth weight, pneumonia and diarrhoeal diseases.⁶ 8.2 per cent infant deaths are caused by birth asphyxia and birth trauma.
- Neo-natal deaths are the highest contributors of under-five and infant deaths in the country. The percentage of neo-natal deaths to the total infant deaths during the year 2013 was 68.⁷ Close to half of neonatal deaths (48.1 per cent) are caused by prematurity and low birth weight. Birth asphyxia and birth trauma (12.9 per cent) and neonatal pneumonia (12 per cent) are other leading causes of neonatal mortality.

Direct district level estimates on premature birth, low birth weight, birth asphyxia and birth trauma are not available. However, various studies have identified strategies and interventions that can substantially reduce mortality among infants and children below five years and these have been considered while identifying proxy indicators for reducing under five mortality rate. The World Health Organisation (WHO) emphasises

⁵ There are academic papers estimating mortality estimates from National Family Health Survey. However, these estimates are not being used.

⁶ Causes of deaths in India 2010-2013, Sample Registration System, Office of the Registrar General and Census Commissioner, Government of India
http://www.censusindia.gov.in/vital_statistics/causesofdeath.html

⁷ National Plan of Action for Children, 2016, Government of India (draft report)

that focussing on ante-natal care, breastfeeding⁸, vaccination, tackling malnutrition, providing safe water and hygienic conditions are extremely effective strategies for reducing mortality among children less than five years. Additionally, various studies have reiterated that delivery by skilled birth attendants (SBAs) and receiving institutional care at birth can significantly reduce the risk of maternal and neonatal deaths attributable to prematurity, intrapartum or postpartum complications⁹

Accordingly, the following indicators¹⁰, which can facilitates improvements in under five mortality rate, have been selected to estimate a composite health index at the district level –

- Institutional births (%)
 - Children age 12-23 months fully immunized (BCG, measles, and 3 doses each of polio and DPT) (%)
 - Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)
 - Prevalence of symptoms of acute respiratory infection (ARI) in the last 2 weeks preceding the survey (%)
 - Children under age 3 years breastfed within one hour of birth (%)
- **Nutrition** – The CDI uses underweight as an indicator whereas the End of Child Index uses stunting as an indicator¹¹. The National Family Health Survey IV provides data at the national, State/UT and the district level for both stunting and underweight. Hence the India CDI uses Children under 5 years who are stunted (height-for-age) (%) and Children under 5 years who are underweight (weight-for-age)(%) as indicators measuring nutritional status. A composite nutrition index has been computed using both the above indicators.
 - **Education** – Percentage of primary school-age children who are not enrolled in school is the indicator measuring education status in the CDI whereas Out of school children, adolescents and youth (%) is the indicator in the End of Child Index. Positive index has been considered for net enrolment at upper primary level to measure the continuity.

⁸ Study published in “Pediatrics” (2006) shows that initiation of breastfeeding within an hour of birth decreases neonatal death by 22 per cent

⁹ Institutional delivery in India, 2004–14: unravelling the equity-enhancing contributions of the public sector William Joe, Jessica M Perkins, Saroj Kumar, Sunil Rajpal, S V Subramanian; Health Policy and Planning, Volume 33, Issue 5, June 2018, Pages 645–653, citing (Carlo et al. 2010; de Bernis et al. 2003; Kassebaum et al. 2016; Paxton and Wardlaw 2011; Randive et al. 2014; Rooks et al. 1989; Wong et al. 2017; Yuan et al. 2014).

¹⁰ Malnutrition is a major risk factor for under five mortality. However indicators pertaining to malnutrition are not being considered in the health domain as they are being used as indicators measuring nutrition in accordance with the Save the Children framework.

¹¹ The SDG India Index of NITI Aayog too uses stunting as a measure of nutrition while the Multi-dimensional Poverty Index (MPI) uses both the indicators in estimating the index. The National Plan of Action for Children, National Indicator Framework and the Transformation of Aspirational Districts programme use both the indicators for measuring progress on nutrition.

Gross Enrolment Ratio and Net Enrolment Ratio are two important education indicators. It is observed that Gross Enrolment Ratio exceeds 100 per cent for districts, hence Net Enrolment Ratio is considered to be more sensitive and appropriate indicator. Additionally, with the thrust of the government on education for all, most children are being enrolled in the primary school. Instances of drop-outs are observed in the transition from primary to upper primary levels. Hence Net Enrolment Ratio at the upper primary level is being used as an indicator in estimating the ICDI.

- **Children and work** – The End of Child Index uses Child labour (%) as an indicator.

Child labour estimates can be computed using the Census data available for population age 5-19 by economic activity and sex. As per the Child Labour (Prohibition and Regulation) Amendment Act, 2016 “child” means a person who has not completed his fourteenth year of age or such age as may be specified in the Right of Children to Free and Compulsory Education Act, 2009, whichever is more and therefore child labour is estimated for children between 5-14 years of age using Census data and being used for computing ICDI.

- **Child marriage** - The end of child index uses per cent of adolescents currently married or in union as an indicator for measuring this.

The National Family Health Survey, Ministry of Health and Family Welfare provides data on the indicators “Women age 20-24 years married before age 18 years (%)” and “Men age 25-29 years married before age 21 years (%)” .

Given the importance of the age of the women for maternal and child health and the fact that the data for men includes age cohort till 21 years, this paper uses “Women age 20-24 years married before age 18 years (%)” as an indicator for measuring child marriage.

- **Children having children** – The End of Child Index uses adolescent birth rate (%) as an indicator.

The National Family Health Survey provides data for the indicator “Women age 15-19 years who were already mothers or pregnant at the time of the survey (%)” at the national, State and district levels. Hence this indicator is being used in computing the ICDI.

- **Children and violence** – Population forcibly displaced by conflict (%) and Child homicide rate (%) are the two indicators used by the End of Child Index. These indicators are not relevant in the Indian context. Since there are no reliable information available at district level, it is therefore proposed to use the indicator “Rate of Total Cognisable Crimes against Children” for the India Child Development Index.

The National Crime Record Bureau, Ministry of Home Affairs has provided district level data for 2015 on total number of crime committed against children¹². For calculating the rate of crime in 2015, population for each district was projected from 2011 to 2015 based on rate of annual exponential growth rate of the population between 2001 and 2011. New districts have been created between 2011 and 2015. These have either been created by bifurcating/trifurcating existing district or by merging parts of two or more districts. In such cases, crime data of the newly created district was added to the parent district or crime data of the newly created district was split equally among all parent districts respectively. (please see Annex 1(b) for details). Thereafter, the number of crimes reported was calculated as a proportion of per lakh child population of the district to arrive at the rate of crime against children.

d. **Treatment of missing values -**

All missing data has been marked as “Null” or “NA”. These values have been ignored while calculating the index.

e. **Normalisation -**

An index was estimated for each of the indicator with values ranging from 0 to 1 with 0 being the lowest performance and 1 signifying highest achievement.

The ICDI uses both positive and negative indicators.

For positive indicators, the formula adopted for computing the index was –

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

Where,

x= data value

min(x) = minimum observed value of the indicator in the dataset

max(x) = target value

x' = index value

For negative indicators, the formula used was

$$x' = \left[1 - \frac{x - \min(x)}{\max(x) - \min(x)} \right]$$

Where, x= raw data value,

min(x) = target value

max(x) = maximum observed value of the indicator in the dataset

x' = index value

¹² <https://data.gov.in/resources/district-area-wise-crimes-committed-against-children-during-2015>. accessed in September 2019. As per NCRB, number of cases reported = Number of crimes.

The target setting was done as follows –

- i. For indicators for which SDG targets have been set by the Government of India, the GoI established target have been taken as ICDI targets. This was done since one of the main objectives of this exercise is to provide a baseline for SDGs.
- ii. For indicators for which SDG targets set by the Government of India did not exist, the following approach was taken-
 - For indicators that align to the global SDG framework, the ICDS target was assigned based on the global SDG targets to be achieved.
 - For some indicators, the legal and regulatory provisions provided a target (for example Child marriage is prohibited under “The Prohibition of Child Marriage Act 2006. Hence the target was taken as 0).
 - If both the above were not available, then targets mentioned in NPAC and/or the sectoral policy papers or aspirational targets have been used.
 - If none of the above provided targets, then either the average of top three performing districts/States was taken as a target (a similar approach has been adopted by NITI Aayog for establishing SDG targets in its Baseline Report) or in the case of one indicator, an aspirational target has been used.

Please refer to Annex 1 for more details on the indicators selected, data sources and targets.

- f. **Assigning weights** – Equal weights have been assigned to all the indicators with in each domain. Equal weightage is considered as each one is as important as the other in constructing CDI

- g. **Aggregation**

The ICDI has two indicators for measuring nutrition attainment and five for measuring health attainments at the district level. In both cases an average of the indicator level index is computed to arrive at the domain index.

Finally, the ICDS is computed using a simple average of all the seven domain indices. The index values thus achieved have been rounded off to three decimal places.

All districts have been divided into four quartiles on the basis of ICDI ranks (very high ICDI, high ICDI, medium ICDI and low ICDI) and depicted on a map. Since there are 640 districts, four quartiles, each of 160 districts, were created. The ICDI values corresponding to 160th district was taken as cut-offs for the four ranges. Districts with ICDI value equal to the cut-off were included in the same range.

h. Limitation of the ICDI –

- i. **Quality and coverage of data** – District level data sets are not robust and while the present exercise uses government sources, challenges persist.

The National Family Health Survey, for the first time provided district level estimates on reproductive health and maternal and child health in its most recent fourth round¹³. No analysis exists for the quality of district level data.

For education, the Unified District Information System for Education (U-DISE) is the only source of district level data. Coverage of schools in U-DISE has been increasing. The U-DISE 2016-17 is based on information from more than 1.4 million schools across the country.

Child labour data is computed using Census statistics.

District level data on crime against children is sourced from the data portal of the Government of India which cites statistics from the National Crime Record Bureau (NCRB). The NCRB provides data for police districts/Commissionerates the jurisdiction of which may or may not be co-terminus with the boundaries of the revenue districts. An attempt has been made to reconcile these differences and also to apportion the crime data for district created after 2011 to the parent districts. Another challenge with regard to crime data is that there might be under-reporting of crimes against children (as many as forty-eight districts have reported zero crimes against children). In the absence of assessment of this district level data, it is not possible to comment on its quality.

- ii. **Target setting** – It is observed that for some indicators, the target set to be achieved in 2030 is lower than the current achievement of some of the States/UTs and districts. This results in the index value of a particular indicator being greater than 1 for those districts. In this paper, the index value has not been capped at 1. This approach recognises achievements of district that are the front runners and also acknowledges the potential of the country to go beyond the global targets. It is for this reason that the present exercise is more useful for comparing performance of districts vis-à-vis each other rather than to assess distance to target. Recognising this, the ranges depicted in the map are based on equal quartile of the ICDI rank which provides useful information to policy makers and planners for better targeting of interventions in districts that are lagging behind and ensure optimum utilisation of resources.

2. CONCLUSION

The India Child Development Index (ICDI) adapts global methodology for estimating status of children on seven domains at the district level in the Indian context - health, nutrition, education, children and work, child marriage, children having children

¹³ NFHS-IV sampling units are based on districts covered under Census 2011.

and children and violence. The last decade has seen tremendous advances in availability of data at the district level. However, challenges remain, and most of the adaptations to the global methodology are necessitated by data constraints at the district level. Among the crucial lacunae for estimating ICDI at the district level is lack of morality estimates at that level. The second is the periodicity at which district level data is updated. Strengthening availability of statistics at the district level needs serious consideration. This is important since the population of districts in India is comparable to countries in the world and it is critical to have the capacity for periodic monitoring key development indicators at the district level.

ANNEX 1
NOTES ON DATA
a. Indicator details -

Domain - Health (institutional birth)	
Level	Districts 2015
Indicator	Institutional births (%)
Data Source	National Family Health Survey (NFHS-4), 2015-16; International Institute for Population Sciences (IIPS) and ICF. 2017.
Maximum (target)	100 (National Target Value - SDG India - Index and Dashboard 2019-20, NITI Aayog)
Minimum	9.7 (Minimum observed value)
Method of calculation of data value	Directly from the source

Domain - Health (immunisation)	
Level	Districts 2015
Indicator	Children age 12-23 months fully immunized (BCG, measles, and 3 doses each of polio and DPT) (%)
Data Source	National Family Health Survey (NFHS-4), 2015-16; International Institute for Population Sciences (IIPS) and ICF. 2017.
Maximum (target)	100 GoI Target (SDG India Index Baseline Report, NITI Aayog).
Minimum	7.1 (Minimum observed value)
Method of calculation of data value	Directly from the source

Domain - Health (diarrhoea)	
Level	Districts 2015
Indicator	Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)
Data Source	National Family Health Survey (NFHS-4), 2015-16; International Institute for Population Sciences (IIPS) and ICF. 2017.
Maximum	44.7 (Maximum observed value)
Minimum (target)	0 (In line with SDG Target 3.3 - "By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases")
Method of calculation of data value	Directly from the source

Domain - Health (acute respiratory infection)	
Level	Districts 2015
Indicator	Prevalence of symptoms of acute respiratory infection (ARI) in the last 2 weeks preceding the survey (%)
Data Source	National Family Health Survey (NFHS-4), 2015-16; International Institute for Population Sciences (IIPS) and ICF. 2017.
Maximum	30 (Maximum observed value)
Minimum (target)	0 (Minimum observed value)
Method of calculation of data value	Directly from the source

Domain - Health (breastfeeding)	
Level	Districts 2015
Indicator	Children under age 3 years breastfed within one hour of birth (%)
Data Source	National Family Health Survey (NFHS-4), 2015-16; International Institute for Population Sciences (IIPS) and ICF. 2017.
Maximum (target)	100 (Aspirational target aligned to SDG for reducing child mortality)
Minimum	13.3 (Minimum observed value)
Method of calculation of data value	Directly from the source

Domain - Nutrition (Stunting)	
Level	Districts 2015
Indicator	Children under 5 years who are stunted (height-for-age)(%)
Data Source	National Family Health Survey (NFHS-4), 2015-16; International Institute for Population Sciences (IIPS) and ICF. 2017.
Maximum	65.1 (Maximum observed value)
Minimum (target)	2.5 (National Target Value - SDG India - Index and Dashboard 2019-20, NITI Aayog)
Method of calculation of data value	Directly from the source

Domain - Nutrition (underweight)	
Level	Districts 2015
Indicator	Children under 5 years who are underweight (weight-for-age)(%)
Data Source	National Family Health Survey (NFHS-4), 2015-16; International Institute for Population Sciences (IIPS) and ICF. 2017.
Maximum	66.9 (Maximum observed value)
Minimum (target)	0.9 (National Target Value - SDG India - Index and Dashboard 2019-20, NITI Aayog)
Method of calculation of data value	Directly from the source

Domain - Education (enrollment)	
Level	Districts 2015
Indicator	Net Enrollment Ratio - Upper Primary (%)
Data Source	Elementary Education in India: Where Do We Stand: District Report Cards 2016-17; National Institute of Educational Planning and Administration and Ministry of Human Resource Development, India
Maximum (target)	100 (based on National Target for adjusted NER at elementary and secondary school - SDG India Index Baseline Report, NITI Aayog)
Minimum	13.8 (Minimum observed value)
Method of calculation of data value	Directly from the source

Domain - Children and work (Child labour)	
Level	Districts 2015
Indicator	Children (5-14 years) engaged in economic activity (%)
Data Source	Table C-12: Population Age 5-19 Attending Educational Institution by Economic Activity Status and Sex - 2011; Registrar General & Census Commissioner, Ministry of Home Affairs, Government of India
Maximum	32.28 (Maximum observed value)
Minimum (target)	0 (In line with SDG Target 8.7 - "Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms ")
Method of calculation of data value	Census provides data on "POPULATION AGE 5-19 ATTENDING EDUCATIONAL INSTITUTION BY ECONOMIC ACTIVITY STATUS AND SEX". This is disaggregated into main workers, marginal workers and non-workers for children attending educational institution and children not attending educational institution. Data for age group 5-14 years was added for all the States/UTs and districts for main and marginal workers for both children attending educational institution and children not attending institution. This was then divided by the child population in the age cohort 5-14 years to arrive at the data value.

Domain - Child Marriage	
Level	Districts 2015
Indicator	Women age 20-24 years married before age 18 years (%)
Data Source	National Family Health Survey (NFHS-4), 2015-16; International Institute for Population Sciences (IIPS) and ICF. 2017.
Maximum	71 (Maximum observed value)
Minimum (target) ¹⁴	0 (Child marriage is prohibited under "The Prohibition of Child Marriage Act 2006")
Method of calculation of data value	Directly from the source

¹⁴ For positive indicators, maximum is the target; for negative indicators minimum is the target

Domain - Children having Children	
Level	Districts 2015
Indicator	Women age 15-19 years who were already mothers or pregnant at the time of the survey (%)
Data Source	National Family Health Survey (NFHS-4), 2015-16; International Institute for Population Sciences (IIPS) and ICF. 2017.
Maximum	29.5 (Maximum observed value)
Minimum (target)	0 (Minimum observed value ¹⁵)
Method of calculation of data value	Directly from the source

Domain - Violence against children (rate of crime against children)	
Level	Districts 2015
Indicator	Rate Of Total Cognisable Crimes (Committed Against Children)(per lakh child population
Data Source	National Crime Record Bureau data available on https://data.gov.in/resources/district-area-wise-crimes-committed-against-children-during-2015 accessed on 4 December 2019
Maximum	246.6 (Maximum observed value)
Minimum (target)	0 (National Target Value - SDG India - Index and Dashboard 2019-20, NITI Aayog)
Method of calculation of data value	<p>a. The police districts list 2015 was aligned to revenue district list 2011. Please refer to the section on crime data for further details on this.</p> <p>b. For districts that were bifurcated or trifurcated after 2011, the crime data of the newly created district was added to the parent district. For districts that were created by merging parts of 2 or more districts after 2011, crime data of the new districts was merged in equal proportion to all the parent districts.</p> <p>c. Child population (0-18 years) for the year 2015 for each of the districts was calculated by computing the annual exponential population growth rate between 2001 and 2011 for each district and applying the same rate for 2011-2015. This provided projected child population in 2015.</p> <p>d. The number of cases of cognisable crimes committed against children was divided by per lakh projected population 2015 for each district.</p>

¹⁵ If more than 3 States/UTs/districts report the target value, the fact that average of top 3 performing districts has been taken is not mentioned

b. Note on Crime data -

The district level data on crime against children has information for 816 districts and special cells/ units (such as C.I.D, Railway Police). Given below is State-wise description of how these have been aligned to 640 revenue districts that existed in 2011. The districts defined by NCRB (other than the special cells or units) have been marked as P.D. or police districts.

1. Andhra Pradesh -

- a. Data for Guntur P.D. and Guntur urban P.D. added in Guntur district
- b. Rajamundry is in East Godavari district; Tirupathi urban is in Chittoor; Vijaywada city is in Krishna district, hence crime data for these police districts has been added to the respective districts.
- c. Data for Visakha rural P.D. added to Vishakhapatnam district
- d. Cannot include data for Guntakal Railway and Vijayawada Railway in any particular district, hence it has not been accounted for.

2. Arunachal Pradesh

- a. Crime branch data not apportioned to any district.
- b. Longding district was part of Tirap; hence data for Longding P.D. included in Tirap
- c. Data for Papum Pare City P.D. and Papum Pare Rural P.D. clubbed in Papum Pare district
- d. Siang has been formed by merging parts of East Siang and West Siang. Data for Siang P.D. has been apportioned to both the parent districts in equal proportion.

3. Assam -

- a. Data for B.I.E.O, C.I.D., G.R.P., R.P.O., S.T.F. not included
- b. Hamren is a sub-division in Karbi Anglong district and Sadiya has been enumerated by Census in Tinsukhia district - hence data added accordingly.
- c. Majuli was created by bifurcating Jorhat ; Biswanath from Sonitpur; Hojai from Nagaon; South Salmara from Dhubri - data accordingly added

4. Bihar

- a. Data for Economic Offence Unit; Anti Terrorist Squad; Muzaffarpur Railway; Patna Railway; Katihar Railway, Jamalpur Railway - not added
- b. Bagaha and Bettiah are in Paschim Champaran, Motihari in Purba Champaran, Naugachia in Bhagalpur, hence crime data added in respective districts.

5. Chhattisgarh

- a. Balod and Bamtera have been carved out of Durg, Gariyaband and Balod Bazar from Raipur, Sukma from Dakshin Bastar Dantewada, Kondagaon from Bastar, Mungali (Mungeli) from Bilaspur, Balrampur and Surajpur from Surguja. Crime data has accordingly been apportioned.

- b. Gujarat
- c. Data for district Ahmedabad includes the data for the following PDs - Ahmedabad city, Ahmedabad rural and half of Botad
- d. Data for district Vadodara includes the data for the following PDs- Vadodara city, Vadodara rural and Chotaudepur
- e. Data for district Kachchh includes the data for the following PDs -Kachchh East(G), Kachchh West
- f. Data for district Rajkot includes the data for the following PDs - Rajkot City, Rajkot Rural and one third of Morbi
- g. Data for district Surat includes the data for the following PDs -Surat City and Surat Rural
- h. District Arvalli carved out of Sabarkantha, hence data added to district Sabarkantha; Chhotaudepur carved out of Vadodara; Devbhoomi Dwaraka carved out of Jamnagar; Gir Somnath carved out of Junagadh, hence data added accordingly.
- i. Botad carved out of Ahmedabad and Bhavnagar – hence crime data split equally into both the districts.
- j. Mahisagar carved out of Kheda and Panchamahals – hence crime data split equally across both the districts.
- k. Morbi carved out of Surendranagar, Jamnagar, Rajkot – crime data split equally across all the three districts.
- l. Data for C.I.D. Crime, W.Rly. Ahemdabad, W. Rly. Vadodara not included

6. Haryana

- a. Data for district Ambala includes the data for the following PDs - Ambala (Rural) and Ambala (Urban)
- b. Data for G.R.P. and Irrigation & Power not included

7. Himachal Pradesh

- a. Baddi is in Solan district; hence data for Baddi PD. added to Solan
- b. Data for C.I.D. and G.R.P not included

8. J&K

- a. Awantipora is in Pulwama; Handwara in Kupwara; Sopore in Baramula. Data for these PDs added accordingly.
- b. Crime Jammu, Crime Srinagar, Railways Jammu, Railways Kashmir, Railways Katra not included

9. Jharkhand

- a. Chaibasa is the headquarter of Paschim Singbhum district; Jamshedpur is the headquarter of Purbi Singbhum. Hence data for these PDs added to the revenue districts accordingly.
- b. Dhanbad Railway and Jamshedpur Railway not included

10. Karnataka

- a. Data for Bangalore City PD and Bangalore district PD is reflected in Bangalore and Bangalore Rural districts respectively.

- b. Hubballi Dharwad City is in Dharwad district; hence data for Hubballi Dharwad PD included in Dharwad district.
- c. Data for K.G.F., K. Railways not included
- d. Mangaluru City is the headquarter of Dakshin Kannada district. Hence data for this city PD included in Dakshin Kannada district.
- e. Data for district Mysore includes the data for the following PDs -Mysuru district and Mysuru City
- f. Belagavi (or Belgaum) City and Belagavi district data clubbed into Belgaum district

11. Kerala

- a. Data for Ernakulam Commr. and Ernakulum Rural police districts has been clubbed into data for Ernakulam district; Kollam Commr. and Kollam Rural police districts into Kollam district; Kozhikode Commr. and Kozhikode Rural police districts into Kozhikode district; Thrissur Commr. and Thrissur Rural police districts into Thrissur district; Trivandrum Commr. and Trivandrum Rural police districts into Thiruvananthapuram district.
- b. Railways and Crime Branch data not included.

12. Madhya Pradesh

- a. Agar district was created after bifurcating district Shajapur. Hence data for Agar PD included in Shajapur district.
- b. Data for Bhopal Railway, Indore Railway, Jabalpur Railway, and Cyber Cell not included

13. Maharashtra

- a. Data for Amravati Commr. and Amravati Rural Police districts have been clubbed into data for Amravati district; Aurangabad Commr. and Aurangabad Rural police districts into Aurangabad district; Nagpur Commr. and Nagpur rural police districts into Nagpur district, Nasik Commr. and Nasik rural police districts into Nasik district, Pune Commr. and Pune rural police districts into Pune district, Solapur Commr. and Solapur rural police districts into Solapur district.
- b. Data for Mumbai Commr. not included (since Census has 2 districts – Mumbai and Mubai Suburban)
- c. Data for Mumbai Railways, Nagpur Railways, Pune Railway not included,
- d. Navi Mubai has been enumerated in Thane district by Census. Hence data added to Thane. Palghar has been created after bifurcation of Thane- hence data added. Thane Commr. and Thane Rural police districts too added to Thane district.

14. Manipur

- a. Data for C.I.D. not included

15. Meghalaya

- a. Garo Hills North has been carved out of East Garo Hills district; Garo Hills South West carved out of West Garo Hills; South West Khasi Hills carved out of West Khasi Hills – hence data added accordingly

- b. Jaintia Hills has been renamed as West Jaintia Hills and a Civil Sub-Division the erstwhile Jaintia Hills District and upgraded into a District named as East Jaintia district – hence data clubbed.

16. Mizoram

- a. Data for Spl Traffic and Spl Narcotic not included.

17. Odisha

- a. Police district Berhampur is in Ganjam; Police district Rourkela is in Sundargarh – data added accordingly
- b. Data for DCP BBSR has been added to Khorda district.
- c. Data for DCP CTC included in Cuttack district
- d. Data for SRP (Cuttack), SRP (Rourkela), CID, CB, HRPC not included

18. Punjab

- a. Batala has been enumerated in Gurdaspur district as part of Census 2011, hence data Police district Batala is clubbed in the same.
- b. Data for police districts CP Amritsar and Amritsar Rural data has been added in Amritsar district
- c. Data for police districts CP Jalandhar and Jalandhar Rural has been added in data for Jalandhar district
- d. Data for police districts CP Ludhiana and Ludhiana Rural data has been added to Ludhiana district. Data for PD Khanna has been added to this district since in Census 2011, Khanna was enumerated in Ludhiana.
- e. Fazilka has been carved out of Ferozpur district; Pathankot has been carved out of Gurdaspur, hence data added accordingly.
- f. Data for G.R.P. not included.

19. Rajasthan

- a. Data for G.R.P. Ajmer, G.R.P. Jodhpur not included
- b. Jaipur district data includes data for following PDs - Jaipur East, Jaipur North, Jaipur Rural, Jaipur South, Jaipur West and Jaipur Metro.
- c. Jodhpur district data includes data for following PDs - Jodhpur East, Jodhpur West and Jodhpur Rural.
- d. Kota City and Kotal Rural PD data has been clubbed into Kota district data.

20. Tamil Nadu

- a. Data for Coimbatore and Coimbatore City PDs has been clubbed into Coimbatore district, Madurai and Madurai City PDs into Madurai district, Salem and Salem City PDs into Salem district, Thirunelveli and Thirunelveli City PDs into Thirunelveli district, Tiruppur and Tiruppur City PDs into Tiruppur district, Trichy and Trichy City PDs into Tiruchirappalli district
- b. Data for Railway Chennai and Railway Trichy, Cyber Cell and Cyber Units not added.

21. Telangana

- a. Data for Hyderabad City is being considered as data for Hyderabad district.
- b. Cyberabad is in Rangareddy district. Hence data has been added.
- c. Data for Secunderabad Railway not considered.
- d. Data for Warangal Rural and Warangal City PDs clubbed in data for Warangal district.

22. Tripura

- a. Data for G.R.P. not included
- b. District West Tripura has been trifurcated into West Tripura, Kowai, Sipahijala; South Tripura has been bifurcated into South Tripura and Gomati; North Tripura into North Tripura and Unakoti. Hence data added accordingly to the parent districts.

23. Uttar Pradesh

- a. Amethi has been created from merging parts of Sultanpur and Rae Bareli. Hence crime data for Amethi PD has been split across both the districts in equal proportion.
- b. Sambhal has been created from merging parts of Moradabad and Budaun. Hence crime data for Sambhal PD has been apportioned equally across both the districts.
- c. Fatehgarh Town is in Farrukhabad district. Hence data for Farrukhabad district corresponds to data for Fategarh Town PD.
- d. Hapur has been carved from Ghaziabad – hence data added; Shamli from Muzzafarnagar – hence data added.
- e. Data for G.R.P. not included.

24. West Bengal

- a. Alipurduar has been carved out of Jalpaiguri district; Jhargram from Paschim Medinipur district, hence data added accordingly.
- b. Siliguri PC is split across the jurisdiction of 2 districts and hence data not included. Similar is the case with Asansol Durgapur PC, hence its data not included
- c. Barrackpur and Bidhannagar are in North 24 Paraganas. Hence data for these 2 PDs have been added to North 24 Paraganas.
- d. Howrah PC and Howrah Rural PD data has been included in Haora district.
- e. Data for Haora G.R.P., Kharagpur G.R.P., Sealdah G.R.P. and Siliguri G.R.P. not included.

25. NCT of Delhi

- a. IGI Airport comes within the jurisdiction of New Delhi. Hence its data has been added to New Delhi district.
- b. Data for Crime Brach, EOW, Metro, Outer, Railway, South East, Spl Cell, SPUWAC and Vigilance not included.

26. Puducherry

- a. No data corresponding to Mahe and Yanam districts and hence not included.

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Ritu Mathur, is an independent development consultant.

Email: ritumathurwork@gmail.com

Namrata Jaitli, is Director, Policy & Programme Impact, Save the Children India.

Amarnath HK, is Associate Professor and Head, Public Finance Information System (data bank), NIPFP

Email: hk.amarnath@nipfp.org.in



National Institute of Public Finance and Policy,
18/2, Satsang Vihar Marg, Special Institutional
Area (Near JNU), New Delhi 110067
Tel. No. 26569303, 26569780, 26569784
Fax: 91-11-26852548
www.nipfp.org.in