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Department of Food and Public Distribution,
Ministry of Consumer Affairs, Food, and Public Distribution,
Government of India,
Krishi Bhawan, New Delhi -110111

2023

Phase-II (2020-23) – Round VI

Period of Study: 1st July 2023- 30th Sept 2023

Districts covered:

Vidisha, Ratlam, Tikamgarh, Barwani

Monitoring Institute:
Atal Bihari Vajpayee Institute of Good Governance and
Policy Analysis
Sushasan Bhawan, Bhopal



Concurrent Evaluation of Implementation of National Food Security Act,
2013 in State of Madhya Pradesh

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This report is output of a study on Concurrent evaluation of National Food Security Act, 2013 in Madhya Pradesh by Cell for Food Systems, (CSSD) AIGGPA, Bhopal on request of the Department of Food Consumer Affairs and Public Distribution, Govt. of India in collaboration with State Food Department, GoMP.

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List of Abbreviations

NFSA: *National Food Security Act*

PHH: *Priority Household*

AAY: *Antyodaya Anna Yojana*

TPDS: *Targeted Public Distribution System*

PDS: *Public Distribution System*

MI: *Monitoring Institution*

DOFPD : *Department of Food & Public Distribution*

DSO :*District Supply Officer*

E-POS :*Electronic Point of Sale*

FCI :*Food Corporation of India*

FPS :*Fair Price Shop*

FGD :*Focus Group Discussion*

GDP :*Gross Domestic Product*

GRM :*Grievance Redressal Mechanism*

Executive summary

The National Food Security Act (NFSA) of 2013 in India was a milestone legislation, aiming to make the right to food a legal entitlement. It achieved this by providing subsidised foodgrains to eligible households, placing the responsibility of identifying these households on state governments. The key objectives of the study is to assess the overall progress of implementation of NFSA Act, 2013 in the state and monitor the changes brought at the system level and at targeted beneficiary level. Since January 2023, the Government of India has initiated the distribution of food grains free of cost to all beneficiaries nationwide. This laudable effort, however, underscores the critical importance of beneficiary awareness regarding the eligibility and identification criteria for receiving benefits under the National Food Security Act (NFSA). To ensure that food grains reach those in need, it is imperative that beneficiaries are well-informed about the eligibility requirements.

This comprehensive study, conducted from July 1, 2023, to Sept 30, 2023, in districts viz during Phase II, Round VI, delves into the state of the Public Distribution System (PDS) under the NFSA in sampled districts; Vidisha Ratlam Tikamgarh and Barwani across Madhya Pradesh. Focusing on key aspects such as Scheme awareness, FPS Quality of service delivery, and the viability of operations, Ease of Access, Leakages and Diversion, ONORC, Targeting Inclusion and Exclusion errors, Non-NFSA Households. This study offers invaluable insights into the functioning of the PDS and its impact on beneficiaries and Fair Price Shop (FPS) dealers.

The study reveals key findings pertaining to the implementation and impact of the National Food Security Act (NFSA) in sampled districts. Notably, a majority of families are aware of NFSA eligibility criteria, while the presence of women as household heads in ration cardholders varies across districts. Accessibility and satisfaction with Fair Price Shops (FPS) operations are generally high, with no reports of Silent Ration Cards. No instances were found of AAY beneficiaries incorrectly included as PHH beneficiaries, indicating more accurate AAY inclusion. However, the use of surveillance technology and biometric authentication poses challenges in certain areas. While awareness about portability is variable, its utilization is limited, calling for awareness campaigns and facilitation efforts. Furthermore, the acceptance of fortified rice, while relatively high, is marred by concerns about taste, highlighting the need for improved product acceptability.

Chapter 1 - Introduction

Concurrent Evaluation of National Food Security Act, 2013 the mentioned project has been sanctioned by the Government of India for a period of 3 years w.e.f 2020-2023. In 2013, the National Food Security Act (NFSA) was passed with the overall objective of providing food and nutrition security to people by providing access to foodgrains at affordable prices. The above project has been sanctioned by the Government of India for a period of 3 years w.e.f 2020-2023. In 2013, the National Food Security Act (NFSA) was passed with the overall objective of providing food and nutrition security to people by providing access to foodgrains at affordable prices. This Act translated the Targeted Public Distribution System (TPDS) from a welfare approach to a rights-based approach to social protection. Under the Act, Priority Households (PHH) are entitled to receive 5 kg of food grains per person per month, and Antodaya Anna Yojana (AAY) households are entitled to 35 kg of food grains per month at a highly subsidized price. To strengthen the ongoing monitoring of National food Security Act or Public Distribution System implementation and to provide more in-depth, incisive, and comprehensive empirical evidence on regular basis, the Department of Food, Consumer Affairs, and Public Distribution Govt. of India has assigned the task of Concurrent Evaluation of Implementation of NFSA during 2020-23. (*National Food Security Portal, Department of Food & Public Distribution, n.d.*)

1.1 Objectives and Scope of Study

To assess the overall progress of implementation of NFSA (2013) across the State (Madhya Pradesh), measure and monitor the change in the following:

- 1. At systemic level:** Assessing and analysing the progress of implementation of various aspects of the NFSA 2013.
- 2. At beneficiary level:** Evaluation of the benefits of NFSA on the target groups to achieve the objectives of the NFSA.

This study was conducted through quantitative as well as qualitative data. The emphasis was to evaluate whether the objectives of the NFSA 2013 was realized when implemented in the state. All the Thematic Focus areas/Indicators approved under the project for concurrent evaluation were assessed on the basis of ToR provided by Govt. Of India. The primary data was completely based on surveys with NFSA Beneficiaries, Non-NFSA Households, FPS Owners. Semi-structured interviews with departmental officers at the district level and block level officials and all the people associated with this work, and a checklist provided by government of India from time to time.

1.2 Sample Selection and Timeline

In accordance with the Terms of Reference provided by the Ministry of Consumer Affairs, Food & Public Distribution, Department of Food & Public Distribution, Government of India, the selection of samples in the central Indian State (Madhya Pradesh) is determined by the population size of the respective State or Union Territory. According to the Census 2011 report, Madhya Pradesh has population of approximately 7.27 Crores (72,626,809). Moreover, this sample allocation is distributed across both rural and urban areas within the State.

Table 1 represents the actual sample size and districts selected were Vidisha, Ratlam, Tikamgarh and Barwani. As per the proposal shared with the Department of Food & Public Distribution, Government of India, the selected districts and sample size of the study was as follows:-

Districts	NFSA Beneficiaries	Non- NFSA Beneficiaries	FPS	Total no. of Beneficiary
Vidisha	50	25	5	80
Ratlam	50	25	5	80
Tikamgarh	50	25	5	80
Barwani	50	25	5	80
Total	200	100	20	320

Table 1 Sample Districts and No. of beneficiaries

There was a total of 320 beneficiaries in the study as per the sampling plan which further has been categorized into Subcategories viz; NFSA beneficiaries, Non NFSA Beneficiaries and FPS owners as indicated in table 1.

Districts	PHH (Urban)	PHH (Rural)	AAY (Urban)	AAY (Rural)	Total PHH	Total AAY	Total
Vidisha	25	15	6	4	40	10	50
Ratlam	25	15	6	4	40	10	50
Tikamgarh	25	15	6	4	40	10	50
Barwani	25	15	6	4	40	10	50

Table 2 Further bifurcation of NFSA Beneficiaries

The Table 2 describes about the further bifurcation of the NFSA beneficiaries comprising two categories Priority Household (PHH Urban and Rural), Antyodaya Anna Yojana (AAY Urban and Rural). Out of the total PHH beneficiaries 25 were from Urban and 15 belong to the rural areas from the respective sample districts. Similarly, from Antyodaya

Anna Yojana 6 beneficiaries belong to Urban and the rest 4 belong to rural areas from the sample districts.

1.3 Data Collection and Analysis

Following the Terms of Reference (ToR) for the concurrent evaluation of the National Food Security Act, 2013, as specified by the Ministry of Consumer Affairs, Food & Public Distribution, Department of Food & Public Distribution, Government of India, data collection has been undertaken in 04 selected districts within the State of Madhya Pradesh during round 6 of the evaluation process.

The NFSA Beneficiaries which include both PHH & AAY Households, and Fair Price Shops of the sample districts, Along with this, Non-NFSA Beneficiaries, were interviewed as a part of thematic round. Structured questionnaire was designed for all three stakeholders. The analysis of the data covers major aspects of the study: beneficiary selection and ration card management system, the management of Fair Price Shops, supply chain management, FPS automation, ONORC, Rice Fortification, and Targeting (Inclusion and Exclusion errors). The data was collected and analysed using Unique IT- Tool software named Kobo Toolbox & Microsoft Excel for the Data Analysis.

Chapter 2: Description of Study Area/Sample

For the purpose of concurrent evaluation of implementation of NFSA Act, 2013 in the Sixth round of the year 2022-23, the four districts have been selected according to the detailed proposal submitted to Government of India.

2.1 Description of Study area/ Sample

Within the state, comprising 53 districts, the concurrent evaluation process, as outlined in the Terms of Reference (ToR), focuses on data collection in 04 selected sample districts in Madhya Pradesh on a half-yearly basis. This evaluation specifically pertains to the Sixth round, spanning from July 2023 to September 2023, as part of the activities for the year 2022-23. Table 3 provides an overview of the details concerning the chosen sample areas.

S.no	Districts	Population	Population Covered under NFSA(Total Cards)	Percentage % Of population covered under NFSA
1	Vidisha	14,58,875	2,39,669	17%
2	Ratlam	14,55,069	2,41,418	17%
3	Tikamgarh	14,45,166	2,18,296	15%
4	Barwani	13,85,881	2,75,378	20%

Table 3 Population covered under NFSA in sample districts

Source: (India Census, n.d.) (Aadhaar enabled Public Distribution System, n.d.)

2.2 NFSA Coverage Details

The table 4 indicates the number of Priority Household (PHH) cards, Antyodaya Anna Yojana (AAY) cards, and the total number of PHH members in each district.

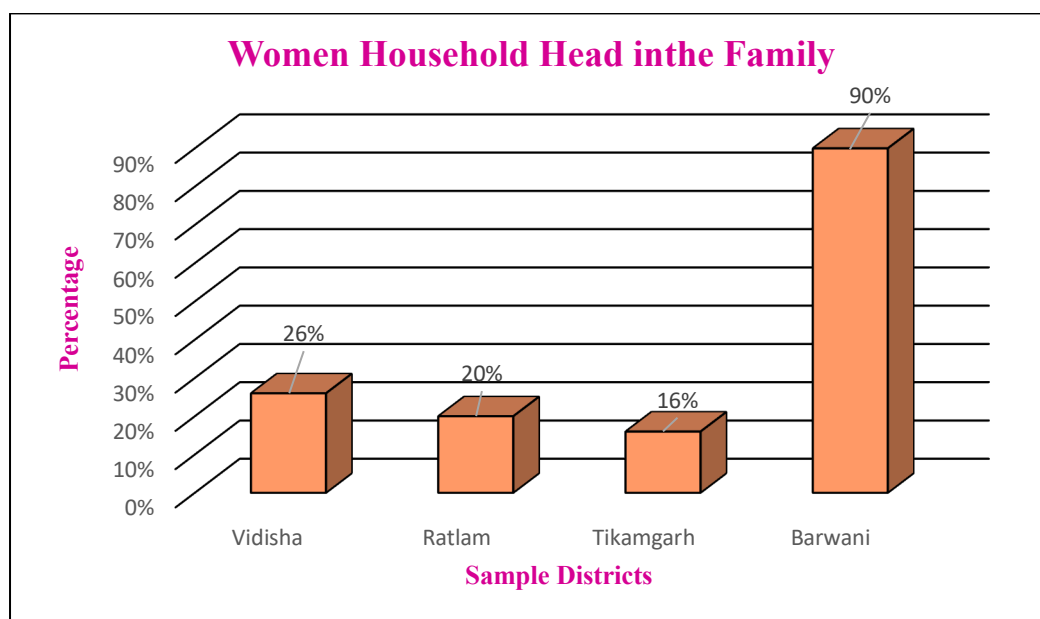
S.no	Districts	AAY Cards	PHH Cards	PHH Members
1	Vidisha	21517	218152	982735
2	Ratlam	18501	222917	927876
3	Tikamgarh	23576	194720	811178
4	Barwani	37584	237794	1100765

Table 4 NFSA Coverage details in sample districts

Source: <http://nfsa.samagra.gov.in/> <https://rationmitra.nic.in/>

2.3 Women Household Head in the Family:

The Respondents were asked whether there were women household heads availing ration from the FPS shops under NFSA as shown in Figure 1.



Graph 1 Women Household Head in the Family

The data reveals that in Barwani, a substantial 45 (90%) of ration cardholders have women household heads. In Vidisha, this figure stands at 13 (26%), in Ratlam at 10 (20%), and it's the lowest in Tikamgarh, with only 8 (16%).

Chapter 3: Ease of Access, Leakages and Diversion:

The successful implementation of the NFSA Act 2013 is dependent on a number of factors, including beneficiary awareness of NFSA entitlement, timely availability and proper distribution of food grains at sample FPS, beneficiary satisfaction with FPS opening and closing times and food grain quality, and special dispensation for the elderly, infirm, physically challenged, and others for food grain distribution at FPS.



Figure 1 Representational pic from the Field

3.1 Timely availability of Food grains and percentage offtake by households in the sample Fair Price Shops.

The research team observed that availability of food grains varies across all the sampled districts in fair price shops. It's significantly depends on the time of visiting of the beneficiaries in their respective fair price shop. For example, the fair price shops are functioning on their scheduled working hours. The table 5 highlights the numbers of beneficiaries that succeeded to collect their food grains in a single visit. The research team observed that all 200 (100%) the sample beneficiaries in all the sampled districts succeeded in getting their entitlements in a single visit

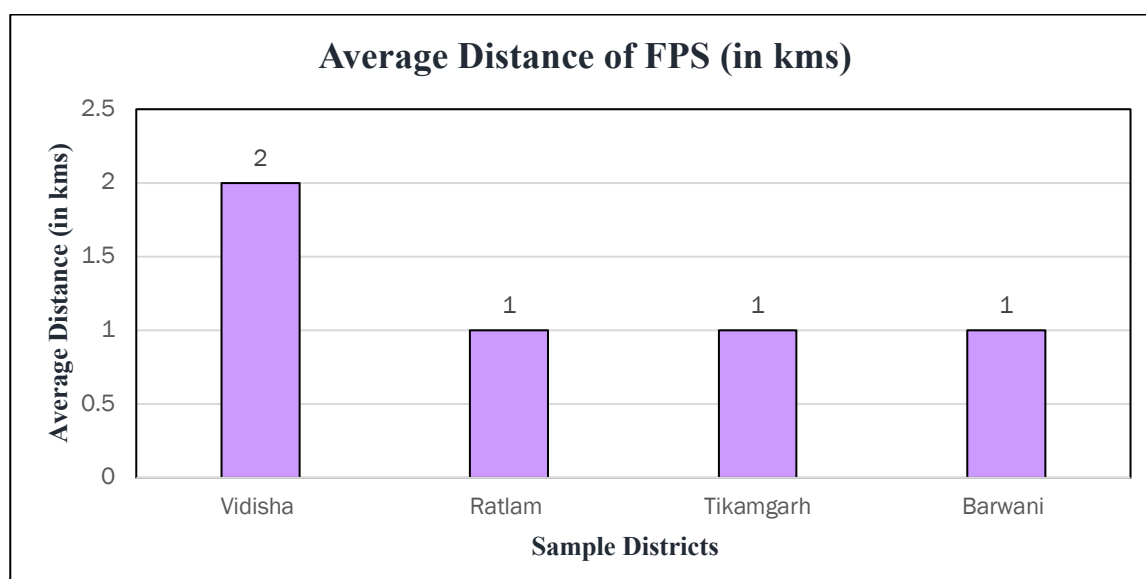
S.no	Districts	Availability of food grains during single visit	Percentage offtake by Households
1	Vidisha	Yes	100%
2	Ratlam	Yes	100%
3	Tikamgarh	Yes	100%
4	Barwani	Yes	100%

Table 5 Availability of foodgrains in Sample Districts

3.2 Average distance of Fair Price Shop from Beneficiary's Home:

The distance between the FPS and beneficiaries' house is one of the key factors of receiving the entitled food grains in a single visit by the beneficiaries.

As illustrated in Figure 1, the research team observed that, on average, the sample beneficiaries residing in Ratlam, Tikamgarh, and Barwani had a distance of approximately 1 kilometer from their homes to the Fair Price Shop (FPS). This distance significantly influences the ability to receive entitled food grains in a single visit. Likewise, the sample beneficiaries in Vidisha faced an average distance of approximately 2.0 kilometers from their registered FPS to their homes. Since the distance in all the districts complies with the norms established in the National Food Security Act (NFSA), there was no issue of any beneficiaries experiencing a shortage of rations due to the long distance to the FPS.



Graph 2 Average Distance of FPS in sample districts

3.3 Awareness levels of beneficiaries regarding Free Distribution under PMGKAY Launched from Jan 2023 to Dec 2023:

Since January 2023, Government of India has decided to distribute foodgrains for free for all the beneficiaries across the country under the scheme PMGKAY, so beneficiaries must be aware of the eligibility/identification criteria for receiving NFSA benefits in order to get food grains. Table 6 demonstrates sample household understanding of eligibility/identification requirements for NFSA benefits.

S. No	Particulars	Responses	Districts				
1	Awareness about eligibility/ Criteria for availing NFSA Benefits		Vidisha	Ratlam	Tikamgarh	Barwani	Total %age
		Yes	(45) 90%	(43) 85%	(44) 88%	(40) 80%	172 (86%)
		No	(5) 10%	(7) 15%	(6) 12%	(10) 20%	28 (14%)
Total			100%	100%	100%	100%	200 (100%)

Table 6 Awareness level of beneficiaries regarding NFSA criteria

On average, 86% of sample families reported knowing the eligibility/identification criteria for receiving NFSA benefit. However, the remaining 14% responded no awareness of NFSA Entitlements in all the sampled districts.

3.4 Awareness regarding the Opening, Closing and Satisfaction with no of working days:

In addition to obtaining responses about the awareness levels of beneficiaries regarding entitlements under the National Food Security Act (NFSA), the research team conducted interviews with the NFSA beneficiaries to gather information about the delivery services provided by their respective fair price shops. The team also collected data on the number of days the ration shops were open in a month across all the sampled districts, namely Vidisha, Ratlam, Tikamgarh, and Barwani.

As shown in Table 7, the data is categorized into four responses representing the frequency of shop openings. Notably, Ratlam and Tikamgarh have the highest percentage (98%), followed by Vidisha (52%), of shops open for more than 20 days. Additionally, Vidisha has a significant proportion open for 15-10 days (48%). Barwani exhibits a relatively mixed distribution of responses across categories. In terms of shops open for less than 10 days (32%),

10-15 days (14%), 15-20 days (44%), and more than 20 days but not for the entire month (8%). There were very few beneficiaries in Ratlam and Barwani, with only 2% each reporting that the shops were open for all days.

Particulars		Responses	Districts				
			Vidisha	Ratlam	Tikamgarh	Barwani	Total %age
1	No of days Ration Shop opens in a month	Less than 10 days	-	-	-	16 (32%)	16 (8%)
		10-15 days	-	-	-	7 (14%)	7 (4%)
		15-20 days	24 (48%)	-	1 (2%)	22 (44%)	47 (24%)
		More than 20 days but not full month	26 (52%)	49 (98%)	49 (98%)	4 (8%)	128 (64%)
		All Days	-	1 (2%)	-	1(2%)	2 (1%)
2	Satisfaction with no of working days of FPS	Highly Satisfied	1 (2%)	30 (60%)	50 (100%)	37 (74%)	118 (59%)
		Satisfied	49 (98%)	20 (40%)	-	11(22%)	80 (40%)
		Not Satisfied	-	-	-	-	-
		Neither Satisfied nor dissatisfied	-	-	-	2 (4%)	2 (1%)
3	Satisfaction with Timings of distribution	Highly Satisfied	1 (2%)	20 (40%)	50 (100%)	34 (68%)	105 (53%)
		Satisfied	49 (98%)	30 (60%)	-	12 (24%)	91 (45%)
		Neither Satisfied nor dissatisfied	-	-	-	4 (8%)	4 (2%)
Total							200 (100%)

Table 7 Awareness Level of beneficiaries regarding FPS Operations

When assessing satisfaction with the number of working days and distribution timings of the Fair Price Shops (FPS), it is noteworthy that all the respondents, particularly those in Tikamgarh (100%), Barwani (74%), and Ratlam (60%), stand out in the "Highly Satisfied" category of responses. Vidisha (98%), followed by Ratlam (40%), has the highest number of respondents who expressed satisfaction with the number of working days. It is worth noting that in only Barwani, (4%) respondents indicated being "Not Satisfied" with number of working days.

The respondents were also asked about their satisfaction with the distribution timings at their respective Fair Price Shops (FPS). It was revealed that the majority of the respondents (98%) in all the sampled districts expressed satisfaction.

S.no	Districts	Opening Time (Daily Average)	Closing Time (Daily Average)	Average Open hours
1	Vidisha	9 am -1 pm	3 pm -7 pm	8 Hours in 2 slots
2	Ratlam	8:00 am- 8:30 am	5:30pm- 6:00pm	9-10 hours
3	Tikamgarh	9:30 am – 10:00am	4:30pm to 5pm	7-8 Hours
4	Barwani	9:00 am – 9:30 am	5:00 pm – 5:30 pm	8-9 Hours

Table 8 Operational time of FPS

The field data presented in table 8 depicts about the opening and closing times of Fair Price Shops (FPS) in four sampled districts. On average, In Vidisha, the Fair Price Shops (FPS) operate from 9 am to 1 pm and then again from 3 pm to 7 pm, providing an average of 8 hours of service each day, divided into two slots. In Ratlam, the FPS opens from 8:00 am to 8:30 am in the morning and from 5:30 pm to 6:00 pm in the evening, offering a total of 9-10 hours of service daily. Tikamgarh's FPS operates from 9:30 am to 10:00 am in the morning and from 4:30 pm to 5:00 pm in the evening, providing an average of 7-8 hours per day. In Barwani, the FPS opens from 9:00 am to 9:30 am in the morning and from 5:00 pm to 5:30 pm in the evening, offering approximately 8-9 hours of service daily.

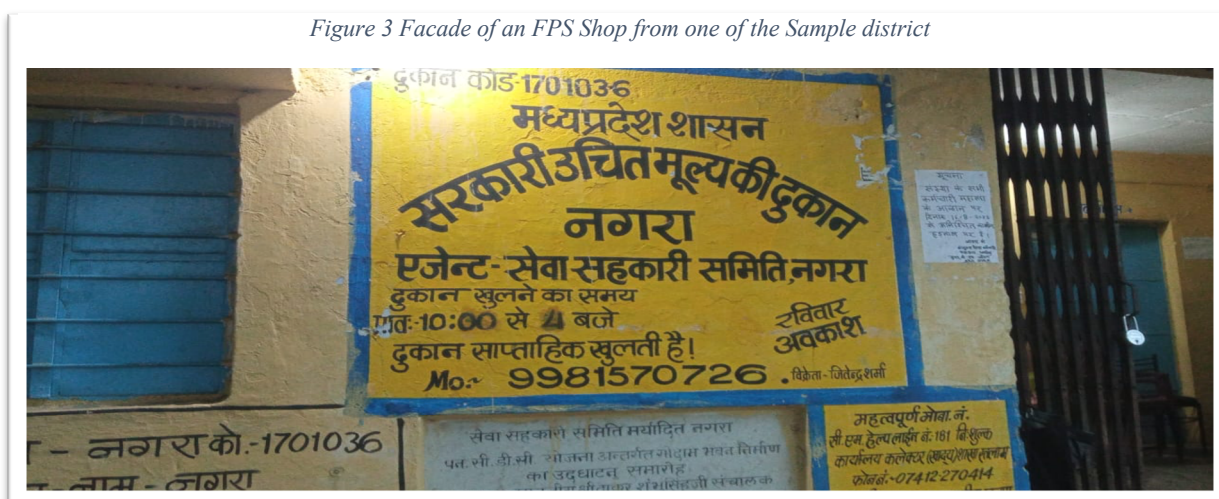
3.5 Awareness about provisioning of uniform receipt for transactions containing the logo of PMGKAY and printed with information on the sale of food grains provided under the PMGKAY scheme:

The findings regarding the awareness and implementation of the provision of a uniform receipt for transactions under the Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY) scheme are highly encouraging. The data analysis reveals a high level of awareness among Fair Price Shop (FPS) dealers regarding the provision of issuing uniform receipts containing the PMGKAY (Pradhan Mantri Garib Kalyan Anna Yojana) logo for transactions, with 98% of the FPS dealers demonstrating knowledge of this requirement across all sample districts. It is important to note that these well-informed FPS dealers understand the significance of including the PMGKAY logo on the receipts, which serves as a crucial indicator that the distributed food grains are part of the government's PMGKAY program. However, it is worth mentioning an exception to this trend, as only one FPS dealer out of the total surveyed in Vidisha and Barwani was found not to be aware of the provision regarding the PMGKAY logo on the receipts. This result reflects a successful effort in disseminating information to beneficiaries and maintaining uniformity in the distribution of essential food items, ultimately contributing to the effective implementation of the PMGKAY scheme in the sampled districts.



Figure 2 Receipt of Ration from PMGKAY

Figure 3 Facade of an FPS Shop from one of the Sample district



3.6 Food grain quantity purchased and price entitlements:

As previously mentioned, from January 2023 to December 2023, essential food rations have been distributed to beneficiaries under the Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY) without any cost. During this period, eligible beneficiaries are receiving their allocated ration quota without any financial burden, as they are not required to make any payments. An examination of the data regarding the quantities of commodities received by the sample beneficiaries through various Fair Price Shops (FPS) reveals no significant variations in the supply of food grains to beneficiaries.

The data analysis indicated that in the majority of the sampled districts, respondents did not encounter the issue of receiving underweight rations, as depicted in Table 9. However, a small proportion of beneficiaries in Tikamgarh, Barwani, and Ratlam reported experiencing this issue. Notably, no such cases were found in Vidisha.

In all the sampled districts, there were no instances of overcharging, with the exception of 6% of beneficiaries in Tikamgarh who reported experiencing overcharging.

S.No	Particulars	Responses	Districts				
			Vidisha	Ratlam	Tikamgarh	Barwani	Total %age
1	Experiences of Beneficiaries about the problem of Underweightment	Yes	0	1 (2%)	4 (8%)	2 (4%)	7 (4%)
		No	50 (100%)	49 (98%)	46 (92%)	48 (96%)	193 (96%)
		Not Aware	0	0	0	0	-
2	Overcharged by FPS	Yes	0	0	3 (6%)	0	3 (2%)
		No	50 (100%)	50 (100%)	47 (94%)	50 (100%)	197 (98%)
		Not Aware	0	0	0	0	-
Total							200 (100%)

Table 9 Issues of under-weightment and overcharging

The respondents were asked about the source of information that enabled them to receive rations from the FPS Store at their respective locations. It was revealed that in all of

the sampled districts, 23% obtained the information by directly visiting the FPS store, 49% obtained it from the FPS dealer, 26% obtained it through friends and neighbours, and 2% obtained it by SMS alert.

The National Food Security Act (NFSA) beneficiaries were also inquired about the timeliness of receiving information regarding the distribution of food grains at their respective Fair Price Shops (FPS) as shown in Table 10. It was revealed that in all the sampled districts, the majority (95%) of the respondents receive timely information. Furthermore, they were asked about the sources through which they obtain this information. Approximately 52% of the respondents mentioned that they become aware of the distribution by personally visiting the FPS shops, while 30% reported obtaining information by directly contacting the Ration shop dealer. Another 16% of respondents stated that they receive information from friends and neighbours. It's worth noting that 3% of beneficiaries in Barwani mentioned that they receive information through SMS alerts from the department, which is a unique case.

S.No	Particulars	Responses	Districts				
			Vidisha	Ratlam	Tikamgarh	Barwani	Total %age
1.	Do you get information on the distribution of food grains at right time?	Yes	49 (98%)	49 (98%)	45 (90%)	46 (92%)	189 (94%)
		No	1 (2%)	1 (2%)	5 (10%)	4 (8%)	11 (6%)
2.	Source of Information about distribution	Personal Visit to FPS	18 (36%)	19 (38%)	50 (100%)	17 (34%)	104 (52%)
		Ration shop Dealer	16 (32%)	18 (36%)	-	25 (50%)	59 (29%)
		Friends or Neighbours	16 (32%)	13 (25%)	-	3 (6%)	32 (16%)
		SMS alert from State Department	-	-	-	5 (10%)	5 (3%)
	Total						200 (100%)

Table 10 Information regarding distribution of foodgrains

A notable point is that in Tikamgarh, all 100% of the beneficiaries reported that they personally visited the FPS shop to acquire information.

3.7 Perception of Beneficiaries about quality of Food grains:

The provision of good quality food grains is one of the important purposes of food security. The study on the quality of food grains supplied by the fair price shops significantly determines the success of implementing food security program. Table 11 illustrates the perception of beneficiaries about the quality of food grains distributed under NFSA. If FPS supplies inferior quality of food grains to the beneficiaries, then it forces the beneficiaries to move to the open market to buy their necessary food grains. It leads to the failure of successful operation of PDS in the economy. Under the NFSA, every household/beneficiary expects superior quality food grains.



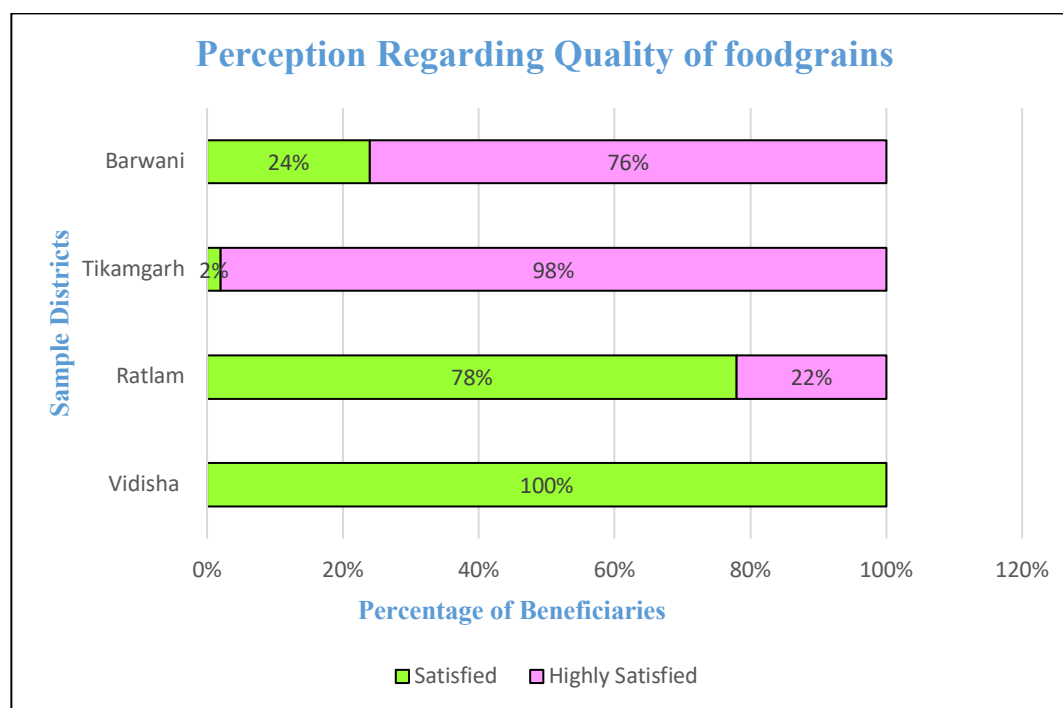
Figure 4 Sample of foodgrains

In this study the respondents were asked about their perception about the entitlements lifted under NFSA from their respective FPS Shops across all the sampled districts which is depicted in graph 3.

S.No	Particulars	Responses	Districts				
			Vidisha	Ratlam	Tikamgarh	Barwani	Total %age
1	Perception of beneficiaries regarding the quality of foodgrains	Dissatisfied	0	0	0	0	-
		Satisfied	50 (100%)	39 (78%)	1 (2%)	12 (24%)	102 (51%)
		Highly Satisfied	0	11(22%)	49 (98%)	38 (76%)	98 (49%)
	Total						200 (100%)

Table 11 Perception of beneficiaries regarding quality of foodgrains

Regarding the quality of food grains and the perception of beneficiaries, it was reported that in all the sampled districts, respondents expressed full satisfaction with the quality of foodgrains. Vidisha has 100% level of satisfaction and Tikamgarh has highest level of satisfaction (98%).



Graph 3 Perception Regarding Quality of foodgrains

3.8 Consumption of food grain by households and share of PDS foodgrains:

Under NFSA, in Vidisha, Ratlam, Tikamgarh and Barwani districts 2kg rice & 3kg wheat was given to PHH cardholders and 20kg wheat & 15 kg Rice was given to AAY cardholders. Table 12 presents data on the satisfaction with the proportion of Wheat/Rice received as share of Public Distribution System (PDS) food grains among beneficiaries in four different districts:

S. No	District	Yes	No	Total (%)
1	Vidisha	50 (100%)	0	100%
2	Ratlam	50 (100%)	0	100%
3	Tikamgarh	50 (100%)	0	100%
4	Barwani	50 (100%)	0	100%

Table 12 Satisfaction with the proportion of wheat/rice

In total, 200 (100%) of the sample households expressed satisfaction with the proportion of wheat and Rice provided to them through the Public Distribution System (PDS).

3.9 Status of Silent ration cards:

There is Electronic Ration card management system ERCMS system in place at the district level to assess the Silent Ration Cards, especially for RCs against which food grains are not lifted for three consecutive months. None of the NFSA ration card holders reported about not lifting ration in last three months and was not reported in any of the 20 FPSs among the sampled Districts.

3.10 Special Dispensation for old, infirm, physically challenged:

Under the National Food Security Act (NFSA), there is a special provision for the elderly, infirm, and physically challenged individuals, ensuring that they receive their ration directly at their doorsteps.

Out of the sample NFSA Households of 200, a total 18 (9%) sample households reported that their members of the family belonged to Old/PwD. Whereas 182 sample households 91% reported that they has mixed age group and do not require home delivery of ration. Any member of the family come to the FPS on the scheduled date and time to take ration of their entitlement. The Beneficiaries were also questioned about the special dispensation provided by Fair Price Shops (FPS) to beneficiaries with disabilities (PWD). The findings in Table 13 revealed that in all the sampled districts, 75% (15) of the FPS offer home delivery of ration to PWD beneficiaries. The remaining 25% (5) of FPS have the provision for PWD beneficiaries to nominate another person to collect their ration entitlement on their behalf, particularly in the districts of Vidisha and Ratlam.

S.No	Particulars	Responses	Districts				
			Vidisha	Ratlam	Tikamgarh	Barwani	Total %age
1	Any Beneficiary Family Member PWD	Yes	11 (22%)	2 (4%)	1 (2%)	4 (8%)	18 (9%)
		No	39 (78%)	48 (96%)	49 (98%)	46 (92%)	182 (91%)
	Total NFSA Respondents						200 (100%)
2	Special dispensation provided by FPS to beneficiaries belonging to PWD	Home Delivery of Ration	2 (40%)	3 (60%)	5 (100%)	5 (100%)	15 (75%)
		Nominate other person	3 (60%)	2 (40%)	-	-	5 (25%)
	Total FPS Respondents						20 (100%)

Table 13 Special Dispensation given under NFSA

Chapter 4 : Targeting (Inclusion and Exclusion Errors), Non-NFSA Beneficiaries

The State Government has issued a Resolution for selection /entitlement of the beneficiaries under NFSA – it may be PHH and AAY. The selection of right beneficiary and ration card management are the crucial aspects of NFSA, 2013 and instrumental in successful implementation of the National Food Security Act. The overall success of NFSA, 2013 lies on the effective management of its execution and coverage of right beneficiaries under the National Food Security Act. Also, it should focus on establishing effective mechanism for identification of eligible beneficiaries, management of left out beneficiaries, providing congenial environment and access to system for applying for new cards and ration cards modification i.e. addition or deletion based on present family profile and conditions. The detailed findings, existing system and process have been given in following sections.

4.1 Critical Overview of PHH inclusion/exclusion criteria adopted by the State/ UT.

In the state of Madhya Pradesh, the Department of Food, Civil Supplies, and Consumer Affairs has exercised the authority granted under section 40 of the National Food Security Act 2013 (No. 20 of 2013). According to this provision, every individual belonging to priority households is entitled to receive a monthly allotment of five (5) kilograms of food grains per person at subsidized rates from the ration shops. These subsidized rates should not exceed Rs. 3 (Three) per kilogram for rice, Rs. 2 (Two) per kilogram for wheat, and Rs. 1 (One) per kilogram for coarse grains. This entitlement is applicable for a duration determined by the Central Government, and thereafter, at prices as may be fixed by the Central Government from time to time. As of January 2023, free ration is being distributed to all beneficiaries.

The State Government has established specific criteria for the inclusion and exclusion of beneficiaries, which are detailed as follows.

PHH Inclusion Criteria is as follows:-

1. Household without shelter.
2. Household with destitute, who is living on alms.
3. All households of Primitive Tribal Groups, **(Particularly Vulnerable Tribal Group)**.
4. Household having a widow pension holder.
5. A person with disabilities of 40% or more.
6. Any transgender person.

PHH Exclusion Criteria is as follows:-

1. Household owning motorized a four-wheeler / a heavy vehicle / a trawler / motor boat (two or more).
2. Household owning mechanized agricultural equipment such as Tractors or Harvesters.
3. Household with any member who is a regular employee - gazetted or non-gazetted - of Central Government, State Government, Public Sector Undertakings, Government aided autonomous bodies and local bodies. This will exclude incentive and other honorarium-based workers.
4. Household with any member in the family earning more than Rs.10,000/- per month in the rural and Rs.15,000/- per month for urban areas.
5. Pensioners with monthly income of more than Rs.10,000/- per month in rural areas and Rs.15,000/- per month in urban areas.
6. Household with enterprises (other than micro-enterprises) registered with the Government for manufacturing and services.
7. Household paying Income Tax or Professional Tax.
8. Household having domestic electric connection with a load of 2 KW or more and consuming an average of 300 units of energy (KWH) per month.
9. Household with three or more rooms with pucca walls and pucca roof.

4.2 Percentage of Inclusion Errors (From NFSA Households)

In this section only those beneficiaries were interviewed who were taking benefits from the NFSA Scheme as PHH Cardholders. The socio economic profile of the sampled NFSA households in Table 14 highlights several key findings.

Firstly, the majority, comprising 70% of these households, reside in kaccha houses across all sampled districts, while only 30% live in pakka houses, indicating a prevalence of less durable housing structures.

In terms of ownership status, a substantial 95% of the households own their houses, demonstrating a relatively high rate of home ownership. The remaining 5% reside in rented houses, implying that a vast majority of NFSA households are residing in their own homes. Regarding the number of dwelling rooms exclusively used by these households, it was found that 94% have either one or two rooms at their disposal, suggesting that most households have relatively limited living space. Only 6% have three rooms, indicating that more spacious accommodations are less common among the sampled beneficiaries.

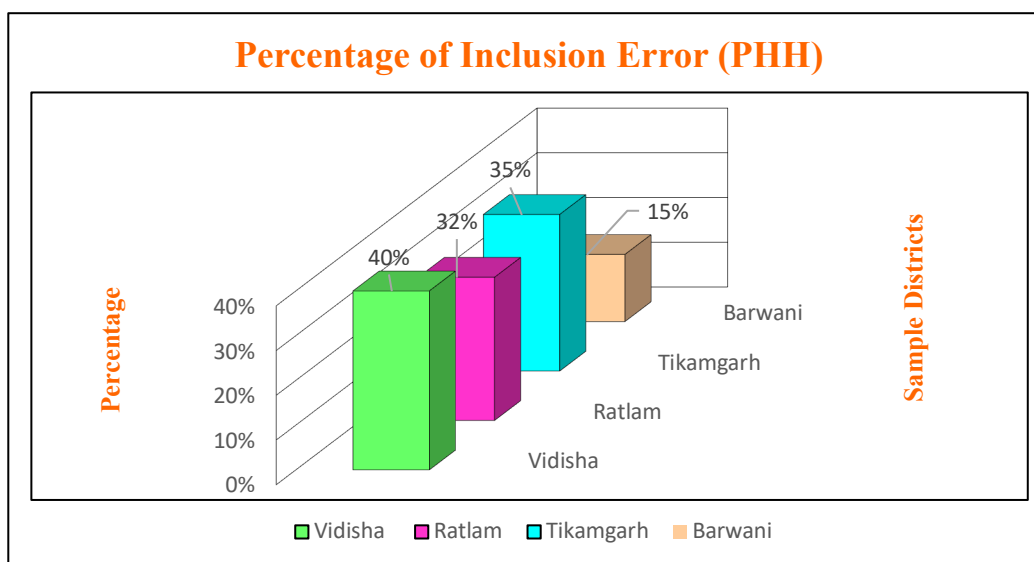
S.No	Particulars	Responses	Districts				
			Vidisha	Ratlam	Tikamgarh	Barwani	%age
1	Type of House	Kaccha	24 (60%)	27 (67%)	26 (65%)	34 (85%)	70%
		Pakka	16 (40%)	13 (33%)	14 (35%)	6 (15%)	30%
2	Ownership Status	Owned	34 (85%)	40 (100%)	30 (75%)	40 (100%)	95%
		Rented	6 (15%)	0	10 (25%)	0	5%
		Leased	0	0	0	0	0
3	No of dwelling rooms in possession	1-2 rooms	38 (95%)	40 (100%)	34 (85%)	38 (95%)	94%
		3 Rooms	2 (5%)	0	6 (15%)	2 (5%)	6%
4	Pay Income tax	Yes	16 (40%)	13 (33%)	14 (35%)	6 (15%)	30%
		No	24 (60%)	27 (67%)	26 (65%)	34 (85%)	70%
5	Own an Enterprise registered with Govt	Yes	0	0	0	0	0
		No	40 (100%)	40 (100%)	40 (100%)	40 (100%)	100%
6	Household having domestic electric connection with a load of 2 KW	Yes	16 (40%)	13 (33%)	14 (35%)	6 (15%)	30%
		No	24 (60%)	27 (67%)	26 (65%)	34 (85%)	70%
7	Consume more than Yes 300 units of energy in last month	Yes	16 (40%)	13 (33%)	14 (35%)	6 (15%)	30%
		No	24 (60%)	27 (67%)	26 (65%)	34 (85%)	70%
8	Motorized four wheeler or Agricultural Equipment	Yes	16 (40%)	13 (33%)	14 (35%)	6 (15%)	30%
		No	24 (60%)	27 (67%)	26 (65%)	34 (85%)	70%

Table 14 Socio-economic profile of NFSA beneficiaries

Furthermore, the data indicates that 30% of the sampled households contribute to income tax payments to the government. Regarding domestic electric connections with a 2KW load or consumption of 300 units of electricity, it was observed that 70% of the sampled respondents do not possess such connections. Notably, within the Priority Household (PHH) category, a significant 30% of households either own a motorized four-wheeler or agricultural equipment, highlighting the presence of these assets within this beneficiary group.

4.2.1 Percentage of PHH Households not meeting eligibility criteria set by state/UT.

It is important to note that the overall percentage of PHH households who were not meeting eligibility criteria depends on the certain factors as enlisted in Table above and its compliance with the State Government Criteria. It was reported that overall 30% of PHH beneficiaries in all the sampled districts were not meeting eligibility criteria to be included in PHH under NFSA as depicted in Figure 4..



Graph 4 Percentage of Inclusion error (PHH)

When analysing the district-wise data, it becomes evident that there are discrepancies in inclusion errors among the sampled districts, indicating variations in the accuracy of beneficiary inclusion in the Priority Household (PHH) category.

In Vidisha, the highest inclusion error is observed, where 40% of the PHH households (16 out of 40) are included erroneously, potentially diverting benefits to households that do not meet the eligibility criteria. Tikamgarh and Ratlam also exhibit relatively high inclusion errors, with 35% and 32% of PHH households having inclusion errors, respectively. This situation implies a considerable percentage of beneficiaries who may be receiving benefits despite not meeting the necessary eligibility criteria, raising concerns about program efficiency and equity.

On the other hand, Barwani demonstrates a relatively lower inclusion error, with only 15% of PHH households (6 out of 40) having inclusion errors. This district appears to have a more accurate and effective system for identifying and enrolling PHH beneficiaries, which can contribute to the program's overall efficiency and targeted support.

4.2.2 Percentage of households eligible to be AAY but included as PHH

Regarding the inclusion criteria for Antyodaya Anna Yojana (AAY) cardholders, the data reveals that a majority of the sampled respondents meet the eligibility requirements on the basis of the criteria set by state government as listed in Table 15. Out of the total 40 AAY (10

each district) cardholders surveyed, 73% of them (29 out of 40) have fulfilled the inclusion criteria for AAY cards. This criterion typically involves a self-declaration of total annual income, which should be less than Rs 15,000.

S.No	Particulars	Responses	Districts				
			Vidisha	Ratlam	Tikamgarh	Barwani	Total %age
1	Annual Income of Rs 10000-15000	Yes	9 (90%)	9 (90%)	5 (50%)	6 (60%)	73%
		No	1(10%)	1(10%)	5 (50%)	4 (40%)	27%
2	A person with disabilities of 40% or more.	Yes	0	0	0	0	0%
		No	10 (100%)	10 (100%)	10 (100%)	10 (100%)	10 (100%)
3	Household without Shelter	Yes	9 (90%)	9 (90%)	5 (50%)	6 (60%)	73%
		No	1(10%)	1(10%)	5 (50%)	4 (40%)	27%
4	Destitute living on Alms	Yes	9 (90%)	9 (90%)	5 (50%)	6 (60%)	73%
		No	1(10%)	1(10%)	5 (50%)	4 (40%)	27%
5	Any Transgender	Yes	0	0	0	0	0
		No	10 (100%)	10 (100%)	10 (100%)	10 (100%)	10 (100%)

Table 15 AAY Inclusion Criteria

In contrast, 27% of the sampled households (11 out of 40) did not meet the inclusion criteria for AAY cardholders, primarily due to their total annual income exceeding the prescribed limit of Rs 15,000. A substantial portion of AAY beneficiaries in the sampled districts are eligible for the program based on their income status. However, there is still a notable percentage of households that do not meet these criteria and may have been included erroneously or could potentially be benefitting from the AAY category without fulfilling the necessary income conditions.

4.3 Percentage of exclusion errors (from non-NFSA household evaluation)

In this section, the interviews were exclusively conducted with beneficiaries who had not previously received any benefits from the National Food Security Act (NFSA) scheme. These individuals were categorized as Non-NFSA Households, meaning they had not been included in either the Priority Household (PHH) or Antyodaya Anna Yojana (AAY) categories

of the NFSA. The selection of beneficiaries for interviews adhered to the guidelines provided by the Department of Food, Government of India, which involved sampling 25 Households per district. The objective was to assess their eligibility for inclusion in either the PHH or AAY categories based on the specific criteria established by the state government.

4.3.1 Percentage of non-NFSA HH eligible under PHH criteria set by state/UT

The analysis of non-NFSA sample households revealed that 50% of them resided in pakka houses, while the remaining households lived in kaccha dwellings. When it comes to the ownership of their houses, 87% of non-NFSA sample households occupied their own houses, with the remaining 13% residing in rented accommodations. Regarding the number of rooms in their dwellings, it was found that 87% of those who owned their houses had 2 rooms, whereas the 13% living in rented houses had 3 rooms or more.

S.No	Particulars	Responses	Districts				
			Vidisha	Ratlam	Tikamgarh	Barwani	%age
	Type of House	Kaccha	17 (68%)	21 (84%)	18 (72%)	20 (80%)	50%
		Pakka	8 (32%)	4 (16%)	7 (28%)	5 (20%)	50%
	Ownership Status	Owned	22 (88%)	18 (72%)	21 (84%)	22 (88%)	87%
		Rented	3 (12%)	7 (28%)	4 (16%)	3 (12%)	13%
		Leased	0	0	0	0	0
	No of dwelling rooms in possession	1-2 rooms	22 (88%)	18 (72%)	21 (84%)	22 (88%)	87%
		3 Rooms	3 (12%)	7 (28%)	4 (16%)	3 (12%)	13%
	Salaried Job	Govt Job	5 (20%)	0	1 (4%)	0	6%
		Regular Pvt Job	2 (8%)	2 (8%)	3 (12%)	1 (4%)	8%
		Govt Pensioner	1 (4%)	0	2 (8%)	1 (4%)	4%
		Daily Labourer	17 (68%)	23 (92%)	19 (76%)	23 (92%)	82%

Table 16 Socio-economic profile of non-NFSA households

Regarding the nature of employment among non-NFSA households, it was observed that 82% of them did not have regular salaried jobs and mostly belonged to the daily wage category, with this category being particularly predominant in districts like Barwani and Ratlam. Only 6% of the non-NFSA households had regular government jobs, while 8% were employed in the private sector. Interestingly, in Vidisha, Tikamgarh, and Barwani, 4% of the households

were government pension holders. This data provided in Table 16 sheds light on the employment status and sources of income for non-NFSA households in the surveyed districts. Out of the 100 non-NFSA households surveyed, 50% were primarily eligible to be considered for inclusion in the Priority Household (PHH) category on the basis of possession of Kaccha House as per the criteria set by the state government. Among the sampled non-NFSA households, 87% owned their houses, and a significant 82% were engaged in daily wage labour with an annual income falling below the threshold of 15,000, making them eligible for the PHH category under the National Food Security Act (NFSA). On the other hand, the remaining 18% of the sampled non-NFSA households did not meet the inclusion criteria, specifically the income range of 10,000 to 15,000, set by the state government.

4.3.2 Percentage of non-NFSA households eligible to be AAY but included as PHH

The survey results indicate that there were no instances in any of the sample districts where non-NFSA households, eligible to be considered as Antyodaya Anna Yojana (AAY) beneficiaries, were incorrectly included in the Priority Household (PHH) category.

4.3.3 Reasons for not availing NFSA benefits.

Many of the non-NFSA households surveyed in the sampled districts have expressed valid concerns regarding the application procedures for various government schemes. These concerns are rooted in the challenges that beneficiaries face, particularly those who rely on daily wage earnings to support themselves and their families.

Firstly, the lengthy and time-consuming application procedures are a major point of contention. For beneficiaries whose livelihoods depend on daily wages, taking time off from work to engage with bureaucratic processes becomes a significant challenge. For instance, a labourer who earns a daily wage might struggle to visit government offices or centers repeatedly due to the loss of income for each day they are absent. This can create a financial burden for already vulnerable households.

Furthermore, beneficiaries find that these schemes often have intricate and complicated application procedures. For example, to apply for availing the benefits under NFSA, they might need to provide a variety of documents, visit multiple offices, and understand the eligibility criteria, which can be confusing. This complexity can deter them from even attempting to access the benefits they are entitled to. These concerns highlight the necessity of streamlining and simplifying the application procedures for government schemes. For instance, providing a one-stop application process or digitizing application procedures can significantly reduce the time and effort required from beneficiaries. Simplifying eligibility criteria and providing clear

guidance can make the process less daunting and more accessible to those who need these programs for their well-being.

4.3.4 Awareness of NFSA eligibility criteria/application process for ration card.

Regarding the awareness about eligibility/identification criteria for availing benefits of NFSA Act, the non NFSA households were asked about their awareness about it as given in table 17.

S.No	Particulars	Responses	Districts				
			Vidisha	Ratlam	Tikamgarh	Barwani	Total %age
	Awareness about eligibility/identification criteria for availing benefits of NFSA Act	Yes	13 (52%)	12 (48%)	0%	18 (72%)	43%
		No	12 (48%)	13 (52%)	25 (100%)	7 (28%)	57%
	Aware of the process of applying/Modifying new ration card	Yes	17 (68%)	21 (84%)	18 (72%)	20 (80%)	50%
		No	8 (32%)	4 (16%)	7 (28%)	5 (20%)	50%
	Aware of facility to Online apply for new ration card	MP Online Kiosk	5 (20%)	2 (8%)	6 (24%)	9 (36%)	22%
		CSC/ Village level Entrepreneurs	8 (32%)	1 (4%)	8 (31%)	7 (28%)	24%
		Block level centers	7 (28%)	17 (68%)	9 (36%)	6 (24%)	39%
		Not Aware	5 (20%)	5 (20%)	2 (8%)	3 (12%)	15%

Table 17 Awareness of NFSA eligibility criteria/ application process for ration card

The survey results reveal that there is a significant gap in awareness among non-NFSA households regarding the eligibility and application procedures for availing benefits under the National Food Security Act (NFSA). A notable 43% of non-NFSA households reported being aware of the eligibility and identification criteria, indicating that a substantial portion of this demographic understands the basic requirements for accessing NFSA benefits. However, it is concerning that 57% of non-NFSA households are not aware of these criteria, suggesting that a large segment of the eligible population remains uninformed about their entitlements. Similarly, awareness about the process of applying for a new ration card is evenly split, with 50% of non-NFSA households indicating awareness of the application process and the other 50% being unaware. This lack of awareness about the application procedures can hinder eligible beneficiaries from obtaining ration cards, which are essential for accessing food security benefits.

Regarding the awareness of facilities for applying for new ration cards, the data shows that there is limited knowledge among non-NFSA households. Only 22% of respondents were aware of MP Online Kiosks, 24% knew about Common Service Centers (CSCs) in villages, and 39% were aware of Block-level Centers. A notable 15% were entirely unaware of the existence of such facilities at the grassroots level. This indicates the need for more extensive awareness campaigns and information dissemination to ensure that eligible beneficiaries are well-informed about the resources and procedures available to them, ultimately improving their access to essential government services.

4.3.5 Ease in Applying for new Ration Card/ Modification.

As far as application for new NFSA ration card applied by the sample respondents in last one year is concerned, 82% sample non NFSA households had applied for it as shown in the table 18.

S.No	Particulars	Responses	Districts				
			Vidisha	Ratlam	Tikamgarh	Barwani	%age
1	Have you applied for the new ration card in last one year	Yes	14 (56%)	21 (84%)	25 (100%)	22 (88%)	82%
		No	11 (44%)	4 (16%)	0%	3 (12%)	18%
2	If yes, how did you apply?	Through FPS Dealers	2 (14%)	3 (15%)	0	4 (18%)	11%
		CSC/ Village level Entrepreneurs	6 (43%)	2 (10%)	3 (12%)	4 (18%)	18%
		Block level centers	6 (43%)	16 (75%)	22 (88%)	11 (50%)	67%
		MP Online Kiosk	-	-	-	3 (14%)	4%
3	Average Distance travelled to avail the services	Upto 5Kms	6-10 Kms	10-20Kms	Upto 5Kms	-	-
4	Average cost incurred to avail the services	30-50 Rs	150-200 Rs	250-300 Rs	100-150 Rs	-	-
5	Average time taken to avail the services	3-6 months	3-6 months	2-3 months	6-8 months	-	-
6	Was the application processed or denied?	Under process	Under process	Under process	Under process	-	-

Table 18 Process for new ration card

The data indicates that 82% of the sampled non-NFSA households had applied for a new NFSA ration card through various available modes in their respective districts, which included FPS Dealers, Common Service Centers (CSCs), Block-level Centers, and MP Online Kiosks. Among those who applied, 11% chose to do so through FPS dealers, 18% used CSCs,

and 4% utilized MP Online Kiosks. A significant 67% of applicants preferred the Block-level Centers for their application process.

When assessing the distances travelled by non-NFSA households to avail this service, variations were observed across districts. In Tikamgarh, respondents covered the longest distance, with 10-20 kilometres being the average range. In Ratlam, 6-10 kilometres was the average distance travelled, while Vidisha and Barwani households had relatively shorter distances to the service point, covering an average of up to 5 kilometres. Additionally, the average cost incurred by non-NFSA households for applying for a new ration card fell in the range of Rs. 50 to Rs. 300.

When asked about the current status of their application process, all non-NFSA households reported that their applications were under process. This data highlights the efforts made by non-NFSA households to access government services, despite challenges such as travel distances and associated costs. However, it also underscores the need for improved awareness and streamlined application procedures to enhance the accessibility of these essential services to eligible beneficiaries.

Chapter 5 : Fair Price Shop Management

The Fair Price Shop plays a pivotal role in the execution of the National Food Security Act, 2013, as it serves as the primary institution responsible for distributing food grains to eligible beneficiaries. Consequently, the success of NFSA implementation is intrinsically linked to the effective management of Fair Price shops. Therefore, to enhance the execution of NFSA with increased transparency, commitment, and accountability, it is imperative to implement better management practices at the Fair Price Shops. Errors can be significantly reduced through the implementation of an effective system, and automation can offer a solution. The Fair Price Shops (FPS) in the state have been automated with the aim of enhancing transparency and facilitating easier access to the entitlement of food grains under the National Food Security Act (NFSA). This automation process involves the use of Aadhaar-enabled Point of Sale machines (AePOS) for the distribution of food grains under NFSA. Below are the findings pertaining to the access to food grain entitlements and the automation of 20 Fair Price Shops (FPS) across four sampled districts, namely Vidisha, Ratlam, Tikamgarh, and Barwani:



Figure 5 Fair Price Shop

5.1 Ownership pattern of FPS dealer:

In the State of Madhya Pradesh, Fair Price Shop (FPS) licenses are issued by the department following a thorough due-diligence process on the applicants. The ownership of FPS remains with the owner exclusively. The state's role is to provide a commission to the FPS owner based on the distribution of commodities per quintal.

S.no	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1	Ownership of FPS Dealer	Private (License)	2	2	1	1
		Panchayat Raj Institution	-	-	-	-
		Cooperative	3	3	1	3
		Women Self Help Group	-	-	3	1

Table 19 Ownership pattern of FPS

The research team visited 05 fair price shops (FPS) in all of the sampled districts. As reported, there were various categories of Fair Price Shop (FPS) dealers, which included Private Licensed FPS, Panchayati Raj Institutions, Cooperative Societies, and Women Self-Help Groups (SHG's). Out of the 20 FPSs in all the sampled districts, 6 are owned by Private Licensed Owners, 10 are owned by Cooperative societies, and the remaining 4 are exclusively owned by Women SHG's, with a significant presence in Tikamgarh and Barwani.

When the respondents in the sampled districts were inquired about the road connectivity to Fair Price Shops (FPS) from their home locations, it was observed that 90% of the FPS in all the sampled districts (18 FPS in total) have good connectivity with metal roads. However, 10% of them (2 FPS, 1 in Tikamgarh and 1 in Barwani) were only partially connected by kaccha roads. The accessibility of beneficiaries to FPS shops has been well documented according to the responses received (as shown in Table 20).

S.no	Is the FPS connected by a metal road	Vidisha	Ratlam	Tikamgarh	Barwani
1	Yes	5	5	4	4
2	No (Only Kaccha Road)	-	-	1	1
3	Total	5	5	5	5

Table 20 Accessibility of FPS

5.2 Adherence to Food Distribution Calendar:

The distribution of food grains at Fair Price Shops (FPS) was scheduled to take place from the 1st to the 30th of every month, as reported by every FPS owner or manager. However, it has been noted that in practice, the distribution primarily occurs within the first two weeks following the receipt of food grains from Food Corporation of India (FCI) godowns.

5.3 Doorstep delivery of Food Grains-Experience and Issues:

The introduction of the Electronic Point of Sale (e-POS) system represents a crucial step in enhancing the efficiency and transparency of the Public Distribution System (PDS). This system optimizes the allocation of essential commodities to Fair Price Shops (FPS) through individual e-POS feedback systems installed at each FPS location, ensuring greater transparency by uploading allocation details to the State PDS Portal. The Government of Madhya Pradesh has demonstrated a methodical approach to distributing rations to FPS dealers at the district level, ensuring an organized process. The survey also gathered insights on doorstep delivery of food grains and the associated charges, as indicated in Table 21.

S.no	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1	Door-step delivery of Foodgrains	Yes	5	4	5	5
		No	-	1	-	-
2	If Yes In how many days did you get the doorstep delivery of foodgrains	Food grain received in advance	2	1	4	5
		Within 1-3 days	-	-	1	-
		Within first week	2	3	-	-
		Within a fortnight	1	-	-	-
		More than a fortnight	-	-	-	-
3	Charged by Transporter for transportation of food grains	Yes	0	0	0	0
		No	5	5	5	5

Table 21 Doorstep Delivery and Transportation

Out of the 20 sampled Fair Price Shops (FPS), 19 in all the sampled districts reported that they received doorstep delivery of food grains, indicating that transportation of food grains was not a concern. Regarding the timeframe for the FPS to receive doorstep delivery of food grains in

the last month, 60% of them (12 FPS) reported that food grains were received in advance. Only 1 FPS in Tikamgarh received it within 1-3 days, while 3 FPS in Ratlam and 2 in Vidisha reported receiving it within the first week. There was 1 FPS in Vidisha reporting that it was received within 14 days (a fortnight).

The study team also inquired further about doorstep delivery of food grains and questioned several people regarding the payment for such delivery. It was revealed that 100% (20) of the sampled Fair Price Shops reported that they were not charged by transporters or others for the transportation of food grains up to their doorsteps.

5.4 Quality of Service Delivery:

The quality of service delivery is a critical aspect of any program or system, as it directly impacts the effectiveness and satisfaction of its beneficiaries. The owners of the Fair Price Shops (FPS) were also questioned about the quality of service delivery, which encompasses aspects such as the number of working days, average operational hours, and the availability of sufficient storage space provided by the FPS owner as shown in Table 22.

	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1	No. of days FPS Shop works?	<10 days	-	-	-	1
		10-15 days	-	-	-	1
		15-20 days	-	-	-	1
		More than 20 days but not all days	5	5	5	2
2	Average Operational hours of FPS		8 hours	9 hours	7 hours	6 hours
3	Is there sufficient storage space in the FPS?		Yes (5) (100%)	Yes (3) (60%)	Yes (5) (100%)	Yes (5) (100%)

Table 22 Quality of service delivery

Out of the 20 FPS owner interviews conducted, 17 FPS reported operating for more than 20 days each month but not for the full month. It's important to note that 3 FPS owners in Barwani reported different monthly operational schedules, with one operating for less than 10 days, another for 10-15 days, and the third for 15-20 days. The reason behind this varied

scheduling was that the distribution process was primarily completed by the first week of the month.

Regarding the average operational hours of the Fair Price Shops (FPS), it was reported that FPS operated for an average of 6-9 hours in all the sampled districts. Additionally, there was sufficient storage space available in the majority of the sampled FPS, with the exception of 2 FPS in Ratlam, which did not have any extra storage space.

5.5 Display of required information as per PDS Control Order:

One of the primary objectives of ensuring food security is to operate the Public Distribution System (PDS) effectively and transparently. To enhance the efficiency of Fair Price Shops (FPS), the Department of Food and Civil Supplies has issued directives for dealers to prominently display essential information about the distribution of food grains at their locations. Our Field Investigators found that every FPS dealer had complied with this directive and had placed notice boards in front of their shops. These notice boards contain information such as samples of PDS food grains, the operating hours of the FPS, and monthly entitlement details for Priority Household (PHH) and Antyodaya Anna Yojana (AAY) categories. The notice boards often include the total number of PHH and AAY beneficiaries, transparency regarding the quantity of commodities

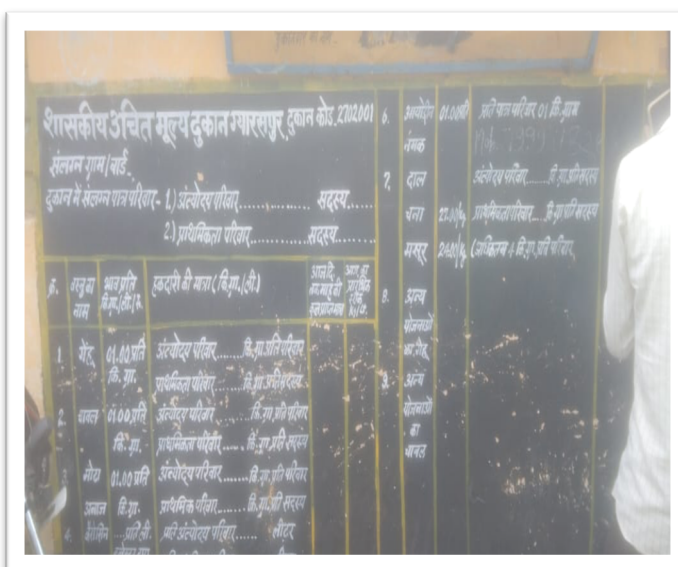


Figure 6 Display of information at FPS

received, distributed, and currently in stock (ration status), a toll-free helpline number for assistance, and the names and contact information of vigilance committee members and the authority for lodging complaints.

Additionally, it was observed that (17) 85% of the Fair Price Shops in all sample districts maintain comprehensive records, including stock registers, commodity-wise records, beneficiary registers, and sales registers. The remaining (2) 10% in Barwani and (1) 5% in Vidisha only maintain stock registers.

5.6 Display of IEC material at FPS:

The Food and Civil Supplies Department strives to run the FPS as efficiently as possible. As a result, fair-price shop owners were told to showcase various forms of relevant

information on food grain distribution in front of their stores. The schemes and information related to ration distribution as shown in Table 23.

S.No	Particulars	Responses	Districts				
			Vidisha	Ratlam	Tikamgarh	Barwani	Total
1.	IEC material on grievance redressal mechanism	Yes	5	4	4	5	18 (90%)
		No	0	1	1	0	2 (10%)
2.	IEC material on ONORC/PMGKAY	Yes	5	3	2	4	14 (70%)
		No	0	2	3	1	6 (30%)
3.	IEC material on e-KYC	Yes	4	3	1	4	12 (60%)
		No	1	2	4	1	8 (40%)
4	IEC material on Inclusion/Exclusion	Yes	3	3	0	4	10 (50%)
		No	2	2	5	1	10 (50%)

Table 23 Display of IEC at FPS

In terms of information provided through IEC (Information, Education, and Communication) materials regarding the grievance redressal mechanism, 18 out of 20 Fair Price Shops (FPS) displayed this information through flex materials. Similarly, when it comes to IEC materials related to ONORC/PMGKAY, 70% (14 out of 20) of the FPS had flex hoardings showcasing this information. For IEC materials pertaining to e-KYC, 60% (12 out of 20) of the FPS had flex hoardings displaying this information. Regarding IEC materials regarding Inclusion/Exclusion, 50% (10 out of 20) of the FPS had flex hoardings featuring this information.

5.7 Issues with use of e-PoS:

As part of the implementation of the National Food Security Act (NFSA) in 2013, Madhya Pradesh took significant steps towards the automation of Fair Price Shops (FPS) in a comprehensive computerization effort for Public Distribution System (PDS) operations. This initiative involved the installation of electronic point-of-sale (e-POS) machines at FPS and the digitization of ration card databases. These e-POS devices played a crucial role in verifying and recording transaction details at FPS, which helped in reducing errors related to beneficiary identities.

To ensure that the benefits reached the intended recipients, the system incorporated biometric authentication methods such as fingerprint recognition using Aadhaar. This measure

substantially reduced leakages and improved the overall efficiency of PDS operations. Following successful biometric verification, the e-POS devices displayed entitlement amounts and fair pricing information for beneficiaries, and all sales transactions were meticulously catalogued and recorded on the state PDS portal. This comprehensive system is commonly referred to as 'e-POS Aadhaar enabled PDS,' and it has significantly enhanced transparency and the effectiveness of food distribution processes.

a. Percentage of Biometric Authentication

The system of biometric authentication has been implemented in all four of the sampled districts. For the purpose of concurrent evaluation across these districts, it was reported (Table 24) that all the 20 Fair Price Shops (FPS) had installed E-PoS devices. However, during visits to the respective FPS shops, it was observed that 1 FPS in Ratlam and 1 in Tikamgarh were non-operational due to connectivity issues.

S. No	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1	FPS distributing food grains through e-PoS	Yes	(5) 100%	(4) 80%	(4) 80%	(5) 100%
		No	0	(1) 20%	(1) 20%	0
2.	HH's receiving Ration through successful e-PoS Authentication	Yes	44 (88%)	43 (86%)	40 (80%)	50 (100%)
		No	6 (12%)	7 (14%)	10 (20%)	0
3.	HH's Get a printed receipt in local language	Yes	50 (100%)	50 (100%)	50 (100%)	50 (100%)
		No	0	0	0	0

Table 24 Percentage of Biometric authentication

b. Percentage of Biometric Failure.

The research team conducted an investigation into the causes of biometric authentication failures when beneficiaries attempted to collect their ration entitlements at FPS shops. During stakeholder consultations, FPS owners cited these authentication failures as shown in Table 25.

S. No	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1	Percent of biometric failure	0-20%	4	4	-	5
		20-40%	1	-	-	-
		40-60%	-	-	1	-
		80-100%	-	1	4	-

Table 25 Percentage of biometric failure

It has been reported that the likelihood of biometric authentication failures varied significantly across all the sampled districts. The majority of the Fair Price Shop (FPS) owners in Vidisha, Ratlam, and Barwani encountered this issue at a rate of 0-20%. Notably, in Tikamgarh, the chances of biometric failure displayed a significant range, with the majority of FPS owners experiencing a range of 80-100%.

c. Reasons for Failure

The reasons for not achieving 100% biometric authentication in the sampled districts varied significantly, reflecting distinct challenges in each area as show in table 26.

S.No	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1.	FPS Reasons for Biometric failure	Low Aadhaar Seeding	1 (20%)	1 (20%)	1 (20%)	1 (20%)
		Authentication Failure due to mismatch/Low quality fingerprint	4 (80%)	4 (80%)	3 (60%)	4 (80%)
		Connectivity Issue	0	0	1 (20%)	0

Table 26 Reasons for biometric failure

The respective Fair Price Shop (FPS) owners were queried about the various reasons for the failure of e-POS during the distribution of rations to beneficiaries. Several factors were cited by the FPS owners, including low Aadhaar seeding of beneficiaries, poor quality and fingerprint mismatches, and connectivity and server issues with the device. Out of the 20 FPS in all the sampled districts, it was reported that the majority, comprising 75% (15 FPS), faced failures primarily due to poor quality and fingerprint mismatches. Low Aadhaar seeding of beneficiaries was cited by 20% (4 FPS). Notably, one FPS in Tikamgarh attributed the failures to server or connectivity issues.

d. Time Taken for e-PoS Authentication.

The analysis of average e-PoS authentication times across the surveyed districts reveals notable disparities. The FPS Owners were asked about the average time of e-PoS

S.No	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1	Average time taken for one e-PoS transaction	0-1 minute	3 (60%)	1 (20%)	3 (60%)	3 (60%)
		1-2 minutes	2 (40%)	2 (40%)	2 (40%)	2 (40%)
		More than 3 minutes		2 (40%)		

Table 27 Average time for transaction

Authentication in all the sampled districts. It has been reported (Table 27) that in all the sampled districts, the average time for one e-POS authentication per transaction varies. Approximately 50% (10) of the FPS Owners stated that it takes 0-1 minute per transaction. Another 40% (8 FPS) reported that it typically takes 1-2 minutes. Notably, in 40% (2) of the FPS in Ratlam, they cited an average authentication time of more than 3 minutes.

e. Exceptional management provisions for beneficiaries at FPS.

Fair price shops employ a range of authentication methods to facilitate the distribution of food entitlements to beneficiaries. To address potential issues with e-POS machines, the government has offered multiple alternative authentication sources as a contingency plan. These alternative authentication methods serve as a backup to ensure that beneficiaries can access their entitlements in the event of e-POS machine problems.

S.No	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1	In Case of Exception Management Practice	Aadhaar based OTP	5 (100%)	4 (80%)	1 (20%)	-
		Fusion Finger	-	1 (20%)	1 (20%)	-
		Ration is denied	-	-	3 (60%)	5 (100%)

Table 28 Usage of Exception Management

In instances where sample Fair Price Shop (FPS) owners encountered fingerprint authentication failures while distributing ration to beneficiaries, they employed various exceptional management practices to ensure the smooth distribution of ration as shown in Table 28.. Out of the surveyed FPS owners, a significant majority, comprising 10 out of the 20 FPS owners, or 50%, adopted the practice of sending an Aadhaar-based OTP to the ration card holder's mobile. Additionally, 2 FPS owners, accounting for 10% of the total, utilized Fusion finger as an exceptional method to address authentication failures only in Ratlam and Tikamgarh. However, 8 FPS owners (40%) reported that they had to deny ration to beneficiaries due to repeated failures in the authentication process .



Figure 7 A picture of FPS Shop

Chapter 6: Viability and Transformation of Fair Price Shops:

During a national conference centered on the transformation of Fair Price Shops (FPS), the Secretary of the Department of Food & Public Distribution (DFPD), underscored the opportunity for FPS dealers to expand their income streams by offering additional products and services alongside their core Public Distribution System (PDS) operations. Encouragingly, the DFPD has advocated for states to permit FPS dealers to sell non-PDS items, thereby augmenting their earnings.

A significant emphasis on the role of technology, particularly Aadhaar authentication, for enabling the portability of food grains and optimizing supply routes was pointed. At the core of this initiative is the government's push for end-to-end computerization to enhance efficiency, a commitment echoed by the Government of Madhya Pradesh. Within this context, Fair Price Shops (FPS), also known as Authorised Retail Dealers (ARDs) in the state, assume a pivotal role in the overall supply chain of the National Food Security Act (NFSA). This study aims to shed light on the challenges related to FPS viability, transformation and diversion, and leakages.

6.1 Demand for Additional Services at the Fair Price Shop:

The Central & State Government has decided to convert the Fair Price Shops into multi-utility shops which can cater to the needs of beneficiaries regarding: -

- Banking and Banking Correspondence Service.
- Common Service Centre Services.
- Sale of non-PDS / grocery items.
- Sale of small (5 kg) LPG Cylinders.
- Broadband network services through PM-WANI Scheme.

During the primary stakeholder consultation, it was revealed that none of the Fair Price Shop owners had yet initiated the provision of these additional services to beneficiaries in all of the sampled districts. However, there was a notable interest in making these services available. Table 29 illustrates the demand for these additional services at the respective FPS. In all the sampled districts, FPS owners were asked about the introduction of these services at their respective FPS and the demand for these services, broadly categorized in different subsections. Except for Ratlam, all the FPS owners expressed their strong interest in offering all the services to enhance service delivery for Ration Card holders.

- a) **Banking Services:** As reported by FPS owners, 100% (5) in Tikamgarh, followed by 40% (2) FPS each in Vidisha and Barwani, expressed interest in the demand for these services.
- b) **CSC Services:** As reported by FPS owners, 100% (5) in Tikamgarh, followed by 40% (2) FPS each in Vidisha and Barwani, showed interest in the demand for these services. Ratlam reported no demand for CSC services.
- c) **Sale of non-PDS/grocery items:** There is significant demand for the sale of non-PDS/grocery items, particularly in Tikamgarh, where 80% (4) of FPS owners expressed interest, and Vidisha, with 60% (3) showing interest. Barwani also exhibited interest in this category, with 40% (2) of FPS owners expressing interest in diversifying their product offerings.

Demand for the additional services	Vidisha	Ratlam	Tikamgarh	Barwani
Banking Services	2 (40%)	-	5 (100%)	2 (40%)
CSC Services	2 (40%)	-	5 (100%)	2 (40%)
Sale of non-PDS / grocery items	3 (60%)	-	4 (80%)	2 (40%)
Sale of small (5kg) cylinders	2 (40%)	-	5 (100%)	2 (40%)
Broadband Services through PM-WANI Scheme	3 (60%)	-	5 (100%)	2 (40%)

Table 29 Demand for additional services at FPS

d) Sale of small (5kg) cylinders: The sale of small cylinders garners notable interest in Tikamgarh, where 100% (5) of FPS owners expressed interest, while Vidisha and Barwani reported relatively lower demand, with 40% (2) in each district.

e) Broadband Services through PM-WANI Scheme: Demand for broadband services through the PM-WANI scheme varies significantly across all districts. In Tikamgarh, 100% (5) of FPS owners showed interest, while in Vidisha, 60% (3) expressed interest, and Barwani reported lower interest, with 40% (2) of FPS owners showing interest.

6.2 Implementation of Other FPS transformation activities at Fair Price Shop:

The data on the implementation of other FPS transformation activities during stakeholder consultation with Fair Price Shops (FPS) across the surveyed districts reveals the following as shown in Table 30:

- a) **CCTV Installations:** In terms of CCTV installations, Ratlam had a 40% implementation rate, followed by 20% in Barwani. On the other hand, Vidisha and Tikamgarh did not report any installations, suggesting limited use of CCTV in these areas for FPS transformation.

- b) **Use of Electronic Weighing Scale:** All surveyed districts, including Vidisha, Ratlam, Tikamgarh, and Barwani, reported 100% implementation of electronic weighing scales, highlighting the widespread adoption of this technology across FPS.
- c) **Integration of e-PoS with Electronic Weighing Scale:** Similar to electronic weighing scales, all districts, including Vidisha, Ratlam, Tikamgarh, and Barwani, reported 100% integration of e-PoS with electronic weighing scales, indicating a seamless technological connection in these areas.

Implementation of other FPS transformation activities at FPS	Vidisha	Ratlam	Tikamgarh	Barwani
CCTV Installations	0%	2 (40%)	0%	1 (20%)
Use of Electronic Weighing scale	5 (100%)	5 (100%)	5 (100%)	5 (100%)
Integration of e-PoS. with electronic weighing scale	5 (100%)	5 (100%)	5 (100%)	5 (100%)
Display of required information as per PDS Control order and IEC Material	4 (80%)	3 (60%)	2 (40%)	4 (80%)
Availing Mudra loan for transformation	0%	0%	0%	0%

Table 30 Implementation of other FPS Transformation activities

- d) **Display of Required Information as per PDS Control Order and IEC Material:** The implementation of displaying required information as per PDS Control Order and IEC material is reported at varying levels, with Vidisha and Barwani reporting 80% implementation, while Ratlam (60%) and Tikamgarh (40%) also exhibit substantial compliance.
- e) **Availing Mudra Loan for Transformation:** None of the surveyed districts reported availing Mudra loans for FPS transformation, indicating that this financing option was not utilized in these areas.

6.3 Viability of the Operations:

The sustainability and long-term success of any system or program depend on its operational viability. This applies to the Public Distribution System (PDS) and related initiatives as well. Evaluating the viability of PDS operations is essential to maintain its effectiveness in providing essential food grains to the economically disadvantaged population. This chapter explores the different factors that influence the viability of PDS operations, such as financial sustainability, resource allocation, efficiency, and adaptability to changing circumstances.

a. Payment of Commissions & pendency of payment:

To gauge the fundamental impact of the implementation process, an essential aspect under study was the viability of Fair Price Shop (FPS) operations. In particular, FPS owners were queried about the punctuality and reliability of payments, specifically focusing on the timely disbursement of commissions. This analysis delves into the core operational stability of FPS establishments and their financial sustenance. The data provided in the table 31 reveals analysis of commission payment timeliness among the sampled districts and reveals distinct patterns:

S. No	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1	Timely receiving the payments of dealer's commission	Yes	4 (80%)	4 (80%)	0	0
		No	1 (20%)	1 (20%)	5 (100%)	5 (100%)
2.	Average Monthly Commission from PDS of FPS Dealers (in Rupees)		48,000	39,500	43,500	49,000
3	Last commission delayed 3 months		30-60 days			

Table 31 Payment of Commission & Pendency of payment

In Vidisha and Ratlam, 80% of Fair Price Shop (FPS) owners reported receiving their commission payments on time, while a smaller percentage (20%) experienced payment delays. In contrast, Tikamgarh and Barwani had no FPS owners (0%) reporting timely commission payments, with all FPS owners facing payment delays. Additionally the FPS owners were asked about the last commission delayed and all of them reported 30-60 days on an average.

The average monthly commission for Fair Price Shop (FPS) dealers in the sampled districts varies. In Vidisha, dealers earn an average of Rs. 48,000 per month, while Ratlam reports slightly lower earnings at Rs. 39,500. Conversely, Tikamgarh and Barwani have relatively higher commission rates, with dealers receiving Rs. 43,500 and Rs. 49,000 per month, respectively.

b. Revenue from other FPS transformation activities:

Examining the revenue generated from other Fair Price Shop (FPS) transformation activities is essential in assessing the financial viability and sustainability of these initiatives. It sheds light on the potential for FPS owners to diversify their income streams beyond the traditional Public Distribution System (PDS) operations as shown in Table 32. Analysing the revenue generated from these activities provides valuable insights into the financial prospects of FPS dealers of the sampled districts and the extent to which they can enhance their income while serving their communities.

Revenue from other FPS Activities	Vidisha	Ratlam	Tikamgarh	Barwani
Additional Average Income through Sale of Gunny bags and other items (in Rupees)	6000-7500	7500-8500	6000-7500	7000-8000

Table 32 Revenue from other FPS Activities

The income generated by Fair Price Shop (FPS) dealers through the sale of gunny bags and other non PDS items varies across the surveyed districts. In Vidisha and Tikamgarh, FPS dealers typically earn an average income ranging from 6000 to 7500 Rupees indicating relatively lower income and viability. In Barwani, the average income falls within the range of 7000 to 8000 Rupees, reflecting moderate earnings from these activities. Ratlam stands out with FPS dealers earning an average income ranging from 7500 to 8500 Rupees, suggesting slightly higher revenue compared to the other districts.

c. Total revenue, expenditure, profit and viability:

The analysis of average expenditures incurred by Fair Price Shop (FPS) dealers in the surveyed districts reveals distinct patterns in terms of financial commitments and operational costs as mentioned in Table 33. The income is based on the commission for sale of food grains under NFSA and other non NFSA items like sale of gunny bags etc.

Average Expenditures (Last Month)	Vidisha	Ratlam	Tikamgarh	Barwani
Total Income of FPS (PDS+Non PDS Items)	55000	48,000	51,000	60,000
Total Monthly expenditure (Salary, Electricity, Internet, Labour and Stationary)	21,500	23,500	20,500	18,000
Total Profit	33,500	24,500	30,500	42, 000

Table 33 Total revenue, expenditure, profit and viability

In all the sampled districts, expenses related to workers' salaries, shop rent, electricity, and maintenance show significant variations. Ratlam incurs the highest monthly expenditure, indicating relatively higher operational costs. However, Vidisha, followed by Tikamgarh, has slightly lower monthly expenditures, suggesting comparatively lower operational costs. Barwani stands out as the only district with a relatively lower monthly expenditure of Rs. 18,000. Despite these variations, the findings indicate that all sampled Fair Price Shops (FPS) in the districts are meeting their expenditures and operating at a profit.

Chapter 7: One Nation One Ration Card and Intra-State Portability:

The Covid-19 pandemic worsened global food insecurity, especially in underdeveloped nations with existing hunger and malnutrition problems. Job losses, particularly among the middle class, destitute, and vulnerable populations, led to urban migrations. A significant contributor to this food insecurity was the inability to obtain local ration cards, essential for accessing government-subsidized goods through the Public Distribution System. This issue particularly affected millions of migrants without proper documentation to access rations and social security benefits at their workplaces. To address this, the Government of India prioritized implementing the One Nation One Ration Card (ONORC) scheme, enabling eligible cardholders and NFSA beneficiaries to access their entitlements from anywhere in the country.

7.1 Awareness Regarding Intra- State and National Portability:

S.No	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1.	Aware about portability Option	Yes	36 (72%)	29 (58%)	48 (96%)	45 (90%)
		No	14 (28%)	21 (42%)	2 (4%)	5 (10%)
2.	If Yes, Awareness About	Pick up ration from any FPS in my vicinity village/block/panchayat/	25%	40%	45%	33%
		Pick up ration from any FPS within the district	24%	38%	20%	33%
		Pick up rations from any FPS within the state	23%	16%	19%	21%
		Pick up rations from any FPS within the country	16%	4%	10%	11%
		Aadhaar seeding with ration card is mandatory to avail portability	10%	1%	6%	2%
		Part lifting of ration (partial lifting of ration in destination state) is possible	2%	1%	0%	0%

Table 34 Awareness regarding Portability(inter&intra)

The Awareness of the portability option among respondents in the surveyed districts varies, as depicted in table 34. Tikamgarh boasts the highest level of awareness, with 96% of

respondents well-informed about the option, followed closely by Barwani at 90%. Vidisha and Ratlam, on the other hand, exhibit slightly lower awareness levels, with 72% and 58%, respectively. In contrast, the percentage of respondents who lack awareness of the portability option ranges from 28% in Vidisha to 42% in Ratlam, illustrating differences in awareness levels across the districts.

The data on awareness levels regarding the One Nation One Ration Card (ONORC) option among respondents in the surveyed districts reveals varying degrees of understanding. Notably, Tikamgarh, Barwani and Vidisha generally exhibit higher levels of awareness about ONORC, encompassing the ability to pick up rations from various locations within their districts and even within the state and country. On the other hand, Ratlam shows lesser awareness among the beneficiaries regarding picking up rations within their districts and localities.

7.2 Demand for ONORC/Portability (Respondents who availed Portability/ONORC + respondents who were unable to avail/ total respondents):

The data on the usage of portability among respondents in the sampled districts reveals the following as shown in Table 35.

The usage of portability among respondents shows very limited adoption. In Vidisha and Ratlam, only 1% of respondents utilized intra-state portability, Barwani has the highest (10%) number of beneficiaries who have availed intra state Portability options. while none of the beneficiaries in Tikamgarh. Notably None of the respondents have availed Inter State Portability in any of the sampled districts with 99% not using portability at all.

S.No	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1	Used Portability	Intra-State	1 (2%)	1 (2%)	0	5 (10%)
		Inter-State	0	0	0	0
		None	49 (98%)	49 (98%)	50 (100%)	45 (95%)
2	If Not used Reason for that	No need as Satisfied with the services of FPS	0	28%	54%	60%
		None of the family members migrated	98%	70%	46%	35%

Table 35 Demand on ONORC / Portability

The reasons for not utilizing portability vary among respondents across the sampled districts. In Vidisha, a striking 98% of respondents refrained from opting for portability because they mentioned that none of their family members had migrated. In Ratlam, 70% of respondents cited the same reason, stating that their family members had never migrated. In Barwani, 60%

of respondents expressed satisfaction with FPS services as the primary reason for not using portability, while 35% stated that none of their family members had migrated. In Tikamgarh, 54% of respondents indicated satisfaction with FPS services as their reason for not using portability, while 46% reported that none of their family members had migrated.

7.3 Reasons for beneficiaries availing Portability/ONORC:

The data on respondents who have availed the portability options in the sampled districts were limited, with notably none of the respondents in Tikamgarh utilizing the portability option. The reasons for choosing to pick up ration instead are presented in Table 36.

In Vidisha, only one respondent availed the portability option from a different district within the state. In Ratlam, one beneficiary used the portability option from a different block. Interestingly, in Barwani, five beneficiaries chose to avail of portability from different districts, blocks, and panchayats.

S.No	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1	Respondents who availed Portability	Different Panchayat	0	0	0	1
		Different block	0	1	0	2
		Different district	1	0	0	2
2	Reasons for picking ration from other FPS	Change in area of residence	1	1	0	5
		Unavailability of ration at FPS (Authentication failure)	0	0	0	0
		Distance between home and FPS	0	0	0	0

Table 36 Reasons why beneficiaries availed portability

For all those beneficiaries who availed Intrastate Portability all the respondents were asked about any particular reason for availing this facility and all of them reported change in the residence as the primary reason for doing so.

7.4 Experience of Beneficiaries Availing Intra-State and National Portability:

Out of all the sample respondents who had utilized Portability options, 100% were highly satisfied with the smooth lifting ration experience. Addressing the grounds for satisfaction, respondents (Table 37) claimed that it saves time and money connected with travelling to FPS.

S.No	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1	Satisfaction with the experience in picking the ration through Portability	Dissatisfied	0	0	0	0
		Highly Satisfied	1 (100%)	0	1 (100%)	5 (100%)
2	If Satisfied, Reasons	Better service delivery in store (dealer behaviour, quantity and good quality)	0	0	0	0
		Saving time and cost associated with traveling to a fair price shop	100%	100%	0	100%

Table 37 Experience of beneficiaries who availed interstate portability

7.5 Difficulties faced by Beneficiaries in Portability Transactions:

Of all the sample respondents who availed Portability options, none of the respondents reported any difficulty and were highly satisfied with the services in terms in getting ration through Portability option.

7.6 Perception of beneficiaries regarding intra-state and national portability:

Beneficiaries' perceptions of intra-state and national portability differ significantly. Intra-state portability has limited usage, mainly due to family members not migrating and satisfaction with local Fair Price Shop (FPS) services. National portability is rarely utilized. These findings underscore the importance of raising awareness about the advantages of portability options within and across states. This would help beneficiaries access their entitlements conveniently, regardless of their location, and encourage them to consider portability even in non-migration situations.

7.7 Impact of FPS portability on beneficiary satisfaction:

FPS portability's impact on beneficiary satisfaction is significant. Most beneficiaries don't use portability due to non-migration and contentment with local FPS services. This highlights the essential role of FPSs in meeting their needs and ensuring satisfaction. However, those who use portability often do so due to changes in residence or ration unavailability at their local FPS. This underscores the benefits of portability in specific situations. To enhance satisfaction, it's vital to improve FPS services and raise awareness about portability's convenience when needed.

7.8 Awareness on intra-state and national portability among FPS dealers:

The data on awareness of intra-state and national portability among sampled Fair Price Shop (FPS) dealers shown in table 38 across all districts indicates that all FPS dealers are well-informed about portability options.

S.No	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1.	Aware about portability Option	Yes	5 (100%)	5 (100%)	5 (100%)	5 (100%)
		No	0	0	0	0
2.	Received any training on ONORC	Yes	1 (20%)	4 (80%)	1(20%)	1(20%)
		No	4 (80%)	1(20%)	4 (80%)	4 (80%)

Table 38 Awareness of FPS Dealers on Portability

Furthermore, the data reveals that a significant portion (80%) of FPS dealers across the districts have not received training and capacity-building programs from the department. However, it's noteworthy that 80% of FPS dealers in Ratlam reported having received such training to facilitate the successful implementation of portability options.

7.9 Impact of portability on number of beneficiaries availing ration, profitability of FPS dealer:

The data presented in Table 34 sheds light on the impact of portability on the number of beneficiaries availing ration and the profitability of Fair Price Shop (FPS) dealers.

S.No	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1.	No of beneficiaries changed after ONORC portability	Increased	1	-	-	-
		Decreased	-	2	-	-
		Stayed same	4	3	-	5
		Not Aware	-		5	-
2.	Change in Profitability after ONORC	Increased	-	-	-	-
		Decreased		-	-	3
		Stayed same	5	5		5
		Not Aware	-	-	5	-

Among Table 39 Impact of Portability on number of beneficiaries availing ration and profitability of FPS Dealer

the sampled FPS dealers, the majority of FPS owners reported that the number of beneficiaries remained the same after the implementation of the One Nation One Ration Card (ONORC)

portability. This is primarily attributed to a lower number of people opting for it. Only 2 FPS owners in Ratlam mentioned a decrease in the number of beneficiaries, while 5 FPS owners in Tikamgarh were not aware of the ONORC. Regarding the change in profitability after the ONORC implementation, all FPS owners reported that profitability remained the same after the implementation of the scheme, with no sudden changes in the profitability of FPS owners.

7.10 Process of Extra Allocation of Foodgrains to Adjust for Portability Transactions:

S.No	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1.	Received extra ration over entitled quantity to adjust for portability	Yes	3	2	1	2
		No	2	3	4	3
2.	If Yes, How do you ask for allotment	Direct request through food officials	3	1	-	-
		Create demand through e-PoS device	-	1	1	2
3	Was it sufficient to meet the demand at FPS?	Yes	3	2	1	2
		No	-	-	-	-

Table 40 Process of extra allocation of foodgrains under NFSA

The data regarding the process of extra allocation of food grains to accommodate portability transactions provides significant insights, as displayed in Table 40. Of the surveyed Fair Price Shops (FPS), only 40% reported receiving additional food grain allocations beyond their entitled quantity to accommodate portability transactions. Among the FPSs that received extra allocation, 3 FPS in Vidisha and 1 FPS in Ratlam mentioned that they directly request it from the District Supplies Officer in their district when the need arises. This direct communication with local authorities facilitates a responsive and customized allocation process, guaranteeing that FPSs maintain adequate stock to meet demand.

Interestingly, 20% (4) of FPSs reported creating a demand through the online e-PoS portal to receive the additional stock within 24 hours. It was also revealed that in all the sampled districts the process of allocated ration is sufficient enough to meet the demands if Portability is availed by any of the beneficiary. This digital approach streamlines the allocation process and demonstrates the integration of technology to meet the evolving needs of FPS operations.

7.11 Any issues/ difficulties faced by dealers in Implementing Portability Transactions:

With the exception of a few server and connectivity issues experienced in Tikamgarh, the feedback from the majority of beneficiaries and dealers indicated that the implementation of portability was relatively trouble-free. However, it's noteworthy that there was one reported instance where a beneficiary encountered difficulties as the dealer refused to distribute rations. This underscores the generally smooth transition to the portability system but also highlights the need for continued vigilance and oversight to address isolated issues and ensure that beneficiaries receive their entitled rations without disruptions.

Additionally, the dealers emphasized the importance of Information, Education, and Communication (IEC) efforts targeting both beneficiaries and dealers. This underscores the significance of awareness campaigns and training programs to ensure that all stakeholders are well-informed about the ONORC scheme, its benefits, and how to effectively utilize it. These educational efforts can contribute to the continued success and expansion of the ONORC initiative by addressing any potential challenges or misconceptions that may arise.

Chapter 8 : Rice Fortification:

Rice fortification is a crucial strategy to enhance the nutritional value of rice, a staple food for a significant portion of the Indian population. In India, where 65% of people rely on rice as a dietary staple, particularly those in vulnerable and economically disadvantaged communities, fortification holds promise in addressing nutritional deficiencies and complementing ongoing efforts to fortify staple foods. This is particularly important in combating issues like anaemia among children under five, women of reproductive age, and pregnant women, as well as preventing birth defects associated with folic acid deficiency. Global research has shown that well-formulated fortified rice, using the right balance of macronutrients and fortificant with efficient technology, can effectively improve micronutrient levels.

The National Food Security Act (NFSA) plays a significant role in this context, focusing on the centrally sponsored pilot scheme initiated in 2019-20 to fortify rice. The state of Madhya Pradesh has initiated the Processing and distribution of fortified rice in the Public Distribution System (PDS), starting with Singrauli district and planning to expand to Bhind and Anantpur through CSR initiatives . This move aims to address micronutrient deficiencies resulting in poor cognitive and learning abilities in children and overall, lower productivity, increased morbidity, and mortality and lower immune responses.

The primary objective of these pilot studies is to assess the adoption and impact of fortified rice on nutritional deficiencies among various age groups in the target population. The insights gained from these pilot studies will not only gauge the effectiveness of rice fortification but also highlight areas for potential enhancements. Ultimately, the results will serve as a guide for scaling up the fortification scheme to additional states across India, ensuring improved nutrition for millions of people.

A. Status of Rice Fortification

The data collected from beneficiaries and Fair Price Shop (FPS) dealers provides valuable insights into the status of rice fortification, including awareness, concerns, challenges related to the fortified supply chain, and the effectiveness of Information, Education, and Communication (IEC) campaigns.

8.1. Awareness & concerns, if any about Rice Fortification (by beneficiaries):

In the realm of rice fortification, one pivotal aspect is the awareness and concerns surrounding this nutritional enhancement strategy, as perceived by both NFSA Beneficiaries

and Fair Price Shop (FPS) dealers. To gauge their insights and understanding, FPS dealers and NFSA beneficiaries were actively engaged, and their perspectives on rice fortification, its significance within the Public Distribution System (PDS), and the associated benefits were diligently captured. The subsequent table 41 presents a comprehensive overview of the data obtained, shedding light on the levels of awareness and any apprehensions or queries that arose during these discussions. This crucial information serves as a foundation for evaluating the effectiveness of awareness campaigns and addressing any potential barriers to the acceptance of fortified rice within these key stakeholder groups.

S.No	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1.	Beneficiary awareness regarding fortified rice and its benefits	Yes	31 (62%)	49 (98%)	20 (40%)	15 (30%)
		No	19 (38%)	1 (2%)	30 (60%)	35 (70%)
2.	Source of Information about fortified rice distribution at FPS	Print media	7	5	6	1
		Social media	2	2	6	1
		E-Media	-	-	8	2
		FPS Dealer	22	42	-	11
3.	Whether, lifted Fortified rice from FPS in last 3 months	Yes	20	40	12	5
		No	11	9	8	10
4.	Beneficiary perception regarding Fortified Rice	Tastes Bad/Plastic Rice	5	0	4	0
		Tastes better than common rice	5	10	0	0
		Its healthy and nutritious for Infants and children	10	30	8	5

Table 41 Awareness & concerns regarding rice fortification (by beneficiaries)

The data collected from primary stakeholder consultations with beneficiaries regarding rice fortification awareness and concerns presented in table 41 reveal significant insights into their perceptions:

Beneficiary Awareness: A 58% majority of beneficiaries in all surveyed districts exhibit awareness about fortified rice and its associated benefits. Ratlam and Vidisha demonstrate higher awareness levels, with 98% and 62% of respondents, respectively, acknowledging fortified rice. In contrast, Tikamgarh and Barwani display slightly lower but still considerable awareness levels, with 40% and 30% awareness, respectively.

Sources of Information: The primary sources of information for beneficiaries regarding fortified rice distribution at Fair Price Shops (FPS) vary across districts. In Ratlam, Vidisha, and Barwani, FPS dealers are a prominent source of information, with the majority of beneficiaries relying on them. Additionally, print media, social media, and electronic media also play a role in disseminating information among beneficiaries.

Fortified Rice Uptake from FPS: A substantial proportion of beneficiaries across all districts have lifted fortified rice from FPS in the last three months. Ratlam has reported maximum of beneficiaries having accessed fortified rice (80%), emphasizing the successful implementation of this nutritional strategy.

Beneficiary Perception: The perception of fortified rice among beneficiaries is generally positive. In all districts, a significant percentage of beneficiaries view it as a healthy and nutritious option for infants and children. However, there are concerns related to taste, as some beneficiaries describe it as unpalatable or liken it to plastic rice. This highlights the need to address taste-related concerns through awareness campaigns and potentially improve the product to make it more acceptable.

8.2 Awareness & concerns, if any about Rice Fortification (by FPS dealers):

The data from the primary stakeholder consultation with Fair Price Shop (FPS) owners regarding rice fortification awareness and concerns as shown in Table 42 reflects the following key points:

1. **FPS Awareness:** FPS owners in all surveyed districts exhibit a high level of awareness regarding fortified rice and its benefits. In Vidisha, Ratlam and Barwani, 100% of FPS

owners are aware of fortified rice, while in Tikamgarh, 80% of FPS owners have knowledge about it. This indicates a comprehensive understanding of the importance of rice fortification among FPS owners.

2. **Training and Workshops:** The data reveals that all FPS owners across the sampled districts have received training or attended workshops on rice fortification. This highlights a proactive approach by the authorities in ensuring that FPS owners are well-informed about the distribution and significance of fortified rice.

S.No	Particulars	Responses	Districts			
			Vidisha	Ratlam	Tikamgarh	Barwani
1.	FPS awareness regarding fortified rice and its benefits	Yes	5 (100%)	5 (100%)	4 (80%)	5 (100%)
		No	0	0	1 (20%)	0
2.	Organized any campaigns regarding fortified rice	Yes	0%	40%	0%	60%
		No	100%	60%	100%	40%
3.	Type of Rice Distributed in last 3 months	Fortified	50%	50%	50%	50%
		Non.Fortified	50%	50%	50%	50%

Table 42 Awareness & Concerns about rice fortification (by FPS Dealers)

3. Type of Rice Distributed: FPS owners in all districts have distributed both fortified and non-fortified rice in the last three months, with a balanced approach. When asked about the reasons behind this practice, all FPS owners explained that they aim to strike a balance between both rice varieties, as some beneficiaries prefer non-fortified rice despite the availability of fortified options. This reflects the successful implementation of the rice fortification program, with FPS owners actively engaged in providing nutritionally enhanced rice to beneficiaries while respecting their preferences.

8.3. Challenges Related to Fortified Supply Chain:

The findings suggest that, in the sampled districts, there were no significant challenges reported in the distribution of the fortified rice supply chain. However, it is emphasized that effective Information, Education, and Communication (IEC) initiatives are crucial for ensuring comprehensive coverage of the program and disseminating accurate information to beneficiaries. Additionally, a proportion of beneficiaries expressed concerns about the taste

and quality of fortified rice, citing issues related to taste and the perception of "plastic rice." These concerns highlight the importance of addressing taste and quality issues to ensure the acceptance and success of fortified rice programs among beneficiaries.

8.4. IEC campaign for orientation of stakeholders towards Rice fortification and its benefits:

IEC campaigns are instrumental in increasing awareness among stakeholders / FPS dealers about the concept of rice fortification. Many individuals, including consumers and even some professionals in the food industry, may be unaware of the significance of fortifying rice with essential nutrients. IEC campaigns facilitate stakeholder engagement and collaboration by informing and involving various groups, including government agencies, rice millers, health professionals, and the public, these campaigns can foster cooperation and support for rice fortification initiatives. When stakeholders are well-informed about the benefits of rice fortification, they are more likely to comply with regulations and adopt the practice. This is especially important for rice millers and producers, who play a crucial role in the fortification process. Also in addition engaged stakeholders can play a role in data collection and monitoring. They can report any issues or challenges they encounter in the implementation of rice fortification programs, contributing to ongoing improvement efforts.

The data from the consultation with FPS dealers suggests that there is room for improvement in Information, Education, and Communication (IEC) campaigns regarding rice fortification and its benefits. While the majority of FPS dealers do provide technical information to beneficiaries who inquire about the type of rice being distributed, it's noteworthy that the remaining FPS dealers prefer to let beneficiaries choose the rice without offering specific information. This suggests that enhancing IEC efforts to proactively educate beneficiaries about fortified rice and its advantages could be beneficial in ensuring that beneficiaries make informed choices when selecting their rice preferences at FPS shops. This, in turn, may contribute to better program outcomes.

Chapter 9: Key Findings and Recommendations:

9.1 Key Findings:

- I. Approximately 86% of sample families were aware of the eligibility/identification criteria for receiving NFSA benefits, while 14% were not aware. The proportion of ration cardholders with women household heads varies across districts. Barwani stands out with 90% women household heads, while Vidisha, Ratlam, and Tikamgarh have 26%, 20%, and 16% women household heads, respectively.
- II. Availability of food grains at Fair Price Shops (FPS) depends on the timing of beneficiary visits. However, all sampled beneficiaries in the districts received their entitlements in a single visit. The average distance between beneficiaries' homes and FPS shops is within the norms established in the National Food Security Act (NFSA), ensuring accessibility. Most FPS operate for more than 20 days each month, but some have varied schedules. Average operational hours range from 6-9 hours. A majority of beneficiaries were highly satisfied with the number of working days and distribution timings.
- III. Vidisha and Tikamgarh reported no CCTV installations, indicating limited use of surveillance technology. Some FPS experience biometric authentication failures, particularly in Tikamgarh (80-100%). Reasons include poor quality, fingerprint mismatches, and connectivity issues. Authentication times vary, with some FPS taking more than 3 minutes per transaction.
- IV. Nearly all FPS dealers demonstrated awareness of the provision to issue uniform receipts with the PMGKAY logo for transactions, except for one dealer in Vidisha and Barwani.
- V. A small proportion of beneficiaries in Tikamgarh, Barwani, and Ratlam reported receiving underweight rations, while no such cases were found in Vidisha. In all the sampled districts, there were no instances of overcharging, except for 6% of beneficiaries in Tikamgarh who reported overcharging.
- VI. All the respondents expressed full satisfaction with the quality of food grains distributed under NFSA, with Vidisha having 100% satisfaction and Tikamgarh the highest at 98%.
- VII. No reports of Silent Ration Cards (RCs against which food grains are not lifted for three consecutive months) were found among NFSA ration cardholders in the sampled districts.
- VIII. In all the sampled districts, 75% of FPS shops offer home delivery of ration to beneficiaries with disabilities (PWD), while the remaining 25% allow PWD beneficiaries to nominate another person to collect their ration entitlement on their behalf, particularly in Vidisha and Ratlam.

- IX. Inclusion error rates vary among districts, with Vidisha having the highest error at 40%, suggesting the need to improve beneficiary identification accuracy. No instances were found of AAY beneficiaries incorrectly included as PHH beneficiaries, indicating more accurate AAY inclusion. Daily wage earners face difficulties due to lengthy and complex application procedures, requiring simplified processes. Many non-NFSA households are unaware of NFSA eligibility criteria and application processes, necessitating awareness campaigns. Non-NFSA households incur varying travel distances and costs to access government services, which could be reduced with more accessible service points.
- X. FPS owners in all sampled districts expressed a strong interest in offering additional services to improve service delivery for Ration Card holders. There is a demand for these services, and their implementation can enhance the beneficiary experience. There are inconsistencies in commission payment timeliness. FPS owners in Vidisha and Ratlam reported receiving payments on time, while Tikamgarh and Barwani had delays.
- XI. There are varying levels of awareness about the portability option among beneficiaries, with Ratlam having the lowest awareness at 58%. Raising awareness about the benefits of portability can enhance its utilization. The usage of portability is very limited, with only 1% utilization in Vidisha and Ratlam. Efforts are needed to promote and facilitate the use of portability options, especially in areas with low adoption rates.
- XII. While awareness about fortified rice is relatively high in some districts, concerns about taste and acceptability exist. Addressing taste-related concerns and ensuring beneficiaries fully understand the benefits of fortified rice is essential for its successful adoption and impact on nutrition.

9.2 Policy Recommendations:

I. Enhance Awareness and Targeting:

- Conduct widespread awareness campaigns to educate the population about NFSA eligibility and application procedures.
- Implement a beneficiary identification and verification system using updated and accurate data to minimize inclusion errors and ensure accurate targeting.
- Simplify application procedures for daily wage earners to improve access to benefits.

II. Improving Service Delivery:

- Encourage Fair Price Shops (FPS) owners to offer additional services to enhance the beneficiary experience and meet demand.
- Address inconsistencies in commission payment timeliness for FPS owners.

III. Enhance Accessibility and Transparency:

Promote the use of technology to address biometric authentication failures, ensuring better connectivity and the provision of uniform authentication services.

Expand the use of CCTV installations, especially in districts with limited surveillance technology.

Promote portability options through awareness campaigns, especially in areas with low adoption rates.

Establish more accessible service points to reduce travel distances and costs for non-NFSA households accessing government services.

IV. Quality Assurance:

- Continue maintaining high-quality food grains under NFSA to ensure beneficiary satisfaction.

V. Silent Ration Cards:

- Implement mechanisms to track and address silent ration cards, ensuring that food grains reach intended beneficiaries.

VI. Fortified Rice Acceptance:

- Address taste-related concerns through product improvements and comprehensive awareness campaigns to highlight the nutritional benefits of fortified rice.

These policy recommendations aim to address immediate issues and improve the effectiveness and efficiency of the National Food Security Act in Madhya Pradesh.

Chapter 10 - References

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