Public Distribution System (PDS) in Odisha- A Case Study with **Special Reference to Dhenkanal District**

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Abstract: The public distribution system is a government-sponsored network of stores with the objective of providing basic food and non-food necessities to the underprivileged segments of society at extremely low costs. The Public Distribution System (PDS) ensures that everyone has access to enough food. The government implemented a strategy to assist the underprivileged and disadvantaged in frequently and affordably obtaining the critical items they require. The rules have evolved over time, and it's important to stay on top of them to make sure everything is running smoothly. In this article, we're going to take a look at the performance of the Public Distribution System (PDS) in the district of Dhenkanal in Odisha. It looks at things like how user-friendly it is, how well it works, if there's enough to meet people's needs, and what they love about it. To make the study work, the researcher used data from both the primary and secondary sources that were collected relating to PDS. We asked specific households a set of questions to gather information for the purpose of study. For the purpose of the sample selection, we take into account the total number of 186 households situated in the vicinity of Dhenkanal. For the purpose of the sample selection, we take into account the total number of 186 households situated in the vicinity of Dhenkanal.

Keyword: Public Distribution System (PDS), Food grain Subsidies, Food Security

Introduction:

For most emerging and underdeveloped countries, food security is an issue of concern. The main challenge that requires attention from the state, civil society and other relevant bodies is to provide nutrition for those most in need. The PDS has been in place for more than 50 years, but except hands full of states in south and the use of PDS commodities have been limited and have had little impact on the nutritional status of the target population (2011 Khera; 1997 Radhakrishna et al.). There have been many modifications and additions to the scheme over the years to improve its efficiency and to meet the primary goal to ensure food security for the eligible population of the country. In this study, we look at how the PDS works and try to identify the different factors that affect the PDS workflow. The purpose of the Public Distribution System (PDS) which originated as a weapon of positive government intervention is to provide regular distribution of essential commodities to the poor segment and disadvantaged people of the society. The main objective is to sell essential commodities in the market at low price. The objective of the PDS was to provide social protection to the weaker section of and vulnerable section of the society. The term PDS is often used to describe the system of food distribution for the general population.

The aim of PDS safe guard interests of the disadvantaged and underprivileged groups of society. Fair Price Shops (FPS) provides access to a number of essential daily necessities to the less favored segments of society. Despite the fact that there are adequate mechanisms in place, there are also shortcomings in the systems that have caused it to become disconnected from its primary purpose of providing reliable access to a sufficient quantity of affordable nutritious food to all household. The commodities which are distributed under the FPS are allocated to the beneficiaries and each ration card holders gets a fixed quantity of commodities under FPS at a fixed rate and on a regular basis by the Govt. Issue price refers to the price at which price products are sold to general public. The PDS functions depend upon the difference between the quoted market price and issued price. The Public Distribution System (PDS) contains verities of commodities that may not be suitable for the consumer. The inability of PDS to succeed is also due to the fact that the poor have limited purchasing power and are unable to utilize the entire grain quota allotted to them thus leading to the black marketing of PDS commodities. The lack of a good system of coordination and monitoring, as well as a lack of communication between the different people involved in the system, has caused PDS to fail on multiple levels. This adversely affects the primary objectives of providing food security to the poor segments of the society. Consequently a Public Distribution System (PDS) study is required to determine the shortcomings of the current PDS system and the necessary tools to rectify them.

Lots of research has been done in India upon Public Distribution System (PDS) but only a handful of studies have been done specifically in the state of Odisha. The underdevelopment and poverty of Odisha has posed a significant challenge to the government's ability to guarantee the state's food security. The state is characterized by widespread unemployment, which has contributed to the emergence of poverty. Approximately twenty percent of the population in the state of Odisha is living beyond three squares of food per day and there are numerous cases of malnourishment. Industrialization and deforestation have resulted in the abandonment of traditional livelihoods and the resulting loss of employment opportunities. The Public Distribution System (PDS) ensure that no one ever goes without food as it is the fundamental element of human existence. There is however some challenges that, to be addressed when the effectiveness of PDS needs to be evaluated on a large scale. A special focus should be given on the commodities that are needed in a specific situation rather than those that are mandated by the government in the framework of the scheme. However the state of Odisha is concern one of the rice consuming states, the government must come up with a plan to provide more rice in lieu of wheat. The implementation of Public Distribution System (PDS) plans and policies is taking place across the country. The purpose of PDS is not limited to the distribution of foodstuffs.

Objective:

- To analyze the performance of the PDS (Public Distribution System) in Dhenkanal
- Find out how different factors affect the percentage of PDS items.

Review of Literature:

Balakrishnan and Ramaswami (1997) reveled that the impact of PDS on consumer perception of product quality. In order to compete with the open market and ensure essential food for all households. The study suggested increasing the coverage of the public service programme to the maximum number of households and improving the quality of products. Khera (2008): suggested that the criteria of PDS should be consistent all over the India. The study based on collection of Primary data from 400 households randomly of selected households of 8 rural villages from the state of Rajasthan. It was found that One third of the households classified as BPLs were misclassified and 44% of the BPL households who were not eligible. In her study she further discovered that there is an association between the possession of a Bellow Proverb Line (BPL) and various disadvantages. The total cost of the food subsidies delivered by the Public Distribution System (PDS) is estimated to be 43% of the illegal cost, 28% of the excess cost, 19% of the income transfer to ineligible households and 10% of the revenue transfer to poor. Ashok Kotwal, Milind Murugkarande and Bharat Rameswami (2011) reveled that to analyse the arguments against the cash transfer scheme (CT) and to highlight the shortcomings of the current system, namely food grains. Himanshu and Abhhijit (2011) argues that not only is a universal NFSA desirable but it is also the most effective and feasible way to guarantee food security for everyone. The study found that there were more exclusion errors in BPL card

distribution and significant self targeting is well known and is a strong argument for universalisation.

Dr. R. Velmurugan (2017), studied on the satisfaction level of customers with the Public Distribution System. Objective of this study was to know the various factors which influence the satisfaction of customers from the public distribution system and what influences the satisfaction of customers. The primary data was collected by using interview schedule. The sample was selected using convenience sampling method. The objectives of the study are to determine factors which affect in customer satisfaction.

Neha Sharma's (2017) study sought to identify the reasons why citizens are not taking advantage of the Direct Benefit Transfer (DBT) system. It also examined the effects of DBT on the dependency of women. Sharma concluded that DBT had the potential to reduce corruption by decreasing intermediate costs. Additionally, the scheme improved the purchasing power of recipients and provided a healthy approach to people's spending behavior, making it likely to be one of the most effective anti-corruption schemes globally.

Data and Methodology:

In this study data are collected from primary source and secondary source. Primary data comes from books and journals. Secondary data comes from census reports, 64th round of NSSO reports, working papers and articles. Primary data came from field survey according to plan. Field work takes place in Nov 2023. In the sample villages, specific queries were posed to the Public Distribution System (PDS). Primary data are compiled from 16 villages in Dhenkanal District using a purposive sample selection methodology. The initial dataset was compiled from the household interview schedules of 186 beneficiaries. The interview consisted of a total of 55 questions. The initial part of the interview consisted of questions related to the demographics of the applicant, while the remainder of the questions was open-ended and closed-ended, depending on the objectives of the study. Personal interview methods are used to collect data using the planned questionnaire used to gather the household information. All the data was collated and analyzed using computer programs such as Excel or SPSS and then multiple regressions was applied for the different variables. The statistical tools used in this study, such as descriptive statistics, correlation, and regression, are used to study the relationship between variables.

Area of Study

Dhenkanal district is located in the centre of Odisha on the geo-political map of the state and is surrounded by wildlife and forest. Primary data are collected from 16 villages from Dhenkanal district. In the present analysis 4 blocks of Dhenkanal district have been selected. They are Gondia, Odapada, Parjang, Kankadahad. From Gondia block the study has selected the village of Alati, Chabisakuda, Chirueli, Kabera, from Odapada block Badalo, Ghantalapasi, Kurunti, Nuara, from Parjang block Jayapurakateni, Kamarda, Gailo, Jaka and from Kankadahad block Hadagari, Baghua, Kalada, Koi.

Sl.	Variable	Subcategory	Percentage
1	Gender	Male	51.38
		Female	48.61
2	Age	о-18	34.5
		18-55	52.72
		55-above	12.74
3	Education	Primary	25.39
		Upper primary	14.58
		High school	25.52
		College	3.52
		Illiterate	30.96
4	Landholding	Landless	46.21
		Marginal	50.25
		Small	1.25
		Medium	1.2
		Large	1.08
5	Income	0-5000	17.13
		5000-10000	55.84
		10000- 15000	23.23
		15000- above	3.78
6	Caste	SC	16.5
		ST	8.5
		OBC	39.78
		GEN	35.20
7	Occupation	Farmer	32.85
		Non agricultural	50.32
		Private	5.98
		Others	6.25
		Others	4.28

Source: Field Survey

Table-1 Demographic Profile of Sample Household

The above figure shows the demographic status of the study area by using gender, age,

education, landholdings, income, caste and occupation of the sample household. Table-1 shows that the majority of participants (51.38%) are male and the remainder (48.61%) is female. It is observed that as compare to female participants male participants collects monthly PDS commodities for their consumption from PDS outlet. The overall conclusion is that a larger proportion of male participants had ration card issues in their name in comparison to female participants. it has been shown that from the all sample villages the maximum percentage of people are in the age of between 18-55 years i.e 52.72% as compare to other age groups. This indicates that a large proportion of the total populations are eligible for involves in the productive process or earning some income. The data also reveals that 30.96% of the total respondents were illiterate and unaware of their PDS benefits. From the selected sample most of the household has marginal land holdings i.e 50.25% and 46.21% has landless. Very few household have medium and large landholdings which also indicates that most of the household depend upon PDS for their food grain.55.84% households income ranging from 5000-10000 which shows very poor economic status of the study area. The above figure also shows that 32.85% of people depend upon agriculture.

Variables	Sub category	Percentage
Types	BPL	16.12
	APL	31.18
	AAY	8.6
	Annapurna	О
	Ration Card	44.08
No of year of possession	02-5	47
	05-7	5
	07-9	3
	9-above	45
Grain sufficiency	no	87.15
	yes	12.84

Source: Field Survey

Table-2 PDS Profile of the Household (percentage)

From the above table it has been shown that majority of PDS card belongs to the ration card (44.08%) followed by 31.18% APL card. Only 16.12% of the entire sample has access to PDS cards belonging BPL category and 8.60% AAY card. According to responses, 47% of card holders hold a ration card for the last 2 to 5 years and 45% have had the same ration card for over 9 years. However, fewer card holders (8%) have a ration card in the past 5-9 years. It can be inferred from the above table that 87.15% of households reported that rice deliver to them under PDS quota was not sufficient as per need of their family, while only 12.8% reported that the amount delivered was sufficient to meet the needs of their family.

Preference of food grain over cash by considering	Sub-Category	%
Distance of PDS outlet	0-4	9.67
	04-08	76.34
	8-above	13.97
Quality of food grain received	poor	2.15
	good	76.34
	average	21.5
Timely opening of PDS outlet in monthly	yes	70.96
	no	29.03
Adequacy of Opening of the PDS Outlet)	yes	96.77
	no	3.22
Attitude of PDS dealer	helpful	78
	unhelpful	2
	indifferent	20
Functioning of PDS outlet	satisfied	79
	Reasonably satisfied	19
	dissatisfied	2

Table-3 Preference for Food Grain Subsidies over Cash Transfer in PDS

Based on the above table, considering 93 households, 76% of them have their PDS outlet 4-8km from their homes, followed by 13% that has their PDS outlet more than 8km from home. Despite this, the respondents chose to purchase food over cash, demonstrating that distance did not play a significant role in their decision to purchase food grain rather than cash. This demonstrates that PDS is considered to be a much more robust food security measure in this study area. The above data indicates that 76% of the respondents considered the quality of the grain to be of good quality, 22% considered it to be of average quality, and the remaining 2% considered it of poor quality. The present study finds robust evidence that the quality of food grains provided under the Public Distribution System (PDS) is of good quality and that there is no need to improve it. In addition, the respondents preferred food grain more than cash. The table indicates that, despite the fact that the PDS outlets were opened for 1-2 days, 70.96% felt that the PDS outlet was opened on time, while 29.03% felt that it was not. This indicates that PDS is considered to be a much more robust food security measure in this study area.

Therefore, the reason for selecting food grain remains unclear as maximum 96.77% of the sample household felt comfortable with the opening days of the PDS outlet. The PDS dealer's attitude also played a significant role. The majority of respondents (78%) rated the PDS dealer's behavior as beneficial to them, while 20% rated it as unfavorable and the remaining 2% rated it as unhelpful. As a result, the PDS dealer's apathetic attitude was a major factor in their decision to go for monthly food, as they were unable to express their views on their monthly entitlements. The above data indicates that approximately 79% of respondents expressed satisfaction level upon the operation of the local Public Distribution System (PDS) while 19% expressed satisfactory satisfaction and 2% expressed dissatisfaction. Since the almost all of the households expressed satisfaction upon the function of the local PDS system. The PDS functioning can be seen as a valid justification for requesting food grains and rejecting the cash preference system. When considering the alternative of not having enough food, respondents were asked their views on providing cash for the purchase of food grains on a monthly basis. It is observed that all respondents preferred food grains over direct cash transfer.

Variable	Coefficient	t-statistics
Intercept	0.346	5.111*
Size of the family	0.036	2.985*
Average years of schooling	-0.013	-7.730*
Monthly income	0.000002	0.355
Social group	-0.068	-2.029**
Land holdings	-0.013	-1.341
Distance of PDS	0.022	2.913*
Distance of the private shop	-0.033	-0.963

Table.4: Regression of the Various Relevant Variables on the Proportion of the **Consumption of PDS items**

Note: * Significance Indicates of t-statistics = 1% level.

The proportion of the consumption of PDS item are determined by the independent variables such as size of the family, average year of schooling, monthly income, social group, land holdings, distance of PDS, distance of the private shop. The education variable is observed by taking average years households education. Size of the family, average year of schooling, social group and distance of PDS are statistically significant for the consumption of PDS item. Monthly income, land holdings and distance of the private shop are statistically insignificant to determine the consumption of the PDS item. Size of the family and distance of PDS outlet has positively related to the

^{**} Significance Indicates of t-statistics = 5% level

consumption of PDS item whereas average year of schooling and social group has negatively related. The greater the size of the family, the greater is the dependence on PDS. The more the people are educated, the less is their dependency on PDS items. Similarly the dependency on better class is less than the backward class.

Conclusions:

This study helped in providing an insight into the current situation of the Public Distribution System (PDS) in Odisha. The purpose of this study was to assess the functioning of the PDS scheme in the Dhenkanal district of Odisha and to analyses the opinion of respondents on the use of cash transfer instead of subsidized food grains among the beneficiaries. The main findings and solutions are presented below. Rice is considered to be the most important product in comparison to the other two products, wheat and Kerosene, as the population in the region is mainly reliant on rice and has limited access to wheat. Kerosene is the second most important commodity which is the substitute of the requirement of collecting firewood for daily cooking, and is therefore of paramount importance to respondents. The Public Distribution System (PDS) successful in providing minimum food requirements however it is often not sufficient for large households. People were generally happy with how the FPS worked in terms of when and where they opened and they were mostly happy with the way PDS working in the state. But another complaint that the distance of the PDS outlet and they want that govt. provides the PDS shop on the village instead of panchayat. As distance of PDS outlet is major problem they still prefer food grain over cash because they are not comfortable in banking system and banks are more distance than PDS shop. Another reason for preferring food is that more than 50% of them are marginal land holding. Thus they have very less agricultural production for which they want food grain. It can be concluded that the amount of rice delivered to them is not enough to meet the requirements of the family. The overall function of PDS scheme in the district of Dhenkanal is in line with the existing policies. It is clear that the service providers are not allowed to operate outside the framework of the state. The scheme has a lot of potential to become the best food security scheme provided corruption, poor management and general state government negligence are addressed.

References:

- 1. Aggarwal and Ankita (2011): "The PDS in Rural Orissa: Against the Grain?", Economic & PoliticalWeekly, 46(36): 19.
- 2. Arora, R. U. (2013). "Food Subsidies for the Poor in India: Are they Working?" Journal of Asian Public Policy, 6(3).
- 3. Balakrishnan, P., & Ramaswami, B. (1997). "Quality of Public Distribution System:

- Why itMatters." Economic and Political Weekly, 162-165.
- 4. Balasubramanian, S (2015)." Is the PDS Already a Cash Transfer? Rethinking India's Food SubsidyPolicies?" The Journal of Development Studies, 51:6, 642-659.
- 5. Dev, S M and M H Suryanarayana (1991): "Is PDS Urban Biased and Pro-Rich: An Evaluation." Economic and Political Weekly, 26, No 41, 2357-2366.
- 6. Drèze, J., &Khera, R. (2013). "Rural poverty and the public distribution system". Economic & Political Weekly, 48(45–46), 55–60.
- 7. Dutta, B., & Ramaswami, B. (2011). "Targeting and Efficiency in the Public Distribution System: Case of Andhra Pradesh and Maharashtra." Economic and Political Weekly, 1524-1532.
- 8. Geetha, S. and Suryanarayana, M.H. (1993). "PDS revamping: some issues and implications", Economic and Political Weekly XXVIII (41), 2207-2213.
- 9. Himanshu, & Sen, A. (2013)." In-kind food transfers—I and II". Economic & Political Weekly, 48(45–47), 38–47.
- 10. Himanshu, & Sen. (2011). "Why not a Universal Food Security Legislation?" Economic and Political Weekly, vol XLVI, No 12.
- 11. Jha, R., Gaiha, R., Pandey, M. K., & Kaicker, N. (2013). "Food subsidy, Income Transfer and the Poor: A Comparative Analysis of the Public Distribution System in India's States". Journal of Policy Modeling, 35(6), 887-908.
- 12. Jha, S and B Ramaswami (2010): "How Can Food Subsidies Work Better: Answers from India and the Philippines", Economics Working Paper 221, Asian Development Bank, Manila.
- 13. Khera, R. (2008)." Access to the Targeted Public Distribution System: A Case Study in Rajasthan." Economic and Political Weekly, 51-56.
- 14. Khera, R. (2011c). "Trends in Diversion of PDS Grain." Economic and Political Weekly, 46(21), 106-114.
- 15. Kotwal, Ashok, Milind Murugkar and Bharat Ramaswami (2011): "PDS Forever?", Economic & Political Weekly, 46(21):72-76.
- 16. MM, M. C., & Narwade, S. S. (2013). "An Evaluation of PDS In Maharashtra-A Case Study". Excel Journal of Engineering Technology and Management Science, 1-10.
- 17. Mooij, J. (2001). Food and Power in Bihar and Jharkhand: PDS and its Functioning. Economic and Political Weekly, 3289-3299.
- 18. Puri, R. (2012). "Reforming the Public Distribution System: Lessons from Chhattisgarh". Economic and Political Weekly, 47(5).
- 19. Rahman, A (2014):" Revival of Rural PDS: Expansion and Out search."Indira Gandhi Instituteof Development Research (IGIDR), Mumbai.
- 20. Sharma, N. (2017)." Impact of Direct Cash Transfer in Liew of Public Distribution System: A Policy Review of Chandigarh India". International Journal of Scientific and

- Engineering Research, Volume 8, Issue 6.
- 21. Thomas, D.K and Shanmugan, P (2018). "An Analysis of the Consumer Satisfaction with the Public Distribution System in Kottatam District Tamilnadu." International Journal of Research in Humanities, Arts and Literature (Impact journal).
- 22. Velmurgan, Ramaswamy (2017). "A Study on Customers Satisfaction Towards PDS." Journal of Advanced Research in Dynamical and Control Systems 05, no. special issue (July 2017): 26-3.

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