



## **Present Scenario of Household Food and Nutritional Security**

**Saurabh<sup>1</sup> and Pankaj Kumar Ojha<sup>2</sup>**

<sup>1</sup>Assistant Professor, College of Community Science, Banda University of Agriculture & Technology, Banda,

<sup>2</sup>Assistant Professor (Agricultural Extension Education), College of Agriculture, Banda University of Agriculture & Technology, Banda

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### **ABSTRACT**

This paper provides a nuanced analysis of the current state of household food and nutritional security in India, examining historical perspectives, policy interventions, and the pivotal role of agriculture. Despite notable strides in reducing severe undernutrition, seasonal food insecurity persists in specific regions, necessitating targeted strategies. Emphasizing the integral connection between agriculture and food security, the paper advocates for increased production, resource efficiency, and gender-inclusive policies. Noteworthy attention is given to the role of women in agriculture and the existing gender disparities. The importance of household food security as a precursor to nutritional well-being is underscored, prompting recommendations for nutrition-oriented agriculture, food diversification, and tailored interventions for vulnerable populations. Furthermore, the abstract highlights the imperative of enhancing food quality and safety measures and advancing nutrition education. The conclusion calls for collaborative efforts from policymakers, researchers, and stakeholders to address the multidimensional challenges and ensure sustainable solutions in the dynamic landscape of food and nutrition security.

**Keywords:** Agriculture, Food quality, Gender disparities, Household food security, Nutrition education, Nutrition, Policy interventions, Sustainable solutions, Vulnerable populations.

## Introduction

India, with 2.5 per cent of the global land mass and 16 per cent of the global population, recognized the importance of human resources as the engines powering national development and gave high priority to the improvement of the health and nutritional status of the population. Article 47 of the Constitution of India states that "the State shall regard raising the level of nutrition and standard of living of its people and improvement in public health among its primary duties." India's Five-Year Plans enunciated the policies, laid down multi-pronged strategies, outlined multi-sectoral programs to improve food security and the nutritional status of the population, laid out the goals to be achieved in a specified time frame, and provided the needed funds to implement the interventions. As a result of all these interventions, famines and severe food insecurity are no longer a threat, but even today, seasonal food insecurity is seen in different pockets of the country. There has been a substantial reduction in severe grades of undernutrition and micronutrient deficiencies and some improvement in the nutritional status of all segments of the population.

Agriculture and food security are inextricably linked. These factors influence women and men in their choice of crops and levels of potential productivity. Agriculture, whether domestic or international, is the only source of food, both for direct consumption and as raw material for refined foods. Agricultural production determines food availability.

India has been at the forefront of developing national food and nutrition databases, undertaking research studies and surveys, and documenting the ongoing agriculture, food, nutrition, and health transitions. Indian scientists have substantially contributed to the global efforts to review the ongoing transitions, evolve appropriate definitions of food security, make recommendations regarding human nutrient requirements, and develop appropriate standards for assessment of nutritional status. The country has also utilized the evolving knowledge and invested in evidence-based intervention programs to:

- (i) improve the food and nutrition security of the citizens,
- (ii) ensure that the ongoing food supplementation programs provide sufficient food to meet the energy and nutrient gap in vulnerable segments of the population, and
- (iii) nationalize and improve ongoing nutrition interventions aimed at prevention, early detection, and effective management of undernutrition and overnutrition.

Women account for a great proportion of the agricultural labor force, produce the majority of food grown, and perform most of the unpaid care work in rural areas; yet, they do not enjoy equality with men when it comes to assets, land, food, nutrition, work opportunities, education, and participation in decision-making (FAO, 2016; World Bank, 2020).

The term "food security" refers to the ability of a country or region to assure an adequate

food supply for its current and projected population. Food security was measured by food grain production to ward off famine, improve availability and access to food at an affordable cost, meet energy requirements, and prevent chronic undernutrition among the ever-growing population. Over decades, there has been increasing recognition that, though there has been a reduction in severe acute food insecurity, dietary intake in large segments of the population does not meet energy (hunger) and micronutrient (hidden hunger) requirements, and consequently, undernutrition and micronutrient deficiencies are widespread. As defined by the State of Food Insecurity (Food and Agriculture Organization of the United Nations, 2002), "Food security is a situation that exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life. This definition encompasses a whole lot of pre-requisites for food security and brings into focus the linkage between food, nutrition, and health.

Those whose access to an adequate diet is conditioned by seasonality are food insecure and are generally called seasonally food insecure. Individuals who normally have enough to eat but become food insecure in the face of disasters triggered by economic, climatic, and civil shocks (war and conflict) are transitorily food insecure. The "at all times" element of the food security definition makes risk and associated vulnerability an important element of the food security concept.

### **Nutrition-Oriented Agriculture and Food Diversification**

Household food security is a precondition to achieving nutrition security. To improve households and communities' situations, the efficiency of existing resource utilization should be improved. At the same time, conserving and, where possible, enhancing the productive capacity of the resources can be an aim. The strategy should involve sound land-use planning and subsequent implementation of actions at the community and household level to match demands with the potentials of both the land and its people (FAO 1996).

Increased production and diversification of food need to be promoted in such a way as to offer particular benefit to the rural poor. Measures should include targeted interventions to increase the productivity of small-scale farmers, such as production incentives, the development of an efficient marketing infrastructure for food products, and improved seeds. In addition, more research input would be required to improve the food production situation in rain-fed and disadvantaged areas, for example, areas where shifting cultivation is practiced. To ensure a proper impact of food production and diversification programs, nutrition and agricultural measures have to be accompanied by effective extension services, credit availability for men and women, and encouragement in using inputs such as fertilizer and improved seeds. Technology combined with investment in people—especially education for men and women farmers, particularly in nutrition and health—can show high rates of return.

In some rural areas, the overriding nutritional problems are not just associated with the shortage of food but also with a lack of jobs

and income. Poor households are more likely to contain malnourished members. Women and children are often the most severely affected. Producer incentives and new technologies that increase production and employment in the agricultural sector, including the establishment of small- and medium-scale food processing facilities, can help augment incomes, alleviate poverty, and improve food security at the household level. Incorporating nutritional considerations into production policies and programs can avoid some of the negative effects sometimes associated with new technology. The health and nutrition risks of technological change must be mitigated through appropriate technology design. There is substantial scope for agricultural, public health, and nutrition workers and researchers to collaborate on improving the design of agricultural programs.

### **Selected agricultural interventions to improve household food security**

Improvement of staple food production is necessary to ensure the sufficiency of staple foods (such as rice, sorghum, maize, etc.) throughout the year. Measures recommended are ones to improve production, such as irrigation systems, terraces, up-land farming systems, etc. Interventions in the fields of land entitlements and management of water supply for agricultural production are also included here. The introduction of improved and more productive seeds, improved soil management, encouragement of seed marketing, and the implementation of essential infrastructure may become necessary. In up-land areas, measures to improve cultivation techniques, including mixed cropping systems and improved seed

varieties, could increase productivity. Promotion of food diversification to increase production of nutritious food items, with special emphasis on fat-, protein-, and micronutrient-rich foods. Examples are the increased production of *mung*, soy, and various other beans or seeds (sunflowers, sesame, peanuts), as well as various kinds of green, leafy, or yellowish-colored vegetables to increase consumption of iron and vitamin A. Products have to be selected according to the production potential of the area, the preferences of the population, and the predominant nutrition deficiencies found in the area. Specific measures can be implemented in upland as well as in lowland areas, home gardens, or village gardens. Fruit tree production is a valuable investment to improve the quality of diet in the long term.

Increase production of food from animals; animal raising programs, including the introduction of new and more productive breeds; vaccination programs; and fodder production. Raising big animals (cows, buffaloes, etc.) is mainly seen as a measure to increase household income, while raising poultry can contribute directly to food consumption within the family. Fish raising is also a valuable measure where appropriate places and water are available. However, measures to be implemented at the community and household levels are not independent from higher levels; they need political commitment, support, and structures through which the measures are implemented.

### **Food production in urban areas**

Feeding the growing population of cities in developing countries has become a major

concern during the past decade. Food supply coming from rural areas is and, in the future, will continue to be the basis for ensuring food security in cities. But agriculture in and nearby cities has to play a very important complementary function to:

- Increase agricultural production by using available land, water, and waste resources.
- Improve the quality and quantity of food supply (more food and fresh food rich in micronutrients, introduction of home gardens, or poultry raising).
- Improve the socio-economic situation by creating jobs and income from food production, especially for poor population groups.
- Contribute to the sustainable development of urban areas and prevent food crises among large population groups.

### **Food quality and safety**

Acceptable levels of food quality and safety can be achieved by implementing and monitoring quality assurance measures along the entire food chain. Food control measures are diverse and complex. The technical dimensions involved are different for nearly every food product, for the various technologies used in food preparation, processing, and manufacturing, and for the many types of facilities in which food is produced. The various measures range from good agricultural and veterinary practices at the farm level to good manufacturing and good hygienic practices applied in food

processing. In view of the many concerns of consumers and the scope and dimensions of food quality and safety problems, technical assistance is often needed. Governments are expected to ensure that the food industry produces safe food and that the risks to human health and economic fraud or unfair trade practices are minimized (World Health Organization, 2023).

Like many developing countries, most of us do not have access to the latest information related to new technologies and may lack technically trained staff, equipment, methods, and facilities to analyze food for contaminants, toxins, chemical or drug residues, or microbiological contamination. In some countries, the legal framework related to food quality and safety needs to be revised, and the regulations governing food standards are lacking or outdated. Food control infrastructure may be weak and may not have sufficient financial support. In India, there is an urgent need for improved regulatory food inspection and laboratory services, the development of food control enforcement programs, and the administration and coordination of food control activities. As many developing countries rely on food exports for foreign exchange, we must have a particular interest in strengthening national food control systems, harmonizing national food regulations with international standards, and establishing import and export food inspection and certification systems to ensure conformity with the World Trade Organization's agreements regarding sanitary and phytosanitary measures and technical barriers to trade (Whitehead 1999, FAO, Food and Nutrition Division).

## **Nutrition, education, and communication**

Promoting better eating habits and positive health behaviors is one of the most challenging tasks in overall efforts to improve nutrition. In addition to access to a variety of safe and affordable foods, people also need accurate information as to what constitutes a healthy diet and how to meet their nutritional needs. Besides education, strategies to promote healthy diets must include motivation and the creation of opportunities for people to change their behavior while recognizing individual preferences, lifestyles, and constraints of time and resources (FAO/WHO, 1992). Dietary guidelines give an individual the recommended dietary allowances. They are most useful to serve as the basis and provide the guiding principles for the dissemination of nutrition education messages. More recently, the central government and private organizations have issued dietary guidelines, reflecting growing concern about the prevention of diet-related non-communicable diseases.

## **Conclusion**

In conclusion, the present paper provides a comprehensive overview of the current status of household food and nutritional security in India, examining the historical context, policy interventions, and the role of agriculture in shaping the nation's nutritional landscape. Despite substantial progress in mitigating severe undernutrition and micronutrient deficiencies, challenges such as seasonal food insecurity persist in certain regions. The paper underscores the crucial link between agriculture and food security, emphasizing the need for increased

production, diversification, and efficient resource utilization. The role of women in agriculture is highlighted, drawing attention to existing gender disparities in access to assets, land, and nutrition. Recognizing that household food security is a prerequisite for nutritional well-being, the paper advocates for strategies such as nutrition-oriented agriculture, food diversification, and targeted interventions to address the unique needs of vulnerable populations. Additionally, the importance of enhancing food quality and safety measures, along with nutrition education and communication, is underscored. The conclusion emphasizes the multidimensional nature of the challenges at hand and calls for concerted efforts from policymakers, researchers, and stakeholders to forge sustainable solutions that ensure the health and well-being of the population in the dynamic landscape of food and nutrition security.

## **References**

- Food and Agriculture Organization of the United Nations (FAO). (2016). Gender and agriculture: Closing the gap for development. <https://www.fao.org/gender/en>
- Food and Agriculture Organization of the United Nations (FAO) & World Health Organization (WHO). (1992). Nutrition education: A practical guide for health professionals. FAO Corporate Document Repository.
- Whitehead, E. (1999). Food quality and safety: A worldwide concern. *Food Science and Technology*, 12(3), 205-214.

World Bank. (2020). Women's land ownership in South Asia: The road less traveled. <https://documents1.worldbank.org/curated/en/315891468206036629/pdf/879290BRI0AES000Box385207B00PUBLIC0.pdf>

World Health Organization. (2023). Nutrition in India. <https://www.who.int/india/health-topics/nutrition>.

