Fair Price Shop Automation in Odisha

Introduction:

Fair Price Shops (FPS) or Ration Shops owe their existence to the Second World War period in India when to manage the shortages; the British Government introduced rationing in various essential commodities. Acute food shortages in early sixties (1960s) in India gave rise to establishment of Food Corporation of India & introduction of universal Public Distribution System (PDS) where certain food items and kerosene oil were distributed at subsidised prices through these FPSs. However, with passage of time, universal PDS gave way to targeted PDS or TPDS in 1997 wherein the poor families were given higher quantity of subsidised food at low prices and rest other got less subsidised food grains at little higher prices.

But all through, there have been complaints of a leaking PDS with several surveys reporting huge diversion (sometimes more than 60%) of PDS items to open market depriving of targeted beneficiaries of their due or entitlements. However, in first decade of this century, under direction of Hon'ble Supreme Court, a Central Vigilance Committee (CVC) on PDS headed by **Justice D.P.Wadhwa** was set up to study the functioning of TPDS in various states and recommend actions to improve same. **Justice Wadhwa** visited several States alongwith his team and made recommendations for each State to reform the TPDS. For Odisha, the CVC on PDS made 19 recommendations. Most of the recommendation made by CVC on PDS have been accepted and implemented by the State Government. Based on the inputs of the CVC on PDS, Hon'ble Supreme Court directed Government of India (in September, 2011) to implement the End-to-End Computerisation (**EtEC**) of the PDS operations across the country. Accordingly, GoI identified four district activities under EtEC namely:

1. Digitisation of Beneficiary Database of PDS
2. Automation of Transactions at Depots of PDS items (Supply Chain Management)
3. Automating transactions at the Fair Price Shops (FPS Automation)
4. A robust Grievance Redressal Mechanism and a Transparency Portal to make the relevant information public.

Government of India included three of the above four activities (except FPS Automation) in Phase-I of the EtEC Scheme to be implemented during the 12th Five Year Plan period (2012-17). The same scheme is funded 50:50 by Central Government and State Government for most of the States. FPS Automation was to be taken up in Phase-II of the EtEC after completion of Phase-I.

Implementation of NFSA'2013 in Odisha…

In the meantime, National Food Security Act was enacted by Government of India in 2013 and was made effective from 5th July'2013. The NFSA also had provision for computerisation, use of Aadhar etc. in FPS transactions. Government of Odisha has implemented NFSA, 2013 in the entire State from December'2015 after complying with all the requirements stipulated by Govt. of India under the Act.

NFSA implementation involved identification of priority households eligible to get benefits under NFSA. Nine exclusion criteria and five auto inclusion criteria notified by Government of Odisha prescribed the eligibility conditions for identification. The identification process was a long drawn one with receipt of applications, digitisation of applications with NPR ID search, comparison with SECC data base, generation & publication of Draft Priority List and Suspect Lists, objection hearing, scrutiny through PRI representatives and publication of Final Priority List. It was followed by printing of Barcoded Ration cards, its lamination and distribution. It was a herculean task which lasted for about a year to prepare around 80 lakh ration cards for about 3 crore beneficiaries in the 1st Phase by October'15. Over 1, 50, 000 Govt. functionaries were involved in the identification process.

FPS Automation Scheme:

With the preparation of digitised ration cards, the next logical step is automation of Fair Price Shops where there cards would be used for distribution of food grains to intended beneficiaries through use of Point of Sale (**PoS**) devices. At present, with every monthly allocation order, a sale register for the FPS is being generated to facilitate transactions at the FPS under NFSA in Odisha. In pre-digitisation period, the FPS owner used to write the name of head of each beneficiary family for each PDS item in the respective sale register

every month and the beneficiaries used to sign or put their LTI against their name. There were allegations of manipulation of sale registers. Now, their names are written as per serial number of ration cards in the Sale Register and they are just to sign or put their LTI in the designated place.

Objectives:

The objectives of FPS Automation are two: First to track all the transactions that take place in the FPS. Second is to ensure authentication of the ration card holders through either biometric (Aadhaar) or through OTP (one time Pin). If both the authentication process does not succeed, then the beneficiaries would still be issued with the PDS item. However, same transaction would be flagged as "un-authenticated".

At present 66% of the NFSA ration cards have at least one member with Aadhar Number. Similarly, 44% of the individual beneficiaries in the NFSA data base have Aadhar Number. As more and more people get Aadhar Number seeding will be done at the FPS through PoS device. As Aadhaar seeding increases, the authentication rate would also increase.

Government of India models for FPS Automation

Government of India had initially planned to fund the Phase-II of the EtEC after completion of Phase-I in shape of CAPEX i.e. cost of **Point of Sale** (PoS) **devices** on State Sharing basis. But the modality of support has been changed about a year back with an incentive scheme. Under the revised scheme, an incentive of Rs.17/- would be given for transacting 1 Quintal of food grains through a PoS device. For a State like Odisha, the incentive is to be shared 50:50 by Centre & State.

The Government of India has given 3 models for FPS Automation with respect to investment for the PoS Device & its ownership.

1. The State Government purchases the PoS devices and deploys it at the Fair Price Shops for use. State Govt. keeps the incentive.
2. The Fair Price Shop owners purchase the PoS devices and use it for transacting. The incentive is to be given to FPS retailer

3. The third party purchases the PoS devices and deploys them in the Fair Price Shops and maintains them. The State pays monthly rental as per bid from out of incentive.

Government of Odisha has decided to adopt a hybrid model for FPS Automation wherein there will be participation of both State Government and the FPS owner for CAPEX i.e. to meet the cost of the PoS device. Secondly, the supplier of PoS device (Vendor) will also have the responsibility for maintenance of the device for 5 years which will include 2 years of warranty and 3 years of AMC.

Financial Model of the Scheme in Odisha…

It is proposed to take a contribution of **Rs.5000/-** from each FPS retailer for the PoS device as the share of the FPS retailer. The SIM card in the PoS machine will be bought by the FPS retailer and the recharge will be done by him. Similarly, the paper and ink in the printer will be replaced by the FPS retailer. It is also proposed to give incentive of around **Rs.10/-** to the FPS retailer for transacting 1 Quintal of food grains through PoS device out of the incentive of Rs.17/- available for same. It is expected that about Rs.1/- per Quintal will be required to meet the cost of recharge and printer maintenance out of Rs.10/- available to the retailer.

Balance Rs.7/- will be utilised for meeting the cost of interest and depreciation (on PoS device cost) and the maintenance cost to be paid to the vendor. However, these rates are tentative and may undergo change after the RFP is finalised. As the RFP has been floated on 23rd April'16, same is likely to be finalised by mid of June'2016.

Timelines …

In the first phase, it is proposed to take up about 9000 FPSs (having 300 ration cards or more attached to them) for automation in Odisha. It is worth noting that these 9000 FPS transact about **90%** of the total food grains distributed to NFSA beneficiaries in the State. The time line for first phase of FPS Automation has been kept at 31st March, 2017.

As consolidation of FPS is taking place for viability and as per guidelines of Government, it is expected that most of the remaining FPS would have around 250-300

ration cards over next one year. These will be taken up in the 2nd phase FPS automation. The second phase is expected to be completed by 30th September, 2017 i.e. within 6 months of completion of first phase.

Change Management…

As Fair Price Shops have been doing all transactions manually till date, the PoS devices would certainly be a novel thing for most retailers. They will need training to accept the same. There will be an elaborate training programme to train all the FPS retailers on its use and routine maintenance.

The vendors who supply the machine will have the responsibility to maintain it for 5 years. The vendors would also deploy man power for trouble shooting or to replace the machines, if necessary. They would ensure that FPS transactions do not suffer due to technological problems on account of non-functioning of PoS devices. The transactions once automated, would be visible to the whole world through internet. Even if the transaction is done offline, the same will be in public domain when the PoS device is synced with the server at a place having mobile connectivity.

The FPS Automation is a win-win situation for all stakeholders. First, the genuine beneficiary will get his/her entitlement. The PFS retailer benefits because his work load of record maintenance is reduced and he gets an additional incentive for transacting through the PoS device. All documents can be generated from the system like the sale register, the stock register etc. The Government also benefits as the information is made available on real time basis. At present the closing balance information have to be collected from each FPS retailer for making allocation for the next month. But with the PoS devices this closing balance would be automatically available.

Integration with RCMS &SCMS…

FPS Automation would be integrated with the Ration Card Management System (RCMS) data base to show as to which beneficiary is not availing food grains. PoS device would also be used to receive stock from the depots from Level-II handling and transport contractors thus integrating Supply Chain Management System (SCMS) with it. This would

also be integrated with the Grievance Redressal Mechanism to ensure beneficiary convenience.

Improving the operations at FPS though automation may pose technological challenges and other systemic issues. But over time, the entire process would help achieve proper targeting of subsidy, reduction of pilferage and diversion of food grains throughout the PDS value chain and improve the stakeholder convenience.