

## Current initiatives and road ahead for food security in India: A critical study.

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Dr. Indresh Kumar

Program Coordinator, Reginal Center of Excellence Nutrition Rehabilitation Resource and Training, Department of Pediatrics, AIIMS Bhopal, India. Email: [kumar.indresh@hotmail.com](mailto:kumar.indresh@hotmail.com)

Mobile No. 8574741072

### ABSTRACT

**Background:** Conditions that food security arises when all people at all times have physical and financial access to adequate, safe, and healthful food to assemble their dietary requirements and food preferences for an active and healthy life. India ranked 71th out of 113 countries assessed by the Global Food Security Index (GFSI) in 2020 based on four parameters: affordability, availability and quality, and safety. According to the 2022 Country Rankings, India ranked 68<sup>th</sup> out of 113 countries in the GFSI. Spending on food subsidies has increased over the years, but the proportion of people living below the poverty line has declined. The objective of this study is to assess the challenges and suggestions for food security initiatives in India by reviewing the available reports and research articles. **Material and method:** Present study is based on secondary data published by the government department, published in reputed research articles, and suggestions of experts given during conferences and seminars were included. **Result:** Several studies show that governments need to expand subsidies to include other high-protein foods as they can increase the imbalance of grains in the diet. Increase food production Actions that need to be taken to achieve food security for a growing population through education and literacy, combating climate change, improving technology adoption, integrated nutrition management, integrated water management, and crop and diversification.

**Keywords:** Food security; food affordability; food availability; food act; hunger in India; public distribution system.

### RESUMEN

**Antecedentes:** La seguridad alimentaria surge cuando todas las personas tienen en todo momento acceso físico y financiero a alimentos adecuados, inocuos y saludables para satisfacer sus necesidades dietéticas y preferencias alimentarias a fin de llevar una vida activa y saludable. India ocupó el puesto 71 entre 113 países evaluados por el Índice Mundial de Seguridad Alimentaria (GFSI) en 2020 según cuatro parámetros: asequibilidad, disponibilidad y calidad, y seguridad. Según la clasificación de países de 2022, India ocupó el puesto 68 entre 113 países en la GFSI. El gasto en subsidios alimentarios ha aumentado a lo largo de los años, pero la proporción de

personas que viven por debajo del umbral de pobreza ha disminuido. El objetivo de este estudio es evaluar los desafíos y sugerencias para las iniciativas de seguridad alimentaria en la India mediante la revisión de los informes y artículos de investigación disponibles. Material y método: El presente estudio se basa en datos secundarios publicados por el departamento de gobierno, publicados en artículos de investigación de renombre y se incluyeron sugerencias de expertos dadas durante conferencias y seminarios. Resultado: Varios estudios muestran que los gobiernos necesitan ampliar los subsidios para incluir otros alimentos ricos en proteínas, ya que pueden aumentar el desequilibrio de los cereales en la dieta. Incrementar la producción de alimentos Acciones que deben tomarse para lograr la seguridad alimentaria para una población en crecimiento a través de la educación y la alfabetización, la lucha contra el cambio climático, la mejora de la adopción de tecnología, la gestión integrada de la nutrición, la gestión integrada del agua y la diversificación y los cultivos.

Palabras clave: Seguridad alimentaria; asequibilidad de los alimentos; Disponibilidad de comida; ley alimentaria; hambre en la India; sistema público de distribución.

## INTRODUCTION

Food security means providing enough food at both times to all people so that they can lead an active and healthy life (George & McKay, 2019). For this, it is necessary that not only should there be a sufficient quantity of food available at the aggregate level, but that individuals or families also have adequate purchasing power. So that they can buy food grains as per the requirement (Desai & Vanneman, 2015). As far as sufficient quantity is concerned. It has two aspects-a quantitative aspect and a qualitative aspect. As far as suitable purchasing power is concerned, it is necessary that employment generation programs should be started so that the income and purchasing power of the people can be increased (Saxena & Mohan, 2021).

Under the auspices of the United Nations, all countries launched a massive campaign against starvation. Many countries have made rapid progress in this direction in the last two decades (George & McKay, 2019). However, in countries with large populations like India, efforts in this direction are still sluggish (Priyadarshini & Abhilash, 2021). That is why now the world community has called for an end to the problem of hunger. The United Nations has set a new agenda for sustainable development and has included 'Zero Hunger' among the 17 Sustainable Development Goals, with a resolution to end the problem of hunger by 2030 (Kumar et al., 2022).

However, during the medieval period, due to external aggression and a lack of a proper system of food security during the colonial period, the country also faced severe calamities of famine and starvation (Swaminathan & Bhavani, 2013). Due to subsistence exploitation and widespread poverty, a large section of the country's population was malnourished (McKay et al., 2020). This is the reason that when the country became independent in 1947, the framers of the constitution made a provision for the fundamental right to life for every

citizen in Article 21 of the Indian Constitution (Sukhwani et al., 2020). At the same time, under the Directive Principles of Policy, Article 47 laid down the duty of the state to raise the nutritional level and standard of living of the people. The year the Constitution came into force in the country, planned development began in the form of five-year plans (Saxena & Mohan, 2021). The agricultural sector was emphasized in the Five Year Plans and the Green Revolution started in the 1960s, making the country self-sufficient in food production. At the same time, measures were initiated in the seventies to improve the level of nutrition in parallel with this (George & McKay, 2019). The Integrated Child Development Scheme was introduced in the seventies to provide nutritional benefits to children as per Article 47 (Chakrabarti et al., 2019).

Like the underdeveloped countries of the world, India also has a large number of people who do not get enough food to survive. Not only this, but the food that is available to them also lacks nutrients (Ramachandran, 2013). This problem of food remains the cause of the serious crisis for a large population of the country. The food problem has been a challenge for the country since independence and it remains the same even today (Sims et al., 2021). There are 3 aspects to this problem in India.

1. The first is that we have recently faced a shortage of food grains, which are the staple food of most Indians.
2. Second, the food that is available here is unbalanced.
3. Third, many people live in lack of purchasing power to get food grains or nutritious food even in the lowest quantity. In such a situation, it is natural for the lives of millions of people to be miserable.

The objective of the study was to assess the Food Security Initiatives in India and their drawbacks.

## MATERIAL AND METHODS

Primary and secondary data have been used in the present research paper. The data has been compiled through magazines, newspapers, and various websites and books. The nature of this study is descriptive. An attempt was made in this study to reach the desired conclusions by doing an integrated study of the existing literature on the related topic. The study includes research papers and institutional reports published between 2013 and 2022.

## RESULTS AND DISCUSSION

According to UN-India, India has nearly 195 million undernourished people, accounting for a quarter of the world's hunger burden. About 43% of children in India are chronically malnourished (Singh & Srivastava, 2019). The number of people living below the poverty line in India decreased by about 22% from 2011 to 2012. Poverty

rates were calculated using the Tendulkar method. India ranked 76th out of 113 countries assessed by the Global Food Security Index (GFSI) in 2018 based on four parameters: affordability, availability and quality, and safety (Priyadarshini & Abhilash, 2021). According to the 2020 Country Rankings, India ranked 71st out of 113 countries in the GFSI. According to the 2018 World Hunger Index, India ranked 103rd out of 119 eligible countries. According to the 2020 World Hunger Index, India ranked 94th out of 107 countries, well behind countries such as Bangladesh, Pakistan, and Nepal (Saxena & Mohan, 2021). About 14.8% of India's population is undernourished, according to FAO's report *The State of Food Security and Nutrition in the World, 2018*. According to the *State of the World Food Security and Nutrition Report 2020*, the prevalence of malnutrition among the general population in India decreased from 21.7% in 2004-06 to 14% in 2017-19 (Savary et al., 2022).

In short, over the past five years, food insecurity among poor households has increased and there has been a lack of investment in programs such as ICDS that contribute to improved nutrition. While there is some improvement in other determinants of undernutrition, the NFHS-5 factsheet finds increased access to toilets, increased vaccination coverage, and several indicators of women's empowerment, For example, 10+ years of education or bank accounts also show improvement, a benefit that seems to be offset by ignoring basic household food security and access to a diverse diet (Dharmalingam et al., 2021).

According to Righettini et al., (2022), between 2005-06 and 2015-16, the country saw some improvement in nutritional outcomes, with the overall prevalence of stunting increasing from 48% (NFHS-4) to 38.4% (NFHS-5). This improvement, though still slow, represents a reversal from the previous stagnant trend. This was at a time when real wages were rising and government social security schemes were expanding. A combination of inclusive growth and coordinated direct action is needed to improve the nutritional determinants of women and children. Over the past five years, we have failed on both counts (Nagappa et al., 2020).

#### Solutions to the food problem

The following measures can be taken to solve the food problem, which is as follows.

**Balancing demand and supply:** To solve the food problem, first of all, it is necessary to establish a balance between the demand and supply of food grains. This balancing should be done from the demand side and also from the supply side. But the other side is more important (Rautela et al., 2020). As far as the demand side is concerned, it is necessary to take this measure to check the rapidly increasing population and also to curb unnecessary consumption.

**By eradicating poverty:** A permanent solution to the food problem can be done by improving the economic condition of these poor people, who are the real victims of food shortages and their high prices. In this context, three important tasks are expected.

- One has to give an employment-oriented form to productive activities. This means that such a method of production should be adopted, in which labor is predominant and at the same time work efficiency is also maintained.
- The second thing is to create or increase the efficiency of the unemployed or under-employed persons to increase productivity per capita.
- The third measure is social justice and judicious distribution.

By making the public distribution system efficient: This problem can also be solved to some extent by making the public distribution system efficient. There is a lot of confusion about the prices of agricultural commodities and their produce (Sukhwani et al., 2020). Therefore, the public distribution system of the country should be so efficient. Due to this essential consumption items like food grains are available at reasonable prices.

But, especially to reach the people of weaker sections of society. In this context, the policy aimed at price stability, yield enhancement, and proper distribution of food items, will have to suitably adjust various interrelated measures (Kumar & Gautam, 2022). Only then the public distribution system will be able to make a proper contribution to solving this problem.

Steps were taken by the government to solve the food problem

Food problems emerged as the biggest challenge before India soon after independence. This was the reason that the organizers accepted an important goal of the event to achieve self-sufficiency in food (Desai & Vanneman, 2015). The first Prime Minister of the country, Pandit Jawaharlal Nehru also considered food self-sufficiency as the basis of the country's progress and development. Later Mrs. Indira Gandhi adopted 'Seeds, Water, Fertilizers, Technology', linking food security with national self-respect, which was popularly named as Green Revolution. can be placed under.

- Increase in the food supply
- Delivery system improvement
- Stability in food prices
- Measures to control demand
- Efforts to eradicate poverty

Food security has been a major challenge since the beginning of human life. There is still a crisis of food security in many countries of the world. In the second half of the twentieth century on the strength of the Green Revolution, India managed to overcome self-sufficiency in food production from terrible tragedies of chronic famine and starvation but provided nutritious food to a large section of the population. Still a big challenge. Under the Food Security Act, a target has been set to provide about 550 lakh tonnes of food grains every year at

affordable rates through TPDS. Therefore, there is a need to look at and evaluate the experience of the National Food Security Act, 2013 so far so that its implementation mechanism can be more effective and robust.

**Public Distribution System:** The Indian Public Distribution System is probably the largest distribution network in the world. It is the only means of ensuring the availability of essential food items at affordable prices (Chakrabarti et al., 2021). Not only this, but it also acts as an auxiliary tool in the fight against poverty. To run this system, the government buys goods from traders and producers at realizable prices, and the purchases made are distributed through fair-price shops. Some of the recoveries are kept for the construction of resistive stores (Rajpal et al., 2020). Apart from food grains, PDS is also used for the distribution of edible oils, kerosene, sugar, coal, clothes, etc. In this system, the entire population has been included i.e. it is not restricted to any particular class.

The main objective of the Public Distribution System in India is to provide rations to consumers at affordable prices, so that they can be protected from the effect of their rising prices and to help the population to achieve the minimum required level of consumption (Kumar & Gautam, 2021). Under the public distribution system, wheat, rice, edible oil, sugar, kerosene, etc. are given to the people in prescribed quantities at a price below the market price. These things are given based on a ration card. Since June 1997, arrangements have been made to provide food grains to the people living below the poverty line at half the cost of the Food Corporation of India (Gavaravarapu & Hemalatha, 2018).

Schemes run under Public Distribution System:

- I. Targeted Public Distribution System
- II. Annapurna Scheme
- III. Emergency Diet Program
- IV. Integrated Child Development Services
- V. Lunch Plan

The corporation has also been entrusted with the responsibility of maintaining a resistant stock of food grains on behalf of the government (Kulkarni & Mamidi, 2019; Padmapriyadarsini et al., 2016). In recent years the role of FCI has also increased due to the increasing production of wheat and rice. The following are the achievements of the Food Corporation of India:

- To meet the demand of the Public Distribution System, it has become quite easy to make available food grains in reasonable quantities.
- Due to the recovery of food grains from farmers in official quantities, the need for the import of food grains has been reduced and valuable foreign exchange has been saved.
- Food Corporation of India has been successful in providing remunerative prices to the farmers by purchasing the produce at pre-announced prices.

- By providing food grains at reasonable prices, the corporation has helped in meeting the food requirements of the poor.
- The Food Corporation of India has helped in the creation of scientific storage systems in the country.

National Cooperative Consumer Confederation: It is a national organization. 30 state cooperative consumer organizations are associated with this council. There are more than 800 consumer cooperative stores at the central wholesale level. There are about 22000 primary stores at the primary level (Gavaravarapu, 2019). About 45000 village-level primary agriculture credit societies and marketing societies are engaged in the distribution of essential commodities along with their normal business in rural areas. About 38000 retail outlets in urban and suburban areas are being operated by the consumer cooperative society. The headquarter of the council is in New Delhi.

The forward Trading and Forward Markets Commission was established under the Forward Contracts (Regulation) Act 1952. This commission works under the Ministry of Consumer Affairs, Food, and Public Distribution.

Along with the achievements of the public system, it has had some shortcomings, which need to be clarified (Turin et al., 2020). The public Distribution System can be criticized under the following points.

1. The Public Distribution System in India has been mainly limited to wheat and rice. Under this, very little attention has been paid to the distribution of coarse cereals (Joshi et al., 2019). Apart from this, ration cards are given to only those people who have a home and permanent address.
2. There is wide variation in the dependence of the poor sections on the public distribution system in different states. The dependence of the lower classes on the public distribution system for rice is 60% in Kerala and less than 1% in Bihar (Jadhav & Mannar, (2021).
3. Corruption is a major problem in the smooth functioning of the Public Distribution System. The adoption of corrupt practices by the shopkeepers of fair-price shops leads to the theft of food grains on a large scale from the public distribution system. A study conducted by TCS reveals that 31% of rice and 26% of wheat of the PDS are sold in the open market (Sinha, 2021).
4. The Public Distribution System is still running in the old-fashioned way. No survey of any kind has been done on this. It is also applicable in areas having developed areas such as western Uttar Pradesh. Almost all the farmers in this area are capable in their own right. They grow enough crops from their fields so that they can survive (Godbole et al., 2021). But not only marginal or small or poor people are taking advantage of this public distribution system, but landlords are also taking advantage of it, so there should be a survey by the government, and only those who are eligible to take ration should be given ration (Panda et al., 2020).

### Solutions to Problems in Food Subsidy Delivery

The following solutions address the study of different reports and articles and will help in addressing problems associated with PDS:

- By direct benefit transfer (DBT) of the replacement food subsidy of the covered public distribution system "TPDS". The National Food Security Act (NFSA) says centers and states must establish a system of cash transfers to beneficiaries. Cash transfers are intended to expand beneficiary options and provide financial assistance. It has been argued that the cost of DBT may be lower than that of his TPDS due to lower transportation and storage costs. These transmissions may also be made electronically. DBT will reduce government subsidies by more than Rs 3 lakh, according to a report by the High-Level Commission of the Food Corporation of India (FCI).
- Automating fair-price shops is another important step in tackling the PDS problem. Currently, his over Rs 430,000 (82%) fair price shops across the country are automated. Automation includes installing point-of-sale (PoS) devices to authenticate beneficiaries and record transactions electronically.
- The introduction of Aadhar and biometrics was recommended to stop PDS leaks. Such transfers are linked to Jan Dhan accounts and may be linked to inflation. It facilitates the removal of fake ration cards, checks for leaks, and provides better delivery of food grains. In February 2017, the ministry made it mandatory for NFSA beneficiaries to use Aadhaar as proof of identity to receive food grains (Rahman, 2016).
- Ration cards are now 100% digital.
- Between 2016 and 2018, Aadhaar seeding detected and removed 1.5 million counterfeit, duplicate, and fake ration cards. Increase government-led procurement known as Decentralized Procurement (DCP) and reduce spending on centralized procurement by the Food Corporation of India (FCI). This greatly reduces the transportation costs borne by the government as the states distribute the grain to targeted populations within their respective states. As of December 2019, 17 states have introduced decentralized procurement (Mbuya et al., 2020)
- According to the government, fair-price stores operate at very low-profit margins. Therefore, fair-priced shops should be allowed to sell non-PDS items and make them commercially viable (Thulasiraman et al., 2021). This will motivate them not to engage in unfair practices in the distribution of government-subsidized grains to beneficiaries of government programs.

### CONCLUSION

It concludes that large numbers of people in the country are dying of hunger, despite the food being stored in the warehouses of the Food Corporation of India. This can be estimated using the World Bank index. So we need to change the public distribution system that can get India out of this situation. Only then can this liberalization meet the needs of the economy. India's position is important as studies show that nearly 195 million



people are malnourished and the agricultural sector is in deep crisis. India was one of the first developing countries to prioritize food security as a policy goal, achieving self-sufficiency in food grain production in the 1970s. The question is whether India can become a grid provider at a time when the population is suffering from high levels of hunger and malnutrition. India must meet this challenge and build on its achievements. Some policy changes are essential to improve India's hunger situation: (i) Universal PDS and complementary programs on nutrition, (ii) Sustainable agricultural practices, resource use and subsidy review, (iii) Improving social security (iv) India's status in the WTO and development cooperation initiatives, (iv) increment in the budget, technology, research, and development.

#### ACKNOWLEDGEMENTS

Articles for this review article were taken from Electronic Data Hub, for which the author is thankful. The authors declare that no funds or other support were received during the preparation of this manuscript.

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Sustainability, Agri, Food and Environmental Research, (ISSN: 0719-3726), 11(X), 2023:  
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Received: 10<sup>th</sup> October 2022; Accepted: 11<sup>th</sup> July 2023; First distribution: 18<sup>th</sup> September 2023.