REVERBERATION OF AADHAR ENABLED PUBLIC DISTRIBUTION SYSTEM (AePDS) ON THE EFFECTIVENESS OF OPERATIONS – A STUDY WITH SPECIAL REFERENCE TO KOTTAYAM DISTRICT

Mrs. Preetha Thomas, Author, MBA, NET, SET; Assistant Professor; PG Department of Commerce, Saintgits College of Applied Sciences; Pathamuttom, Kottayam.

Mrs. Juby Thomas, Author, M.Com, MBA, B.Ed; Assistant Professor; Research Scholar, PG Department of Commerce, Saintgits College of Applied Sciences, Pathamuttom, Kottayam.

ABSTRACT:

The Public Distribution System (PDS) plays a significant role in the Indian government's poverty alleviation programmes by distributing essential commodities like rice, wheat, sugar and kerosene at subsidised prices. Today, the public distribution is implemented by Aadhaar authentication with biometric and iris authentication. Main objective of the Aadhaar enabled Public Distribution System is to improve service delivery through online real time transactions, to issue food rations to the genuine and eligible cardholders in time and to make a fool proof PDS.

The present study was carried out to understand the efficiency of Aadhaar Enabled Public Distribution System in bringing about transparency in PDS and food security, to study the impact of Aadhaar Enabled Public Distribution System (AePDS) on quality and efficiency of PDS and to evaluate if there is any improvement in the public distribution system after the introduction of EPOS System.

The study concludes that with the effective utilization of technology and with the linkage of Aadhar card in Public Distribution System by using Aadhar Enabled Public Distribution System we have been able to overcome a lot of issues in ration shops.

Keywords: Ration cards, Ration shops, Aadhar Enabled Public Distribution System.

INTRODUCTION:

The Public Distribution System (PDS) plays a significant role in the Indian government's poverty alleviation programmes and discharging its social development obligations by providing food grains and essential items to the rural and urban poor at subsidized rates. While the social objective is of protecting poor citizens from the vagaries of market forces, the PDS current system has several well documented problems such as lack of transparency, accountability, poor governance and poor service delivery mechanisms.

PDS is primarily a social welfare and anti-poverty programme of the Government of India that distributes essential commodities like rice, wheat, sugar and kerosene at subsidised prices. PDS

provides rationed amounts of basic food items and other non-food products at below market prices to consumers through a network of fair price shops disseminated over the country. The PDS is considered as the principal instrument in the hands of Government for providing a safety net to the poor and the downtrodden. The system serves triple objectives namely protecting the poor, enhancing the nutritional status and generating a moderate influence on market prices. Thus the main objectives of the PDS can be summarised as follows;

- 1. Maintained price stability
- 2. Raising the welfare of the poor (by providing access to basic foods at reasonable prices to the vulnerable population)
- 3. Rationing during situations of scarcity
- 4. Keeping a check on private trade

But whether or not these objectives are being met is the question of the hour. Can the enormous public expenditure on the system for the procurement, transportation, storage and distribution of commodities be justified? Scholars are of the opinion that system itself should be made redundant and that time has come for an entirely different scheme to ensure food security.

Targeted Public Distribution System (TPDS) to AePDS

With a view to reduce the burden of food subsidy and targeting it better to the really needy people, the Government of India adopted the Targeted Public Distribution System (TPDS) from June 1, 1997. TPDS aims at providing food grains to people below the poverty line at highly subsidised prices from the PDS and food grains to people above the poverty line at much higher prices than the poverty line Thus, the TPDS adopted by the Government of India maintains the universal character of the PDS but adds a special focus on the people below the poverty line (known as BPL).

TPDS schemes are implemented by Aadhaar authentication with biometric and iris authentication. Main objectives of Aadhaar enabled Public Distribution System are to improve service delivery through online real time transactions, to issue food rations to the genuine and eligible cardholders in time, to make a fool proof PDS System, free from hoarding, stock diversions and corruption etc. At ePOS level the application is provided bilingual - in English and local language to the user.

The main purpose of the Secure Ration Card System is to reduce the paper works involved, widespread corruption, misuses of cards and duplications of ration cards ant to reduce the time complexity of the manual data entries and checks. Many fake ration cards users exist which is against the Law, it helps to curb these things. Our system is used to protect the products of FPS in black markets. This system mainly focuses on designing and implementation of a security system for a ration card using finger print recognition.

AePDS, uses fingerprints for identifying individuals using a biometric device and it is the science of verifying the identity of an individual through physiological measurements or behavioural traits. Since biometric identifiers are associated permanently with the user they are more reliable than token or knowledge based authentication methods.

RESEARCH OBJECTIVES:

- 1. To understand the efficiency of Aadhaar Enabled Public Distribution System in bringing about transparency in PDS and food security
- 2. To study the impact of Aadhaar Enabled Public Distribution System (AePDS) on quality and efficiency of PDS
- 3. To study the existing problems relating to the implementation of Aadhaar Enabled Public Distribution System (AePDS)
- 4. To evaluate if there is any perceived improvement in the public distribution system after the introduction of E Aadhaar Enabled Public Distribution System (AePDS) among different cardholders.

HYPOTHESIS:

Based on the objectives following hypothesis is set:

H0: There is no significant association between perceived impact of Aadhaar Enabled Public Distribution System (AePDS) on quality and efficiency of PDS and the kind of ration card held.

H1: There is a significant association between perceived impact of Aadhaar Enabled Public Distribution System (AePDS) on quality and efficiency of PDS and the kind of ration card held.

METHODOLOGY

This study is based on primary data collected from household survey conducted in Kottayam district, Kerala using Questionnaires and Schedules. Purposive sampling is used to select four types of card holders and then random sampling is used to get respondents within each card category. Total 250 cardholders are surveyed.

SCOPE OF THE STUDY

The study 'Impact and Issues of Aadhar Enabled Public Distribution System (Aepds) in Kerala' was carried out in the district of Kottayam. A total of 250 respondents were selected and the findings generalised for the entire state.

Respondents were selected from Kottayam town and from Panachikkad panchayat. This was done in order to ensure that respondents from all four different card categories were obtained.

LIMITATIONS OF THE STUDY

Major limitation of the study is the lack of effective response from ration card-holders. Many card-holders were reluctant to share their sincere opinion regarding the efficiency or quality of service delivery. Most of the BPL cardholders expressed their concern over losing the BPL status and such worries are reflected in the pattern of their responses regarding the service delivery.

REVIEW OF LITERATURE

In recent years, there has been tremendous growth in the literature on PDS. Therefore it is just not possible to conduct a survey of all available literature on the subject. Keeping in view the limitation of research scholar in terms of time and resources, we briefly review some of the earlier studies on PDS in India to identify gaps in research, if any, which would help in formulating the methodology of present study.

Dev and Suryanarayana (1991) tried to evaluate the validity of the criticism against the public distribution system that it is urban and pro rich using the National Sample Survey data on the utilization of public distribution system for the year 1986 -87. The study explains that the nature of bias differs depending on the commodity in question and the criterion used.

Rao (1991) conducted a study to measure the effectiveness of PDS and to review the Central Government policy on the PDS in rural areas of Khanapur Havali in Khammam district of Andhra Pradesh which is a scheduled caste area. The study observes the quantities of commodities supplied and demanded in the area and problems faced by the people.

Geeta and Suryanarayana (1993) have reviewed the objectives of PDS during different five year plans, investigated interstate PDS disparities and their implication for on-going PDS reforms. The study was based on the data taken from the various issues of Bulletin of Food Statistics (Central and state governments) and NSS data (on consumer expenditure).

Balakrishnan and Ramaswami (1997) have addressed the question of whether certainly it is that consumers observe the quality of grains available in the PDS to be lower than that of grains available in the private market and if quality difference exist, how they matter. The study identified the consumer perception of quality difference between the grain from PDS and from private sources as the significant mechanism of price transmission from the PDS to open market.

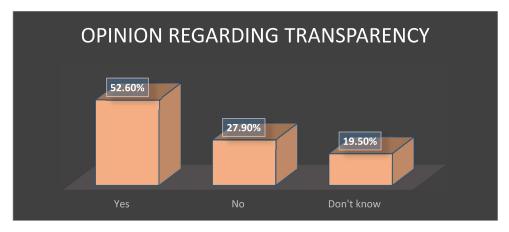
Inderkanth (1997) has made an attempt to throw light on the leakages in public distribution system in Andhra Pradesh and to examine the targeting efficiency. The paper states that the subsidised rice scheme benefitted nearly 70 per cent of population while only about the 20 per cent of the population were estimated to be poor. The paper pointed out that the diversion or leakages took place at three levels.

Swaminathan (2001) has studied about the inefficiency of public distribution system. The study points out the cruel paradox of Indian economy that the introduction of targeting, based on income poverty line, led to the exclusion of millions of vulnerable from the BPL category and subsequently from the PDS.

DATA ANALYSIS AND INTERPRETATION

Transparency of PDS after introduction of AePDS:

PARTICULARS	PERCENTAGE	
Yes	52.60%	
No	27.90%	
Don't know	19.50%	

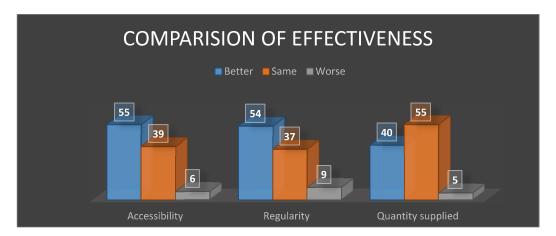


INFERENCE

The analysis shows that about 53% of respondents feel that the PDS is more transparent after the introduction of AePDS

Effectiveness of Aepds

Particulars	Accessibility	Regularity	Quantity supplied
Better	55	54	40
Same	39	37	55
Worse	6	9	5



INFERENCE

The analysis shows that about 55% of respondents feel that the PDS is better in terms of accessibility, after the introduction of AePDS.

Testing of Hypothesis

H0: There is no significant association between perceived impact of Aadhaar Enabled Public Distribution System (AePDS) on quality and efficiency of PDS and the kind of ration card held

H1: There is a significant association between perceived impact of Aadhaar Enabled Public Distribution System (AePDS) on quality and efficiency of PDS and the kind of ration card held

Perceived Impact/ Type of Ration card	Non-	Non-	BPL/AAY	Total
	Priority	priority		
		subsidy		
YES	35	28	60	123
NO	11	29	87	127
Total	46	57	147	250

$$\chi^2 = 17.439$$
, df = 2

The calculated value of Chi-square = 17.439 Critical value of Chi-square for 2 df at 5% significance is 5.991

Since the calculated value is greater than the table value, we reject the null hypothesis with 95% accuracy. Therefore there is significant association between perceived impact of Aadhaar Enabled Public Distribution System (AePDS) on quality and efficiency of PDS and the kind of ration card held

FINDINGS, SUGGESTIONS AND CONCLUSIONS

With the effective utilization of technology and with the linkage of Aadhar card in Public Distribution System by using Aadhar Enabled Public Distribution System we have been able to overcome a lot of issues in ration shops.

The perceived impact of making the ration card aadhar enabled has been felt by the beneficiaries.

The system has helped to curb the pilferage of commodities and also ensured that the goods go to the real beneficiaries.

A computerized ration system has helped to achieve paperless work and to increase efficiency and security while using this system.

Using this system can achieve transparency and reduce the flow of commodities to the black market. This system protects the card owner's right and also helps in efficient working of ration shops.

REFERENCES:

Ahluwalia, Deepak (1995); "Public Distribution of Food in India. Coverage, Targeting and Leakages, 18, No. 1, pp. 33 – 54.

Bapna, S.L. (1990) D.S. Tyagi and Vijay Shankar Vyas (eds.): Increasing Access to Food. The Asian Experience. Sage Publications New Delhi, pp. 99 – 144

Besely, T. and R. Kanbur, (1988); Food Subsidies and Poverty Alleviation", 98,pp 701 – 19

Centre for Development Studies (1977): Orient Longman, Madras Cornia, Giovanni Andrea and Frances Stewart (1993): "Two errors of targeting", 5, No. 5, pp. 459 – 496

Dantwala, M. L. (1993) "Agricultural Policy: Prices and Public Distribution System: a Review"., 48, No. 2

Dev, S. Mahendra and M.H. Suryanarayana (1991): "Is PDS Urban Biased and Pro-Rich: AnEvaluation"., 26, No. 4, pp. 2357 – 2366

Gulati, I.S and T.N. Krishnan, (1975): "Public Distribution and Procurement of Food grains: AProposal", 10, 21, May 24, pp. 829 – 42

Geetha, S. and M.H. Suryanarayana (1993): "Revamping PDS: some issues and implication"., 28, No. 41, pp. 2207 – 2213

George, P. S (1979): Public Distribution of Food Grains in Kerala: Income Distribution Implications and Effectiveness, Research Report No. 7, Washington D.C.

Ghosh, Jayati, Abhijith Sen and C.P. Chandrasekhar (1996): "Using Food Stocks Productively"., 31, No. 21, pp. 1235 – 1237

Harris, Barbara (1983): "Implementation of Food Distribution Policies. A Case Study in South India, May 1983, pp. 121 – 130

Howes, S and S, Jha, (1992): "Urban Bias in the Indian Public Distribution System". May 9, pp. 1022 -30".