

INDIA'S NATIONAL FOOD SECURITY ACT: IMPLICATIONS ON INDIAN AGRICULTURE

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ABSTRACT

In pursuance of the obligations under Indian constitution and International conventions, providing food security to all citizens has been the focus of the Government's planning and policy. National Food Security Act (NFS Act) is the latest initiative of Indian Government to achieve the food security through right based legislation. The ambitious programme of the Government, offers several opportunities like right based approach to give food to all its subjects, life based approach, women empowerment reforms in public distribution, revitalisation of agriculture etc. However, the Act throws many challenges like the huge financial implications like domestic subsidy on food, transparency in procurement and distribution of food, mitigating corruption, reaching the intended beneficiaries, impact of the Act on inflation and other macroeconomic indicators etc and hence raises many questions over its successful implementation in India.

KEYWORDS: Food Security, Agriculture, Extension, Implications

INTRODUCTION

The foreword of The Global Hunger Index published by International Food Policy Research Institute, Washington DC begin with the quote- "The dogs of hunger are not dead; some are sleeping, others are biting". Unsurprisingly, the issue of hunger and food insecurity arising out of poverty or otherwise continues to concern the policy makers, administrators, social researchers and the academia, especially in the third world countries.

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 (Anon., 1996). India has been quite successful in ensuring ample availability of food in the country. But making food available is only one aspect of food security, though an important one. Economic access to food and its absorption by people for better nourishment are other important aspects of food security.

Indian Constitution provides the right to life to all its citizens including the Right to Food (Article 21) and directs the state to take measures to raise the level of nutrition and the standard of living of its people and improve the public health (Article 47). The Universal Declaration of Human Rights and International Convention on Economic, Social and Cultural Rights, to which India is a signatory, also cast responsibilities on all State parties to recognize the right of everyone to adequate food. Eradicating extreme poverty and hunger is one of the goals under the Millennium Development Goals of the United Nations (Anon., 2013).

In pursuance of the obligations under Indian constitution and International conventions, providing food security to all citizens has been the focus of the Government's planning and policy. National Food Security Act (NFS Act) is the latest

initiative of Indian Government to achieve the food security through right based legislation. The ambitious programme of the Government, besides offering several opportunities, throws many challenges in its implementation. In this background, it is important to review the features of the NFS Act with special emphasis on its strengths and weaknesses and its implications on Indian Agriculture.

THE NEED AND RELEVANCE OF FOOD SECURITY ACT IN INDIA

Despite buoyant economic growth in recent years, around one-third of India's population (400 million people) still lives below the poverty line (Anon., 2010). According to the survey by United Nations Development Programme (UNDP) on Multi Dimensional Poverty Index, India is ranked at 75 among 109 countries and ranked 136 among 186 countries on Human Development Index. The survey by International Food Policy Research Institute (IFPRI) places India at 67th position among 81 countries in the Global Hunger Index (Anon., 2011). The Food Insecurity Index published by DuPont Chemicals places India at 66th position among 105 countries. For all the indices, better performing nations are ranked from one and the worst faring countries occupies last positions. Summary of India's rank in the surveys is given in the table given below.

Table 1: Summary of India's Rank in Different Surveys at the Global Level

Sl. No	Index	Rank	Agency/ Year
1	Human Development Index	136/186	UNDP, 2013
2	Global Hunger Index	67/81	IFPRI, 2011
3	Multi Dimensional Poverty Index	75/109	UNDP, 2010
4	Food Insecurity Index	66/105	DuPont chemicals, 2012

In all the Indices mentioned above, the performance of India's performance is very poor compared to many of its neighbouring countries and African countries. India has been pursuing various social welfare measures including the Public Distribution System (PDS) in 1974 and the Targeted Public Distribution System (TPDS) since December, 2000. But, the progress made by the country in alleviating poverty and hunger is less than impressive. Hence, the right based legislation was conceived to ensure the legal entitlement to minimum food for its citizens. The Food Security Bill after being introduced in the Lok Sabha was passed in both the houses after much debate and discussion and received President's assent on 10th September, 2013. The same was published in the official gazette of India by the Ministry of Law and Justice.

SIGNIFICANCE AND SALIENT FEATURES OF THE NFS ACT

The significance of the Act lies in its various features and provisions among which many were missing in the hitherto existing schemes and Government programmes. Some of the significant features are discussed here.

Right Based Approach

The act aims to give legal entitlement to every person belonging to priority households, to receive five kilograms of foodgrains per person per month at subsidised prices (specified in Schedule I from the State Government i.e Rs.1 per kg for millets, Rs. 2 per kg for wheat and Rs. 3 per kg for rice) under the Targeted Public Distribution System. The legal entitlement to receive food grains by persons will give them the constitutional rights to minimum food security. After this landmark legislation, the State on the other hand, is under legal obligation to ensure the availability of entitled grains to eligible persons.

Life Cycle Approach

Unlike the previous schemes of the Government, the NFS Act adopts the life cycle approach, in the sense; it is an integrated effort to address the food requirement of every phase of human life cycle starting from the infancy to the adult and the parenthood. The Pregnant and Nursing Women-can take home rations or nutritious cooked food during their pregnancy and six month thereafter through anganwadies and Rs1000/month as maternity benefits for a period of six months.

Food Security Allowance

In case of states' failure to supply the entitled quantities of foodgrains or meals to entitled persons, such persons shall be entitled to receive such food security allowance from the concerned State Government to be paid to each person. The time and manner of such an allowance will be prescribed by the Central Government.

Nutritional Support to Women and Children

The take home rations and maternity benefits to pregnant and lactating mothers is a welcome initiative considering the Country's poor record in Infant Mortality Rate and the Maternal Mortality Rate. In order to address malnutrition among children, any child below the age of 14, including those that are out-of-school, may approach any feeding facility such as anganwadi centre, school mid-day meals centres for midday meal.

Women Empowerment

In a major shift from the past, the eldest woman in every eligible household who is not less than eighteen years of age, shall be head of the household for the purpose of issue of ration cards. This is done with a rationale of helping the feeding hands to have first right to food grains rather than male member who on many occasions is presumed to divert the grains to black market or liquor shops in villages.

Grievance Redressal Mechanism

Every State Government shall put in place an internal grievance redressal mechanism which may include call centres, help lines, designation of nodal officers, or such other mechanism as may be prescribed. The State Food Commission and Central Food Commission will be established under the Act to oversee the effective implementation of the Act. The District Grievance Redressal Officer will look after and address the grievances of the public at every district.

Reforms in TPDS

The Act provides for Central and State Governments to endeavour to progressively undertake necessary reforms in the Targeted Public Distribution System in consonance with the role envisaged for them in this Act. Some of the reforms mentioned in the Act include, Doorstep delivery of food grains to the Targeted Public Distribution System outlets, application of information and communication technology tools for end-to-end computerisation, transparency in maintenance of records of transactions at all levels and to prevent diversion, leveraging "aadhaar", progressive preference in allotment of Fair Price Shops, diversification of commodities distributed, Introducing schemes such as cash transfer, food coupons to the targeted beneficiaries in order to ensure their foodgrain entitlements.

According to the provisions of the Act, the State governments are encouraged to undertake a decentralized planning process to procure, store and distribute food grain at local levels from district to panchayat, with a view to minimize transportation costs and losses and provide state governments with the appropriate facilities and incentives. The Act intends to accord preference to community institutions such as Self-Help Groups and Cooperatives or public bodies like Gram Panchayats or nongovernmental organizations and women collectives to establish the fair price shops.

Social Audit and Penalty Provisions

All Targeted Public Distribution System related records shall be placed in the public domain and kept open for inspection to the public, in such manner as may be prescribed by the State Government. Every local authority, or any other authority or body, as may be authorised by the State Government, shall conduct or cause to be conducted, periodic social audits on the functioning of fair price shops, Targeted Public Distribution System and other welfare schemes, and cause to publicise its findings and take necessary action, in such manner as may be prescribed by the State Government. The social audit can also be given to independent agencies having experience in conducting such audits. To ensure transparency and proper functioning of the Targeted Public Distribution System and accountability of the functionaries in such system, every State Government shall set up Vigilance Committees who can regularly supervise the implementation of all schemes under this Act.

STRENGTHS AND COMINGS OF THE SHORT NFS ACT

The salient features and several important key provisions of the NFS Act discussed above are strengths in themselves of the Act. However, in the present context of poverty, hunger, child and maternal malnutrition, state of public distribution etc, the Act comes as an answer to many questions if not a panacea for all miseries. Through the enactment of Act, now the food becomes everybody's right and every citizen becomes empowered to seek justice by approaching the court in the event of State's inability to give the entitled food to him. Other significant strengths of NFS Act are, life cycle approach as an integrated solution to human's food needs at various stages of life, women empowerment for food grain distribution, food security allowance, child and maternal health care, grievance redressal mechanism etc,. Additional benefits that are expected to flow after the implementation of the Act have the potential to address many other present day problems, which are discussed below.

Already the procurement quantity is high and reached a peak of 67 million tonnes during 2012-13. It is blamed that, excessive procurement in the absence of sufficient storage capacity, grains are allowed to get spoiled or subjected for huge pilferage. Instead of wasting the food in the godowns, the same can be given at cheaper price to the needy through the Public Distribution System.

The food grain production varies greatly among different Indian states. States like Punjab, Haryana, Andhra Pradesh and Uttar Pradesh produce huge quantity of food grains on the other hand, some states like Kerala, Rajasthan and States from North Eastern region account for very low production of food grains. This often results into problems of plenty in some states and problems of scarcity in some other states. The NFS Act through its distribution network and post-NFS Act reforms in the PDS will address this problem.

Despite the strengths mentioned above, the NFS Act has been widely debated over its several provisions starting from the time when the Bill was introduced and discussed in the parliament to its final enactment in the official gazette of

India. The Act has been the subject of criticism for its shortcomings related to its narrow approach to food security, the fiscal challenges it poses, inflationary pressure on the food items due to the Act, centralised food procurement, inadequate coverage of the population, rationale of spending so hugely on the welfare schemes, developing the dependency syndrome among the people, etc.,. Few of the key shortcomings and criticisms of the NFS Act are discussed below.

Food Security or Cereal Security?

The Act proposes to provide food and nutritional security to people. However, the Act falls short in keeping promise with its own provision as the foods covered are only rice and wheat. To meet nutritional security, the Act should focus on complete dietary requirement to include the pulses, vegetables, milk, meat etc in the food basket.

Gulati et al while discussing on the draft version of the Bill makes a valid observation on this account. Faster growth in per capita incomes and urbanization are triggering shift towards high value commodities like fruits, vegetables, fats and oils, and animal products such as dairy, poultry and eggs. Share of expenditure on cereals in total food expenditure has declined from 41% in 1987-88 to 29.1% in 2009-10 in rural areas and from 26.5% in 1987-88 to 22.4% in 2009-10 in urban areas. The Bill's focus on rice and wheat goes against the trend for many Indians who are gradually diversifying their diet to protein-rich foods such as dairy, eggs and poultry, as well as fruit and vegetables. There is a need for a more nuanced food security strategy which is not obsessed with macro-level foodgrain availability. *But at the policy level, the Government is still focused on foodgrains and with NFS Bill is clearly reversing the movement of Indian agriculture from high value items to foodgrains.* This will trap the Indian agricultural sector in a low level equilibrium trap as returns are generally higher in high value agriculture. But a faster movement towards high value agriculture needs large investments in infrastructure and risk mitigating strategies. The NFS Bill is likely to slow down this natural process, and at places even reverse this trend (Gulati Ashok *et al.*, 2012).

Coverage of the Population

The Act at present as mentioned in schedule-I propose to cover nearly 67.5 per cent of the country's population (75 per cent from rural areas and 50 per cent in urban areas). Though, the coverage is well above the poverty levels of India indicated by different surveys, it leaves sizable share of population outside the purview of the ambitious NFS Act. Moreover, covering 75 per cent and 50 per cent of rural and urban areas is totally arbitrary and without any scientific basis. The distinction between many among the covered under Act and many among the left out will be difficult to make. In this context, the Act throws up major challenge ensuring equitability, social justice for all and following the reforms in PDS in the same direction.

It is important to mention that some States are already covering the food security on near universal basis. States like Tamil Nadu and Chattisgarh were pioneers in giving the benefits under their PDS to all the citizens of the State with additional coverage of food items like sugar, salt, pulses, edible oil etc.,.

Timing of the Announcement of the Act

At a time when the nation was facing challenges on the macro economic issues, the Governments rationale to spend such a huge amount of subsidy with implications on current account deficit is questioned. There are apprehensions that, the NFS Act will raise government spending on food subsidies to about 1.3% of GDP (gross domestic product) per year from an estimated 0.8% currently, exacerbating the government's weak finances (Sinha Dipa, 2013). Bhalla (2013)

has argued that implementation of the bill will annually cost over Rs 3 lakh crore or 3% of GDP. It is also feared that, the policy of Government to spend huge for welfare schemes will deter foreign institutional investors' readiness to invest in India. It is argued and feared that, high taxation is the main measure of Government to raise money for welfare schemes.

Another criticism that was levelled with respect to timing of the Bill as it was passed when the Loksabha election was imminent. The incumbent Government under United Progressive Alliance was asked an uncomfortable question as why it remained silent on the NFS Act for nine years and became active only during the fag end of its second term.

Developing Dependency Syndrome

The NFS Act's provision of giving too many grains at too cheap rate to too many people is criticised by many. They argue that it will boomerang in the long run as it develops 'dependency syndrome' among the people and they lose motivation to work harder to earn their living. The Government's policy of wasting the tax payers' hard earned money on many ineligible people attracted the wrath of industries and working class. Instead, they suggest, the Government should have considered spending hugely on asset creation and enable people to get access to sufficient food. Though, the argument is not without substance, it is important to realise that, there are huge number of people in the age group who are not in the work force like the school going children, the aged, handicapped, women, pregnant women and nursing mothers, destitute, etc. The Act is a major step to help this section of needy population.

When we weigh the strengths and weaknesses or criticisms on the NFS Act, the strengths subdue the weaknesses, as the Act is a critical initiative towards addressing the longstanding problem of hunger, malnutrition and poverty in a holistic manner. However, it has to be ensured that, the perennial problems of corruption, nepotism, red tapism etc are countered well for the effective implementation of the NFS Act.

IMPLICATIONS OF NATIONAL FOOD SECURITY ACT

The national food security Act, once implemented is expected to have wide spread implications on various sectors of economy and more prominently on primary sector. Though, the impact of the NFS Act over a long period is yet to be studied, the immediate jerk reaction of market after the Bill was introduced in Parliament underscores the significance it holds over the Government policy matters. From the introduction of food Bill in the Loksabha to its final enactment, the share market was on crash mode and the rupee lost heavily against the dollar sliding from little above Rs 60/- US \$ to nearly Rs 69/- US \$ (Figure 1).



Figure 1: The Performance of Rupee against US Dollar after the Introduction of Food Bill during August, 2013

The other immediate jerk reactions were seen in the form of fleeting Foreign Institutional Investment (FIIs) and disapproval of the Government's policy of spending so huge on public welfare by a section of industrialists. Some significant implications that might arise after the implementation of the NFS Act are discussed below.

Financial Implications

The NFS Act, as mentioned before, has huge financial implications on the Indian economy. The estimates of National Advisory Council (NAC) shows that the food subsidy itself will cost around Rs. 85,584 crore to Rs. 92,000 crore. NAC has assumed a food grain mix of 60 per cent and 40 per cent wheat to make the subsidy calculations for three different scenarios of present, and two combinations of offtake ranging from 85 per cent for general and 95 per cent for priority households to 100 per cent. However, the actual ratio is 66 per cent for rice and 34 per cent wheat (Refer table). Other than food subsidy, the NFS Act will cost the state exchequer around Rs. 22,832 crore for meeting the expenditure on intrastate transport of food grains, establishment of state and central food commission, grievance redressal mechanism etc (Anon., 2013 b).

Table 2: Expected Cost of Subsidy for Three Different Scenarios after the NFS Act

	Rs Crores					
	NAC Projections* Scenario 1		Scenario 2* Offtake – priority-95% ; general-85%		Scenario 3* Offtake-100%	
	Phase 1	Final Phase	Phase 1	Final Phase	Phase 1	Final Phase
Priority Households	54,449	57,652	61,636	63,093	64,880	66,414
General Households	17,388	22,279	17,598	21,799	20,704	25,646
Total Subsidy Requirement	71,837	79,931	79,234	84,892	85,584	92,060
Current Subsidy**	56,700	56,700	56,700	56,700	56,700	56,700
Additional Subsidy	15,137	23,231	22,534	28,192	28,884	35,360

***Population:** Scenario 1–October 2010; Scenario 2 & 3–Phase 1–October 2011; Phase 2–October 2013

****Source:** NAC

Expected Rise in the Minimum Support Price (MSP) for Food Grains

The burden on Government for giving MSP to food grains is on the steep hike since 2004-05. The MSP for rice, wheat and pulses during 2004-05 was Rs 600, 640 and 1390 respectively. The MSP for the same increased to Rs.1280, 1285 and 3850 respectively in 2012-13. The MSP have more than doubled in cereals and nearly tripled in pulses in just about eight years. With the introduction of the NFS Act, the continuous and augmented procurement of food, it is anticipated that the food inflation will be difficult to contain.

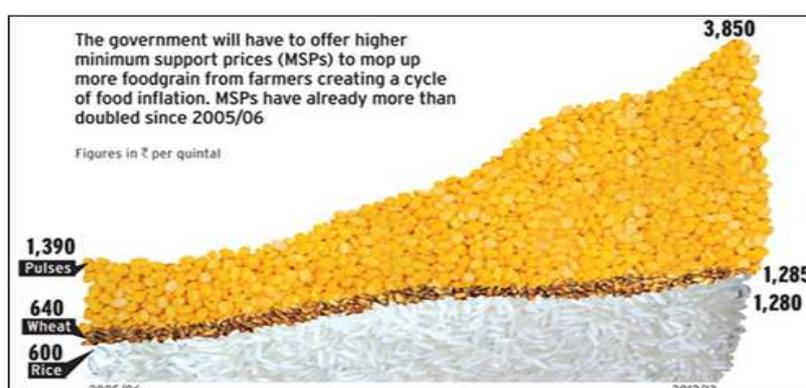


Figure 2: Minimum Support Prices for Rice, Wheat and Pulses (2005-06 to 2012-13)

Implications on Banking Sector

The NFS Act mentions in the Act itself of its likeliness to have impact on banking sector. The Act says that, cash transfer in lieu of food subsidy, will push the banking infrastructure and accessibility to banking facility in all parts of the country including remote, rural and hilly tribal areas (Anon., 2013 a).

The implications of the Act on Agriculture and extension services as detailed by the NFS Act is given below from some excerpts of the Act (Anon., 2013 a).

Revitalisation of Agriculture

- Agrarian reforms through measures for securing interests of small and marginal farmers;
- Increase in investments in agriculture, including research and development, extension services, micro and minor irrigation and power to increase productivity and production;
- Ensuring livelihood security to farmers by way of remunerative prices, access to inputs, credit, irrigation, power, crop insurance, etc.;
- Prohibiting unwarranted diversion of land and water from food production.

Procurement, Storage and Movement Related Interventions

- Incentivising decentralised procurement including procurement of coarse grains;
- Geographical diversification of procurement operations;
- Augmentation of adequate decentralised modern and scientific storage;
- Giving top priority to movement of foodgrains and providing sufficient number of rakes for this purpose, including expanding the line capacity of railways to facilitate foodgrain movement from surplus to consuming regions.

Other Implications Include Mainly on the Social Front

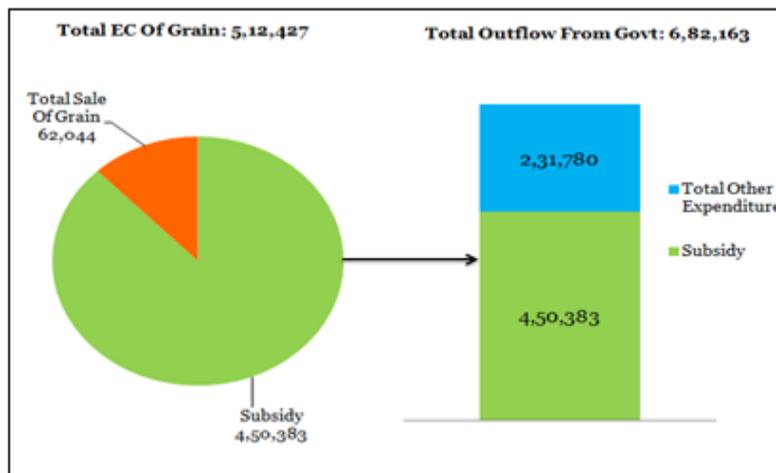
- Safe and adequate drinking water and sanitation;
- Health care;
- Nutritional, health and education support to adolescent girls;
- Adequate pensions for senior citizens, persons with disability and single women.

CHALLENGES, CONSTRAINTS AND SUGGESTIONS IN IMPLEMENTING THE NFS ACT

Even though, the NFS Act looks ambitious and holistic in its approach, there are several doubts and apprehensions about the successful implementation of this Act considering our poor track record in the past to render welfare measures yield the desirable results. The challenges and constraints are many in implementing the Act. This looks particularly daunting when we see it in the background of our struggling economy, political and bureaucratic environment, will of the executives and awareness among the people to get benefitted from the Act. Some of the serious issues that have the potential to act as hurdles in implementing the NFS Act are discussed below.

Cost of Meeting the Food Requirement

The Act once implemented is expected to cost Rs 124,000 crore on the Government exchequer. This cost includes the cost of subsidy on food grains and its distribution. However, the miscellaneous expenditure to set up the administrative and bureaucratic structures like Central and State Food Commissions, vigilance committees etc cost still more and managing such a huge cost for the three years is an immediate and major challenge in front of the Government. According to the estimates of Commission for Agriculture Costs and Prices, the total outflow from the Government would be Rs. 682,163 crore (Gulati Ashok, 2013). This total cost comprises of Rs. 450,383 crore on food subsidy and Rs. 231,780 crore on other expenditure (Figure 3).



Figures in RSCT, Note: EC=Economic Cost
 Source: Commission for Agricultural Cost and Prices

Figure 3: Projected Cost of the National Food Security Act over the Next Three Years

However, according to Ministry of food and civil supplies, the subsidy burden is already incurred on the existing food distribution schemes, the additional cost arising out of the NFS Act will be in the manageable limits to the Government. It says that, the cost of food subsidy will range from Rs. 112,205 crore in 2012-13 to Rs 181,229 crore in 2016-17 which is marginally higher than the present estimates based on 2011 census.

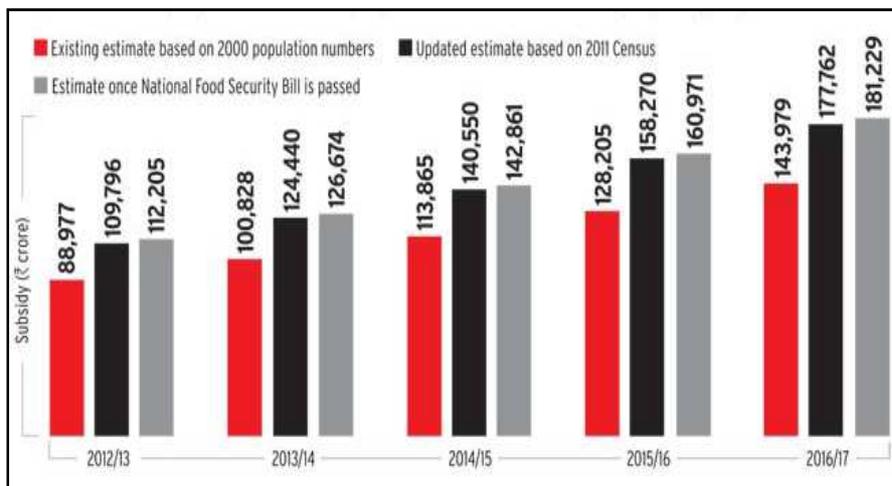


Figure 4: The Increase in Subsidy Cost of the Food from the Existing to the Scenario with Updated Estimate for 2011 Census and Post Implementation of the NFS Act

Challenge of Mitigating Corruption

The issue of corruption has become an almost certain and single most major concern in every welfare measures initiated by the Government. Though, the rationale and spirit of several welfare schemes is not questioned, their way of implementation and yielding desired results is always doubted. In this environment of lack of probity, the successful operation of the ambitious NFS Act hangs in balance.

Apathy of Other Ministries and Departments about Social Welfare Measures

Other ministries within the Government have been skeptical and lukewarm on most occasions. One example is the Ministry of railways, which transport nearly 90 per cent of the food grains of public distribution does not bother to give any priority to the food transportation (Anon., 2013). The Wagons used to transport coal, chemical fertilizers and other hazardous things are used again to transport food grains rendering those unsuitable for consumption by human beings. Even many state Governments were not willing to be part of the Act and to quote from the Tamil Nadu's request to keep it out of the purview of the NFS Act.

Inadequate Storage Infrastructure

The Food Corporation of India has the responsibility of ensuring proper storage of the grains after procurement. However, there are major issues concerned with the storage capacity and the way the food grains are stored by the Food Corporation of India. The table below shows the existing storage capacity and the shortage faced by the Food Corporation of India (FCI) over the years from 2008 to present year. At present, the FCI stores more than twice the storage capacity available with it. This is one major reason causing their wastage infested by fungus, rodents and subjecting for pilferage.

Table 3: Existing Storage Capacity and the Shortage Faced by the FCI

Year	Foodgrain stock	Storage capacity	Shortage
2008	29.88	23.89	5.99
2009	41.94	25.27	16.67
2010	46.87	28.83	18.04
2011	54.13	31.61	22.52
2012	66.78	33.6	33.18

Figures in million tonnes

There is also a significant distortion between the buffer stock norms and the actual grains stored by the FCI (figure 5). This is in fact a point in favour of NFS Act, as it helps to ease the pressure of demand on storage facilities. At the same time, it points to the efforts needed to raise the level of storage capacity to match with the food grain procurement by the FCI.

The food grain procurement must also continue as it is seen as a measure to ensure minimum returns to the farmers growing the food grains.

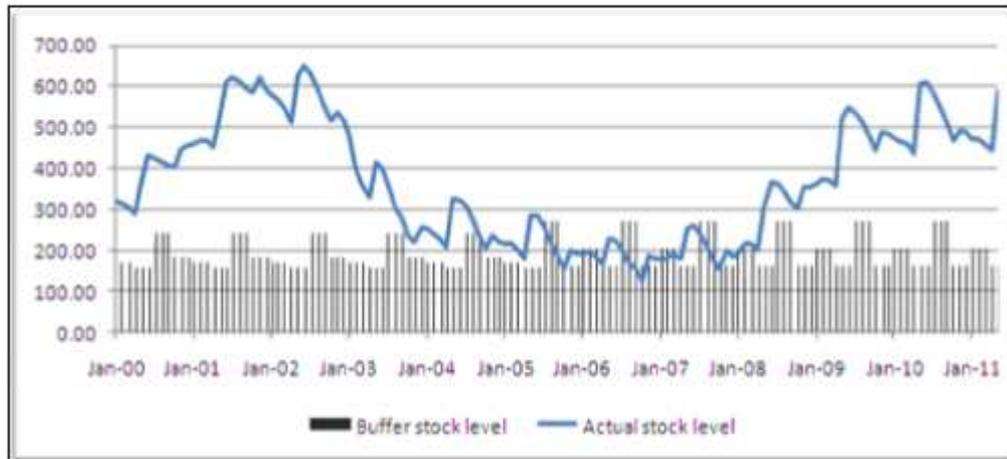


Figure 5: Month Wise Stock Position vis-à-vis the Buffer Stock Norms and Strategic Reserve for Last Ten Years (2000-2011)

The storage infrastructure even available with FCI itself is matter of concern as there is wide regional disparity from Northern region to the other regions of the country (Figure 6). The diagram below shows that North Indian States account for nearly half of the storage capacity, whereas, the Eastern, Western and North-Eastern States do not have adequate storage preparedness of the food grains (Anon., 2013). Unless this disparity is addressed, the smooth operation of NFS Act is sure to be affected.

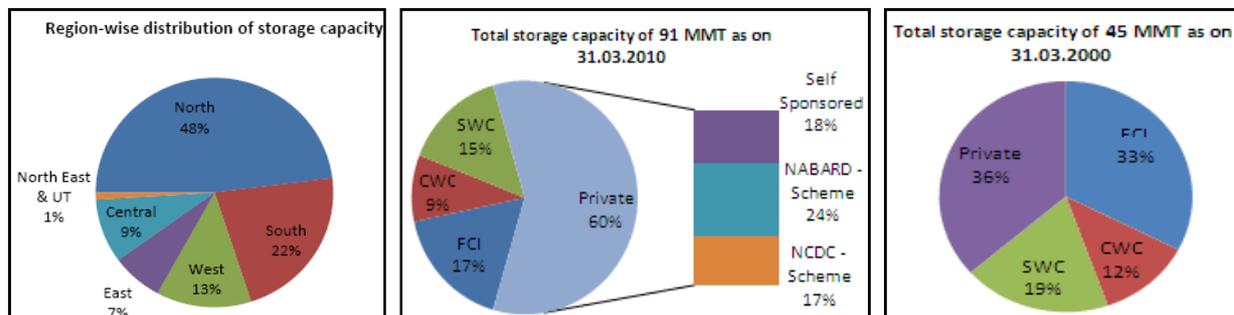


Figure 6: Storage Capacity of FCI Analysed According to Region and Agencies

Identification of Beneficiaries

The problem of identification of beneficiaries is two dimensional as both the Type 1 and Type 2 errors of non inclusion of eligible households and inclusion of non eligible households defeats the idea of giving the food grains to unprivileged and the most needy.

Wastage of Food Grains in FCI and Other Godowns

The quantum of food grains being wasted at FCI because of improper storage and unscientific management is a major challenge in making the NFS Act successful. Continuity in fresh procurement, replenishment of food grains at regular intervals after the harvesting season, continuous offtake of the foodgrains from the FCI godowns are the important tools to avoid huge losses at the storage point.

Insufficient Anganwadis and Their Status

The benefits of Anganwadis are not reaching many children in the country. The spread of coverage of anganwadis in some states is especially poor. In such cases, how the benefits of the Act will percolate to the children and pregnant woman is to be seen as a challenge. On this front, the establishment of anganwadis to reach the unreached is to be taken on priority. Moreover, the condition of the existing anganwadis is far from comfortable. It's a critical issue because, the children are most susceptible to infection emanating out of unhygienic conditions.

Food during Crisis

Even though, the trend of food grain procurement has been on rise over the years, it is not mentioned as from where the food grains will be purchased during crisis. The severe drought as happened in 2002-03 can pose serious challenge in food procurement.

Influence of Powerful People at Village Level

Mr. Jeane Dreze, Hon. Professor, Delhi School of Economics opines that powerful people who will have no stake in the PDS would try to sabotage the Act (Anon., 2013).

SUGGESTIONS FOR EFFECTIVE IMPLEMENTATION OF THE ACT

In spite of Government's initiative to make the Act yield results, depending upon the discussions above following suggestions are recommended for effective implementation of the NFS Act.

Adoption of More Scientific and Safe Methods in Food Storage by FCI, SFC

The food storage by the FCI and State Food Corporation (SFC) needs to keep in time with the progress achieved in science to store the food grains to protect from infestation from insects, fungus and rodents. The adequate measures to stop pilferage and ensure accountable offtake at the time of transportation to state Governments must be given due importance.

FCI Should Take Measures to Move Food Grains through Road Transport in Addition to the Railways

Though, it is unavoidable to use the network of railways to transport the food grains, it is important to make best use of other means of road and waterways according to the situation and demands.

Transparent Exclusion Criteria

This is the most important measure that State Governments are supposed to initiate without any delay. This is the only practical and workable solution to ensure that, the eligible will only get the food grains and the ineligible people are excluded from the purview of the Act. End to End Computerisation demonstrated by the Department of food and civil supplies of Government of Karnataka and Tamil Nadu must be replicated in other states.

Ensuring Proper Functioning of Anganwadi Centres

Since, child nutrition is the bigger challenge than it appears, due importance must be given to establishing anganwadis in places where they are not working and also taking required measures to ensure their proper functioning. The maternal health care and providing maternal benefits as envisaged in the Act must be looked after by the implementing agencies. The Vigilance committees must respond to the peoples complaints and grievances without any lapse of time.

The Nutrition to Lactating Mothers and Children to be Specified on Qualitative Terms Based on Scientific Assessment

This suggestion was made by the United Nation's Children Fund (UNICEF) while making observations on the draft version of the Bill. The UNICEF says that, children at different ages require different kind of food varying in proteins, vitamins and minerals and accordingly there must be an effort to prepare concentrated food as needed by the children's physiology (Anon., 2013)

In the context of the discussion on the Food Security Act, the words of Dr M. S. Swaminathan hold special significance for agriculturists and for democratic approach of implementing the Act. **This Bill would succeed or fail depending upon the** production of the necessary quantities of wheat, rice or **nutri-millet**s. Our farmers can be legitimately regarded as the guardians of the food security system in our country. Unfortunately farmer do not find place in this Bill. At least in State Food Commission, there should be one women and one male farmer (Anon, 2013). Subsequently, a farmer member was included in the State Food Commission which is a welcome step in giving voice to the farming community in the issues related to him.

LESSONS FOR AGRICULTURAL EXTENSION

Shifting Focus on Dry Land Agriculture and Food Sufficiency

Of the total 143 million hectares of cultivated land in India, 85 million hectare (60 per cent) does not have the irrigation facility. This area under dry land agriculture contributes 40 per cent of food grain production and supports 2/3 of India's livestock population. Hence, after the NFS Act, the focus would shift to dryland areas to sustain the food grain production required to meet the demand under the Act. In this context, the extension professionals and extension strategies must reorient themselves to address the needs of nearly 55 million households practicing dryland agriculture.

Welfare of Children, Women, Old Aged, under Privileged etc

With the holistic approach of the NFS Act of covering the children, women and other households, now it is important to be seen whether, the expenditure on food grain subsidy and its delivery is reaching the intended and helping them to lift themselves out of poverty and empowering them to contribute to the nation building. The role of extension in the immediate future would be to take up the issues involved in execution, implementation of the NFS Act.

Impact Analysis - Post Implementation of NFS Act

The experiences with the well intended Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) have been mixed. Some states show intent and are resolute in proper implementation of the Act. Whereas, few states have failed to capitalize on the opportunity of making use of this Act to help people get employment and involve in asset creation at the village level. From the lessons learnt from MGNREGA, the NFS Act must be implemented with earnest will to make it successful and benefits must reach the intended beneficiaries. The opportunity before the researchers involved in agricultural extension will be to take up the impact analysis studies after the implementation of the NFS Act. Other dimension of the research can include the structural and functional changes and reforms in PDS and TPDS and their perceived impact on change in social status, improvement in health indicators etc of the poor people.

CONCLUSIONS

Under present circumstances, the success of Act depends on efficient grievance redressal, tackling corruption and stakeholders' active involvement. Subsidised food will reduce the food spending of the poor and place some surplus money in their hands. This surplus money which would then be spent in India will stimulate domestic consumer demand. Unless the Act is effectively implemented, eliminating hunger and poverty continue to affect our country. The Act has potential to bring rich dividends especially in rural areas as access to food for poor means improvement in their productivity, labour efficiency, reduced expenditure on health and reduced migration to cities.

The challenges and constraints foreseen in implementing the NFS Act must effectively addressed if the Act is to succeed and deliver goods in the Indian economy and more so in rural India. It is important that, India with more than 1.2 billion will get its long due status of a leader at the global level. But, the hunger and malnutrition affecting more than one third of citizens will not bode well for its ambitions. An African quote is apt to mention in this context. *"Anybody's Hunger is Everybody's Shame"*. Dream of India becoming a global superpower can be achieved not before all its citizens hunger is addressed. National Food Security Act – though delayed, is a giant step in that direction.

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