Review Article



Challenges in Achieving Food Security in India

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Abstract

First Millennium Development Goal states the target of "Halving hunger by 2015". Sadly, the recent statistics for India present a very gloomy picture. India currently has the largest number of undernourished people in the world and this is in spite of the fact that it has made substantial progress in health determinants over the past decades and ranks second worldwide in farm output. The causes of existing food insecurity can be better viewed under three concepts namely the: 'traditional concept' which includes factors such as unavailability of food and poor purchasing capacity; 'socio-demographic concept' which includes illiteracy, unemployment, overcrowding, poor environmental conditions and gender bias; 'politico-developmental concept' comprising of factors such as lack of intersectoral coordination and political will, poorly monitored nutritional programmes and inadequate public food distribution system. If the Millennium Development Goal is to be achieved by 2015, efforts to improve food and nutrition security have to increase considerably. Priority has to be assigned to agriculture and rural development along with promoting women empowerment, ensuring sustainable employment and improving environmental conditions (water, sanitation and hygiene). As the problem is multi-factorial, so the solution needs to be multi-sectoral.

Keywords: Food security, Challenges, India

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Introduction

Food insecurity per se, exists when all people, at all times, do not have physical and economic access to the sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (Food and Agriculture Organisation, FAO, 1996) (1). Food insecurity can lead to lower cognitive ability, diminished work performance and substantial productivity losses. All of these can hamper the growth and development of national economy.

India has made substantial progress in health determinants over the past decades. The critical indicators of health, including Infant Mortality Rate, maternal mortality ratio, disease prevalence, and morbidity as well as mortality rates have shown consistent decline over the years. India's life expectancy has improved and infant mortality, nearly halved in the last fifty years (2). There has been an impressive economic progress with achievements in the domain of agriculture contributing significantly. India ranks second worldwide in farm output. Agriculture and allied sectors like forestry, logging and fishing accounted for 18.6% of the gross domestic product (GDP) in 2005 and employed 60% of the total workforce (3). However, the problem of chronic hunger and malnutrition seems to prevail on a large scale. India currently has the largest number of undernourished people in the world i.e. 212 million. The total number of undernourished people was 172.4 million in 1990-92 which rose to 237.7

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million in 2005-07 i.e. nearly 38% increase in undernourished people (4,5).

Reasons for the existing food insecurity in India

In rural and tribal areas

This is mainly due to lack of improvement in agricultural productivity owing to inadequate resources and markets needed to obtain agricultural stability. An agrarian crisis is currently being unleashed in India and it has a variety of causes, the prominent being the huge cut in government's development expenditure in the nineties, particularly in rural areas (6). Following the adoption of structural adjustment policies from the early 1990s, the focus was shifted on expenditure reduction. As against an average of 3.8 per cent of the country's Net National Product (NNP) spent on rural development per year during the seventh plan period 1985 - 90, the share of spending on rural development was down to 1.9 per cent of NNP in 2000 - 01 and rose only to 2.3 per cent in 2004 - 05. This adversely affected the availability and expansion of irrigation facilities, improvement in agricultural technology and overall food grain output (7). Lack of education and job opportunities in rural areas have further added to the problems. Climate change too, has an impact on the agricultural productivity, which affects the availability of food items and thus, food security. Major impact of climate change is on rain fed crops, other than rice and wheat (8). For the tribal communities, habitation in remote difficult terrains and practice of subsistence farming has led to significant economic backwardness.

In urban population

The key issue which catalyzes the problem of food insecurity in urban areas and needs to be addressed is the large proportion of informal workforce resulting in unplanned growth of slums which lack in the basic health and hygiene facilities. Rural-to-urban migration has shown a gradual increase, with its share in total migration rising from 16.5% to 21.1% from 1971 to 2001 (9). These rural migrants form a large chunk of population referred to as 'informal sector'. The emergence of these rural origin pockets in the urban areas has resulted in a number of slum settlements characterized by inadequate water and sanitation facilities, insufficient housing and increased food insecurity (10). Another important point which might promote food insecurity is the dependence of this labourer class on daily employment wages which tends to be variable on different days of the month and thus the food procurement and access is also fluctuating. A striking issue is that in India, all the privilege of the government schemes and programmes, aimed at helping the urban slum people, is enjoyed only by those slums that are notified. Ironically, around 50 % of the urban slums are not notified and thus are deprived of the government schemes. People from these un-notified slums have to buy their food from the common market at the competitive price and are devoid of the subsidized food made available through Public Distribution System (PDS) (11). In spite of rapid economic growth since the early 1980s and 1990s, the access and absorption indicators of urban food insecurity convey a notion that there has been relatively negligible improvement in nutritional intake and deterioration in terms of food security.

In children and mothers

The children are food insecure because of factors attributed to overpopulation, poverty, lack of education and gender inequality. Poverty is a major cause as it limits the amount of food available to children. Overpopulation is linked to competition for food and can lead to malnutrition amongst children, especially in rural areas where access to food is limited. Lack of adequate knowledge amongst mothers regarding nutrition, breast-feeding and parenting is another area of concern (12). Gender inequality places the female child at a disadvantage compared to males and causes them to suffer more because they are last to eat and considered less important (13). Also, there is neglect in form of lack of preventive care (specifically immunization) and delays in seeking health care for disease (14). Girl children have far less opportunity of schooling than men and boys do (15). Even where women may have access to basic facilities such as primary health care and elementary education, lack of opportunities for higher education, vocational and professional training for women limits their capacity to become independent (16).

There is also an issue of wage differentials. In India, there does exist gender-specific wage rates differences. The females are at a more disadvantaged position compared to men in the rural labour market. The relative male-female wage gap is larger in non-agriculture sector where female workers earn 65 percent of male wages while in manufacturing, female wages are only 59 percent of male wages (17). All these factors contribute to limiting the productivity of women, in turn jeopardizing their long term purchasing power.

Faulty food distribution system

Inadequate distribution of food through public distribution mechanisms (PDS i.e. Public Distribution System) is also a reason for growing food insecurity in the country. The Targeted Public Distribution System (TPDS) has the disadvantage in the sense that those people who are the right candidates for deserving the subsidy are excluded on the basis of non-ownership of below poverty line (BPL) status, as the criterion for identifying a household as BPL is arbitrary and varies from state to state. The often inaccurate classification as above poverty line (APL) and below poverty line (BPL) categories had resulted in a big decline in the off take of food grains. Besides this, low quality of grains and the poor service at PDS shops has further added to the problem.

Unmonitored nutrition programmes

Although a number of programmes with improving nutrition as their main component are planned in the country but these are not properly implemented. For instance, a number of states have yet to introduce the Mid Day Meal Scheme (MDMS). In states such as Bihar and Orissa where the poverty ratio is very high, poor implementation of nutritional programmes that have proven effectiveness has a significant impact on food security (18).

Lack of intersectoral coordination

Lack of coherent food and nutrition policies along with the absence of intersectoral coordination between various ministries of government such as Ministry of Women and Child Health, Ministry of Health and Family Welfare, Ministry of Agriculture, Ministry of Finance etc have added to the problem.

Challenges and Way Ahead

There is a compelling need to operationalise the concept of nutrition security which implies physical, economic and social access to balanced diet, clean drinking water, safe environment, and health care. Ensuring food security alone will aid in reducing hunger but will not eliminate malnutrition or impact nutrition status largely if other components such as safe drinking water and health care are also not envisaged.

Implementing measures to improve agricultural productivity and food storage

The government policy needs to adopt an integrated policy framework to facilitate the increased use of irrigation and newer farming techniques. The measures should focus mainly on rationale distribution of cultivable land, improving the size of the farms and providing security to the tenant cultivators apart from providing the farmers with improved technology for cultivation and improved inputs like irrigation facilities, availability of better quality seeds, fertilizers and credits at lower interest rates. One main reason why food is not distributed equitably is that a significant amount is wasted (19).

It would be useful to adopt strategies for food storage which have been implemented successfully in other countries. For example, China has an excellent system of grain storage education and research (20). The country has invested in building advanced storage facilities that are armored with modern equipments. India can take professional help from the China in order to improve the quality of food storing facilities so that the food grains that are wasted and spoiled could be used to satisfy the hunger of those people who really need it.

Ensuring food availability and accessibility to below poverty line (BPL) candidates

It is essential to ensure availability of food grains to the common people at an affordable price. This can be done by more accurate targeting of the BPL population so that they get food at substantially low price. There is a problem associated with the BPL listing. There is a debate about the exact number of people falling under this category. The estimates of the government are around 30 per cent of the population. The Planning Commission (under the Government of India) has now recommended a 37 per cent cut off based on the Tendulkar Committee report (21, 22). Besides helping out the BPL population, there should be a provision for subsidy on the sale of food grains to above poverty line (APL) customers too. Also, all restrictions on food grains regarding inter-State movement, stocking, exports and trade financing should be removed. This will reduce the food prices and increase affordability. The Public Distribution System must be made transparent and reliable.

Improving purchasing power through employment generating schemes

The government should come up with more holistic schemes like Mahatma Gandhi National

Employment Rural Guarantee Act (MGNREGA) (23). Poverty alleviation programmes like the Integrated Rural Development Programme (IRDP) and employment generation schemes like Jawahar Rozgar Yojana, Nehru Rozgar Yojana etc need to be re-oriented and up scaled to make a positive impact on the purchasing power of the lower socio-economic segment of the population. Also, it is equally important to enhance the quantity and quality of wage-paid employment. Focus needs to be shifted to the workers in the informal sector by providing decent wages and healthy working conditions. In the urban areas, providing assistance to the small scale enterprises will lead to expansion of employment opportunities. It should be ensured that nutritional objectives should be an integral part of all the poverty alleviation programmes.

Crop diversification, establishing food grain banks and promoting household gardening

Another area which needs to be explored is 'crop diversification'. Higher profitability and the stability in production highlight the importance of crop diversification, e.g. legumes alternative with rice and wheat. Growing of non-cereal crops such as oilseeds, fruits and vegetables etc need to be encouraged. The creation of decentralized food grain banks in each village or block of the district, from which people may get subsidized food grains against food coupons, will be a good option. This concept will improve the delivery of food grains and eliminate corruption.

One of the ways to ensure direct access to good quality food that can be easily grown and prepared could be the concept of home gardening. One excellent example of household gardening can be seen in Bangladesh where as part of its global effort to eliminate vitamin A deficiency and nutritional blindness, the NGO Helen Keller International implemented a home gardening and nutrition education project (24). The concept worked upon was that promotion of lowcost vegetable gardens amalgamated with nutrition education could prove to be instrumental for improving the nutritional status, particularly women and young children. As a result of this intervention, the average household income increased and also the nutritional intake. Using community leaders through a group approach will indirectly ensure community participation and will add to the success of the concept.

Community awareness through IEC activities and social marketing

Need based IEC and training materials should be developed for effective dissemination of nutrition messages. Local community education on key family health and nutrition practices using participatory and planned communication methodologies will be helpful. Incorporating health and nutrition education into formal school curriculum for girls and adult literacy programmes could greatly improve women's health and nutrition. Social marketing of iodized salt, iron and folic acid and vitamin A supplements, nutritious food mixes and other low cost vitamin/mineral preparations will prove to be beneficial.

Monitoring and timely evaluation of nutritional programmes

A complete community based approach needs to be adopted. Focus on even simple interventions like promoting exclusive breastfeeding, proper complementary feeding and growth monitoring and promotion (GMP) can be expected to give outstanding results. Efforts should be made by the concerned health departments and authorities to initiate and supervise the functioning of the nutrition related schemes in an efficient way. Annual surveys and rapid assessments surveys could be some of the ways through which program outcomes can be measured. Evaluations must be timely performed and should provide relevant information regarding the effectiveness of interventions. Use of information technology to improve program monitoring can be thought of too.

Community participation and intersectoral coordination

Revamping of existing direct nutrition programmes to enable management by women's Self Help Groups (SHGs) and /or local bodies along with orientation and training of community health workers, Panchayati Raj Institution (PRI) members, other opinion leaders, care givers and other stakeholders can be another area, if addressed, can give positive results. Delivering very basic, well-targeted package of nutrition services through a multi-sectorial approach will improve the nutrition level of people. Attention needs to be given to school based interventions including hygiene, sanitation and nutrition education. Community based nutrition programs (CBNP) which create scope for community participation, must be facilitated by effective policy implementation.

Ethical Considerations

Ethical issue principles including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc. have been completely observed by the authors.

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