

Food Security Vs Nutritional Security—need for Multi-sectoral Convergence

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Abstract

The persistence of under nutrition in India is a cause for deep worry. In India, 3000 children die every day; 79 per cent in children under five and 56 per cent in young women suffering from anemia and the problems of low birth weight, chronic energy deficiency, iodine deficiency, and Vitamin A and B deficiency are of enormous concern. Only 55 per cent of adult women in India consume milk or curd once a week, only 33 per cent eat a fruit once a week, and 28 per cent get an egg (second National Family Health Survey). Today, food security concerns include not only the problems of physical availability of food stocks but also of nutrition practices and knowledge that can help or hinder the absorption of food into the body. While the Green Revolution concerned with production exclusively and not nutritional aspect, which is the ultimate end, need to be addressed in the second Green Revolution. It requires involving agriculture, nutrition, health, livelihoods, and women's empowerment (Ved and Menon 2011). Both direct and indirect interventions are called for; improving the dietary pattern by promoting the production and increasing the per capita availability of nutritionally rich foods, production of pulses, oil seeds and other food crops, production of protective food crops such as vegetables, fruits, milk, meat, fish and poultry shall be augmented. Preference shall be given to growing foods such as millets, legumes, vegetables and fruits (carrots, guava, papaya and amla), green leafy vegetables (palak, moringa). For this, high-yielding variety of above mentioned crops are to be extensively cultivated and their improved cultivation practices increasingly made available to farmers through adequate extension services. The schemes of central and state governments like National Horticulture Mission, National Food

Security Mission, Rashtriya Krishi Vikas Yojana, National Rural Health Mission, Mahatma Gandhi National Rural Employment Guarantee Scheme, Strengthened Integrated Child Development Services (ICDS), Enlarged Mid-Day Meal Programme in schools etc., shall be integrated with other development schemes as nutrition affects overall development. Malnutrition free India is possible with the engagement of numerous players and integrating nutrition with overall development strategy of the country.

Keywords: Malnutrition, nutritional security, food security.

1. Status of malnutrition in India

Preventing under-nutrition has emerged as one of the most critical challenges to India's development planners in recent times. Due to malnutrition, the loss to gross domestic product (GDP) runs as high as 3 to 4 percent. Despite substantial improvement in health and well-being since the country's independence in 1947, under-nutrition remains a silent emergency in India, where it is equally common among the population, more so in the vulnerable groups such as women and children.

1.1 Intensity of Malnutrition

Almost half of all children under the age of three are underweight, 30 percent of newborns born with low birth weight, and 74 percent of children are anemic. Under-nutrition is the underlying cause for about 50% of the 2.1 million under-5 deaths in India each year. Pelletier et.al. (1995) identify malnutrition by virtue of its synergistic relationship with infectious disease has a powerful impact on child mortality in India.

The major nutritional deficiency widely prevalent among the pregnant women is iron deficiency. As per the latest NFHS-2 survey, about half of the pregnant women suffer from iron deficiency and consequent anemia – 35 per cent suffer from mild anemia, 15 per cent from moderate and 2 per cent from severe. Other major nutritional deficiencies of public health importance in the country are Vitamin A deficiency and iodine deficiency.

Vitamin-A deficiency, which leads to preventable blindness, is more common among the children from the rural households. The people live in hilly regions are more prone to iodine deficiency.

The prevalence of under nutrition is the highest in Madhya Pradesh (55%), Bihar (54%), Orissa (54%), Uttar Pradesh (52%) and Rajasthan (51%), while Kerala (37%) and Tamil Nadu (27%) have lower rates. The contributing factors for under-nutrition are household food insecurity and intra-household food distribution, imbalanced diet, inadequate preventative and curative health services, and insufficient knowledge of proper care and infant feeding practices. Malnutrition amongst women is one of the prime causes of low birth-weight babies and poor growth and it is a vicious cycle.

2. Food Security Vs Nutritional Security

2.1 Food Security

According to a report by National Nutrition Monitoring Bureau (NNMB), Cereal-pulse based Indian diets are qualitatively deficient in micronutrients particularly iron, vitamin A and riboflavin (hidden hunger), due to low intake of protective foods such as pulses, vegetables particularly green leafy vegetables (GLV), fruits, and foods of animal origin. NNMB Surveys done between 1975-79, and 2005-06, show marked reduction in the intake of nutrients as percent RDA (Recommended Dietary Allowance) — Energy 97 to 76, protein 103 to 82, calcium 152 to 110, iron 62 to 53. The challenge to food security comes mainly from the slow growth of purchasing power of the people. Food security can be ensured by increasing agricultural productivity mainly of protective foods, augmenting the income of the farmers, through organized markets for agricultural produce, making available food at an affordable price through the public distribution system (PDS), and other poverty alleviation programmes. In PDS, food stamps could be issued to the consumers to buy the grain of their choice not just rice and wheat. This suggestion had come as the outcome of study by Gali B and Rao P P (2012) who suggested that sorghum should be included in the Public Distribution System (PDS) in Maharashtra, Karnataka and Andhra Pradesh because in these places sorghum was staple food once but not now. It can be applicable to other regions also where the food crops, which are having local advantage, are not consumed as expected. It will definitely increase the accessibility of millets and pulses to the target group, which comprises highly of women and children who are of highly prone to malnutrition.

2.2 Nutritional Security

The micro-nutrient deficiency can be cost effectively rectified by certain effective Govt. policy, supplementary nutritional programmes to the children and the expectant and lactating mothers and other poverty alleviation programmes. In India, nearly half of the rural children are suffering from malnutrition. On one side there is non-availability of food and on other side there is change in consumption pattern of affordable people. For example, Radhakrishnan (2005) has reported in his study that decline in per capita consumption of pearl millet both in rural and urban areas at all-India level was due to several factors but the most important ones were increase in per capita income, growing urbanization, changing tastes and preferences.

To eliminate malnutrition, diversified food including of minor millets, pulses, fruits and vegetables should be included in the diet. Healthy diet in terms of quality (e g, intake of animal protein, vitamins, minerals, and so on) to be ensured. For diversified food, all cereals should be given importance not just rice and wheat. Millets like sorghum, bajra, ragi and pulses like soybean and *rajma* which is having high protein content should be regularly included in the diet. Local production seems to be an important factor influencing its consumption. And the arrangements of purchasing it should be made available through PDS. And the farmers will also be encouraged to grow these crops because if the Govt. procures then they will be getting Minimum

Support Price. Our research should be focused on improving the productivity of those crops, which are of highly nutritious. Rao (2000) argued in his study about infrastructure. He reported that “roads facilitated mechanised transportation, which increases “better availability of urban goods” in rural areas, which in turn diversified their food baskets. Hence, connectivity between production system and processing industry, rural and urban and market to consumer is very much essential to ensure accessibility.

And processing industries should come in urban areas where diversified products like dosa, vermicelli, upma are of high in demand. Because, lack of availability of processed products comparable to those available for cereals has contributed to the decline in consumption of millets like sorghum, bajra, ragi and so on.

3. Multi-sectoral Convergence

First of all, nutrition should be an important component of professional and school education. People particularly vulnerable sections i.e. pregnant and lactating women should be made aware of nutritional value of essential food items which are of must needed for a healthy diet. Illiterate people can be educated through their school going children and grand children. And then, it should be made available to all particularly to women and children. Education, particularly of women is important for optimum utilization of the available services and creating demand. School children, youth and pregnant women who are the future of India should be sensitized more about nutritive value of food and its importance and the effect of its deprivation on body and its development. Here comes the role of extension agents who are the change agents in a social system, shall be exploited in this direction too.

The second green revolution has to be nutrition oriented, which was neglected in production oriented Green Revolution, to have inclusive and equitable growth and development of our country. The platforms of various schemes like National Horticulture Mission, National Food Security Mission, *Rashtriya Krishi Vikas Yojana*, National Rural Health Mission, Mahatma Gandhi National Rural Employment Guarantee Scheme, Strengthened Integrated Child Development Services (ICDS), Enlarged Mid-Day Meal Programme in schools etc., which directly or indirectly oriented towards nutrition to get the maximum mileage out of the current efforts. And the various schemes of different ministries which directly or indirectly influence nutritional security shall be integrated together with other development schemes as nutrition affects overall development of the country.

For food and nutrition security there has to be awareness, availability of food (inclusive of pulses, millets, fruits, vegetables, milk and so on) and access of food at affordable cost at household and individual level, are of foremost important. By improving the dietary habits of our people both in terms of quantity and in terms of quality, we can strive for malnutrition free India, which is not so easy, but at the same time not impossible provided all the stakeholders of agriculture and development

programmes, policy makers, pla administrators, field level agents, farmers and consumers professionals and people in general work together in synergy.

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