

National Food Security Bill

e-governance major project paper by

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Abstract

Consider the two best-known facts about India's food economy. On the one hand, 42 percent of our little children are malnourished. On the other, our godowns are bursting with foodgrain. Can we join the dots by drawing a straight line from the warehouse to the homes of the hungry?

Following paper introduces hunger statistics in the country and need of a legislative bill to counter the issues. It further gives details as to the provisions mentioned in National Food Security Bill proposed in 2009, and its Motive. We aim to equip the reader with the current scenario information, implementation details and impounding drawbacks which tend to nullify the effect of a bill of such a grand importance. We further propose solutions to tender such issues and how e-governance can play a crucial role in such solutions.

Keywords

Food Security Bill, Public Distribution system, FCI, Food Storage and Transport

1. Introduction

Food is essential for living as air is for breathing. According to the definition of UN's Food and Agriculture Organization (FAO) food security exists "when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life." Food security is built on three pillars:

1. Food availability: sufficient quantities of food available on a consistent basis.
2. Food access: having sufficient resources to obtain appropriate foods for a nutritious diet.
3. Food use: appropriate use based on knowledge of basic nutrition and care, as well as adequate water and sanitation.

Food security refers to the availability of food and one's access to it. A household is considered food-secure when its occupants do not live in hunger or fear of starvation.

The National Family Health Survey (2005-06) recorded almost 40.4% of the children below the age of three as underweight and malnourished. The report also shows the shameful figures of women and children with nutritional deficiencies. It is imperative that these kinds of figures should be brought down to achieve better status and overall growth. Food and nutrition should therefore be considered as "economic engine". An improved health is not a mere necessity, but an essential organ to achieve economic growth.

As a large section of India still lies below poverty line, unable to have nutritious and sufficient food, twice a day, it becomes a bigger question to the existing policies of our country at an inner as well as a global level. Now with the Food security bill being implemented, we need to focus on its purpose, shortcomings and possible solutions.[6]

1.1) Necessity of Food Security Bill:

There is need of food security Law in India:-

1. To encourage economical development of a country.
2. To reduce poverty.
3. To encourage development of backward classes.
4. To encourage P.D.S system.

1.2) Food Security Law in India:

The recent Food Security Bill proposed by the expert committee, headed by Dr. C. Rangarajan. The bill is likely to cost the government Rs 1.25 lakh crore each year.

The bill has been introduced in the current Lok Sabha session which seeks to enact The National Food Security Act 2013. It aims to:

"To provide for food and nutritional security in human life cycle approach, by ensuring access to adequate quantity of quality food at affordable prices to people to live a life with dignity and for matter connected therewith or incidental thereto."

This Bill provides major relief to the common man who falls under the 'eligible households' as covered under the 'Priority Household' category as The Bill aims to make the right to food a legal right.. Under this Act a provision has been made to provide 5 kg of foodgrains per month per person to those identified under this scheme. This will be given at highly subsidized rates (Rs 3/2/1 for Rice/ wheat/ coarse grains respectively). as prescribed under Schedule I of the State Govt under the TPDS (Targeted Public Distribution System). Besides, the provision also says that all households covered under the Antyodaya Anna Yojana shall, as specified by the Central Govt in relation to each State, be entitled to 35 kg of food grains per household per month at the subsidized prices specified in the said Schedule.

The food grains would be transported to the various depots as prescribed by the Central Govt. The monitoring and implementation of these schemes will however largely be left in the hands of the concerned State Govts.

1.3) Role of State Government:

Further, the concept forces the State government to (1) fix the numbers of those who are BPL in their respective states; (2) decide the amount of food grain to be given to them, and (3) fix the rate at which these shall be provided. (4) Universalisation of TPD In view of the above provisions it is amply clear that the provisions of the proposed Food Security Bill 2013 are in the nature of largely benevolent provisions and can eradicate hunger and poverty from the face of this Nation once and for all.

The National Food Security Bill 2013 is therefore a well thought out carefully planned blueprint for the effective eradication of hunger and malnutrition from our Country. It requires careful and consistent application on the part of both the Central Govt as well as all the respective State Govts. It is after all a scheme spread out for the whole of India and for its successful implementation the effective participation of the State Govts is a must.

Logistics:

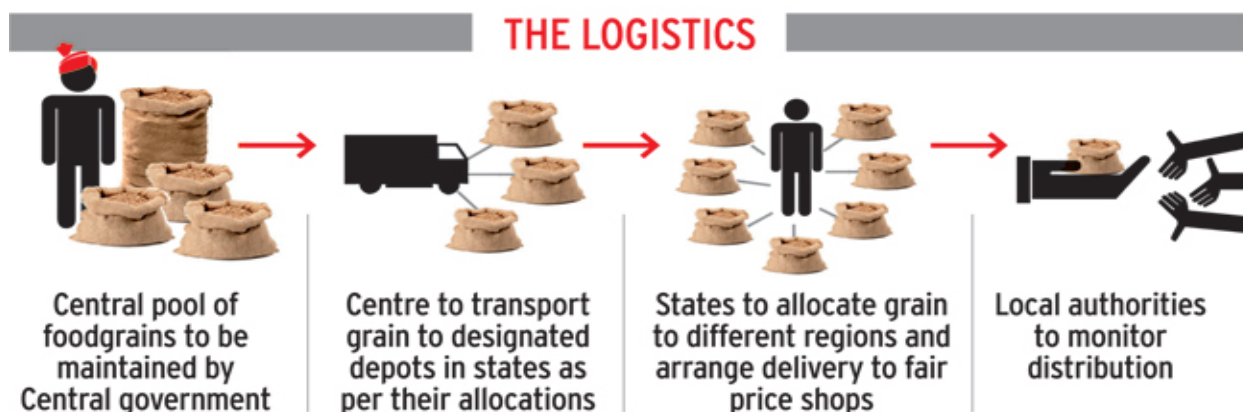


Figure I

2. Current Scenario

According to the recent survey done by Food and Agricultural Organisation(FAO):[14]

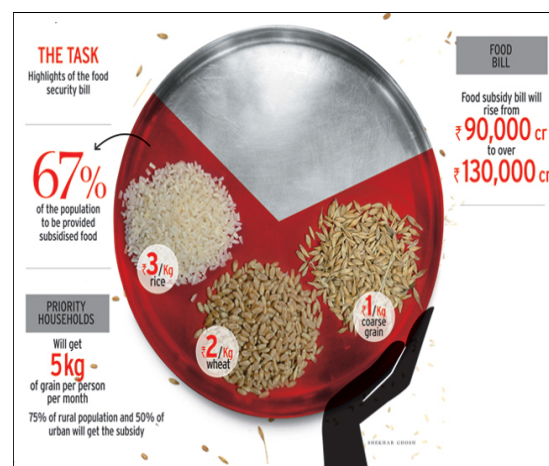
1. 1/3rd of the world's hungry population live in India. The food grains supplied by the ration shops are not enough to meet the consumption needs of the poor or are of inferior quality. The average level of consumption of PDS grains in India is only 1 kg per person / month.
2. 836 million Indians survive on less than Rs. 20 (less than half-a-dollar) a day.
3. India has 212 million undernourished people.
4. Over 7000 Indians die of hunger every day.
5. Over 25 lakh Indians die of hunger every year.
6. Despite substantial improvement in health since independence and a growth rate of 8 percent in recent years, under-nutrition remains a silent emergency in India, with almost 50 percent of Indian children underweight and more than 70 percent of the women and children with serious nutritional deficiencies as anemia.
7. During 2006 - 2007, malnutrition contributed to seven million Indian children dying, nearly two million before the age of one.
8. 30% of newborn are of low birth weight, 56% of married women are anaemic and 79% of children age 6-35 months are anaemic.
9. The number of hungry people in India is always more than the number of people below official poverty line.

3. Provisions of Food Security Bill

On the basis of the report of Standing Committee on Food, Consumer Affairs and Public Distribution, the Union Cabinet cleared the National Food Security bill on 4th July 2013 and paved a way to make the framework of the proposed legislation simpler by providing more flexibility to States/ Union territories in its implementation and to address some of the important concerns relating to food security. Major highlights of the Bill are discussed hereunder:[9]

3.1) Targeted Public Distribution System (TPDS):

The Bill has made provision for the State Government to provide 5 kilograms of food grains per person per month at subsidized prices to



person belonging to priority households. Here the word "Priority household" means Households identified by the State Government.

Figure II

3.2) Antyodaya Anna Yojana:

A National Sample Survey Exercise points towards the fact that about 5% of the total population in India sleeps without two square meals a day. Their purchasing power is so low that they are not in a position to buy food grains round the year even at BPL rates. "Antyodaya Anna Yojana" which was launched by the Government of India on 25th December, 2000 specifically targets this 5% population and provides subsidized foodgrains to them. With the current modification in the bill, households that come under this scheme will be provided with 35 kgs of foodgrains per household per month as allotted by the Central Government to the respective States.

3.3) Maternity Benefits:

Every pregnant mother and lactating mother will be provided with free meal during pregnancy and 6 months after childbirth by the local anganwadis along with maternity benefit of not less than Rs 6000/-.

3.4) Free meal to Children:

Children between the age group of 6 months to 6 years as well as children suffering from malnutrition will be provided with free meal by the local anganwadis and children between 6 to 14 years will be provided with one free midday meal in school except on school holidays to meet the nutritional need of the children.

3.5) Food Security Allowance:

The Bill has also made provision for providing food security allowance to the persons who have not received any of the benefits in accordance to the above mentioned schemes.

3.6) Eligible households:

Corresponding to the coverage of 75% of rural and 50 % of urban population at all India level, State wise coverage will be determined by the Planning Commission. The work of identification of eligible households is left to the States/UTs, which may frame their own criteria or use Social Economic and Caste Census data. Special concern must be paid to the needs of vulnerable group especially in hilly and tribal areas.

3.7) Women Empowerment:

Eldest woman of eighteen years of age or above will be head of the household for issue of ration card, and if not available, the eldest male member is to be the head of the household.

3.8) Grievance Redressal Mechanism:

There will be a redressal mechanism which will be implemented at the state as well as at the district level, including provisions for establishing call centre and helpline with designated nodal officers. State Food Commission will also be established in order to monitor and review implementation of this act. The States will be allowed to use the existing machinery for District Grievance Redressal Officer, State Food Commission, if they so desire, to save expenditure on establishment of new redressal set up.

3.9) Subsidized Prices and their revision:

Uniform prices of Rs. 3/2/1 per kg for rice/wheat/coarse grains will be applicable to all eligible beneficiaries. It is proposed to fix these prices for the first three years of implementation of the Act.

Responsibility of Central Government, State Government & local authority:

In case of non supply of food grains to the State Government, the Central Government will be responsible to provide funds to overcome short supply so as to meet the obligations. The State Government is responsible to implement the schemes of various ministries under the guidelines of Central Government. The local authorities will be responsible for the implementation of these schemes in a particular area entrusted upon them.

3.10) Transparency and accountability of records:

There should be transparency of records in regard to the work undertaken and implementation of schemes and to meet such requirement, provisions have been made for disclosure of records relating to PDS, social audits and setting up of Vigilance Committees.

3.11) Penalty for non compliance:

The Bill provides for penalty to be imposed on public servants or authority, if found guilty of failing to comply with the relief recommended by the District Grievance Redressal Officer.

States to get assistance for intra-State transportation and handling of food grains:

In order to address the concern of the States regarding additional financial burden, Central Government will provide assistance to the States towards cost of intra- State transportation, handling of food grains and FPS dealers' margin. This will ensure timely transportation and efficient handling of food grains.

Discussion on minutes and other documents, notice received by the company, leave of absence, attendance sheet and disclosure under Section 299 of Companies Act is also required.[13]

3.12) Reforms to Public Distribution System

Public Distribution System (PDS) is an Indian food security system. Established by the Government of India under Ministry of Consumer Affairs, Food, and Public Distribution and managed jointly with state governments in India, it distributes subsidized food and non-food items to India's poor. Major commodities distributed include staple food grains, such as wheat, rice, sugar, and kerosene, through a network of Public distribution shops, also known as Ration shops established in several states across the country. Food Corporation of India, a Government-owned corporation, procures and maintains the Public Distribution System. The bill has made provision for doorstep delivery of foodgrains, application of information and communication technology (ICT) including end to end computerization, leveraging 'Aadhaar' for unique identification of beneficiaries, diversification of commodities under TPDS and full transparency of records for effective implementation of the Food Security Act.

4. Concerns of the project

The proposed bill may not prove effective in identifying the problems relating to malnutrition, hunger and poverty if the entire system in our country is abetted by corruption and this comes as a major threat to the developmental policies. Political and bureaucratic problems in the country need to be addressed first. The darker side of the proposed bill is that it may turn out to be little beneficial and create new avenues for political and bureaucratic corruption.

4.1) Procurement of Grains:

The Minimum Support Price (MSP) Scheme is a scheme of the Government of India (GOI) to safeguard the interests of the farmers while procuring grains from them. Under this Scheme the GOI declares the minimum support Prices of various agricultural produces and assures the farmers that their agricultural produce (of FAQ) will be purchased at the MSP, thereby preventing its distress sale.[2]

Every year, the minimum support price (MSP) can go up and impact the food subsidy bill. Since 2003-04,

MSPs of wheat and rice have more than doubled, from Rs 640 to Rs 1,350 per quintal in the case of wheat, and from Rs 550 to Rs 1,250 for paddy. But the food subsidy bill has gone up more than three times in the same period, from Rs 25,181 crore to Rs 85,000 crore. This is because handling and storage costs have gone up as well. This leads to an imbalance in the cost handling procedures and sales price.

Small wonder that there is an annual tug of war between the ministries of food and agriculture. The former, as the purchaser, does not want the MSP increased. The latter, representing farmers, insists that it must be. The recent procurement trend shows a heavy rise in the wheat and rice procurement and this need to be kept in check to ensure a better food security.

4.2) Food Storage and Reserves:

According to the survey conducted by the Food Ministry of India, about 1454.27 tonnes of grain was rendered unusable in the year 2012 because of insufficient storage facilities. Also, as per a senior official of the Federal Government's Warehousing Development and Regulatory Authority, 13% of the gross domestic product (GDP) is wasted each year because of the wastage of food grains in the supply chain.

As of April 1, 2012, the country has the total storage capacity of 34 million tones. But the total food stock reached 62.9 million tonnes as of March 1, 2013. Because of less storage space, rice is sold at low prices in the international market. Same is the condition with other food grains. All this when in India, many poor families do not get a one-time meal in sufficient quantity.



Figure III

Paddy stock being salvaged from open space storage in Bhubaneswar as monsoons arrive early this year[16]

4.3) Spoilage

Distribution of old and almost inedible food under the subsidized public distribution system is also not uncommon. To reduce the spoilage, the Food Corporation of India opted to export Wheat. But India needs to store its grains for his starving countrymen and for rainy days. Despite its grain reserves which are often seen rotting, India has some of the worst hunger and malnutrition.

India's policy of buying all wheat at the same price, "whatever the quality", has made the situation worse by encouraging farmers to focus on quantity rather than edibility. Furthermore, grain reserves overflowing with

rotting wheat means that the *already poor quality of India's harvest will be worsened due to lack of storage space.*

4.4) Transportation

Food Corporation of India (FCI), is India's biggest food transportation agency. According to FCI figures, on an average 4,00,000 bags of foodgrains are transported every day from the producing States to the consuming areas, by rail, road, inland waterways etc. This includes the stocks that move to Kashmir valley, Himachal Pradesh, North Eastern States and Andaman & Nicobar Islands and Lakshadweep etc., which are the remotest of areas in Indian territory where there are few or nil rail or road links. Although the movement of food grains and sugar had been showing consistent growth during the last three years as the quantity was 35 million tonnes, 29 mt and 25 mt respectively, there is still a large need of improvement so that the food grains reach the remote areas.

4.5) Wastage of food in India

Loss/wastage of food in India is ironical given the fact that India is among the world's most hunger-ridden countries. With nearly one-fifth of total population and 43.5 per cent of under-five children malnourished, India ranks 15th from the bottom in the 2012 global hunger index. A reduction in food loss/waste can potentially mitigate hunger in the country. Plugging the supply leakage and simplified lifestyle inducing fewer expenses on food in social gatherings would reduce the overall food production requirement. It would reduce the demand for food from the rich and increase its supply for the poor. It would reflect in decline in food prices, which in turn would increase the affordability of poor for food items.

4.6) BPL and Beneficiary:

The bill has however left an open house for discussion by not providing a specific limit for identification of eligible households under Public Distribution System which has been left on the discretion of the government. The bill says that states will provide the list of the poor but they have no such records. The government has constituted various committees to look at measures of poverty but they come up with different numbers. This leads to inefficiency in terms of distribution of goods.

4.7) PDS:

Both the central and state governments shared the responsibility of regulating the PDS. While the central government is responsible for procurement, storage, transportation, and bulk allocation of food grains, state governments hold the responsibility for distributing the same to the consumers through the established network of Fair Price Shops (FPSs). State governments are also responsible for operational responsibilities including allocation and identification of families below poverty line, issue of ration cards, supervision and monitoring the functioning of FPSs [1][11][12]

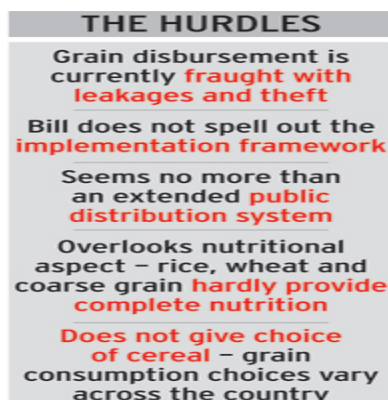
1. Growing instances of the consumers receiving inferior quality food grains in ration shops.
2. Deceitful dealers replace good supplies received from the F.C.I(Food Corporation of India) with inferior stock and sell FCI stock in the black market.
3. Illicit fair price shop owners have been found to create large number of bogus cards to sell food grains in the open market.
4. Many FPS dealers resort to malpractice, illegal diversions of commodities, hoarding and black marketing due to the minimal salary received by them.
5. Numerous malpractices make safe and nutritious food inaccessible and unaffordable to many poor thus resulting in their food insecurity.
6. Identification of households to be denoted status and distribution to granted PDS services has

been highly irregular and diverse in various states. Regional allocation and coverage of FPS are unsatisfactory and the core objective of price stabilization of essential commodities has not met.

5. Ideal Scenario

1. Given the current trends of foodgrain production and government procurement, and the likely improvements in these over time, there should be adequate availability of grain with the public authorities to implement the full entitlements for the priority and general category as proposed in the NFSB.
2. To arrive at a clear definition of priority and general households and the methodology of identification of these households especially the feasibility of involving the Registrar General of India and Census Commissioner in this task and e-government solutions involving Aadhar card.
3. Given the inefficiencies and leakages in the current distribution system, identify the principal areas of reform of the PDS and the alternative mechanisms of reaching the foodgrain/subsidy to the entitled households.
4. India's high economic growth rate in the past decade has not been fully reflected in the health status of its people, with 22 per cent of its population undernourished. We should aim to achieve a high GDP with a healthy population.

6. Obstacles and challenges:



6.1) Identification of targeted group: BPL survey of 2002. In this model, thirteen factors were considered under the survey. Apart from the basic factors of food security, clothes, and housing (ROTI, KAPDA AUR MAKAN), other factors which contributed to the quality of life were also included. Literacy, children's education, indebtedness, reasons for migration and ownership of simple consumer goods, were some of these. Each factor was rated on a five point uniform scale of 0 to 4 and the scores of all thirteen factors were added. The poverty line was drawn at a score of 14. First, the scoring method transforms the data for each indicator to a uniform cardinal scale – scored as 0, 1, 2, 3, or 4, with zero representing

extreme deprivation – such that the difference between 0 and 1 (for example, the difference between being illiterate and having some primary education) is the same as between 3 and 4 (for example, the difference between having secondary education versus having a graduate degree). Second, each indicator enters the aggregate score with an equal weight, implicitly assuming that each indicator has the same impact on poverty status. Equal weights have the appeal of simplicity and apparent objectivity, but these qualities only mask the fact that the imposition of numeric equality is completely arbitrary. It can lead to absurd situations where having less than one square meal per day for much of the year can be treated the same as non-ownership of any of the listed consumer durables.

Analysis shows that while the BPL score index is good at distinguishing the bottom 10 percent from the top 20 percent of the population, it is unable to differentiate between the poor and non-poor in the vicinity of the poverty line.

6.2) PDS Cash Transfers: Cash in place of the PDS was not an acceptable option for most households as it was fraught with many other problems. A major concern with regard to cash transfers was the remoteness of banks and

markets.

A common reason for the lack of trust in cash transfers was people's unsatisfactory experiences with government schemes involving direct transfers of money to beneficiaries. Many old people and widows recounted how they had to wait for months to get their pensions and feared that similar delays would take place with cash transfers for buying food as well.

What bothered most respondents was the thought of giving up the food security offered by the PDS for unpredictable cash transfers. This was particularly true of women, who worried that they would lose control over household budgets because it would be men who travel outside the village to withdraw money from the bank and buy things for the house. Many felt that the money intended for buying food would be spent on non-food items, particularly alcohol which would rip them off of food security.[8]

While proponents of cash transfers talk about the flexibility and choice offered by cash, it is important to realise that large numbers of India's poor live in villages where the basic institutions and infrastructure required for availing themselves of such benefits are largely absent.

6.3) Disaster Management: Indian agriculture is still highly dependent on rainfall and drought years cause production declines which can take a couple of years to be made up. A buffer stock maintenance becomes mandatory keeping in view some unforeseen and unfortunate circumstances such as flood, drought and other natural calamities,. The importance of building up a buffer-stock of foodgrains -- normally rice and wheat -- is to provide food security to the country. The argument in favour of buffer-stocking is that where there is large variation in foodgrain output, either due to weather conditions or due to man-made factors, it becomes essential for the State to ensure food security for the large mass of people by building adequate buffer stocks from the surpluses in good production years and/or by arranging to import the requisite amounts of food grains in times of need. Various committees have suggested the optimal size of the buffer-stock, which varies from 15 to 25 million tonnes, depending on the season food security will cost Rs 1,24,723 crore per year.[7]

6.4) Storage: Food logistic chain in India needs huge investment to provide proper storage facilities to reduce the wastage. The Indian government buys food grains from the farmers but does not have the space to store it. The Food Corporation has insufficient number of grain silos (modern storage facilities), and so grains are stored in outdoor depots across the country. This makes grains prone to rodents, moisture, birds and pests. Unexpected rainstorms and bad weather make matters even worse. According to the National Auditor Report, India at present does not have space to store 33 million tonnes of food grains worth 12 billion dollars. This means that there is a 40% shortage in storage space.

6.5 Center vs State : Another contentious issue is that the Bill envisages a cost sharing between the Centre and the states where the states will bear the cost for nutritional support to pregnant women and lactating mothers, mid-day meals, anganwadi infrastructure, meals for children suffering from malnutrition, transport and delivery of food grains and creating and maintaining storage facilities. These are all good provisions but they place a significant burden on the states. With regard to implementation it is unclear if the Centre can require the states to allocate funds without encroaching on the powers of state legislative assemblies. If a state does not have the funds for implementation or the state assembly chooses not to allocate, it could seriously affect the working of the Bill.

7. Solutions

A law has to be their in place to stop rotting of grains in granaries, to pluck out leakages in PDS, to ensure the targeted people get the benefit of the food security law, to uplift malnourished people ,to ensure proper enumeration to the farmers for their produce, to Ensure punishment to the guilty person ,to reduce criminal wastage

of food grains, to ensure poor have the right to live by giving them right to food, to enhance food storage capacity, to effectively regulate minimum support price for the produce.

An effective law when implemented properly will ensure that the food produced is not wasted .

7.1) Identification of beneficiary : In view of the forthcoming food security legislation, it is critical that the beneficiaries are reasonably accurately identified in the shortest time-frame possible. Since this is a national legislation, there is also need for some broad uniformity of approach for the identification of the beneficiaries for this purpose. Given that state governments are closest to the field situation and are aware of the various local nuances and realities, they are best placed to carry out the actual identification. In the very nature of things, it will be difficult to evolve uniform national criteria which can be applied to all states and districts. Using the pilot exercises that the Ministry of Rural Development is at present undertaking, it will be possible to come up with the broad guidelines and indicative criteria which can then be communicated as guidelines to the states. Thereafter, it will be best to entrust this socio economic survey work for the identification of the beneficiaries under the NFSB to the state governments. However to ensure that the number of people identified in the entitled category (for the purpose of the foodgrain entitlements under the NFSB) is within the ceiling of BPL + 10% of BPL, the central government must indicate the cutoff numbers of the rural and urban population percentage to the states. This will ensure that the number of persons identified by the states as entitled do not exceed the state-wise prescription and are totally within the overall all India coverage figure of 46 per cent rural and 28 per cent urban population. In other words the central government will indicate the percentage of the entitled population, while the actual identification of the beneficiaries will be the responsibility of the states.

7.2) Public Distribution System:

1. An efficient measure to increase transparency was signs painted outside every house, which included the name of the head of the household, the colour of the ration card and the rate at which rice could be purchased. This was an innovative approach to name and shame households that had Antyodaya ration cards but did not belong to the category of the poorest of the poor. In some villages we saw a list of all ration card- holders painted outside the ration shop.
2. The recent development of Aadhar UIDAI cards has taken up the challenge of solving the problem of identification and distribution of PDs services along with Direct Cash Transfers. The bill does proposes leveraging the Aadhaar database to identify prospective beneficiaries. Aadhaar can be used to remove ghosts and duplicates in the PDS. It can also be used for online authentication so that the beneficiaries can take their allocated quota of grain.
3. With the biometric identification system, people will have the freedom to migrate to any part of the country without the fear of losing their food rations. People have an opportunity to go to any store of their choice and use their smart cards or food coupons to buy food. Since under this system the poor will be paying the stores the same price for food grains as the others the shopkeeper, including PDS stores, will have no incentive in selling adulterated grain to the poor. This will finally lead to a system where there are no leakages and distortions of food grains and will create incentives for PDS stores to be more efficient.
4. Creation of additional storage capacity both at central and state level. States to create decentralized storage facilities at block/village/ panchayat levels by construction of Fair Price Shop-cum-godowns using funds available under various schemes.

7.3) Transportation

The lorries used to transport grains from the godowns to fair price shop should be painted bright yellow (or any other specific color) for identification by the neighbouring villagers in case the trucks are unloaded elsewhere. A recent sting operation by 'AajTak' called '**Operation Black**' revealed how the grains were transported to a private

mill instead of the Fair Price shop [12].

8. Statistics and Budget

India is already spending close to Rs 1.16 lakh crore on schemes that are listed as "entitlements" under the FSB. For instance, food subsidy (Rs 85,000 crore), mid-day meal (Rs 13,215 crore), Integrated Child Development Scheme (Rs 17,700 crore) and maternity entitlements (Rs 450 crore). So, the additional expenditure is around Rs 8,635 crore, an increase of 0.09 percent of the GDP. India became largely self-sufficient in food grain production at the macro level. There have hardly been any foodgrain imports after the mid-1970s. Foodgrain production in the country increased from about 50 million tonnes in 1950-51 to around 233.9 million tonnes in 2008-09. The growth rate of foodgrains has been around 2.5 per cent per annum between 1951 and 2006-07. The production of oilseeds, cotton, sugarcane, fruits, vegetables, and milk has also increased appreciably.[13]

9. Suggestion and recommendations:

9.1) BPL identification: After deep analysis, we propose an improved model for identification of targeted group which employs “weights” to the parameters and self improves the model according to input database which can develop over the years. The intention obviously is that even those families, who have basic security of Roti, Kapda aur Makaan, but lack in other areas which improve the quality of life, should be included in BPL and helped to raise their standard. We propose to give weightage to all factors based on their correlation to these three primal factors. A self learning model could be implemented, wherein the input data determines the proportionality percentage of a parameter with the four possible scores. Once this percentage has been decided, all the parameters together can be summated to give the proper result.

Current data should be used periodically to modify the model to obtain a fairer BPL. The present model is one such attempt at suggesting weights based on statistical model of field data.

9.2) Public Distribution System: While a majority of respondents (88%) were satisfied with the PDS, there have been some common complaints which includes:

- 1) Reachability: Most common complaint came from respondents living far away from ration shops. Extension counters(which serve as FPS centers) are vital for improving the outreach of the PDS as some of the most vulnerable groups, such as the so-called “primitive tribal groups”, often live in areas that are not easily accessible.
- 2) Many households felt that in addition to the foodgrains provided at their ration shops, the government should also supply subsidised dal (lentils) and cooking oil. As rice is the staple food in Chhattisgarh, many households were unhappy with the 10 kg of wheat that is provided as part of the 35 kg foodgrain entitlement and wanted it to be replaced with rice. Finally, households with more than four members suggested that foodgrain entitlements should be based on the number of individuals because 35 kg was not adequate for their monthly consumption.

9.3) Transport: Proper GPS systems can be installed in the lorries so that they remain enroute. Cameras and RFID card authentication can be placed to reduce corruption and food leakage from godowns.

The comprehensive computerization of the PDS network starting from the allocation of the grain to the final delivery to the targeted beneficiary will go a long way in plugging diversion of grain, bogus ration cards and delivery of poor quality of foodgrains to beneficiaries.

9.4) Education: The food security bill could be linked to education as they did in Bangladesh where school children and their families were given access to subsidized food. This in turn will help to promote education among the poor. The bill should have included subsidized rates for pulses which for many of the poorest are their only source of protein and highly nutritious. The price of pulses has gone up, making them out of reach for many.

9.5) Technology: should be used for proper weather forecasting (in case of floods, droughts etc.) The Indian Meteorological Department can provide data as required and which can be further analysed for proper predictions (in case surplus is required - handle the storage etc. details in advance)

10. Performance Measurement Metrics

To verify a proper performance measurement tool, we can study the success story of Chhattisgarh PDS and how it has affected the food distribution in the state.

SURVEYS: A recent informative survey suggested that a majority of respondents (88%) were satisfied with the PDS

COVERAGE: The Chhattisgarh Food Security Act extends coverage to 90 percent of the population.

ECONOMY: Significantly, apart from grains, beneficiaries are entitled to 2 kg of pulses at Rs 5- Rs 10 per kg. The Chhattisgarh model would argue that the Food Security Act can work without sinking the economy. But then, the state first fixed its leaky PDS and gave its farmers incentives before enacting the law

The PDS has been successful in some states, such as Chhattisgarh and Tamil Nadu. In Chhattisgarh, about 75 per cent of households receive 35 kg of rice at Rs 1 or Rs 2 a kg.

CORRUPTION: The scheme is universal and relatively corruption free. It removes most of the food leakages in the system.

INVOLVEMENT: Inclusion of more needy people in BPL class and issuing more BPL cards and cancel bogus cards.

11. Conclusion

India is one of the top producers of food grains and one of the leading nations to have maximum number of deaths due to starvation.

Subsidies on food and agriculture have shot up and bumper crops have been harvested, but instead of bringing down food prices, it seems to have had the opposite effect. Farmers are being paid more than double than what they were 10 years ago for their foodgrain, and retail prices of food have gone up — but they are still committing suicide. We congratulate ourselves on record foodgrain exports at a time when the per capita food availability at home is declining — and we lose money on every tonne that we export. Exporters make profits, but the exchequer loses.

Food security is not just a poverty issue. It is a much larger issue that involves the whole food system and affects every one of us in some way. Food security is a complex sustainable development issue, linked to health through malnutrition, but also to sustainable economic development, environment, and trade.

A well targeted nutrition policy can create wonders and also provides a way analogous compared to other policies. Hence, drafting a Food Security Bill and passing it in the parliament with absolute majority will alone not solve the purpose of food and malnutrition, but implementation of proper measures to ensure that the schemes reach the beneficiaries properly will only provide a better solution to solve the food crisis.

In this scenario, the National Food Security Bill can turn into something revolutionary and can leave a huge impact in the economy of the country. The Bill can transform and restructure the lives of people if carefully crafted and implemented.

We need to think rationally and force the negatives out of the system like maintaining the buffer stock perfectly

without getting rotten.

Each state must take up the agenda in a mission mode to implement the food security act in its true spirit. The states should gear up to plug loopholes with the use of appropriate and innovative technology

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