

# **Chronic Child Undernutrition (Stunting) in India: An Overview of the Problem, Determinants and Ongoing Efforts for Improving the Situation**

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## **Abstract**

Chronic child undernutrition, measured as stunting or too short for one's age, is largely irreversible under the age of two years. In India, despite a decrease in the prevalence rate of stunting in the last decade, 4 out of 10 children are reported to be stunted. A quarter of children in the high wealth index category are also found to be suffering from chronic undernutrition. The determinants of stunting are not merely limited to poverty or lack of food or poor preventive health services. Analysis of survey data confirms maternal and child care practices, maternal nutrition, maternal education and socio-economic status as well as sanitation are high risk factors contributing to stunting. For accelerating the rate of reduction in stunting, there is a need to combine nutrition specific actions with nutrition sensitive actions and accord priority to simultaneous multisector inputs in the first 1000 days of life. The recently launched 'National Nutrition Mission' adopts the strategy and aims to reduce stunting by 6 percent in the first three years. Rate of childhood stunting, along with IMR and U5MR, should be accepted as a measure of development of the country and of the states.

*Key words:* Stunting; Average annual reduction rate; Nutrition specific; Nutrition sensitive.

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## **1 Introduction**

Malnutrition occurs when the intake of essential macronutrients and micronutrients does not meet or exceeds the metabolic demand for those nutrients (WHO, 2013). The term "Malnutrition" includes both undernutrition and overnutrition as well as micronutrient deficiencies. Malnutrition in women and children encompasses imbalances in energy, specific macronutrients and micronutrients due to inadequate dietary intake, imbalances in dietary pattern and insufficient availability of nutrients to body primarily due to adverse effect of ill health or poor health services. Malnutrition prevalence rate in children is assessed using international measures and standards for the following anthropometric indicators-- stunting (too short for one's age), underweight (being too low weight for one's age), wasting (dangerously thin for one's height), low Mid-upper arm circumference (MUAC), Body Mass Index (BMI—a ratio of weight and height) and biochemical estimates for identification of

deficiencies of minerals and vitamins (micronutrient deficiencies). Overweight is measured by using the BMI cut offs.

Stunting or chronic malnutrition refers to a child being too small (in height) for their age. Stunting is failure to achieve expected height/length as compared to healthy, well nourished children of the same age. Stunting in fact is the failure to grow physically, with serious implications also on cognitive development and is the preferred measure for assessing undernutrition since it is largely irreversible under the age of two years. A stunted child has height for age Z score that is at least two standard deviations ( $-2SD$ ) below the median of the WHO Child Growth Standards 2006. Stunting is a result of cumulative effects of persistent nutrition deprivation. In situations of such continuous lack of nutrients, the body adjusts and adapts to such long-term shortage of nutrients by prioritizing the utilization of available nutrients for meeting the needs of vital organs and their functions and compromising on growth in height (Golden MHN, 1988).

Such undernourished stunted children set up a life cycle of malnutrition. Undernutrition in fact has serious implications on national development. Undernutrition is responsible for 45 % of all under five child deaths. In early childhood, stunting adversely affects physical, cognitive and mental development and in later years contributes to poor school concentration and learning outcomes. Young child undernutrition also increases the risk of adult onset non-communicable diseases such as cardiovascular diseases, diabetes etc.

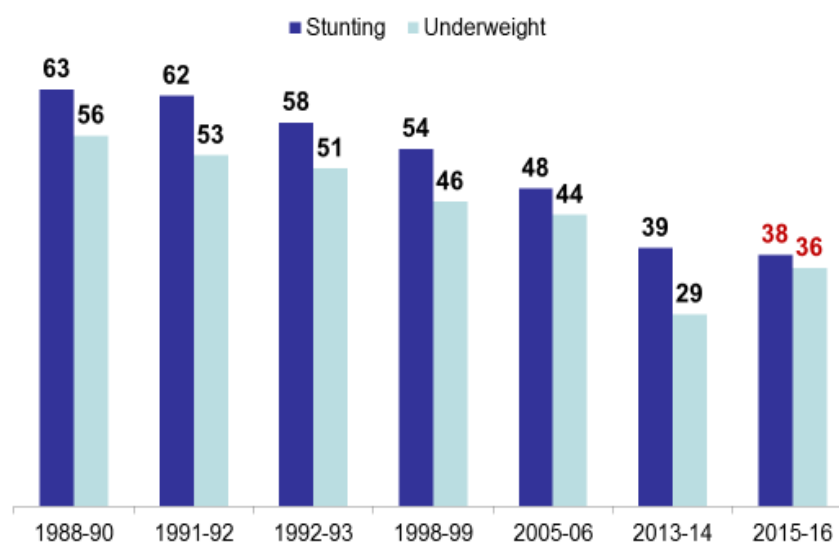
## **2 Magnitude of the problem of Childhood Stunting in India: Realities and Myths**

As per the last global report of 2017, 22.2 % under five children are stunted (UNICEF/WHO/World Bank 2018). Stunting, the most prevalent form of child undernutrition, is internationally accepted as a key indicator for monitoring child health and nutrition. Out of the 667 million children under age 5 worldwide, there has been a decline in number of stunted children from 169 million stunted children in 2010 to estimated 156 million in 2015 and 150.8 million in 2017. (UNICEF, WHO and World Bank, 2015 and Global Nutrition Report, 2016 and UNICEF/WHO/World Bank 2018) In 2015 and 2017, more than one half of all stunted children lived in Asia (83.6 million) while over one third lived in Africa (58.7 million). Despite a declining trend, 33.3 percent children under five years living in South Asia continue to experience stunted growth (UNICEF/WHO/World Bank 2018). Bangladesh, India, Nepal and Pakistan (1991-2014) are the four countries which together bear 95 percent of South Asia's stunting burden (UNICEF, 2013, UNICEF, 2016). In the global assessment of undernutrition in under five years children of 132 countries, ranked from lowest to highest, India with a stunting prevalence rate of 38.7 percent (RSOC, 2013-14) was ranked 114<sup>th</sup> (UNICEF, WHO and World Bank, 2015).

Between 2005-2015, there has been a decrease in the percent prevalence rate of stunting in under five year children in India – stunting prevalence rate declined from 48.0 per cent in 2005-06 to 38.7 percent in 2013-14 to 38.4 percent in 2015-16. Underweight percent prevalence rate in under five children also shows a decline from 43 percent in 2005-06 to 29.4 percent in 2013-14 but shows an increase to 36.7 percent in 2015-16 (NFHS-3, 2005-06; RSOC, 2013; NFHS 4, 2015-16). Figure 1 presents the trend in undernutrition since 1988-

89. The project trend is a crude comparison since the study methodology, geographical coverage and age group has not been constant in all these periods.

**Figure 1: Percent prevalence rates of underweight and stunting in children in India: 1988-89 to 2015-16 (Source : NNMB, NFHS 1.2.3 and 4)**

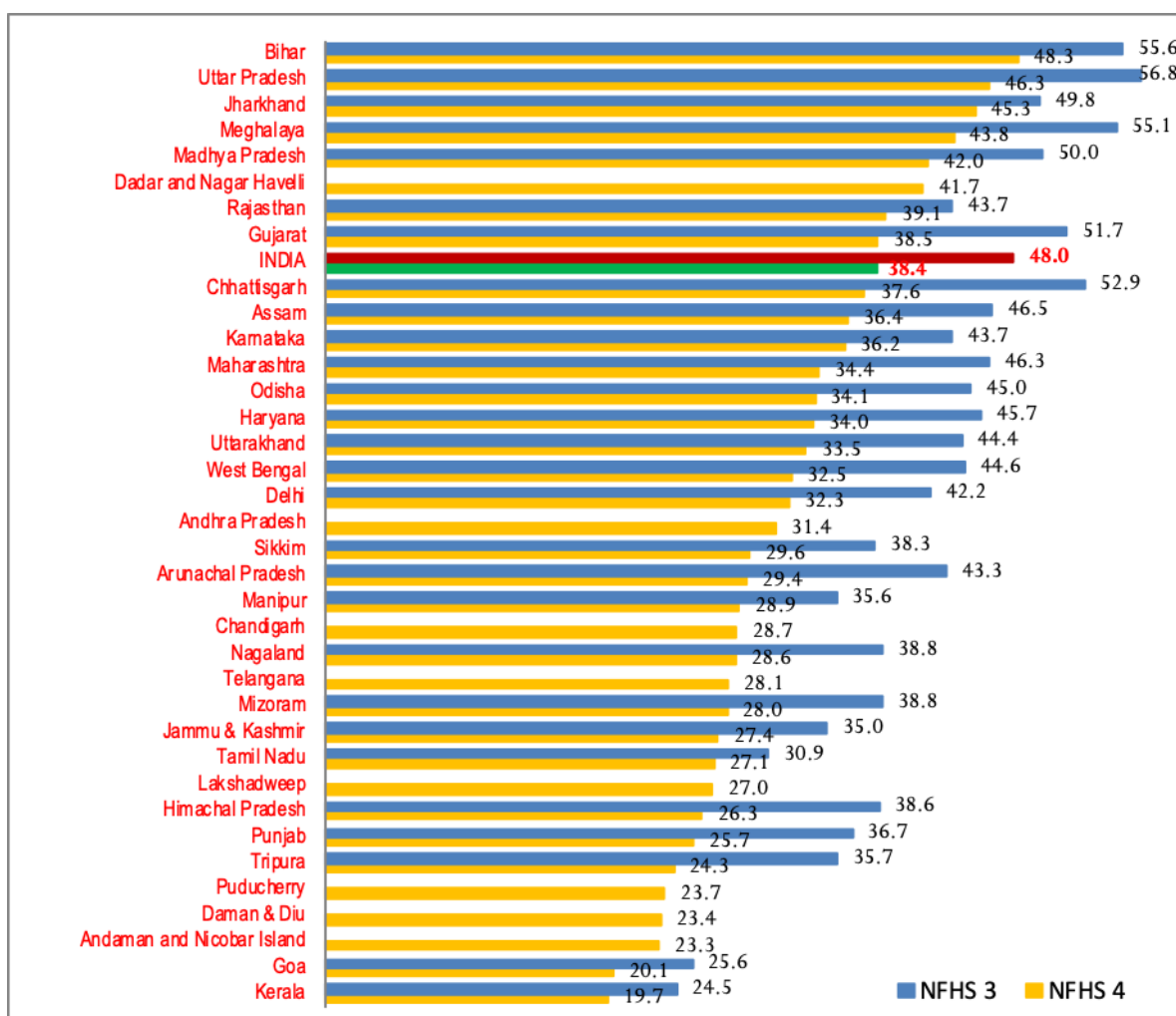


A comparison of NFHS 3 and NFHS 4 findings indicate a decrease in the past decade in the prevalence rate of chronic undernutrition at national level as well as in all states of the country (Fig. 2). At national level, 38.4 percent under five years children are stunted. There is a wide state-wise variation in the prevalence rate of stunting in under 5 year children—over 45 % in Bihar, UP and Jharkhand and 20.1 % in Goa and 19.7 % in Kerala (Fig. 2).

The NFHS 4 survey also presents district -wise data on rate of stunting in children under five years. There is a wide variation across districts (range: 12.4% to 65.1%), with 239 of the 640 districts have stunting prevalence levels above 40% and 202 have prevalence of 30–40%. Most of India's stunted children live in northern and central districts of India (IFPRI, 2018). The largest state Uttar Pradesh, with one sixth of India's population, bears a quarter of the burden of stunted children. Available NFHS 4 district-wise data of UP state indicates that in 61 of the 71 districts surveyed in the state, over 40 percent children are reported to be stunted. Today, with the availability of district data on undernutrition, 315 districts for priority nutrition program actions have been identified and are being targeted in the first phase of the National Nutrition Mission, referred as "Poshan Abhiyan" (Niti Aayog, 2017, NNM, 2018)

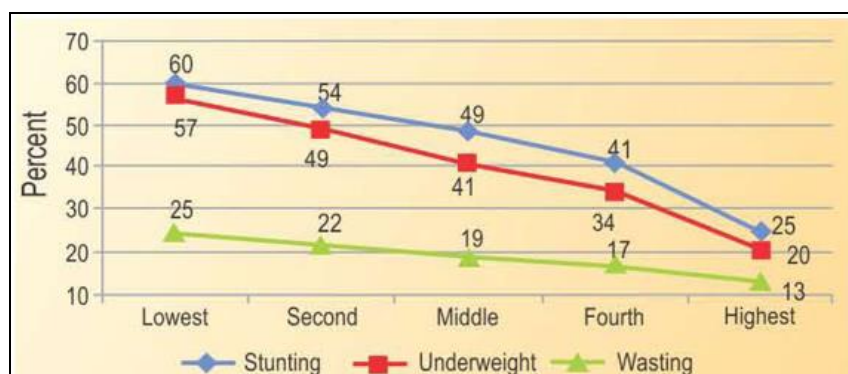
Despite the fact 4 out of 10 Indian children are stunted, these undernourished children are not "visible" and get lost in the crowd of children who have not attained optimum growth and suffer from adverse effect on cognitive development, education, productivity with serious implications on national development. Moreover, the common incorrect understanding that undernourished children are only those who are poor, hungry, very thin, emaciated with sunken eyes and brittle hair strengthens the belief of community members that undernutrition is rare. The view of the general population, strengthened further by media, is that undernourished children are only the emaciated 'visibly undernourished' children or severely wasted children and not the stunted children. In fact, the existing high prevalence rate of stunting in the country is not understood to be a serious problem.

**Figure 2: Prevalence rate of stunting in Under 5 years Children (national and state) in India in 2005-6 and 2015-16**



Source: NFHS – 3 (2005-06) and NFHS – 4 (2015-16)

Stunting is not limited to children belonging to poor wealth index households. This is a myth. Recent 2015-16 data (Fig. 3) shows that little over a fifth of children in the country even in the high wealth index are stunted and there is no decline in the last decade. In 2015-16, the gap is larger (Figures 3 and 4). The prevalence rate stunting is more than double in the lowest wealth index compared to the highest wealth index stunting (57.0 percent) and underweight (44.0 percent) in the lowest wealth index compared to corresponding 22.0 percent and 20.0 percent in the highest wealth index. It is of concern that despite adequate resources, almost a fifth of undernourished children in the high wealth index are also stunted and are not able to attain the maximum potential growth despite having the required resources. This supports the fact that poverty or lack of resources are not the only factor contributing to such a grave scenario.

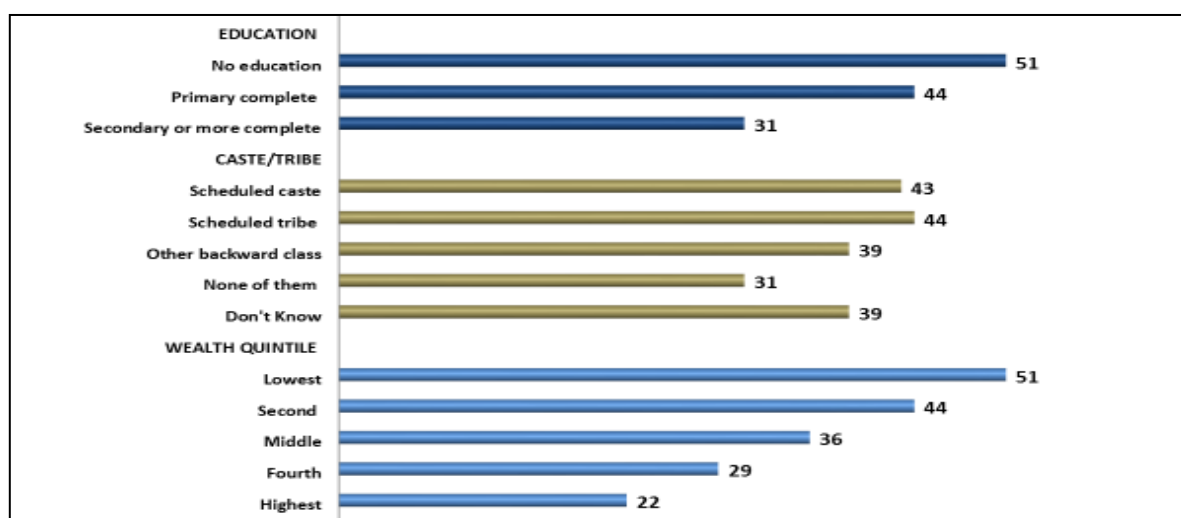


**Figure 3: Wealth Index and Undernutrition (2005-6), NFHS 3**

This observation is further supported by the fact that there are a number of households with overweight mothers who have under five years children who are stunted. It is interesting to note that in UP state, as per NFHS 4, 34.9 percentage of children of overweight mothers are stunted compared to 45.8 percent stunted children of normal nutritional status mothers and 54.2 percent in undernourished mothers. It is therefore crucial that we stop equating undernutrition merely with food shortage or poverty as being the only cause of undernutrition in.

Figure 4 presents information on stunting prevalence rate and education level of mothers— high school education versus primary or no education. A substantial gap in the prevalence rate of stunting is noted in case of mothers who have no education and high school education. The impact of education upto primary level on prevalence rate of stunting is much less. High school education possibly empowers mothers to take appropriate child care decisions, delay age of marriage and effectively use the available resources.

**Figure 4: Percentage of stunted children under 5 by Wealth index, Education and**

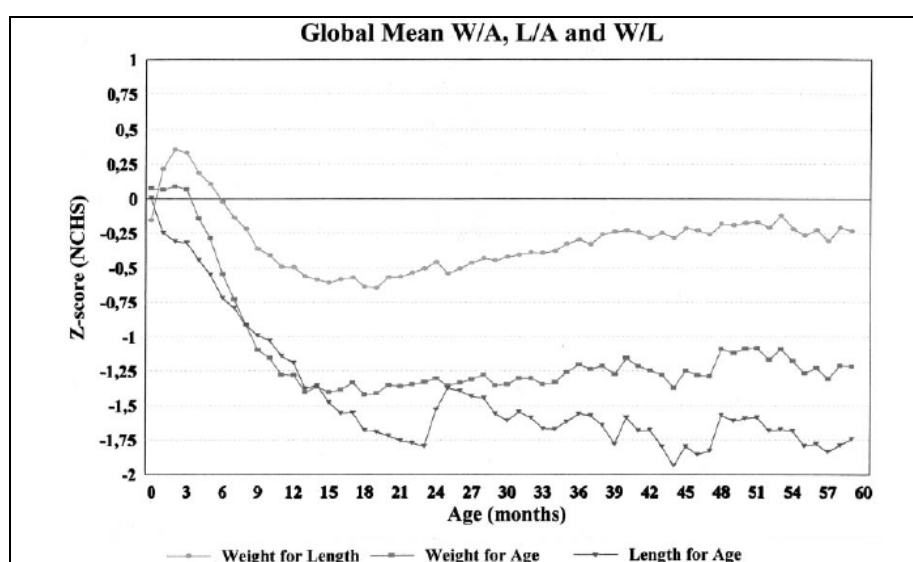


### 3 Caste/Tribe

As indicated in Figure 4, the prevalence rate of stunting in schedule caste and schedule tribe is comparable and is slightly above the national average. The prevalence rate is lower in non-SC or non-ST population. Similar trend was noted in the 2013-14 RSOC survey.

In the past decade, the first 1000 days of life (from the onset of conception to the time a child is 24 months of age), is established to be significant for addressing undernutrition. Global data, including of India, indicates prevalence of undernutrition increases steadily up to 24 months and then stabilises (Fig. 5). The prevalence rate of both stunting and underweight increases rapidly in the first two years of life and reaches its peak at about two years of age. (Shrimpton et al., 2001). Growth faltering in height or failure to grow adequately is sharpest in the first two years of life and by six months of age almost 25 % children are already stunted.

**Figure 5: Mean anthropometric Z-scores by age for all 39 studies (children 0-59 months) relative to NCHS reference**

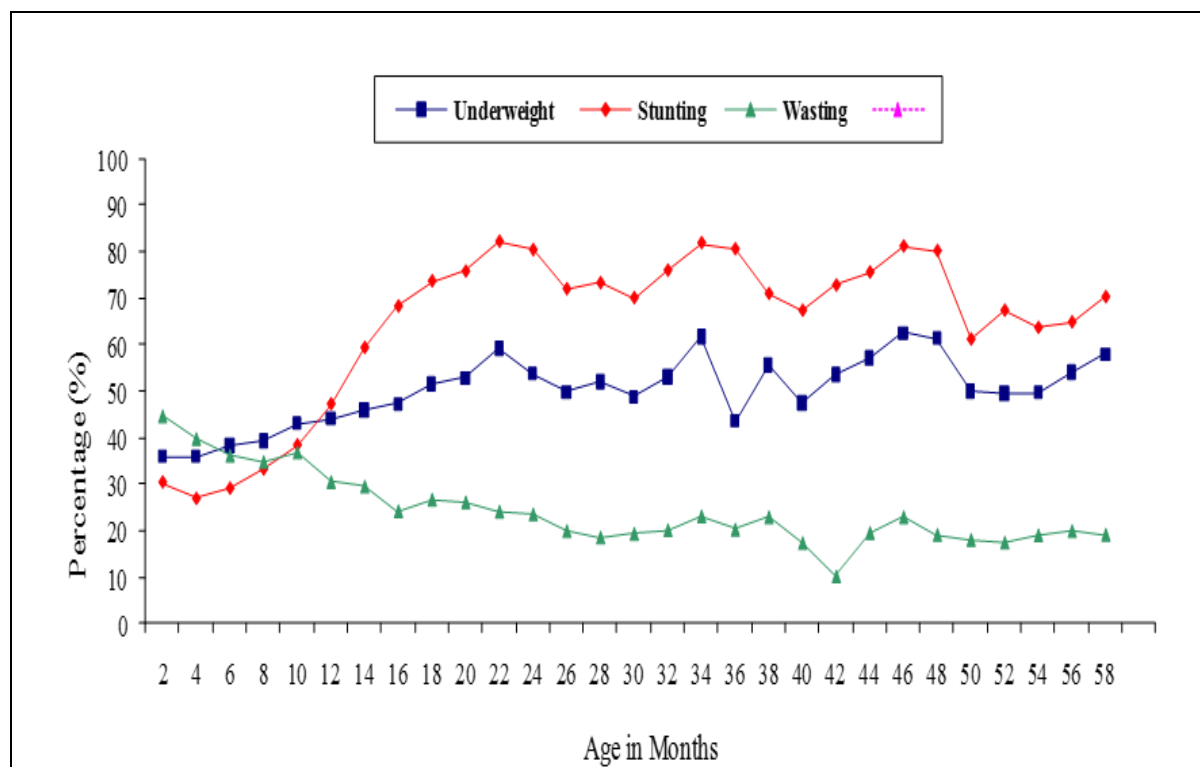


Source: Shrimpton et al., 2001

In India, a month-wise analysis of prevalence rate of undernutrition was undertaken for the first time in the state of UP by IASDS in 1998-99, for the Government of UP and UNICEF. The findings revealed that in the first 12 months, the prevalence rate of undernutrition increases steadily (Vir, 2001) and then tends to slow down in the increase rate of prevalence. The study findings indicated nutrition preventive measures should be undertaken in the first year of life of a child. (Vir, 2001). Such a trend is also reported by NFHS 3 survey 2005-6 (figure 6). A rapid increase in undernutrition is noted in the first two years of life—57.8 percent children stunted at 18-23 months compared to about 30 percent at 6 months (NFHS-3, 2006). The age wise analysis indicates that the situation of stunting worsens with increase in age, from being 32.7 percent at 9-11 months and 46.9 percent at 12 - 17 months followed by a sharp increase to almost 58 percent by 23 months. It is of concern to

note that almost a third of children are underweight or stunted in the first 1-2 months of life itself. In fact, almost a third are born low birth weight (LBW) which indicates substantial growth faltering. Such children with LBW have a poor catch up growth and have a high chance of being stunted at 24 months.

**Figure 6: Percent prevalence rate of underweight, stunting and wasting –Trend with increase in age of children 0-5 years in India (Source: NFHS3)**



Today there is conclusive global evidence that by the age of two years most growth retardation has already taken place. The period of the first 1000 days is not only a period of rapid linear growth but also mirrors rapid brain development--80 % of brain development takes place during this period. It is now well established that the child growth faltering in children from developing countries, including India, occurs in the first 1000 days of life *i.e.*, from conception to 2 years (SUN, 2016).

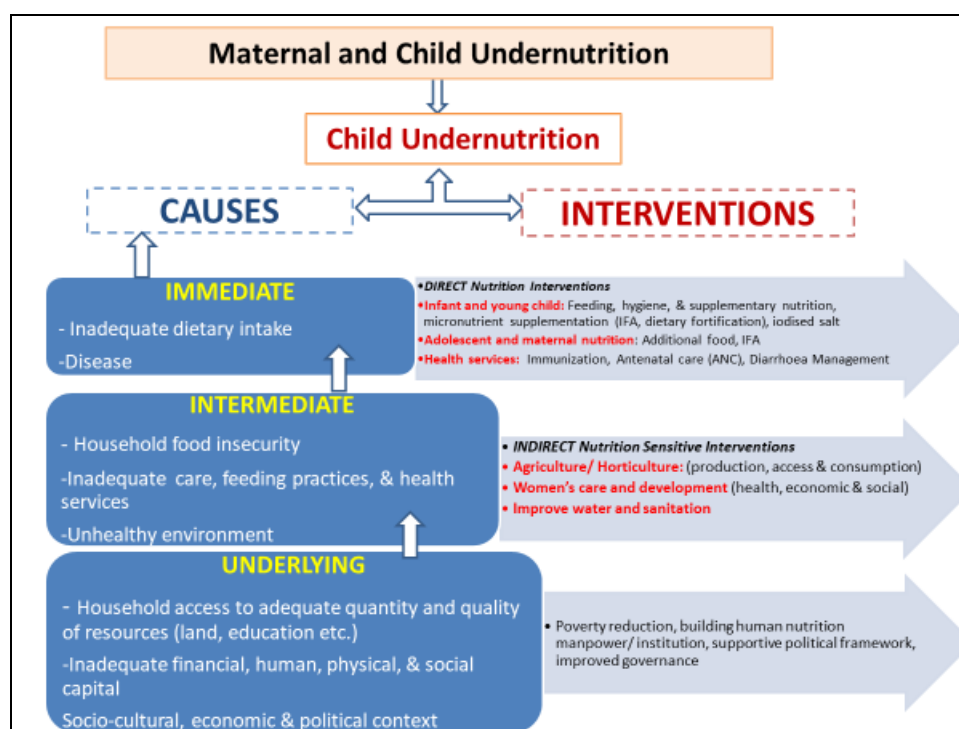
Stunting or poor growth occurring during this period is not only largely irreversible but has implications in the period of second growth spurt period of life. Available evidence indicates that these children who are stunted at two years of age fail to grow to their optimum height during adolescence (Rao, 2012). Stunted or underweight children also have lower immunity and have a higher chance of falling ill and thus setting up a cycle undernutrition-infection. Poor growth of children in the first 1000 days of life also results in greater chance that female children grow up to be stunted adult women. This sets up an intergenerational cycle of undernutrition in women. Care of children 0-24 months or 1000 days is the “window of opportunity” and is the period to prevent linear growth retardation or growth faltering in early childhood in low and middle income countries (Shrimpton et al, 2001)) which is the

second and the last growth spurt period of life. Poor nutrition status of women through the life cycle impacts on lowering birthweight and low birth weight increases chances of stunting in young children.

#### 4 Determinants of Undernutrition in Children

From the data presented above, it is evident that mere poverty or lack of food is not the determinant of undernutrition. This was well explained in the UNICEF conceptual framework of malnutrition (UNICEF,1998) which illustrated how the drivers of undernutrition operate at different levels. Based on this framework and modified version of Lancet 2013 (figure 7), it is evident that immediate causes of undernutrition are inadequate dietary intake and disease while inadequate access to food, inadequate for children and women and insufficient health services and unhealthy environment are the intermediary causes while human, economic and organisational resources are the basic causes.

**Figure 7: Immediate, Intermediate and underlying determinants of maternal-Child Undernutrition(source Adapted UNICEF 1998)**



In Indian context, the risk factors of undernutrition are further confirmed by the regression analysis on the highest risk factors of undernutrition in children. The first such regression analysis regarding underweight in children was undertaken by IASDS in 1998-99. The study revealed the highest risk factors responsible for underweight in children (Government of UP,1999). Later in 2014-15, a regression analysis of the national data of NFHS 3 was undertaken by the National Institute of Medical Statistics of the Indian Council of Medical Research (ICMR) and Public Health Nutrition and Development Centre. The analysis revealed that the first five highest risk factors of childhood stunting are poor maternal education, poor maternal height, no institutional delivery, low standard of living and



households with no toilet facility( Tulsi et al., 2015). As indicated in the table below, such studies from other Asian countries, Nepal and Bangladesh (Heady and Hoddinott, 2013, Bhagowalia, 2012), also present with similar findings of risk factors of childhood stunting (Table 1) .

**Table 1: High risk factors associated with stunting in young children: India, Nepal and Bangladesh**

Risk factors for Stunting		
India	Bangladesh	Nepal
No education of mothers	Domestic violence	Maternal Height
Maternal Height	Decision making power	Water
Mothers with no Institutional delivery	Maternal Height	Open defecation
Households with low standard of living	Secondary education	Born in hospital
Households with no toilet facility	Wealth quintile	ANCs visits- or more
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Source: Adhikari, Vir et al, 2013; Heady & Hoddinott, 2013; Bhagowalia et al, 2012

Interestingly, most of these risk factors pertain to maternal situation (Table 1). Mothers with high school education are noted to have a strong association with a significant drop in childhood stunting rates and this is possibly due to impact on improving knowledge on self care and child care practices regarding food, feeding and hygiene and significance of essential health services during pregnancy and childhood as well as implications on preventing early marriage and early onset of first conception. In some states, such as Bihar, the decrease in early marriage prevalence rate is unbelievably high – from 60.3 % to 39 %. The state also shows a corresponding doubling in high school attendance – from 13.2 to 22.8%. Recent analysis of NFHS 4 data by IFPRI (IFPRI, 2018) also show parameters like women’s body mass index, education, age at marriage and antenatal care affect child stunting. The study emphasizes that the interdistrict differences in stunting is a result of multitude of economic, health, hygiene, and demographic factors.

## **5 Challenges for India: Accelerating the Annual Rate of Reduction (AARR) of Prevalence Rate of Stunting**

The decadal progress in stunting in our country is evident but the rate of decrease is rather slow for meeting the 2012 global call of World Health Organisation (WHO, 2012). The target of WHO to reduce the number of stunted children by 40 percent by 2025. As per the National Nutrition Mission, the objective is to prevent and reduce stunting in children 0-6 years by 6 percent and at the rate of 2 percent per annum( Niti Aayog, 2017 and National Nutrition Mission, 2018, Administrative Guidelines, 26<sup>th</sup> February, 2018).

Recent IFPRI analysis (Sarswat et al., 2017) indicates that India needs to accelerate the current decade average annual rate of reduction (AARR) of stunting from 2.2 percent to 3.6 percent to achieve the WHO target 2025 for maternal, infant and young child nutrition (Table 2). Such a rate of increase in AARR for the reduction in prevalence rate of child undernutrition is feasible, as evident from the rate of decline in the last decade noted in a few states (Table 2). For example, Chhattisgarh in the last decade, with an AARR of 3.4 %, resulted in a sharp decline in the percent prevalence rate of stunted children – from 52.9 % to 37.6 % (Figure 1). As indicated in the figure, similar substantial decline is noted in Arunachal Pradesh, Gujarat, Himachal Pradesh. On the other hand, states such as Uttar Pradesh (UP) state (as indicated in the figure), demonstrate a rather slow decadal decline (from 56.8 % to 46.3%). The AARR of UP state (Table 2) being only 2.0 % which needs to be increased to 3.3 % for meeting the WHO 2025 target.

**Table 2: Average Annual Rate of Reduction Required**

Average Annual Rate of Reduction of Stunting : Current and Required AARR to meet WHO targets					
State	2016 stunting (%)	2025 target (%)*	2025 prevalence using current AARR (%)	required AARR (%)**	current AARR (%)
ARUNACHAL PRADESH	29.4	20.9	20.8	3.7	3.8
ASSAM	36.4	25.5	29.2	3.9	2.4
BIHAR	48.3	31.0	42.6	4.8	1.4
CHATTISGARH	37.6	26.2	27.7	3.9	3.4
DELHI	32.3	23.2	25.4	3.6	2.6
GOA	20.1	14.7	16.2	3.4	2.4
GUJARAT	38.5	27.2	29.5	3.8	2.9
HARYANA	34	24.1	26.1	3.7	2.9
HIMACHAL PRADESH	26.3	19.1	18.6	3.5	3.8
INDIA	38.4	27.7	31.4	3.6	2.2
JAMMU & KASHMIR	27.4	14.7	22.0	6.7	2.4
JHARKHAND	45.3	30.3	41.6	4.4	0.9
KARNATAKA	36.2	26.5	30.6	3.4	1.9
KERALA	19.7	15.6	16.2	2.6	2.2
MADHYA PRADESH	42	30.1	35.9	3.6	1.7
MAHARASTRA	34.4	25.5	26.3	3.3	2.9
MANIPUR	28.9	18.9	24.0	4.6	2.1
MEGHALAYA	43.8	26.3	35.6	5.5	2.3
MIZORAM	28	17.3	20.4	5.2	3.5
NAGALAND	28.6	20.3	21.7	3.7	3.0
ODISHA	34.1	25.3	26.6	3.3	2.7
PUNJAB	25.7	19.3	18.6	3.1	3.5
RAJASTHAN	39.1	27.8	35.4	3.7	1.1
SIKKIM	29.6	26.0	23.5	1.4	2.5
TAMIL NADU	27.1	19.9	24.1	3.4	1.3
TRIPURA	24.3	16.8	17.2	4.0	3.8
UTTAR PRADESH	46.3	34.4	38.5	3.3	2.0
UTTARAKHAND	33.5	24.0	26.0	3.6	2.8
WEST BENGAL	32.5	25.4	24.4	2.7	3.1

\*based on 2025 population and prevalence of stunting in Nos; \*\*based on % prevalence of stunting in 2025 and 2016

Source: Sarswat et al., 2017

## 6 Actions for Accelerating Rate of Reduction of Childhood Stunting: Complementing Specific Nutrition Actions with Nutrition Sensitive Actions.

An increase in AARR is achievable if efforts are focused on doable evidence based nutrition specific interventions, essential health actions, sanitation-hygiene actions combined with interventions to improve nutrition sensitive factors such as education of women ,empowerment of women, hygiene and sanitaion situation and socio-economic situation of women.For preventing undernutrition,highest proiority needs to be accorded to interventions being focused in households with pregnant women and children 0–24 months and ensuring actions being taken in the first 1000 days of life.

As indicated in Figure 7, nutrition specific or direct nutrition interventions and programs need to focus on appropriate breastfeeding practices (initiation of breastfeeding within an hour of birth, exclusive breastfeeding for six months), complementary feeding practices (timely introduction of semi-solid food at 6-8 months along with continuation of breast milk, feeding diversified family quality food of right semisolid consistency at least 2-3 times a day, continuing feeding during illness), ensuring provision of adequate energy-protein food intake from diversified food sources during pregnancy and improving daily consumption of Iron – folic acid supplements in the last two trimesters of pregnancy. Besides the nutrition inputs, essential health services are critical. ICDS and health systems therefore play important roles in the implementation of these interventions. Contacts by health workers (Auxiliary Nurse Midwife (ANMs) and Accredited Social Health Activists (ASHAs) with mothers/caregivers during maternal- child health (MCH) services a minimum of 11 contacts with a mother in the first 1000 days of life *i.e.*, extending from the ANC registration in the first trimester to child immunisation booster dose vaccine administration around 16 months. These contacts are the opportunities for delivery of services pertaining to nutrition-specific interventions. Improved coverage of MCH services therefore is crucial for improved frequent contacts of health frontline workers with mothers and thus increasing the opportunities for nutrition counselling for influencing adoption of appropriate behavioural care practices during pregnancy, infancy and early childhood. The accelerated decadal decrease in the rate of stunting in children in Chhattisgarh state, from 52.9 percent in 2005 and 37.6 percent in 2015 could be attributed, to a great extent, to a substantial improvement in coverage of maternal-child health services during the period – Antenatal care services coverage increased from 46.0 % to 76.8%, institutional based delivery from 14.3 % to 70.2% while complete child immunisation rate also increased significantly from 48.7 % to 76.4%. Taking these into consideration, in September 2018, Government of India issued guidelines on “Home Based Care for Young Child ‘ (HBCY) and has added five additional home visits, between the ages of 3 to 15 months, by frontline workers (ASHAs) of the primary health care system. These contacts are expected to be used for tasks pertaining to counselling on age appropriate child feeding, immunisation and vitamin A supplement administration, appropriate hygiene-sanitation practices and guidance on timely childhood stimulation (MoHFW and MWCD, 2018).

Globally, it is estimated that universal coverage of the above referred nutrition specific interventions could reduce stunting by only about a quarter (Lancet, 2013). These nutrition specific actions need to be complemented with interventions which are nutrition sensitive to address the indirect pathways to influence the underlying cause of undernutrition and accelerate the rate of reduction in undernutrition.

For effective implementation of nutrition sensitive actions, there is a need to go beyond ICDS supply of food supplements or supply of cereals at a subsidised rate through the public distribution system (PDS). It is important to accord a very high priority for supporting high education schooling of girls and improvement in socio-economic situation of women (Vir, 2016). Such actions are expected to contribute significantly in breaking the intergeneration cycle of undernutrition/stunting in near future. Many state governments have initiated

incentive schemes for encouraging completion of high school education by girls,. *Beti Bacchao and Beti Padhao* scheme, recently launched Maternity Benefit Scheme (Pradhan Mantri Matritva Vandana Yojana or PMMVY), MNREGA (Mahatama Gandhi Rural Employment Act) as well as the National Rural Livelihood Mission (NRLM) are expected to impact positively on the socio-economic status of women and in turn on the nutrition situation. Recently, recognising the potential of NRLM in influencing maternal -child nutrition through the network of about 25 lakh self help group of women (SHGs) covering about 27 million households in 400 districts, a joint directive of MoRD with MoHFW and MWCD has been issued for addressing malnutrition through NRLM (GoI, 2018).

Another important urgent nutrition sensitive action required for reducing undernutrition in children are sanitation and hygiene interventions. There is increasing evidence that open defecation in high density population results in regular ingestion of fecal matter which causes destruction of intestinal villi, also referred as environmental enteropathy or EE with no clinical signs of diarrhoea, which in turn reduces absorption of nutrients leading to stunting as well as possibly anemia (Humphrey, 2009). For the rapid desirable reduction in childhood stunting rates, the current push by the government to intensify Swachh Bharat Abhiyan (SBA) drive, needs to be combined with well-planned promotion of washing of hands with soap and water after defecation or prior to cooking, eating and child feeding. Highlighting the adverse impact of poor sanitation on chronic undernutrition and in turn also on increase in the risk of adult onset diseases would facilitate in achieving the national goal of Open Defecation Free (ODF) India. In the last decade, as per NFHS 3 and 4, there is a substantial improvement in ODF villages. According to NFHS 3 and 4, at the national level, 48.4 percent households used improved sanitation facility compared to 29.1 % in 2005.

## **7 Towards Accelerating Reduction in Childhood Stunting Rates**

India is signatory to WHO targets of 40 percent reduction in number of stunted children by 2025. There is an urgent need to develop and implement district level nutrition plans of action. The interventions need to accord priority to households with pregnant women and children 0–24 months *i.e.*, the first 1000 days of life. Intervention actions need to go beyond food and feeding. There is an urgent need to address the various dimensions of development which are nutrition sensitive such Water-Sanitation, Agriculture, Women Empowerment, Women's education and these varied inputs require involving a number of government departments/ministries.

Investing in nutrition must be recognised as means to accelerate economic growth. According to the Global Nutrition Report 2016, for every dollar invested in scaling up nutrition actions, \$16 are realized in return (Global Nutrition Report, 2016). The challenge for policy makers is to recognise that a reduction in the prevalence rate of childhood stunting is in fact an indicator of a country's or a state's progress towards overall development. It is time that along with under five mortality rate, undernutrition, specifically stunting rate in children under five years, is used as a measure of status of the overall development of states/UTs and of the country.

Today, India has political commitment and conducive policy environment of complementing nutrition specific interventions with nutrition sensitive interventions. Nutrition Mission or “POSHAN Abhiyaan”, launched on 8<sup>th</sup> march 2018 by the Prime Minister of India, (POSHAN Abhiyaan, 2017) is expected to spearhead the movement in the right direction for meeting one of the primary objectives of reducing stunting by 6 percent in three years.

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