

Assessment of Government of India's Special Scheme for Release of Pulses to States/UTs at Discounted Rate to be Utilized for Various Welfare Schemes during September 2018 to August 2019



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Disclaimer

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Assessment of Government of India's Special Scheme for Release of Pulses to States/UTs at Discounted Rate to be Utilized for Various Welfare Schemes

I. Background

Pulses – An important source of protein in Indian diet

Pulses have been an essential part of the human diet for centuries (FAO, 2019). However, pulses have lately been recognised not only as a nutritious food for the diet but also a very good crop for a sustainable agriculture which can contribute to the achievement of various goals of SDG 2030. Given its important role in the diet, in 2013, the United Nations General Assembly declared 2016 as the International Year of Pulses (IYP). IYP contributed significantly in bringing to light the crucial roles that pulses play in healthy diets, sustainable food production and, above all, in food security.

Pulses are also economical and therefore considered as 'protein for the poor' against animal protein which is costly to afford. Pulses comprise 20 to 25 per cent protein by weight, which is double the protein content of wheat and three times that of rice which makes it an important source of vegetarian protein. Besides being rich in protein, pulses contain a wide range of nutrients, including carbohydrates, dietary fiber, unsaturated fat, vitamins, minerals, amino acids, iron and zinc as well as non-nutrients, such as antioxidants and phytoestrogens. Pulses contribute to reduced colon cancer and disease, increased satiety, and lowered Body Mass Index and obesity risk (Boye, Zare, and Pletch 2010; McCrory et al. 2010; Jukanti et al. 2012).

In India, there has been a declining trend in the protein consumption.¹ In rural India, the average protein intake has gone down from 63.5 grams per capita per day in 1983 to 57 grams in 2004-05 and further to 56.5 grams in 2011-12. Similarly, in urban areas, the per capita per day consumption of protein has declined from 58.1 grams in 1983 to 55.7 grams in 2011-12. Despite the declining trends of protein intake, both in rural and urban areas, per capita consumption was higher than the daily minimum protein consumption requirement as per the RDA level. However, this is not true with the poorest 30 per cent of the population. Their per capita per day protein consumption is lower than the RDA norms. Their per capita per day protein consumption is 47.5 gram against 48 gram norms in rural areas and 47.2 grams against 50 grams norms in urban areas². One of the reasons for protein deficiency could be vegetarianism of the Indian population. India being home

¹ https://mospi.gov.in/web/mospi/documentinfo/-/document_library/VRN9YwVcuChC/view_file/232094

² ib.id.

of the world's 70 per cent vegetarians, pulses add a significant value to Indian diet and is a natural preference. India's higher dependence on this plant-based protein source makes it world's largest consumer, producer, and importer of the pulses.

2015-16 Pulses crisis and Government's Initiatives

The production of pulses in India was consistently lower than national requirements between 2000-2016 (MoSPI and WFP, 2019). As a result, it has shown high price volatility and its availability throughout the year, especially among the poor, remained a challenge. India witnessed a worst pulses crisis during 2015-16. Between 2011-12 and 2015-16, the demand for pulses outgrew domestic supply considerably, forcing the Indian government to increasingly depend on imported pulses. The precarious situation was made even more alarming in 2015-16 by two back-to-back failed monsoons³. As a result, the pulses prices in the Indian market shot up to nearly three times.

Government of India took drastic measures to improve the availability of the pulses in Indian market and stabilize its prices. These measures included increase in import of pulses from foreign countries; taking action against hoarders; raising the buffer stock from 0.8 million tonnes to 2 million tonnes. Besides, it also took many steps to increase the domestic pulses production by sharply increasing the MSP of Kharif pulses for the 2016-17 crop year to encourage farmers to grow pulses. The National Food Security Mission (NFSM) was extended in all 638 districts of 29 states and its allocations were also increased to boost pulses production.

These initiatives led to an all-time high production of pulses and its availability within an year. Government of India under Price Support Scheme (PSS) made record procurement of 4.5 million MT of pulses during Kharif 2017 and Rabi 2018 marketing season. Besides, despite record production, India imported 6.6 million tonnes of pulses due to existing commitments leading to a massive domestic supply glut, and a sharp and sustained fall in pulse prices in Indian market. This also led to a severe storage issue of pulses.

Among production of various pulses, in 2015-18, percentage share of gram was the highest followed by tur, urad, moong and lentil. The yield of pulses increased from 630 Kg/ha in 1996 to 835 Kg/ha in 2018 (32% increase) (MoSPI and WFP, 2019). Over the years, area under pulses have also increased.

Government of India's Special Scheme on Pulses

Given the protein deficiency resulting into poor nutritional outcome, sufficient availability of pulses since 2017-18 straining the warehouses and to arrest declining consumption level; on 9th August 2018, the Cabinet Committee on Economic Affairs, chaired by Prime

³<https://swarajyamag.com/ideas/arhar-modi-how-the-government-turned-a-pulses-crisis-into-an-opportunity>

Minister, Government of India approved the release of pulses to States/UTs at discounted rate to be utilized for various Welfare Schemes from the stock of pulses procured under Price Support Schemes (PSS). Under this approved Scheme, the States/UT Governments were offered to lift 34.88 lakh MT of Tur, Chana, Masoor, Moong and Urad at discount of Rs.15 per Kg over the prevailing wholesale market price of the sourcing state on a first come first serve basis. The scheme was a pilot for a period of 12 months from the date of 1st supply or complete disposal of 34.88 lakh MT of pulses stock, whichever is earlier. The scheme guidelines is enclosed as **Annexure 1**.

In order to ensure that the Price Stabilization Fund (PSF) stock is renewed, the scheme guidelines suggested that the balance old stock with Department of Consumer Affairs, Ministry of Food, Public Distribution and Consumer Affairs (DoCA) under PSF was also to be utilized under the scheme. On receipt of indent from state, if the old stock of that type of pulses was available under PSF, the same would have been transferred to PSS and equivalent amount of pulses under PSS will be transferred to PSF. This transfer was to take place at zero costs between PSF and PSF and WHR (warehouse receipt) weight basis.

The 'Issue Price' for the scheme was to be calculated using the two scenarios a) Weighted average of last seven days of modal price of the specific pulse in the APMCs (*Mandi/s*) situated within a radius of 100 km of *godowns* from where the PSS pulse stock will be issued to the states; b) Weighted average of wholesale prices of selected APMCs (*Mandi/s*) near to the warehouse(s) of last seven days in sourcing state. The issue price will be the higher of (a) & (b). The validity of 'Issue Price' for each Pulse/Sourcing State Wise, will be for each calendar month.

The scheme was to be monitored by an Empowered Committee (EC). EC was to be chaired by Additional Secretary (Cooperation), DAC&FW with representatives from Department of Expenditure, Department of Food and Public Distribution, Department of Consumer Affairs, O/o of Chief Adviser, Cost, Internal Finance Division, DAC&FW, Central Nodal Agencies and representatives of 4 states. The Joint Secretary/Director, of Marketing Division, DAC&FW will be co-opted Member of EC.

The Central Nodal Agency (CNA) to implement the scheme was NAFED. The detailed roles and responsibilities of CNA and States/UT governments are mentioned in scheme guidelines in **Annexure 1**.

Fourteen states/UTs came forward and placed their indent to avail the benefits of subsidized pulses. These states and UTs include Maharashtra, Tamil Nadu, Tripura, Himachal Pradesh, Karnataka, Andhra Pradesh, Gujarat, Kerala, Daman and Diu, Madhya Pradesh, Chhattisgarh, Nagaland, Uttar Pradesh, and Uttarakhand. This scheme was operational for one year.

Secretary, Ministry of Agriculture and Farmer's Welfare, in one of the Central Programme Advisory Committee (C-PAC) meeting of WFP on 31st December 2019, requested the WFP team to assess the scheme and its benefits accrued to beneficiaries. The documentation from the learning from this scheme is expected to be helpful in any future scale-up decisions of adding pulses to the food safety nets. This may even support in fulfilling the obligations of the central government under NFSA of diversifying the food basket over time as enshrined in the Act under article 12 (2)(f).

II. Assessment Objectives, Data and Methods

WFP, MoAFW and NAFED organized a round of discussions to map out the objective and scope of the assessment.

Objectives, outputs and outcomes

The key objectives of the assessment are:

1. To assess the benefits and satisfaction levels among the beneficiaries and other stakeholders with the inclusion of subsidized pulses in food safety nets.
2. To explore the sustainability aspects of the inclusion of Pulses into the TPDS in terms of meeting national policies on maintaining strategic reserves and ensuring food and nutrition security.

Objectives	Expected Outputs	Outcome
1. To assess the benefits and satisfaction levels among the beneficiaries and other stakeholders with the inclusion of subsidized pulses in food safety nets	Output 1: A report documenting the learnings from the beneficiary and other stakeholder's perspective on including subsidized pulses into the food safety nets.	Government has field-based evidence on beneficiary and other stakeholders' perception on inclusion of pulses in the PDS.
2. To explore the sustainability aspects of the inclusion of Pulses into the TPDS in terms of meeting national policies on maintaining strategic reserves and ensuring food and nutrition security.	Output 2: A consolidated analytical section in the report on sustainability of distribution of subsidized pulses through food safety nets Output 3: A set of recommendations for the potential scale-up of distribution of subsidized	Evidence and learnings inform policy decisions around scaling-up of subsidized pulses through Food Safety Nets in all States and Union Territories.

	pulses through food safety nets.	
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Key Areas of Enquiry

1. How was the scheme implemented against scheme guidelines in different states?
2. What is the level of satisfaction among beneficiaries with the quality, quantity, pricing, timely availability and overall service delivery of pulses through food safety nets?
3. What is the perception of beneficiaries on the dietary diversity and food and nutrition security levels in the households with the inclusion of subsidised pulses into their food basket?
4. What are the views and opinions of other key stakeholders such as FPS owners and government officials in terms of opportunities and challenges on addition of subsidized pulses in the food safety nets?
5. Whether the distribution of subsidized pulses to all the NFSA beneficiaries are sustainable in terms of its sustained availability, strategic reserves, and subsidy burden?

Methods and Approach

Secondary data and materials

- The study used mixed methods to assess the scheme.
- A desk review of existing literatures, government orders, minutes of the meetings, instructions to state nodal agency, indent form, utilization certificates and other such relevant documents were collated and key information about the scheme from them were compiled.
- The data and literatures on the pulses production, consumption, import etc. will be used to understand the sustainability of the scheme.

Primary Data and sampling

- A perception-based survey was carried out during September-October 2021 with beneficiaries from five states namely Himachal Pradesh, Gujarat, Madhya Pradesh, Tamil Nadu and Tripura using a representative sampling strategy to understand the satisfaction level with the receipt of subsidized pulses through the food safety nets. The detailed sampling strategy is presented in **Annexure 2**. The beneficiary perception survey tool is enclosed in **Annexure 3**.
- Key informant interviews were conducted with key stakeholders such as national and state government officials, NAFED officials, state nodal agency officials and

FPS owners to understand their views on opportunities and challenges of distribution of subsidized pulses through food safety nets. The tools of the KII are enclosed in **Annexure 4**.

Limitations and mitigations

The scheme was implemented for one year during September 2018-August 2019. However, the assessment was conducted in the last quarter of 2021 with a time-lag of nearly 2 years. It has a potential of recall lapse among the beneficiaries to recollect about the distribution of the pulses through food safety nets and its benefits accrued to them. Moreover, many states continued the distribution of pulses even after the closure of this scheme during the time of the field data collection. As a mitigation measure, investigators spent some time with the beneficiaries to explain to them about the 2018-19 Special Scheme on Pulses and the prices on which it was distributed so as to help them recall about the scheme. Despite repeated requests to the Government of Tamil Nadu, we could not get the scheme implementation details. The study relied on the beneficiary perception survey to explain the scheme implementation in Tamil Nadu.

III. Status of Implementation of the Scheme in sample states

With the help of the documents received from state governments and inputs received during discussion with their key officials, this section discusses out the status of implementation of scheme in sample states. Nearly 14 states have lifted pulses under this scheme in variable quantities, frequencies and in different time periods. The scheme was demand driven and was customised to prevailing consumption preferences of individual states. There were choices of lifting particular pulse(s) and distributing them in raw, milled or both forms in quantities as per the willingness of the state governments across TPDS, MDM and ICDS components of NFSA.

While the guidelines from the central government was shared with all states and UTs, the implementation of the scheme varied across states. Of the sampled states, Himachal Pradesh opted for four varieties of pulses to be distributed, whereas Tripura opted for distribution of only one type of pulse. In certain states, such as Himachal Pradesh and Madhya Pradesh, the PSS for pulses was a continuation of existing state-sponsored schemes, in which pulses were already being distributed through the Public Distribution System (PDS). However, in states such as Tripura, pulses were introduced for distribution through PDS for the first time. It was made possible due to the discounted rates offered by the Central government. This section discusses in detail various aspects of the scheme implementation, highlighting successful strategies as well as challenges faced.

Types and Quantity of Pulses

The types of pulses distributed in the five sample states is shown in the Table 3.1. Himachal Pradesh received four different types of pulses whereas Madhya Pradesh, Gujarat and Tamil Nadu received three types of pulses. Tripura received only Masoor dal. These receipts are based on the indents submitted by the respective states (**Table 3.1**).

Table 3.1: Types of pulses distributed by states

Sr. No.	State	Variety of Pulses				
		Gram	Masoor	Tur (Arhar)	Urad	Moong
1	Madhya Pradesh	√	√			√
2	Tripura		√			
3	Gujarat	√		√		√
4	Himachal Pradesh	√	√		√	√

5	Tamil Nadu	√		√		√
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The total allocation under the scheme was around 1,003,113 MT, of which around 997,733 MT was lifted by 14 states and UTs. As can be seen from the **Table 3.2** below, among the sample states, Madhya Pradesh lifted the highest quantity of pulses followed by Tamil Nadu and Gujarat. Tripura, despite being a small state, placed a large indent. Interestingly, it placed the indent for Masoor dal, which was not the preference of most of the other states. As a result, central government agreed to issue the Masoor dal to Tripura as per its indent. In discussion with Tripura officials, during the data collection, it was realized that the state wanted to maximise the benefit of this scheme for its people by placing the indent for two times of its requirement to distribute it to its people for more than an year. However, they were required to pay monthly storage charges to NAFED for using their warehouses for storing the additional pulses.

Table 3.2: Details of pulses lifted by states under the Special Scheme

Sr. No.	State	Total Quantity Lifted (in MT)					Total (in MT)
		Gram	Masoor	Tur (Arhar)	Urad	Moong	
1	Madhya Pradesh	243,177.87	8,444.74	n/a	n/a	n/a	251,622.61
2	Tripura	n/a	34,419.58	n/a	n/a	n/a	34,419.58
3	Gujarat	54,215.96	n/a	n/a	n/a	11,284.73	65,500.69
4	Himachal Pradesh	n/a	12,949	n/a	10,807	3102	26,858.00
5	Tamil Nadu	2,050.99	n/a	1,88,435.96	n/a	n/a	190,486.95

	Total Pulses lifting in 5 States	299,444.82	55,813.32	188,435.96	10,807	14,386.73	568,887.83
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Distribution of Pulses

As per the clause 7 (b) of the scheme guidelines, the states were given the autonomy to select an implementing agency with the responsibility of ensuring successful implementation of the scheme. Government of Tripura, however, chose to self-implement the programme. Though, it took the help of National Cooperative Consumers' Federation of India Limited (NCCF) to get the raw pulses milled and delivered to the state. Himachal Pradesh implemented the scheme with the help of NCCF. All other sample states implemented the scheme by their respective State Civil Supplies Corporation.

Section 7 (a) of the scheme guidelines specify that the pulses obtained from the Central scheme could be utilized for distribution in welfare schemes, such as Public Distribution System (PDS), Mid Day Meal Scheme (MDM now PM Poshan), Integrated Child Development Services Scheme (ICDS) etc. Tripura and Tamil Nadu distributed the pulses in all the three schemes. Gujarat utilized the pulses for PDS and MDM scheme whereas Himachal Pradesh and Madhya Pradesh distributed the pulses only in PDS. Some pulses were also found to be distributed for other than these three schemes. For instance, Madhya Pradesh and Tripura also distributed the pulses for residential school scheme and scheme for adolescent girls respectively (**Table 3.3**).

Table 3.3: Implementation details of pulses received under the Special Scheme

Sr. No	State	Distribution Period	Implementation Agency	Utilization			
				PDS	MDM	ICDS	Others
1	Madhya Pradesh	Jan 19 - Oct 19	MPCSC	√			√(Residential School Scheme)
2	Tripura	Oct 18 - Sept 19*	Self	√	√	√	√ (Scheme for Adolescent Girls)
3	Gujarat	Oct 18 - Dec 19**	GSCSCL	√	√		
4	Himachal Pradesh	Oct 18 - June 19 (Gram)	HPCSC	√			

5	Tamil Nadu	Feb 19 -	TNCSC	√	√	√	
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* Scheme being continued by state at own expense.

** Scheme continued in 2019-20 and 2020-21 for distributing raw Gram and Tur respectively, however, unclear if the distribution was done under PSS for pulses.

All sample states were of the view that including pulses in their supply chain and distributing it to the beneficiaries was not at all an issue for them. The state civil supplies department are already managing the other commodities like wheat, rice, iodised salt, fortified edible oil, and inclusion of one more commodity such as pulses was not a problem for the state government. In fact, many states such as Gujarat, Tamil Nadu, Himachal Pradesh and Tripura are continuing the distribution of the pulses even after the closure of the special scheme by their own resources.

States under study also did not mention any major issues of storage. However, they did mention that pulses take more space than rice and wheat and hence it reduces the godown capacity and increases the storage cost.

The delay in timely supply of the pulses was also cited as a challenge by Madhya Pradesh and Gujarat.

Cost-breakup for Stakeholders

The states received a central subsidy of Rs.15 per kg over the issue price of the pulses. This issue price of pulses was based on calculations as outlined in the guidelines in Section 4a & 4b. Any additional expenses related to processing, transportation etc. were to be borne by the state government. The cost at which the pulses were to be distributed to the beneficiaries were decided by the state governments and shared with the FPS owners through the district officials. A detailed cost-breakup table has been shared to depict the cost to state for purchase from NAFED, additional costs borne by the state for value addition, if any, and finally the cost to beneficiary (**Table 3.4**). In Tripura, where a large section of the population is dependent on the PDS, the success of the pulses distribution scheme was attributed primarily to its cost effectiveness. Masoor dal was distributed in the state at Rs. 40 per kg in the first year and at Rs. 45 per kg in the second year of implementation. During discussions, officials mentioned that the pulses received under the scheme were distributed on a no-profit, no-loss basis, at zero cost to the state ex-chequer. Similarly, in Madhya Pradesh, the state didn't incur any additional cost burden as all costs for the scheme were passed down to the beneficiaries. States like Gujarat and Madhya Pradesh mentioned that the subsidy component for the pulses should be in tune of fifty percent of the market price to make it more appealing and beneficial to the beneficiaries. Gujarat mentioned that because of the narrow gap between the market price and the subsidised pulses, many beneficiaries opted to go the market to buy the pulses. As a result, there wasn't a hundred percent lifting of pulses by beneficiaries in the state. However, states like Tripura and Himachal Pradesh expressed

satisfaction over the given subsidy and said that there is cent per cent lifting of the subsidized pulses from the beneficiaries.

Table 3.4: Stakeholder-wise cost breakup for implementation of scheme*

States	Issue price (NAFED) (in Rs./kg)	Cost to state (in Rs./kg)	Cost to beneficiary (in Rs./kg)
Gujarat	Tur: 32.45 (Nov 18) Chana: 38.05 (Nov 18); 42.72 (2019) Moong: 51.11 - 52.02 (Nov 18); 50.98 (Feb 19)	Tur: 38.08 Chana: 42.50 Moong: N/A	Tur: 37 Chana: 42 Moong: N/A
Tripura	Masoor: 33.76 (Nov 18)	Masoor: 50.84 (est.)	Masoor: 45 (from Nov 19)
Madhya Pradesh	Chana: 38.63 (Feb 19) Masoor: 37.98 (Feb 19) Moong: 51.32 (Dec 18)	N/A	Chana: 27 Masoor: 24 Moong: N/A
Himachal Pradesh	Chana: 38.59 (Nov 18); 38.25 (Feb 19) Masoor: 35.41 (Nov 18) Moong: 52.02 (Nov 18); 50.98 (Feb 19) Urad: 35.60 – 47.56 (Nov 18)	N/A	Chana: 35 Masoor: 30-35 Moong: 40 Urad: N/A
Tamil Nadu	Tur: 34.77-36.80 (Nov 18); 47.40 (Feb 19) Chana: 49.31 (Feb 19) Moong: 49.74 (Feb 19)	N/A	Tur: 30 Chana: N/A Moong: N/A

* The issue price refers to the cost before the discount of the Rs. 15/kg subsidy under the scheme. The actual cost applicable to the states was after discounting the Rs.15/kg from the issue price. Other costs to the state included transportation, processing, storage etc. related charges.

**Figures in red are based on qualitative data/other sources and may not be completely accurate due to recall/other errors.

Raw versus Milled Pulses

As per the section 7 (a), the pulses which were distributed by central government were raw. It was the obligation of the states/UT government to get them transported, processed, or upgraded to FSSAI standards, as per their requirement. A detailed analysis of state-specific implementation of these segments of the value chain is presented in **Table 3.5**. There were differences between states in the way the pulses were distributed. While in Himachal Pradesh, the pulses distributed were raw in certain places and processed in other areas, in case of Madhya Pradesh only raw pulses, as received from NAFED, were distributed to the beneficiaries. Tripura, despite lack of milling facilities in the state, distributed milled pulses. The state directed pulses allocated from NAFED to be directly sent to milling facilities in Madhya Pradesh or Uttar Pradesh and got them transported from therethrough NCCF. It must be noted that pulses like Gram, Moong, Urad as well Masoor can be distributed in raw form whereas Tur requires processing. The distribution of pulses in raw form is economical compared to its processed/milled form, which explains the approach adopted by states such as Madhya Pradesh.

Table 3.5 Analysis of state governments' responsibilities and implementation

Sr. No	State	State govt. responsibilities			
		Transport	Processing/ Upgrade	Expenses borne	Distribution Details
1	Madhya Pradesh	All pulses pivoted from NAFED warehouses within state.	Pulses distributed as received; no further expenses borne by state on quality improvement.	Costs for all processes, such as transportation etc., passed down to beneficiaries.	For TPDS, 1 kg/beneficiary, max 4 kg/HH. 50% gram, 30% masoor and 20% moong. Est. 11,728,107 TPDS beneficiaries and 260,000 students in residential schools reached.
2	Tripura	NCCF coordinated milling and transport activities in state; pulses transported in 30 kg SDPE bags.	Milling done in MP (30-35 locations) or UP (Kanpur) and then milled pulses were transported to state.	<ul style="list-style-type: none"> - Distribution on a no-profit, no-loss basis. No extra cost of state exchequer. - Implementation continuing currently at a cost of Rs. 18 crore/annum to state. - Paid warehousing charges to NAFED due to large order quantity which was lifted on monthly basis. 	Indent placed by state for 2 years (double the current requirement) and then state would lift pulses monthly.

3	Gujarat	Data unavailable	6672 MT milled tur dal received (OTR 68%); 6671.91 MT chana (OTR 80%) (not total amount; figures as per minutes of a meeting from 2018-19).	Rs. 38.08/ kg (Tur); Rs. 42.5/kg (Chana)	Pulses to be distributed 1 kg/card
4	Himachal Pradesh	Data unavailable	Difference in quality of pulses distributed across different regions; some FPS owners received milled pulses in packets whereas others received raw pulses.	Data unavailable	1 kg dal of each type; if FPS owner had three types of pulses, each cardholder would get 3 kg pulses.
5	Tamil Nadu ⁴	Data unavailable	Data unavailable	Data unavailable	Data unavailable

Quality of the Pulses

Except Gujarat, all other states expressed satisfaction over quality of pulses received from the scheme. Tripura was very appreciative of the pulses received from the scheme. On

⁴Despite repeated requests, we could not fetch the relevant information from Tamil Nadu.

the other extreme, Gujarat complained of the poor and infected quality of pulses received in this scheme.

Demand for the Continuity of the Scheme

During discussion with the state officials from all five sample states, there was an unequivocal demand for the continuity of the scheme. In fact, economically better-off states such as Gujarat, Tamil Nadu and Himachal Pradesh were continuing the subsidized pulses distribution in their states in PDS with their own resources even after the cessation of the special scheme. However, relatively poorer states such as Tripura and Madhya Pradesh were dependent on the union government support to continue the pulses distribution in their states and, hence, were demanding for the continuation of such a scheme. Tripura officials even mentioned that their Minister had written a request letter to the Union Government to continue the scheme which was not accepted.

IV. Findings and Discussion from Beneficiary Perception Survey

A detailed survey was conducted with 1680 sample beneficiaries from five sample states to understand their perception about the scheme. It is to be reiterated that the survey was conducted two years after the closure of the scheme. Moreover, in states such as Gujarat, Tamil Nadu and Himachal Pradesh, the state government continued the pulses distribution even after the cessation of the special scheme. It led to both recall lapse as well as a bit of confusion among the beneficiaries to report precisely about the perception on the special scheme on pulses. Research team took special measures to probe in detail only about the special scheme on pulses. But, despite that a great deal of variations were observed between the perception of the beneficiaries and official data and information. The findings from the beneficiary perception survey (BPS) have been presented in the section below.

Background characteristics of sample population

The demographic and socioeconomic profile of the sample households from five sample states are presented in **Figures 4.1-4.6**. Of the total 1,680 sample households, 57 percent are from general and OBC categories, 20 percent from Scheduled Castes category and 23 percent from Scheduled Tribes. 77 percent of the total sample households own Priority Household (PHH) card, 12 percent own Antyodaya Anna Yojana (AAY) card and other 10 percent own other ration card. Fifty-two percent households owned a Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) card. Sixty-one percent of the respondents were head of the household and 32 percent of the respondents were women. The average household size of the sample households was 5.

Figure 4.1 Households by Social Groups (%)

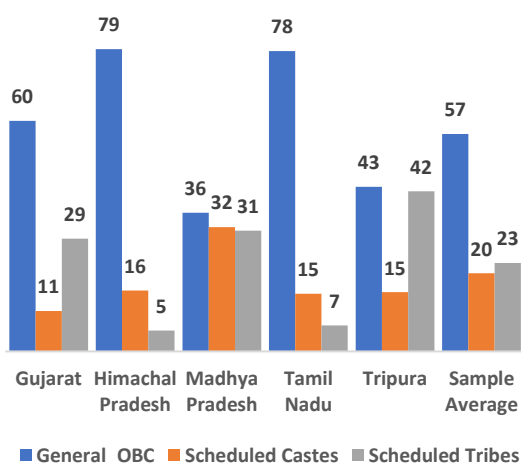


Figure 4.2 Households by Type of Ration Cards

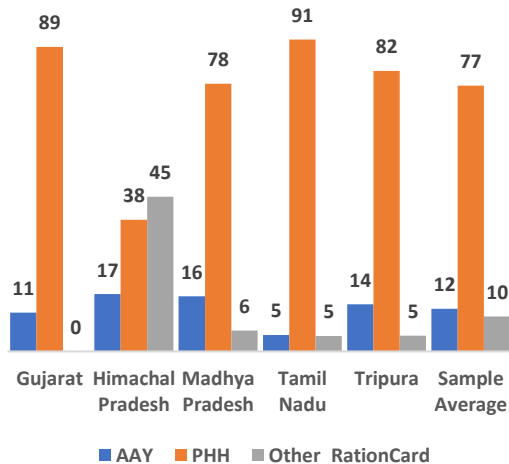


Figure 4.3 Household and Respondent Characteristics and Household Size

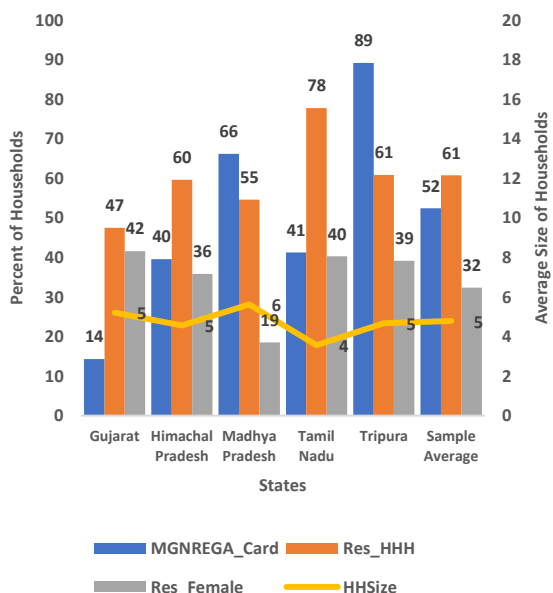
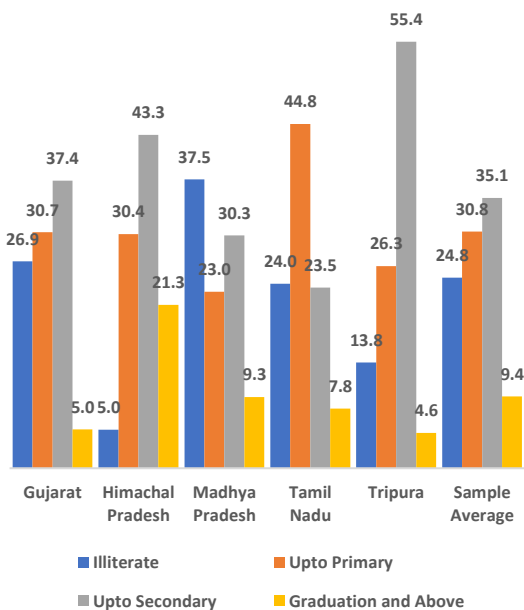


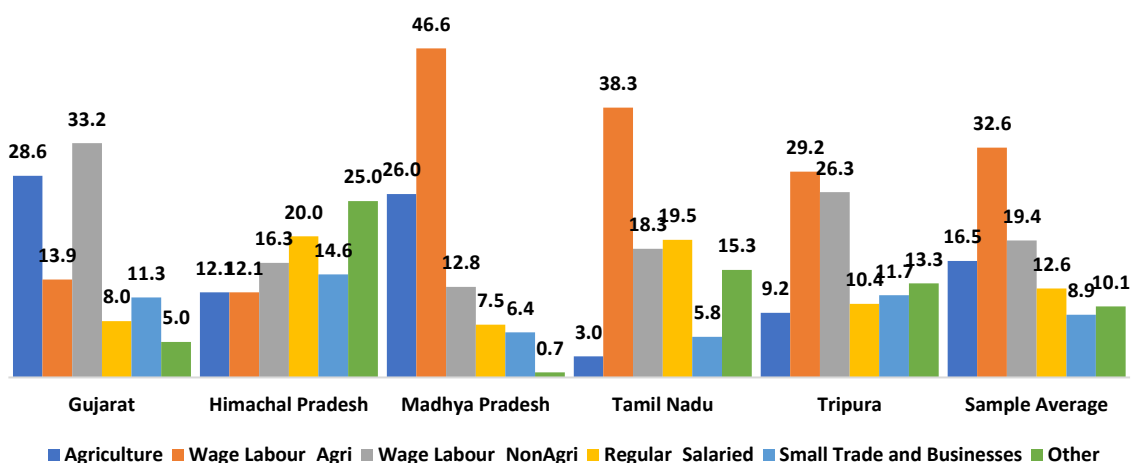
Figure 4.4 Respondents by Education Levels (%)



One-fourth of the respondents were illiterate. Two-third of them were educated up to secondary level and less than ten per cent were graduate and above.

Among the sample households from five states, 32.6 per cent of the respondents were agriculture labourer and another 16.5 per cent were engaged into agriculture activities. One-fifth of the respondents were casual wage labourer in non-agriculture sector whereas 12.6 per cent of the respondents were regular wage labourer. Nine percent of the respondents were engaged in the small trade and business.

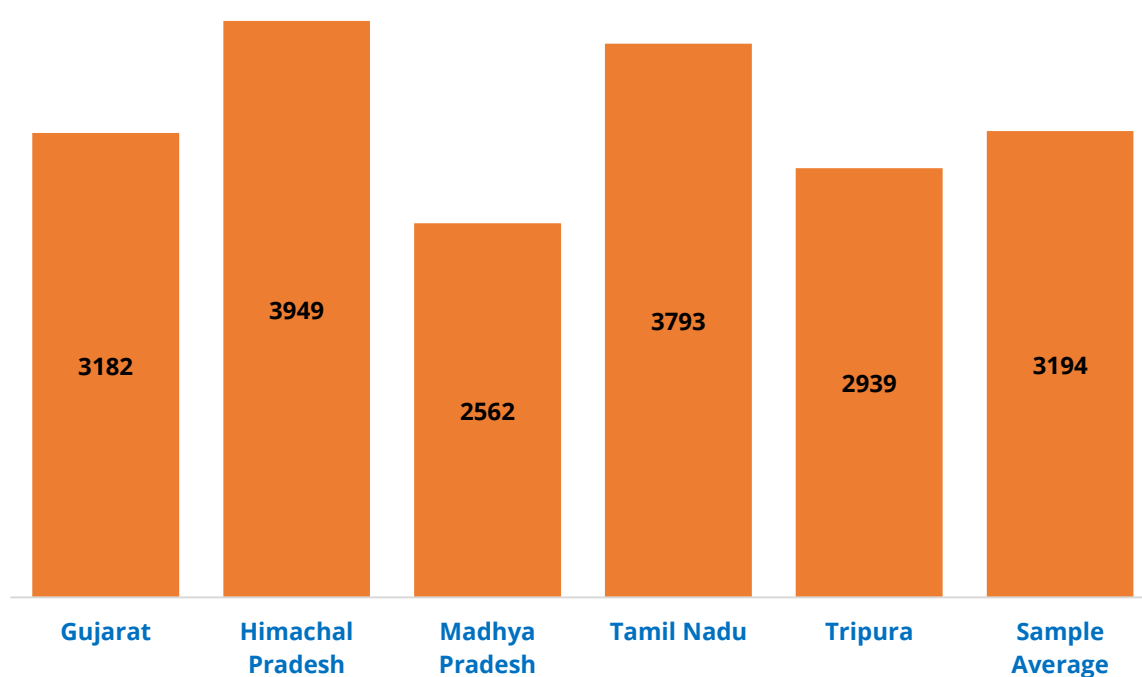
Figure 4.5 Major Sources of Income (%)



Monthly Per-Capita Consumption Expenditure (MPCE)

Monthly Per-Capita Consumption Expenditure (MPCE) shows the relative economic well-being of the population. Higher the MPCE, better is the economic condition of the households and vice-versa. Among the sampled households across the five states, Himachal Pradesh had the highest MPCE of Rs. 3949, followed by Tamil Nadu at Rs 3793, Gujarat at Rs. 3182 and Tripura at Rs. 2939. The lowest MPCE was recorded in Madhya Pradesh at Rs. 2562.

Figure 4.6: Monthly Per Capita Consumption Expenditure across Five States (Rs.)



Source: WFP Pulses Study, 2021

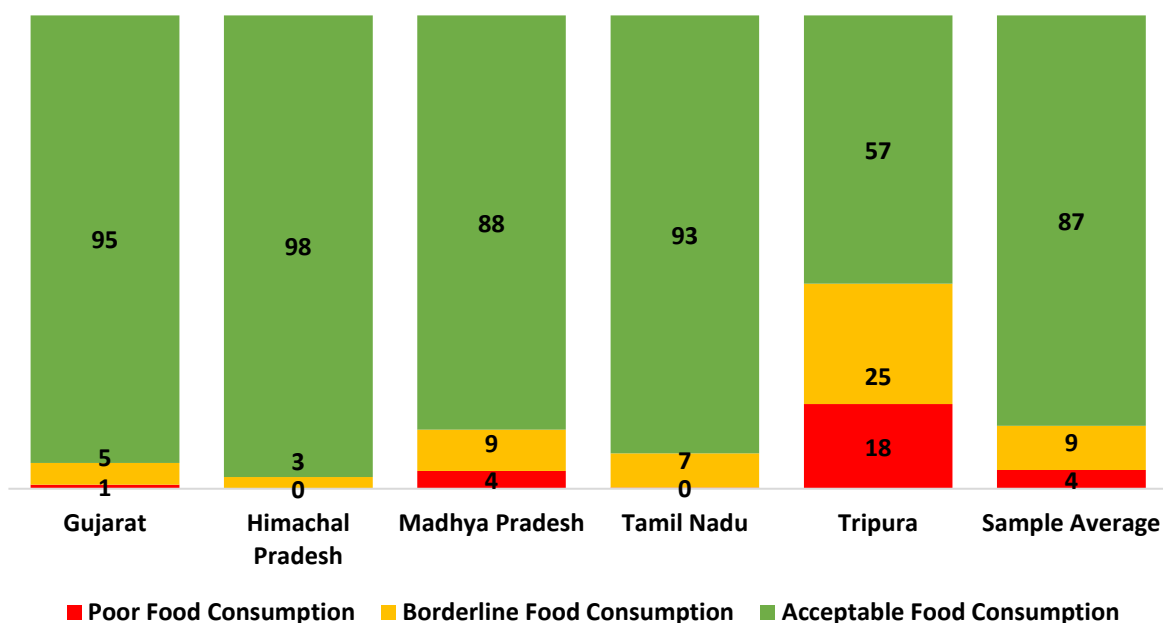
Food Consumption Score (FCS) and Food Consumption Score Nutrition (FCS-N)

In this section, an attempt has been made to understand the food and nutrition security status of the sample households. The analysis has been done using WFP indicators and tools which focus on status of food insecurity at the household level by combining dietary diversity, food frequency and relative nutritional importance of food groups. The indicators used are **'food consumption score'** (FCS) and **'food consumption score nutrition quality analysis'** (FCS-N).⁵

⁵The elaborate methodology of calculating FCS and FCS-N, with all its periodic updates, can be accessed from the WFP website (<https://resources.vam.wfp.org>)

The FCS has been calculated by following the standard methodology. The threshold values for classification of households are 0-28 for Poor food consumption status, 28-42 for Borderline and greater than 42 for Acceptable food consumption status. **Figure 4.7** shows the distribution of households across three categories of food consumption score. Except Tripura (18%), the other four states have negligible proportions of households in poor food security category, the sample average being 4%. Another 9% households were in borderline food consumption category, in which Tripura, again, had a higher proportion of households (25%). 87% of the sampled households across states had acceptable food consumption score, with three states (Gujarat, Himachal Pradesh and Tamil Nadu) having more than 90% of households in this category. This shows that the food consumption is better in the sample households.

Figure 4.7 Proportion of Households in different categories of FCS (%HH)

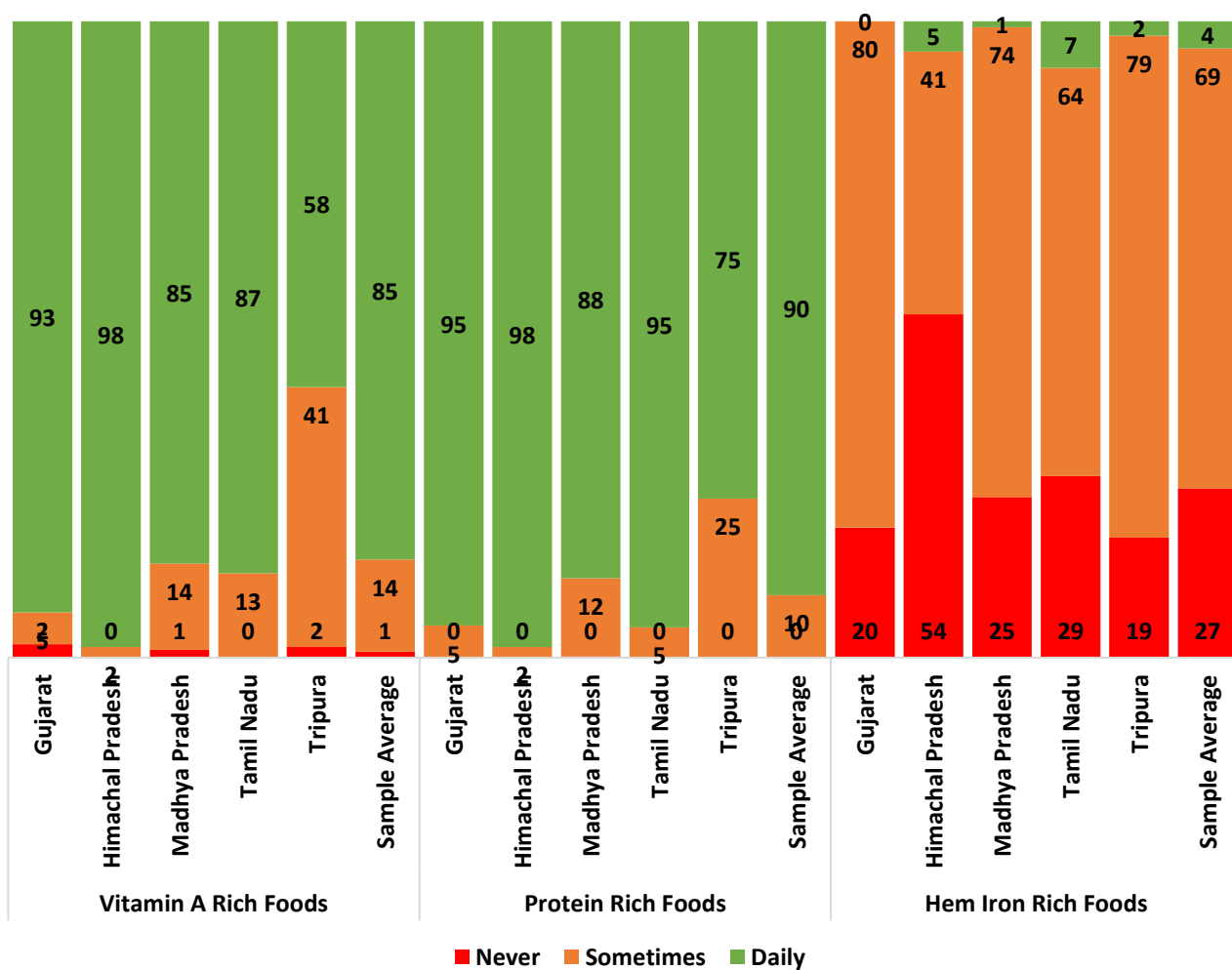


Source: WFP Pulses Study, 2021

FCS however does not provide any information on nutrition consumption. To overcome this limitation, another indicator FCS-N was used. A standard tool to capture FCS-N was deployed to capture the nutritional intake of the sample households. The households are classified into three categories (0 for Never, 1-6 for Sometimes and 7 for Daily) based on frequency of consumption of a food item in relevant food groups. **Figure 4.8** shows the

distribution of households across three food groups (Vitamin A rich food group, Protein rich food group, Hem-iron rich food group) across five states.

Figure 4.8 Proportion of Households in different categories of FCS-N



Source: WFP Pulses Study, 2021

As can be seen from the **Figure 4.8**, a very high proportion of the sample households reported consuming the Vitamin A and protein rich foods. There are, however, state level variations. For instance, among the five sample states, a considerable proportion of

6Iron from food comes in two forms: hem and non-hem. Hem is found only in animal flesh like meat, poultry, and seafood. Non-hem iron is found in plant foods like whole grains, nuts, seeds, legumes, and leafy greens. Non-hem iron is also found in animal flesh (as animals consume plant foods with non-hem iron) and fortified foods. Hem iron is better absorbed by the body than non-hem iron. (Source: <https://www.hsph.harvard.edu/nutritionsource/iron/>)

households in Tripura reported consuming lesser Vitamin A and protein rich foods in comparison to the other four states.

Proportion of sample households consuming Hem Iron rich food items, however, shows a big concern. Households of all the five sample states have shown a very miniscule consumption of hem Iron rich foods. Here, it must be noted that the nutritional status of beneficiary households might have been impacted by their preference for vegetarian diet, as food items rich in Hem iron in the tool are usually non-vegetarian. The consumption status of Hem iron rich food items has thus been analysed for the households consuming either non-vegetarian diet or vegetarian diet with egg. Nearly 47 per cent of the sample households were vegetarian and 40 percent were non-vegetarian. Another 12 percent were vegetarian with eggs consumption.

Consumption Preference of Pulses

Having a large vegetarian population, pulses consumption in India is ubiquitous. It is consumed in different forms in different states. For the domestic consumption, Toor (pigeon pea) and Masoor (red lentils) dal were the first and the second preferences respectively in total sample. In terms of the highest proportion of households reporting consumption of a particular pulse, Toor or Arhar (pigeon pea) was the first preference among households in Gujarat and Madhya Pradesh, while Masoor (red lentils) was the first preference in Tamil Nadu and Tripura (**Table 4.1**). Chana (gram) was the first preference among households in Himachal Pradesh.

Table 4.1: Consumption Preference of Pulses by Households across sampled states

States	Consumption Preference of Pulses		Consumption Type of Pulses	
	First Preference	Second Preference	First Preference	Second Preference
Gujarat	Toor (84.0)	Moong (65.5)	Dal_Sambhar (94.1)	Idli ⁷ _Dosa (58.8)
Himachal Pradesh	Chana (70.0)	Urad (59.6)	Dal_Sambhar (97.5)	Snacks (30.8)

⁷ Idli = a type of savoury rice cake; Dosa = a type of crisp savoury pancake

Madhya Pradesh	Toor (86.8)	Chana (27.0)	Dal_Sambhar (82.4)	Vegetable_curry (26.2)
Tamil Nadu	Masoor (53.0)	Urad (40.3)	Dal_Sambhar (90)	Idli_Dosa (44.8)
Tripura	Masoor (97.9)	Moong (29.6)	Dal_Sambhar (100)	Snacks (12.9)
Sample Average	Toor (47.7)	Masoor (36.1)	Dal_Sambhar (90.5)	Idli_Dosa (26.4)

Source: WFP Pulses Study, 2021

Note: Figures in the parenthesis show percentage of households reporting consumption of a particular pulse.

Echoing the regional variations of pulse consumption preference was the diversity in consumption types or the forms of consumption of pulses across the sampled states. For majority of the households, the dominant mode of pulse consumption was either in the form of *dal* (cooked lentils) or in the form of *sambhar* (lentil-based vegetable stew) (**Table 4.1**). It is worth noting that the individual categories (such as snacks, vegetable curry, etc.) are quite diverse within themselves and account for varied regional consumption preferences. For instance, dal is majorly consumed in the northern part while sambhar is majorly consumed in the southern part of India.

Beneficiary awareness of the Special Scheme on Pulses

With respect to the information dissemination or the mode of the beneficiary awareness the two most important channels for majority of the households across the five states were FPS owners and friends and relatives. It shows the predominance of word-of-mouth mode of information dissemination about the special scheme on pulses. However, in Tripura (40.8%), Tamil Nadu (14.5%) and Himachal Pradesh (10.0%), a sizeable proportion of the households also acknowledged receiving information from the television. The importance of other modes of information dissemination like district and block officials, frontline functionaries, radio, social media and others were negligible.

Table 4.2: Source of Information about the Subsidized Pulses Distribution Scheme

State	FPS Owner	Friends and Relatives	District/Block Officials	Frontline Functionaries	TV	Radio	Social Media	Others
Gujarat	91.6	29.8	0.8	0.0	0.8	0.4	0.0	0.4

Himachal Pradesh	86.3	50.0	0.4	2.1	10.0	0.0	6.7	0.0
Madhya Pradesh	95.7	27.4	0.4	0.2	2.3	0.0	0.4	0.2
Tamil Nadu	78.0	54.2	1.5	1.5	14.5	1.8	0.3	0.0
Tripura	89.6	33.3	3.8	0.8	40.8	0.0	1.7	0.0
Sample Average	88.7	38.2	1.2	0.8	11.6	0.5	1.4	0.1

Source: WFP Pulses Study, 2021

Note: All figures in percentage. Since multiple choices were allowed for responses, total may be more than 100 per cent.

Beneficiary Perception about the key attributes of the scheme

The analysis of perception of beneficiaries regarding key attributes of the scheme provide first-hand account of the implementation status of the scheme. While the respondents in Himachal Pradesh reported receiving pulses for 12 months, their counterparts in Gujarat, Madhya Pradesh and Tripura reported to have received pulses only from 2, 3 and 5 months respectively (**Table 4.3**). On an average, the beneficiaries received pulses for six months.

Table 4.3: Households reporting number of months, types and quantities of pulses received under the Special Scheme

State	Pulse Received (Months)	Types of Pulses Received		Quantities of Pulses Received [#]		
		1 st	2 nd	1 kg	>1 kg	NA
Gujarat	2	Chana (53)	Arhar (47)	86	0	14
Himachal Pradesh	12	Chana (67)	Masoor (20)	91	9	0
Madhya Pradesh	3	Chana (91)	Arhar (7)	69	11	20
Tamil Nadu	9	Masoor (64)	Arhar (15)	100	0	0
Tripura	5	Masoor (99)	Chana (1)	93	7	0
Sample Average	6	Chana (50)	Masoor (33)	85	6	9

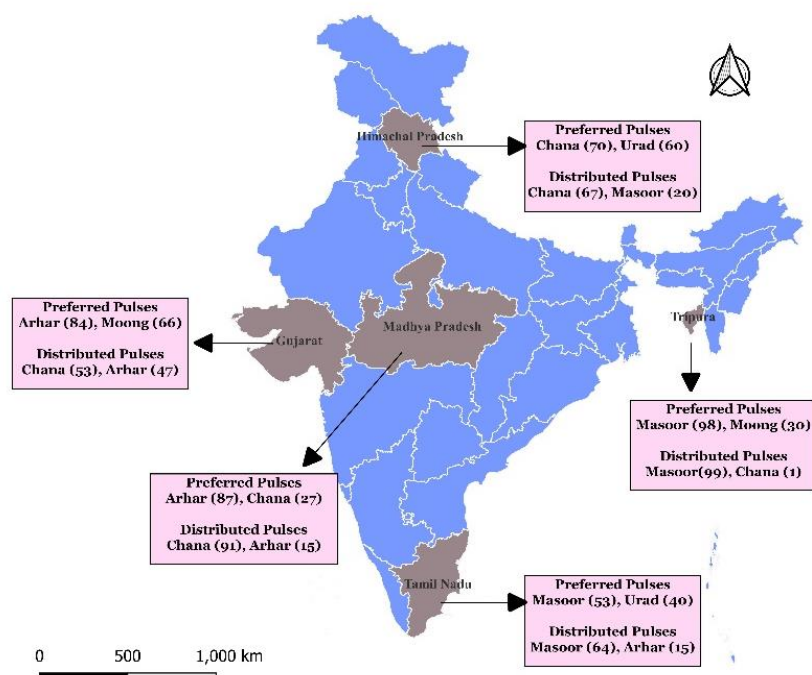
Source: WFP Pulses Study, 2021

Note: Figures in the parenthesis show percentage of households
[#] Proportion of households reporting receipt of pulses in kg.

With respect to the **quantities of pulses** received (**Table 4.3**), majority of the households (91%) reported to have received either 1 kg (85%) or more than 1 kg (6%) of pulses under the scheme whereas 9% of the households failed to recall the amount received. There was no household reporting receipt of less than 1 kg of pulses under the scheme. In Tamil Nadu (100%), Tripura (93%) and Himachal Pradesh (91%), more than 90% of the households reported receiving 1 kg of pulses under the scheme. In Gujarat (14%) and Madhya Pradesh (20%), households reported recall issues with respect to the quantity of pulses received.

The beneficiary households gave a mixed picture with respect to the forms of pulses (milled, raw or both) received under the NFSA (**Table 4.3**). In the total sample, 44% of the households received pulses either in raw form or both, while only 4% of the households reported receiving milled pulses.

Map 4.1: Pulses Preference for Household Consumption and Type of Pulses Distributed under the Scheme



With respect to distribution of type of pulses across states, majority of households reported receiving either Chana (Gujarat, Himachal Pradesh and Madhya Pradesh) or Masoor (Tamil Nadu and Tripura). It must be noted that households in these five states have also received other types of pulses like Tur (Arhar), Urad and Moong. A comparison

between preferred pulses for consumption among households and the distribution of pulses under the scheme reveals a high degree of overlap between the two (**Map 4.1**).

Table 4.4: Forms of Pulses Received, Amount Paid (Rs), Market Price, and Perception of the Beneficiaries about Savings from the Subsidized Pulse Distribution Programme.

State	Forms of Pulses Received (%)			Subsidized Pulse Distribution Scheme		
	Milled	Raw	Both	Payment (Rs.)	Market Price (Rs.)	HHs* Savings Perception (%)
Gujarat	2	77	7	41	95	95
Himachal Pradesh	0	0	100	34	74	85
Madhya Pradesh	10	12	58	27	63	91
Tamil Nadu	0	76	25	30	77	69
Tripura	1	74	25	42	107	76
Sample Average	4	44	44	33	80	83

Source: WFP Pulses Study, 2021

*Proportion of Households (HHs) perceiving savings from the pulse distribution scheme

The **Table 4.4** shows the payments made towards the pulses received under the NFSA, their market prices and proportion of households perceiving financial savings from the receipt of pulses. Although the distribution price of pulses varied across states, on an average, the households paid Rs. 33 for 1 kilogram of any type of pulses received under the scheme and opined the market price averaged at Rs. 80. The highest amount paid for the pulses under the scheme was in Tripura (Rs. 42), while the lowest was in Madhya Pradesh (Rs. 27). It must be noted that different pulses were distributed in different states and accordingly prices varied. Interestingly, the households in Tripura and Madhya Pradesh provided the highest (Rs. 107) and the lowest (Rs. 74) figures for the market prices of the pulses respectively. Here, the distinction in the type of pulses distributed in these two states may also have partly influenced the households' perception about the market prices, recalling that the major pulses distributed were Masoor in Tripura and Chana in Madhya Pradesh (**Map 4.1**).

What is worth noting is the fact that more than four-fifth of the sample households perceived that the pulse distribution scheme led to savings for their household (**Table 4.4**). The proportion of such households was the highest in Gujarat (95%) and the lowest in Tamil Nadu (69%).

Beneficiary satisfaction with Pulse Distribution Scheme

The beneficiary perception with respect to five key attributes of the pulse distribution scheme – types, quantity, prices, quality and timeliness - has been captured in the survey. The responses were sought on the Likert scale from 1 to 5 (1-Very Dissatisfied, 2–Somewhat Dissatisfied, 3–Indifferent, 4–Somewhat Satisfied and 5–Very Satisfied). However, due to insignificant variations between scale 1 and 2 i.e. very dissatisfied and somewhat dissatisfied, they have been merged for ease of understanding. The responses have been summarised in the **Table 4.5**.

Table 4.5: Proportion of Households by their perception about the Types and Quantity of Pulses distributed under the scheme

State	Types of Pulses (%)				Quantity of Pulses (%)			
	Very Satisfied	Somewhat Satisfied	Indifferent	Dissatisfied	Very Satisfied	Somewhat Satisfied	Indifferent	Dissatisfied
Gujarat	76.5	23.1	0.4	0.0	37.0	50.8	5.5	6.7
Himachal Pradesh	82.1	11.3	5.4	1.3	57.1	25.8	12.5	4.6
Madhya Pradesh	68.3	29.4	0.2	2.1	48.8	37.9	3.7	9.6
Tamil Nadu	49.3	40.0	7.3	3.5	61.8	31.8	3.8	2.8
Tripura	17.9	66.3	5.0	10.8	16.7	57.5	6.7	19.2
Sample Average	59.7	33.7	3.3	3.3	46.8	39.4	5.7	8.2

Source: WFP Pulses Study, 2021

For the types of pulses distributed under the scheme, only 3.3% of the households expressed dissatisfaction or indifference (3.3%); pointing to a high level of satisfaction amongst the beneficiaries. Across states, the levels of satisfaction were highest in Himachal Pradesh (82.1%) whereas Tripura (10.8%) reported the lowest levels of satisfaction.

The beneficiary perception with the **quantity of pulses** received (usually 1 kg as reported in the **Table 4.3**) had relatively higher variations (**Table 4.5**). While 8.2% of the households expressed dissatisfaction, another 5.7% were indifferent. Across states, 19.2% households in Tripura were dissatisfied, while only 2.8% of the households were dissatisfied in Tamil Nadu. 12.5% of the households were indifferent in Himachal Pradesh. Tamil Nadu has the highest proportion of households showing high satisfaction at 61.8%. Interestingly, the satisfaction level with the types of pulses was high in Himachal Pradesh, while the satisfaction with the quantity of pulses distributed was low. The underlying policy implication is that the people want more pulses, if the types of pulses being distributed match local consumption preferences. In Tripura, the satisfaction levels

were relative, low for both the type as well as quantity of pulses distributed under the scheme.

Moreover, 7.1% of the households were dissatisfied with the prices of the pulses, with another 4.9% showing indifference (**Table 4.6**). The proportion of households showing dissatisfaction was the highest in Tripura at 22.1% and the lowest in Tamil Nadu (0.8%). In Himachal Pradesh and Madhya Pradesh, more than 60% of households were highly satisfied with prices of pulses. The beneficiaries appear to appreciate the distribution of pulses even at a higher price, although the effective price remain below prevailing market price, as reported in the **Table 4.4** where more than 88% of the households perceived savings from the scheme.

Table 4.6: Proportion of Households by their perception about the Prices and Quality of Pulses distributed under the scheme

State	Prices of Pulses				Quality of Pulses			
	Very Satisfied	Somewhat Satisfied	Indifferent	Dissatisfied	Very Satisfied	Somewhat Satisfied	Indifferent	Dissatisfied
Gujarat	44.1	45.0	6.3	4.6	74.4	21.4	3.8	0.4
Himachal Pradesh	63.8	19.6	11.3	5.4	74.6	18.8	3.3	3.3
Madhya Pradesh	62.3	29.5	1.3	6.9	74.7	22.6	0.9	1.8
Tamil Nadu	58.3	34.0	7.0	0.8	66.5	28.8	3.0	1.8
Tripura	37.9	37.9	2.1	22.1	27.5	56.7	2.1	13.8
Sample Average	55.5	32.6	4.9	7.1	66.0	28.2	2.3	3.5

Source: WFP Pulses Study, 2021

On being asked about their satisfaction with the **quality of pulses**, 3.5% of the households were dissatisfied (**Table 4.6**). Madhya Pradesh, Himachal Pradesh and Gujarat had more than 70% of the households highly satisfied with the quality of pulses. Tripura had the highest proportion of households dissatisfied with the quality of pulses at 13.8%. Only 2.3% of the households showed indifference to the quality of pulses.

On being asked about the **timeliness of distribution** of pulses, Gujarat and Madhya Pradesh had more 70% of the households highly satisfied. Overall, only 4.7% of the households were dissatisfied (**Table 4.7**), a majority of which came from Tripura (20%). 16.7% of the households reported indifference to timeliness of the pulses distribution.

Table 4.7: Proportion of Households by their perception about the Timeliness of Pulses distributed under the scheme

State	Timeliness of Pulse Distribution			
	Very Satisfied	Somewhat Satisfied	Indifferent	Dissatisfied
Gujarat	72.3	21.0	6.3	0.4

Himachal Pradesh	65.0	17.9	8.3	8.8
Madhya Pradesh	70.3	28.7	0.2	0.9
Tamil Nadu	56.5	38.3	4.3	1.0
Tripura	9.2	54.2	16.7	20.0
Sample Average	57.8	32.0	5.5	4.7

Source: WFP Pulses Study, 2021

Thus, the analysis of the perception of the beneficiaries about the key aspects of the pulses distribution scheme, reveals that Tripura had a relatively higher proportion of households dissatisfied with all the five attributes. This is in contrast to the feedback received from the FPS owners, state officials as well as field observations – all of which point to a high level of satisfaction amongst beneficiaries in Tripura. In other four states, relatively a higher proportion of the households were either satisfied or very satisfied with all the five attributes of interest. The pulse scheme distribution has been well received and appreciated by the beneficiary households.

Beneficiaries Suggestions on the Scheme

The BPS tool also tried to capture the suggestions from the respondents to improve the special scheme on pulses. Majority of the respondents suggested to increase the quantity (59.2%), to reduce the prices (39.6%) and to improve the quality (21%) of the pulses (**Table 4.8**). There are state level variations in the suggestions towards improvement in the pulses distribution scheme. Interestingly, the first and second suggestions of a majority of the sample households in all five sampled states were to increase the amount and reduce the prices respectively. But the second suggestions in Tamil Nadu was to increase the variety of the pulses.

The third suggestion had more variations. It was to improve the quality of pulses in Madhya Pradesh, Tamil Nadu and Tripura, to change the variety of pulses in Himachal Pradesh and to provide two or more pulses in Gujarat.

Table 4.8: Suggestions of the Respondents towards Improving the Pulses Scheme

State	First Suggestion	Second Suggestion	Third Suggestion
Gujarat	Increase Amount (77.3)	Reduce Prices (58.0)	Provide Two or More Pulses (45.0)
Himachal Pradesh	Increase Amount (82.9)	Reduce Prices (54.6)	Change the variety (45.0)

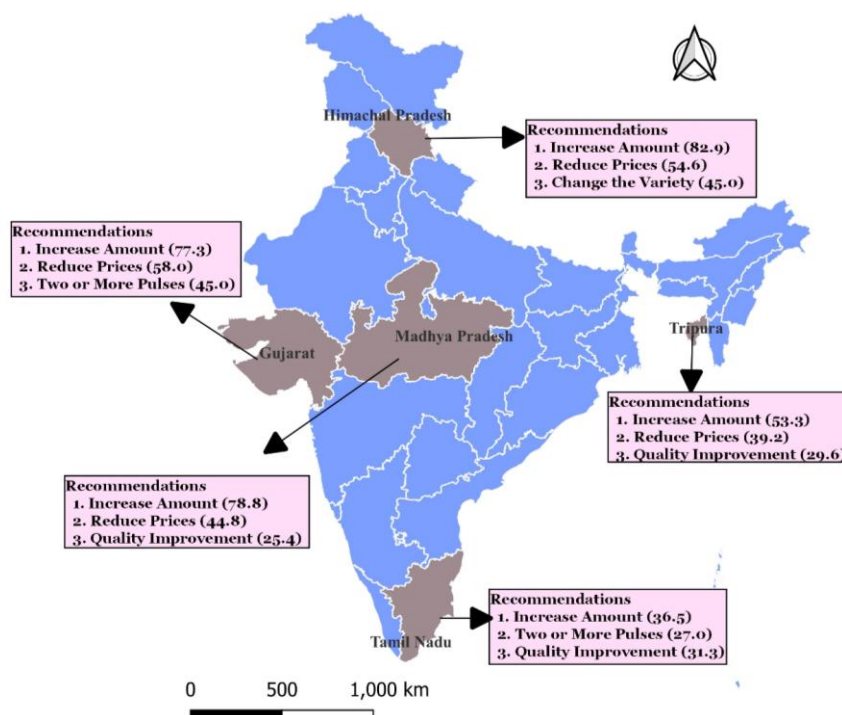
Madhya Pradesh	Increase Amount (78.8)	Reduce Prices (44.8)	Quality Improvement (25.4)
Tamil Nadu	Reduce Price (36.5)	Provide Two or More Pulses (27.0)	Quality Improvement (31.3)
Tripura	Increase Amount (53.3)	Reduce Prices (39.2)	Quality Improvement (29.6)
Sample Average	Increase Amount (59.2)	Reduce Prices (39.6)	Quality Improvement (21.0)

Source: WFP-DFPD Pulses Study 2020-21

Note: Figures in the parenthesis represent proportion of households.

It can be noted that the first suggestions on increasing the amount was endorsed by a higher proportion of the households across states. The proportion of households suggesting for an increase in the amount varied from 82.9% in Himachal Pradesh to 36.5% in Tamil Nadu. The proportion of households endorsing second and third suggestions has come down, highlighting diverse and localised issues gaining traction in the second and third suggestions. Top three suggestions are also presented in the **Map 4.2**, to further display the regional variations.

Map 4.2 Top Three suggestions from Beneficiaries for Improving the Pulses Scheme



On being asked about the willingness to pay to access pulses from the public programme, 60.9% sampled households suggested that they can pay up to Rs. 5 per kilogram and another 13.6% said to pay up to Rs. 10 per kilogram. (Table 4.9) About 12.3% of the total sampled households expressed their inability to pay anything at all. The proportion of such households of not being able to pay varied widely across states from 0.7% in Madhya Pradesh to 38.8% in Himachal Pradesh. Another 13.2% of the sampled households were willing to pay Rs. 15 and more for one kilogram of pulses. Proportion of such households varied from 0.3% in Tamil Nadu to 19.6% in Himachal Pradesh.

Table 4.9: Perception about the continuity of the scheme and willingness to pay

State	Continuation of the Scheme	Willingness to Pay			
		No	Yes(Rs per kg)		
			upto 5	upto 10	upto 15 & Higher
Gujarat	100	23.5	71.0	2.5	2.9
Himachal Pradesh	100	38.8	33.3	8.3	19.6
Madhya Pradesh	100	0.7	54.1	26.3	18.9
Tamil Nadu	100	9.0	86.3	4.5	0.3
Tripura	100	7.5	52.1	15.4	25.0
Sample Average	100	12.3	60.9	13.6	13.2

Source: WFP-DFFD Pulses Study 2020-21

It suggests that in case of future continuation of the pulse distribution scheme, a majority of households are willing to pay, albeit with varying degrees of paying commitments.

V. Findings and Discussion from the KIIs from Stakeholders

Another level of triangulation of the information on the implementation of the special scheme on pulses was done with the help of qualitative data collected through KIIs with the FPS owners and other key stakeholders. A total of **82 Key Informant Interviews (KIIs)** were conducted with 78 Fair Price Shop (FPS) owners and 4 district-level officials across five sample states. This was further triangulated with observations from field visits; documents received from the respective state governments⁸ as well as discussions with various stakeholders such as state government officials, NAFED officials, FPS owners and beneficiaries. **Table 5.1** gives details of the KIIs conducted across various states.

Table 5.1 Details of Key Informant Interviews conducted across states

Sr. No.	State	No. of KIIs conducted
1.	Madhya Pradesh	28 FPS owners; 3 district officials
2.	Tripura	12 FPS owners
3.	Gujarat	12 FPS owners; 1 district official
4.	Himachal Pradesh	6 FPS owners
5.	Tamil Nadu	20 FPS owners
Total		82

FPS commissions

FPS owners reported receiving varying amounts of commissions, with differences in amount even within the state. In case of Tamil Nadu, no commissions were reported by the FPS owners. *"We were paid additional Rs 2 commission per kg dal. We deposited money to the Food office at the rate of Rs 38/- per kg and gave to the RC holders at the rate of Rs 40/- per kg,"* an FPS owner from Gungia in Tripura said. Whereas in case of Himachal Pradesh, the amount was reduced from the deposit to be paid by the FPS owner. *"We got our commission at the rate of 3% of the total value. So, if total value of dal sold was Rs 10,000 then*

⁸ Official documents pertaining to scheme information, implementation guidelines, timelines, indents, minutes of meetings etc. were received from the governments of Madhya Pradesh, Tripura, Gujarat, and Himachal Pradesh. As mentioned previously, despite repeated attempts, documents from Tamil Nadu could not be obtained.

our commission was Rs 300... commission was reduced in the purchase price. So, we had to deposit 3% less."

Especially in the case of Gujarat, most FPS owners reported incurring losses for implementing the pulses distribution scheme citing reasons such as mandatory advance payments (from FPS owner to district office), high price of pulses, low commission, low beneficiary interest, among others. *"There is no profit or advantage to us by adding pulses because it is costly for people as they cannot afford it. So, they do not come to purchase dal. We run in loss if the dal remains unutilized,"* reported an FPS owner from Navsari, Gujarat.

Implementation

Three key themes emerged regarding the implementation of the discounted pulses under the PSS distributed by states. These have been discussed in detail below:

Seamless integration in supply chain

Across all sampled states, a common aspect has been the seamless integration of the pulses distribution scheme into the existing PDS. FPS owners reported that due to pre-existing infrastructure and supply-chain mechanism such as Standard Operating Procedures, Transportation and Distribution Networks, Warehousing facilities, etc. being strongly in place, the scheme was incorporated into their existing functions without any hiccups. As one FPS owner from Silli in Gujarat mentioned - *"Dal (Pulses), rice and wheat were all stored together in different heaps in the same godown. There was no separate storage, no extra efforts and no extra expenses were incurred for Dal."*

Distribution timing coincided with high market prices

Beneficiaries were especially satisfied with the timing of scheme as it coincided with a time when the rate of pulses was very high in the local markets. It has been reported that the price of pulses distributed in the PDS was considerably lower than the price at which they were being sold in the local markets. As an FPS owner from Haroli block in Himachal Pradesh explained - *"We used to receive 3 to 4 types of pulses, for which the subsidy rates were Rs. 30 or 35 per kg and market rates were Rs. 60 or 70 that time."* This has led to the perception amongst beneficiaries and FPS owners that the scheme was implemented by the central government in order to shield the poor from the rising prices.

Information about scheme disseminated through various channels

There was a lack of uniformity in information dissemination regarding the scheme from the state department to the FPS-level. While some FPS owners learnt about the scheme

during their visit to their respective district departments, others found out through the newspapers or the *gram panchayat* (village-level governing body). There was a lack of written communication regarding the scheme reported by FPS owners across all states. *"We were informed by the Food Office that you will receive masur dal at subsidized rate. So, for the same purpose, to get dal, I had to deposit money, and challan was given. We were not informed anything in writing,"* said an FPS owner from Bampur in Tripura.

Impact

Several stakeholders pointed out that since most populations who partake in the welfare schemes are from vulnerable backgrounds, they often cannot afford to buy food items from the market and are heavily reliant on the PDS to meet their daily food requirements. In this backdrop, distribution of pulses provided the necessary dietary diversity to their consumption, compensating for lack of vegetables and other foods. As expounded by an FPS owner from Khargone in Madhya Pradesh, *"Getting dal is a problem here. (People) Do not even grow vegetables. So, they prepare dal and/or besan (gram flour). So that is the benefit. Since it is available at subsidized rate, people do not have to purchase vegetables at higher rates."*

Challenges

Quality

Differences in quality of pulses were reported across states and even within the state, as in the case of Himachal Pradesh. The beneficiaries as well as FPS owners in Tripura were extremely satisfied with the quality of pulses distributed. Most of the FPS owners emphasized that the quality of the sortex masoor dal received was so good that they used it for self-consumption as well. In Tamil Nadu as well the quality was satisfactory and an FPS owner from Udumalpet mentioned that he *"didn't receive any complaints."*

Contradictorily, the quality of pulses distributed in Gujarat encountered several complaints from the beneficiaries, FPS owners and officials alike. Another issue in Gujarat was that the pulses distributed were of imported varieties, which were bigger in size and not palatable as per local taste. Even in Tripura, some FPS owners have reported that *"there seems to be a difference in quality of pulses distributed earlier and now (Aug 2019)."*

Quantity

Beneficiaries and FPS owners across all sample states suggested that it would be more beneficial if the quantity of pulses distributed could be increased further as it was insufficient to meet the needs of all household members. For instance, in Tripura, where the mandate was for distribution of 1 kg masoor dal per ration card, the demand was to increase it to 0.5 kg per member on the ration card.

Packaging

In Madhya Pradesh and Gujarat, FPS owners reported that lack of packaging led to spoilage related losses in some cases. *"The dal received was in 25 kg packaging. So, it used to get spoiled due to moisture or tearing. It would be good if it is packed in 1 kg, as this will not get spoiled and it will help in distribution as well,"* explained an FPS owner from Anand in Gujarat. Even in Tamil Nadu, an FPS owner from Andipalayam suggested that *"if tur dal is supplied in 0.5 kg packets it would be beneficial to consumers."*

Supply delays and other logistical challenges

In Madhya Pradesh, Gujarat, and Tamil Nadu, it was also suggested by officials that timely supply needed to be ensured. The District Supply Officer (DSO) from Khargone in Madhya Pradesh said that beneficiaries liked to receive the supplies at one go so that they do not lose their daily wages. *"We try and ensure that all items are supplied at the same time,"* he added. However, delay in receiving supplies led to disruption in ensuring the timeliness of distribution, inconveniencing the beneficiaries. According to a district-level official from Anand in Gujarat, *"Quantity could not be delivered to the FPS / MDM / ICDS in time due to delay in receipt of the total required quantity."*

Suggestions for the Scheme

Scheme Continuation

When asked about their expectations about continuation of pulse distribution under TPDS, almost all the sampled FPS owners unanimously responded in affirmative across all the states. The merits of scheme appear to have been well acknowledged by the beneficiaries with high endorsement and expectations about its future continuation. The DSO from Morena in Madhya Pradesh emphasized that the scheme should be continued because *"it (pulses) is part of a complete diet and with its availability (from PDS) the beneficiaries will have relief (in spending)."* According to an FPS owner from Navsari in Gujarat, beneficiaries often complain that *"government gives rice and wheat but what do we eat it with?"* *"So, if they add dal then poor families can get nutritious food,"* he added.

Diversification of pulses basket

FPS owners suggested that beneficiaries would often request for further diversifying the types of pulses which were available through the PDS. An FPS owner from Junga block in Himachal Pradesh said, *"They (Beneficiaries) said that there should be some changes in the dal. They wanted to get different varieties of dals... They wanted chana and masoor."* Another FPS owner from Charel in Gujarat said that *"instead of Tur dal if Chana (gram) dal or Moong dal is given then it will be better as they (beneficiaries) can prepare khichdi (a kind of porridge). But from Tur, people can only prepare dal, so they have less liking for it."*

Specifically in Gujarat, a need for mapping local taste and requirement for pulses was highlighted. According to FPS owners, many of the beneficiaries of the scheme were farmers, who already grow certain pulses for self- consumption, thereby resulting in low demand and losses for FPS owners. It is prudent to note here, that in case of Tripura, where masoor is a widely consumed pulse, it is not grown in the state, and therefore, the satisfaction levels on receiving this from the central scheme was high amongst stakeholders.

Further reduction in prices

A suggestion from FPS owners was that the prices of pulses should be further slashed to be in tandem with the prices of rice and wheat distributed traditionally through the PDS system. An FPS owner from Khambhat in Gujarat said that the reason beneficiary demand was low in the state was because the difference between the price of pulses from the FPS and the market rate was only marginal. As per another FPS owner from Lahar in Madhya Pradesh, *"(For) those who belong to poor families, spending Rs. 27 (on pulses) was also very difficult."* He further stated that households holding Antyodaya Anna Yojana (AAY) cards could be provided free supplies as they are quite poor.

VI. Assessing the sustainability aspects of inclusion of pulses in food safety nets

One of the objectives of this study was to also assess the sustainability of running such scheme in the country. In order to assess this, this study has used the supply and demand projection of the foodgrains made by the Working Group of NITI Aayog in 2018⁹. A tentative costing of running such programme through the PDS has also been estimated.

Supply of Pulses in India

The growth of pulses supply in India has not matched the pace with other foodgrains. During the period between 1951 and 2008, the productivity of pulses grew by only 45% whereas the area under pulses grew by 25% - these rates were lower than those for any other food grain.¹⁰ This had led to a dependency on imports for meeting domestic demand. Import of pulses have increased the pulses supply in the country but has depressed the domestic price which have adversely impacted the domestic production in subsequent years. Year 2015-16 was an erratic year for the pulses. But, initiatives taken by the government since then have brought back the much-needed focus to the domestic pulses production. Area under pulse production has increased significantly by 21.74% to 28.34 million hectares in 2019-20 from 23.28 million hectares in 2009-10.

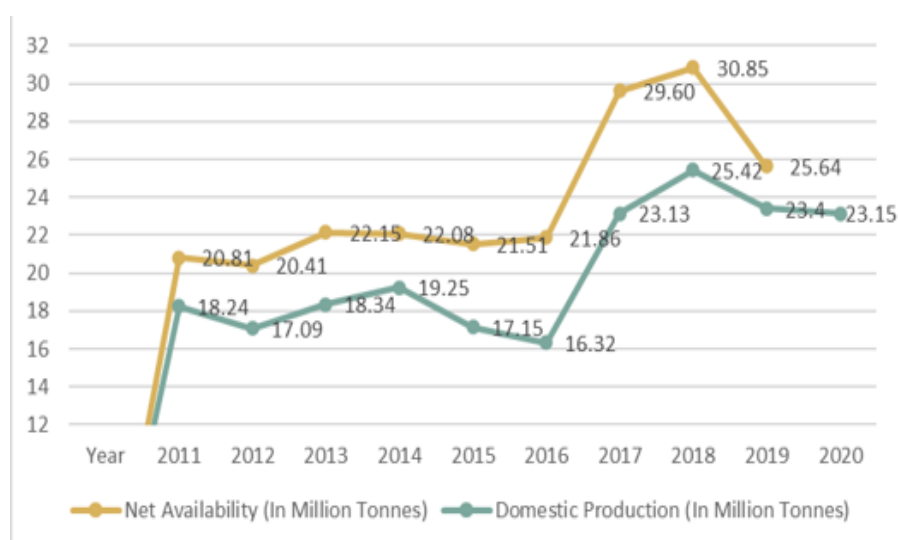


Figure 6.1 Domestic production and Net availability of pulses in India (in Million Tonnes)

⁹<https://www.niti.gov.in/sites/default/files/2019-07/WG-Report-issued-for-printing.pdf>

¹⁰https://iipr.icar.gov.in/pdf/vision_250715.pdf

Also, as can be seen in **Figure 6.1**, the domestic production of pulses has improved significantly in the last decade. Prior to 2016, the domestic production was less than 20 Million Tonnes which has now grown to around 23 Million Tonnes. In the last decade, yield per hectare has also increased by around 30% to 817 kg in 2019-20. India is the largest producer of pulses in the world, contributing around 27.6% (25.5 MT) of the 92.32 MT global production, in 2018. Rajasthan, Maharashtra and Madhya Pradesh were the largest producers of pulses in the country in 2019-20.¹¹ It can be seen from **Table 6.1** that owing to the increasing domestic production, India has reduced its dependence on imports and even increased its export of pulses in recent years.

Table 6.1 Trends in production and availability of pulses in India (in Million Tonnes)

Particulars	2016-17	2017-18	2018-19	2019-20*
Domestic Production	23.13	25.42	22.08	23.15
Net Imports	6.6	5.6	2.5	2.9
Net Exports	0.14	0.18	0.29	0.23
Net Availability	29.6	30.9	25.6	

*Based on advanced estimates

Per capita availability of pulses has also fluctuated over the years. During 1950-76, it ranged between 70.3-48.2 gram/day. However, post 1976, there has been a decline in the per capita availability of pulses which reached all time low at 29.1 gram/day in 2003. However, since 2011, we again see a slight rise in the per capita availability, though with some degree of fluctuation.¹² The latest projected data for 2020 suggests the per capita availability at 47.9 gram/day.

Trends in Prices of Pulses

Prices of pulses have shown great volatility over the years. During 2015-16, the pulses price reached all time high (**Figure 6.2**). The Government had to undertake drastic measures to stabilize the pulses price in the country which led to the cooling down of prices. In recent years, though, owing to the increase in domestic production, the higher volatility in the prices has largely reduced.

¹¹Agricultural Statistics at a Glance, 2020, Government of India

¹²[https://eands.dacnet.nic.in/PDF/Agricultural%20Statistics%20at%20a%20Glance%20-%202020%20\(English%20version\).pdf](https://eands.dacnet.nic.in/PDF/Agricultural%20Statistics%20at%20a%20Glance%20-%202020%20(English%20version).pdf); pg 167

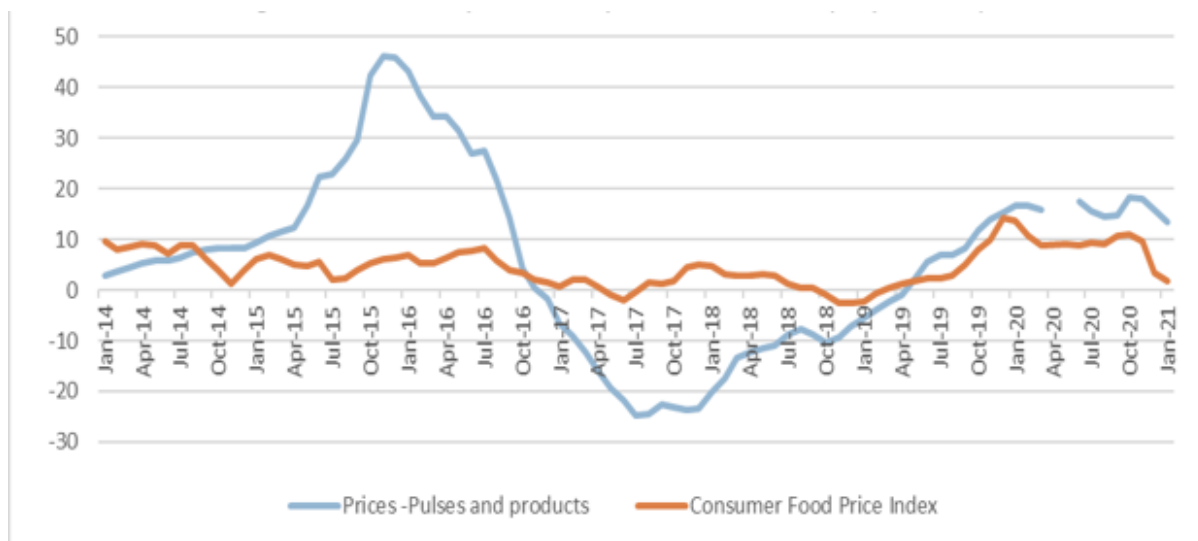


Figure 6.2 Consumer price and Pulses inflation (in percent)

Demand of Pulses in India

India is facing a great deal of macro and micro-nutrient deficiencies challenges. The situation is more worrisome for the poorest and vulnerable population. As can be seen from Figure 6.3, the poorest 30 per cent of the population both in rural and urban areas have lesser protein consumption than the recommended dietary allowances (RDA) by the Indian Council of Medical Research (ICMR).

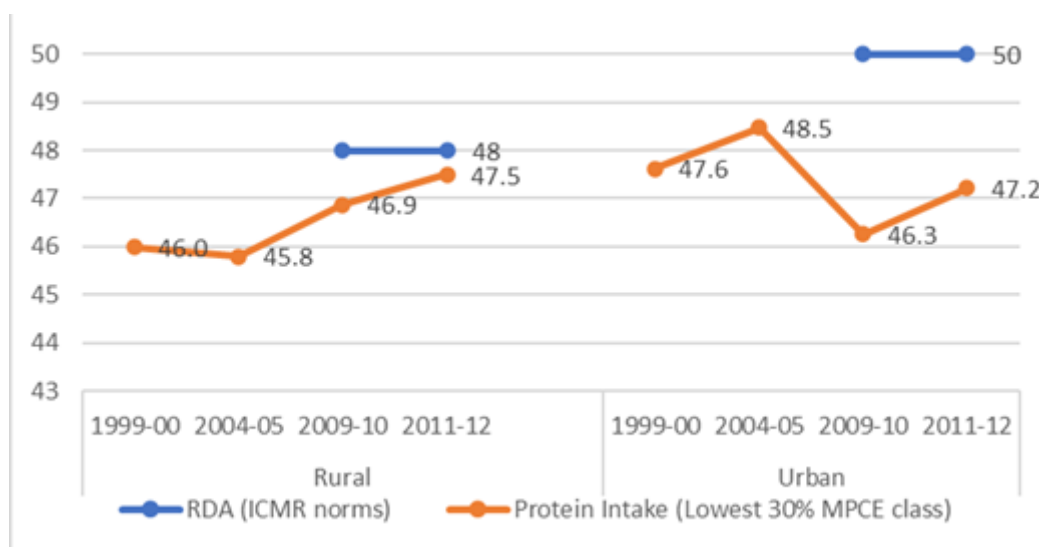


Figure 6.3: Per capita Protein Intake among the poorest 30% of India

The data on the pulses consumption comes from NSSO consumption expenditure survey. The latest figures are available only for 2011-12. It can be seen from **Table 6.2** that the average per capita pulses consumption in rural and urban areas during 2011-12 was 9.53

kg and 10.96 kg per annum. The trend during 1999-00 and 2009-10 suggest a religious decline in pulses consumption in India which was reversed in 2011-12.

Table 6.2: Trends in consumption of pulses in India (kg/capita/annum)

Commodity	Year	Qty. consumed (kg/year)	
		Rural	Urban
All pulses & pulse products	1999-00	10.22	12.17
	1993-94	9.25	10.46
	2004-05	8.64	9.98
	2009-10	7.92	9.6
	2011-12	9.53	10.96

Sources: NSSO Consumption Expenditure Survey, various rounds.

Demand-Supply Projections for Pulses in India

The NITI Aayog working group estimates the total demand for pulses to be around 26.72 MT¹³ in 2021-22. This includes both household as well as commercial demand. This is expected to increase to about 35.23 MT by 2032-33. The estimates also suggest that, based on NSS 68th round consumption data, household demand for pulses is expected to increase to 16 MT in 2032-33 from 14 MT projected for 2021-22.

On the supply side, the Working Group projected that the total supply of pulses would be around 33.95 MT in 2032-33, compared with 24.35 MT in 2011-22. They highlight that as per projections, a deficit in domestic supply of pulses of around 5-6 MT is expected to persist. From the perspective of sustainability of pulses availability in India, it is important to focus on reducing the projected deficit of 5-6 MT through domestic production by strengthening the ongoing interventions.

A Case for Introducing Pulses in Welfare Schemes

Pulses are currently not a part of Public Distribution System (PDS) in the country, under the National Food Security Act. Although some states distribute them through the PDS at their own expense. India with a large vegetarian population rely heavily on pulses to get their protein. Nevertheless, as observed in Figure 6.3 that the protein intake in the poorest 30 percent population is lower than the RDA. The demand-supply mismatch also keeps the prices of pulses volatile affecting further the access of pulses by the poor and the vulnerable population which have a direct impact on their consumption and,

¹³MT is million tonnes

concomitantly, the nutritional status of the vulnerable communities. The SDG 2 on food security and nutrition too is far from its achievement by 2030.¹⁴

The Government of India continues to procure large quantities of pulses under its Price Support Scheme (PSS). As of March 2021, 2.1 Million Tonnes were procured by the government in 2020-21.¹⁵ Given that this large quantity of procured stock is putting pressure on the storage and is prone to infestation over a long duration, it is usually disposed under the Open Market Sale Scheme (OMSS). However, this is often done at hugely discounted prices – even below the MSP – leading to depressed market prices and discouraging private sector players to wait for OMSS instead of procuring directly from farmers. In this regard, it has been suggested that the significant increase in pulses production in the country needs to be leveraged through the PDS to provide nutritional security to the population.¹⁶ This view is echoed by several other experts¹⁷, owing to the nutritional value of pulses as “the most economical vegetable protein”.

Financial Viability of Scheme for Providing Pulses at Discounted Prices

Based on the suggestions mentioned above to leverage the domestic pulses supply for improving the nutritional status of the poor households, the following analysis aims to assess the financial implications to including pulses in the NFSA. **Table 6.3** utilizes the projections provided by the NITI Aayog Working Group¹⁸ to provide comparative figures for the total population, total pulses demand and total household demand in the years 2021-22 and 2032-33.

Table 6.2 Assessing the financial viability of including pulses scheme in PDS

Year	Total Projected Population (in Million)	Total Pulses Demand (in Million Tonnes)	HH Pulses Demand (in Million Tonnes)	Per Capita Demand (in Kg per annum)	TPDS beneficiaries (in Millions)	Pulse needs for TPDS beneficiaries (in Million Tonne)	Subsidy Need in Rs. Crore
2021-22	1384.1	26.72	14	10.1	800	8.1	12137.9
2032-33	1566.5	35.23	16	10.2	800	8.2	12256.6

¹⁴<https://sdgindiaindex.niti.gov.in/#/ranking>

¹⁵ Agricultural Statistics at a Glance, 2020, Government of India

[https://eands.dacnet.nic.in/PDF/Agricultural%20Statistics%20at%20a%20Glance%20-%202020%20\(English%20version\).pdf](https://eands.dacnet.nic.in/PDF/Agricultural%20Statistics%20at%20a%20Glance%20-%202020%20(English%20version).pdf)

¹⁶<https://www.financialexpress.com/opinion/bring-pulses-under-public-distribution-system/2170512/>

¹⁷<https://www.thehindubusinessline.com/markets/commodities/time-to-boost-production-consumption-of-pulses/article64997983.ece>

¹⁸<https://www.niti.gov.in/sites/default/files/2021-08/Working-Group-Report-Demand-Supply-30-07-21.pdf>

The total population estimates and the total household demand for pulses are used to derive the per capita demand (~10 Kg per annum) for both the reference periods. Estimating the number of TPDS beneficiaries at 800 Million, the estimate for pulses demand to meet the requirements for TPDS beneficiaries comes to around 8.1 Million Tonnes. Assuming the subsidy rate of Rs. 15/kg which was provided in the special scheme evaluated in this study, the cost of the subsidy to the government would be around Rs. 12,138 -12,257 crores.

Government can commission a study to assess how the needs of 8-10 Million Tonnes of pulses every year can be met and how the subsidy can be managed. The study can also assess the quantum of the subsidy that can be given so that it becomes accessible and affordable for all. The silver lining is that the beneficiaries are eager to receive the subsidised pulses through NFSA and are also willing to pay a good amount for it. Many of the state governments have also taken initiatives on their own to supply pulses to the NFSA beneficiaries. Their experiences can also be recorded by the study. Government of India too can think around extending the support for the larger food and nutritional security of the poor and the vulnerable population of the country which will be an important step towards the attainment of SDG 2 for the country. It will also help in achieving a mandate of the NFSA, 2013 under article 12(2)(f) to diversify the food commodities distributed under PDS over a period of time.¹⁹

¹⁹https://www.egazette.nic.in/WriteReadData/2013/E_29_2013_429.pdf

VIII. Conclusions and Recommendations

Based on the findings from the three different types of data sources: i) official documents and in-depth discussion with government representatives, ii) beneficiary perception survey and iii) qualitative data through the key informant interviews with the FPS owners and few other stakeholders, this report provided insights into the level of implementation, successes, bottlenecks and suggestions on the special scheme on pulses.

It is evident that the scheme was well received by stakeholders at all levels – from beneficiaries to implementing officers in the government machinery. Even smaller states such as Tripura could introduce pulses through their PDS for the first time and utilize maximum benefits for its population due to the discounted prices offered under the PSS. As the scheme coincided with a time when the prices of pulses were very high in the markets, the beneficiaries readily partook the pulses offered at their respective PDS centres, leading to high offtake reported by FPS owners. Apart from the PDS, pulses were also distributed in other welfare schemes such as ICDS and MDM (PM Poshan) in different states. The satisfaction levels across parameters such as types, quantity, prices, quality and timeliness were largely satisfactory across states barring Gujarat, where sub-par quality of pulses led to dissatisfaction amongst the beneficiaries and FPS owners.

The scheme was implemented differently in different states, leading to unique distribution mechanisms and challenges at the state-level. While the integration of the pulses into the PDS supply chain was reportedly seamless across states, there were differences in terms of processing, transportation and distribution of pulses as per the states' discretion. While states such as Tripura chose to focus on a single type of pulse (Masoor), states such as Himachal Pradesh distributed 3-4 types of pulses, as per their pre-existing scheme. Supply delays and other logistical challenges such as poor packaging were reported in certain areas.

The quantity of pulses distributed through the PDS varied across states. Beneficiaries and FPS owners across most states suggested that an increase in quantity of pulses distributed would be beneficial for both. Similarly, even though the prices of pulses distributed under the scheme were significantly below the market prices, it was suggested that further reduction of prices, by upto 50 per cent of the market price, was necessary in order to make it affordable for the vulnerable communities so that the nutritional benefits of pulses consumption can reach those who need it the most.

Based on repeated requests from beneficiaries for continuation of scheme, states such as Madhya Pradesh and Tripura had requested the Central government to continue the scheme.

The study also looked at the sustainability dimensions of including pulses in the TPDS system. It roughly calculated a need of 8-10 Million Tonnes of pulses and around 12-13 thousand crores for rupees to extend the current subsidy to extend it to all the NFSA beneficiaries.

Various stakeholders including beneficiaries have also provided their suggestions for the improvement of such scheme. Insights and feedback from the findings and suggestions from the stakeholders have been synthesized to identify the following recommendations to help improve the effectiveness of any such discounted pulses scheme in the future.

Table 8.1 Recommendations for improving the efficiency and effectiveness of the discounted pulse scheme

Recommendations	Types	Responsibility
Recommendation #1 National government should consider continuing the scheme on a long-term basis <ul style="list-style-type: none"> National government should commission a study to understand the different dimensions of including pulses in the food safety nets on a longer-term basis. National government should also discuss the possibility of including pulses on a cost-sharing basis with States and UTs. 	Strategic	<ul style="list-style-type: none"> National Government State governments
Recommendation #2 Local preference and quality of the pulses need to be ensured. <ul style="list-style-type: none"> States to place indent after taking cognizance of local tastes. Samples of the pulses to be checked in FSL before releasing to the states to ensure it meets the FSSAI quality norms. More robust quality assurance mechanisms to be put in place. 	<ul style="list-style-type: none"> Operational 	<ul style="list-style-type: none"> National government NAFED State government
Recommendation #3 Quantity of pulses should be enhanced to meet individual requirement <ul style="list-style-type: none"> Government to consider increasing allocation as per availability of pulses, exploring viability of one kg pulses/beneficiary. RDA should be considered while deciding on the quantity. 	<ul style="list-style-type: none"> Strategic 	<ul style="list-style-type: none"> National Government State government

Recommendations	Types	Responsibility
<p>Recommendations #4 Quantum of subsidy should be reviewed to make it accessible and affordable to the vulnerable population</p> <ul style="list-style-type: none"> Centre and states to assess the viability of providing pulses at even further discounted rates, to make it affordable to the poorest of the poor. Discussion with the State can be held to make it a cost-sharing scheme. 	<ul style="list-style-type: none"> Strategic 	<ul style="list-style-type: none"> National government State Government
<p>Recommendations#5 Supply chain of the pulses procurement and distribution should be strengthened</p> <ul style="list-style-type: none"> Pulses supply chain should be strengthened to ensure timely delivery to the states 	<ul style="list-style-type: none"> Operational 	<ul style="list-style-type: none"> NAFED

Annexures

Annex 1

Scheme Guidelines

Policy Guidelines for Release of Pulses to States/UTs at Discounted Rate to be Utilized for Various Welfare Schemes from the Stock of Pulses Procured Under Price Support Scheme (PSS).

This Scheme is for disposal of pulses procured under PSS by way of distribution to States/UTs for utilization under various welfare schemes like Mid-day Meal (MDM), Integrated Child Development Services(ICDS), Public Distribution System(PDS), etc with central subsidy of Rs.15 per kg over the "issue price" as a "One time measure" for a period of 12 months or till present PSS pulses stock of 34.88 lakh MT lasts, whichever is earlier.

1. **Duration of the Scheme** : This is one time measure for a period of 12 months from the date of 1st supply or complete disposal of 34.88 lakh MT of Pulses stock, whichever is earlier.

2. **Availability of Stock of Pulses**: The Department of Agriculture, Cooperation & Farmers' Welfare (DAC&FW) has allocated 34.88 lakh MT of Pulses from the present stock of Pulses under PSS. Further, the balance stock with Department of Consumer Affairs, Ministry of Food, Public Distribution & Consumer Affairs (DoCA) under Price Stabilization Fund (PSF) will also be utilized under the Scheme. On receipt of indent from state, if the old stock of that type of pulses is available under PSF, the same will be transferred to PSS and equivalent amount of pulses under PSS will be transferred to PSF. This transfer will take place at zero costs between PSF and PSF at WHR (warehouse receipt) weight basis. Such transfer will ensure that PSF stock is renewed.

3. **Variety of pulses**: The DAC&FW and DoCA are holding the stock of Chana, Masoor, Arhar(Toor), Urad and Moong, in whole form, conforming to FAQ norms at the time of Procurements.

4. **Issue price** : The formula for calculating sourcing State wise "Issue Price" will be as follows:

- a) Weighted average of last seven days of modal price of the specific pulse in the APMCs (Mandi/s) situated within a radius of 100 km of godowns from where the PSS pulse stock will be issued to the States.
- b) Weighted average of whole sale prices of selected APMCs (Mandi/s) near to the warehouse(s) of last seven days in sourcing state.

The issue price will be the higher of (a) & (b). The validity of the "Issue Price" for each Pulse / Sourcing State wise, will be for each calendar month.

5. **Empowered Committee** : An Empowered Committee constituted under the Chairmanship of Additional Secretary (Cooperation), DAC&FW with representatives from Department of Expenditure, Department of Food and Public Distribution,



Department of Consumer Affairs, O/o Chief Adviser Cost, Internal Finance Division, DAC&FW, Central Nodal Agencies and representatives of 4 states. The Empowered Committee will take day to day decision for smooth implementation of this scheme including following issues:-

- a) Finalize Operational guideline of this scheme.
- b) Approve "Issue price" as per method prescribed and communicate it to the States/UTs.
- c) Allocate pulses to different states/UT as per their demand.
- d) Decide type of pulses to be distributed in a state/UT as per states demand.
- e) Decide warehouse from where pulses will be issued.
- d) Decide under which schemes/programme the pulses will be distributed and its monitoring mechanism to be followed by states.
- f) Consider and decide any other related issue/s for successful implementation of the proposal.
- g) The services of any required agency or/and experts may be requisitioned by the Committee on payment basis, if necessary.

The Joint Secretary/ Director, of Marketing Division, DAC&FW will be co-opted Member of the Empowered Committee.

The Empowered Committee will meet on regular intervals.

6. Responsibilities of Central Nodal Agencies (CNA) : The scheme is an additional channel for disposal of pulses procured at MSP under PSS. The CNAs as per the PSS Guidelines are to arrange disposal at best prevailing market rate of the stock held by them within defined period of Procurement. Since this Scheme is valid for 12 months, the CNAs will continue to hold sufficient Stock to serve the States upon their indent to utilize the stock for their various Welfare Schemes. The CNAs will provide all the required support for smooth implementation of this Scheme to the Empowered Committee and the States. They will be responsible for submission of updated detailed status of stock position of pulses, daily sale price of the pulses being sold in open market through approved portal/mechanism. The issue price may be calculated by an agency to be engaged by CNA, based on the data available on AGMARK Net Portal or any other approved Portal/s.

The CNAs will release the Stocks on receipt of the advance fund by the State Government in the designated Bank Account, which will be further credited to the concerned Cash Credit Accounts. The delivery terms and applicable taxes, if any, in this scheme will be same as applicable for the open market disposals. The subsidy



of Rs. 15 per kg will be released by DAC&FW on monthly basis to CNA on submission of delivery report counter signed by the implementing agency of the State Govt., as proof of delivery.

The CNAs will submit audited accounts of each PSS operations within the stipulated period of the PSS scheme to DAC&FW and provide the necessary documents/records for vetting of their claims to office of Chief Adviser (Cost), Department of Expenditure. Since the market is dynamic and "Issue Price" is required to be fixed periodically, the "Issue Price" so fixed will not have any binding on day to day open market disposal rates of PSS stock.

7. Responsibilities of State/UTs Governments:

- a) The responsibility of indenting State/UT Governments is to receive raw pulses from warehouses at "Issue Price" minus Central Subsidy, get it transported, processed or upgraded to FSSAI standards (as per their requirement) and ensure distribution /usage in welfare schemes (PDS, Mid Day Meal Scheme, ICDS etc.) as informed at the time of indent to the DAC&FW. While allocating raw pulses, the standard Out Turn Ratio (OTR) of pulses will be considered depending upon the need of up gradation or milling. No expenses on account of milling, transport or related expenses will be loaded by the States while calculating their requirement of raw pulses under this Scheme.
- b) The State/UT Government may also select the implementing agency which will have the responsibility of successful implementation of the Scheme. State government will ensure that the benefit of subsidy is passed on to the identified beneficiaries of the selected welfare schemes following the monitoring norms of those states schemes. The State/UTs Governments need to ensure that their Department or agencies nominated by them do not make any profit from the pulses issued under this Scheme.
- c) Any expenses beyond the point of delivery and its warehouse will effectively be the responsibility of state government/union territory. The State/UT Governments at their discretion are free to provide additional subsidy for usage in these welfare schemes. In such cases, the delivery expenses at the delivery points like labour charges, weightment charges and any delivery related expenses will be booked under PSS.
- d) The State/UT Governments shall ensure proper utilization of Pulses issued to them in various welfare schemes like PDS, Mid-Day Meal Scheme, ICDS etc. They are required to submit the utilization certificate in the prescribed format for each indent to DAC&FW.
- e) The State Government will constitute a Monitoring Committee under the Chairmanship of Chief Secretary comprising of the Principal Secretaries/Secretaries of Finance, Food, Agriculture, Cooperation and the implementing Departments of the selected Welfare Schemes to oversee the



proper utilization of pulses issued under the Scheme. A similar Monitoring Committee may be constituted under the Chairmanship of District Collector/Deputy Commissioners/District Magistrates, as the case may be, at the District level.

- f) The State may ensure that no agencies be engaged having conflict of interest in the implementation of the Scheme.

8. Release Mechanism

- a. The States will be offered raw Pulses from the stock available under PSS/PSF generally on "First In-First Out" (FIFO) basis at "Issue Price" minus the Central Subsidy of Rs. 15 per kg on "First Come-First Serve".
- b. The indenting States will send their request to the DAC&FW, indicating the variety, quantity, period of lifting, confirmation of the purchase at issue price. Thereafter, the Department will confirm the allocation with detail of locations from where the stocks are to be lifted on "as is where is basis". The indenting States /UT Governments or their Implementing Agencies may inspect the stock before making advance payments. However, no cancellation of the indent will be accepted, once the supply against the indent is confirmed.
- c. On receipt of advance payment of the allocated stock, it will be the joint responsibility of the Central Nodal Agency and the States or their nominated agency to arrange for lifting of the allocated quantity Pulse-Wise. The lifted stock may require upgrading/milling as per the requirement of the State/UT which has to be arranged by the indenting States/UTs at their cost and expense.

9. Reporting Mechanism: The CNAs will provide weekly location-wise, age-wise, variety-wise stock position of pulses along with daily disposal rate with quantity of pulses in open market. The CNAs will work out the "Issue Price" along with supporting information/document for fixation of issue price on intervals to be decided by the Empowered Committee. The CNAs will also provide weekly advance fund receipt position of the States/UTs Govts. and lifting status of pulses by the indenting State/UTs or their implementing agencies.

10. Publicity and Awareness: The Department will organize Video Conferences with Food Departments or the concerned Departments of the State/UTs Govts. to discuss any issues related with subject matter. Further, the State Governments will ensure sufficient publicity and awareness of the Scheme for the benefit of target groups to be covered under the Welfare Schemes for distribution of pulses.

11. Impact Analysis: The DAC&FW may arrange concurrent and third party evaluation of the scheme through an independent agency as per due procedure.



12. Dispute Resolution :- Any disputes arising between the States/UTs or their Implementing Agencies and the CNAs will be referred to the Empowered Committee , whose decision will be binding .



5/12

Annex II

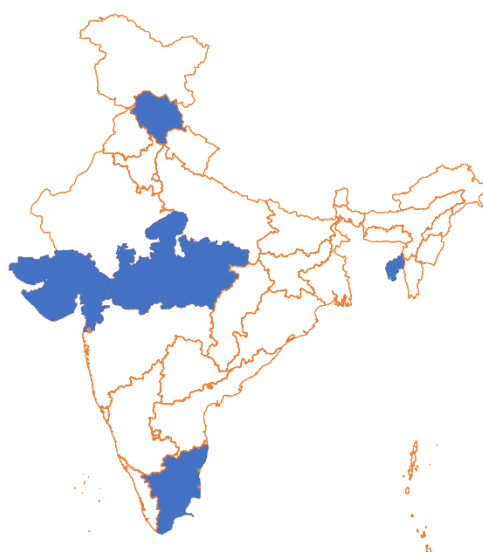
Sampling Methodology

The study aims to draw a minimum sample across five states²⁰ to capture beneficiary perspectives on the pulses received through the Govt. of India's Pulses scheme during the period of September 2018 to August 2019.

Approach to sampling:

A multi-stage stratified sampling approach is suggested for selecting FPS (clusters):

- 1) The selection of the states has been done purposively on the basis two criterion. The first criteria being the geographic representation. Thus, one state has been selected from 5 geographical zones (Central, West, North, South, and North-East). And, the second criteria have been the pulses lifting history of the state under the scheme. Use of both the criterion has ensured a heterogenous group of states within the sample.
- 2) In each state, sample districts have been allocated proportionately for surveys following the Probability proportional to size (PPS) sampling. However, for smaller states such as Himachal Pradesh and Tripura a provision to have a cap of at least 3 districts to be covered was built in to ensure minimum sample selection. The selection of the districts will be done randomly within each state.
- 3) Within each district, 2 sample blocks will be selected randomly. Further, within each selected block, 2 FPS (clusters) will also be selected randomly.
- 4) 20 households will be randomly surveyed from the FPS list in each of the identified FPS clusters.



²⁰ For minimum sample estimation at the state level, following parameters have been considered: Estimated prevalence of 67%, 95% confidence level, 0.08 Margin of Error and 1.8 design effect

Sample size:

A total of 1680 households across 21 districts will be surveyed for the entire study²¹. In each state, the study will survey various sample households as mentioned in the below table:

Quantitative Survey							
Srl. No.	States	Sample Districts (Based on PPS)	No. of Blocks	No. of FPS each block	Total FPS per state	No. of sample beneficiary per FPS	Total Sample (beneficiaries)
1	Madhya Pradesh	7	2	2	27	20	534
2	Tamil Nadu	5	2	2	19	20	390
3	Gujarat	3	2	2	14	20	277
4	Himachal Pradesh	3	2	2	12	20	240
5	Tripura	3	2	2	12	20	240
Total		21			84		1,680

Sample Size at National Levels	
Sample States	5
Sample Districts	21
Sample Blocks	42
Sample FPS (clusters)	84
Sample Beneficiaries	1,680

Respondents:

In line with the primary objective of the study, respondents for the study will include Targeted Public Distribution Scheme Beneficiary households.

²¹ At national level, a sample of 1680 households across 84 clusters will be adequate to detect a change of 5% in the key outcome, at 0.85 power, 95% confidence level, and 1.95 design effect

Annexure 3

TPDS Beneficiary Household Schedule

MODULE 1: PRELIMINARY SCREENING QUESTIONS

Q.No	Question	Response		Skips
1.1	Do you or anybody in your household have a ration card?	1 = Yes	2 = No	If Yes, move to 1.2
1.2	Did you ever receive pulses at a subsidized rate between September 2018 and August 2019 from your FPS? ?	1 = Yes	2 = No	If Yes, proceed with interview
If the response to either Q1 and Q2 is 'No', please thank the respondent and proceed to the next sample household.				

[Enumerators' introduction and present the purpose of the survey, indicating that results will be anonymized and that answers provided will not affect benefits or subsidies the respondent may receive now or in the future. Check that respondent is available for the duration of the survey and ask for consent to proceed.]

Introduction:

Hello/ Namaste sir/ma'am, my name is #.....#, and I am interviewing you on behalf of the Government of India and the United Nations World Food Programme. Currently, we are conducting a survey on special Pulses scheme that was rolled out during 2018 and 2019. Through this survey, we intend to collect experiences of beneficiaries and document learnings from the scheme. Sir/ma'am, as you have received Pulses under the scheme, we would like to ask your consent to be interviewed now on the topic.

Your participation will help in understanding your experience of receiving Pulses from FPS and its benefits. There is no risk or benefit to you by participation in the study.

You can refuse to respond to any question and can stop the interview at any time.

Everything that you report during the interview will be kept strictly confidential and will be used only for the purpose of the study. The interview will take approximately 15-20 minutes. Your participation in this survey is completely voluntary.

Do you have any question about the study? If you have questions even later on, you can contact our #-----#

I would like to receive your consent on your participation in this survey before I proceed further.

- 1. Respondent agreed
- 2. Respondent Disagreed

If at a later stage in case of any clarification, can we ask you on mobile? Can you please share the number?

We assure you that all the information will be kept strictly confidential and will be used only for the purpose of the study.

Date:	(drop down menu)
Name of interviewer:	(drop down with code)
Phone number of the respondent:	
Name of respondent:	
Sex of the respondent:	<i>1 = male, 2 = female</i>
Status:	<i>1=Head of HH, 2=Alternate,3=other</i>
Sex of HH head:	<i>1 = male, 2 = female</i>
Education level of the respondent:	<i>1= No education, 2= Up to primary, 3= Up to secondary 4= Graduate and above</i>
Main Income Source:	<i>1=Agriculture (crops/livestock); 2= Agriculture wage labour, 3=Non-agricultural wage labour, 4=Salary, 5= Small business, 6=Petty trade, 7= Remittances, 8=others</i>
State:	(drop down with code)
District:	(drop down with code)
Block	(drop down with code)
Village/Town:	(drop down with code)
Household No:	
UID	_ _ _ _ _ _ _ _ _

Could you please specify the number of your household members by age and sex?

# of HH members	Under 6 years	6 to 14 years	15 to 59 years	60 or older
Females				

Males				
Transgender				
Whether any person in your family have: Physically disabled? (Y/N): Mentally disabled (Y/N) :				

MODULE 2: HOUSEHOLD CHARACTERISTICS

Q.No.	Question	Response		
2.1	What is your Household's Social Group?	1 = Scheduled Caste	2 = Scheduled Tribe	3 = OBC and General
2.2	Which type of ration card does your household possess?	1=Priority Household (PHH)	2= Antyodaya Anna Yojana (AAY)	3= Any other state ration card
2.3	How regularly do you avail food items from FPS?	1= Every month		3= Occasionally
		2= Sometimes		4= Never
2.4	Do you have MGNERGA card?	1= Yes		2= No
2.5	What type of diet do you follow at home?	1= Vegetarian	2= Vegetarian with Egg	3= Non-vegetarian

MODULE 3: BENEFITS ACCRUED FROM THE PULSES SCHEME

Q. No	Question	Response		
Beneficiary Perception & Experience				
3.1	What are the major types of Pulses that are most frequently consumed at your home?	_ _ 1 st preference	_ _ 2 nd preference	
	1 = Chana			7 = Rajma
	2 = Masoor			8 = Kala chana
	3 = Arhar (Toor)			9 = Lobia
	4 = Urad			10 = Kabuli chana
	5 = Moong			11 = White peas (Safed matar)
	6 = Moth			12 = Green peas (Matar) 99= No other

3.2	How do you generally use Pulses at home?		_ _ Major Use	_ _ Major use
	1 = Dal/Sambar	7 = Snacks (pakora/ roasted moong dal/ chana chaat)		
	2 = Chutney/ Dry chutney (podu)	8 = Chhole		
	3 = Desserts (Laddoo/ payasam/porridge/ mung dal halwa)	9 = Idli/Dosa/ Pongal/ Vada/ Khichdi/ Dhokla		
	4 = Sattu drink/ Dal shorba	10 = Vegetable curry		
	5 = Baby food	11 = Others (Specify...)		
3.3	How did you come to know about the subsidised pulses that were being distributed through FPS in 2018 and 2019? (Suggest 2 main sources of information)	1 = FPS Owner 2 = District/block officials 3 = Frontline functionaries (AWW, ASHA, ANM) 4 = Friends and relatives 5 = Television 6 = Radio 7 = Social media 8 = Other	_ 1 st source	_ 2 nd source
3.4	How many months did you collect subsidised pulses between September 2018 to August 2019? [Note: Check the ration card entry]			
3.5	Which variety of Pulses did you receive under the scheme?		_ _ Pulses I:	_ _ Pulses II:
	1 = Chana	4 = Urad		
	2 = Masoor	5 = Moong		
	3 = Arhar (Toor)	6 = Other (Specify..)		
3.6	Amount of Pulses received under the scheme each month? (In Kgs)	1= 1 Kg	2= More than 1 Kg	3= less than 1 Kg
3.7	In which form did you receive Pulses from Fair Price Shops?		_ Raw	_ Milled
3.8	Amount paid for Pulses per month. (INR/Kg)		_ _ Pulses	
3.9	what is the market price for this pulse? (INR/Kg; as per general prevailing prices)		_ _ _ Pulses	
3.10	Did you save any money from this subsidised Pulses programme?		1= Yes	2= No

MODULE 4: BENEFICIARY SATISFACTION

Q.N o.	Question	Response
Beneficiary Satisfaction Rates with the Pulses Scheme (Likert Scales)		

4.1	How satisfied are you with the type of pulses you received under the scheme?	5 = Very satisfied	4 = Somewhat satisfied	3 = Neither satisfied nor dissatisfied	2 = Somewhat dissatisfied	1 = Very dissatisfied
4.2	How satisfied are you with the amount of pulses you received under the scheme?	5 = Very satisfied	4 = Somewhat satisfied	3 = Neither satisfied nor dissatisfied	2 = Somewhat dissatisfied	1 = Very dissatisfied
4.3	How satisfied are you with the price of pulses you paid under the scheme?	5 = Very satisfied	4 = Somewhat satisfied	3 = Neither satisfied nor dissatisfied	2 = Somewhat dissatisfied	1 = Very dissatisfied
4.4	How satisfied are you with the quality of the pulses you received under the scheme?	5 = Very satisfied	4 = Somewhat satisfied	3 = Neither satisfied nor dissatisfied	2 = Somewhat dissatisfied	1 = Very dissatisfied
4.5	How satisfied are you with the timeliness of the receipt of pulses under the scheme?	5 = Very satisfied	4 = Somewhat satisfied	3 = Neither satisfied nor dissatisfied	2 = Somewhat dissatisfied	1 = Very dissatisfied
Beneficiary Perception & Expectations about Pulses Scheme						
4.5	How do you think government can improve the pulses scheme if they were to continue it in the future?	1 = Increase Amount 2 = Reduce Prices 3 = Change the variety 4 = Regular availability at FPS 5 = Timely Information about the Pulses availability 6= Provide two or more varieties of dal 7= Improve the quality 8= Others (specify...) 9= No Suggestion		_ 1 st	_ 2 nd	_ 3 rd
4.6	Would you want the Govt. to continue Pulses scheme?	1 = Yes	2 = No	3 = Indifferent	4 = Don't know	
4.7	Having availed Pulses at subsidised rate from FPS, how much would you be willing to pay more for the pulses if included in the scheme in the future.? (in INR)	1 = up to 2	2 = up to 5	3 = up to 10	4 = up to 15	5 = more than 15

MODULE 5: HOUSEHOLD FOOD & NON-FOOD EXPENDITURE

Expenditure on Food in last seven days (INR)

5.1.a	Expenditure on cereals: Grains, such as rice, wheat, sorghum, millet, maize; - Pasta/ bread	_ _ _ _
5.1.b	Expenditure on pulses: beans, peas, lentils, soybean, pigeon peas; Nuts such as almonds, cashews, peanuts or others	_ _ _ _
5.1.c	Expenditure on tubers (potatoes, sweet potatoes, cassava, plantains, yams)	_ _ _ _
5.1.d	Expenditure on Fruits	_ _ _ _
5.1.e	Expenditure on Vegetables	_ _ _ _
5.1.f	Expenditure on Meat	_ _ _ _
5.1.g	Expenditure on Eggs	_ _ _ _
5.1.h	Expenditure on Oil, Ghee, Fat & Butter	_ _ _ _
5.1.i	Expenditure on Milk, Cheese, Yogurt & other dairy products	_ _ _ _
5.1.j	Expenditure on sugar, confectionery, and desserts	_ _ _ _
5.1.k	Expenditure on condiments (salt, spices, cubes, fish powder)	_ _ _ _
5.1.l	Expenditure on non-alcoholic beverages (coffee, tea, bottled water; soft drinks; juice)	_ _ _ _
5.1.m	Expenditure on other meals/snacks consumed outside the home	_ _ _ _
Non-food Expenditure in last one Month (INR)		
5.2.a	Alcoholic beverages and tobacco	_ _ _ _
5.2.b	Soap, hygiene & personal care items	_ _ _ _
5.2.c	Transport	_ _ _ _
5.2.d	Water supply for domestic consumption	_ _ _ _
5.2.e	Electricity &	_ _ _ _
5.2.f	Energy (cooking, heating, lighting) from other sources	
5.2.g	Information and communication (phone top-up incl. internet, other information and coms services)	_ _ _ _
5.2.h	Rent, actual	_ _ _ _
Non-food Expenditure in last Six Months (INR)		
5.3.a	Medicine, other medical products, medical equipment (COVID19)	_ _ _ _
5.3.b	Medicine, other medical products, medical equipment (Non-COVID19)	_ _ _ _
5.3.c	Clothing, shoes	_ _ _ _
5.3.d	Tuitions fees	_ _ _ _
5.3.e	Construction material/house repairs/DIY	_ _ _ _
5.3.f	social events (weddings, funerals, etc.)	_ _ _ _
5.3.g	Textiles, utensils, goods and services for household routine maintenance (do NOT include durable furniture, equipment and appliances)	_ _ _ _

MODULE 6: HOUSEHOLD FOOD CONSUMPTION

6.1	How many meals did this household eat yesterday ?	__ meals	
	Food items/ groups Examples	a. How many days over the last 7 days , did you or members of your household eat these foods?	b. What was the main source of this food? (see list below)
		Days (a)	Source (b)
6.2	Foods made from grain Porridge, bread, rice, chapatti, roti, pasta/noodles or other foods made from grains	__	__
6.3	White roots and tubers and plantains Potato, white flesh sweet potato, taro; other tubers & root	__	__
6.4	Pulses, lentils, beans and groundnuts Dal, Sambar, etc.	__	__
6.5	Milk and milk products Fresh milk, powdered milk, yogurt, cheese, other dairy products (exclude small amounts of milk for tea / coffee)	__	__
6.6	Organ meat Liver, kidney, heart, other organs	__	__
6.7	Meat and poultry Flesh meat: beef, lamb, goat, chicken, duck	__	__
6.8	Fish and seafood Fish, shellfish, dry fish	__	__
6.9	Eggs Chicken eggs, duck eggs	__	__
6.10	Vitamin A-rich vegetables, Carrot, red pepper, pumpkin	__	__
6.11	Dark green leafy vegetables Spinach, amaranth, other dark green leaves,	__	__
6.12	Other vegetables Any other vegetables (Okra, Eggplant etc..)	__	__
6.13	Vitamin A-rich fruits Mango, papaya, apricot, peach	__	__
6.14	Other fruits Banana, oranges, apples and any other fruits	__	__
6.15	Sugar Sugar, jaggery, honey, jam, sweets, fizzy drinks	__	__
6.16	Oil/fats	__	__

	Vegetable oil, palm oil, butter, ghee, other fats / oil		
Food source codes:			
1 = purchase (cash)	4 = Exchange labour for food	7 = begging/scavenging	
2 = purchase (credit)	5 = support from relatives/friends	8 = Own production	
3 = Govt. Schemes	6 = barter and exchange	9 = gathering/hunting	

Annexure 4:

KII guidelines for FPS

FPS Owner

Introduction

Enumerators' introduction and present the purpose of the survey, indicating that results will be anonymized and that answers provided will not affect benefits or subsidies the mills may receive now or in the future. Check that respondent is available for the duration of the survey and ask for consent to proceed.

Hello/ Namaste sir/ma'am, my name is #.....#, and I am interviewing you on behalf of the Government of India and the United Nations World Food Programme. Currently, we are conducting a survey on special Pulses scheme that was rolled out during 2018 and 2019. Through this survey, we intend to collect experiences of beneficiaries and FPS owners to document learnings from the scheme. Sir/ma'am, as you had participated in the Pulses scheme and had further distributed the subsidised pulses to the ration card holders, we would like to ask your consent to be interviewed now on the topic.

Your participation will help in understanding your experience of receiving and distributing Pulses from FPS and its benefits. There is no risk or benefit to you by participation in the study.

You can refuse to respond to any question and can stop the interview at any time.

Everything that you report during the interview will be kept strictly confidential and will be used only for the purpose of the study. The interview will take approximately 20-30 minutes. Your participation in this survey is completely voluntary.

Do you have any question about the study? If you have questions even later on, you can contact our #-----#

I would like to receive your consent on your participation in this survey before I proceed further.

1. Respondent agreed
2. Respondent Disagreed

If at a later stage in case of any clarification, can we ask you on mobile? Can you please share the number?

Date:	(drop down menu)
Name of interviewer:	(drop down with code)

Name of the FPS Owner/Manager:	
Gender of FPS Owner/Manager:	(drop down with code)
Phone number:	
Rural/Urban	(drop down with code)
State:	(drop down with code)
District:	(drop down with code)
Block	(drop down with code)
Village/Urban Ward:	(drop down with code)
FPS No.:	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _

IDI GUIDING QUESTIONS

Overview

- Do you remember distributing pulses through your FPS during September 2018 to August 2019? Please try and recall how did you come to know about this scheme? Was there enough information provided to you about this scheme? ? Did you receive any letter or written guidelines about the scheme? Can we see and/or have a copy of the same. Please tell us about the provisions of this scheme.

Pulses Management Experience at FPS

- Please verify from your records between 2018 and 2019 and tell us for how many months did you receive and distribute Pulses (raw & milled) under this scheme? What was the quantity of pulses (raw and milled) you received each month? Please show your records.
- Please share your experiences of storing and handling of pulses in your FPS? Was there any spoilage (Raw & Milled)? Is handling pulses different from rice, wheat and coarse grains? Did you make any extra efforts to store and handle pulses in your FPS? If yes, please explain what were different kinds of efforts that were made by you.
[Probe: What were the mode of collection of the pulses for distribution and What kind of efforts were involved in collecting pulses.]
Probe: Were there any challenges related to logistics, storage & frequency of the supply]
[Probe: Were there any check and balances within the system to ensure proper distribution to the identified beneficiaries.]

Cost Benefit Analysis

4. Did you bear any additional cost on storage, handling, and distribution of Pulses? For which aspect cost was incurred. How much was this cost per kg (Rs./Kg)? What was the price that beneficiary had to pay for pulses?
5. Did you receive any additional Commission on Pulses? If yes, how much was the commission per kg (Rs./Kg)
6. Would adding Pulses to TPDS basket make your venture profitable? Could you share how incremental revenue it added per kg?

Perception on Beneficiary' satisfaction

7. Was there any positive feedback from the beneficiary on receiving pulses? Please share some of the positive feedback/stories that would help us understand the importance from a beneficiary's perspective.
8. Did you receive any complaints /comments from beneficiary on the pulses scheme? Please share those challenges expressed by the beneficiaries. Tell us what do you think about these challenges? Why they exist and what can be done to resolve them?
9. How did the beneficiary overall feel about receiving Pulses under TPDS? (Raw & Milled) Please share your perspective with examples.

Opinions of FPS owners on recommendations to continue the scheme

10. Do you have some suggestions for the Govt. on the Pulses scheme? Please help me listing them out.
11. Do you want this scheme to continue? Why would you want to continue or discontinuation of this scheme? Please explain.

Acronyms

AAJ	Antyodaya Anna Yojana
APMC	Agricultural Produce Market Committee
BPS	Beneficiary Perception Survey
CNA	Central Nodal Agency
C-PAC	Central Programme Advisory Committee
DFPD	Department of Food and Public Distribution
DoCA	Department of Consumer Affairs
DSO	District Supply Officer
EC	Economic Cost
EC	Empowered Committee
FAO	Food and Agriculture Organization
FCS	Food Consumption Score
FCS-N	Food Consumption Score Nutrition
FGDs	Focused Group Discussions
FPS	Fair Price Shop
HCR	Head Count Ratio
HH	Household
ICDS	Integrated Child Development Scheme
ICMR	Indian Council of Medical Research
IP	Issue Price
IYP	International Year of Pulses
KG	Kilogram
KII	Key Informant Interview
MDM	Mid-Day Meal
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MoSPI	Ministry of Statistics and Programme Implementation
MPCE	Monthly Per-capita Consumption Expenditure
MPI	Multidimensional Poverty Index
MT	Million Tonne
NAFED	National Agricultural Cooperative Marketing Federation
NCCF	National Cooperative Consumers' Federation

NFSA	National Food Security Act
NFSM	National Food Security Mission
NSSO	National Sample Survey Organisation
OMSS	Open Market Sale Scheme
OTR	Out Turn Ratio
PDS	Public Distribution System
PHH	Priority Households
PPS	Probability Proportional to Size
PSF	Price Stabilization Fund
PSS	Price Support Scheme
RC	Ration Card
RDA	Recommended Dietary Allowance
Rs.	Rupees
SC	Scheduled Caste
ST	Scheduled Tribe
TPDS	Targeted Public Distribution System
UTs	Union Territories
WFP	World Food Programme
WHR	Warehouse Receipt

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