PRS LEGISLATIVE RESEARCH

Functioning of the Public Distribution System

An Analytical Report

Sakshi Balani

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Public Distribution System and Food Security

Objective

During September 2013, Parliament passed the National Food Security Act (NFSA), 2013. The NFSA seeks to make the right to food a legal entitlement by providing subsidised food grains to nearly two-thirds of the population. The Act relies on the existing Targeted Public Distribution System (TPDS) mechanism to deliver these entitlements. This note describes the functioning of the existing TPDS mechanism and the role played by the centre and states. It also explores challenges in the effective implementation of TPDS and alternatives to reform the existing machinery.

Back-end process

The existing TPDS operates through a multi-level process in which the centre and states share responsibilities. The centre is responsible for procuring or buying food grains, such as wheat and rice, from farmers at a minimum support price. It also allocates the grains to each state on the basis of a formula. Within the total number of poor in each state, state governments are responsible for identifying eligible households. The centre transports the grains to the central depots in each state. After that, each state government is responsible for delivering the allocated food grains from these depots to each ration shop. The ration shop is the end point at which beneficiaries buy their food grains entitlement.

Challenges

Analyses of TPDS have revealed several gaps in implementation. These challenges pertain to the inaccurate identification of households and a leaking delivery system. Expert studies have shown that PDS suffers from nearly 61% error of exclusion and 25% inclusion of beneficiaries, i.e. the misclassification of the poor as non-poor and vice versa. Another challenge is the leakage of food grains during transportation to the ration shop and from the ration shop itself into the open market.

Issues

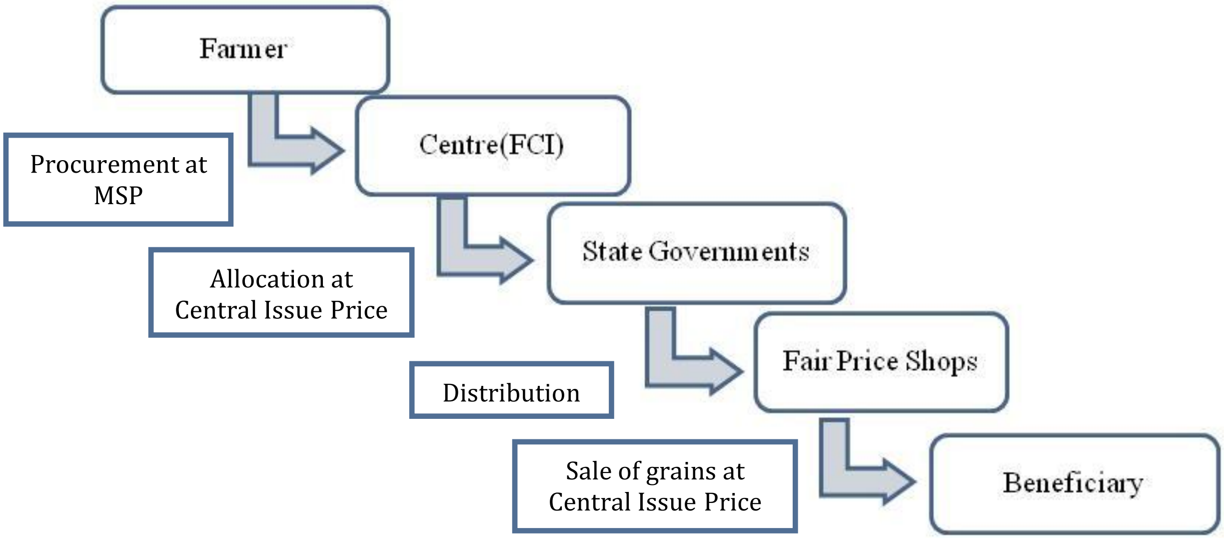
There are other issues to consider with regard to trends in procurement vis-à-vis production of food grains. As recent data show, the central government procures about a third of the quantity of cereals produced domestically. However, the amount slated for procurement is expected to increase under the Act, raising concerns regarding the sustainability of such a food delivery mechanism. There are also concerns regarding the financial feasibility of such a system. The centre bears a large financial burden, the food subsidy, because the cost of procuring and delivering food grains is about six times its sale price. It is anticipated that the food subsidy will rise steadily due to the increased procurement of grains under the Act, related costs and other factors. Furthermore, a performance audit by the Comptroller and Auditor General has revealed a serious shortfall in the government's storage capacity. Given the increasing procurement and incidents of rotting food grains, the lack of adequate covered storage is bound to be a cause for concern.

Reforms to TPDS

Despite the existence of these challenges, several states have implemented reforms to address gaps in implementation. It is important to note that while the centre plays a big role in implementing TPDS, states have flexibility to tailor TPDS according to their own priorities. This is demonstrated in states in different ways. Tamil Nadu implements a universal PDS, such that every household is entitled to subsidised food grains. States such as Chhattisgarh and Madhya Pradesh have implemented IT measures to streamline TPDS, through the digitisation of ration cards, the use of GPS tracking of delivery, and the use of SMS based monitoring by citizens.

Alternatives to TPDS

Other alternatives to TPDS include cash transfers and food coupons. Beneficiaries would directly be given either cash or coupons which can be exchanged for food grains. There are several arguments both in favour and against the effectiveness of such measures. Efforts have been made to introduce cash transfers for various schemes with the Unique Identification Number as a way to improve identification and prevent leakage of subsidy.



Context

India's Public Distribution System (PDS) is the largest distribution network of its kind in the world. PDS was introduced around World War II as a war-time rationing measure. Before the 1960s, distribution through PDS was generally dependant on imports of food grains. It was expanded in the 1960s as a response to the food shortages of the time; subsequently, the government set up the Agriculture Prices Commission and the Food Corporation of India to improve domestic procurement and storage of food grains for PDS. By the 1970s, PDS had evolved into a universal scheme for the distribution of subsidised food. In the 1990s, the scheme was revamped to improve access of food grains to people in hilly and inaccessible areas, and to target the poor.

Subsequently, in 1997, the government launched the Targeted Public Distribution System (TPDS), with a focus on the poor. TPDS aims to provide subsidised food and fuel to the poor through a network of ration shops. Food grains such as rice and wheat that are provided under TPDS are procured from farmers, allocated to states and delivered to the ration shop where the beneficiary buys his entitlement. The centre and states share the responsibilities of identifying the poor, procuring grains and delivering food grains to beneficiaries.

In September 2013, Parliament enacted the National Food Security Act, 2013. The Act relies largely on the existing TPDS to deliver food grains as legal entitlements to poor households. This marks a shift by making the right to food a justiciable right. In order to understand the implications of this Act, the note maps the food supply chain from the farmer to the beneficiary, identifies challenges to implementation of TPDS, and discusses alternatives to reform TPDS. It also details state-wise variations in the implementation of TPDS and discusses changes to the existing system by the Act.

Laws and Regulations governing TPDS

PDS has evolved from the late 1930s into its current form. Table 1 traces the developments related to TPDS since its introduction and the various laws and regulations that govern its implementation.

Table 1: Timeline of PDS: 1930s to present

Evolution of PDS	Timeline	Details
PDS	1940s	Launched as general entitlement scheme
TPDS	1997	PDS was revamped to target poor households
Antyodaya Anna Yojana	2000	Scheme launched to target the 'poorest of the poor'
PDS Control Order	2001	Government notified this Order to administer TPDS
PUCL *vs.* Union of India	2001	Ongoing case in Supreme Court contending that "right to food" is a fundamental right
National Food Security Act	2013	Act to provide legal right to food to the poor

Essential Commodities Act and PDS (Control) Order

TPDS is administered under the Public Distribution System (Control) Order 2001,[1] notified under the Essential Commodities Act, 1955 (ECA).[2] The ECA regulates the production, supply, and distribution of essential commodities including edible oils, food crops such as wheat, rice, and sugar, among others. It regulates prices, cultivation and distribution of essential commodities.

The PDS (Control) Order, 2001 specifies the framework for the implementation of TPDS. It highlights key aspects of the scheme including the method of identification of beneficiaries, the issue of food grains, and the mechanism for distribution of food grains from the centre to states.

PUCL *vs.* Union of India, 2001

In 2001, the People's Union for Civil Liberties (PUCL) filed a writ petition in the Supreme Court contending that the "right to food" is essential to the right to life as provided in Article 21 of the Constitution. During the ongoing litigation, the Court has issued several interim orders, including the implementation of eight central schemes as legal entitlements.[3] These include PDS, Antyodaya Anna Yojana (AAY), the Mid-Day Meal Scheme, and Integrated Child Development Services (ICDS). In 2008, the Court ordered that Below Poverty Line (BPL) families be entitled to 35 kg of food grains per month at subsidised prices.[4]

National Food Security Act, 2013

The National Food Security Act gives statutory backing to the TPDS. This legislation marks a shift in the right to food as a legal right rather than a general entitlement. The Act classifies the population into three categories: excluded (i.e., no entitlement), priority (entitlement), and Antyodaya Anna Yojana (AAY; higher entitlement). It establishes responsibilities for the centre and states and creates a grievance redressal mechanism to address non-delivery of entitlements. It is yet to be implemented.

Identification of eligible households under existing TPDS

The government launched TPDS in order to target food grains entitlements to poor households. Therefore, identification and classification of beneficiaries is crucial to fulfil the goals of the scheme.

Categorisation of beneficiaries

APL and BPL

Under TPDS, beneficiaries were divided into two categories:

- Households below the poverty line or BPL; and
- Households above the poverty line or APL.

BPL beneficiaries that are currently covered under TPDS were identified through a detailed process when TPDS was initially launched. The Planning Commission calculated state-wise estimates of the total number of BPL beneficiaries that would be covered under TPDS. Each state government was responsible for identifying eligible BPL households on the basis of inclusion and exclusion criteria evolved by the Ministry of Rural Development. Such households were entitled to receive a BPL ration card. APL households were not identified and any household above the poverty line could typically apply for an APL ration card.

Antyodaya Anna Yojana (AAY)

The AAY scheme was launched in December 2000 for the poorest among the BPL families.[5] Individuals in the following priority groups are entitled to an AAY card, including: (i) landless agricultural labourers, (ii) marginal farmers, (iii) rural artisans/craftsmen such as potters and tanners, (iv) slum dwellers, (v) persons earning their livelihood on a daily basis in the informal sector such as porters, rickshaw pullers, cobblers, (vi) destitute, (vii) households headed by widows or terminally ill persons, disabled persons, persons aged 60 years or more with no assured means of subsistence, and (viii) all primitive tribal households.

Entitlements under TPDS

Eligible beneficiaries are entitled to subsidised food grains such as wheat and rice. States have the discretion to provide other commodities such as sugar, kerosene, and fortified atta under TPDS. Table 2 indicates the entitlements across categories.

Table 2: Number of beneficiaries and entitlements

Category	Number of beneficiaries (crore families)	Entitlement of foodgrains (kg/family)
AAY	2.43	35 kg
BPL	4.09	35 kg
APL	11.52	15 - 35 kg
Total	18.04	-

Sources: Unstarred Question No. 256, Lok Sabha, Ministry of Consumer Affairs, Food and Public Distribution, Answered on February 26, 2013; Department of Food and Public Distribution; PRS.

Process for identification of eligible households

The centre and states identify eligible BPL households through a detailed process, as seen in Table 3.

Table 3: Process for identification of BPL families

Authority	Role	Details
National Sample Survey Organisation	Conducts sample survey of consumer expenditure every five years	Consumer expenditure is the expenditure of a household on some basic goods and services. The expenditure on this basket of goods is the basis for the poverty line
Planning Commission	Estimates state-wise poverty, i.e., the number of people below the poverty line	Uses NSSO household expenditure data
Central government[6]	Allocates food grains to each state based on state-wise poverty estimates of Planning Commission and population projections of the Registrar General of India as of March 2000	The number of BPL families has been calculated using 1993-94 poverty estimates by Planning Commission. This number has not been revised despite the release of new poverty estimates by the Planning Commission in 2004-05 and 2011-12
Ministry of Rural Development[7]	Comes out with criteria for inclusion and exclusion from BPL list as part of its BPL Census	Criteria for classification of BPL families, as per BPL Census 2002, include parameters like size of land holding, clothing owned, food security, means of livelihood etc.
State governments[8]	Identify eligible households	Based on above criteria

Sources: Department of Food and Public Distribution; Planning Commission; Ministry of Rural Development; PRS.

The government does not identify APL households; therefore, any household above the poverty line is eligible to apply for a ration card. The centre allocates food grains to states for APL families in addition to BPL families; however, this allocation is based on availability of food grains in the central stocks and the average quantity of food grains bought by states from the centre over the last three years. Hence, the allocation to a state increases if its offtake increases over the previous years.

Table 4 depicts the change in poverty since 1993, as estimated by the Planning Commission. According to the data, the percentage of the total rural and urban population that is poor has declined by 23.4 percentage points from 1993-94 to 2011-12. This implies that the number of poor households in the country eligible for assistance as BPL families would have come down. However, the government did not reduce the estimated number of BPL households and continues to provide BPL allocations based on 1993-94 poverty estimates.[9] State-wise estimates of poverty in rural and urban areas are detailed in Table 18 in the annexure.

Table 4: National percentage poverty estimates (1993 - 2012)

Year	Rural	Urban	Total
1993 – 94	50.1	31.8	45.3
2004 – 05	41.8	25.7	37.2
2011 – 12	25.7	13.7	21.9

Sources: Review of Expert Group to Review the Methodology for Estimation of Poverty, Planning Commission, 2009; Press Note on Poverty Estimates, 2011 – 12, Planning Commission, 2013; PRS.

Management of food grains for TPDS

The central and state governments share responsibilities in order to provide food grains to the identified beneficiaries. The centre procures food grains from farmers at a minimum support price (MSP) and sells it to states at central issue prices. It is responsible for transporting the grains to godowns in each state. States bear the responsibility of transporting food grains from these godowns to each fair price shop (ration shop), where the beneficiary buys the food grains at the lower central issue price. Many states further subsidise the price of food grains before selling it to beneficiaries.

The Food Corporation of India (FCI) is the nodal agency at the centre that is responsible for transporting food grains to the state godowns. Specifically, FCI is responsible for: (i) procuring grains at the MSP from farmers, (ii) maintaining operational and buffer stocks of grains to ensure food security, (iii) allocating grains to states, (iv) distributing and transporting grains to the state depots, and (v) selling the grains to states at the central issue price to be eventually passed on to the beneficiaries. Each stage of this process is discussed below.

Procurement of food grains from farmers

The food grains provided to beneficiaries under TPDS are procured from farmers at MSP. The MSP is the price at which the FCI purchases the crop directly from farmers; typically the MSP is higher than the market price. This is intended to provide price support to farmers and incentivise production.

Currently procurement is carried out in two ways: (i) centralised procurement, and (ii) decentralised procurement. Centralised procurement is carried out by the FCI, where FCI buys crops directly from farmers. Decentralised procurement is a central scheme under which 10 states/Union Territories (UTs) procure food grains for the central pool at MSP on behalf of FCI. The scheme was launched to encourage local procurement of food grains and minimise expenditure incurred when transporting grains from surplus to deficit states over long distances. These states directly store and distribute the grains to beneficiaries in the state. Any surplus stock over the state's requirement must be handed over to FCI. In case of a shortfall in procurement against an allocation made by the centre, FCI meets the deficit out of the central pool.

The centre procures and stores food grains to: (i) meet the prescribed minimum buffer stock norms for food security, (ii) release food grains under TPDS on a monthly basis, (iii) meet emergency situations arising out of unexpected crop failures, natural disasters, etc., and (iv) sell through the Open Market Sale Scheme (OMSS).[10] The central government introduced the Open Market Sale Scheme (OMSS) in 1993, to sell food grains in the open market; this was intended to augment the supply of grains to moderate or stabilise open market prices.

Storage of food grains

Apart from the food grains requirement for immediate distribution under TPDS, the central government maintains minimum buffer reserves of food stocks for emergencies. The food grains procured for TPDS and other contingencies are maintained and stored as the central pool stock. FCI is the main government agency entrusted with the storage of food grains in the central pool. According to the storage guidelines of the FCI, food grains are normally stored in covered godowns, silos, and in the open, referred to as Covered and Plinth (CAP).[11] However, FCI's own storage capacity has been insufficient to accommodate the central pool stock of food grains. As a result, FCI hires space from various agencies such as the central and state warehousing corporations, state government agencies and private parties. In an evaluation of the storage management of food grains by FCI, the Comptroller and Auditor General (CAG) noted that there is sub-optimum utilisation of the existing storage capacity available with FCI and states.[10]

CAP storage involves storage on elevated plinths with polythene covers specially made for this purpose. Normally, CAP storage capacity should only be resorted to for storing food grains during peak procurement seasons. Subsequent storage should be in the covered godowns, as storage in CAP for long duration exposes food grains to the risk of deterioration in quality.

Allocation of food grains to states

The central government allocates food grains from the central pool to the state governments for distribution to BPL, AAY and APL families. Allocation for BPL and AAY families is done on the basis of the number of identified households. On the other hand, allocation for APL families is made on the basis of: (i) the availability of food grains stocks in the central pool, and (ii) the past offtake (lifting) of food grains by a state from the central pool. Given the food grains stocks in FCI, the centre has the discretion to allocate more grains to states on an ad-hoc basis. In the past, ad-hoc allocations have been provided in the event of floods, droughts, and festivals, etc.

Distribution of food grains to beneficiaries

The responsibility of distributing food grains is shared between the centre and states. The centre, specifically FCI, is responsible for the inter-state transport of food grains from procuring to consuming states, as well as delivering grains to the state godowns. Once FCI transports grains to the state depots, distribution of food grains to end consumers is the responsibility of state governments.

On receipt of food grains, states allocate the grains to each district and further to each Fair Price Shop (FPS; ration shop) within the first week of the month. State governments are responsible for transporting food grains from the state godowns to the doorstep of each FPS in the state. Across the country, food grains are distributed to a network of around 5.13 lakh FPSs.[12] Beneficiaries buy their monthly food grains entitlements at subsidised prices from these ration shops.

Licensing of fair price shops

Fair price shops or ration shops form the last mile delivery of the TPDS network. Ration shops can be owned privately, by co-operative societies or the government. The owners of ration shops are licensed under the PDS (Control) Order, 2001 to sell essential commodities at central issue prices. Ration shop owners are issued licenses by state governments and have certain responsibilities under the scheme. These responsibilities include: (i) sale of commodities as per the entitlement of ration card holders at the retail issue prices fixed by state governments, (ii) maintenance of records and the display of information such as the list of BPL and AAY beneficiaries, entitlements of essential commodities, timings of shops, and opening and closing stocks, and (iii) maintenance of accounts of actual distribution of essential commodities and the balance stock at the end of the month to government officials and the gram panchayat.

Pricing of food grains: MSP, CIP and food subsidy

While the centre procures food grains at the MSP, the price at which food grains are sold under TPDS is much lower. The centre sells food grains to states at subsidised prices, known as central issue prices. The food subsidy is the difference between the costs incurred by the centre on MSP (including additional costs) and the central issue price.

Minimum support price

As mentioned earlier, the MSP is the price at which the centre buys food grains from farmers. Typically, the MSP is higher than the market price and is intended to incentivise production. The MSPs for various agricultural commodities are fixed by the central government based on rates recommended by the Commission for Agricultural Costs and Prices (CACP). The CACP considers certain factors such as the cost of cultivation and remunerative prices for farmers on their produce while determining the MSP. The MSPs recommended by the CACP are finally approved by the Cabinet Committee on Economic Affairs.

Central issue price

Wheat and rice are sold by the central government at uniform central issues prices (CIP) to states and union territories for distribution under TPDS. The issue prices for food grains for AAY and BPL categories have remained constant since 2000 and the CIP of APL categories since 2002.[5] Table 5 depicts the issue prices for different categories under TPDS.

Table 5: CIPs and MSPs of rice and wheat (Rs/kg)

	Rice (Grade A)				Wheat			
Year	MSP*	CIP			MSP	CIP		
		AAY	BPL	APL		AAY	BPL	APL
2002	5.40	3.00	5.65	8.30	5.50	2.00	4.15	6.10
2012	12.80	3.00	5.65	8.30	13.50	2.00	4.15	6.10

Sources: Food Corporation of India; PRS.
*The MSP is for paddy. The equivalent price of rice is about 60% higher.

The table indicates that while the CIP for food grains have remained constant through the years, the MSP has been increasing. The difference between the MSP (higher than market price) and the lower CIP is the food subsidy per kg of food grain.

Food Subsidy

The food subsidy is the difference between the cost (MSP and handling and transportation costs) and the issue price at which the beneficiary buys food grains. The centre reimburses FCI and state agencies with the food subsidy, since they are responsible for procurement and selling the procured food grains to states at CIP. The food subsidy also includes the buffer subsidy, which is the cost borne by FCI and states for maintaining buffer stocks beyond the prescribed time frame.

Implementation of TPDS: Issues and analysis

There are several issues to consider while analysing the implementation of TPDS, which relate to the (i) identification of eligible households, (ii) trends in procurement vis-à-vis production of food grains, (iii) storage space for food grains, (iv) food subsidy, and (v) leakage of food grains.

Identification of beneficiaries

Studies have shown that targeting mechanisms such as TPDS are prone to large inclusion and exclusion errors.[13] This implies that entitled beneficiaries are not getting food grains while those that are ineligible are getting undue benefits. An expert group was set up in 2009 to advise the Ministry of Rural Development on the methodology for conducting the BPL census. It estimated that about 61% of the eligible population was excluded from the BPL list while 25% of non-poor households were included in the BPL list. Table 6 categorises states according to varying levels of errors of exclusion (of BPL families). Table 19 in the Annexure uses three indicators to demonstrate the state-wise variation in inclusion and exclusion errors.

Table 6: Categorisation of states according to high and low exclusion of BPL families from TPDS

Low exclusion (less than 20%)	Andhra Pradesh, Himachal Pradesh, Madhya Pradesh, Punjab, Rajasthan, Tamil Nadu
High exclusion (more than 20%)	Assam, Bihar, Gujarat, Haryana, Karnataka, Maharashtra, Odisha, Uttar Pradesh, West Bengal

Source: "Performance Evaluation of Targeted Public Distribution System", Planning Commission, 2005.

Another indicator of inaccurate classification of beneficiaries is the existence of ghost cards in several states. 'Ghost cards' are cards made in the name of non-existent people. The existence of ghost cards indicates that grains are diverted from deserving households into the open market. Table 7 shows states grouped according to the level of leakage of grains due to the existence of ghost cards.

Table 7: Leakage through ghost cards

Moderate Leakage (less than 10%)	Andhra Pradesh, Haryana, Kerala, Punjab, Rajasthan, Tamil Nadu
High Leakage (10% - 30%)	Bihar, Gujarat, Karnataka, Maharashtra, Odisha, Uttar Pradesh, West Bengal
Very High Leakage (more than 30%)	Assam, Himachal Pradesh, Madhya Pradesh

Source: "Performance Evaluation of Targeted Public Distribution System", Planning Commission, 2005.

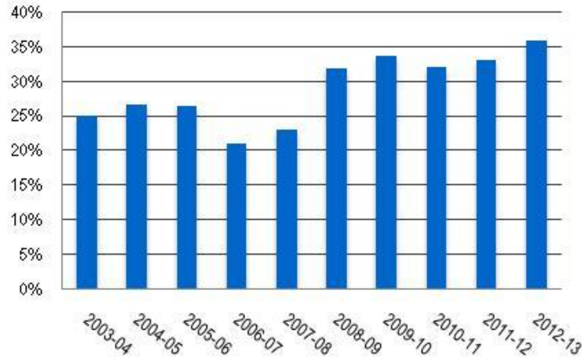
Trends in procurement vis-à-vis production

Under TPDS, nearly 75% of the population is entitled to food grains (assuming 90 crore beneficiaries; Table 16). This has ramifications for the procurement of food grains by the centre and states.

According to current trends, the government procures nearly one-third of the cereals production, which amounts to almost half of the marketed surplus (total production minus captive consumption by farmer) of wheat and rice.[14] Over the last few years, the procurement of food grains has been increasing steadily with a quantity of 70 million tonnes in 2012-13, comprising nearly 36% of production. In several states such as Punjab, Haryana and Madhya Pradesh, the state government is dominant in procuring rice and/or wheat, and controls a large proportion of the market.

Under the National Food Security Act, the centre would be required to procure nearly 61 million tonnes of food grains consistently every year to deliver rights under the law. Procurement of this quantity of food grains might be easier in years when production is high. However, in years of drought and domestic shortfall, India will have to resort to large scale imports of rice and wheat, exerting significant upward pressure on prices. This raises questions regarding the government's ability to procure grains without affecting open market prices and adversely impacting the food subsidy bill. Figure 1 indicates the rise in procurement as a percentage of production.

Figure 1: Total procurement of rice and wheat as a percentage of production (2003-2012)



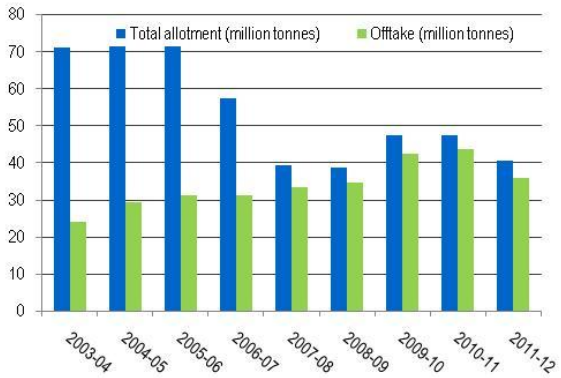
Sources: Food Corporation of India; Monthly Foodgrain Bulletins, Department of Food and Public Distribution; PRS.

- Over the last 10 years, the average procurement has been around 30% of production.
- Procurement has increased steadily from 38 million tonnes in 2003-04 to 70 million tonnes in 2012-13. The 2012-13 figure of 70 million tonnes indicates the level of procurement that will have to be sustained to provide entitlements under the Act.[12] In comparison, the CACP estimate for procurement is 61 million tonnes.

Allocation and offtake of food grain

The centre allocates food grains to states on the basis of the identified BPL population, the availability of food grains stocks, and the quantity of food grains lifted by states for distribution under TPDS. The allocation to a state changes every year on the basis of the state's average consumption over the last three years. Figure 2 depicts the total allocation and offtake (quantity lifted by states from the central godowns for distribution under TPDS) of rice and wheat from 2003-04 to 2011-12.

Figure 2: Total allocation and offtake of rice and wheat (million tonnes)



Sources: PDS Portal, Department of Food and Public Distribution; PRS.

- The offtake (lifting) of grains has increased in relation to the total amount of grains allotted to states over the last 10 years.
- However, according to the CACP, based on 2009-10 data from the National Sample Survey, consumption under TPDS was only 60% of the total offtake (see Table 13).
- This implies that nearly 40% of offtake is being leaked into the open market.

Rising food subsidy

The food subsidy, the difference between the cost of procuring food grains and the price at which they are issued to beneficiaries under TPDS, is borne by the central government. The food subsidy has increased over the years, having more than quadrupled from Rs 21,200 crore in 2002-03 to Rs 85,000 crore in 2012-13. The factors that contribute to the rising food subsidy are: (i) record procurements in recent years, as discussed above, (ii) increasing costs of buying (at MSP) and handling food grains, and (iii) a stagnant CIP.

The cost of handling food grains (MSP and other costs) has increased due to rising costs of production and increasing costs for handling and distributing food grains.[14] The cost of producing rice and wheat has gone up primarily due to sharply rising input costs such as labour and energy costs, including fertilisers. Costs of handling food grains or procurement incidentals, which include cost of gunny bags, and charges to state governments for storage and interest, etc., have also been increasing. In addition, since procurement is concentrated in a few states, the cost of distributing these food grains to other states has also increased.[14] These combined factors contribute to the rising costs of procurement and ultimately add to the food subsidy bill. In contrast, the CIP of cereals (the price at which food grains are sold to beneficiaries under TPDS) such as rice and wheat have remained constant since 2002. The widening difference between the rising cost of procuring and handling food grains and the constant issue price has been a major factor for the rising food subsidy. Tables 8 and 9 depict a comparison of the central issue prices of rice and wheat, that have remained constant, and their increasing MSPs. The MSP per kg of paddy has increased by 120% from 2003-04 to 2012-13, while the increase in MSP per kg of wheat during the corresponding years has been 114%.

Table 8: MSP and CIP of rice/paddy (Rs/kg)

Year	MSP/Paddy	Derived MSP/rice*	CIP		Derived MSP/rice - CIP	
			BPL	APL	BPL	APL
2003-04	5.8	9.3	5.7	8.3	3.6	1.0
2004-05	5.9	9.4	5.7	8.3	3.8	1.1
2005-06	6.0	9.6	5.7	8.3	4.0	1.3
2006-07	6.1	9.8	5.7	8.3	4.1	1.5
2007-08	6.8	10.8	5.7	8.3	5.2	2.5
2008-09	8.8	14.1	5.7	8.3	8.4	5.8
2009-10	9.8	15.7	5.7	8.3	10.0	7.4
2010-11	10.3	16.5	5.7	8.3	10.8	8.2
2011-12	11.1	17.8	5.7	8.3	12.1	9.5
2012-13	12.8	20.5	5.7	8.3	14.8	12.2

Sources: CACP; Food Corporation of India; PRS.
*Note: Derived MSP of rice has been calculated as 1.6 times the MSP of paddy

Table 9: MSP and CIP of wheat (Rs/kg)

Year		CIP		MSP-CIP	
	MSP	BPL	APL	BPL	APL
2003-04	6.3	4.2	6.1	2.2	0.2
2004-05	6.4	4.2	6.1	2.3	0.3
2005-06	6.5	4.2	6.1	2.4	0.4
2006-07	7.5	4.2	6.1	3.4	1.4
2007-08	10.0	4.2	6.1	5.9	3.9
2008-09	10.8	4.2	6.1	6.7	4.7
2009-10	11.0	4.2	6.1	6.9	4.9
2010-11	11.2	4.2	6.1	7.1	5.1
2011-12	12.9	4.2	6.1	8.7	6.8
2012-13	13.5	4.2	6.1	9.4	7.4

Sources: CACP; Food Corporation of India; PRS.

Change in food subsidy with implementation of the Act

Food subsidy is likely to increase initially as the new Act is implemented, and rise steadily thereafter. The initial increase will be due to a rise in per kg subsidy as the average issue prices under the new

Act are lower than the current level. The subsequent growth will be driven by two factors. Since, the proportion of the population covered is constant, the number of eligible beneficiaries will increase with the population growth. This will result in an increase in the quantity of food grains to be procured. Second, the MSP will tend to rise with inflation in input prices; if the issue prices are not revised upward, the subsidy per kg of grains will increase. Figure 3 demonstrates the rise in food subsidy as a percentage of GDP.

Total food subsidy expenditure = food subsidy/person x no. of beneficiaries

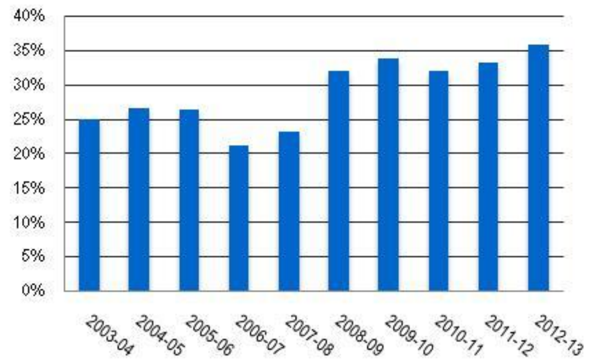
↓ ↓

[per kg subsidy {(MSP etc.) - CIP} x no. of kg/person] x [% of pop. covered x total pop.]

↓ ↓ ↓ ↓

Increases with time | constant | constant | increases with time

Figure 3: Food subsidy as a % of GDP (2003-2012)



Source: India Budget; MOSPI; PRS.

- Food subsidy, as a percentage of GDP, has increased from 0.5% in 2007-08 to 0.8% in 2012-13.
- The rising food subsidy is due to the constant CIP of food grains and an increasing MSP.
- In real terms, the subsidy per person has increased over this duration.

Cost estimates of implementing the Act

When the Bill was introduced in Parliament in 2011, the government estimated the annual cost of implementation at about Rs 95,000 crore. In its representation to the Standing Committee, the central government estimated that the actual expenditure or the food subsidy would be closer to Rs 1,12,000 crore.[15] However, other experts such as the CACP have estimated an expenditure of about Rs 6 lakh crore for the next three years.[16] The Food Ministry has been reported saying that the total cost of implementation will be Rs 1.26 lakh crore.[17] Table 10 compares cost estimates by various experts.

Table 10: Cost estimates of implementing the National Food Security Act, 2013

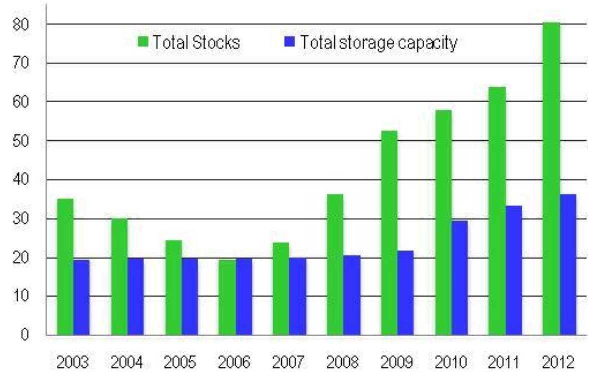
National Food Security Act, 2013	Commission for Agricultural Costs and Prices[18]
95,000 – 1,26,000	2,41,263 – 2,17,485

Sources: National Food Security Act, 2013; Standing Committee on Food, Consumer Affairs and Public Distribution; Commission for Agricultural Costs and Prices; PRS.

Shortfall in storage capacity with FCI against the central pool stock

After obligations under TPDS have been met, the food grains that have been procured need to be stored as a buffer stock. The government also aims to create storage capacity for procured food grains in procuring states and transfers food grains from surplus regions to deficit regions. While there has been a sharp hike in procurement from 19.6 million tonnes in 2008 to 82.0 million tonnes in 2012, FCI's storage capacity (both owned and hired) has not increased commensurate to the growth in procurement.[19] In its report, the CAG found that from 2008-09 onwards, due to the increase in procurement of food grains, there was a severe strain on storage capacity available in the country for the central pool stock.[10] Figure 4 shows the increasing food grains stocks and the slower increase in FCI storage capacity.

Figure 4: Total food grains stocks and available FCI storage capacity in million tonnes (2003-2013)



Sources: Food Corporation of India; pdsportal.nic.in; PRS

- With the increasing food grains stocks, FCI's storage gap increased from 5.9 million tonnes in 2007-08 to 33.2 million tonnes in 2011-12.
- As of 2012, food grains stocks of rice and wheat were at 80.5 MT, nearly double the total storage capacity available with FCI.
- This implies that a certain amount of grains is being stored in unscientific storage, leading to the rotting of food grains.

The CAG audit also found that the owned storage capacity with FCI remained stagnant, ranging from 15.1 to 15.6 million tonnes during the period 2006-07 to 2011-12 and was not enough to accommodate the minimum buffer stock of 21.2 to 31.9 million tonnes.[10] Key findings from the CAG audit were:

- *Imbalances in availability of storage capacity across states:* There is an imbalance in the availability of storage capacity across regions. On the one hand, there is a shortage of space in consuming states, such as Rajasthan and Maharashtra, which together account for 13 percent of the total capacity of the FCI.[10] On the other hand, 64 percent of the total storage capacity is concentrated in states undertaking large procurement such as Punjab, Haryana, Andhra Pradesh, Uttar Pradesh and Chhattisgarh.
- *Maximum buffer norms not specified:* The minimum buffer norms prescribed by the government do not clearly delineate individual elements of food security (e.g., emergency, price stabilisation, food security reserve, and TPDS) within the minimum buffer stock. The existing norms also do not specify the maximum stock that should be maintained in the central pool for each of the above components.
- *Low utilisation of existing capacity in various states/UTs:* The audit observed that despite storage constraints in FCI, utilisation of existing storage capacity in various states/UTs was less than 75 percent in the majority of the months during the period 2006-07 to 2011-12.

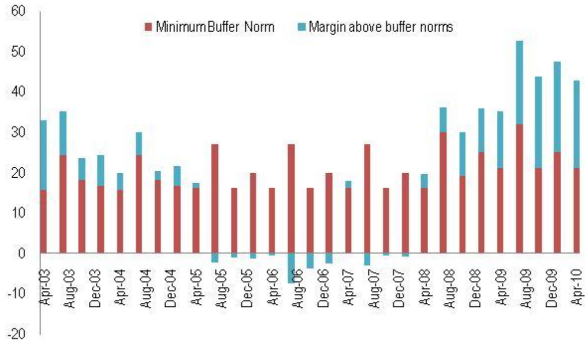
Supreme Court order on rotting of food grains in CAP storage[20]

In August 2010, in the ongoing case of PUCL *vs.* Union of India, the Supreme Court found that food grains were rotting due to inadequate storage. It directed the central government to adopt long and short term measures to store and preserve procured food grain, and prevent rotting, including: (i) constructing adequate FCI storage facilities in each state and division, (ii) increasing allocation to BPL families, (iii) opening FPSs for all days in the month, and (iv) distributing food grains to beneficiaries at low or no costs.

More central food grains stocks than minimum buffer norms

The centre procures food grains to meet requirements under TPDS as well as to maintain minimum buffer stocks for contingencies. In a discussion paper, the then Chief Economic Advisor, Kaushik Basu noted that the centre holds food reserves significantly higher than the stated buffer norms.[21] He argued that food grains need to be released into the market to contain food-price inflation. Figure 5 depicts season-wise minimum buffer norms and the margin of central stocks held by the centre above this minimum.

Figure 5: Minimum FCI food grains buffer norms and margin above buffer norms (2003-2010)



Sources: "Economics of food grains management in India", Ministry of Finance, September 2010; PRS.

- The figure indicates that the margin of stocks above the minimum buffer stocks has been increasing over the years. This could lead to the rotting or hoarding of food grains.
- The holding of stocks above the minimum buffer norms also adversely impacts prices of grains in the open market. This affects poor households, which buy the remaining requirement of food grains from the open market.

Leakage of food grains

TPDS suffers from large leakages of food grains during transportation to and from ration shops into the open market. In an evaluation of TPDS, the Planning Commission found 36% leakage of PDS rice and wheat at the all-India level.[22] The following tables provide data on states with varying leakage of food grains.

Table 11: Overall leakage of food grains across states

Low Leakage (less than 25%)	Andhra Pradesh, Kerala, Orissa, Tamil Nadu, West Bengal
High Leakage (25% - 50%)	Assam, Gujarat, Himachal Pradesh, Karnataka, Maharashtra, Rajasthan
Very High Leakage (50% - 75%)	Haryana, Madhya Pradesh, Uttar Pradesh
Abnormal Leakage (more than 75%)	Bihar, Punjab

Source: "Performance Evaluation of Targeted Public Distribution System", Planning Commission, 2005.

Table 12: Leakage of food grains at the fair price shop

Very Low Leakage (less than 10%)	Assam, Himachal Pradesh, Madhya Pradesh, Odisha, Tamil Nadu, West Bengal
Moderate Leakage (10% - 25%)	Andhra Pradesh, Gujarat, Karnataka, Kerala, Maharashtra
High Leakage (25% - 50%)	Rajasthan, Uttar Pradesh
Very High Leakage (more than 50%)	Bihar, Haryana, Punjab

Source: Performance Evaluation of Targeted Public Distribution System", Planning Commission, 2005.

The CACP observed high leakage of food grains in 2004-05 and 2009-10, the two years for which National Sample Survey data on consumption from TPDS are available. In 2009-10, of a total allocation of 47.6 million tonnes, 42.4 million tonnes were lifted by states. However, CACP noted that only 25.3 million tonnes were actually consumed, implying a leakage of 40.4 percent of food grains from the TPDS network. Leakage also decreased from 54.1 per cent in 2004-05 to 40 per cent in 2009-10. Table 13, reproduced from the CACP discussion paper, indicates the allocation, offtake and consumption of grains in 2004-05 and 2009-10.

Table 13: Offtake compared to consumption of food grains (all India) in million tonnes

Cereal	Year	Allocation	Offtake	Consumption as per NSS	Leakage	Leakage (in %)
Rice	2004-05	34.5	16.5	9.9	6.5	39.8
	2009-10	24.8	23.4	17.5	5.9	25.1
Wheat	2004-05	37.3	12.9	3.6	9.3	72.4
	2009-10	22.8	18.9	7.8	11.2	59.1
Total (Rice + Wheat)	2004-05	71.7	29.4	13.5	15.9	54.1
	2009-10	47.6	42.4	25.3	17.1	40.4

Source: Commission for Agricultural Costs and Prices.

Mechanisms to strengthen TPDS

Reforms have been proposed to make the TPDS more effective. Major reforms include using information technology and leveraging Aadhaar to improve identification of beneficiaries.[8]

Role of Aadhaar

One of the key problems in the implementation of TPDS is the inclusion and exclusion errors in the identification of beneficiaries. Proposals have been made to integrate the Unique Identification or Aadhaar number with several government schemes, including TPDS to address this problem. The Aadhaar number would be used to accurately identify and authenticate beneficiaries entitled to receive subsidies under TPDS and other government schemes. According to a study by the Unique Identification Authority of India, using Aadhaar with TPDS would help eliminate duplicate and ghost (fake) beneficiaries, and make identification of beneficiaries more accurate.[23]

Technology-based reforms of TPDS implemented by states

The Supreme Court appointed a committee under the chairmanship of Justice Wadhwa to look into reforms to the TPDS that have been implemented by various states. In its 2009 report, the Wadhwa Committee found that certain states had implemented computerisation and other technology-based reforms to TPDS. Technology-based reforms helped plug leakages of food grains during TPDS. The Committee found that the current manual recording of eligibility of beneficiaries and transactions was prone to human errors and tampering. Furthermore, there was pilferage through the distribution network and no central monitoring system to ensure end-to-end delivery. The Committee observed that end-to-end computerisation could curb large-scale diversion and help track the delivery of food grains from state depots to beneficiaries. Table 14 highlights some IT-based reforms implemented by states and the challenges they address:

Table 14: Technology-based reforms to TPDS undertaken by some states

Type of reform	Benefits of reform	States implementing reforms
Digitisation of ration cards	▪ Allows for online entry and verification of beneficiary data ▪ Online storing of monthly entitlement of beneficiaries, number of dependants, offtake of food grains by beneficiaries from FPS, etc.	Andhra Pradesh, Chhattisgarh, Tamil Nadu, Madhya Pradesh, Karnataka, Gujarat, etc.
Computerised allocation to FPS	▪ Computerises FPS allocation, declaration of stock balance, web-based truck challans, etc. ▪ Allows for quick and efficient tracking of transactions	Chhattisgarh, Delhi, Madhya Pradesh, Tamil Nadu, etc.
Issue of smart cards in place of ration cards	▪ Secure electronic devices used to store beneficiary data ▪ Stores data such as name, address, biometrics, BPL/APL category and monthly entitlement of beneficiaries and family members ▪ Prevents counterfeiting	Haryana, Andhra Pradesh, Orissa, etc.
Use of GPS technology	▪ Use of Global Positioning System (GPS) technology to track movement of trucks carrying food grains from state depots to FPS	Chhattisgarh, Tamil Nadu
SMS based monitoring	▪ Allows monitoring by citizens so they can register their mobile numbers and send/receive SMS alerts during dispatch and arrival of TPDS commodities	Chhattisgarh, Uttar Pradesh, Tamil Nadu
Use of web-based citizens' portal	▪ Publicises grievance redressal machinery, such as toll free number for call centres to register complaints or suggestions	Chhattisgarh

Sources: Justice Wadhwa Committee Report on Computerisation of PDS Operations, 2009; PRS.

Case study: Chhattisgarh Food Security Act

On December 1, 2012, the Chhattisgarh Assembly passed the Chhattisgarh Food Security Act, 2012, preceding the National Food Security Act. The Act provides statutory backing to TPDS and the reforms implemented by the state to improve TPDS. Key features of the Act are:[24]

Provision	Detail
Beneficiaries	AAY, priority and general households; state government shall prescribe guidelines for their identification including guidelines for excluded households
Entitlements/month	AAY and priority households - 35 kg of food grain, 2 kg each of iodised salt, black gram and pulses (subsidised) General households - 15 kg of food grains (subsidised)
Special groups	Pregnant women and lactating mothers, children up to 14 years, students in hostels and ashrams, destitute, homeless, migrants, emergency or disaster affected persons
Implementing authorities	Local authorities shall be responsible for: (i) identification of eligible households, (ii) issuing ration cards, (iii) monitoring and supervision of fair price shops, and (iv) conducting social audits of fair price shops.
Grievance Redressal Mechanism	Internal mechanism including call centres, nodal officers, etc. Provision of entitlements to eligible households shall be notified as services to be provided under the Chhattisgarh Public Service Guarantee Act, 2011
Reforms to TPDS	Includes doorstep delivery of grains to ration shops, leveraging Aadhaar for targeting of beneficiaries, and maintenance of adequate buffer stocks of food items
Force Majeure	The state government shall not be held liable for a lack of supply due to war, flood, drought, fire, etc

Alternatives to TPDS

There are some alternatives to TPDS, which address some problems during implementation. Tamil Nadu implements a Universal rather than a Targeted PDS. Experts have noted that PDS could be replaced with cash transfers or food coupons.[31] Each of these alternatives is discussed below in detail.

Universal PDS

When PDS was first introduced, it was a universal entitlement scheme. In 1997, it was changed into the Targeted PDS. Unlike most states in the country, Tamil Nadu retained the Universal PDS, providing subsidised food grains to the entire population. Certain features of the Universal PDS in Tamil Nadu are analysed and compared to the current TPDS below. Universal PDS helps the state avoid errors in targeting beneficiaries.

Case study: Universal PDS in Tamil Nadu[25]

Non-classification of beneficiaries - Subsidised PDS commodities are distributed to all residents without classifying them into different categories. According to the Justice Wadhwa Committee Report, non-classification helps the state avoid errors of exclusion of eligible and vulnerable families. However, TN identifies AAY beneficiaries.

Commodities provided under universal PDS - Rice is distributed at the price of Re 1/ kg to everyone, lower than the central issue price. Families are not given 35 kg as mandated by the central government; rice cardholders get anywhere between 12-20 kg rice depending on the number of individuals in their family.

Groups involved in the distribution of food grains - No private trader is engaged in the PDS activity. Ration shops are mainly run by the cooperative societies and the Tamil Nadu Civil Supplies Corporation, the FCI counterpart in the state.

Cash Transfers

The National Food Security Act, 2013 includes cash transfers and food coupons as possible alternative mechanisms to the PDS.[26] Beneficiaries would be given either cash or coupons by the state government, which they can exchange for food grains. Such programmes provide cash directly to a target group – usually poor households. Some potential advantages of these programmes include: (i) reduced administrative costs, (ii) expanded choices for beneficiaries, and (iii) competitive pricing among grocery stores.

However, cash transfers may expose recipients to price fluctuation, if they are not frequently adjusted for inflation. Such programmes also do not address the issue of inclusion of ineligible beneficiaries and the exclusion of eligible ones. Additionally, since cash transfers include the transfer of money directly to the beneficiary, poor access to banks and post offices in some areas may reduce their effectiveness.[27] In January 2013, the Ministry of Consumer Affairs, Food and Public Distribution introduced a pilot scheme in six Union Territories for the direct transfer of cash subsidy under TPDS.[28]

According to a UIDAI paper by the Planning Commission, using Aadhaar with cash transfers would help eliminate duplicate and fake beneficiaries, and make identification for entitlements more effective.[23] The central government plans to integrate the Unique Identification or Aadhaar number with government schemes such as TPDS to better identify and authenticate beneficiaries.

Food coupons

Food coupons are another alternative to PDS.[29] Beneficiaries are given coupons in lieu of money, which can be used to buy food grains from any grocery store. Under this system, grains will not be given at a subsidised rate to the PDS stores. Instead, beneficiaries will use the food coupons to purchase food grains from retailers (which could be PDS stores). Retailers take these coupons to the local bank and are reimbursed with money. According to the Economic Survey 2009-10 reports, such a system will reduce administrative costs.[29] Food coupons also decrease the scope for corruption since the store owner gets the same price from all buyers and has no incentive to turn the poor buyers away. Moreover, BPL customers have more choice; they can avoid stores that try to sell them poor-quality grain.

However, some problems could exist while designing such a system.[30] Food coupons can be counterfeited. Regular delivery of food coupons to the intended beneficiaries could also pose logistical challenges; there is a need to ensure the timely reimbursement of subsidy to the participating retailers.

PDS vs. Cash Transfers – a comparison

Table 15: Advantages and disadvantages of PDS and other delivery mechanisms[31]

Mechanism	Advantages	Disadvantages
PDS	Insulates beneficiaries from inflation and price volatility	Low offtake of food grains from each household
	Ensures entitlement is used for food grains only	High leakage and diversion of subsidised food grain
	Well-developed network of FPS ensures access to food grains even in remote areas	Adulteration of food grain
		Lack of viability of FPS due to low margins
Cash transfers	Cash in the hands of poor increases their choices	Cash can be used to buy non-food items
	Cash may relieve financial constraints faced by the poor, make it possible to form thrift societies and access credit	May expose recipients to price volatility and inflation
	Administrative costs of cash transfer programmes may be significantly lesser than that of other schemes	There is poor access to banks and post offices in some areas
	Potential for making electronic transfer	
Food coupons	Household is given the freedom to choose where it buys food	Food coupons are not indexed for inflation; may expose recipients to inflation
	Increases incentive for competitive prices and assured quality of food grains among PDS stores	Difficult to administer; there have known to be delays in issuing food coupons and reimbursing shops
	Ration shops get full price for food grains from the poor; no incentive to turn the poor away	

Sources: See Endnote 31; PRS.

Changes in TPDS with Food Security Act, 2013

The National Food Security Act, 2013 seeks to make the right to food a statutory right. The Act implements some key changes to the existing TPDS, as can be seen in Table 16.

Table 16: Comparison of existing TPDS with the National Food Security Act

Provision	Current TPDS	National Food Security Act 2013
Implication for 'right to food'	Set up under administrative order; no legal backing	Provides statutory backing for right to food
Coverage	90.2 crore beneficiaries = 18.04 crore families x 5 (average no. of members in a family)	Up to 75% of rural and up to 50% of urban population, about 81.34 crore beneficiaries[32]
Categories	AAY, BPL, and APL	AAY, priority, and excluded
Entitlements per category	BPL and AAY: 35 kg/family/month APL: 15 – 35 kg/family/month	Priority: 5 kg/person/month AAY: 35 kg/family/month
Prices of food- grains	AAY: Rs 3/kg for rice, Rs 2/kg for wheat, and Re 1/kg for coarse grains Other categories: differs across states	All categories: Rs 3/kg for rice, Rs 2/kg for wheat, and Re 1/kg for coarse grains
Identification of beneficiaries	Centre: ▪ releases state-wise estimates of population to be covered under TPDS ▪ creates criteria for identification States: Identify eligible households	Centre: releases state-wise estimates of population to be covered under Act States: ▪ create criteria for identification ▪ identify eligible households
Centre-state responsibility	Centre: procurement; state-wise allocation; transport of grains up to state depots; storage States: delivery of grains from state depots to ration shop to beneficiary	Same as current system with some additions Centre: provides food security allowance to states to pass on to beneficiaries Centre and states: not responsible for failure to supply food grains during force majeure conditions, e.g., war, flood, drought
Grievance redressal mechanism	State governments responsible for ensuring monitoring; vigilance committees to be set up at state, district, block and ration shop levels	Appoints district grievance redressal officers; establishes State Food Commissions; and vigilance committees at state, district, block and ration shop levels

Sources: PDS (Control) Order, 2001; National Food Security Act, 2013; PRS.

Other issues

Minimum Support Price: Implications for agricultural production and food prices

This note examines the functioning of the public distribution system, and touches upon the related issue of MSP and procurement of food grains. There are some issues related to MSP that have not been explored and require further study. These include the effects of MSP on production of non-cereal crops and implications for water resources.

The current policy holds food grains as the key to food and nutrition security. The Act's focus on rice and wheat goes against recent trends which show that Indians are gradually diversifying their diet to protein-rich foods such as dairy, eggs and poultry, as well as fruits and vegetables.[14] The increased procurement requirements under the Act will serve to incentivise production of cereals like rice and wheat, at the exclusion of other crops such as pulses, fruits and vegetables. In turn, this would affect prices of these commodities in the market.

Another related issue that requires further examination is the environmental sustainability of MSP and procurement of cereals. The over-emphasis on attaining self-sufficiency and a surplus in food grains, which are water-intensive, has been found to be environmentally unsustainable.[33] Procuring states such as Punjab and Haryana are under environmental stress, including rapid groundwater depletion, deteriorating soil and water conditions from overuse of fertilisers. It was found that due to cultivation of rice in north-west India, the water table went down by 33 cm per year during 2002-08.[34]

Table 17: Food security schemes in some states

State	Centre (Proposed)	Bihar[35]	Chhattisgarh[24]	Gujarat[36]	Haryana[37]	Kerala[35]	Madhya Pradesh[38]
Law / Scheme	National Food Security Act, 2013	Existing central schemes[39]	Chhattisgarh Food Security Act, 2012	Central schemes	Central schemes	Central schemes	Central schemes and Mukhyamantri Annapurna Yojana
Beneficiaries	Priority; AAY; pregnant women and lactating mothers; children	AAY, BPL, APL. State government claims to cover more BPL beneficiaries than those covered by the centre	AAY, priority, general, pregnant women and lactating mothers, children, destitute, homeless, migrants	AAY, BPL, APL. State government claims to cover more BPL beneficiaries than those covered by the centre.APL is further classified according to income	AAY and BPL	AAY, BPL, APL. State government claims to cover more BPL beneficiaries than those covered by the centre	AAY, BPL, destitute and elderly and others
Type of food grain	Wheat, rice, and coarse cereals	Rice, wheat, and sugar	Foodgrains, iodised salt, black gram, and pulses	Rice, wheat, and fortified atta	Wheat, sugar and kerosene	Rice, wheat and sugar	Rice, wheat, iodised salt, and kerosene
Entitlements (in Rs/kg/household/month)[1]	**AAY:** 35 kg of food grains (at Rs 3/kg for rice, Rs 2/kg for wheat, Re 1/kg for coarse grains)	**AAY:** 14 kg of wheat and 21 kg of rice (at Rs 2 and Rs 3 respectively)	**AAY:** 35 kg of food grains, 2 kg of iodised salt, 2 kg of black gram, and 2 kg of pulses (at Re 1, free, Rs 5, and Rs 10 respectively)	**AAY:** 16.7 kg of fortified atta and 16 kg of rice (at Rs 38/bag and Rs 3 respectively)	**AAY:** 35 kg of wheat, 2.85 kg of sugar and 5 ltr of kerosene (at Rs 2, Rs 13 and Rs 13 respectively)	**AAY:** 35 kg of rice and 400 gm of sugar (at Re 1 and Rs 13 respectively)	**AAY:** 35 kg of wheat and rice and 2 kg of sugar. Wheat, rice and iodised salt (at Re 1, Rs 2, and Re 1) are provided to beneficiaries of the Mukhyamantri Annapurna Yojana
	Priority: 5 kg of food grains/*person*/month (at Rs 3/kg for rice, Rs 2/kg for wheat, Re 1/kg for coarse grains)	**BPL:** 25 kg (10 kg of wheat, 15 kg of rice) and 1 kg of sugar (at Rs 5, Rs 7, and Rs 13 respectively)	**Priority:** 35 kg of food grains, 2 kg of iodised salt, 2 kg of black gram, 2 kg of pulses (at AAY rates)	**BPL:** 9 kg of wheat and 3.5 kg of rice (at Rs 2 and Rs 3 respectively) **State BPL:** 5 kg of wheat and 2 kg of rice (at Rs 5 and Rs 6 respectively)	**BPL:** 35 kg of wheat, 2.85 kg of sugar and 5 ltr of kerosene (at Rs 5, Rs 13, and Rs 13 respectively)	**BPL:** 5 kg of wheat, 25 kg of rice and 400 gm of sugar (at Rs 2, Re 1 and Rs 13 respectively)	**BPL:** 20 kg of wheat and rice, 2 kg of rice (at Re 1 for wheat and Rs 2 for rice) and 5 ltr of kerosene for non gas users
	Pregnant women: subject to scheme and maternity benefit of Rs 6,000. **Children:** one free mid-day meal	**APL:** 18 kg of wheat, and rice (at Rs 7 and Rs 9 respectively)	**General:** 15 kg of food grains (Rice: Rs 9, the price of other food grains shall not exceed 50% of the Minimum Support Price)	**APL:** 10 kg of wheat (at Rs 7)		**APL:** 3 kg of wheat, 10 kg of rice and 2 kg of fortified atta (at Rs 7, Rs 9 and Rs 12 respectively)	**APL:** 5 kg of wheat and 2-4 ltr of kerosene

[1] The central government issues food grains to states at a fixed rate that has remained constant since 2000. For AAY, the issue prices for rice and wheat are Rs 3 and Rs 2 respectively; for BPL, the prices are Rs 5.65 and Rs 4.15; and for APL, Rs 8.30 and Rs 6.10.

Table 17 continued…

State	Centre	Meghalaya[40]	Punjab[41]	Rajasthan[42]	Tamil Nadu[43]	Uttar Pradesh[44]	West Bengal[45]
Law / Scheme	National Food Security Act, 2013	Central Schemes	Central schemes and Atta Dal Scheme	Central schemes	Universal PDS	Central Schemes	Central schemes and special schemes for tea garden workers, tribal communities and BPL residents of Junglemahal, Singur and Aila
Beneficiaries	Priority, AAY, pregnant women and lactating mothers; children	AAY, BPL and APL. In addition, rice is provided at discounted rates to residents of SC/ST hostels	AAY, BPL, APL under TPDS and other economically weak families	AAY, BPL, APL. State government claims to cover more BPL beneficiaries than those covered by the centre	There is no differentiation between APL and BPL, although a separate AAY category has been created	AAY, BPL and APL	AAY, BPL, APL, tea garden workers, residents of Singur and Aila, and tribal communities of Junglemahal
Type of entitlement	Wheat, rice, and coarse cereals	Rice, wheat, sugar and kerosene	Rice, wheat, sugar, pulses, and kerosene	Rice, wheat, sugar, atta and kerosene	Rice, sugar, wheat and kerosene	Wheat, rice, sugar, and kerosene	Rice, wheat, sugar and kerosene
Entitlements (in kg/household/month)	**AAY:** 35 kg of food grains (at Rs 3/kg for rice, Rs 2/kg for wheat, Re 1/kg for coarse grains)	**AAY:** 1-5 kg of wheat, 35 kg of rice and 697 gm of sugar (at Rs 6-7, Rs 3 and Rs 13 respectively). Rural and urban families receive 4 and 9 ltr respectively (at Rs 16-18/ltr)	**AAY:** 35 kg of wheat (at Rs 2) **Atta Dal Scheme** (which is run in addition to PDS) the following entitlements exist: 25 kg of wheat and 2.5 kg of pulses (at Rs 4 and Rs 20 respectively)	**AAY:** 35 kg of wheat and rice (at Rs 2 and Rs 3 respectively)	Rice, 5 kg of wheat (10 kg in Chennai and district headquarters), 2 kg of sugar and 3-15 ltr of kerosene (depending on location) (at Rs 8, free, Rs 13 and Rs 13 -14 respectively)	**AAY:** 15 kg of wheat, 20 kg of rice, 700 gm of sugar (at Rs 2, 3 and 13.50), kerosene 3 ltr	**AAY** (per adult): 750 gm of wheat, 1 kg of rice, 500 gm of sugar and 750 – 900 ml of kerosene (at Rs 2, Rs 2, Rs 13 and Rs 15 -16/ltr respectively) In Kolkata and Bidhannagar, 2 ltr of kerosene are sold at Rs 14.9/litre
	Priority: 5 kg of food grains/person/month (at Rs 3/kg for rice, Rs 2/kg for wheat, Re 1/kg for coarse grains)	**BPL:** Same as above	**BPL:** 35 kg of wheat (at Rs 5)	**BPL:** 25 kg of wheat, rice, 500 gm of sugar, 10 kg of atta and 2-5 ltr of kerosene (at Rs 2, Rs 6, Rs 13, Rs 6 and Rs 14 respectively)	Same as above	**BPL:** 12 kg of rice, 23 kg of wheat , 700 gm of Sugar (at Rs 6.15, Rs 4.65 and Rs 13.50) kerosene 3 ltr	**BPL:** 750 gm of wheat, 1 kg of rice, 500 gm of sugar and 750 – 900 ml of kerosene (at Rs 5, Rs 2, Rs 13 and Rs 15 – 16/ltr respectively)
	Pregnant women: subject to scheme and maternity benefit of Rs 6,000. **Children:** one free mid-day meal	**APL:** 1-5 kg of wheat, 16.15 kg of rice and 697 gm of sugar (at Rs 7, Rs 10-11 and Rs 13-14 respectively). Rural and urban families receive 4 and 9 ltr (at Rs 16 –18/ltr)	**APL:** 35 kg of wheat (at Rs 6.23)	**APL:** 35 kg of wheat (at Rs 7)	Same as above	**APL:** 12 kg of rice, 23 kg of wheat (at Rs 8.45 and Rs 6.60) kerosene 3 ltr	**APL:** 500 gm of wheat, 250 gm of rice (in select areas), and 750 – 900 ml of kerosene (at Rs 7, Rs 9, and Rs 15 – 16/ltr respectively)

Annexure

Tendulkar Committee methodology for the estimation of poverty

In 2009, a Planning Commission expert group, chaired by Suresh Tendulkar, reviewed the methodology for poverty estimation and suggested changes to the way poverty is measured.[46] It recommended four major changes: (i) a shift away from calorie consumption based poverty estimation; (ii) a uniform poverty line basket (PLB) across rural and urban India; (iii) a change in the price adjustment procedure to correct spatial and temporal issues with price adjustment; and (iv) an incorporation of private expenditure on health and education while estimating poverty. The Committee recommended using Mixed Reference Period (MRP) based estimates, as opposed to Uniform Reference Period (URP) based estimates that were used in earlier methods for estimating poverty.[46] A Mixed Reference Period measures consumption of five items (clothing, footwear, durables, education and institutional health expenditure) for the previous year, and all other items for the previous thirty days.

The Committee based its calculations on the consumption of the following items: cereal, pulses, milk, edible oil, non-vegetarian items, vegetables, fresh fruits, dry fruits, sugar, salt & spices, other food, intoxicants, fuel, clothing, footwear, education, medical (non-institutional and institutional), entertainment, personal & toilet goods, other goods, other services and durables.

The Committee computed new poverty lines for rural and urban areas of each state. To do this, it used data on value and quantity consumed of the items mentioned above by the population that was classified as poor by the previous urban poverty line. It concluded that the all India poverty line was Rs 446.68 per capita per month in rural areas and Rs 578.80 per capita per month in urban areas in 2004-05. It revised its estimates in 2009-10 and then in 2011-12. Table 18 presents the state-wise poverty estimates of the Tendulkar Committee report. As can be seen in the table below, according to the Committee's 2011-12 estimates, a total of 21.9 percent of the national population is below the poverty line. This indicates a decrease of nearly 15 percentage points in poverty from 2004-05.

Table 18: State-wise poverty estimates (1993 – 2012)

State	1993-94	2004- 05	2009-10	2011- 12	State	1993 -94	2004- 05	2009-10	2011- 12
Andhra Pradesh	44.6	29.9	21.1	9.2	Maharashtra	47.8	38.1	24.5	17.4
Arunachal Pradesh	54.5	31.1	25.9	34.7	Manipur	65.1	38.0	47.1	36.9
Assam	51.8	34.4	37.9	31.9	Meghalaya	35.2	16.1	17.1	11.9
Bihar	60.5	54.4	53.5	33.7	Mizoram	11.8	15.3	21.1	20.4
Chhattisgarh	50.9	49.4	48.7	39.9	Nagaland	20.4	9.0	20.9	18.9
Delhi	15.7	13.1	14.2	9.9	Odisha	59.1	57.2	37.0	32.6
Goa	20.8	25.0	8.7	5.1	Puducherry	30.9	14.1	1.2	9.7
Gujarat	37.8	31.8	23	16.6	Punjab	22.4	20.9	15.9	8.3
Haryana	35.9	24.1	20.1	11.6	Rajasthan	38.3	34.4	24.8	14.7
Himachal Pradesh	34.6	22.9	9.5	8.1	Sikkim	31.8	31.1	13.1	8.2
Jammu & Kashmir	26.3	13.2	9.4	10.4	Tamil Nadu	44.6	28.9	17.1	11.3
Jharkhand	60.7	45.3	39.1	36.9	Tripura	32.9	40.6	17.4	14.1
Karnataka	49.5	33.4	23.6	20.9	Uttar Pradesh	48.4	40.9	37.7	29.4
Kerala	31.3	19.7	12.0	7.1	Uttarakhand	32.0	32.7	18.0	11.3
Madhya Pradesh	44.6	48.6	36.7	31.7	West Bengal	39.4	34.3	26.7	19.9
					All India	**45.3**	**37.2**	**29.8**	**21.9**

Sources: Review of Expert Group to Review the Methodology for Estimation of Poverty, Planning Commission, 2009; Press Note on Poverty Estimates, 2011-12, Planning Commission, 2013; PRS.

Table 19: Distribution of cardholders among poor and non poor in some states

State	% of poor with no ration card	% poor with BPL/AAYcards	% non-poor with BPL/AAY cards
Andhra Pradesh	24.1	66.8	50.3
Assam	25.7	23.3	7.6
Bihar	25.5	21.2	12.6
Chhattisgarh	24.1	47.9	29.4
Gujarat	10.9	48.1	24.2
Haryana	4.4	32.6	15.2
Himachal Pradesh	3.3	45.1	13.7
Jammu &Kashmir	7.9	55.1	17.2
Jharkhand	22.1	31.9	17.0
Karnataka	20.7	59.6	36.5
Kerala	10.0	48.4	25.0
Madhya Pradesh	30.0	41.9	22.2
Maharashtra	19.2	39.9	18.4
Odisha	29.3	54.8	29.4
Punjab	15.8	19.5	8.5
Rajasthan	5.0	23.6	12.1
Tamil Nadu	9.0	29.7	15.0
Uttar Pradesh	16.4	22.9	10.6
Uttarakhand	6.1	35.2	12.0
West Bengal	11.2	40.5	20.6
All India	19.1	36.0	20.7

Source: Planning Commission, Eleventh Five Year Plan, Volume II, 2008; PRS.
Notes: AAY refers to the Antyodaya Anna Yojana category, the poorest 10 percent of the BPL category.

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