Case Study
Barcoded Ration Card & Biometric Food Coupon System for Effective & Efficient Service Delivery, Gujarat

Food, Civil Supply & Consumer Affairs Department

Date – May 2nd, 2014

Name of Authors/Content creators
PricewaterhouseCoopers
1. EXECUTIVE SUMMARY

The Public Distribution System in India has for long been clouded with diversions, leakages due to malpractice and problems related to manual beneficiary data management.

A certain planning commission report points to the fact that about 58% of the subsidized food grains allocated by the Central Government fails to reach the target population due to errors and leakages in the supply chain process. According to the same report, every Re 1 subsidy provided by the government is yielding a total benefit of only 27 paisa to the target population. It would be unwise to conclude that this difference can be attributed to transactional overheads only.

As part of an effort to ensure focused subsidy for targeted beneficiary, TPDS was announced in 1997. While the performance of TPDS over the years is debatable, some states have achieved a whole new level of Government Process Re-Engineering in the endeavor to improve transparency in the public distribution services and to provide services in a manner which revolve around the interests of the end beneficiary.

This case study sheds light on the TPDS Computerization initiative picked up by Government of Gujarat under the leadership of the Civil Supplies department. The implementation model is a solid example of how drastic changes can be brought into what is generally considered by most to be a change resistant system. The Civil Supplies department has worked to focus on and improve areas which are prone to unhealthy practices by harnessing technology to reduce pilferage of ration charged on the public exchequer.

The Barcoded Ration Card and Biometric Coupon System has helped to move towards elimination of ghost cards and fake beneficiaries thereby ensuring that more is available for the less privileged. Further, it has brought Fair Price Shops/Distribution Centers under constant scrutiny which has helped the government go a long way in improving transparency and establishing accountability for all stakeholders.

The word “Citizen centric” has often been used to refer to processes which revolve around the needs and requirements of citizens who are the end beneficiaries. Let us delve deeper into the case study to understand if the project justifies this term.

2. INTRODUCTION

PDS was setup to be a food security mechanism for the poor and underprivileged where basic necessities such as wheat, rice, sugar and kerosene are provided at highly subsidized rates to Below Poverty Level citizens and at relatively higher, but still subsidized rates, to Above Poverty Level citizens.

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The responsibility is shared between the Central and State Governments in that the Central Government helps in procurement, allocation, storage and transportation to target states whereas the State Governments are responsible for beneficiary identification, distribution management, ration card management etc.

PDS has been in operation for several decades and its deficiencies are also well known. It caters to almost 90% population of the state spread across a very large geographical area.

The Government of Gujarat identified that the primary goal was to ensure that the end beneficiary reap the maximum benefit out of the transformation process. While technology can always be used to automate the administration of TPDS, it was essential to make the end beneficiary feel empowered. Keeping this goal in mind, it was possible to come up with a robust distribution mechanism.

The key challenges were identified, the first one being the need for elimination/reduction of bogus ration cards which would automatically ensure that ration is distributed only to the target population and not to mischief makers. So, beneficiary identification was the first step in the TPDS transformation process. Further, the next challenge was to devise a full proof architecture which would involve all key stakeholders and make them accountable to the citizens by strengthening the vigilance mechanism.

Last but in no way the least, a sustainable solution with a strong leadership was required to ensure that the initiative is not lost into the rigmaroles of the government machinery.

3. OVERVIEW OF PROJECT OWNER

➢ **Background of Sh. R.P Gupta**

Shri R.P Gupta, IAS (1987) is a dynamic senior officer belonging to Gujarat Cadre and has worked on a variety of key positions throughout his tenure. He has worked with Land Revenue Management and District Administration on several occasions and was also the Settlement Commissioner and Director of Land Records during which he spearheaded the resurvey activity as a part of the ambitious Land Record Modernization initiative.

Apart from that, he has also worked on other key initiatives where he has held the position of Education Secretary on the Sarva Shiksha Abhiyan before finally assuming his position as the Civil Supplies Secretary of Gujarat. He is well known for his diligence and perseverance in work.

➢ **Current Position**
Currently, he is the Principal Secretary in the Department of Food, Civil Supply and Consumer Affairs.

➢ *His experience on the project*

When it came to the execution of the project, Shri Gupta proved to be an unstoppable force. He made sure that no stone was left unturned in the effort to implement this ambitious project. He quickly realized that in Gujarat, PDS is exclusionary, leaky, getting worse. He realized that it was essential to take a methodical approach which would involve first conducting a survey of knowing the actual number of beneficiaries. Under him, the department was aware that any decision ought to have a huge impact on the citizens of Gujarat, hence, it was of utmost importance to get the first things right. His strong will to implement the project helped get backing from the political leadership of the state who spread the vision for this project and encouraged the department to execute the project.

Shri Gupta always voiced out the need for a strong technology driven solution as a result of which the department shook hands with National Informatics Centre for tackling this. Although he faced considerable resistance both internally and externally, yet Shri Gupta was able to find a work around taking cognizance of requirements as well as resistance of the stakeholders. The biggest step that the department took was to decentralize the decision making process while still ensuring that overall TPDS was centralized. In the nutshell, Shri Gupta’s astute thinking and vision led to the successful roll out and implementation of this project.

4. PROJECT OVERVIEW

➢ *History of the Project*

The Concept of rationing was first introduced during the British rule to insulate the citizens from inflation and massive fluctuations in price of food grains. Over the years, the rationing system has undergone tremendous change from the All India Basic Plan set up by the Food department in the year 1942 to the establishment of FCI in 1965 and to the introduction of Fair Price shops in the Sixth Five Year plan through the Essential Supplies Programme. This was succeeded by the Revamped PDS (RPDS) which focused on all in economically deprived areas. TPDS was introduced in the year 1997 with the “poor in all” approach to focus on most needy beneficiaries.

While TPDS followed a stricter and more focused approach, it proved to be ineffective due to several challenges which were identified during TPDS evaluation.
The Government went on to realize that one of the most basic problems with the existing TPDS mechanism was ineffective management of beneficiary identities. Existence of ghost cards acquire through incorrect means lead to severe distortion in equitable distribution of necessities. Moreover, the identities were managed in a decentralized manner further adding to existing woes of identity management.

Another key deficiency identified was that the service recipients were not empowered with adequate tools to avail what is rightfully theirs. Beneficiaries were found to be dependent on the ways of FPS shops and were tied to particular FPS shops accompanied with the unavailability of proper grievance redressal mechanisms ensuring that the end beneficiaries were turned into mere spectators.

Further, looking at the management of PDS internally by the Civil Supplies department, the number of transactions was too large for the department to maintain a strict vigil on each of them. Monitoring the transactions was impossible with the conventional pen and paper method as a result of which most transactions went unverified leaving an easy opening for shady PDS functioning. When a discrepancy was identified, it was difficult to actually point to the leakage point because there was no accountability as far as key players of the PDS cycle were concerned.

5. Situation in the State

While there were problems with the PDS mechanism all over the country, the following statistics shed light on the key issues in Gujarat:

1. Approximately 45% of intended beneficiaries were subject to exclusion errors and close to 10% of beneficiaries were included erroneously
2. Gujarat was categorized as moderate (10% - 25%) as far as leakage at FPS level was concerned
3. As far as leakage due to ghost card was concerned, Gujarat was categorized into the High Leakage category (25% - 50%)
4. 10%-30% leakage was identified due to ghost cards
5. For a survey done in 2003-04, out of a total off take of 320.24 kg/BPL family/annum only 169 kg actually reached the target population while the rest was lost
6. In the year 2009, approximately 62.5 million beneficiaries were identified through ration card records whereas the overall population was estimated to be 60.5 million which was a big concern

Keeping these statistics in mind, a major restructuring of the existing architecture of PDS was required where stakeholders would be made accountable for their individual roles and the end beneficiary would remain at the focus of all PDS activities.
To crisply lay down the problems with the existing TPDS mechanism, the following pain points were identified:

1. Due to the large number of transactions, monthly reconciliation for MIS reporting and further allotment of quota for upcoming months was very difficult
2. With manual records, it was difficult to monitor and ensure FPS operations were fair and that grains were not diverted to black market
3. Citizens were tied to specific FPS making them dependent on these dealers
4. In the absence of a strong grievance redressal mechanism, citizens could not voice their opinion
5. Presence of large number of bogus cards meant that ration was regularly being diverted to undeserving candidates
6. Benefit to citizens was reduced drastically because of too many middlemen feeding into the system
7. Some Fair Price shops were not viable enough to sustain operations while providing superior quality.

➢ Stakeholders
Stakeholder Identification and ranking of the same in order of importance as far as the end goal is concerned is key to implementation of any project. It helps in identifying the degree of change of roles and responsibilities for each stakeholder and planning out an effective roadmap.

The key stakeholders of PDS delivery were:
1. Ration card holder/End Beneficiary
2. e-Gram (CSC)
3. Fair Price Shops
4. Gujarat State Civil Supplies Corporation
5. State/District/Taluka Supply Administration

➢ Beneficiaries
The end beneficiaries were identified as following:

1. Below Poverty Level Ration card holders
2. Above Poverty Level Ration card holders
3. Antyodaya Anna Yojana beneficiaries

➢ Steps/ Action taken at the State/ District level to address the problem:

In the year 2010, the then Civil Supplies Secretary came across the concerning statistics that highlighted the number of registered PDS beneficiaries to be in excess of the total population of the state and this basically triggered the entire re-engineering process.
The department figured that the first step to address the identified issues was to reduce bogus ration cards created by false means. The solution comprised of a complete resurvey to recollect beneficiary data along with issuance of bar coded ration cards and centralized management of FPS data in order to track miscreants and improve accountability. Hence, the department developed and implementation strategy which started with creation of new application forms for a fresh survey of beneficiaries. This new application form was designed to capture details of beneficiaries along with other details such as EPIC number, driving license number, BPL number etc. for verification of authenticity by matching these details against already existing databases. This activity itself led to a reduction of 12.8% of ration cards.

The reforms envisaged as a part of this initiative were directly linked to the TPDS shortcomings identified above.

1. By devising a mechanism where only the end beneficiary can authorize transactions, diversions and leakages can be reduced drastically. This would empower the beneficiaries to safeguard their own rights.
2. Accountability was improved by decentralizing decision making but centralizing TPDS administration.
3. Focus was on the improvement in quality of governance and that of the solution rather than on the technology which would only play a role of facilitator.

To bring about a greater level of surety in beneficiary identification, biometrics of at least one member of the family was also captured leading to a further reduction of around 11% of ration cards. Prior to issuance of bar coded ration cards, photo and biometric details of at least one adult member of the family was captured at FPS and Village Panchayat level.

Once the most basic task of identifying true beneficiaries was completed, a high level strategy was devised keeping in mind the design, technology and leadership style of the initiative.

- **Design**
  1. Authentication of transactions through biometrics of card holders, supply staff, FPS dealers etc.
  2. Demand aggregation by considering card holders and FPS dealers as building blocks
  3. Freedom of choice of FPS dealer and choice between food coupons and cash coupons

- **Technology**
  1. A biometric based bar coded system was used

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2. Software modules required for computerization were provided by NIC
3. The architecture envisaged was centralized while the mode of operations were decentralized
4. Project costs were reduced by using ICT infrastructure set up under National e-Governance Plan (NeGP)

- **Leadership and Management**
  1. The ownership of the project would lie with the department itself from development to implementation
  2. Continuous survey to identify true beneficiaries would be done by asking citizens to fill up the newly designed application forms
6. MODALITIES OF THE NEW SOLUTION
A diagrammatic representation of the re-engineered process through the Biometric based Barcoded Coupon System has been depicted below:

In the re-engineered process, the following is required to be done by the citizens availing the benefits:

1. e-Gram centers were set up which would provide bar coded coupons for availing PDS facility
2. Before approaching an FPS, citizens were required to visit the e-Gram facility with their bar coded ration cards.
3. The bar coded coupons were made available to citizens after online verification of biometric details of any of the family members. Each coupon sheet contains the name of the card holder, number of family members, FPS dealer’s name, quantity price etc.
4. Once the coupon sheet is collected, the citizen must visit the FPS shop allocated to him
5. FPS dealer makes entry of the sale in the bar coded ration card at the time of sale
6. At the end of each month, the FPS dealer visits the e-Gram facility and submits the coupons deposited at his shops in order to register the quantity of sale made by him in a central database. This quantity registered would form the basis of the permit provided to him in the subsequent month
7. In case of any misconduct, call centers are made available for citizens to register their complaints.

To emphasize on the citizen centricity of the solution, certain additional services are also provided.

➤ **PDS Transparency Portal**

A PDS portal was set up by the department for dissemination of information to the masses. The portal contains information related to card holders, FPS wise list of card holders, details of food grain permits issued to FPS dealers.

The portal went on to provide a list of more than 16,000 FPS dealers and information of approximately 6000 superior kerosene providers along with their address and phone numbers for each of the talukas in all districts. It also provides a gas agency wise list of more than 70 lakh LPG connection holders.

The portal allows citizens to verify details of their ration cards as well as their monthly entitlements. In fact it is even possible to verify the quota allotted to FPS dealers each month. Needless to say, this introduces transparency and makes most of the information easily accessible to citizens.

➤ **SMS Alerts**

Beneficiaries have the option of registering their mobiles with PDS to get SMS updates related to commodity lifting in particular FPS areas.

➤ **Call Center**

The absence of an easily accessible grievance redressal mechanism had been identified as one of the key pain points in existing PDS. Setting up call centers gives citizens an easy and cost effective way of registering their complaints without having to stand in queues or travel to local offices.

➤ **Innovativeness of the Project**

The innovativeness of the project lies in the fact that the citizen was always kept at the center of all solutions envisaged. It has been often observed that the end goal becomes hazy as and when the complexities of implementation are faced. In this case however, despite the rigorous Process Re-engineering, the project was implemented successfully. This reform initiative establishes that citizen-centric public service delivery can be assured in a hassle-free and cost effective manner, if the technology along with business process re-engineering (BPR) is used in an innovative manner. Design of the reform processes is such that the official discretion of the District/Taluka Supply Administration
has been minimized while optimizing the accountability, transparency and rule based administration. Project roll out has been quite smooth while costs have been kept at the minimum by leveraging available e-Governance infrastructure, to the extent possible. The very design of the Project is based on centralized architecture and therefore, it has been easy to replicate the project across FPS areas in the State.

➢ Technology Platform

The Civil Supplies department decided to work with the biometric based bar coded system. All solutions were developed by National Informatics Center. A centralized architecture was developed so that all PDS information could be stored and updated centrally. The software modules developed by NIC were also developed and rolled out in a phased manner.

By leveraging the IT infrastructure made available to the state under National e-Governance Plan, the cost of the project could also be reduced.

➢ Issues with existing technology

Ascertaining card holder’s identity by matching Electoral Roll Data (EPIC) and capturing of bio-meteric data was a major issue. It was also difficult to capture finger print of the right person.

There was the problem of unavailability of e-Gram center in vicinity. In addition to this, in case of a connectivity failure, citizens had to wait till connectivity was restored in order to avail coupons.

➢ Measures to enhance Accountability

After the introduction of the Barcoded Ration Card & Biometric Food Coupon Systems, the transparency level has increased in the overall Governance of the Public Distribution System. The System is designed in such a way that at each level the roles & responsibilities are fixed and they have to enter the data into the system for subsequent month’s processing.

Barcoded ration cards are linked with biometric authentication of the beneficiaries and they have to pass through the process of authorization as well as fingerprint authentication to avail the food coupons. FPS owner needs to validate the collected food coupons to get the subsequent month’s food grains as it is linked with the opening stock minus food coupons validated thus resulting in the closing stock.

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ATVT Centre Operator generates the permit to the FPS owner based on the online data available and cannot modify it. Godown manager has to make entries into the online PDS system against the food grains issued to the FPS owner based on the permit.

At each level the accountability has been fixed owing to transparent processes with the help of PDS computerization. Currently, no hand held devices have been made available to FPS dealers; the same has been envisaged for the future and will enable the FPS dealers to capture transactions at the point of distribution.

➢  Measures to ensure possibility of replication

Owing to the centralized architecture of the re-engineered system, replication across other fair price shops in the state was not an issue. In fact, the new process was extremely citizen friendly and also translated into substantial savings for the government and was thus a strong incentive for replicating the solution all over the state post pilot implementation.

Moreover, it provided employment opportunity through e-Gram services where citizens can collect coupons. The e-Gram services were made viable as citizens had to pay a small fee to collect coupons. This payment was refunded to the citizens in the form of deduction from the highest cost coupon.

➢  Restrictions, if any, in replication and or scalability

While the initial implementation was done in a few pilot villages, replicating the same process over the entire state would bring in complexities while capturing biometric of entire population and distributing bar coded ration cards all over the state. Also, the implementation model was based on the presence of e-Gram services in a well distributed manner. Unavailability of these services would lead to problems in availing coupons without which citizens cannot approach an FPS.

➢  Risk Analysis

Some of the risk factors identified were as following:
1. Requirement of a good strong network of e-Gram services in all areas to cater to citizens without which the entire model would fail
2. Connectivity of these e-Gram services was essential to ensure uninterrupted service delivery
3. With a centralized data base to keep track of all PDS activities, any failure at center would cause a state wide collapse

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4. Viability of e-Gram services was essential as they were operated by private vendors who would perish without profits
5. Stakeholder participation was important to ensure that the roles and responsibilities post re-engineering of processes were complied
6. Change in leadership sometimes leading to projects losing sight

➤ **Capacity Building**

Capacity building forms an integral part of most e-Governance projects because they employ ICT to facilitate transformation. The re-engineered process is often supported by latest technologies. Without a continuous training and capacity building exercise, the true value addition of the project may not be realized.

Government of Gujarat has involved the State unit of NIC in the development of software component of TPDS Solution. Software related training has been provided by NIC District Team to various stakeholders involved in the system.

7. **IMPACT ON STAKEHOLDERS AND BENEFICIARIES**

➤ **Cost benefit analysis**

Any comprehensive software solution catering to various layers of TPDS administration including the State, District, Block, FPS, card holders and other associated organizations would generate vast amount of data. Obviously, this would require investments into data processing, storage and networking resources. Instead of evolving a green field software solution in terms of hardware/networking resources across the State/District/Block/FPS level, it reflected sound decision to utilize existing computational and connectivity set up under the National e-Governance Plan (NEGP) wherein GoI had already assisted states in setting up of State Wide Area Network (SWAN), State Data Centers (SDC) and several thousand Common Service Centers (CSCs) at the village level.

Furthermore, with reduction in the number of fake card holders by about 11%, there have been savings in the quantum essential commodities supplied to the 225 FPS dealers.

➤ **Value delivered (qualitative and quantitative)**

**To Organization**

As per available data, post digitization of ration cards, beneficiaries are now assured of *right* quantity of food grains at the *right* time. Positive feedbacks have been received from card holders in the pilot FPS areas. The process has led to improved analysis of FPS functioning on monthly basis by means of MIS reporting for each application/process.
Concept of pilot FPS in each taluka has been helpful in training the block level supply staff and FPS dealers in implementing this project.

To Citizens

The services are made available closer to the home of the beneficiaries and to the extent possible through e-Gram at village panchayat. Online forms and facility to take print out of the same from e-Gram have been made available.

The village level entrepreneur who runs the e-Gram and authorized cyber café owners have been benefited by earning handsome amount by issuing bio-metric food coupons to the authenticated Barcoded Ration Cardholders.

PDS web portal having basic features as under is accessible to all the citizens:

- Provides list of 16,000+ FPS dealers and 6000+ SKO Retailers/ hawkers with address, phone nos. etc. for all Taluka in each of the 26 districts of the State.
- Provides FPS-wise list of more than 1.10 Crore ration card holders along with card holders' name, card category, LPG/PNG/Kerosene status.
- Provides district-wise list of 400+ SKO Agents and 500+ LPG Distributors who lift the SKO and LPG refills from Oil Marketing Companies every month.
- Provides gas agency-wise list of more than 70 Lakh LPG/PNG gas connection holders in the State.
- Each card holder can verify his/her ration card details as well as monthly entitlement of essential commodities on this portal.
- Anyone can verify the authorized quantum of essential commodities to each FPS dealer/ SKO Retailer/ Hawker each month.
- Submit grievance/complaint online

Beneficiaries can register his/her mobile at PDS portal to get PDS commodity lifting related SMS alert linked with FPS Area. Beneficiaries get SMS alerts regarding the food grain lifted by the FPS owner.

Beneficiaries can register their complaint / grievance on the PDS portal as well as on the dedicated Toll-free number. Beneficiary grievances are redressed within a stipulated time frame as per the laws of State government.

Other Stakeholders

Robust conceptualization from various team members has led to the successful design/implementation of reform components. Digitization of the form data has helped in laying a solid foundation in the introduction of transparency, accountability and the ease of PDS administration.

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Actual transactions in food coupons issued monthly have been drastically reduced due to digitization of ration cards and authorization at various levels. Actual e-permits issued have also been declined due to biometric authorization of FPS owner at collector office and also at Government go-downs.

8. FUTURE ROADMAP

While the solution described above mainly focuses on the FPS level activities, a good share of PDS is about the management of the supply chain from the produce to the target state. While this is primarily a responsibility of the Central Government, the State can also play an important role in modernizing procurement activities which can further lead to reduction in leakage of subsidized ration at various steps.

At the FPS level within the state, it is proposed to provide technology at FPS (PoS – Point of sale) to capture the last mile transactions. FPS owner can avail permit without going to Block level office.

SUSTAINABILITY

FPS owners become more viable as the food grains, kerosene, etc. are being delivered to their door step through Government vehicles which reduces their travel cost to Government Godowns and time spent for the same. e-Gram official is being given Rs.5 from State Government for each food coupon being issued to the beneficiary, thus making him/her viable and resulting in sustainability of the project. Improvements in the delivery efficiency of essential commodities to the beneficiaries would bring about substantial savings to the government along with enhancement in customer satisfaction making the project initiative sustainable, both administratively and financially.
ANNEXURE:

EXHIBIT – 1

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PDS</td>
<td>Public Distribution System</td>
</tr>
<tr>
<td>2</td>
<td>TPDS</td>
<td>Targeted Public Distribution System</td>
</tr>
<tr>
<td>3</td>
<td>GSCSC</td>
<td>Gujarat State Civil Supply Corporation</td>
</tr>
<tr>
<td>4</td>
<td>FPS</td>
<td>Fair Price Shops</td>
</tr>
<tr>
<td>5</td>
<td>FCI</td>
<td>Food Corporation of India</td>
</tr>
<tr>
<td>6</td>
<td>BPR</td>
<td>Business Process Re-Engineering</td>
</tr>
<tr>
<td>7</td>
<td>NIC</td>
<td>National Informatics Center</td>
</tr>
<tr>
<td>8</td>
<td>SWAN</td>
<td>State Wide Area Network</td>
</tr>
<tr>
<td>9</td>
<td>SDC</td>
<td>State Data Center</td>
</tr>
<tr>
<td>10</td>
<td>NeGP</td>
<td>Nation eGovernance Programme</td>
</tr>
<tr>
<td>11</td>
<td>PoS</td>
<td>Point of Service</td>
</tr>
<tr>
<td>12</td>
<td>EPIC</td>
<td>Electoral Photo Identity Card</td>
</tr>
<tr>
<td>13</td>
<td>CSC</td>
<td>Common Service Center</td>
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<tr>
<td>14</td>
<td>SKO</td>
<td>Superior Kerosene Oil</td>
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<tr>
<td>15</td>
<td>ATVT</td>
<td>Apno Taluko Vibrant Taluko</td>
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<tr>
<td>16</td>
<td>APL</td>
<td>Above Poverty Level</td>
</tr>
<tr>
<td>17</td>
<td>BPL</td>
<td>Below Poverty Level</td>
</tr>
<tr>
<td>18</td>
<td>AAY</td>
<td>Antyodaya Anna Yojana</td>
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</tbody>
</table>
**EXHIBIT – 2 – Stakeholders / Strategy for ensuring stakeholder participation**

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Issue</th>
<th>Strategy for ensuring Stake holders’ Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ration Card holder</td>
<td>Identity</td>
<td>Elector’s Photo Identity Card No. + Bio-metric data of at least one member of Beneficiary Family. This helps in eliminating bogus/duplicate cards.</td>
</tr>
<tr>
<td></td>
<td>Delivery</td>
<td>Beneficiary gets assurance about the delivery of entitlements along with choices at the time of coupon printing.</td>
</tr>
<tr>
<td></td>
<td>Classification</td>
<td>In due course, convergence of Beneficiary Family’s socio-economic data e.g. BPL data, Electricity Connection no., LPG no., Land holding status etc. could be used for proper classification in BPL/APL category.</td>
</tr>
<tr>
<td>E-GRAM (CSC)</td>
<td>Viability</td>
<td>Card holder makes on the spot payment of Rs. 5 per coupon sheet (of which Re. 1 is for Village Panchayat) to the E-Gram operator. In case of BPL card holder this sum of Rs. 5 reimbursed by way of deduction from the highest cost commodity coupon. Similarly, the E-GRAM operator also receives Rs.0.10 for scanning of each commodity coupon produced by the FPS dealer whose online account with GSCSC is credited to that extent automatically.</td>
</tr>
<tr>
<td>Fair Price Shop Dealer</td>
<td>Transaction capturing/replenishments</td>
<td>Subsequent month’s stock replenishment would be linked to the reading of the coupons (capturing of transaction data) and appropriate credits are made in FPS dealer’s account.</td>
</tr>
<tr>
<td></td>
<td>Improving Viability</td>
<td>State government has sanctioned Door Step Delivery of food grain to the FPS that saves transportation cost to the dealers.</td>
</tr>
<tr>
<td></td>
<td>Incentives for transition to Coupon system</td>
<td>In respect of each commodity coupon submitted by BPL, the FPS dealer gets additional Rs. 0.50 as transaction charges credited in his account by the govt. while APL pays Rs. 1 per commodity coupon by themselves.</td>
</tr>
<tr>
<td>GSCSC</td>
<td>Logistics efficiency</td>
<td>Online availability and commodity-wise aggregation of Supply and Demand Data at various stages i.e. FCI Depot, Godown, FPS, Kerosene Agent/ dealer etc.</td>
</tr>
<tr>
<td>State/District/Taluka supply Administration</td>
<td>Transparency</td>
<td>SMS alerts, Web Portal.</td>
</tr>
<tr>
<td></td>
<td>Accountability</td>
<td>Bio-metric authentication by Decision makers at Taluka level</td>
</tr>
</tbody>
</table>

Disclaimer: This case study has been prepared solely as a basis for class discussion. This case is not intended to serve as an endorsement, a source of primary data, or an illustration of effective or ineffective management.

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