

Customer Perceptions of Public Distribution System in Chhattisgarh and Mizoram

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Abstract

Public Distribution System (PDS) is viewed as the most important food security network in India in terms of its coverage and public expenditure yet it is not without its limitations. The government spends around Rs.750 billion per year on food grains, however, over 20% of the population remains undernourished in the country. The present study focuses on the performance of PDS in the states of Chhattisgarh and Mizoram by analyzing the household customer perceptions. For this purpose, 300 households were surveyed from the two states. The purposive sampling method was followed in choosing the respondents from the capital cities of Raipur (Chhattisgarh) and Aizawl (Mizoram). The study found that more than three-fourth of the customers in both the states were satisfied with the performance of PDS. The Fair Price Shops in Chhattisgarh were perceived to be faring better in terms of number of working days compared with their counterparts in Mizoram. However, the respondents in Chhattisgarh have to travel more than the respondents in Mizoram to reach the ration shop. Almost all the respondents acknowledged the important role being played by PDS in the well-being of their family. In respect of the replacement of PDS over cash transfer system, over 70% of the respondents in Mizoram and nearly 89% of the respondents in Chhattisgarh did not want cash transfer. The findings suggest the need to support and strengthen the existing policy of supplying the commodities at subsidized prices.

Keywords: Public distribution system, Fair price shops, Ration cards, Customer perceptions.

Introduction

Evidences provided by Jacob (1999); Choudhari (2003); Rao (2007) and Parmod Kumar (2010) and Chivate (2014) indicate that the origin of Public Distribution System (PDS) can be traced back to the period of Second World War

in India. PDS till 1992 was a general entitlement scheme in the country for all consumers without any specific target. The Revamped Public Distribution System (RPDS) was launched in June 1992 in 1775 blocks throughout the country with a view to strengthen and streamline the PDS as well as to improve its reach in the

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far-flung, hilly, remote and inaccessible areas where a substantial sections of the poor live (Parmod Kumar, 2010). However, PDS was criticized for its urban bias and its failure to serve effectively the poorer sections of the population, a need was then felt to review the PDS and make it more focused. Consequently, the Targeted Public Distribution System (TPDS) replaced the erstwhile PDS from June 1997.

Thereafter, the PDS has become a popular food security system in the country which is managed jointly by the central government and state governments. It has been distributing subsidized food and non-food to the targeted beneficiaries including the poor. Major commodities distributed include staple food grains such as wheat, rice, sugar and kerosene through a network of public distribution shops, popularly known as Fair Price Shops (FPSs) in academic literature. These are known as Ration Shops in general public which were established in different states across the country. The Food Corporation of India (FCI), a central government undertaking, procures and maintains the public distribution system. PDS is considered to be the most important food security network. However, the food grains supplied by the ration shops are not enough to meet the consumption needs of the poor and they are in general of low quality.

Chhattisgarh state which was formed on November 16, 2000 with the 16 Chhattisgarhi speaking southeastern

districts of Madhya Pradesh, is known for its successful implementation of PDS in the country. Armed with the slogan 'bread and employment for all', nearly 35 lakh Below Poverty Line (BPL) people have been supplied with subsidized Rs.2 per kg rice in Chhattisgarh. So strong and efficient is the PDS in Chhattisgarh that it has become the lifeline for its 35 lakh recipients or roughly 65% of the state's population. However, in Mizoram, a small state of North East Region (NER), certain irregularities in management of public distribution system such as leakages and the existence of a large number of bogus ration cards have been observed. This paper attempts to study the performance of PDS as perceived by the customers of both the states.

Review of Literature

A few studies have been reviewed in brief relating to the functioning, performance and impact of PDS in the country.

Ananda (2008) in his study on state response to food security in Anantapur district of Andhra Pradesh observed that the main weakness found out in the PDS has been its inability to reach the poor effectively. Cardholders face problems of irregular and inadequate supplies and lack of information about when the ration would be available. The villagers were poorly informed, and certainly not in advance. No respondent was happy with quantity of rice supplied.

Parmod Kumar (2010) analysed the performance and inefficiencies of

Targetted Public Distribution System in the states of Ashom, Mizoram, Rajasthan, Chattisgarh, Bihar and UP during 2006 - 2007. Majority of the households in the six states opined that the shop owners were indulging in delivering food items to the open market or they were involved in black marketing of PDS food items. Around 35% to 40% households were not happy with PDS quality of rice. But among the two states of Ashom and Mizoram, majority did not prefer local variety over the PDS variety.

Alamu R (2011) observed that PDS is working quite successfully in Tamil Nadu. Tamil Nadu has a universal PDS where all households are entitled to food rations, including upto 20 kg of rice per month. People are aware of their entitlements. At least one person in every household is aware of the details of PDS ration shops and prices. The dissemination of information is impressive. Awareness amongst the masses reduces corruption. Moreover, it is not just awareness amongst people but also politics that makes the PDS perform.

Khera (2011) found that between 2004-05 and 2007-08, the proportion of households getting any grains from the PDS has progressively risen, from about a quarter of rural households (27%) to just over one third (35%). In different states the proportion of households that the government is willing to subsidize i.e. BPL households has increased by more than 10% points i.e. 6% to 18% in UP 22% to 36% in Orissa, 25% to 47% in

Chhattisgarh, 40% to 59% in Kerala. In addition, in states such as Andhra Pradesh, Himachal Pradesh and Tamil Nadu access was high to start with - 81%, 69% and 88% respectively.

Himanshu & Sen (2013) observed that there is a significant increase in the contribution of in-kind food transfers to both poverty reduction and nutrition. The authors also highlight that a 12 state NCAER study by Parmod Kumar (2010) reports high satisfaction level except in Bihar. Khera (2011) reports similar results from a nine state study, noting further that 80% of respondents considered PDS “very important” in their lives and 98% at least “quite important” and that a large majority prefer in-kind food to cash transfers, again except in Bihar.

Dreze & Khera (2013) highlighted the impact of PDS in poverty reduction in the state of Chhattisgarh where PDS was successfully implemented. In Chhattisgarh (2009-10), 73% households purchased PDS and the poverty gap index was reduced by 39%. In Bihar, only 18% of the BPL households did not get their full PDS entitlement while 97% BPL households in Chhattisgarh got their full entitlement under PDS. The authors concluded that India’s PDS has a significant impact on rural poverty. The impact is particularly large in states with a well functioning PDS.

Objectives and Methodology

This paper aims at evaluating the performance of PDS in the select states

of Chhattisgarh and Mizoram from the angle of the customers of the targeted groups of PDS. In other words, it is attempted to study the perceptions of the household customers of PDS in respect of its functioning.

Further, this study makes an attempt to test the following hypotheses:

H1: There is significant difference between the respondents belonging to the two select states in respect of their preference of PDS over cash transfer.

H2: There is significant difference between the respondents belonging to the two select states in respect of their satisfaction of performance of FPS in their own state.

H3: There is significant difference between the respondents belonging to the two select states in respect of importance of PDS for their family's welfare.

The data were collected by administering a structured schedule meant for the beneficiaries of PDS in select states. A total number of 150 households were surveyed from each of two states. For the purpose of conducting survey, a

purposive sampling method was adopted in selecting the respondents from the capital cities of Raipur (Chhattisgarh) and Aizawl (Mizoram). At the time of field study conducted in January - June 2014, the proportion of BPL and Above Poverty Line (APL) households were in the ratio of 80 and 20 in the country. Accordingly, out of 300 selected households, 240 were selected from BPL category and the remaining 60 from APL category. In addition, among the beneficiaries belonging to BPL category, the poorest of the poor, come under the scheme of Antyodaya Anna Yojana (AAY). The proportion of BPL and AAY was in the ratio of 77 and 23 (as this is the ratio of total existing number of BPL and AAY card holders) in the country. Hence, the numbers of the respondents are BPL: 185, AAY: 55 and APL: 60, totaling to 300.

The hypotheses were tested by using Mann Whitney U test.

Results and Discussion

An attempt is made to study the preferences and the satisfactions of the respondents in two select states in respect of the functioning and performances of PDS.

Table 1: Type of Ration Cards possessed by the Respondents

State	No. of respondents				
	Parameters	AAY	BPL	Others (APL)	Total
Mizoram	No. of families	28	92	30	150
	Percentage	18.7	61.3	20	100
Chhattisgarh	No. of families	28	92	30	150
	Percentage	18.7	61.3	20	100
Total	No. of families	56	184	60	300

Source: Field Survey

Table 1 shows the type of ration cards possessed by the respondents in Mizoram and Chhattisgarh. As seen from the table, the category of respondents is same in both the states since they were purposively selected for the study. Thus, over 60% of the respondents have BPL cards and 20% of the respondents have APL card while about 19% of the respondents have AAY card.

Table 2: No. of Days Opening of the Fair Price Shops

State	No. of respondents						
	Parameters	2 days	3 days	4 days	5 days	Other response	Total
Mizoram	No. of families	15	74	-	47	14	150
	Percentage	10	49.3	-	31.3	9.3	100
Chhattisgarh	No. of families	4	1	9	1	135	150
	Percentage	2.7	0.7	6	0.7	90	100
Total	No. of families	19	75	9	48	149	300
	Percentage	6.3	25	3	16	49.7	100

Source: Field Survey

Table 2 shows the number of days opening of the fair price shops in Mizoram and Chhattisgarh. In Chhattisgarh, over 90% of the respondents have stated that the ration shops were opened throughout the week (except Sunday), however, only 40.6% of the respondents in Mizoram stated the ration shops were opened throughout the week. Nearly 50% of the respondents in Mizoram stated that the ration shops were opened only three days a week according to the convenience of the dealers.

Table 3: Distance between the Respondents' Residence and Fair Price Shop

State	No. of respondents					
	Parameters	upto 0.5 km	1 km	1.5 km	2 km and above	Total
Mizoram	No. of families	118	31	1	-	150
	Percentage	78.7	20.7	0.7	-	100
Chhattisgarh	No. of families	48	20	1	81	150
	Percentage	32	13.3	0.7	54	100
Total	No. of families	166	51	2	81	300
	Percentage	55.3	17	0.7	27	100

Source: Field Survey

In the field study it was observed that the ration shops, in general, were placed at every locality in Mizoram while in Chhattisgarh they were found at a distant location. The finding mentioned below also corroborates this observation.

Table 3 shows the distance between the residences of the respondents and their fair price shop in Mizoram and Chhattisgarh. As already mentioned above, over 50% of the respondents in Chhattisgarh have to travel 2km and above to get their ration while such incidents were not found in Mizoram. Nearly 80% of the respondents in Mizoram need not travel more than half a kilometer to reach the ration shop while only 32% of the respondents in Chhattisgarh have such convenience. Nearly 21% of the respondents in Mizoram have to travel 1km to get the ration while 13.3% of the respondents in Chhattisgarh have to travel the same distance to get the ration.

Table 4: Time Spent for Purchase of Commodities at Ration Shop

State	No. of respondents						Total
	Parameters	less than 1/2 hour	1/2 - 1 hour	1-2 hours	more than 2 hours	Can't say	
Mizoram	Parameters	77	72	1	-	-	150
	No. of families	51.3	48	0.7	-	-	100
Chhattisgarh	Percentage	-	3	18	80	49	150
	No. of families	-	2	12	53.3	32.7	100
Total	Percentage	77	75	19	80	49	300
	No. of families	25.7	25	6.3	26.7	16.3	100
	Percentage						

Source: Field Survey

Time spent by the respondents in Mizoram and Chhattisgarh for purchase of commodities at a ration shop is shown in Table 4. In Chhattisgarh, over 53% of the respondents spend more than two hours to get commodities at ration shop while no respondent need to spend that much time in Mizoram. 12% of the respondents spend 1-2 hours time for purchase of commodities in Chhattisgarh. In case of Mizoram, over 50% of the respondents spend less than 30 minutes and 48% of the respondents in the state spend ½ - 1 hour time for the purpose.

Table 5: Are you satisfied with the Performance of Fair Price Shops?

State	No. of respondents					
	Parameters	Yes	No	Can't Say	No answer	Total
Mizoram	No. of families	133	10	7	-	150
	Percentage	88.7	6.7	4.7	0	100
Chhattisgarh	No. of families	111	18	21	-	150
	Percentage	74	12	14	0	100
Total	No. of families	244	28	28	-	300
	Percentage	81.3	9.3	9.3	0	100

Source: Field Survey

The respondents were asked whether they are satisfied with the overall performance of fair price shops. As shown by Table 5, nearly 89% of the respondents in Mizoram and 74% of the respondents in Chhattisgarh were satisfied with the performance of fair price shops. Only about 7% of the respondents in Mizoram and 12% of the respondents in Chhattisgarh were not happy with the performance of ration shops.

Table 6: Have you filed any Complaint regarding the Service of the FPS?

State	No. of respondents					Total
	Parameters	Yes	No	Can't say	No answer	
Mizoram	No. of families	4	129	15	2	150
	Percentage	2.7	86	10	1.3	100
Chhattisgarh	No. of families	6	142	2	-	150
	Percentage	4	94.7	1.3	-	100
Total	No. of families	10	271	17	2	300
	Percentage	3.3	90.3	5.7	0.7	100

Source: Field Survey

Table 6 shows that 86% of the respondents in Mizoram and nearly 95% of the respondents in Chhattisgarh have never filed any complaint relating to the services of FPS. This finding corroborates with the overall satisfaction of the respondents in both the states (88.7% and 74% of the respondents in Mizoram and Chhattisgarh respectively) as shown in Table 5.

Table 7: Price of Food items under PDS is Reasonable

State	No. of respondents						Total
	Parameters	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	
Mizoram	No. of families	1	1	47	100	1	150
	Percentage	0.7	0.7	31.3	66.7	0.7	100
Chhattisgarh	No. of families	2	0	5	98	45	150
	Percentage	1.3	-	3.3	65.3	30	100
Total	No. of families	3	1	52	198	46	300
	Percentage	1	0.3	17.3	66	15.3	100

Source: Field Survey

Table 7 shows the satisfaction level of the respondents on the reasonability of prices under PDS items in Chhattisgarh and Mizoram. Over 67% of the respondents in Mizoram and over 95% of the respondents in Chhattisgarh said the prices of the ration items charged items were reasonable. Only negligible percent of the respondents expressed their dissatisfaction in this respect. But, in Mizoram, over 30% of the respondents have no definite opinion.

Table 8: PDS plays an Important Role in our Family's Welfare

State	No. of respondents						Total
	Parameters	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Mizoram	No. of families	-	-	1	73	76	150
	Percentage	0	-	0.7	48.7	50.7	100
Chhattisgarh	No. of families	-	3	10	92	45	150
	Percentage	0	2	6.7	61.3	30	100
Total	No. of families	-	3	11	165	121	300
	Percentage	0	1	3.7	55	40.3	100

Source: Field Survey

Table 8 shows that over half of the respondents in Mizoram and 30% of the respondents in Chhattisgarh were strongly agreed with the statement. Overall, 99% of the respondents in Mizoram and over 90% of the respondents in Chhattisgarh felt the importance of PDS for their family's welfare.

Table 9: The Govt. had rightly set the criteria in Identifying entitled Beneficiaries

State	No. of respondents						Total
	Parameters	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
Mizoram	No. of families	1	6	91	51	1	150
	Percentage	0.7	4	60.7	34	0.7	100
Chhattisgarh	No. of families	10	32	93	15	-	150
	Percentage	6.7	21.3	62	10	-	100
Total	No. of families	11	38	184	66	1	300
	Percentage	3.7	12.7	61.3	22	0.3	100

Source: Field Survey

A question was asked to know whether the respondents were satisfied with the criteria set by their respective government in identifying the beneficiaries correctly.

Table 9 shows that over 60% of the respondents in both the states were neither satisfied nor dissatisfied with the soundness of the criteria followed by the govt. in identifying the beneficiaries. However, nearly 35% of the respondents in Mizoram and only 10% of the respondents in Chhattisgarh thought the criteria followed by the govt. were right. But about 5% of the respondents in Mizoram and 28% of the respondents in Chhattisgarh were not happy with the criteria set by the government.

Table 10: The Govt. does not Inspect and Cancel Bogus Ration Cards

State	No. of respondents						Total
	Parameters	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
Mizoram	No. of families	2	62	84	2	-	150
	Percentage	1.3	41.3	56	1.3	0	100
Chhattisgarh	No. of families	7	76	59	8	-	150
	Percentage	4.7	50.7	39.3	5.3	0	100
Total	No. of families	9	138	143	10	-	300
	Percentage	3	46	47.7	3.3	0	100

Source: Field Survey

Table 10 shows over 42% of the respondents in Mizoram and nearly 56% of the respondents in Chhattisgarh agreed with the statement. Only very few respondents have disagreed with the statement. 56% of the respondents in Mizoram and nearly 40% of the respondents in Chhattisgarh expressed no definite opinion in this regard.

This finding implies that the respective state governments were not playing an effective role in monitoring and cancelling the bogus ration cards as perceived by the respondents.

Table 11: There is a huge Diversion of PDS in the State

State	No. of respondents						Total
	Parameters	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
Mizoram	No. of families	2	77	64	7	-	150
	Percentage	1.3	51.3	42.7	4.7	-	100
Chhattisgarh	No. of families	2	31	109	7	1	150
	Percentage	1.3	20.7	72.7	4.7	0.7	100
Total	No. of families	4	108	173	14	1	300
	Percentage	1.3	36	57.7	4.7	0.3	100

Source: Field Survey

Table 11 shows the significant difference in the opinion of the respondents of Chhattisgarh and Mizoram. More than half of the respondents in Mizoram and only 22% of the respondents in Chhattisgarh stated that there were huge diversions of PDS items in their state thereby not reaching the beneficiaries to the full extent. However, only about 5% of the respondents in both the states felt the other way. Over 42% of the respondents in Mizoram and nearly 73% of the respondents in Chhattisgarh expressed no definite opinion.

Table 12: There is no proper inspection of FPS in the State

State	No. of respondents						Total
	Parameters	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
Mizoram	No. of families	5	60	81	4	-	150
	Percentage	3.30%	40	54	2.7	0	100
Chhattisgarh	No. of families	4	66	73	7	-	150
	Percentage	2.7	44	48.7	4.7	0	100
Total	No. of families	9	126	154	11	-	300
	Percentage	3	42	51.3	3.7	0	100

Source: Field Survey

As shown by Table 12, 40% of the respondents in Mizoram and 44% of the respondents in Chhattisgarh agreed with the statement, "There is no proper monitoring

of FPS by the state govt.”.But only about 3% of the respondents in Mizoram and nearly 5% of the respondents in Chhattisgarh did not agree with the statement. In this regard also, many of the respondents took a neutral stand (54% of the respondents in Chhattisgarh and nearly 49% of the respondents in Mizoram).

Table 13: Cash Transfer is a Better Option than PDS

State	No. of respondents						
	Parameters	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Mizoram	No. of families	2	2	36	105	5	150
	Percentage	1.3	1.3	24	70	3.3	100
Chhattisgarh	No. of families	13	-	4	-	133	150
	Percentage	8.7	-	2.7	-	88.7	100
Total	No. of families	15	2	40	105	138	300
	Percentage	5	0.7	13.3	35	46	100

Source: Field Survey

It is attempted to know the perception of the respondents in both the states, they were asked to indicate their opinion on whether cash transfer is a better option than PDS on a five point rating scale as shown in Table 13. The table shows that over 70% of the respondents in Mizoram and nearly 89% of the respondents in Chhattisgarh did not want to replace PDS to cash transfer. Only 2.6% of the respondents in Mizoram and nearly 9% of the respondents in Chhattisgarh felt cash transfer as a better option. But, 24% of the respondents in Mizoram and only 3% of the respondents in Chhattisgarh expressed no definite opinion in this regard.

Testing of Hypotheses

The hypotheses framed for the present study were tested using Mann Whitney U test to determine whether significant differences existed between variables.

Table 14: Mann Whitney U –test Summary table showing their Preference of PDS over Cash Transfer

State	N	Mean Rank	Sum of Ranks	U-value	Remarks
Mizoram	150	94.04	14106.5	2781.5	P<0.05
Chhattisgarh	150	206.96	31043.5		
Total	300				

From Table 14, it may be observed that the Mann Whitney U- value is 2781.500 with a p value of 0.000 which shows that there is significant difference in their preference

of PDS over cash between Mizoram with sum of the ranks score of 14106.50 and Chhattisgarh with sum of the ranks score of 31043.50.

Table 15: Mann Whitney U-test table Summary showing the Respondent's Satisfaction on Performance of FPS

State	N	Mean Rank	Sum of Ranks	U-value	Remarks
Mizoram	150	139.22	20883	9558.5	P<0.05
Chhattisgarh	150	161.78	24267		
Total	300				

From Table 15, it may be observed that the Mann Whitney U- value is 9558.500 with a p value of 0.001 which shows that there is significant difference in their satisfaction on the performance of FPS between Mizoram with sum of the ranks score of 20883.00 and Chhattisgarh with sum of the ranks score of 24267.00.

Table 16: Mann Whitney U-test Summary table showing the Perception of Importance of PDS in their family's welfare

State	N	Mean Rank	Sum of Ranks	U- value	Remarks
Mizoram	150	168.87	25330	8495	P<0.05
Chhattisgarh	150	132.13	19820		
Total	300				

From Table 16, it can be observed that the Mann Whitney U- value is 8495.000 with a p value of 0.000 which shows that there is significant difference in their opinion on importance of PDS for their family's welfare between Mizoram with sum of the ranks score of 25330.00 and Chhattisgarh with sum of the ranks score of 19820.00

Major Findings

The following are the major findings of the study:

- The Fair Price Shops in Chhattisgarh were perceived to be faring better in terms of number of working days compared with their counterparts in Mizoram.
- Respondents in Chhattisgarh have to travel more than the respondents in Mizoram to reach the ration shop.
- In Chhattisgarh, respondents spend more than two hours to get commodities at ration shop while the respondents in Mizoram need not spend that much time.
- Nearly 89% of the respondents in Mizoram and 74% of the respondents in Chhattisgarh were satisfied with the overall performance of fair price shops.

- In Mizoram, 86% of the respondents and nearly 95% of the respondents in Chhattisgarh have never filed any complaint relating to the services of FPS.
- Majority of the respondents in Mizoram and almost all of the respondents in Chhattisgarh felt that the prices charged for the ration items were reasonable.
- Almost all the respondents in Mizoram and over 90% of the respondents in Chhattisgarh felt that the PDS plays an important role in their family's welfare.
- Majority of the respondents in both the states were neither satisfied nor dissatisfied with the soundness of the criteria followed by the govt. in identifying the beneficiaries.
- The respective state governments were not playing an effective role in monitoring and cancelling the bogus ration cards as perceived by the respondents.
- Over 70% of the respondents in Mizoram and nearly 89% of the respondents in Chhattisgarh did not want to replace PDS to cash transfer.

Conclusions

PDS has been an important food security measure meant for vulnerable sections of the society, especially in underdeveloped states such as Chhattisgarh and Mizoram. The customers of the two states were satisfied with the performance of PDS although significant differences exist in their perception in respect of some issues. The study also highlights the need to eliminate the bogus ration cards to avoid the wastage of resources and to strengthen the existing system. The Chhattisgarh government may consider opening of more FPSs for the convenience of the customer. The overall analysis indicates that the vast majority of the respondents in the select states of Chhattisgarh and Mizoram were satisfied with the functioning of PDS in their respective states. They were particularly satisfied with the reasonable prices of the goods distributed through the PDS, and the role being played by PDS in their well-being. Almost all the respondents in both the states still prefer PDS over cash transfer which would imply the need to support and strengthen the existing policy of supplying the commodities at subsidized prices through PDS.

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