

Food for All

Naresh Gupta

India still faces a long road ahead in its quest to achieve Zero Hunger. Over 25 years since India ushered in its economic reforms, the country's economy has undergone significant structural transformations, encouraging planners to turn their focus away from agriculture and instead towards the service and manufacturing sectors. The priority now is to return attention to agriculture and its central role of providing food security, reducing poverty and generating employment.

State of Hunger in India¹

India, with a population of over 1.3 billion, has seen tremendous growth in the past two decades. Gross Domestic Product has increased 4.5 times and per capita consumption has increased 3 times. Similarly, food grain production has increased almost 2 times. However, despite phenomenal industrial and economic growth and while India produces sufficient food to feed its population, according to Food and Agriculture Organization of the United Nations (FAO) estimates in The State of Food Security and Nutrition in the World, 2020 report, 189.2 million people, that is 14% of the population, are undernourished in India. The problem of hunger is complex, and different terms are used to describe its various forms.

Hunger is usually understood to refer to the distress associated with a lack of sufficient calories.

Undernutrition goes beyond calories and signifies deficiencies in any or all of the following: energy, protein, and/or essential vitamins and minerals. Undernutrition is the result of inadequate intake of food in terms of either quantity or quality, poor utilisation of nutrients due to infections or other illnesses, or a combination of these factors. These, in turn, are caused by a range of factors, including household food insecurity; inadequate maternal health or childcare practices; or inadequate access to health services, safe water, and sanitation.

Malnutrition refers more broadly to both undernutrition (problems caused by deficiencies) and overnutrition (problems caused by unbalanced diets, such as consuming too many calories in relation to requirements with or without low intake of micronutrient-rich foods).



In the Global Hunger Index (GHI) Report, “hunger” refers to the index based on four component indicators. Taken together, the component indicators reflect deficiencies in calories as well as in micronutrients.

Computation of Gross Hunger Index (GHI)

Gross Hunger Index scores are calculated using a three-step process that draws on available data from various sources to capture the multidimensional nature of hunger. First, for each country, values are determined for three dimensions—inadequate food supply, child undernutrition and child mortality rate with indicators of undernourishment for the first dimension, wasting and shunting for the second dimension and under 5 mortality rate for the third dimension, as indicated below.

1. Undernourishment: the share of the population that is under-nourished (PUN).

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2. Child Wasting: the share of children under the age of five who are wasted (CWA).
3. Child Stunting: the share of children under the age of five who are stunted (CST).
4. Child Mortality: the mortality rate of children under the age of five (CM).

Second, each of the four component indicators is given a standardised score on a 100-point scale based on the highest observed level for the indicator on a global scale in recent decades. Third, standardised scores are aggregated to calculate the GHI score for each country, with each of the three dimensions given equal weight. Standardisation of the component indicators is as follows:

Standardised PUN = $PUN \times 100/80$; Standardised CWA = $CWA \times 100/30$; Standardised CST = $CST \times 100/70$ and Standardised CM = $CM \times 100/35$.

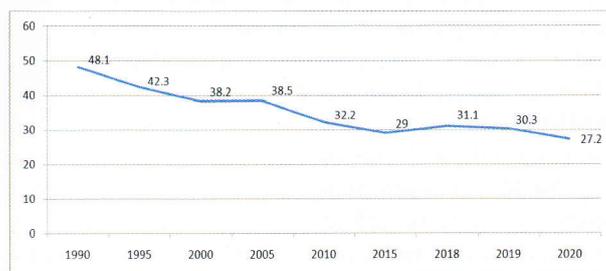
The component indicators are then aggregated as $1/3 \times \text{Standardised PUN} + 1/6 \times \text{Standardised CWA} + 1/6 \times \text{Standardised CST} + 1/3 \times \text{Standardised CM} = \text{GHI score}$

Values less than 10 reflect 'low hunger', values from 20 to 34.9 indicate 'serious hunger'; values from 35 to 49.9 are 'alarming'; and values of 50 or more are 'extremely alarming'.

India's Progress in GHI

In the Global Hunger Index Report 2019, India was ranked at 102 out of 117 countries. According to the Global Hunger Index 2020

Report, India ranked 94 with a Global Hunger Index of 27.2. India has made considerable progress over the years which is evident from its Gross Hunger Index as shown in the Graph 1.



Graph 1.

The published data for the corresponding period for the States/UTs within India is not available and therefore GHI for the States/UTs could not be computed. Nevertheless, the Comprehensive National Nutrition Survey 2016–2018² provides considerable data on nutritional status State/UT wise.

The Government of India is strongly committed to achieving the 2030 Sustainable Development Goals (SDGs). The current nutrition situation in India justifies its high level national commitment with strong policy initiatives based on evidence-informed interventions towards combating all

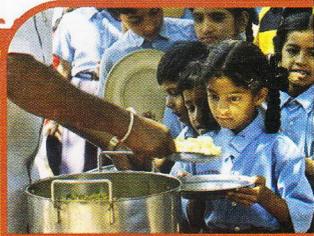
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forms of malnutrition in the country. Ambitious targets

MINISTRY OF WOMEN AND CHILD DEVELOPMENT
GOVERNMENT OF INDIA

POSHAN Abhiyan
National Nutrition Strategy
2017

myGov
मेरी सरकार



Realizing the Vision of Malnutrition-Free India

- 

Aim to reduce malnutrition in a phased manner through the life cycle concept by adopting a synergised and result-oriented approach
- 

Will ensure mechanisms for timely service delivery & a robust monitoring as well as intervention infrastructure
- 

To bring down stunting of children in age group of 0-6 years from 38.4% to 25% by 2022
- 

Prevalence of stunting, wasting & underweight among children reduced from the levels reported by NFHS-4*

*National Family Health Survey - 4

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Realizing the Vision of Malnutrition-Free India

To achieve improvement in nutritional status in a time bound manner with fixed targets as under:

Objective	Target to prevent &/or to reduce by
Prevent & reduce stunting in children (0- 6 years)	6% @ 2% p.a.
Prevent & reduce under-nutrition (underweight prevalence) in children (0-6 years)	6% @ 2% p.a.
Reduce the prevalence of anemia among young Children (6-59 months)	9% @ 3% p.a.
Reduce the prevalence of anemia among Women & Adolescent Girls in age group of 15-49 years	9% @ 3% p.a.
Reduce Low Birth Weight (LBW)	6% @ 2% p.a.

have been set for POSHAN Abhiyaan³ to reduce stunting (2%), underweight (2%), anaemia (3%) among young children, women and adolescent girls and reduce low birth weight (2%) per annum. Also, the National Health Mission (NHM) includes programmatic components such as health system strengthening, Reproductive-Maternal-Neonatal-Child and Adolescent Health (RMNCH+A), and prevention and treatment of communicable and non-communicable diseases. The NHM envisages achievement of universal access to equitable, affordable & quality health care services that are accountable and responsive to people's health and well-being. Anaemia continues to be a major public health problem in the country. Micronutrient deficiencies are an important cause of morbidity and mortality, especially in infants and pre-school children.

Prevalence of Malnutrition in India – Stunting, Wasting and Underweight children⁴

A number of the most populous states including Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh had a high (37-42%) stunting prevalence. High prevalence of wasting ($\geq 20\%$)

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states included Madhya Pradesh, West Bengal, Tamil Nadu and Jharkhand. The states with the highest prevalence ($\geq 39\%$) of underweight were Bihar, Chhattisgarh, Madhya Pradesh and Jharkhand. The first 1000 days (from conception to age two years) is considered the most important period to intervene to prevent the lifelong damage caused by malnutrition.

SDG India Index & Dashboard 2019-20

The NITI Aayog has brought out SDG India Index & Dashboard 2019-20 which measure the progress achieved and distance to be covered by the States/UTs in their journey towards meeting the targets, using the SDG India Index, covering 16 out of 17 SDGs. Two of the most important SDGs (Sustainable Development Goals) having a bearing on poverty, hunger and nutrition are:

SDG 1. No Poverty

SDG 2. Zero Hunger

Table 1. shows % of stunting, wasting and underweight children aged 0-4 years by State, India - CNNS 2016-18

S. No.	State/ UT/ India	% of Stunting among Children aged 0-4 years by State, India - CNNS 2016-18	% of Wasting among Children aged 0-4 years by State, India - CNNS 2016-18	% of Underweight among Children aged 0-4 years by State, India - CNNS 2016-18
1	Andhra Pradesh	31.5	17.1	35.5
2	Arunachal Pradesh	28.0	7.0	16.0
3	Assam	32.4	19.4	29.4
4	Bihar	42.0	14.5	38.7
5	Chhattisgarh	35.4	19.3	40.0
6	Delhi	28.8	14.8	28.1
7	Goa	19.6	15.8	20.3
8	Gujarat	39.1	17.0	34.2
9	Haryana	34.9	11.7	28.8
10	Himachal Pradesh	28.4	11.0	22.6
11	Jammu & Kashmir	15.5	15.0	13.0
12	Jharkhand	36.2	29.1	42.9
13	Karnataka	32.5	19.0	32.0
14	Kerala	20.5	12.6	18.7
15	Madhya Pradesh	39.5	19.6	38.7
16	Maharashtra	34.1	16.9	30.9
17	Manipur	28.9	6.0	13.0
18	Meghalaya	40.4	15.0	30.0
19	Mizoram	27.4	5.8	11.3
20	Nagaland	26.2	12.9	16.3
21	Odisha	29.1	13.9	29.2
22	Punjab	24.3	6.7	19.7
23	Rajasthan	36.8	14.3	31.5
24	Sikkim	21.8	7.0	11.0
25	Tamil Nadu	19.7	21.0	23.5
26	Telangana	29.3	17.9	30.8
27	Tripura	31.9	12.8	23.8
28	Uttar Pradesh	38.8	18.5	36.8
29	Uttarakhand	29.9	5.9	18.7
30	West Bengal	25.3	20.1	30.9



SDG 2: Zero Hunger - To measure India's performance towards the Goal of Zero Hunger, seven national-level indicators have been identified, which capture three out of the eight SDG targets for 2030 outlined under this Goal. The indicators of SDG 2 taken are:

1. Ratio of rural households covered under public distribution system (PDS) to rural households where monthly income of highest earning member is less than Rs. 5,000.
2. Percentage of children under age 5 years who are stunted.
3. Percentage of pregnant women aged 15-49 years who are anaemic.
4. Percentage of children aged 6-59 months who are anaemic (Hb<11.0 g/dl).
5. Percentage of children aged 0-4 years who are underweight.
6. Rice, wheat and coarse cereals produced annually per unit area (Kg/Ha).
7. Gross Value Added in Agriculture per worker.

SDG Index Score for Goal 2 ranges between 22 and 76 for States and between 12 and 73 for UTs. Goa and Chandigarh are the top-performing among States and UTs, respectively. Seven states and two UTs bagged a position in the category of Front Runners (with Index score higher than/equal to 65). However, twenty States and three UTs fell behind in the Aspirants category (with Index score less than 50).

Food and Nutrition Security

The implementation of a revamped Public Distribution System under the National Food Security Act (NFSA), 2013 is a paradigm shift in the approach towards the issue of food security at the household level, from welfare to a rights-based approach. Under the "Antyodaya Anna Yojana" (AAY), the poorest from amongst the Below Poverty Line families are entitled to 35 kg of food

grains per month at more subsidised rates. The NFSA adopts a life cycle approach making special provisions for ensuring food security of pregnant women, lactating mothers, and children from 6 months to 14 years of age. Under the Integrated Child Development Services, 70.37 million children in the age range 6 months to 6 years, and 17.18 million pregnant women and lactating mothers are provided access to nutritious food as on March 31, 2019. Another initiative aimed at achieving better nutrition standards for school going children is the Mid-day meal (MDM) scheme, which provides nutritious cooked mid-day meal with the calorie range of 450-700 to over 120 million children at primary and upper primary levels.

The National Nutrition Mission (Poshan Abhiyaan), a multi-ministerial convergence mission was launched in 2018 to make a concerted attack on under-nutrition, stunting, and anaemia. The Mission targets to reduce stunting, under-nutrition, anaemia (among young children, women and adolescent girls), and low birth weight by 2 per cent, 2 per cent, 3 per cent, and 2 per cent per annum, respectively. It targets to bring down stunting among children in the age group 0-6 years from 38.4 per cent to 25 per cent by 2022.

Agricultural Productivity and Income

India's foodgrain requirement to adequately provide for its population is projected to range from 334-350 million tonnes by 2032-33. The government has been implementing a multi-faceted strategy for doubling farmers' income focusing on seven growth factors: improved crop productivity, increased livestock productivity, cost-effective production processes, increa-

POSHAN Abhiyaan - PM's Overarching Scheme for Holistic Nourishment
Launched on 8th March, 2018

- Overall budget of ₹9046 crore for 3 years
- To ensure a holistic approach, all 36 States/UTs and districts covered
- Over 10 crore people to be benefitted, scheme extended upto 31st March, 2021

sed cropping intensity, crop diversification favouring high-value crops, access to better prices and shifting to the non-farm occupation. 221 million soil health cards have been distributed so far to farmers to help rationalise the use of fertilisers. The Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) focuses on improved water efficiency with the motto of “Har Khet Ko Paani” and “Per drop more crop” and provides end-to-end solutions in the irrigation supply chain, viz. water sources, distribution network, and farm-level applications. The Pradhan Mantri Fasal Bima Yojana (PMFBY) provides better insurance coverage and agricultural credit at a reduced rate of 4 per cent per annum to farmers. The increase of the minimum support prices for all kharif and rabi crops at least by 150 per cent of the cost of production has also shored up farmers’ income. In addition, the Pradhan Mantri Kisan Scheme has been initiated to extend the payment of INR 6,000 per year to every farmer in the country, which provides a further boost to their income. Under Pradhan Mantri Kisan Sampada Yojana, financing of mega food parks, infrastructure of agro-processing clusters, and integrated cold chain and value addition infrastructure are undertaken, in addition to other components.

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planners to turn their focus away from agriculture and instead towards the service and manufacturing sectors. The priority now is to return attention to agriculture and its central role of providing food security, reducing poverty and generating employment. India is likely to be the most populous country on this planet by 2030 with 1.6 billion people. Ensuring food and nutrition security will become a bigger challenge unless Government of India and the State Governments, particularly of the more populous States, pursue in right earnest population stabilisation programmes. □

References

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2. Comprehensive National Nutrition Survey 2016-18/ UNICEF/ MOFH & FW
3. The Prime Minister’s Overarching Scheme for Holistic Nutrition or POSHAN Abhiyaan or National Nutrition Mission, is Government of India’s flagship programme to improve nutritional outcomes for children, pregnant women and lactating mothers. Launched by the Prime Minister on the occasion of the International Women’s Day on March 8, 2018 from Jhunjhunu in Rajasthan, the POSHAN (Prime Minister’s Overarching Scheme for Holistic Nutrition) Abhiyaan directs the attention of the country towards the problem of malnutrition and address it in a mission-mode.
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