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Delivery Protocols in AePDS in Five Southern States of India

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Summary:

In this document, we compile Aadhaar-enabled Public Distribution System (AePDS) protocols in the five southern states of India, namely, Tamil Nadu, Andhra Pradesh, Karnataka, Kerala, and Telangana. **Table 1** provides details of the various protocols each state follows. **Table 2** documents delivery failures in PDS and maps alternative mechanisms the states have put in place to address those failures. Appendix I and II broadly consolidate the key aspects of PDS of each state such as types of cards and commodities that can be availed under the programme.

About Social Protection Initiative:

India has moved over 271 million people out of multidimensional poverty between 2006 and 2016 while halving its poverty rate. However, the analytical apparatus used to measure poverty often leaves out a significant section of households that fall in and out of poverty over time. With 85% of India's 460 million workforce currently engaged in the unorganised sector, there is a significant proportion of the workforce vulnerable to income, livelihood, longevity and health-related shocks. The lack of or insufficient access to risk protection may push these households into poverty when such risks materialise. Trends of growing informalisation of the workforce, even within the formal sector, further exacerbates these vulnerabilities.

The Social Protection Initiative at Dvara Research is a policy initiative that aims to conduct research that will inform the design and implementation of a universal social security system. We believe a universal social security system is one that protects households and individuals against the vulnerabilities faced across the life cycle. At the same time, it is important to keep in mind India's unique demographic and economic realities. These vulnerabilities are the outcomes of complex interactions of being exposed to a threat, of a threat materialising, and of lacking the defences or resources to deal with a threat.

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Table 1: Citizen-Interface Processes in PDS (Identification and Authentication)

PDS Process	Key Protocols	Inference
Identification	Tamil Nadu is the only state that follows Universal PDS (UPDS) and spends above the centrally allocated budget in order to provide universal coverage ² .	Tamil Nadu with UPDS encounters relatively less exclusion errors in terms of identification compared to states that follow TPDS ⁴ as wider coverage leads to lesser exclusion errors.
	Kerala was known for its robust Public Distribution System until the shift of UPDS to Targeted PDS, which then resulted in a large number of beneficiaries being denied subsidised benefits ³ .	
	Andhra Pradesh, Karnataka and Telangana identify beneficiaries according to NFSA rules.	
Authentication	Tamil Nadu is the only state that practices Non-Biometric Authentication (NBA), it offers smart cards with QR codes in place of biometrics and generates a one-time password (OTP) for two-factor authentication ⁵ .	Tamil Nadu is less likely to experience authentication failure as it employs NBA as compared to the other four states ⁶ .
	Andhra Pradesh, Telangana and Kerala predominantly practice the standard process with biometric authentication.	

²Citizen charter. (2018). Retrieved from Department of Food & Public Distribution, Government of Tamil Nadu: <https://www.tnpds.gov.in/downloads/citizen-charter/Citizen-Charter-2018.pdf>

³Anuradha, G. (2018). Public Distribution System in Tamil Nadu: Implications for Household Consumption. Retrieved from LANSa: <http://59.160.153.187/sites/default/files/Public%20distribution%20system%20in%20Tamil%20Nadu%20Implications%20for%20household%20consumption.pdf>

⁴Hundal, H et al., (2020). A Conundrum of Efficiency And Inclusion: Aadhaar and Fair Price Shops. Retrieved from Economic & Political Weekly: <https://www.epw.in/engage/article/conundrum-efficiency-and-inclusion-aadhaar-and>

⁵Masiero, Silvia. (2015). PDS computerisation: What other states can learn from Kerala. Ideas For India. Retrieved July 8, 2020, from <http://www.ideasforindia.in/topics/trade/pds-computerisation-what-other-states-can-learn-from-kerala.html>

⁶Allu, R., Deo, S., & Devalkar, S. K. (2019). Alternatives to Aadhaar based biometrics in the Public Distribution System. Retrieved from Economic & Political Weekly: <https://www.epw.in/journal/2019/12/special-articles/alternatives-aadhaar-based-biometrics-public.html>

	<p>Although Karnataka practices the standard process, few places in the state practice the process in two phases due to connectivity issues, authentication as phase one and disbursement as the other⁷.</p> <p>Authentication is done in the first 3-5 days along with issuance of a receipt, and in the next 1-3 days, the beneficiary visits the fair price shop (FPS) with the receipt and receives their subsidies⁸.</p>	
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⁷Hundal, H et al., (2020). A Conundrum of Efficiency and Inclusion: Aadhaar and Fair Price Shops. Retrieved from Economic & Political Weekly: <https://www.epw.in/engage/article/conundrum-efficiency-and-inclusion-aadhaar-and>

⁸ibid

Table 2: Documenting Delivery Failures in Citizen-Interface Processes of PDS

Documented Process Failures	Key Protocols	Grievance Redressal
Identification Errors		
<p>BPL households are identified as per the official criteria, however, the accuracy of such criteria to identify all deserving beneficiaries has been called into question⁹.</p> <p>The Socio-Economic Caste Census (SECC) which is used to identify BPL households is both outdated and characterised by exclusion errors¹⁰.</p>	<p>Kerala: Although it implements TPDS and identifies beneficiaries as per NFSA, it simultaneously attempts to cover a larger group of eligible beneficiaries by expanding PDS coverage to those who may not fall under NFSA criteria but are identified as vulnerable based other criteria¹¹.</p> <p>Tamil Nadu: It offers different types of family cards based on different levels of eligibility criteria such as Priority Household card, Non-PHH card, Family cards for transgenders, homeless etc., in order to cover most of the state’s deserving population¹².</p>	<p>Tamil Nadu¹³ and Karnataka¹⁴ offer both offline (toll-free service) and online services for beneficiaries to register their complaints and for the status check.</p> <p>Kerala¹⁵, Andhra Pradesh¹⁶ and Telangana¹⁷ also maintain live statistics of applications received and redressed on their online portal.</p> <p><i>However, studies in Karnataka and Telangana show that despite the presence of grievance redressal mechanism, most beneficiaries are not aware of the system and hence it remains underused¹⁸.</i></p> <p>It has also been reported that the grievance redressal mechanisms are almost non-functional with beneficiary complaints remaining unprocessed¹⁹.</p>

⁹Khera, R. (2017). Impact of Aadhaar in welfare programmes. Retrieved from SSRN 3045235: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3045235

¹⁰Srinivas, A. (2019). The targeting challenge in India’s welfare programs. Retrieved from livemint: <https://www.livemint.com/politics/policy/the-targeting-challenge-in-india-s-welfare-programs-1557294982507.html>

¹¹Hundal, H et al., (2020). A Conundrum of Efficiency And Inclusion: Aadhaar and Fair Price Shops. Retrieved from Economic & Political Weekly: <https://www.epw.in/engage/article/conundrum-efficiency-and-inclusion-aadhaar-and>

¹²Citizen charter. (2018). Retrieved from Department of Food & Public Distribution, Government of Tamil Nadu: <https://www.tnpds.gov.in/downloads/citizen-charter/Citizen-Charter-2018.pdf>

¹³Official website of Civil Supplies and Consumer Protection Department, Government of Tamil Nadu. Retrieved from <https://tnpds.Gov.In/home.Xhtml>

¹⁴Public Grievance Redressal System. Food Civil Supplies & Consumer Affairs Department. Government of Karnataka. Retrieved from: https://ahara.kar.nic.in/pgrs_fcs/Grievance/Grievance.aspx

¹⁵Grievance Redressal. Food & Civil Supplies Department. Government of Kerala. Retrieved from: [http://pg.civilsupplieskerala.gov.in/welcome.do?lang=eng&grmd=m\\$S1a2bd](http://pg.civilsupplieskerala.gov.in/welcome.do?lang=eng&grmd=m$S1a2bd)

¹⁶Department of Consumer Affairs, Food & Civil Supplies. Government of Andhra Pradesh. Retrieved from: <https://aeos.ap.gov.in/Grievance/Home.jsp>

¹⁷Grievance Redressal System for E2E PDS, Government of Telangana. Retrieved from: <http://nfsagrams.telangana.nic.in/>

¹⁸See Ganesh, M et al., (2019), Sreedharan, S., et al, Jayan, T. (2018)

¹⁹Times of India. (2020). PDS grievance redressal system is not working. Retrieved from MicroSave – India Focus Note: <https://timesofindia.indiatimes.com/city/ahmedabad/pds-grievance-redressal-system-is-not-working/articleshow/76251120.cms>

Authentication Errors	
<p>If no beneficiary in the household is “POS-able”²⁰, then the household is denied ration, which adds to exclusion errors²¹. For instance, beneficiaries were denied ration due to mismatching fingerprints²² in the database or improper biometric²³ recognition by the epos machine.</p>	<p>Andhra Pradesh: If the beneficiary is denied ration due to biometric authentication failure, the beneficiary receives ration with the authentication of Deputy Tahsildar or Mandal Civil Supplies Officer or the Village Revenue Officer (VRO)²⁴.</p>
	<p>Telangana: Food security allowance in case of lack of food grains at FPS²⁵.</p>
	<p>Karnataka: Introduced coupon-based authentication in 2016 which allows beneficiaries to generate coupons online or through IVR which can then be used at FPS for authentication²⁶.</p>

²⁰a POS-able person is one who is Aadhaar linked and fingerprints are recognized by the POS machine

²¹ibid

²²Masiero, S. (2014). Food security and the politics of service computerisation in Karnataka. Retrieved from LSE: <http://eprints.lse.ac.uk/75078/1/blogs.lse.ac.uk-Food%20security%20and%20the%20politics%20of%20service%20computerisation%20in%20Karnataka.pdf>

²³Singh, S.S., & Chatter, A. (2019). Aadhaar Authentication Failure in the Public Distribution System of Andhra Pradesh. Retrieved from Digital Identity Research Initiative. ISB: <https://diri.isb.edu/en/community/blog-grid/aadhaar-authentication-failure-in-the-public-distribution-system.html>

²⁴The Andhra Pradesh State Targeted Public Distribution System (Control) Order. (2018). Retrieved from Department of Consumer Affairs, Food and Civil Supplies: https://civilsupplies.ap.gov.in/apcivil/Downloads/msp/01082018FCS_MS15.PDF

²⁵Telangana Food Security Rules. (2015). Retrieved from Department of Consumer Affairs, Food and Civil Supplies, Government of Telangana: <http://www.civilsupplies.telangana.gov.in/extrapdf/Gazette%20of%20telanganaF%20S%20Rules.27.2.16.pdf>

²⁶Kapoor, A., & Ravi, V. (2017). Understanding Karnataka’s Food Coupon System. Retrieved from MicroSave – India Focus Note: http://www.microsave.net/files/pdf/IFN_141_Understanding_Karnataka_s_Food_Coupon_System_3.pdf

Appendix I: State-wise Comparison of Key Aspects of PDS

States	Tamil Nadu	Karnataka	Telangana	Andhra Pradesh	Kerala
Key Aspects					
Ration Card Count	One card per family				
Enrolee	Eldest female in the family can be selected as the head of the family.				
Coverage	Universal	Targeted	Targeted	Targeted	Targeted
Coverage	PHH, PHH-AAY, Non-PHH Non-PHH-Sugar, Non-PHH-No commodity	Akshaya Scheme (BPL), Annapurna Yojana, Antyodaya Anna Yojana, APL	Food Security Card (FSC), Antyodaya FSC (AFSC), Annapurna	Annapurna, AAY, BPL	AAY, BPL, Non-priority, Non-priority subsidy
Enrolment	Anyone in the family				
Authentication	Smart Card + OTP	Smart card + Biometrics			Ration card + Biometrics
Types of Commodities	Rice, Sugar, Kerosene, Wheat, Palmoelin Oil, Toor Dhal.	Rice, Sugar, Kerosene and Wheat	Rice, Wheat, Sugar, Kerosene, Salt	Rice, Wheat, Sugar, Salt, red gram, Kerosene, Ragi, Jowar	Rice, Wheat. Sugar on availability
Acts & Rules (in addition to NFSA)	TN Food Security Rules 2017, Gazette Act 2019	Karnataka Essential Commodities Control Order - 1992, Consumer Protection Act - 1987	The Telangana Gazette Act 2016	The Andhra Pradesh State Targeted Public Distribution System (Control) Order, 2018	Kerala Gazette, 2018 (State NFSA Rules)
FPSO's Pay	1st year - Rs. 5,000/- per month and then ranges between Rs. 4,300/- to Rs. 12,000/-	Rs. 100/ per quintal of disbursement	Rs. 70/ per quintal and Rs. 17/ per quintal (Qntl) for operating biometrics according to the central government	70 paise per kg (35p by Central government + 35p by State government)	18,000/- for a minimum offtake of 45 Qntl

Private FPSs	Co-operatives	Yes	-	Yes
FPS Location	Every 1.5 km			Every 2 km
GPS Tracking of food grains	Yes	No		Yes No
Grievance Redressal	Offline & Online		Online with status check & live statistics	

Appendix II: State-wise Typology of Commodities and Cards in PDS

Tamil Nadu

Card types	Eligibility	Commodities	Price
PHH – Priority Household	Annual Income ≤ Rs. 12,000 in Rural Annual Income ≤ Rs. 17,000 in Town	Rice – 4 kgs/adult & 2 kgs/child Sugar – 500 gms/head Wheat – 10 kgs/card Toor Dhal – 1kg/card Kerosene – Ranges from 3-15 litres per card depending on the location and possession of LPG Cylinders Palmoelin oil – 1 litre/ card	Rice @ Re. 1/kg Sugar @ Rs. 25/kg Wheat @ Rs. 7.50/kg, Toor dhal @ Rs. 30/kg, Kerosene @ Rs. 13.60 to 15.20/ litre. Palmoelin oil @Rs. 25/litre
PHH – Antyodaya Anna Yojana (AAY)	Issued to the poorest of the poor household	Rice – 35 kgs per month	At free of cost
Non-PHH	People who do not fall under PHH & AAY	All commodities as issued for PHH	Same issue price as PHH
Non-PHH-Sugar		All commodities as issued for PHH except rice	Same issue price as PHH
Non-PHH-No Commodity		NIL	NIL

Karnataka

Card types	Eligibility	Commodities	Price
Below Poverty Line - Akshaya Scheme	Annual Income ≤ Rs. 12,000 in Rural	Rice 20 kgs, Wheat 5 kgs, Sugar 3 kgs and Kerosene 4 litres for non-gas cards	Rice @ Re. 1/kg Sugar @ Rs. 25/kg Wheat @ Rs. 7.50/kg, Toor dhal @ Rs. 30/kg, Kerosene @ Rs. 13.60 to 15.20/ litre. Palmoelin oil @Rs. 25/litre
	Annual Income ≤ Rs. 17,000 in Town		-

Annapurna Yojana	Peoples who are above 65 years of age without old age pension and any other source of income	Rice 20 kgs, Wheat 5 kgs, Sugar 3 kgs and Kerosene 4 litres for non-gas cards	Free of cost
Anthyodaya Yojana	Widows, Poorest of Poor, Persons with disability	Rice 29 kgs, Wheat 6 kgs, Sugar (on availability) 3 kgs and Kerosene (only for non-gas cards) 4 litres in rural, 6 litres in town and 8 litres in informal rationing area	Rice @ Rs. 3/kg, Wheat @ Rs. 2/kg, Sugar @ Rs. 13.50/kg; Kerosene ranges from Rs. 9.50 to 10.50
	Scheduled Castes, Scheduled Tribes and Agricultural Labourers All Primitive Tribal Groups		
Above Poverty Line	Income above the limit prescribed for Akshaya Scheme, Annapurna, Anthyodaya Cards	Families who do not have the domestic gas connection are eligible to get Kerosene as per the availability	No subsidised rate

Telangana

Card types	Eligibility	Commodities	Price
AFSC – Antyodya Food Security Card	Issued to the poorest of the poor households	35 kgs. per card	Rice @ Re. 1/kg
		2 kgs per card per month in Municipal corporations and 1 kg per card per month in Municipalities	Wheat @ Rs. 7/kg
		1 kg per AAY cards only	Sugar @ Rs. 13.50/kg
		1 kg per card	Salt @ Rs. 5/kg
		Municipal Corporation (non-LPG) – 2 litres Municipalities & Mandal Headquarters (Non-LPG) – 2 litres Rural Areas (Non-LPG) – 1 litre LPG/Deepam Card Holders in all areas – 1 litre	Kerosene oil @ Rs. 23/litre

Annapurna	Persons who are above 65 years of age without old age pension and any other source of income	10 kgs per card	Rice; Free of cost
		2 kgs per card per month in Municipal corporations and 1 kg per card per month in Municipalities	Wheat @ Rs. 7/kg
		1 kg per card	Salt @ Rs. 5/kg
		Municipal Corporation (Non-LPG) – 2 litres Municipalities & Mandal Headquarters (Non-LPG) – 2 litres Rural Areas (Non-LPG) – 1 litre LPG/Deepam Card Holders in all areas – 1 litre	Kerosene oil @ Rs. 23/ litre
Food Security Card	Annual Income of Rs. 60, 000 to Rs. 1.50 lakhs in rural areas and Rs. 75, 000 to Rs. 2.00 lakhs in urban areas.	6 kgs per unit without a ceiling on the number of members in the family	Rice @ Re. 1/kg
		2 kgs per card per month in Municipal corporations and 1 kg per card per month in Municipalities	Wheat @ Rs. 7/kg
		1 kg per card	Salt @ Rs. 5/kg
		Municipal Corporation (Non-LPG) – 2 litres Municipalities & Mandal Headquarters (Non-LPG) – 2 litres Rural Areas (Non-LPG) – 1 litre LPG/Deepam Card Holders in all areas – 1 litre	Kerosene oil @ Rs. 23/ litre

Andhra Pradesh

Card types	Eligibility	Commodities	Price
Antyodaya Anna Yojana (AAY)	Issued to the poorest of the poor households	35 kgs. per card	Rice @ Re. 1/kg
		2 kgs per card per month in Municipal corporations and 1 kg per card per month in Municipalities	Wheat @ Rs. 7/kg
		1 Kg per AAY cards only	Sugar @ Rs. 13.50/kg
		1 kg per card	Salt @ Rs. 5/kg
		Municipal Corporation (non-LPG) – 2 litres Municipalities & Mandal Headquarters (Non-LPG) – 2 litres Rural Areas (Non-LPG) – 1 litre LPG/Deepam Card Holders in all areas – 1 litre	Kerosene oil @ Rs. 23/ litre
Annapurna	Persons who are above 65 years of age without old age pension and any other source of income	10 kgs per card	Rice; Free of cost
		2 kgs per card per month in Municipal corporations and 1 kg per card per month in Municipalities	Wheat @ Rs. 7/kg
		1 kg per card	Salt @ Rs. 5/kg
		Municipal Corporation (Non-LPG) – 2 litres Municipalities & Mandal Headquarters (Non-LPG) – 2 litres Rural Areas (Non-LPG) – 1 litre LPG/Deepam Card Holders in all areas – 1 litre	Kerosene oil @ Rs. 23/ litre

BPL	Annual Income of Rs. 60, 000/- to Rs. 1.50 lakhs in rural areas and Rs. 75, 000/- to Rs. 2.00 lakhs in urban areas.	4 kgs per person with a maximum 20 kgs	Rice @ Re. 1/kg
		500 gms per person	Sugar @ Rs. 10/500gms
		1 kg per card	Wheat Atta @ Rs. 16.60/kg
		2 kgs per card	Red gram dhal @ Rs. 40/kg
		3 kgs per card (in lieu of rice)	Ragi @ Re. 1/kg
		2 kgs per card (in lieu of rice)	Jowar @ Re. 1/kg
		1 kg	Salt @ Rs. 12/kg

Kerala

Card types	Eligibility	Commodities	Price
Antyodaya Anna Yojana (Yellow Card)	Issued to the poorest of the Poor households	At free of cost	28 kgs of rice and 75 kgs of wheat
Priority or BPL (Pink card)	Annual Income is less than Rs. 6400/- in rural areas and less than Rs. 11,850/- in urban areas.	At free of cost	4 kgs of rice and 1 kg of wheat
Non-Priority Subsidy or APL (Blue card)	Annual Income is between Rs. 15,000/- to Rs. 1 lakh	Rs. 2/kg	4 kgs of rice and 1 kg of wheat
Non-Priority (White card)	-	Rice @ Rs. 8.90/kg & Wheat @ Rs. 6.60/kg	10 kgs of rice and wheat