STUDIES

Child Deprivation in India
Evidence from
Rapid Survey of Children, 2013-14

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Abstract
Using the latest data available through the Rapid Survey of Children 2013-14, this paper present a composite picture of child deprivation in India and in its states incorporating deprivation in critical domains of child well-being. The paper suggests that there is little change in issues and concerns related to child well-being in the country and residence and social class inequalities in child deprivation remain pervasive in the country. Given the inter-state, residence and social class variation in deprivation in different domains of child well-being, the paper argues for a decentralised district-based approach of addressing issues and concerns related to child well-being in India.

Introduction

Concerns for child well-being in India are enshrined in the fundamental rights and the directive principles of state policy as inscribed in the Constitution of India. These concerns are amply reflected in the National Policy on Children, announced, for the first time, in 1974 (Government of India, 1974). The policy commits provision of adequate services to children, both before and after birth and through the period of growth, to ensure their full physical, mental and social development. It also emphasises that the state shall progressively increase the scope of such services so that, within a reasonable time, all children in the country enjoy optimum conditions for their survival, balanced growth and cognitive development. In 1992, India ratified the United Nations Convention on the Rights of the Child (United Nations, 1989) and committed herself to protecting and advancing children's rights. Since then, there have been many attempts to main streaming child rights issues in the development agenda of the country through policy and programme initiatives. The latest in these attempts is the National Policy on Children which was announced in 2013 which affirms the commitment of the Government of India to rights-based approach to addressing the continuing and emerging challenges in promoting and sustaining child well-being (Government of India, 2013). The policy recognises that survival, health, nutrition, development, education, protection and participation are the undeniable rights of every child of the country. The Government of India has also launched the Integrated Child Protection Scheme (ICPS) which is based on the cardinal principles of "protection of child rights" and "best interests of the child". It aims to promote the best interests of the child and prevent violations of child rights through appropriate punitive measure against perpetrators of abuse and crimes against children and to ensure rehabilitation for all children in need of care and protection by creating a protective environment through improving regulatory frameworks, strengthening structures and professional capacities at national, state and district levels so as to cover all child protection issues and provide child friendly services at all levels (Government of India 2007).

Despite repeated commitments, protecting child rights in India remains a major development challenge because of a number of social, cultural and economic factors. Although, child protection has increasing been recognised as a human rights issue, yet, children are particularly vulnerable to deprivation of their specific needs simply because they are not full economic agents (White et al 2002). They are exposed more to household, societal and cultural vulnerabilities than adults and their dependence on public provision of goods and services is heavier than other members of the family and the society (Gordon et al 2003a, 2003b; Minujin et al, 2005; Notten and de Neubourg, 2011; Waddington, 2004; White et al, 2002).

Despite repeated commitments about creating a social and economic environment conducive to well-being of children in diverse cultural and environmental settings, there has rarely been efforts to measure and monitor trends and differentials in child deprivation in India. There are studies on child poverty (Dréze, Khera and Narayanan, 2007; Chandrashekhar and Suryanarayana, 2007) but child poverty essentially emanates from deprivation of children from services and facilities that they need for their survival,

growth, development and protection. In this paper, we focus on measuring child deprivation in a multidimensional context and analysing how child deprivation varies by the place of residence and social class in India and in its constituent states.

Our approach of measuring child deprivation is essentially different from the approach adopted by Save the Children's Fund (2012) and Citizens Initiative for the Rights of Children (2006). First we adopt a domain specific approach. We measure deprivation in different domains of child well-being and then combine them into one composite index of child deprivation. Second, we focus on services and facilities that have an impact on the well-being of children. We assume that a child is deprived if it fails to receive a service or facility for which it has the right. In this sense, our approach puts the onus of child deprivation on the providers of services and facilities. The argument is that it is the needs effectiveness and capacity efficiency of the service provider that is primarily responsible for the deprivation among children and deprivation from specific services and facilities is largely responsible for poor survival, growth and development of children.

The paper follows the rights framework of addressing the survival, growth and development needs of children. The rights framework has been evolved in recognition of the fact that a child is a human being and, therefore, has a certain moral status that needs to be recognised like the other human beings. This means that there are certain things that should not be done and there are certain things that should be done to children to ensure that they grow up as responsible and productive assets to the family and the society.

The rights that serve the 'best interests' of children can be articulated in many ways but can broadly be grouped into positive rights and moral rights. Positive rights are recognised by law. Moral rights, on the other hand, are recognised by some moral theory but are largely accepted by the society as a social norm. The important point in analysing child deprivation is that entailing positive rights to children does not always ensure their moral rights in the family and the society, although, it is argued that possession of a positive right in itself is sufficient to outweigh or discount all other moral considerations (Nozick, 1974). At the same time, it is also argued that mere possession of positive rights may not out balance every other moral claim of children simply because of they lack the capability to exercise positive rights. This means that proclamation of positive rights alone may not be sufficient for children, to exercise them. There must be conditions in place, to ensure that positive rights are actually translated into moral rights. Child deprivation, essentially reflects the gap between positive and moral rights of children.

Data for the present analysis come from the Rapid Survey of Children 2013-14 which was conducted by the Government of India, Ministry of Women and Child Development (Government of India, 2015). The survey was directed towards strengthening the data system on children and women by providing estimates of indicators related to well-being of children and women in India. It covered aspects of child development, maternal care, school attendance, early childhood care and enabling environment. The survey covered 105,843 households distributed across 29 states of the country. Union Territories were not covered in the survey. The respondents of the survey included head of the selected household, all ever married women aged 15-49 years in the selected households; and all currently married women aged 15-49 who were pregnant at

the time of the survey. Detailed analytical report of the survey has not yet been released by the Government of India but country and state fact sheets depicting key indicators related to children and women for the total population and separately for rural and urban areas as well as for different social classes have been released. These fact sheets allow assessment of child deprivation in the country and in its constituent states on the basis of the latest available data. These fact sheets also permit analysis of place of residence and social class inequality in child deprivation.

Child Deprivation Index

The conceptual model of child deprivation is based on the idea of distinct domains of deprivation faced by children which can be recognised and measured separately. Children may be counted as deprived on one or more of the identified domains of deprivation, depending on the number and types of deprivation that they experience. Each domain reflects a separate aspect of deprivation related to child survival, growth and development. This approach avoids the need to make judgments about the complex link between different types of deprivation. These domains of deprivation can be identified in many ways. In most of the situation, however, selection of the domains is contingent upon the availability of the data necessary to estimate indicators that reflect the deprivation in different domains. It is logical to assume that each domain of deprivation is multi-dimensional so that more than one indicator may be required to characterise the deprivation in the domain. The multi-dimensionality of different dimensions of child deprivation also means that an appropriate approach should be adopted to arrive at a single index of deprivation.

In the present paper and in the context of the perspective of the rights of the child, we have identified domains within the framework of child well-being to measure child deprivation: 1) survival; 2) growth; 3) development; 4) protection; and 5) environment. In each domain, we have identified the services or facilities, the deprivation of which directly influence the outcome of the domain and measured the coverage of these services through an appropriate coverage indicator. The selection of services and facilities, of course, is contingent upon the data available through RSoC. We have selected the following ten indicators to reflect the deprivation in the five domains of child well-being:

1. Survival domain
    1.1 Proportion of women who had not received full antenatal care during their last pregnancy (S_1).
    1.2 Proportion of newborn who received first check up within 24 hours of birth/discharge from the hospital (S_2).
    1.3 Prevalence of low birth weight (S_3).
    1.4 Proportion of children 12-23 months of age fully immunised (S_4).
2. Growth domain
    2.1 Proportion of children 0-23 months of age who were initiated breast feeding within one hour of birth (G_1).
    2.2 Proportion of children aged 0-59 months who were stunted (G_2).
    2.3 Proportion of children aged 0-59 months who were wasted (G_3).

3.   Development domain
    3.1   Proportion of children aged 3-6 years who were not attending pre-school education (D_1).
4.   Protection domain
    4.1   Proportion of girls aged 10-19 years ever married (P_1).
5.   Environment domain
    5.1   Proportion of households practising open defecation (E_1).

All the 10 indicators identified above are essentially outcome indicators reflecting the gap or the deficiency in the coverage of different services and facilities that influence in one way or the other survival growth and development of children. Any child who does not receive any of these services or devoid of facilities is classified as the deprived child and the proportion of the deprived children in the community reflects the extent of child deprivation. It is obvious that the larger the proportion of deprived children in the community, the greater is the extent of child deprivation. Combining the proportions deprived children in terms of different coverage indicators into a single entity gives the child deprivation index which is specific to the domains of child well-being and indicators selected to reflect the deprivation in the domain. The child deprivation index so developed is context specific.

The list of indicators included in the present analysis is not exhaustive but, at best, selective. One reason for selectivity is the availability of the estimates of the indicator from RSoC 2013-14 so that they are the most recent. This has especially been the case in the domains of child development, child protection and child environment where only one indicator could be selected to reflect child deprivation. For example, deprivation in the child development domain has been measured in terms of pre-school education only because other indicators of child development are not available through RSoC. Similarly, an important component of child protection domain is child labour but estimates of the prevalence of child labour is not available through RSoC and so it could not be included in the construction of the child deprivation index.

The first step in constructing the child deprivation index is to normalise indicators used in the construction of the index. Normalisation can be done in two ways. The first way of normalisation involves setting up fixed goal posts for each indicator. Goals posts for each indicator are fixed on the basis of the past experience and theoretical limits of the indicator. Since all indicators used in the present analysis are proportions, the theoretical limits of variation of the indicators range from 0 which means no deprivation to 1 which means total deprivation. Obviously, the higher is the level of the indicator, the higher is the deprivation in terms of that indicator.

The second approach to normalisation is relative. In this approach, goal posts are the minimum and maximum values of the indicator in the current data set and so they are not fixed. They change with the change in the data set. In this paper, we have used the first approach of normalisation. We have normalised the data set on the basis of theoretically possible minimum and maximum values of the indicators. In other words, we measure the deprivation in terms of different indicators and domains of child deprivation in absolute and not in the relative sense.

The 10 indicators selected to reflect child deprivation were combined to constitute the child deprivation index by adopting the methodology used by Chaurasia (2010) which follows the approach adopted by the United Nations (1997) for developing the human poverty index. This methodology first calculates separately the index of deprivation for each of the five domains of child well-being included in the present analysis and then combining domain specific deprivation indexes into child deprivation index. Thus the deprivation index in the survival domain *(SDI)* is calculated as

$$SDI = \sqrt[3]{(S_1^3 + S_2^3 + S_3^3 + S_4^3)/4}$$

while the deprivation index in the growth domain *(GDI)* is calculated as

$$GDI = \sqrt[3]{(G_1^3 + G_2^3 + G_3^3)/3}$$

On the other hand, there is only one variable in the remaining three domains. Hence, the development domain deprivation index *(DDI)*; the protection domain deprivation index *(PDI)*; and the environment domain deprivation index *(EDI)* is calculated as

$$DDI = D_1$$
$$PDI = P_1$$
$$EDI = E_1$$

Finally, the five domain specific deprivation indexes have been combined to obtain the child deprivation index:

It is obvious that *CDI* varies between 0 and 1. When *CDI*=0, there is no

$$CDI = \sqrt[3]{(SDI^3 + GDI^3 + DDI^3 + PDI^3 + EDI^3)/5}$$

deprivation in any of the five domains of child well-being and in terms of the 10 indicators of child deprivation. On the other and, when *CDI*=1, there is total deprivation in all the five domains of child well-being and in all the 10 indicators of deprivation. Thus the higher is the *CDI*, the larger is the proportion of children who are deprived in at least one of the domains of child well-being. Similarly, deprivation in a domain of child well-being is larger relative to other domains if the domain specific deprivation index of that domain is larger than the deprivation indexes of other domains.

Based on the level of *CDI*, child deprivation in any population or sub-group of the population may be categorised as very low if the *CDI* is less than 0.3; low if the *CDI* ranges between 0.3-0.4; medium if the *CDI* ranges between 0.4-0.5; high if the *CDI* ranges between 0.5-0.6; and very high if the *CDI* ranges between 0.6-0.7. On the other hand, child deprivation may be termed as extreme if the *CDI* is 0.7 and above. The same classification may be applied to characterise deprivation in different domains of child well-being included in the present analysis.

We have applied the above approach to measure and analyse child deprivation in India and in 29 states by calculating the *CDI* for the country and for each of its 29 states for the total population and separately for rural and urban areas and different social classes

on the basis of the data available through RSoC 2013-14. In doing so, we have also calculated the index of deprivation in different domains of child well-being. Based on the *CDI* and domain specific deprivation indexes, we have also calculated deprivation inequality by place of residence and by social class. Based on the *CDI*, the states have been ranked according to the extent of child deprivation. The ranking has been done separately for rural and urban population and for different social classes.

Child Deprivation in India

The first step in the construction of *CDI* is to test the presence of multicolinearity among the indicators of survival, growth, development, protection and environment related to children used in the present analysis. If two indicators used in the analysis are multicolinear then there is no rationale to use both of them in the construction of *CDI* and one of the two needs to be dropped. The simple zero order correlation coefficients among the indicators used in the construction of *CDI* are presented in table 1 with statistically significant correlation coefficients presented in *italics*. These correlation coefficients have been obtained on the basis of inter-state variation in the 10 indicators of child deprivation as revealed through the RSoC. The table shows that only 17 of the 45 correlation coefficients are statistically significant and there is no correlation coefficient which is more than 0.75 or less than -0.55. This shows that there is no multicolinearity among the indicators used in the construction of *CDI*. The absence of multicolinearity among the indicators used in the construction of *CDI* validates the use of the indicators in the construction of *CDI*.

Table 1

Simple zero-order correlation coefficients among variables used in constructing *CDI*

Indicator	S_1	S_2	S_3	S_3	G_1	G_2	G_3	D_1	P_1
S_2	*0.432*								
S_3	*0.474*	-0.227							
S_4	*0.629*	*0.435*	0.000						
G_1	*0.521*	0.090	*0.568*	-0.007					
G_2	*0.664*	0.150	0.255	*0.466*	*0.447*				
G_3	-0.134	*-0.544*	0.246	-0.102	-0.235	-0.030			
D_1	*0.546*	*0.409*	0.088	*0.700*	-0.002	0.272	-0.130		
P_1	0.344	0.185	0.192	*0.450*	-0.064	0.010	0.076	*0.575*	
E_1	*0.487*	-0.093	0.335	0.261	0.237	*0.746*	0.303	0.113	-0.04

Source: Author's calculations

1. Child Deprivation in India. Estimates of *CDI* for India and in different population sub-groups are given in table 2 along with domain specific deprivation indexes. For the country as a whole, *CDI* is estimated to be 0.433 which suggests that child deprivation in India continues to be substantial. Table 2 also shows that there is very substantial gap of child deprivation in rural and urban areas of the country. Similarly,

child deprivation appears to be relatively the highest among Scheduled Tribes followed by Scheduled Castes but relatively the lowest in 'Others' social class. The latest data from RSoC thus indicate that residence and social class inequality in child deprivation continue to persist in India despite all child development efforts.

Table 2
Child Deprivation Index (*CDI*) in India: 2013-14

Population	*CDI*	Domains of deprivation				
		Child survival	Child growth	Child development	Child protection	Child environment
Total	0.433	0.599	0.426	0.269	0.064	0.455
Residence						
Rural	0.487	0.620	0.436	0.280	0.072	0.616
Urban	0.368	0.550	0.404	0.245	0.045	0.128
Social Class						
SC	0.478	0.617	0.445	0.291	0.075	0.581
ST	0.508	0.630	0.388	0.273	0.064	0.689
OBC	0.435	0.592	0.439	0.283	0.060	0.457
Others	0.392	0.582	0.412	0.229	0.058	0.280

Source: Author's calculations

Among different domains of child well-being, the situation appears to be relatively the most serious in the survival domain followed by environment and growth domains of child well-being but the lowest in the protection domain of child well-being. Residence and social class differentials in deprivation in different domains of child well-being are revealing. In the survival domain, deprivation in the rural areas is substantially higher than that in the urban areas but difference in deprivation by social class are not very large. Deprivation, in this domain, is relatively the highest in Scheduled Tribes but the lowest in 'Others' social class. In case of growth domain of child well-being, the rural-urban and social class gap in deprivation is not very wide but deprivation is relatively the highest in Scheduled Castes but the lowest in Scheduled Tribes. In development and protection domains, deprivation gap by residence and by social class is not very large but in both domains, deprivation is relatively the highest in Scheduled Castes. and not in Scheduled Tribes. Finally, the deprivation gap by residence and by social class appears to be the widest in the environment domain. The proportion of households reporting open defecation is less than 13 percent in the urban areas compared to almost 62 percent in the rural areas of the country. Similarly, almost 70 percent of the Scheduled Tribes households reported open defecation compared to and less than 30 percent households belonging to 'Others' social class. In Scheduled Castes households also, the prevalence of open defecation is very high.

2. Child Deprivation in States. Estimates of the *CDI* and estimates of deprivation index in different domains of child well-being for 29 states of the country are given in appendix table 1 for the total population and separately for rural and urban

population and for different social classes - Scheduled Castes (SC), Scheduled Tribes (ST), Other Backward Classes (OB) and Others (OT) - in tables 2 through 6. The distribution of states by the level of child deprivation and deprivation in different domains of child well-being is given in table 3. Inter-state variation in *CDI* is quite substantial. Child deprivation is the lowest in Kerala but the highest in Nagaland. Besides Kerala, Goa is the only other state where child deprivation is very low whereas in Jharkhand, Bihar, Uttar Pradesh, Odisha and Rajasthan, child deprivation is high as *CDI*, is more than 0.5. In 7 states, child deprivation is low and in 14 states, it is average. There is however no state where there is extreme child deprivation, as measured through *CDI*.

Child deprivation in rural areas is higher than in the urban areas in all but two states - Punjab and Sikkim. In Punjab, rural-urban gap in *CDI* is not large but it is quite marked in Sikkim. Child deprivation is very high in the rural areas of Jharkahnd, Nagaland, Uttar Pradesh and Bihar. and high in Rajasthan, Odisha, Madhya Pradesh and Chhattisgarh. By contrast, in the urban areas, there is no state where child deprivation is very high, although, in Nagaland and Uttar Pradesh, child deprivation is high even in the urban areas.

Child deprivation also varies by social class in all states. There are 10 states where child deprivation in Scheduled Tribes is either high or very high whereas there is no state where child deprivation in Scheduled Tribes is very low. By comparison, there are only 3 states child deprivation in 'Others' social class is high. There is no state where child deprivation is very high or extreme in 'Others' and 'Other Backward Class' social classes. Bihar, Jharkhand and Uttar Pradesh are the only three states in India where child deprivation is either high or very high in all social classes.

Among different domains of child well-being, deprivation varies widely across states and across residence and social class in each state. Deprivation appears to be the highest in the survival domain as the deprivation index (*SDI*) is more than 0.7 in 6 states in the total population; 9 states in the rural population and in 10 states in Scheduled Tribes. Even in the urban areas, deprivation in this domain is extreme in 5 states. Rajasthan and Uttar Pradesh are the only two states where deprivation in this domain is extreme in both rural and urban areas and in all social classes.

The other domain where deprivation is found to be extreme in a number of states is the environment domain. There are 3 states where deprivation in this domain is found to be extreme in the total population. In the rural areas, deprivation in this domain is extreme in 8 states. Similarly, Scheduled Tribes children in 7 states face extreme deprivation in the environment domain. In the urban areas and in 'Other Backward Classes' and 'Others' social classes, there is no state where the deprivation is extreme in this domain. Deprivation has also been found to be extreme in the development domain in Nagaland which is the only state in the country with extreme deprivation in this domain of child well-being.

Ranking of states in terms of deprivation in different domains of child well-being also varies widely. There is no state which ranks in the first five in all the five domains of child well-being. On the other hand, Bihar, Jharkhand and Rajasthan ranks amongst the poorest five in all the five domains of child well-being.

Table 3
Distribution of *CDI* and deprivation indexes in different domains of child deprivation
in states of India by residence and social class 2013-14

Population	Level of deprivation							Total
	Very low <0.3	Low 0.3-0.4	Medium 0.4-0.5	High 0.5-0.6	Very high 0.6-0.7	Extreme ≥0.7	NA	
Child Deprivation (*CDI*)								
Total	2	7	14	6	0	0	0	29
Rural	2	4	15	4	4	0	0	29
Urban	3	11	13	2	0	0	0	29
SC	2	2	11	6	2	0	6	29
ST	0	3	12	5	5	0	4	29
OBC	3	5	11	6	0	0	4	29
Others	2	8	14	3	0	0	2	29
Deprivation in terms of survival (*SDI*)								
Total	0	1	6	2	14	6	0	29
Rural	0	2	4	3	11	9	0	29
Urban	0	1	7	3	13	5	0	29
SC	0	4	3	3	9	8	2	29
ST	0	0	3	4	8	10	4	29
OBC	0	2	5	3	10	5	4	29
Others	0	0	7	4	10	6	2	29
Deprivation in terms of growth (*GDI*)								
Total	5	10	10	4	0	0	0	29
Rural	5	10	9	5	0	0	0	29
Urban	7	8	11	1	2	0	0	29
SC	5	5	12	4	1	0	2	29
ST	7	9	7	3	2	0	1	29
OBC	5	5	13	3	0	0	3	29
Others	3	11	9	4	0	0	2	29
Deprivation in terms of development (*DDI*)								
Total	21	5	1	1	0	1	0	29
Rural	19	6	2	1	0	1	0	29
Urban	21	5	2	0	1	0	0	29
SC	18	5	2	1	1	0	2	29
ST	15	9	3	1	0	1	0	29
OBC	19	6	2	0	0	1	1	29
Others	20	4	3	1	0	0	1	29
Deprivation in terms of protection (*PDI*)								
Total	27	2	0	0	0	0	0	29
Rural	27	2	0	0	0	0	0	29
Urban	27	2	0	0	0	0	0	29
SC	23	2	0	0	0	0	4	29

Population	Level of deprivation							Total
	Very low <0.3	Low 0.3-0.4	Medium 0.4-0.5	High 0.5-0.6	Very high 0.6-0.7	Extreme ≥0.7	NA	
ST	26	2	0	0	0	0	1	29
OBC	24	1	0	0	0	0	4	29
Others	26	1	0	0	0	0	2	29
Deprivation in terms of environment (*EDI*)								
Total	13	8	1	2	2	3	0	29
Rural	10	4	4	2	1	8	0	29
Urban	25	4	0	0	0	0	0	29
SC	9	3	3	3	4	5	2	29
ST	10	3	2	3	4	7	0	29
OBC	28	1	0	0	0	0	0	29
Others	18	7	0	2	1	0	1	29

Source: Author's calculations

3. Child Deprivation Inequality. We have estimated residence and social class child deprivation inequality by calculating the coefficient of variation which is a special case of Generalised Entropy measures (Litchfield, 1999). The coefficient of variation is based on the variation in deprivation across residence and across social class and . Second, it is scale independent. It belongs to the generalised class of decomposable inequality measures (Foster, Greer, Thorbecke, 1984) and can be decomposed into two components - intensity and extensiveness of deprivation. Intensity measures the differential in deprivation while extensiveness measures the proportion of the population to which the observed intensity applies. The coefficient of variation, as a measure of inequality is calculated as (Firebough, 1999):

$$CV = \sqrt{\sum p_i \left(\frac{d_i}{d} - 1 \right)^2}$$

Where d_i is the deprivation index in class i, p_i is the proportion of the target population in class i and d is the deprivation index for all class combined. RSoC, however, does not provide the information about the proportionate distribution of the target population by residence and social class. We have, therefore, calculated the reduced form of CV

$$CV = \sqrt{\frac{1}{n} \sum \left(\frac{d_i}{d} - 1 \right)^2}$$

where n is the number of classes.

The index of residence inequality in child deprivation in India is estimated to be 0.138. In survival, growth and development domains, residence inequality is not very large but it is extreme in the environment domain (Table 4). Residence inequality is also very high in the protection domain. Table 4 also suggests that the residence inequality may be attributed primarily to residence inequality in environment and protection domains. In other three domains, there is not much rural-urban difference in deprivation.

10

Table 4
Residence and social class inequality in child deprivation

Country/State	Residence						Social class					
	CDI	SDI	GDI	DDI	PDI	EDI	CDI	SDI	GDI	DDI	PDI	EDI
India	0.138	0.063	0.041	0.069	0.228	0.566	0.207	0.063	0.106	0.123	0.189	0.852
Andhra Pradesh	0.097	0.063	0.019	0.525	0.487	0.533	0.427	0.218	0.164	0.263	1.005	1.081
Arunachal Pradesh	0.024	0.024	0.134	0.052	0.122	0.647	na	na	na	0.653	na	0.920
Assam	0.081	0.055	0.114	0.067	0.602	0.662	0.086	0.082	0.232	0.324	0.615	0.835
Bihar	0.124	0.016	0.045	0.048	0.212	0.404	0.126	0.053	0.116	0.091	0.908	0.844
Chhattisgarh	0.231	0.083	0.090	0.168	0.132	0.469	0.203	0.142	0.068	0.513	0.435	0.863
Delhi	0.025	0.005	0.125	0.026	0.707	1.160	na	na	0.348	0.337	4.655	2.514
Goa	0.083	0.089	0.033	0.127	0.412	0.401	na	0.075	0.468	0.544	1.382	1.034
Gujarat	0.158	0.070	0.015	0.034	0.356	0.649	0.230	0.058	0.129	0.186	0.428	0.912
Haryana	0.020	0.014	0.042	0.069	0.112	0.553	0.065	0.052	0.071	0.179	1.077	0.995
Himachal Pradesh	0.009	0.038	0.078	0.541	0.314	0.493	0.141	0.127	0.286	0.104	0.957	0.409
Jammu & Kashmir	0.016	0.022	0.094	0.180	0.343	0.589	0.266	0.146	0.144	0.356	4.695	1.557
Jharkhand	0.173	0.043	0.137	0.156	0.451	0.398	0.104	0.040	0.043	0.124	0.491	0.780
Karnataka	0.103	0.030	0.016	0.197	0.179	0.584	0.275	0.126	0.287	0.286	0.429	1.040
Kerala	0.042	0.012	0.013	0.185	0.374	0.872	na	na	0.143	0.646	2.946	18.283
Madhya Pradesh	0.196	0.091	0.021	0.162	0.086	0.532	0.292	0.143	0.059	0.255	0.204	0.854
Maharashtra	0.123	0.010	0.018	0.248	0.075	0.563	0.228	0.114	0.073	0.250	0.509	0.745
Manipur	0.044	0.054	0.061	0.024	0.479	0.605	na	1.010	1.025	1.186	1.334	1.370
Meghalaya	0.069	0.060	0.056	0.040	0.295	0.664	na	na	na	na	na	0.713
Mizoram	0.023	0.036	0.072	0.128	0.287	0.898	na	na	na	na	na	na

Country/State	Residence						Social class					
	CDI	SDI	GDI	DDI	PDI	EDI	CDI	SDI	GDI	DDI	PDI	EDI
Nagaland	0.085	0.030	0.148	0.152	0.034	0.565	na	na	na	0.261	na	0.691
Odisha	0.154	0.023	0.114	0.163	0.264	0.389	0.213	0.103	0.224	0.546	0.209	0.772
Punjab	0.006	0.021	0.083	0.134	0.504	0.619	0.043	0.027	0.259	0.398	0.490	0.841
Rajasthan	0.139	0.030	0.099	0.196	0.392	0.589	0.229	0.045	0.120	0.276	0.379	0.827
Sikkim	0.051	0.041	0.075	0.179	0.110	0.519	0.119	0.145	0.071	0.402	0.455	0.857
Tamilnadu	0.259	0.022	0.011	0.054	0.020	0.621	na	na	0.101	0.266	0.721	0.698
Tripura	0.070	0.090	0.010	0.148	0.161	0.589	0.092	0.145	0.092	0.508	0.501	4.289
Uttar Pradesh	0.089	0.033	0.024	0.115	0.384	0.595	0.119	0.026	0.063	0.142	0.561	0.854
Uttarakhand	0.046	0.071	0.121	0.023	0.083	0.665	na	na	na	0.555	1.738	1.663
West Bengal	0.019	0.007	0.005	0.068	0.114	0.582	0.170	0.020	0.041	0.313	0.367	1.305

Source: Author's calculations

Across states, residence inequality in child deprivation varies widely. Residence inequality is the highest in Tamilnadu where *CDI* in the rural areas is more than 1.5 times the *CDI* in the urban areas but the lowest in Punjab where *CDI* in the urban areas is marginally higher than that in the rural areas. Chhattisgarh and Madhya Pradesh are other states where residence inequality in child deprivation is very high whereas in Himachal Pradesh and Jammu and Kashmir, it is very low.

Residence inequality in deprivation in different domains of child well-being also varies across states. In the survival domain, Madhya Pradesh has the highest residence inequality while Delhi has the lowest. In the growth domain, residence inequality is the highest in Nagaland but the lowest in West Bengal. In the development domain, Himachal Pradesh has the highest residential inequality but this inequality is the lowest in Uttarakhand. Andhra Pradesh also has very high residence inequality in deprivation in this domain. On the other hand, residence inequality in deprivation in the protection domain is abnormally high in Delhi and Assam but very low in Tamilnadu. Similarly, the residence inequality in deprivation in environment domain is the highest in Delhi but the lowest in Odisha. Obviously, residential inequality in deprivation in different domains contribute differentially to residence inequality in child deprivation in different states. In Delhi, for example, residence inequality in child deprivation is largely due to the residence inequality in deprivation in protection and environment domains whereas in Madhya Pradesh, the main contributor is the residence inequality in deprivation in the survival domain.

The index of social class inequality in child deprivation in India is estimated to be 0.207 and there wide variation in this inequality across domains of child well-being. In the environment domain, the social class inequality is the highest while it is the lowest in the survival domain (Table 4). Compared to survival domain, social class inequality in deprivation is almost two times larger in the development domain and more than three times larger in the protection domain but almost 14 times larger in the environment domain. This means that reducing social class inequality in deprivation in the environment domain of child well-being may contribute significantly to reducing social class inequality in child deprivation in the country.

Among the states of the country, social class inequality in child deprivation is the largest in Andhra Pradesh but the lowest in Punjab. On the other hand, Manipur has the largest social class inequality in deprivation in survival, growth and development domains of child well-being but West Bengal in survival and growth domains and Bihar in the development domain has the lowest social class inequality in deprivation. In the protection domain, social class inequality in deprivation is the highest in Jammu and Kashmir but the lowest in Madhya Pradesh. Finally in the environment domain, the social class inequality in deprivation is the lowest in Himachal Pradesh but extremely high in Kerala where prevalence of open defecation in Scheduled Tribes households is almost 25 percent but less than one percent in 'Others' social class.

Conclusions

In this paper, we have presented a composite perspective of child deprivation in India and states on the basis of the latest data available through the Rapid Survey of
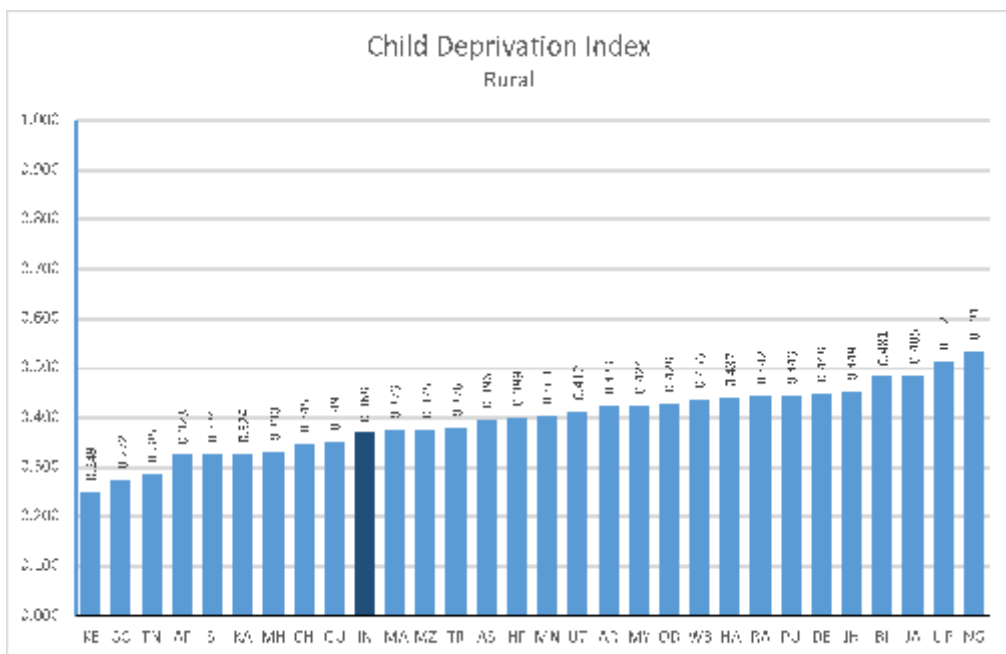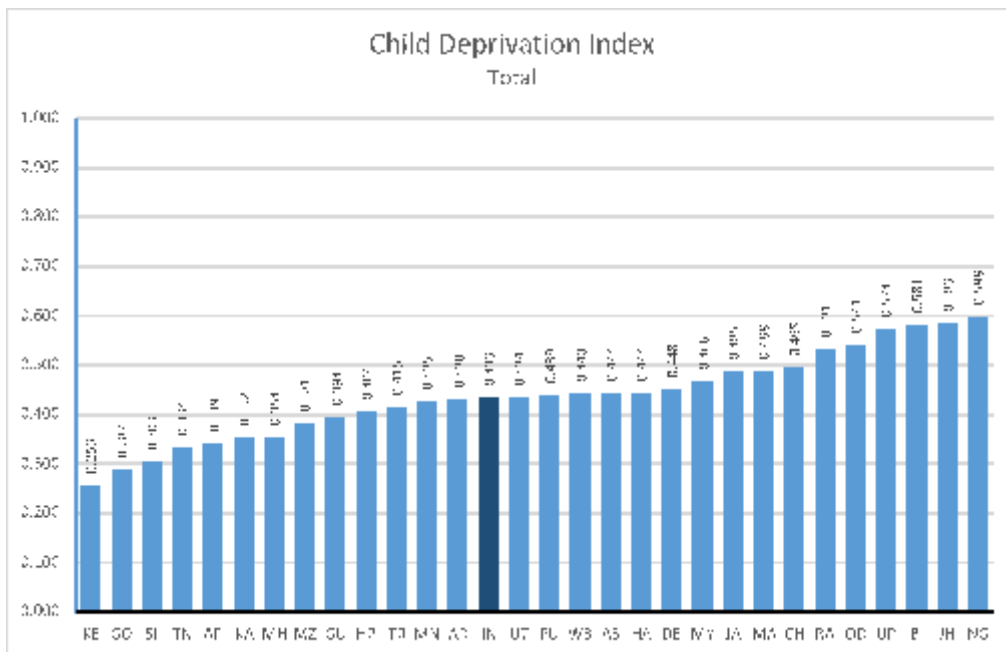
Children carried out by the Government of India that incorporates deprivation in domains critical to child well-being. The analysis suggests that issues and concerns related to child deprivation in India and in its constituent states remain more or less unchanged. A substantial proportion of children in the country continues to be devoid of basic services and facilities that are necessary for their survival, growth, development and protection despite all emphasis on the positive rights of children and there is stark variation in child deprivation across states. The analysis also suggests that one of the reasons for the persistence of unacceptable child deprivation scenario in India and in its constituent states is very strong residence and social class inequality in child deprivation including deprivation in different domains of child well-being. Persistence of residence and social class inequalities in child deprivation indicate towards poor administrative capacity and organisational efficiency of the efforts directed towards improving child well-being.
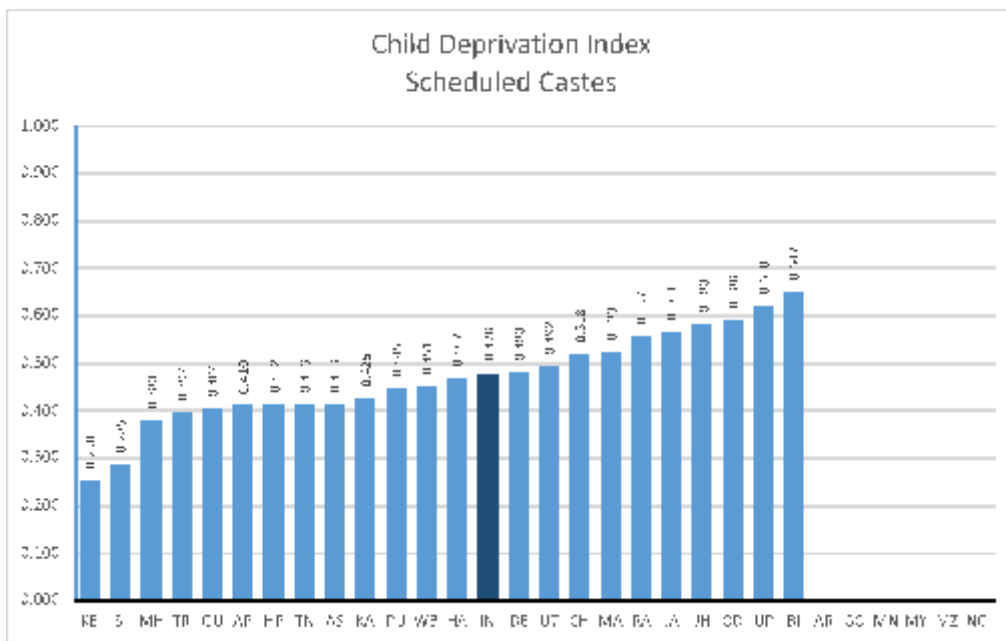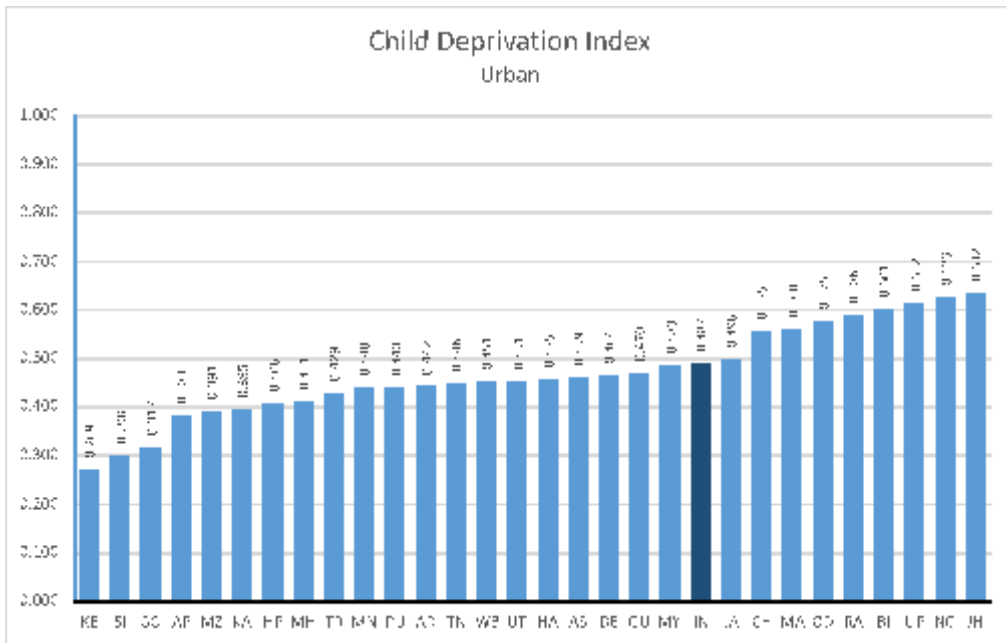
It is also clear from the present analysis that there is no universally applicable prescription to reduce and ultimately eliminate child deprivation in the country. Although, broad geographic patterns of child deprivation can be established on the basis of the present analysis, yet it is obvious that a decentralised approach is needed to address issues concerning to child well-being as deprivation is not only residence and social class sensitive but also varies by domains of child well-being in all states of the country. The evidence generated on the basis of the latest data related to survival, growth, development and protection of children and the living environment of children suggests that every state needs to formulate its own strategy to address challenges and concerns related to child well-being specific to the state. Although, the Rapid Survey of Children does not provide district level data related to child well-being, yet it is logical, given the social, economic, cultural and environmental diversity of the country, that this decentralised approach to addressing issues and concerns related to child well-being must be institutionalised at the district level.

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Child Deprivation Index — Total

Child Deprivation Index — Rural

Child Deprivation Index
Urban

Child Deprivation Index
Scheduled Castes

Child Deprivation Index
Scheduled Tribes

Child Deprivation Index
Others
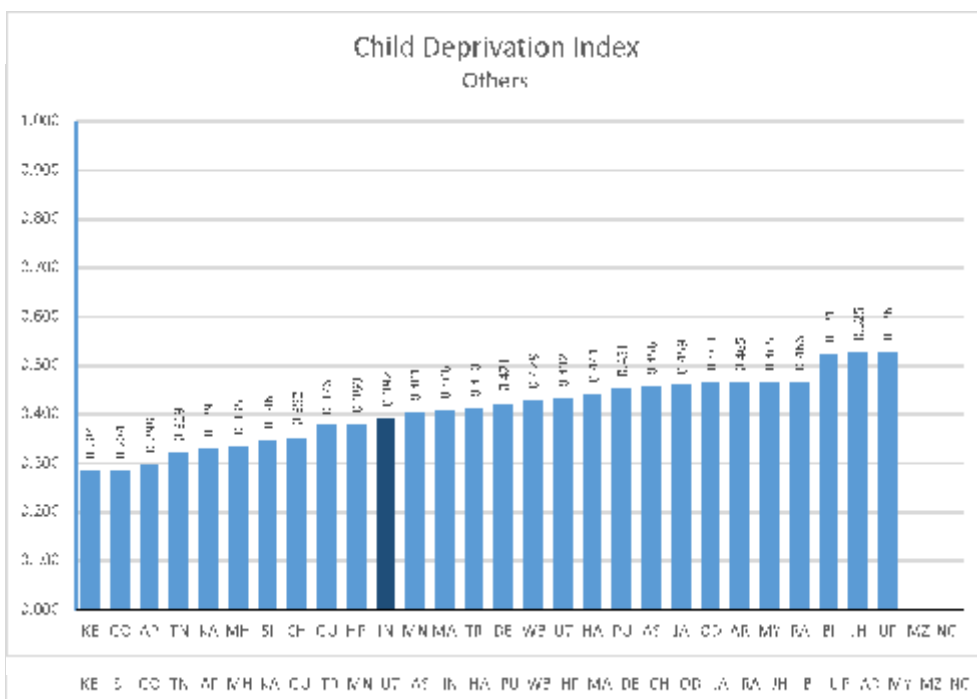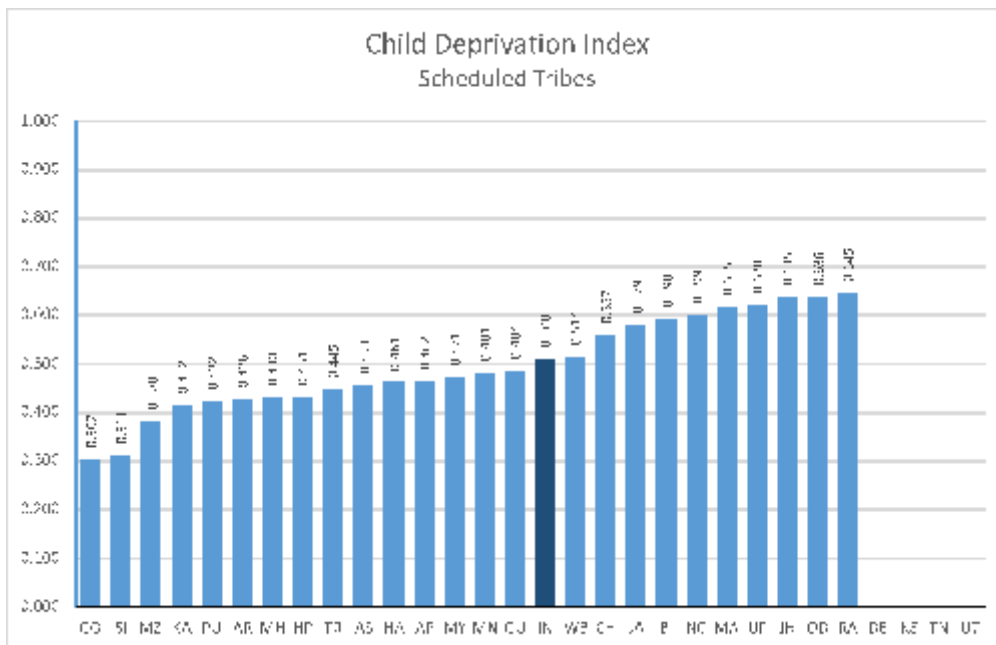
Appendix Table 1
Estimates of *CDI* in India and states by residence and social class: 2013-14

Country/State	*CDI*	Residence		Social class			
		Rural	Urban	SC	ST	OBC	Others
India	0.433	0.487	0.368	0.478	0.508	0.435	0.392
Andhra Pradesh	0.339	0.383	0.323	0.41	0.462	0.323	0.298
Arunachal Pradesh	0.428	0.442	0.423	na	0.426	na	0.465
Assam	0.444	0.459	0.396	0.413	0.453	0.424	0.456
Bihar	0.581	0.601	0.481	0.647	0.590	0.576	0.521
Chhattisgarh	0.495	0.555	0.345	0.518	0.557	0.471	0.352
Delhi	0.448	0.464	0.448	0.48	na	0.466	0.421
Goa	0.287	0.317	0.272	na	0.302	0.295	0.284
Gujarat	0.394	0.470	0.349	0.404	0.484	0.395	0.376
Haryana	0.444	0.455	0.437	0.467	0.461	0.440	0.441
Himachal Pradesh	0.404	0.406	0.399	0.412	0.431	0.452	0.380
Jammu & Kashmir	0.485	0.496	0.485	0.563	0.579	0.525	0.459
Jharkhand	0.583	0.632	0.449	0.580	0.635	0.572	0.525
Karnataka	0.352	0.395	0.324	0.425	0.412	0.363	0.329
Kerala	0.256	0.269	0.249	0.25	na	0.248	0.284
Madhya Pradesh	0.488	0.560	0.373	0.523	0.615	0.455	0.406
Maharashtra	0.354	0.411	0.330	0.38	0.430	0.353	0.335
Manipur	0.425	0.440	0.403	na	0.481	0.415	0.401
Meghalaya	0.466	0.483	0.424	na	0.471	na	0.465
Mizoram	0.381	0.391	0.375	na	0.380	na	na
Nagaland	0.598	0.623	0.531	na	0.599	na	na
Odisha	0.541	0.575	0.428	0.588	0.636	0.517	0.463
Punjab	0.439	0.440	0.443	0.445	0.422	0.441	0.451
Rajasthan	0.531	0.586	0.442	0.557	0.645	0.531	0.466
Sikkim	0.303	0.298	0.324	0.285	0.311	0.282	0.346
Tamilnadu	0.334	0.446	0.285	0.413	na	0.313	0.319
Tripura	0.415	0.429	0.376	0.397	0.445	0.401	0.410
Uttar Pradesh	0.574	0.612	0.512	0.618	0.620	0.577	0.526
Uttarakhand	0.434	0.451	0.412	0.492	na	0.419	0.432
West Bengal	0.44	0.451	0.436	0.451	0.514	0.443	0.428

Source: Author's calculations

Appendix Table 2

Estimates of deprivation index in child survival domain (*SDI*) in India and states
by residence and social class: 2013-14

Country/State	*SDI*	Residence		Social class			
		Rural	Urban	SC	ST	OBC	Others
India	0.599	0.620	0.550	0.617	0.630	0.592	0.582
Andhra Pradesh	0.407	0.393	0.441	0.388	0.493	0.397	0.419
Arunachal Pradesh	0.681	0.675	0.703	0.399	0.683	na	0.712
Assam	0.691	0.700	0.639	0.642	0.701	0.667	0.706
Bihar	0.729	0.731	0.713	0.756	0.747	0.725	0.690
Chhattisgarh	0.569	0.587	0.504	0.632	0.584	0.544	0.488
Delhi	0.687	0.683	0.687	0.714	na	0.693	0.668
Goa	0.435	0.483	0.410	0.417	0.457	0.449	0.426
Gujarat	0.540	0.571	0.496	0.521	0.564	0.535	0.545
Haryana	0.671	0.677	0.659	0.684	0.695	0.648	0.677
Himachal Pradesh	0.638	0.643	0.605	0.655	0.698	0.687	0.599
Jammu & Kashmir	0.696	0.705	0.676	0.717	0.759	0.770	0.664
Jharkhand	0.723	0.735	0.681	0.745	0.707	0.726	0.742
Karnataka	0.476	0.487	0.460	0.498	0.528	0.491	0.448
Kerala	0.367	0.373	0.369	0.352	na	0.356	0.411
Madhya Pradesh	0.607	0.632	0.533	0.623	0.681	0.573	0.554
Maharashtra	0.498	0.503	0.493	0.543	0.531	0.495	0.479
Manipur	0.701	0.726	0.653	na	0.793	0.682	0.652
Meghalaya	0.666	0.679	0.611	0.583	0.664	na	0.728
Mizoram	0.622	0.647	0.602	na	0.621	na	na
Nagaland	0.801	0.812	0.769	0.779	0.793	na	na
Odisha	0.662	0.658	0.682	0.653	0.722	0.637	0.631
Punjab	0.670	0.680	0.653	0.666	0.668	0.688	0.677
Rajasthan	0.732	0.744	0.703	0.732	0.764	0.731	0.718
Sikkim	0.468	0.462	0.494	0.429	0.488	0.431	0.542
Tamilnadu	0.448	0.441	0.460	0.399	na	0.462	0.466
Tripura	0.647	0.673	0.569	0.602	0.716	0.603	0.633
Uttar Pradesh	0.763	0.773	0.728	0.780	0.768	0.761	0.747
Uttarakhand	0.692	0.720	0.628	0.737	na	0.668	0.696
West Bengal	0.677	0.674	0.683	0.681	0.682	0.688	0.670

Source: Author's calculations

Appendix Table 3
Estimates of deprivation index in child growth domain (*GDI*) in India and states
by residence and social class: 2013-14

Country/State	*GDI*	Residence		Social class			
		Rural	Urban	SC	ST	OBC	Others
India	0.426	0.436	0.404	0.445	0.388	0.439	0.412
Andhra Pradesh	0.390	0.395	0.381	0.416	0.337	0.402	0.352
Arunachal Pradesh	0.279	0.295	0.229	0.332	0.270	na	0.333
Assam	0.308	0.316	0.259	0.284	0.248	0.285	0.343
Bihar	0.507	0.511	0.475	0.539	0.459	0.496	0.523
Chhattisgarh	0.436	0.451	0.382	0.463	0.430	0.427	0.438
Delhi	0.453	0.533	0.451	0.510	0.590	0.495	0.387
Goa	0.319	0.332	0.311	0.176	0.278	0.325	0.328
Gujarat	0.434	0.441	0.428	0.481	0.407	0.450	0.427
Haryana	0.463	0.453	0.489	0.437	0.470	0.482	0.468
Himachal Pradesh	0.381	0.377	0.422	0.365	0.333	0.477	0.366
Jammu & Kashmir	0.561	0.538	0.631	0.616	0.619	0.561	0.545
Jharkhand	0.517	0.543	0.420	0.521	0.513	0.530	0.483
Karnataka	0.411	0.416	0.403	0.450	0.301	0.427	0.423
Kerala	0.252	0.250	0.256	0.269	0.227	0.244	0.287
Madhya Pradesh	0.443	0.444	0.456	0.461	0.431	0.448	0.470
Maharashtra	0.357	0.352	0.365	0.371	0.339	0.369	0.353
Manipur	0.332	0.327	0.361	0.000	0.367	0.267	0.354
Meghalaya	0.345	0.355	0.320	0.473	0.339	na	0.369
Mizoram	0.205	0.222	0.192	0.000	0.207	na	na
Nagaland	0.268	0.288	0.216	0.216	0.287	0.156	na
Odisha	0.300	0.310	0.253	0.328	0.340	0.323	0.221
Punjab	0.480	0.454	0.530	0.493	0.362	0.449	0.521
Rajasthan	0.455	0.475	0.395	0.446	0.508	0.454	0.439
Sikkim	0.327	0.321	0.361	0.326	0.322	0.312	0.361
Tamilnadu	0.228	0.231	0.230	0.238	0.232	0.236	0.190
Tripura	0.438	0.441	0.433	0.451	0.412	0.466	0.441
Uttar Pradesh	0.583	0.579	0.603	0.575	0.618	0.588	0.579
Uttarakhand	0.391	0.370	0.455	0.437	na	0.384	0.386
West Bengal	0.423	0.426	0.425	0.431	0.437	0.418	0.416

Source: Author's calculations

Appendix Table 4

Estimates of deprivation index in child development domain (*DDI*) in India and states
by residence and social class: 2013-14

Country/State	*DDI*	Residence		Social class			
		Rural	Urban	SC	ST	OBC	Others
India	0.269	0.280	0.245	0.291	0.273	0.283	0.229
Andhra Pradesh	0.176	0.116	0.292	0.152	0.212	0.190	0.159
Arunachal Pradesh	0.282	0.287	0.262	0.183	0.265	0.414	0.442
Assam	0.289	0.285	0.316	0.298	0.311	0.199	0.309
Bihar	0.356	0.353	0.380	0.360	0.325	0.350	0.369
Chhattisgarh	0.139	0.131	0.171	0.193	0.148	0.122	0.054
Delhi	0.323	0.311	0.323	0.383	0.389	0.377	0.260
Goa	0.095	0.110	0.087	0.143	0.076	0.092	0.095
Gujarat	0.227	0.233	0.218	0.194	0.238	0.207	0.253
Haryana	0.266	0.278	0.243	0.308	0.279	0.253	0.241
Himachal Pradesh	0.159	0.146	0.280	0.149	0.158	0.172	0.161
Jammu & Kashmir	0.278	0.303	0.212	0.288	0.354	0.339	0.248
Jharkhand	0.351	0.373	0.277	0.351	0.378	0.327	0.4
Karnataka	0.149	0.130	0.186	0.127	0.175	0.171	0.123
Kerala	0.262	0.309	0.212	0.221	0.426	0.255	0.278
Madhya Pradesh	0.248	0.268	0.195	0.239	0.302	0.217	0.261
Maharashtra	0.156	0.122	0.199	0.145	0.123	0.143	0.180
Manipur	0.122	0.123	0.118	0.000	0.189	0.096	0.063
Meghalaya	0.521	0.528	0.492	0.401	0.538	na	0.402
Mizoram	0.297	0.261	0.337	0.000	0.302	0.147	na
Nagaland	0.791	0.844	0.629	0.642	0.795	0.852	0.533
Odisha	0.194	0.186	0.238	0.114	0.250	0.158	0.233
Punjab	0.228	0.250	0.191	0.276	0.300	0.238	0.177
Rajasthan	0.375	0.406	0.276	0.435	0.441	0.362	0.273
Sikkim	0.101	0.092	0.125	0.117	0.069	0.115	0.075
Tamilnadu	0.138	0.145	0.130	0.165	0.126	0.135	0.095
Tripura	0.074	0.078	0.059	0.056	0.097	0.095	0.052
Uttar Pradesh	0.479	0.499	0.404	0.519	0.459	0.495	0.382
Uttarakhand	0.202	0.205	0.196	0.296	0.255	0.219	0.152
West Bengal	0.229	0.22	0.249	0.267	0.279	0.258	0.192

Source: Author's calculations

Appendix Table 5

Estimates of deprivation index in child protection domain (*PDI*) in India and states
by residence and social class: 2013-14

Country/State	*DDI*	Residence		Social class			
		Rural	Urban	SC	ST	OBC	Others
India	0.064	0.072	0.045	0.075	0.064	0.060	0.058
Andhra Pradesh	0.078	0.104	0.031	0.089	0.150	0.078	0.020
Arunachal Pradesh	0.044	0.047	0.037	0.000	0.049	na	0.019
Assam	0.063	0.071	0.01	0.08	0.092	0.044	0.056
Bihar	0.074	0.077	0.052	0.115	0.023	0.068	0.046
Chhattisgarh	0.034	0.032	0.040	0.047	0.033	0.028	0.041
Delhi	0.019	0.038	0.019	0.037	0.105	0.009	0.015
Goa	0.011	0.006	0.015	0.000	0.021	0.008	0.013
Gujarat	0.060	0.077	0.035	0.061	0.035	0.064	0.052
Haryana	0.051	0.055	0.044	0.032	0.090	0.083	0.03
Himachal Pradesh	0.018	0.018	0.010	0.030	0.010	0.026	0.008
Jammu & Kashmir	0.015	0.017	0.008	0.010	0.085	0.017	0.004
Jharkhand	0.073	0.085	0.028	0.096	0.085	0.070	0.024
Karnataka	0.067	0.075	0.052	0.080	0.057	0.087	0.042
Kerala	0.042	0.055	0.024	0.158	0.000	0.049	0.029
Madhya Pradesh	0.042	0.043	0.037	0.037	0.045	0.045	0.031
Maharashtra	0.047	0.050	0.043	0.050	0.025	0.040	0.058
Manipur	0.039	0.028	0.063	0.000	0.019	0.067	0.040
Meghalaya	0.044	0.051	0.027	0.065	0.047	na	0.004
Mizoram	0.011	0.015	0.009	0.000	0.010	na	na
Nagaland	0.342	0.351	0.328	0.329	0.363	na	na
Odisha	0.041	0.038	0.056	0.042	0.045	0.047	0.032
Punjab	0.027	0.018	0.044	0.032	0.038	0.022	0.023
Rajasthan	0.113	0.131	0.053	0.123	0.129	0.130	0.044
Sikkim	0.049	0.052	0.042	0.033	0.038	0.059	0.040
Tamilnadu	0.035	0.035	0.036	0.041	0.011	0.038	0.027
Tripura	0.132	0.140	0.103	0.143	0.125	0.069	0.163
Uttar Pradesh	0.042	0.048	0.020	0.054	0.023	0.043	0.028
Uttarakhand	0.035	0.036	0.031	0.026	0.047	0.093	0.014
West Bengal	0.167	0.177	0.142	0.153	0.113	0.142	0.174

Source: Author's calculations

Appendix Table 6

Estimates of deprivation index in child environment domain (*EDI*) in India and states
by residence and social class: 2013-14

Country/State	EDI	Residence		Social class			
		Rural	Urban	SC	ST	OBC	Others
India	0.455	0.616	0.128	0.581	0.689	0.187	0.280
Andhra Pradesh	0.395	0.537	0.133	0.594	0.685	0.169	0.221
Arunachal Pradesh	0.317	0.418	0.045	0.568	0.310	0.171	0.264
Assam	0.375	0.441	0.030	0.338	0.423	0.068	0.369
Bihar	0.748	0.802	0.324	0.896	0.781	0.142	0.57
Chhattisgarh	0.696	0.824	0.252	0.695	0.836	0.155	0.257
Delhi	0.025	0.066	0.024	0.047	0.012	0.082	0.011
Goa	0.139	0.207	0.099	0.181	0.274	0.117	0.112
Gujarat	0.381	0.616	0.122	0.411	0.675	0.217	0.22
Haryana	0.256	0.357	0.083	0.422	0.303	0.081	0.122
Himachal Pradesh	0.218	0.236	0.067	0.251	0.268	0.155	0.178
Jammu & Kashmir	0.331	0.426	0.072	0.643	0.632	0.057	0.231
Jharkhand	0.756	0.868	0.346	0.721	0.904	0.199	0.517
Karnataka	0.332	0.490	0.108	0.551	0.555	0.196	0.221
Kerala	0.019	0.034	0.001	0.042	0.247	0.28	0.006
Madhya Pradesh	0.634	0.803	0.188	0.712	0.905	0.195	0.347
Maharashtra	0.365	0.558	0.148	0.389	0.591	0.219	0.303
Manipur	0.126	0.177	0.031	0.000	0.024	0.067	0.112
Meghalaya	0.306	0.386	0.030	0.210	0.330	0.137	0.114
Mizoram	0.038	0.075	0.007	0.000	0.039	0.144	na
Nagaland	0.140	0.194	0.042	0.070	0.147	0.114	0.018
Odisha	0.777	0.857	0.357	0.889	0.949	0.22	0.605
Punjab	0.097	0.142	0.025	0.149	0.157	0.095	0.06
Rajasthan	0.591	0.749	0.125	0.669	0.877	0.228	0.313
Sikkim	0.044	0.056	0.014	0.013	0.063	0.041	0.063
Tamilnadu	0.434	0.700	0.161	0.646	0.566	0.265	0.377
Tripura	0.035	0.046	0.008	0.018	0.110	0.163	0.004
Uttar Pradesh	0.577	0.717	0.112	0.721	0.739	0.144	0.392
Uttarakhand	0.216	0.300	0.031	0.441	0.479	0.123	0.170
West Bengal	0.283	0.386	0.074	0.343	0.633	0.189	0.205

Source: Author's calculations