# TRANSPARENCY IN PUBLIC FOOD DISTRIBUTION THROUGH DIGITIZATION

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Identification of unique individuals and families is the vital element to bring transparency in PDS. The role of data cleaning and management through biometric updation is the most important. Use of this can lead to a high-quality beneficiary database without duplication and perpetration of ghost cards. The UID database can also be used by the PDS system for confirmation of off take by the resident. The efficiency and transparency improvements in the PDS system will make it one of the best-run pro-poor schemes in the country.

tate resources are continuously utilized in the name of poverty alleviation and disparity reduction. Even after 69 years of independence, the country is still suffering from poverty and disparities. A series of welfare schemes over the last 60 years failed to end the miseries of the bottom segments of population in the economic ladder. In the past few years, technology has become the tool to bring transparency and effectiveness in welfare measures. Most states have now digitized their PDS to pass on subsidy benefits to targeted group of beneficiaries. The objective is that the Cash transfers can directly improve the economic lives of poor, and raise economic efficiency by reducing leakages and market distortions.

crore (15.2 per cent) respectively. It is widely accepted that India's welfare system is suffering with leakages. Rampant corruption diverted the benefits intended for the poor to the pockets of middlemen and corrupt officials. Neither the system covers the genuine beneficiaries, nor does it support the recipients with total of benefits. Consequently, nearly 22 per cent of the population is still living below poverty line. Aadhaar based cash transfer, cashless environment, efficiency in communication and administration are different initiatives of Government to pass on direct benefits to the poor.

# Public Distribution System (PDS)

PDS was introduced after 2<sup>nd</sup> World War due

# Background:

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According to the Economic Survey 2014-15, about 4.2 per cent of the GDP, which works out to roughly Rs 3.78 lakh crore was spent on key subsidies in the Financial Year March 2015. Out of the total subsidies, Rs 1.23 lakh crore was food subsidy (1.14 per cent of GDP). Food subsidy during 2015 -16 was around Rs 1.24 lakh crore. As per an estimate of FAO, during 2010-12 and 2014-16, undernourished population of the country was Rs18.99 crore (15.6 per cent) and 19.46



to severe food shortages in the country. Initially, the subsidy was common to all. In 1990's, PDS was restructured to include hilly and inaccessible areas. Finally, the scheme was moved with a targeted approach and is known as Targeted PDS (TPDS). Under Essential Commodities act 2001, Public distribution system order was passed. It governs rules regarding identification of beneficiaries and commodities to be included for PDS. Department of Rural Development through BPL survey decides criteria for inclusion or exclusion of beneficiaries. Finally, individual states identify the beneficiary households. Central govt. allocates food grains as per list prepared by NITI Aayog (erstwhile Planning Commission) based on families of BPL category to each state. Enactment of Food security Act, 2013 has done away with the need for BPL based identification.

## What is Food Security?

Food security ensures 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 an active and healthy life. Food security has three important and closely related components, which are availability of food, access to food, and absorption of food. Food security is thus, a multi-dimensional concept and extends beyond the production, availability and demand for food. Ensuring food security is the basic goal of social justice, apart from development of adequate human resources.

# Components of Food Security:

- 1) Production and procurement.
- 2) Storage
- 3) Distribution.

All these functions are performed through the PDS (Public Distribution System). PDS is operated under the joint responsibility of the Central and the State Governments. The Central Government, through Food Corporation of India (FCI), has assumed the responsibility for procurement, storage, transportation and bulk allocation of food grains to the State Governments. The operational responsibility including allocation within State, identification of eligible families, issue of Ration Cards and



supervision of the functioning of Fair Price Shops (FPSs) etc., rest with the State Governments.

### Food Security: Issues

Though, the functioning of PDS has ensured the availability of essent ial commodities to the people, the system is often blamed for:

- Lack of efficiency.
- Discrimination in Rural-urban service delivery.
- Many instances of corruption and black marketing, known as PDS leakages.
- Identification of poor by the states is not fool proof.
- A large number of poor and needy persons are left out.
- Lot of fake and shadow ration cards are available in the market.
- Fair Price Shop owner uses bogus Ration cards and sell the food grains in the open market.
- Many times, good quality food grains are replaced with poor quality food grains.
- Uneven distribution of food grains all over the country.

# National food Security Act: Some Provisions

 Coverage: 75 per cent of the rural and 50 per cent of the urban population will be covered under targeted PDS, with uniform entitlement of 5 kg food grain per person per month. However, beneficiaries of Antyodaya Anna Yojana (AAY) households will be protected at 35 kg per household per month as they constitute poorest of the poor in the society.

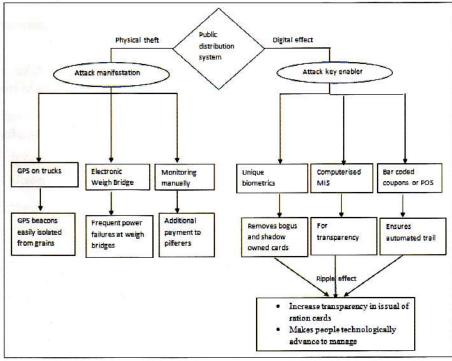
- Subsidized prices: Food grains under TPDS are made available at subsidized prices and in future, it will be linked to Minimum Support Price (MSP).
- 3) Support to Women and Children: Pregnant women and lactating mothers and children in the age group of 6 months to 14 years will be entitled to meals as per prescribed nutritional norms under Integrated Child Development Services (ICDS) and Mid-Day Meal (MDM) schemes.
- 4) Women Empowerment: Eldest woman of the household of age 18 years or above to be the head of the household for the purpose of issuing of ration cards.
- Transportation Cost: Central Government will provide assistance to States in meeting the expenditure incurred by them on transportation of food grains within the State.
- Food Security Allowance: Provision for food security allowance to entitled beneficiaries in case of non-supply of entitled food grains or meals.

under this Scheme are to be utilized under the Integrated Child Development Scheme (ICDS) for providing nutritious food to children below 6 years of age, expected and lactating mother.

- Annapurna Scheme: Needy senior citizens of 65 years of age or above who are not getting 'Old Age Pension' are provided 10 kgs of food grains per person per month without any cost.
- 4) Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (RGSEAG): The Scheme aims at empowering adolescent girls of 11-18 years by improvement of their nutritional and health status and upgrading various skills. This scheme has provision of 100 grams of grains per beneficiary per day for 300 days in a year.

#### DBT Solution of Food Subsidy:

DBT aims to transfer subsidies directly to the people through their bank accounts, using the Aadhaar Payment Bridge of NPCI. It is hoped that crediting subsidies into bank accounts will reduce leakages, delays, etc. During 2017-18, the Centre's food subsidy bill is expected to go down



#### **Other Welfare Schemes:**

Apart from TPDS and Food Security Act, there are number of other schemes. Important among them are:-

- Mid-Day Meal Scheme: The Scheme presently covers students of Class I-VIII. It was launched with an objective to improve enrollment, retention, attendance and simultaneously improving nutritional levels among students.
- Wheat Based Nutrition Program (WBNP): The food grains allotted

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Flow Chart-1: Digital control for better transparency in PDS

by ₹25,000 crore annually, due to the Direct Benefit Transfer arrangement. The Centre's overall subsidy bill is also expected to dip further with the planned extension of the DBT. State governments are expected to automate all the 5.4 lakh fair price shops and install Point of Sale machines for distribution of subsidized food grains. This will be a massive step for systematic identification of beneficiaries and cutting down on leakages.

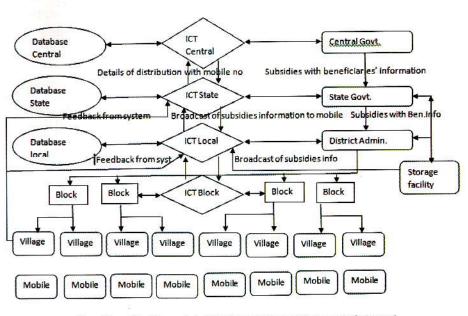
#### Digital solution to the problem:

Major challenges in the PDS system emanates from bogus ration cards belonging to fictitious families and shadow ration cards, that is genuine ration cards are being used by someone else. Attempts of preventing physical theft by human monitoring, Global Positioning System (GPS) of truck movement and electronic weigh bridge are inadequate and easily by-passable. Leakages of various forms cannot be avoided through this way. Quality and transparency in beneficiary database, followed by tracking of Individual Beneficiary off take, coupled with a computerized MIS system can effectively improve the PDS system. By leveraging e-governance, initiatives can minimize leakage and pilferage.

#### Solution: Some Factors

#### a) Creation of a Beneficiary Database:

The government should create a quality beneficiary by conducting database house-to-house survey and by enrolling each family member into Unique ID program. Information of each family member must be digitized. The digitized database will contain ten finger biometrics and photographic information of all family members. This enrolled data would be sent to Unique Identity Authority of India for printing on the ration card for each member to avoid card duplication.



#### Flow Chart-2: ICT model of PDS for better efficiency and control

The inclusion of all families in the beneficiary database is important for an effective elimination of Shadow and Bogus cards.

#### b) Individual Beneficiary Tracking:

Eligible beneficiaries sometimes do not avail of their entire allotment due to immediate unavailability of funds, usage of own farm grains and temporary absence in the locality. But Fair Price Shop owners report a complete off take of allotments. The most ideal option is the deployment of a Point of Sale (POS) system, equipped with a fingerprint reader to identify a beneficiary before an issue is made. The POS system can automate the book keeping and generate receipt. This data can be updated each month in the data base server. As the server data are available and accessible everywhere, it also creates considerable flexibility in the choice of FPS for the consumer and introduces competitiveness between different FPS. (Flow Chart-1)

#### Information, Communication Technology Infrastructure (ICT) base Solution

Information Communication Technology (ICT) infrastructure needs to be deployed to connect all the key offices of the Food Department including the Secretariat, Commissioner Cell, District Offices, Block offices and Sale Points both horizontally and vertically for transparent

communication. Central Government Data Center to host the beneficiary database and all other crucial MIS needs by the Department. The Central Data Center could be linked with the State Data Center (SDC) being setup under the National E-Governance Action Plan (NEGAP) and the State Wide Area Network (SWAN). Software should include a ration card management system, an individual beneficiary offtake analysis system and an automated allotment system etc. A full-featured MIS system is the need of the Departments. Appropriate mechanism and set up for data management and administration to extend the benefits of computerization to the field force are the essential parts of the ICT. This also includes the use of mobile hand set, handheld devices or the POS for managing inspections and other data collection activities. Common Service Centers (CSCs) under the National E-governances Action Plan can be used for Grievance submission and redressal as also for services such as issue of duplicate ration cards and changes to ration cards. There must be horizontal and vertical movement of information by use of beneficiary mobile at last mile to Block, District, State and Centre for better transparency and effective PDS mechanism (Flow Chart-2)

## ICT Solution: Major Benefits

- Better Identification of individuals and families leading to better targeting and increased transparency.
- The PDS system can use the database for authentication of beneficiaries during the off take process. A mechanism of verifying the ID of the person at the time of delivery of grains will help in improving the targeting of the grains and beneficiaries.
- Technology specifications and infrastructure to handle enrollment, storage and identity confirmation of all Indian residents. The PDS system can leverage this and rapidly move ahead with the enrollment process.
- Duplicate and Ghost detection becomes easier.
- This data base can be utilized for Direct Benefit Transfer through bank account.

## Other Steps to Strengthen PDS:

- 1. Decentralized of procurement and distribution of locally produce food grain would ensure diversity of food grains requirement.
- Proper identification and classification of beneficiaries, APL, BPL, or AAY household in a foolproof manner.
- Incentivizing the Fair Price Shops (FPSs) for extended opening hours and selling commodities not covered under PDS with permission.
- 4. Computerization and other technologybased reforms to TPDS have succeeded in plugging leakages of food grains. It is important to mention the e-PDS project of Chhattisgarh government which has real time GPS monitoring from depots to the FPSs. has shown an encouraging result.
- 5. Under coupon system, grains will not be given at a subsidized rate to the PDS stores. Instead, beneficiaries will use the food coupons to purchase food grains from retailers/PDS stores. Retailers take these coupons to the local bank and are reimbursed with money. This coupon comes back to state agency that is then compensated by government as per value of coupon. Food coupons also decrease the scope for corruption since the store owner gets the same price from all buyers.

#### Conclusion

Identification of unique individuals and families is the vital element to bring transparency in PDS. The role of data cleaning and management through biometric updation is the most important. Use of this can lead to a high-quality beneficiary database without duplication and perpetration of ghost cards. The UID database can also be used by the PDS system for confirmation of off take by the resident. The efficiency and transparency improvements in the PDS system will make it one of the best-run pro-poor schemes in the country.

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