



Food Security in India: Issues and Measures

KEYWORDS

Food Security, Mal-nutrition, Food Security Act, India's Food Policy, NFSA

Dr. B. D. Karhad

Associate Professor, B. M. College of Commerce, Pune 411 004

ABSTRACT *Production of certain cereals has increased in India and now the country is one of the largest producers of cereals like rice and wheat. However, the number of people who are struggling with hunger and malnutrition remains very high. In this study the researcher checks whether food safety measures adopted in India are sufficient to ensure the availability of enough food for everyone and also to reduce malnutrition, using the library online research. The researcher feels that food safety measures adopted in India were not enough, so the current food safety law is necessary. For the success of NFSA there is a need to obtain the cooperation of related departments of state and central government. Research paper concludes that at present the biggest challenge is not only improving the productivity of agriculture, but making accessible to the poor and needy food grains. The Food Security act is not only the scheme, but an opportunity for India to assume full responsibility for food safety of its citizens.*

INTRODUCTION:

Currently, millions of people around the world suffer from hunger and malnutrition. In 2007, the United Nations (UN) estimated about 850 million people worldwide who suffer from malnutrition. It also estimated that African and Asian continents have 799 million undernourished people, most of them living in developing countries. The main cause of this problem is food insecurity. India has over 120 million people and the second most populous country in the world. To feed this population farmers are working very hard for centuries.

Well, we have achieved self-sufficiency in food production; the majority of the Indian population does not get enough food or balanced food. Due to the increase in average cereal production per capita consumption of cereals is satisfactory, but there is a decrease in consumption per capita pulse. Production and consumption of fruits and vegetables is relatively low. Until now, specific efforts are not taken to improve the production and distribution of vegetables at an affordable cost in both urban and rural areas.

Food insecurity is a condition, where very less food is available for the household member. In such situation, the food intake of household members is reduced and their normal eating pattern is disrupted because the household lacked money and other resources for food.

The paper is written with an objective to discuss food security measures with reference to recent national food security act, its challenges, benefits, limitations and to give suggestions to ensure food security in India.

DEFINITIONS:

1. According to the Organization for Food and Agriculture (FAO) of the United Nations, food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for active living and healthy life.
2. According to the European Crop Protection Association, food security often refers to food availability and an individual's access to food. A person can be considered "food secure" if they do not live in hunger or fear of starvation. In addition to hunger and starvation, food security can also refer to the availability of a sufficient nutrition to ensure a healthy diet, avoiding the health impacts of malnutrition.

3. According to the Department of Agriculture of the United States, "Food insecurity is a situation of limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways."

Hypothesis:

Null Hypothesis (Ho): Food safety measures taken in India are enough to ensure the availability of sufficient food for all and also to avoid malnutrition.

Alternative Hypothesis (H1): Food safety measures taken in India are not enough to ensure the availability of sufficient food for all and also to avoid malnutrition.

Research Methodology:

The research paper is prepared using a research library with online access to books, journals, articles, surveys and encyclopedias.

Objectives of study:

1. To study food safety measures taken in India.
2. To anticipate the challenges of food insecurity in India.
3. To discuss limitations and propose measures to reduce food insecurity in India.

REVIEW OF LITERATURE

KCS Acharya (1983) discusses evolution of the concept of food grain reserve in the food policy of India. According to him, what is central to the concept of food security is management of food economy in a manner society does not have to depend upon external assistance to meet the normal cyclical shortages that occur in the agricultural economy.

Manoj Panda, Ganesh Kumar (2009), observe that food security / nutritional status outcome with regard to individual nutrients depends crucially on movements in the relative prices of different commodities along with changes in income levels. These results show that trade policy analysis should consider indicators of food security in addition to the overall growth and poverty measures traditionally considered in such studies.

Sujoy Charvarty, Sejal A Dand (2005) observe that the main determinants of food insecurity in India today are the shrinking of agrarian and informal sector incomes and failures (both due to policy framing as well as implementation) of support led measures to combat poverty. The latter include the near breakdown of the targeted public distribution system (TPDS)

in most regions of the country.

MH Suryanarayana (1997) observes although assessments by conventional macro measures show considerable improvement in food security in India, the levels of cereal consumption and calorie intake of even the general population are still below the normative threshold limits.

MS Swaminathan (2011) has suggested a package of measures to ensure food security to all as below.

1. Revisiting international trade rules, in order to promote a "food security oriented" trading system.
2. Creating a better market information system, inclusive on the level of stocks, to help restore confidence in international markets.
3. Tightening up speculation on the futures market to avoid price manipulations.
4. Reviewing support to bio-fuels, except when there is a win-win situation for both food and energy security.
5. Reducing food waste and post-harvest losses and ensuring food safety.
6. Increasing investment in ever-green agriculture and in agricultural research.
7. Giving greater attention to the net income of smallholder farmers.

Parchi Mishra (2013) points out that one needs to take into account not only the cost of the food subsidy but also the costs of setting up or running new institutions and bureaucracies, and the costs that are likely to arise if there are political pressures to protect the existing beneficiaries. There are still more imponderables, and the final cost could add up to much more than what is now estimated.

According to Deepa Sinha (2013) a number of independent estimates have been made of the cost of implementation of the National Food Security Act. However, these estimates are either based on wrong assumptions or work with numbers that are not in the public domain. The one thing that most of them share is an attempt to demonstrate that the costs will be unaffordable.

ELEMENTS OF FOOD SECURITY:

1. Food Availability:

Food availability is meant by the physical existence of food either from own production or from the market. At the national level, food availability derives from the combination of domestic food stocks, commercial food imports, food aid and domestic food production. Per capita availability of the food grains in India, in the year 1951 was 144.1 kg. After 56 years i.e. in 2006 per capita availability of food grains went up by just 18 kg. It means increase in food grains is very less than the rate of increase in population in India as shown in the table.

Table 1: Yearly Net availability of food grains (per person) in India (in kgs)

Year	Cereals				Pulses	Total Food grains
	Rice	Wheat	Other	Total		
	2	3	4	5	6	7
1951	58	24	40	122	22.1	144.1
1961	73.4	28.9	43.6	145.9	25.2	171.1
1971	70.3	37.8	44.3	152.4	18.7	171.1
1981	72.2	47.3	32.8	152.3	13.7	166
1991	80.9	60	29.2	171	15.2	186.2
2001	69.5	49.6	20.5	141	10.9	151.9
2006	72.3	56.3	22.1	150.7	11.8	162.5

- Cereals includes rice, wheat and other cereals
- Food grains includes rice, wheat, other cereals and all pulses

2. Access to food:

It is ensured that all households and all individuals within those households have sufficient resources to obtain appropriate food for a nutritious diet. It depends on the level of household resources (capital, labor and knowledge), food prices and the existence of social safety net. Therefore, adequate access to food can be obtained without being self-sufficient in food production. More importantly, it is the ability of households to generate sufficient revenue, which, with its own production, can be used to meet food needs. For example, India today has more than 30 million tonnes of wheat and rice in government warehouses, yet poverty-induced hunger affects over 200 million people.

3. Use and utilisation of food:

Use requires not only an adequate diet, but also a healthy physical environment, including availability of adequate drinking water and sanitation (to prevent disease) and an understanding of proper health care, food preparation and storage processes. In addition, the ability of health care, behavior and practices are equally important. According to UN-ESCAP (2006) 148 million people who struggle daily to get drinking water live in rural India.

4. Stability of food security:

Stability refers to the time dimension of food security. A distinction can be made between chronic food insecurity (permanent) and transitory food insecurity (temporary).

FOOD SECURITY IN INDIA:

Government of India has taken several steps to increase productivity of agriculture. These include schemes like; Rashtriya Krishi Vikas Yojana (RKVY), National Food Security Mission (NFSM), Development and Strengthening of Infrastructure facilities for Production and Distribution of Quality Seed, National Horticulture Mission (NHM), Rainfed Area Development Programme (RADP), Integrated Scheme of Oilseeds, Pulses, Oil Palm and Maize (ISOPOM), Gramin Bhandaran Yojana etc. In addition, Government has also improved the availability of farm credit; implemented debt waiver; introduced better crop insurance schemes; increased Minimum Support Price (MSP), improved marketing infrastructure, etc.

Further in order to provide food security to the people by ensuring availability of food at affordable prices, Government has enacted National Food Security Act, recently. The National Food Security Act is a historic initiative for ensuring food and nutritional security to the people. It gives right to the people to receive adequate quantity of food grains at affordable prices.

Salient features of the act are:

1. Upto 75% of the rural population and upto 50% of the urban population will have uniform entitlement of 5 kg food grains per month at highly subsidized prices of Rs. 3, Rs. 2, and Rs. 1 per kg. For rice, wheat, coarse grains respectively. It will entitle about 81 crore people while under the existing Targeted Public Distribution System only 2.5 crore Antyodaya Anna Yojana (AAY) families or about 32.5 crore persons (assuming 5 as the average household size) are getting food grains at these prices. Thus, population getting food grains at these highly subsidized prices as their legal right will increase to 67% from existing 27%.
2. The poorest of poor households would continue to receive 35 kg food grains per household per month under Antyodaya Anna Yojana at subsidized prices of Rs 3, Rs 2 and Re 1.
3. Pregnant women and lactating mothers, besides being entitled to nutritious meals according to nutritional standards prescribed also receive maternity benefit at

- least Rs. 6000 / -. Children in the age group 6 months to 14 years have the right to take home ration or hot cooked food according to the prescribed nutritional standards.
- The central government will provide funds to States / Union territories, in case of shortage of grain from the central pool. In case of failure to supply food grains or meals to entitled people, the concerned state / UT governments are required to provide such allowance of food security as may be prescribed by the Central Government to beneficiaries.
 - Central government will provide assistance to States towards cost of intra-state transportation, handling of food grains and FPS dealer's margin. This will ensure timely transport and efficient handling of food grains.
 - Reforms have been undertaken for home delivery of grain, the application of information and communication technologies (ICT), including end to end computerization, diversification of products covered by TPDS etc. for effective implementation food security Act
 - Women Empowerment: Eldest woman of 18 years old and above will be the head of household for the issuance of ration card, and if not available, the eldest male member is to be the head of the family.
 - Grievance redressal mechanism: There will be the state and district level redressal mechanism with designated nodal officers. States will be allowed to use existing mechanisms for District Grievance Redressal Officer (DGRO), National Food Commission, if they wish, to save the costs of creating new redressal set up. Grievance Redressal Mechanism may also include call centers, telephone support, etc.
 - On the issue of redress of grievances that may arise in the implementation of such a program of mass social justice, it is expected to give a greater role for Panchayati Raj institutions and to self-help groups of women in program monitoring and social audit.
 - With this mega scheme of Strengthening the food security of the poor, destitute billions, with an Estimated annual food grain requirement of 612.3 lakh tonnes and Corresponding Estimated food subsidy of about Rs.1, 24,724 crore, during 2014-15, a new beginning is being made towards welfare of citizens. A food secure nation can only be economically and socially steady.

FOOD GRAINS REQUIRED UNDER NFSA 2013:

The NFSB envisages distribution of about 61.2mt of cereals, primarily rice and wheat, though the existing PDS and other welfare schemes, costing the exchequer about Rs. 125000 Crore annually. The break up is given in the table below:

Table 2: Food Grains Requirement under National Food Security Act, 2013	(Million Tonnes)		
	Wheat	Rice	Total
Requirement for beneficiary population (67% of 1.215 billion @ 5 kg per person)	22.0	26.8	48.8
Additional requirement for AAY @ 2 kg for 2.5 Crore households of 5 persons per household)	1.4	1.6	3.0
Estimated requirement for other welfare schemes	2.9	3.6	6.5
Additional requirement for protecting the average annual off-take of states	1.3	1.6	2.9
Total annual requirement	27.6	33.6	61.2
Monthly requirement (annual requirement / 12)	2.3	2.8	5.1

Source: Commission for Agricultural Costs and Prices, Discussion Paper No. 6, May 2013

CHALLENGES OF FOOD SECURITY:

The challenges India faces to meet its food security are-

- Productivity increase of Indian agriculture using high yielding seeds and modern technology.
- Changes in food consumption pattern due to changes in dietary habits of the population
- Malnutrition in India, especially in children to be reduced to zero.

- Development of supply chains of high value to cover the last recipient in time.
- Food security is a right and it is pre-requisite to enjoy other rights available to an individual.
- Hunger and poverty must be reduced to ensure food security for all beneficiaries.
- More investment in agriculture is needed within and outside India.
- Government neglect of agriculture is reflected in the suicide of the farmer.
- Research on new challenges that farmer's face like climate change, droughts and floods.

BENEFITS OF NFSA:

The Government of India has recently passed National Food Security Act, 2013, which would offer following benefits.

- NFSA has kept the poor as its top priority.
- Food security Act will help plug 30% leakage in PDS.
- Food security Act is a chance for India to take full responsibility of food security of its citizens.
- The legislation will provide highly subsidized food to two third of the country's population.
- An opportunity to ensure that no child is malnourished in the country.
- States are asked to identify the beneficiaries of the food scheme.
- Loopholes under PDS scheme would be taken care of in the Food Security act.
- Food security Act is a historic achievement for everyone.
- It is beginning of the fight to eradicate poverty and malnutrition in the country.

CRITICISM OF THE NFSA:

NFSA is criticized by stakeholders as below -

- It is an incomplete law of food security without provisions for the construction of infrastructure.
- The targeted approach NFSA excludes marginalized and may lead to corruption.
- Centre only wants to move the burden of Food Security Act to states.
- Law on Food Security would be a failure if it does not take care of the interests of farmers.
- Law on Food Safety does not have universal application, and is unclear on certain aspects.
- Food security Act has inherent flaws and deficiencies, since it fails to address both calorific and nutritional security of the poor.
- The task of obtaining, storage, transport, delivery is with the bureaucrat and not with the elected.

SUGGESTIONS:

Following suggestions are offered for the success of food security programme.

- There is a need to improve the PDS and plug leakage for success of National Food Security Act.
- Along with rice, wheat and coarse grains, the government must provide salt, edible oil and pulses at reasonable prices, especially for people from backward communities.
- Food Security Bill should give flexibility to states on how to distribute food grains to the actual beneficiaries.
- The very poor people should not be charged even Rs.3 per kg, but offered free food.
- The Centre and the State will have to work hand in hand for the success of Food Safety programme.
- Unless and until, the Panchayats and Municipalities are given more powers the Food Safety Act will not deliver with the desired results.
- Although there are some flaws in the law, it can be improved, based on experience, after its application.
- To address the problems related to food insecurity and malnutrition, good co-ordination and co-operation

between the departments of Health, Family Welfare, Women and Child Development, Education, Agriculture, Food, Rural and Urban Development, is imperative.

CONCLUSION:

Cereal production in India increased and the country has become the world's largest producers of cereals like rice and wheat. However, the levels of hunger and malnutrition remain high. At present, the biggest challenge is not only improving the productivity of agriculture, but also making the food grains accessible to the poor and needy. In such a situation, the Food Security Act would be an opportunity for India to assume full responsibility of food safety of its citizens.

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