



## Nutritional Security in India: A Vision

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According to the FAO (2009), nutrition security implies “physical, economic and social access to balanced diet, clean drinking water, safe environment, and health care (preventive and curative) for every individual. Education and awareness are needed to utilize these services”. Malnutrition occurs not just due to lack of adequate and nutritious food but also due to a variety of interconnected economic and social risks and vulnerabilities such as inadequate care in terms of breastfeeding and child care, and education (UNICEF, 2015). The link between nutrition, poverty, food security and agriculture has been recognized and is embodied in the UN’s Sustainable Development Goals (SDGs). Of the 17 SDGs, the report focuses on three interrelated SDGs of eradicating extreme poverty, zero hunger and good health and well-being. The report uses the Global Indicators Framework for SDGs to ensure that the ultimate goal of ending all forms of malnutrition and nutritional security is achieved by 2030.

### India’s Position Globally in terms of Nutritional Security

Globally, India accounts for the highest proportion of stunted (31 per cent) and wasted children (51 per cent) and under five deaths (16 per cent) (FAO, IFAD, UNICEF, WFP and WHO, 2019; UNICEF, 2019). India is also the home to the largest number of undernourished people in the world (24 per cent of the world population) (FAO, IFAD, UNICEF, WFP and WHO, 2019). India is still home to the largest number of the extremely poor in the world. Globally, there were 735 million extremely poor people (as measured by the World Bank’s international poverty line defined as \$1.9 per day per capita at the 2011 purchasing power parity rate (PPP)), of which 175.8 million people (23.9 per cent) were residing in India. In relative terms, the proportion of population living in extreme poverty in India has plummeted from 45.9 per cent in 1993 to 13.4 per cent in 2015 (World Bank, 2019).

Further, an examination of the Global Hunger Index (GHI), which captures the multidimensional nature of hunger based on four components – undernourishment, child stunting, child wasting and child mortality rates – shows that the country has been performing poorly in terms of reducing the incidence of hunger. Despite an improvement in the GHI score from 38.8 in 2000 to 30.3 in 2019, India still suffers from serious levels of hunger.

### Linkage Between Nutritional Security and Economic Growth

The Indian states/UTs, a one per cent increase in per capita income reduces being underweight by 0.4 per cent, stunting by 1.4 per cent and the infant mortality rate by 0.6 per cent. Thus, it is evident that economic growth reduces child under-nutrition and mortality rate in India, with its impact being the strongest on the incidence of stunting. Economic growth can affect under-nutrition through two pathways. First, growth needs to trickle down to the lowest income deciles through increased household income or through increased government

spending. Second, increased income should result in augmenting household spending on nutrition and health or on government nutritional programs. There is growing consensus that poverty reducing economic growth with a framework to protect the poor and the vulnerable through efficient governance is crucial to accelerate the reduction in the incidence of malnutrition.

### **Food security and Nutritional Security in India**

In India, a major share of the population suffers from malnutrition despite the fact that India became self-sufficient in food grain production two decades after independence. Food grain production in the country increased from 176.39 million tonnes in 1990-91 to 315.72 million tonnes in 2021-22. However, it is important to recognize that self-sufficiency in food production and having enough food available per person for the country is not the only condition to achieve food security; households must also have access to available food to achieve adequate nutrients intakes. Availability and affordability of nutritious diet is crucial to reduce the burden of malnutrition.

Historically, food security in India was always synonymous with food grain security. The per capita availability of food grains has declined from 186.2 kg/year in 1991-92 to 185 kg/year in 2020-21. This decline in cereal availability has been concomitant with a marked increase in the availability of pulses (45 gm /day), eggs (90/annum) and dairy (427 gm/day) and a marginal increase in per capita availability of sugar and edible oil. This changing trend in per capita food availability reflects significant changes in the Indian food basket, away from staple food grains towards high-value horticultural and animal products.

### **Determinants of Malnutrition**

Nutritional intervention is a proxy for the utilization of prenatal and postnatal health care services for mother and child. Antenatal care (ANC) and delivery at a health facility with skilled assistance are key determinants of malnutrition, and has a significant effect on infant and child mortality rates. Immunization of children can reduce child morbidity and mortality and has a significant impact on the nutritional status of children. The percentage of children aged 12-23 months who received all the basic vaccinations (BCG, measles, and three doses each of DPT and polio vaccines) increased from 44 per cent in 2005-06 to 62 per cent in 2015-16.

The body mass index (BMI) of the mother is used as a proxy to measure the mother's nutritional status. Mothers with a BMI lower than 18.5 kg/mm<sup>2</sup> are classified as suffering from under-nutrition. At the all India level, the prevalence of low BMI among women has declined from 35.5 per cent in 2005-06 to 22.9 per cent in 2015-16. Across states, Jharkhand (31.6 per cent), Bihar (30.5 per cent) and Rajasthan (28.4 per cent) have a high proportion of women with low BMI whereas Manipur (8.8 per cent), Mizoram (8.4 per cent) and Sikkim (6.4 per cent) reported a low proportion.

The other key factors that have a significant impact on reducing child malnutrition indicators are the duration of breastfeeding, nutritional and health care interventions such as antenatal care, taking iron folic acid (IFA) supplements, place of delivery and caste. The states with a low percentage of children breastfed within one hour are Uttar Pradesh (25.4 per cent), Rajasthan (28.4 per cent), Uttarakhand (28.8 per cent), Punjab (29.9 per cent), Bihar (35.3 per cent) and Jharkhand (33.0 per cent). Goa (75 per cent) and Mizoram (73 per cent) performed better in terms of children being breastfed within one hour. Nutritious food should contain a diverse diet from different food groups to provide the child with micro-nutrients. In 2015-16, around 22 per cent of children (aged 6-23 months) were given minimum dietary diversity, 35.9 per cent were given minimum meal frequency and only 9.6 per cent were fed a minimum acceptable diet. Mothers' educational status is strongly associated with the nutritional status of children as well child mortality indicators.

## Determinants of Infant Mortality Rate

Mortality and nutritional security are closely interlinked and several of the multi-sectoral solutions to address child malnutrition such as breastfeeding practices, health care utilization, wealth index and mother's educational status along with birth order and mother's age have a significant impact on child mortality.

## Future Prospects and Existing Policy Initiatives

According to FAO, Tackling the challenges of malnutrition requires adoption of an approach that combines short- and long-term actions, and strengthens the linkages between the preventable and curable aspects, developmental and humanitarian interventions. According to UNICEF (2015), the risk of stunting, wasting, micronutrient deficiencies, being overweight and obesity can be significantly reduced through nutrition specific interventions by focusing on disadvantaged women (particularly pregnant and lactating women) and children under the age of 2 years.

There are already a number of nutritional schemes relating to food, health, water and sanitation, poverty and education in India that directly/indirectly affect the nutritional status of children (0-6 years of age), pregnant women and lactating mothers. Among the major programmes being implemented by the government at the national level is the provision of food grains (wheat and rice) to around 813 million individuals (67 per cent of the population) residing in India under the National Food Security Act (NFSA) (the largest food based programme in the world). The scheme is being implemented in all 36 states/UTs. Studies have shown that access to the public distribution system (PDS) increases the consumption of cereals and hence, the intake of calories by households.

It has been widely accepted that women's education is closely linked to a reduction in the fertility rate, mortality rate, lower population growth and improved nutrition. In May 2008, the National Scheme of Incentive to Girls for Secondary Education (NSIGSE) was launched to reduce dropout rates and promote the enrolment of the girl child (14-18 years) at the secondary stage. The scheme covered all SC/ST girls who have passed class VIII from Kasturba Gandhi Balika Vidyalayas (irrespective of whether they belong to the SC/ST community) and enrolled for class IX in state/UT government, government-aided or local body schools.

To enable self-development, improve their nutritional and health status, and promote awareness about health, hygiene and nutrition among adolescent girls of the age group 11-18 years, the Rajiv Gandhi Scheme for the Empowerment of Adolescents – SABLA – was launched in 2010 in 200 districts of India on a pilot basis. The central government also introduced the *Beti Bachao Beti Padhao* (BBBP) campaign on January 22, 2015, to address the declining sex ratio and eliminate gender bias against the girl child. More recently, the Government of India launched the *Samagra Shiksha* scheme in 2018-19 to make good quality education accessible and affordable to all. The scheme subsumed the three erstwhile centrally sponsored schemes of *Sarva Shiksha Abhiyan* (SSA), *Rashtriya Madhyamik Shiksha Abhiyan* (RMSA) and Teacher Education.

As a result of these initiatives, the enrolment ratio of girls to boys at the primary level (class IV) improved to 95.39 per cent in 2017-18 from 85.5 per cent in 1990-91. The dropout rates among girls at the primary level declined from 6.49 per cent in 2014-15 to 6.30 per cent in 2016-17 (Lok Sabha Questions Unstarred, 2018b). According to the ASER rural report (2018), the overall proportion of girls in the age group 11 to 14 years who are out of school has fallen to 4.1 per cent.

## Covid-19 Impact on Food and Nutritional Security

The novel coronavirus disease (COVID-19) was declared a pandemic by the World Health Organization (WHO) on March 11, 2020. Countries were advised to take immediate action to

stem the spread of the infection and save lives with minimum impact. As on July 20, 2020, a total of 14,508,892 cases of coronavirus have been confirmed worldwide, leading to the death of 606,206 people according to the John Hopkins Coronavirus Resource Centre. India took early action in the form of a nationwide lockdown to prevent the spread of coronavirus. Yet, the numbers quoted by the Ministry of Health and Family Welfare (MoHFW) shows that 11,18,043 cases have been reported in 32 states/UTs with 27,497 fatalities as of July 20, 2020.

The measures being taken by India as well as by other countries will help in fighting the spread of COVID-19 but a complete shutdown of all economic activities worldwide will have a negative economic impact. Moreover, the pandemic will also have a severe impact on absolute poverty in the short run. Many international agencies have estimated the impact of COVID-19 on global poverty. The World Bank claims that around 40-60 million people will be in extreme poverty globally in the coming months given the severity of the economic shock. The extreme poverty (measured at international poverty line of \$1.9 per day per capita) would increase by 50 million globally. For India, their estimates predict that the number of the extremely poor will increase by 10 million in the current year. So, the pertinent question is what will be the impact of the Covid-19 on the progress achieved in terms of nutritional security and what needs to be done to mitigate its negative impact on hunger and malnutrition in India.

The central government had initially announced Rs.1.70 lakh crore for the *Pradhan Mantri Garib Kalyan Yojana* (PMGKY). The package provided free food grain and cash payments to women, the poor, senior citizens and farmers. PMGKY offers an additional 5 kg of food grain and 1 kg of pulses per household to 80 crore individuals covered under NFSA until November 2020. Additionally, a relief-cum-stimulus package of Rs.20 lakh crore was announced by the government (10 per cent of the GDP) to achieve *Aatmanirbhar Bharat* (self-reliant India). The package subsumes a range of monetary and fiscal stimuli to revive the crippled Indian economy. These packages by the central government had neglected the urgent need for economic support to the millions of citizens who have lost their livelihood, particularly migrant workers. The only relief that was announced in the ‘stimulus package’ was distribution of free food grains to around 8 crore migrants for two months who were left stranded by the lockdown. However, neither of these relief packages is considered sufficient to mitigate the negative impact of the pandemic on food and nutritional security.

Moreover, various initiatives taken by the Centre and the state governments in terms of food transfer schemes such as MDM and ICDS have been frozen due to the breakdown of food markets. The COVID-19 pandemic has highlighted the gaps in our public health system and social safety nets that put nutritional security at risk and needs to be addressed. Unless state governments take urgent measures to keep food safety nets, and maternal and child health services functioning, the situation of malnutrition among women and children could worsen in the country.

### Policy Recommendations

The following measures to achieve nutritional security

1. Synergy between agricultural programmes and nutrition sensitive interventions
2. Food grain security to nutritional security
3. Investment in women’s education, particularly higher education
4. Maternal health and child care practices
5. Integrated nutrition policy against multi-dimensional indicators of malnutrition

The major ongoing central government programme, *swachh bharat abhiyan*, aims to push the safe drinking water, universal sanitation coverage and hygiene (wash) agenda of the sustainable development goals.