EFFICIENCY OF PUBLIC DISTRIBUTION SYSTEM INSIGHTS AND CHALLENGES

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PUBLIC Distribution System (PDS) is an Indian Food Security System evolved as a system of management of scarcity and for distribution of food grain at the affordable prices. It was established by the Government of India under Ministry of Consumer Affairs, and is managed jointly by the central and the state government. The paper provides insights to the challenges faced by Public Distribution Systems (PDS) and various management related issues faced by the system. As we know that 30% of India's population fall below poverty line, that is, they are not able to arrange basic needs, such as, food, clothing, and shelter, etc. The research was undertaken to study the functioning of the PDS centres, and to also record the satisfaction level of the beneficiaries of the system.

Approach: The data was collected from the beneficiaries of three villages in Gautam Budh Nagar District through a structured survey. The Fair Price Shops (FPS) dealers were interviewed and the Area Marketing Officers appointed by the state government were also interviewed to collect deeper insights of the challenges faced by various stakeholders of PDS system. The researchers also collected the data to record the details of leakage of food grains while the food grains are distributed under PDS. The authenticity of the ration cards was also checked to discover the cases where ration cards were being used by the FPS dealer themselves.

Findings: It was found that the goods distributed by the Fair Price Shops were neither sufficient in quantity nor good in quality. The lack of government initiation was observed at every stage of the process. The research revealed that no feedbacks are collected by the government from beneficiaries to find out the areas of improvement and also to measure the satisfaction of beneficiaries from the service provided by PDS. The problems of inappropriate infrastructure, and lack of support from the government to the government officers appointed for various duties under the system, were encountered at a large scale. The government employees appointed for the discharge of different duties under the system were found to be highly disappointed with the Human Resource policy of the government.

Research Limitations: The study was conducted in three villages of district Gautam Buddh Nagar of the state of Uttar Pradesh, which is the major limitation of the study. Appropriately, bigger sample size spread over different parts of the country could have provided even deeper understanding of the challenges of PDS in India. Unavailability of historical data to validate the results posed another limitation to this study.

Practical Implications: After studying the PDS in detail in the country, researchers not only bring

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major areas of improvement in the system in light but also suggests some solutions for effective management of the Public Distribution System (PDS). The suggestions regarding the implementation were sent to the Food Secretary (U.P.), Shri Pradeep Shukla. One of the most important practicality of this research paper is Biometric Cards' which have been made for all the consumers of three villages in which the study was conducted.

Key Words: Public Distribution System (PDS), Leakage of Food Grains, Fair Price Shops (FPS).

Introduction

Public Distribution System (PDS), an Indian Food Security System evolved as a system of management of scarcity, and for distribution of food grain at the affordable prices, was established by the Government of India under Ministry of Consumer Affairs, and is managed jointly by the central and the state government. PDS had been in existence in India during the inter-war period, it had also emanated from the critical food shortages of the 1960's. Till 1992, PDS was a general entitlement scheme for all consumers without any specific target.

In June, 1997 the government started the Targeted Public Distribution System in which states were required to formulate arrangements for the identification of the poor for delivery of food grains, and for its distribution in a transparent and accountable manner at the FPS level. A National Sample Survey exercise pointed towards the fact that about 5% of the total population in the country sleep without two square meals a day. This section of the population could be called as "hungry". In order to make TPDS more focused and targeted towards this category of population, the Antyodaya Anna Yojana (AAY) was launched in December 2000 for one crore poorest of the poor families.

Food Corporation of India under central government is responsible for procurement, storage, transportation, and bulk allocation of food grain. While the state governments hold the responsibility for distributing the goods to the consumers through the established network of Fair Price Shops. The State Governments are also responsible for the operational responsibilities including allocation and identification of families below poverty line, issue of ration cards, supervision and monitoring the functioning of FPS's. Under the PDS, presently the commodities, namely, wheat, rice, sugar, and kerosene are being allocated to the States/UTs for distribution. Some States/UTs also distribute additional items of mass consumption through the PDS outlets, such as, pulses, edible oils, iodized salt, spices, etc.

The TPDS under National Food Security Act, 2013 which was notified on 10th September 2013 provides the coverage of up to 75% of the rural population, and up to 50% of the urban population at the all India level. Under the NFSA (2013), the priority households are entitled to receive 5 kg of food grains per person per month at the issue prices of Rs. 3.00, Rs. 2.00, and Rs. 1.00 per kg for rice, wheat, and coarse grains respectively. The existing AAY households, however, will continue to receive 35 kg of food grain per households per month.

Objectives of PDS: The objectives of initializing the PDS were as follows:

- 1. Effective price support operations for safeguarding the interests of the consumers.
- 2. Distribution of food grains throughout the country for Public Distribution System.
- 3. To maintain satisfactory level of operational and buffer stocks of food grain to ensure National Food Security.
- 4. To maintain buffer stocks as measure of food security.
- 5. To make food grains available at reasonable prices, particularly to vulnerable sections of the society.

Research Background

The PDS has been functioning for more than four decades now, if we leave aside its predecessor, the rationing system. Its greatest achievement lies in preventing any more famines in India. As recently as during the 1987 drought, considered worst in the century, the PDS helped the country overcome it with dignity and effectiveness. "The result of diet and nutrition survey during the 1987 drought showed that widespread hunger, and its consequences experienced earlier in 1960, & 1970 were arrested in 1987" (Nutrition Assessment & Analysis NIN, March 1992). Of course, buildup of a buffer in preceding years provided the wherewithal to PDS as well as food for work type of programs.

Its major drawback, however, has been its lack of effective contribution towards household food security. In fact, it remains one of the weaker components of the food policy troika of procurement, distribution, and stocking. The other two components have fully exhibited their worth. But for carefully worked out support prices with a structure to guarantee these, the farmer would not have been induced to produce more and more food-grains. In fact, without FCI and other procuring agencies ready at thousands of purchase centers to step in, and purchase grains, if the producer was not getting higher prices than the Government announced procurement prices, the private trade could never have handled the huge quantities that come to market at harvest time, and prices would have crashed, making all the efforts and investments of farmer go waste. As for the buffer stocks, it was the stock built in the preceding years (which had reached an all-time high of 27 million tons on 1.7.1986), which came handy, and enabled the country to meet the challenge thrown up by the great drought of 1986-87, a challenge which was met successfully without seeking any food aid from any quarter. No desperate purchases were required, and import of some wheat and rice could be deferred to 1988-89 when the country could import on its own terms.

The PDS also, no doubt, played a great role by making rice and wheat available at the fixed prices to consumers in all nooks and corners of the country, thereby, preventing the specter of famine in any part of the country. This distribution network also supplied grains for the "food for work" type programs taken up on a large scale to fight the drought.

Parties Involved in PDS

- 1. Food Corporation of India: This is the first most party from where the allotment of the food grain to the block godowns of the Districts are done. This party is having the supreme authority in the functioning of the PDS as from the releasing of the goods to the subsidies given to the consumers is being done by the FCI. Their major role is to seek that the food grains are being supplied to the various block godowns at an appropriate time and quantity. They also make arrangements to ensure the quality of the goods by using various pesticides in their warehouse.
- 2. State Government: On behalf of the State Government, Area Marketing Officer is the authorised employee who deals with the goods relating to the PDS. For each block godown there is one AMO who supervises all the functioning of the PDS goods. From the receiving of the goods from the FCI to the distribution of the food grains to each FPS Dealers, the AMO plays a very major role. The AMO's work also involves monthly survey in the villages to check, if the consumers are satisfied or not. In every state the expenditure by the state government on PDS is different, so the AMO acts as an intermediary between the consumer and the State Government.
- 3. Fair Price Shop Dealer: In every village there are one or two Fair Price Shop dealers depending on the size of population. These dealers are the one who took up the responsibility to distribute the food grains to consumers at subsidized prices without any salary. For every quintal they are given Rs.17 as a commission by the state government. These dealers are responsible for the timely delivery of the goods to the consumers with good quality and appropriate quantity.
- 4. Consumers: The PDS process ends with the consumers. They are the persons for whom this

program was initiated by the government. They are authorised to complaint if the dealers sell them the faulty food grains. This program was also started for the welfare of the consumers of India, so that, no people in India die of hunger.

Functioning of PDS Centres

From the 1st till the 21st of every month, the food grains are being supplied to the various district godowns from the FCI's warehouses. At the time when the goods reach the district's godowns there are minimum of two Gazette officers (generally Area Marketing Officers) who are there to check the quality and the quantity of the food grains. In the case, when the goods are of obscure quality or the goods are of less quantity in each pack of bag they are returned immediately to the FCI. These officers are also responsible to make the entries of the stock that they are receiving from the FCI's warehouse. After checking all the things they give the signing of the received letter to the employee of the FCI.

On the $22^{\rm nd}$ of the month, these Area Marketing Officers are responsible to value the quantity of the stock. Then from the $23^{\rm th}$ of the month till the end of the month, they distribute these goods to the dealers of the Fair Price Shops. These dealers first prepare a challan of Rs.7000 to Rs.10000 depending on the number of consumers in their regions. The dealers of the FPS also have to bring Quota Card along with the challan in which the information about their share is also given. Then along with this challan from the $23^{\rm th}$ to the end of every month they come to the godowns, and submit the challan to the Area Marketing Officers at the time of receiving the goods.

In the first week of every month the goods are then recorded by the FPS dealers' and from 1st to 4th of the month, the deputed employee is responsible to verify the quantity. During this work, two employees of the State Government are also present. So, in this first week, the dealers make all the arrangements for the goods to be distributed to the consumers. From the 8th of every month, the goods are being distributed to the consumers in front of an employee of the State Government to check the integrity of the dealers. Generally it's an assumption that the FPS shop will remain open throughout the month, but as the stock gets finished in three to five days the shops remain closed for the rest of the days. After the stock gets over, the dealers have to prepare the Distribution Certificate which is signed by the Pradhan, Secretary, Lekhpal, and five core members of the Gram Sabha of the specific village. This Distribution Certificate is compulsory for every dealer to be submitted to the AMO as without this, they are not eligible to get the stock again for the next month. One copy regarding the information of the stocks is also being sent to the office of the District Supply Officer. The DSO also maintains records of all the stock valuation that is required to check the efficient utilization of the resources available. Every month the DSO conducts a survey in the villages to check if they are satisfied.

Feedback System

- 1. FCI: At their level they maintain proper stock inventory in Journal and Ledger relating to the allotment of the food grain to every block godown of the districts.
- 2. State Government: They also maintain the proper records of the distribution of the food grain in their accounts to each FPS Dealer. Apart from this, they also ask the dealers of the FPS to produce a distribution certificate every month which is signed by the Gram Pradhan, and other dignitaries of the village.
- 3. Fair Price Shop Dealer: This dealer maintains a register in which details about every consumer along with the signature is being mentioned. He also provides an option for the consumers to give the remarks to improve the condition of the shops, and the quality of the food grain as well.

Shortcomings in the Functioning of PDS

The shortcomings noticed in the functioning of PDS, as it is structured presently, range from it being urban biased and pro-rich to its ineffectiveness in reaching the poor. The system has, however, come to

stay, notwithstanding its shortcomings, because millions of India's poor derive direct or indirect benefits from the very existence of this system. The World Bank (1991) in their report has observed that "poverty consideration will compel India to sustain publicly sponsored food-grain procurement, storage, and distribution efforts. These programmes are even more important in a period of economic downturn and adjustment, to ensure an adequate safey net".

- Urban bias: As regards urban bias, a study has shown that "in case of all commodities except coal, more than 50 per cent of the total quantity purchased under PDS is in the rural areas. PDS is rural based at all-India level for rice, coarse cereals, sugar and cloth. These items constitute more than 60 per cent of the total PDS purchases. Hence, it appears that PDS is not urban biased but pro-rural" (Suryanarayana & Dev, 1991). As regards its being pro-rich, the same study finds that "more or less all the population [income] groups depend uniformly to the same extent on the PDS with respect to all commodities in rural areas, even though there were slight variations", (Dev & Suryanarayana, 1991). Thus, even though PDS appears to be even-handed for all income groups, this very point leads to its failure in achieving its basic goal of helping the poor.
- Cost ineffectiveness: It is also said that PDS is not cost effective, its operations are too costly and the ratio between procurement and transportation is too high, pointing to 'wasteful' movements. It is also mentioned that storage losses are very high. However, if one was to analyse the various costs of FCI, it will be seen that almost 80% of the costs of FCI are non-controllable and FCI just cannot do anything if these rise. Example of such costs are minimum support price/ procurement price which have increased by almost 20% per annum in the past four years; interest rates for bank credit; rail and road transportation cost, etc. Thus, hardly 20% of the costs are amenable to cost reduction by FCI, and efforts need to be intensified in increasing labour productivity i.e., handling costs; rationalisation of movement plans to avoid criss-cross movement; reduction in transit and storage losses, etc.
- Negligible impact on income transfer to poor household: Another valid criticism of the PDS is its marginal impact, as far as income transfer to poor households is concerned, with too many or everyone being eligible to draw food-grains from PDS, the per capita transfer of income is very small. In an study based on National Sample Survey's 42nd round (NSSO, 1990), it has been found that "the value of the subsidy is so little even for those households who make all their purchases of cereals from ration shops. For the bottom 20% of the rural population, the subsidy is no more than Rs. 2.08 per capita per 30 days. With the average family size of 6, the subsidy per family is almost Rs. 12.50 per month. In other words, it is useful to note here, one person's day of additional employment per family per month would provide the same income support as provided by the cereals distributed under PDS" (Parikh, 1994).
- Missed target beneficiaries: Most of the above shortcomings flow from the universal nature of the present PDS, with benefit having been thinly spread over all the beneficiaries, be they rich or poor. "While a number of studies have suggested proper targeting of PDS, none of them have discussed the costs and political feasibility of targeting. The administrative costs of targeting have been reported to be high in some developing countries. If PDS could be targeted to the poor, a larger proportion of the household's requirement could be met by enhancing the scale and it would also be able to generate a commitment on the part of card holders on the system. Beneficiaries could then be organised and educated. They would then monitor the supplies and sales themselves to ensure that supplies reach the fair price shop in proper quantity and quality, and are sold to genuine beneficiaries. The entitled households would also then demand their quota from the FPS owner, and would not be turned away by the shopkeeper by saying that whatever quantity had come has been sold away or that the bad quality grains were supplied (in some cases replaced by unscrupulous vested interest), and beneficiary would find such stocks not worth purchasing at that price.

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• Leakage in targeting: Many studies have also reported a high percentage of leakages in the event of targeting. (Radhakrishnan & Rao, 1993). The main weakness in PDS i.e. not reaching poor effectively stems from the universality of the PDS coverage. Every household, irrespective of its income, can have an entitlement card and draw food-grains against it. This in turn leads to low scales per household, and first come first served system of delivery. These two combine to allow leakages and diversions on the one hand, and "no commitment" syndrome on the part of the poor households on the other. Targeting of PDS to the really needy is, therefore, immediately required, and an effective PDS needs to be maintained till the time the country has poor & needy households.

Research Objectives

- 1. To study the functioning of the PDS centers.
- 2. To record the satisfaction level of the consumers who are receiving the food grains.
- 3. To check where the leakage of food grains happens, and what should be done to control it.
- 4. To check the authenticity of the bogus ration cards which are used by the FPS dealers itself.
- 5. To study and analyze the conditions of the state godowns where the goods are stored.
- 6. To study the role of the state government in making PDS a successful one.
- 7. To propose the solutions to increase the effectiveness of PDS.

Research Methods and Data Collections

A descriptive research design was chosen for the study. There are three main entities involved in the whole PDS, those are Customers of PDS, Employees of PDS, and fair Price Shop Owners. Data was collected from four villages of Gautam Budh Nagar of the state of Uttar Pradesh. Average population of these villages is 1000 family, and apx. 4000 people. Sampling technique applied was simple random, and 400 customers of PDS were surveyed to collect the feedback and record the satisfaction level. A structured questionnaire was used for collecting data from consumers. 10 employees of PDS posted in Gautam Budh Nagar were interviewed to get the insights of the challenges faced by them while working in this system. Structured interview schedules were developed to collect feedback from the employees. These employees included District Supply Officer, Marketing Inspector, Area Marketing Officer, Accountant and Clerk posted at HQ – PDA Gautam Budh Nagar. The other sampling unit survey was Fair Price Shop Owners of these villages. There were total eight shops in these villages, and structured interviews were conducted to collect data from the owners of these shops.

Data Analysis

(A) Analysis of Available Records

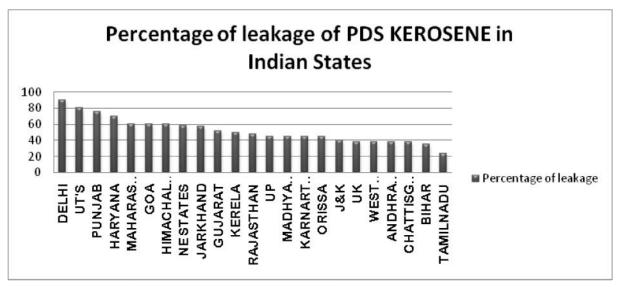
Leakage of kerosene in the year 2011-12 and 2012-13: The functioning of the PDS centres is insufficient to satisfy the end customers. If we look at the leakage of kerosene in the year 2011-12 and 2012-13 we see that the collective share of the so-called BIMARU (Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh) is 36%. As these states are considered to be relatively poor and economically backward, and have a high share in total allocation, their leakage rates range from 34-46%. Among these states Bihar has the lowest leakage rate (34%), below the national average, and second only to Tamil Nadu. On the other hand, the estimate for Madhya Pradesh is almost 46%, close to the national average. Here we see that the North Eastern States get a small share of kerosene allocation (under 5%) but in per capita terms, allocation of the kerosene (10.18 litres per capita), turns out to be the highest in the country (National average 8.20 litres). The entire North Eastern Region, with the exception of Tripura has high estimated leakages. The average leakage of the north eastern states is 57.9%.

Table No. I

State	Allocation (2 year average 2011-12 and 2012-13), kl	Share (%)	PDS Purchase (2011-12), kl	Leakage (%)
Andaman & Nicobar	7242	0.07	3,105	57.1
Andhra Pradesh	498,402	5.02	309,047	37.8
Arunachal Pradesh	11,592	0.12	2,768	76.1
Assam	329,430	3.32	150,876	54.2
Bihar	818,766	8.25	539,446	34.1
Chandigarh	5,646	0.06	2,766	51.0
Chhattisgarh	186,420	1.88	118,219	36.6
Dadra and Nagar Haveli	2,382	0.02	1,330	44.2
Daman and Diu	1,464	0.01	921	37.1
Delhi	57,642	0.58	4,714	91.8
Goa	12,618	0.13	5,019	60.2
Gujarat	673,584	6.79	316,822	53.0
Haryana	126,168	1.27	37,111	70.6
Himachal Pradesh	28,806	0.29	11,407	60.4
Jammu and Kashmir	94,890	0.96	56,796	40.1
Jharkhand	270,132	2.72	116,440	56.9
Karnataka	531,216	5.35	294,181	44.6
Kerala	161,160	1.62	79,639	50.6
Lakshadweep	1,014	0.01	700	31.0
Madhya Pradesh	626,190	6.31	339,240	45.8
Maharashtra	1,102,266	11.11	442,263	59.9
Manipur	25,344	0.26	3,677	85.5
Meghalaya	26,004	0.26	7,341	71.8
Mizoram	7,836	0.08	3,234	58.7
Nagaland	17,100	0.17	578	96.6
Odisha	400,356	4.03	217,501	45.7
Puducherry	7,554	0.08	2,660	64.8
Punjab	188,220	1.90	44,322	76.5
Rajasthan	511,182	5.15	294,346	42.4
Sikkim	6,468	0.07	1,288	80.1
Tamil Nadu	516,798	5.21	396,288	23.3
Tripura	39,222	0.40	25,292	35.5
Uttar Pradesh	1,592,424	16.05	898,142	43.6
Uttarakhand	72,726	0.73	45,341	37.7
West Bengal	964,596	9.72	598,176	38.0
NE States	462,996	4.67	195,055	57.9
India	9,922,866	100	5,444,185	45.1

Source: (1) Allocation Annexure referred to in reply to parts (a) & (b) of the Lok Sabha Starred Question No. 270 for answer on 15.03.2013 regarding 'Release of Kerosene oil through PDS' asked by Shri Narendra Singh Tomar.

⁽²⁾ Purchase: Government of India (2014).



In the above chart it can be seen that the maximum leakage of kerosene is in Delhi (91.8%) and Tamil Nadu (23.3%) is the state which has the minimum leakage. The data shows that the total leakage is 45.1% for the year 2011-12. To see the Union Territories we can see the Andaman and Nicobar Islands (57.1%) has the highest leakage.

(B) Diversion of Food grain

In the Table No. 2 we can see the diversion of the food grains for the years 1999-2000, 2001-02, 2004-05, 2006-07 and 2007-08.

- Year 1999-2000: In this specific period we can see the maximum leakage is for wheat i.e. 48.6% and the minimum for rice i.e. 9.9%. When we look at the states Haryana (100%) is one of the state in which all the food grain are diverted and Kerala is one of them in which there is minimum diversion i.e. (5.9%). The maximum diversion for rice is in Punjab and Rajasthan i.e. 100%, and the minimum is in Haryana i.e. 0%. Maximum diversion for other food grain is in Haryana i.e. 100% and minimum in Andhra Pradesh.
- Year 2001-2002: In this time period also we can see that the maximum diversion is for wheat i.e. 66.8%, and minimum for rice i.e 18.2%. For wheat, the maximum diversion is in Assam i.e. 98.1%, and minimum in Gujarat i.e. 27.3%. On the other hand, maximum diversion of rice is in Punjab i.e.92.5%, and minimum in Andhra Pradesh i.e. 12.3%. For other food grains we can see that the maximum diversion is in Haryana i.e. 94%, and minimum in Andhra Pradesh i.e. 11.2%.
- Year 2004-2005: In this time period we see that the maximum diversion is for wheat i.e. 70.3% and minimum for rice i.e. 41.3%. For wheat, the maximum diversion is in Assam i.e. 100%, and minimum for Uttar Pradesh i.e. 36.7%. For rice we see that the diversion is maximum in Punjab and Rajasthan i.e. 100%, and minimum for Himachal Pradesh. For the other food grains, the maximum diversion is in Rajasthan i.e. 93.9%, and minimum in Tamil Nadu i.e. 7.3%.
- Year 2006-2007: In this specific time period we see that the maximum diversion is again for wheat i.e. 61.9%, and minimum for rice i.e. 39.6%. For wheat we see that the maximum diversion is in Assam i.e. 98.4%, and minimum in Uttar Pradesh i.e. 7.8%. For rice we see that the maximum diversion is in Jharkhand i.e. 86.4%, and minimum in Kerala i.e. 0.8%. For other food grains, the maximum diversion is in Jharkhand i.e. 84.4%, and minimum in Kerala i.e. 14.8%.

Table No. II: Diversion of PDS grain

		1990-2000	000		2001-2002	2		2004-2005	05		2006-2007	200	2	2007-2008	8
	RiceV	Wheat	Rice Wheat Foodgrain Rice Wheat Foogdrain Rice Wheat Foogdrain	Rice	Wheat F	oogdrain	Rice V	Wheat	Foogdrain		Wheat	Rice Wheat Foogdrain	RiceV	Vheat F	Rice Wheat Foogdrain
AP	15.2	14.4	15.2	12.3	-210.8	11.2	22.3	93.0	23.2	16.1	6.99	17.0	19.2	50.3	19.6
AS	54.7	100	65.3	69.4	98.1	74.9	83.5	100.0	88.7	72.4	98.4	9.92	73.0	97.5	77.5
$\overline{\mathbf{B}}$	94.6	75.2	80.2	77.3	91.6	88.3	84.8	92.8	91.0	83.6	84.4	84.0	92.4	85.1	89.5
Chh				45.8	33.4	43.2	45.1	82.6	51.8	28.9	65.3	30.9	-3.1	57.0	-1.5
Guj	-23.9	8.2	-2.5	35.6	27.3	29.8	52.7	51.3	51.7	66.1	39.6	53.2	73.0	53.3	63.1
Har	0	100	100		94.0	94.0		82.7	82.7	39.5	29.4	31.4	61.8	48.8	51.1
HP	•			26.0	43.8	31.2	7.0	46.2	27.0	11.6	32.4	21.8	12.9	14.3	13.6
JK	-1.4	-80.3	-12.3	54.1	79.0	60.7	-8.9	79.4	23.0	36.5	66.4	-1.0	7.6	59.1	24.3
$^{\mathrm{Hf}}$				71.5	83.0	79.1	82.3	87.9	85.2	86.4	80.9	84.4	83.3	85.2	84.0
KA	17.1	21.0	18.0	47.0	53.7	48.4	25.8	41.7	28.7	32.6	34.4	32.9	42.2	33.4	41.0
KE		5.9	-36.9	28.6	6.99	0.0	-1.9	78.9	25.6	8.0	55.3	14.8	3.5	55.6	16.2
MP		18.2	46.9	50.8	46.4	47.4	12.9	56.7	50.1	52.8	64.0	61.1	20.8	39.9	35.5
MA		33.3	29.9	40.0	53.2	48.3	46.5	51.0	49.3	44.6	38.5	41.4	40.7	44.1	42.5
OR	26.8	87.5		21.4	,	21.0	74.1	9.66	76.3	53.4	91.5	57.0	46.2	97.1	50.2
PU	100	-107.0		92.5	87.7	87.9	100.0	93.1	93.2	71.9	81.1	78.5	17.6	18.4	18.4
RAJ	100	53.0	53.4	76.1	75.8	75.8	100.0	93.9	93.9	8.69	83.5	81.9	75.7	82.0	81.2
$\overline{\text{IN}}$		-21.7	-13	-79.2		0.0	9.4	-86.7	7.3	2.4	-105.6	-0.7	8.7	-186.1	4.4
UP		17.4	31.1	77.4	67.1	69.7	85.4	36.7	58.0	72.3	7.8	50.5	52.9	-14.5	26.7
Γ			•	109.08	109.08-810.0	0.0	44.2	84.8	59.4	44.2	88.3	63.3	33.3	70.9	48.5
WB	23.8	70.9	57.3	42.4	84.0	67.3	70.4	85.0	9.08	72.4	80.4	8.92	70.8	77.9	74.8
IND	INDIA 9.9	48.6	23.9	18.2	8.99	39.0	41.3	70.3	54.0	39.6	61.9	46.7	37.2	57.7	43.9

Notes: For a discussion of "negative" diversion estimates, see section 4.3

figures have been used. For 2004-5, population projection for 1st March, 2005 have been used. For 2006-2007 (2007-2008), projected population on 1st March 2007 (2008) has been used. Population projections have been taken from Office of the Registrar General and Census Commissioner (2006). Sources: Offtake data from Monthly Foodgrains Bulletin published by Government of India. Total (BPL, APL and Antyodaya) offtake

Year 2007-2008: In this specific time period the maximum diversion is recorded again for wheat i.e. 57.7%, and minimum for rice i.e. 37.2%. For wheat it can be seen that the maximum diversion is in Assam i.e. 97.5%, and minimum in Himachal Pradesh i.e. 14.3%. For rice the maximum diversion is in Bihar i.e. 92.4%, and minimum in Kerala i.e. 3.5%. For other food grain, the maximum diversion is in Bihar i.e. 89.5%, and minimum in Tamil Nadu i.e. 4.4%.

Conclusion: With all the facts and figures that is available, it can be clearly seen that there is a leakage of the foodgrains in all the parts of India. The quantity that is being procured by the FCI does not reach the end consumers. It is very necessary to find the occurring shortcomings due to which we are not able to satisfy the population of India. Hence, all the problems and the solutions are being discussed in the forthcoming portions.

(C) Beneficiary Satisfaction: What Beneficiaries Speak About PDS Profile of the beneficiaries

S. No. Amount of Land % of Total Beneficiaries Surveyed 1. 77.60% 0-3 acres 2.3-6 acres 6.47% 3. 6-9 acres 3.23% More than 9 acres 12.62%

Table No. 1

As discussed above, the public distribution system which was initiated by the government of India was for the welfare of the poor citizens of our nation. In the above chart it is shown that the farmers of the three villages are lacking in the farms, and hence, it is determined that more than 77.60% of the population are only having three acres or less than that. They are in need of the basic essential commodities of the food which they should be getting, and is also being given by the government of India. Hence, by this diagrammatic picture it is very clear that PDS is required.

Access to the Facility through Ration Card

Ration card is a type of service that is being provided to the citizens of our nation to help them in monetary terms. It is being developed to help the citizens in providing them the basic facility like, food. They are being given goods to the consumers at the subsidised prices. The goods include wheat, rice, kerosene, sugar, and other materials.

All the households for which the survey was conducted were holding the ration card as all the villagers were in need of the basic necessities including food which they were getting.

The categories which are there in the Public Distribution System (PDS) are Above Poverty Line, Below Poverty Line, Antodaya Anna Yojana. The study further revels that 68.6% of the population were holding Above Poverty Line, 24.27% of the population were having Below Poverty Line, and 7.11% were having Antodaya Anna Yojana card. Further, it was concluded that majority (68.6%) of the population are holding APL Cards.

Table No. 2

S. No.	Facility Through Ration Card	Percentage
1.	Yes	100%
2.	No	0%

4.

Table No. 3

S. No.	Type of Ration Card	Percentage
1.	Above Poverty Line	68.6%
2.	Below Poverty Line	24.27%
3.	Antodaya Anna Yojana	7.11%

Another important finding of the study is revealed in Table No. 4. It reveals that 46.92% of the population are having ration cards for more than 9-12 years. This signifies that the government has not initiated in renewing the ration cards. The data itself reveals that the number of bogus ration cards have increased and these are being used by the supplier to use for their own convenience.

Table No. 4

S. No.	No. of Years of Having Ration Card	Percentage
1.	0-3 yrs	4.85%
2.	3-6 yrs	29.44%
3.	6-9 yrs	18.77%
4.	9-12 yrs	46.92%

Quality of Food Granis distributed

In the Table No. 5 the quality of the PDS has been described in three phases: poor, quality and average. Now it is being noted that 70.55% of the population describes that the quality of the goods are average, 14.23% of the population believes that the quality is poor, and only 15.21% of the population believes that the quality is good.

Table No. 5

S. No.	Quality of Goods	Percentage
1.	Poor	14.23%
2.	Average	70.55%
3.	Good	15.21%

Proportion of Food Grains Distributed

As discussed in Table No. 3 that the 68.6% of the population is having Above Poverty Line card, and therefore, the number of consumers who are receiving the kerosene i.e. 60.51% is the maximum. Table No. 6 discusses that 21.35% of the population are receiving all the goods. The number of the population who is not at all getting any of the goods is 16.50%.

Table No. 6

S. No.	No. of Goods Provided	Percentage
1.	Wheat	0.97%
2.	Rice	0.64%
3.	Kerosene	60.51%
4.	Sugar	0%
5.	All of above	21.35%
6.	None of these	16.50%

Quantity of Food Grains Distrubuted

As depicted in Table No.7 the quantity of every goods which they are receiving is the maximum in case of the category, 0-5 kgs i.e. 59.54%. For the other two category, i.e. 5-10 kgs and 10-15 kgs it is 11.65%. 16.84% of the population is not receiving any of the goods at all.

Table No. 7

S. No.	Quantity of Every Good Provided	Percentage
1.	$0\text{-}5\mathrm{kgs}$	59.54%
2.	$5\text{-}10\mathrm{kgs}$	11.65%
3.	$10\text{-}15\mathrm{kgs}$	11.65%
4.	$15\text{-}20\mathrm{kgs}$	0.07%
5.	None of these	16.84%

Availability of PDS Facility

The interview conducted with the owner of the FPS shops and others stated that the food grains which is given to them by the state government gets over within 2-3 days. As it is very clear that the opening of the PDS shops throughout the month is not possible because type shop owner will remain idle. From the above chart it is seen that the PDS shops are just opened for 0-10 days throughout the month. The shop is never opened throughout the month.

Table No. 8

S. No.	No. of Days PDS Shops are Opened	Percentage
1.	0-10 days	100%
2.	10-20 days	0%
3.	Throughout the month	0%

(D) Employees Satisfaction

From table no.9 chart it is very clear that the number of organisations who are receiving the salary from 10-15k is 54% and the number of persons who are receiving 15-20k is 36%. This clearly indicates that the state government is not working for the welfare of the employees and the benefits which are provided to them are very meagre. The state government should work for the upliftment of the employee by providing them good monetary incentives.

Table No. 9

S. No.	Salary to the Employees	Percentage
1.	0-10 k	0%
2.	10-15k	54%
3.	15-20k	36%
4.	20-25k	10%

Table No.10 clearly shows that 100% of the employees are not receiving any HR increment. The government is not at all focussing on the increment policies. The employees in the state government are not receiving any kind of monetary benefits from the government, as there is no such HR policy regarding their non-monetary benefits which is being considered by the state government.

Table No. 10

S. No.	Monetary Benefits	Percentage
1.	Yes	0%
2.	No	100%

(E) Dealer's Satisfaction

Number of Customers Dealt

Table No.11 depicts that the dealers of the Fair Price Shops are receiving 200-300 consumers, the maximum i.e. 71%, and consumers ranging from 300-400 is 29%. Most of the consumers are not turning to the PDS shops as they are not interested in the food being provided to them by the government. They strongly feel that the quality of the goods provided to them is of obscure quality.

Table No. 11

S. No.	No. of Consumers Coming to Shop	Percenatge
1.	0-100 consumers	0%
2.	100-200 consumers	0%
3.	$200-300\mathrm{consumers}$	71%
4.	300-400 consumers	29%

Quantity of Goods Available

In Table No. 12 it is clearly stated that 71% of the FPS dealers receive 1000-1500 kgs of quantity of each goods, and the dealers receiving goods in the category of 1500-2000 kgs is 29%.

Table No. 12

S. No.	Quantity of the Goods	Percentage
1.	0-1000kgs	0%
2.	1000-1500kgs	71%
3.	$1500\text{-}2000\mathrm{kgs}$	29%
4.	Above 2000 kgs	0%

Support from State Government for the prservation of Food Grains

The dealers of the Fair Price Shops are having one or two godowns. Table No.13 provides the details that confirms that the state government is lacking in providing them the infrastructure for the proper preservation of the goods.

Table No. 13

S. No.	No. of Godowns	Percentage
1.	0-2	100%
2.	More than 2	0%

Support From Government to Meet the Shortage of Food Grains

There is always shortage of the food-grains which is not being dealt with proper attention by the state government. The government has not taken any step in providing them the support. It is because, the government has not enough man-power to support the system which is being initiated by them. The proper allocation of all the Human Resource is not being done by them.

Result Discussion & Major Findings of The Study

It was found that the goods being distributed by the PDS shops does not satisfy human needs at every stage. The lack of government initiation is seen throughout the process. No surveys are being done by the government to ensure whether the goods are reaching to the end-consumers or not. The problems of infra-structure and office services are also seen at a very large scale. There is lack of finance, i.e. employees are not being provided by any kind of allowances also.

1. Procedural Challenges

- i. FCI: The FCI is facing a shortage of employees due to which they are having a lot of problems in the storing and the allotment of the goods. They do not have sufficient warehouses for the proper storage of the goods due to which goods are placed in a very stuffed manner. They are not able to work properly as each employee is being over-burdened with multiple responsibilities.
- ii. State Government: When goods arrive to the state godowns from the FCI, the presence of two gazette officers is not possible. As these officers also have to inspect the other villages so they are not able to be present there. The state government is also facing a lot of shortage of the employees.
- iii. Fair Price Shop Dealers: The dealers of the FPS shops are given Rs.17 as a commission from the state government for each quintal of the food grain. From this amount of Rs. 17, Rs. 16 is being given by the dealer to the labour for the carrying charges. Here we analyze that only Rs. 1 is being left to the dealer as his income on 1 quintal. The dealer gets approximately 100-200 quintals of the goods monthly. Now when the goods are there in the FPS shops it generally happens that the employees of the state government whose responsibility is to be present at the time when goods are distributed are found missing. Due to this the FPS dealer changes the good quality goods with the poor quality goods from the General Stores, and then sells it to the consumers.
- iv. Consumers: It is seen some of the customers do not go to the Fair Price Shops. It is their negligence due to which the dealer does not have any option instead of selling the goods in the black.

2. Human Resource Challenges

- i. FCI: The number of employees who are currently there to work are insufficient, due to this each employee is over-burdened with two to three responsibilities. This makes the employee restrained for completing the duties properly.
- **ii. State Government:** Due to insufficient number of employees, one Area Marketing Officer is being given responsibility of four block godowns. The clerks are so much over-burdened that out of 13 employees, only 3 are present right now. Even the employees of the D- grade are less in number.

3. Financial Challenges

- i. FCI: The salary which is being given to the employees of the FCI is not sufficient. The officer's of the FCI are not being given sufficient monetary and non-monetary benefits as compared to counterparts.
- ii. State Government: The salary which the Area Marketing Officers and clerks are receiving from the state government is not adequate to sustain their family. Moreover, the officers of the state government are provided bus allowances for the transportation charges. They are also not being given the stationery expenses.

4. Functional Challenges

i. **FCI:** The number of the godowns are not sufficient enough for the storage of the goods. There are no safety measures which are taken for the safe preservation of the goods.

- ii. State Government: The state government is lacking in the number of godowns that they should have for the proper storage of the goods. The godowns which are used by them are in a bad condition. Some of them are very old like the antique pieces, and the others are on lease. The godowns which are on lease are very frequently getting taunts from the owners to vacate the storehouses. There are no safety measures which are provided to the employees to protect the goods from any kind of theft or dacoity. There is always a risk to the food grain in the rainy season as the roof top of the godowns have a leakage. In each block godown it is seen that there is a shortage of a staff due to which the employees have a lot of mental tension. Some of the posts are vacant for more than a year, and still no attention is given to it by the state government. Even the clerical posts, and the store keeper are vacant due to which the Marketing Officer is engaged in all the so-called official work. The office premises of the PDS Centers do not have washrooms which is very detrimental if the employees are females as well. And even after that the government wants the employees to be present in the office from 10 to 5, for 6 days a week. The employees of the PDS centers do not get any kind of training and research development programs as such to increase the efficiency of the work. It is also found that they do not get any increment as per the HR policies except the DA and HRA. The female Area Marketing Officers are getting bus allowances for travelling to one city from the other in the night as well. They have to work till late night as well without any allownaces. All the stationery items are being purchased by the staff of the godowns, and nothing is being provided to them by the government. Even the stencil which is with the PDS moving vehicles is being prepared by the staff.
- iii. Fair Price Shop: The dealers of the FPS Shops have remained same for the previous two to three decades which gives rise to corruption. They do not have proper shops or the godowns for the proper storage of the food grains. Hence, the goods are being sold right from their home. They are not educated at all because of which they face a lot of problems in this process of the PDS. These dealers don't have a bank balance of more than Rs.40,000 which itself says a lot about their honesty in dealing with the goods.

Proposed Solutions to Increase the Effectiveness of PDS System

- 1. Solutions to Procedural problems
- i. FCI: The central government should focus on the recruitments of the B and C grade employees which would enhance the working in an efficient manner. The burden faced by the employees is leading to lot of mental tension. They should also focus on the timely departure of the food grain so that they reach the state godowns at an appropriate time. Proper attention is also to be seen in the storing of the food grain with proper pesticides.
- ii. State Government: The state government should focus on increasing the number of officers in the state godowns so that proper attention is maintained during the receiving, and the distribution of the food grains, as these officers have other responsibilities in inspecting the villages, and the other godowns as well. The adequate security measures should be made by the state government so that proper protection of the food grain is done.
- iii. Fair Price Shop Dealers: The commission which the dealers are receiving for every quintal of the food grain must be increased to an appropriate level (minimum Rs. 50). The dealers must be provided with the training and the development programs about the safe storage of the food grain. They must be made aware about the kind of pesticides they must use while preserving the goods. These factors will make the dealers in living and leading the normal life without any kind of fraud or misrepresentation of the facts related to the goods.
- iv. Consumers: The consumers must know about the facilities which are provided to them by the state and the central government. They must consume the food grain which are provided to them at the subsidized prices and benefit it at the maximum they can.

2. Solutions to Human Resource Problems

- i. FCI: The relevant number of staff must be allocated to the FCI godowns so that food grain are being stored properly. For this, recruitments must be done as soon as possible to remove this barrier. Now, a days we have seen that recruitments take a very long time in the government sectors. It is a very important matter in which the government has to pay a lot of attention which will definitely reduce the work load and improve the system of the PDS.
- ii. State Government: The state government must do urgent recruitments in the B and the C grade categories. This will enable the efficient and effective working of the PDS centres.

3. Solutions to Financial Problems

- i. FCI: The salary of the employees must be increased so that young generation must aspire for them. The employees must be given other monetary benefits, such as, yearly increment and other allowances.
- ii. State Government: The salary of the Area Marketing Officers and the clerks must be increased to an appropriate level so that people aspire and have will to work in it. The government must provide them the sufficient stationery and the other items for the working of the PDS centres. The transport allowances which are given to them must be at least double of what they are receiving right now.

4. Solutions to Functional Challenges

- i. FCI: When the goods are being sold by the farmers to the distribution centres of the FCI, there is always a shortage of the employees and the laborers. Due to this shortage there is a false weight age of the goods because of which the farmers suffer. Now, when these goods reach to the FCI godowns there as well, due to the shortage of the staff the same problem occurs which they recover by mixing the impurities to each bag of the 100 kgs of food grain. It also needs to be seen that timely departure of the goods from the FCI must be there. The sample which is shown to the Marketing Inspectors at the time of the delivery is very different from the goods which the consumers receive at the time of consuming it. Hence, the whole system of the PDS gets disturbed because of the ignorance of the central and the state government. Therefore, the quality of the PDS Centres can be improved only if the government will initiate in making it more efficient. As for now, the state government is involved in having only the benefits which they can have through the schemes provided by the Central government.
- ii. State Government: Their should be increased number of godowns available for the food grain as now they are being kept in a stiffed manner. The godowns which are available right now should be repaired and renovated as according to the needs. Proper security guards should be posted there to protect the godowns, and give the employees some safety measures as well. From years it is observed that the various posts are just left vacant which should be immediately filled by recruiting skilled employees. Proper hiring and then training, and the research development programs must be initiated by the state governments. The PDS office premises must be properly maintained and basic facilities must be provided to the employees. As to work in a office for 6 days in a week the working environments are to be according to that. The training and research development programs must be initiated by the governments to keep the employees motivated and focused towards the work they are engaged in. The allowances to the B-Grade officers must be increased as they are bound to do late night shifts, and sometimes they move to the other cities in the peak night hours. The higher officials must take care of the stationery which is required by the staff working at the PDS centres. As according to it, all the basic items must be provided to them. For the better functioning of the PDS centers the employees must be given non-monetary benefits as this will definitely increase the efficiency of their work. There should be an increment to the HR policies which must be done at a frequent basis so as to enable growth of employees as well. Moreover, the non-monetary facilities like

LTC, medical facilities, appropriate leaves, promotional opportunities must be there which would make the happening of the PDS Centers good. Last but not the least, the salary of all the employees including the District Supply Officer, Marketing Officers should be increased at the appropriate level so they live a dignitary life.

iii. Fair Price Shop Dealers: The dealers of the FPS shops must be provided with the supply of the goods at an appropriate time with feasible transportation costs. Every month there should be a meeting to be organized by the officials with the dealers to listen to their grievances, and provide them sufficient support in running the shops. The dealers should also be provided with the other monetary benefits which should be looked upon by the state government to improve their condition.

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