



PERFORMANCE OF TARGETED PUBLIC DISTRIBUTION SYSTEM IN KERALA: A STUDY WITH A FOCUS ON THE ROLE OF ICT-BASED INTERVENTIONS

Jinto John* Prof. (Dr.) Meerabai M **

* Ph.D Research Scholar, Department of Applied Economics, CUSAT , Kochi, Kerala.

**Former Professor & Head, Department of Applied Economics, CUSAT , Kochi, Kerala.

Abstract

The Targeted Public Distribution System (TPDS) denotes a vital policy instrument that seeks to reduce poverty by ensuring the delivery of minimum requirements of food grains at prices which are heavily subsidized; the target (focus) of TPDS being the BPL (below poverty line) population. This paper analyses the performance of TPDS in Kerala and the role of Information and Communication Technology (ICT) on the performance of TPDS.

Key Words: Food Security, Targeted Public Distribution System (TPDS), ICT.

Introduction

Nothing is more basic to human survival than food. World over, six million children die each year from hunger and related causes, almost 200 million children under 5 years of age are underweight due to lack of food and about two billion people suffer from various forms of micronutrient malnutrition (Shaw, 2009). Globally, food security has been recognized as one of the most fundamental of all human rights and numerous international conventions, declarations and resolutions have been held on the subject. The concerns regarding meeting food security needs of an increasing human population found resolution in the seminal work of Malthus (1798) *An Essay on the Principle of Population*. In the early 1990s, 20 per cent of the developing world's population was chronically undernourished (Clapp and Cohen, 2009). One of the key Millennium Development Goals (MDG) targets set by the global community at the 2000 United Nations Millennium Summit was to cut that figure to 10 per cent by 2015. Despite these developments, food insecurity and under nutrition continues to remain unacceptably high. According to the Food and Agriculture Organization's (FAO) report on *The State of Food Insecurity in the World* (FAO, 2012), about 870 million people are estimated to have been undernourished during the period 2010–2012. This represents 12.5 per cent of the global population. Among these, 852 million live in developing countries, where the prevalence of undernourishment is estimated at 14.9 per cent of the population. For the fragile global food system, the sharp rises in the food prices in 2007 and 2008 have also been a major cause of concern. The broader impacts of the price rise on poor people, particularly in the developing countries whose spend about 60–80 per cent of their income on food need not be overemphasized. The World Food Programme estimates that higher food prices will set back any progress on the MDGs by at least 7 (WFP, 2009). Food security has a vital role in health policy making across the world. Although, world has enough to feed everybody yet around 795 million people of the 7.3 billion, or one in nine individuals around the world are undernourished. In India, a number of issues are involved in the issue of food security in the country over the two decades or more. These include, economic liberalization and its impact on agriculture and food security, impact of the policies of World Trade Organization (WTO) and its Agreement on Agriculture (AOA), impact of climate change, rising food prices, and so on. This paper analyses the food security issue and the performance of Targeted Public Distribution System (TPDS) in Kerala and the impact of Information and Communication Technology (ICT) on TPDS in Kerala.

Objectives of the Paper

1. To make an overall study of food security and public distribution system (PDS) in India;
2. To study the performance of the Targeted Public Distribution System (TPDS) in Kerala, and the influence of Information and Communication Technology (ICT) on TPDS; and
3. To suggest strategies for enhanced and sustainable performance of TPDS in Kerala.



Methodology of the Study

This study is designed as a descriptive-analytical study using secondary data from authentic sources. Being in the nature of an exploratory study, no hypothesis has been formulated in this study. Common statistical tools have been used wherever found relevant.

Review of Literature and Research Gap

According to Amartya Sen (1981), the poor are vulnerable because they do not have adequate means or entitlements to secure their access to food, even if food is available in the local or regional markets. The major factor responsible for food insecurity of the people is the lack of purchasing power or 'exchange entitlement' and he stated that starvation is the characteristic of some people not having enough to eat. It is not the characteristic of there being not enough to eat. While the latter can be cause of the former, it is but of many possible causes. So food security is related to poverty and chronic food insecurity leads to hunger and famine.

Dutt (1999) defines food security as a food system provides which has the ability to provide the total population with a timely, reliable and nutritionally adequate supply of food on a long-term basis. There are five dimensions to evaluate food security viz; security for its participants, maximum autonomy and self determination, reliable, equitable and socially and environmentally sustainable. According to Vyas (2003), the concept of food security comprises of four elements, availability of food, households' entitlement, stability in the supply and protection against malnutrition. He also pointed out that food security is a complex issue to be left only to the state to resolve. But the markets and the civil society institutions also have a role to play towards achieving the four objectives. It is only when the civil society institutions, markets and policies of the state converge that the economy will come closer to the ideal of food security for all. Access to food in turn is determined by entitlements (Jha and Srinivasan, 2004). Four types of entitlements generally define access to adequate food - production based, exchange based, labour based and transfer based entitlement. Government policies impact production based entitlements through production support policies such as credit, subsidies and capital formation and exchange based entitlement by food price stabilization policies, market development and reforms. Labour-based entitlements are by enhancing the employment and promoting high value export crops and small and medium enterprises. Support for labour intensive public work programmes and targeted feeding programmes enhances the transfer based entitlements. There is a distinction between transitory and chronic food insecurity in policy discussions (Radhakrishna & Reddy, 2004). Transitory food security is associated with the risks related to either access or the availability of food during the off-season, drought, inflationary years, etc. In those situations policies like price stabilization, credit, crop insurance and temporary employment creation can be used for stabilizing the consumption of the poor. The problem of chronic food insecurity is primarily associated with poverty and arises due to continuously inadequate diet. To overcome this problem, the purchasing power of the poor to be raised by generating employment opportunities, and long-term growth mediated interventions to improve food availability and incomes of the poor. Research paper by Manoj P K (2009) [15], "Revival of Indian Agriculture for Sustainable Development: A Global Perspective", published in Asian Journal of Environmental Science, has made a macro level study on Indian agriculture sector and has suggested a few strategies for the revival of the sector. The author has noted that 'Technological Fatigue' is one of the root causes for the crisis in the sector. The need for adoption of most modern technologies like agricultural bio-technology, ICT-based tools etc. for gaining strategic advantage for the agricultural sector has been specifically pointed out by the author. Centre for Public Policy Research (CPPR) (2012) [4] in its report "The PDS System in Kerala: A Review" has sought to study the evolution of present TPDS system in Kerala. The earlier regime of universal system of public distribution till 1997 and its transition to the current system of TPDS has been discussed in detail in the report. A research paper by Manoj P K (2012) [16], "Information and Communication Technology (ICT) for Effective Implementation of MGNREGA in India: An Analysis" in P Arunachalam & M Rajarajan (Eds.) has sought to discuss the cardinal role that ICT can play in ensuring transparency and efficiency in the implementation of MGNREGA in India. This macro level paper has discussed success stories in this regard in selected states. The paper has suggested strategies for the effective use of ICT for transparent and corruption-free implementation of MGNREGA and sustained growth of rural India and hence the economy as a whole.



In view of the foregoing discussions, it is noted that there are studies on food security in India, PDS or TPDS and also on minimum wage guarantee schemes like MGNREGA, including a few studies in the Kerala context. But, studies on the performance of TPDS in Kerala and the impact of ICT on TPDS are virtually nil. The present study seeks to bridge this research gap.

Relevance and Significance of the Study

Food security scenario in India is fraught with a number of issues in the ongoing reforms era, that is, since the early 1990s. Over the period of more than two decades (nearing three decades) in this reforms era, the major issues include the economic deregulation measures and its impact on agriculture and food security, impact of the policies of World Trade Organization (WTO) and its Agreement on Agriculture (AOA), impact of climate change, rising food prices, monetary crisis, and so on. The irony of decay and wastage of grains within the PDS storage on the one hand, and acute hunger and poverty among the masses on the other hand is really embarrassing. The efficacy of various central government schemes for alleviating poverty and ensuring food security, like, ICDS, Midday meal, MGNREGA, Food for work schemes, Right to Food scheme, and the recent National Food Security Act, 2013 (NFSA) etc. need to be critically studied. Here, the present study seeks to critically study the specific case of TPDS system that is prevalent in Kerala since 1997 including the prospects and problems of TPDS, with a view to suggest suitable strategies for enhanced performance of TPDS so that it helps achieving food and nutrition of the poor segments of Kerala society, like, those in the BPL category.

Public Distribution System (PDS) in India – Emergence of Targeted PDS (TPDS)

Public Distribution System (PDS) in India is a poverty alleviation programme and contributes towards the welfare of the people. Essential commodities like rice, wheat, sugar, kerosene, etc. are provided to the people under the PDS at affordable prices. PDS is a boon to the individuals living below the poverty level. PDS is the primary welfare and antipoverty programme of the govt. of India and later it was followed by the RPDS. Revamped Public Distribution System (RPDS) has been initiated by the Govt. of India from the year 1992 so as to serve and supply essential commodities to the people living in remote, backward and hilly areas. In the year 1997, the Government introduced Targeted Public Distribution System (TPDS) in which both the Central and State Governments are actively concerned in steering the operations for the success of the Public Distribution System.

It may be noted that vast majority of the Indian population are living in rural areas and their standard of living is also poor and they cannot afford the prevailing market prices for the food grains and essential commodities. So it is impossible to neglect the PDS in India. Central Government has provided Rs. 6066 crores for food subsidy in the Union budget for the year 1996-97. This has increased over the years and stood at Rs. 21,200 crores in 2002-03. The food subsidy has augmented considerably and reached a record level of Rs. 72283 crores in 2011-12. The overall value of food subsidies that amounted to about 2.2 per cent of agricultural GDP during the 1990s multiplied significantly to about 5 per cent throughout the last decade. Increase in procurement price was main contributor to increase in price of food grains that is responsible for rising food subsidy. During 2014-15 the entire food subsidy in India has increased to Rs. 1.15 lakh crore out of the total subsidy of 2.51 lakh crore. In keeping with the Union Budget 2015-16, out of Rs 2.27 lakh crore, India is to supply Rs 1.24 lakh crore (\$20.11 billion) in food subsidies for the fiscal year 2015-16. Of the entire food subsidy, nearly Rs 65,000 crore is for implementation of the recently enacted National Food Security Act (NFSA). According to Economic Survey 1992-93 (Government of India) while the PDS has to be continued, the burden of subsidy on the Central Budget has also to be restrained. A step by step withdrawal of food subsidies by targeting the real poor under PDS would help in the control of inflation. Following widespread criticism of the universal PDS, the GOI introduced Revamped PDS in 1992 that was targeted at the selected backward areas of the country. Under this scheme, special preference was given to the population living in the most difficult areas of the country such as drought prone areas, desert, tribal and certain designated hilly areas and urban slums, etc. The objectives of RPDS were to increase the coverage of the population under PDS in the target areas, to improve the access of consumers to the PDS, to increase the range of commodities supplied by FPSs and to provide selected commodities at lower prices than in the general PDS.



The Government of India (GOI) decided to streamline the PDS in the form of Targeted Public Distribution system (TPDS) as per the recommendations of the Chief Ministers Conference held in July 1996. TPDS was introduced in India in June 1, 1997 wherein the Below Poverty Line (BPL) population would be identified in every State and every BPL family would be entitled to a certain quantity of subsidized food grains. The BPL populations were offered food grains at half the economic cost. The APL were not to have a fixed entitlement to food grains and were supplied grains at their economic cost. TPDS differs from all earlier programmes in certain major respects. A distinction between BPL and APL population is introduced and the two groups treated differently in terms of quantities and prices. The principle of entitlements has been altered from a per capita norm to per family norm i.e. each poor family is entitled to a uniform quantity of food grain irrespective of their size and need and the monthly entitlement for the poor was fixed at the meager level. Additional allocations demanded by the state from the central pool were to be provided at commercially viable prices. TPDS is operated under the joint responsibility of the Central and State Governments. The GOI's responsibilities include procurement, storage, transportation and bulk allocation of food grains at subsidized prices. GOI supplies grains at CIP to the states for distribution to consumers. The responsibility of the distribution to consumers rests with the State Governments through a network of fair price shops. State Governments are also responsible for identification of the BPL families as per the poverty estimates of the Planning Commission. The TPDS food grains are allocated to the states according to their shares of the population living below the official poverty line based on poverty estimates. There is a three level targeting under the TPDS; government targets the quantities to be allotted to the states based on their poverty estimation and the state then targets the distribution of food grains to the local district which in turn targets the fair price shops and quantities to the population. The special feature of TPDS is that it ties the Central Government subsidy to the BPL population within a state. Thus, TPDS intends to target the subsidy provision of food grains to 'poor in all areas' unlike RPDS, which laid stress on 'all in poor areas'.

Dynamics of Public Distribution System (PDS) in Kerala

The state and the local governments, the Trade Unions & Peasants I Agricultural Workers Unions and the public played very important role in the evolution of Public Distribution System in Kerala. The Trade Unions continuously campaigned for food and struggled against black marketing and complete rationing. The TUs and the peasant organisations played an important role in highlighting the need for a universal rationing system in the State and their sustained campaigns kept the successive state governments vigilant with regard to food matters. Under the successive State Governments, food security was placed at the top of the political agenda, given the latent fear of food security in the State getting threatened one day.

The State Government took steps to universalize the System and established a wide network of FPSs at both the urban and rural areas to ensure physical accessibility of food grains across the State. As Dutt (1999) pointed out that it was only the social commitment of the State Government that was responsible for the higher per capita offtake of the food grains from the FPS in the State. Kerala also developed a second tier of public distribution outlets, a chain of Mveli stores, Thriveni stores, etc. which worked outside the FPS system whereby rice and wheat products, sugar, pulses, vegetables and a range of consumer goods are procured independently from the market for distribution at reasonable prices. The laws relating to PDS (ECA and KRO 1966) lays down the procedures of PDS, which prescribes the distribution of ration cards, appointment of Authorized Wholesale Dealers (AWDs) and Authorized Retail Dealers (ARDs). The law in the State had functioned as a resource in the hands of consumer's cardholders and the active local governments to improve food rationing as well as in the hands of the political parties to increase their local popularity. The struggle for food in the course of years also resulted in the general perception amongst the public that the citizens have a right and governments a duty to secure a decent living in which food at fair prices takes a prominent place. The nearly cent percent coverage in Kerala with relatively transparent procedures had probably a lot to do with the high literacy rate and the well developed sense of rights and entitlement, which had made people more assertive and apt to resist unlawful procedures restricting access. The consumer participation in implementation of food policy is the unique feature of Kerala which helped in the smooth and efficient functioning of the System.



TPDS in Kerala and its Implications: Impact of ICT on TPDS's Performance

Kerala has got the most comprehensive scheme under food distribution in the State, the coverage of which was almost universal, unlike the other States of the country which was once known for its celebrated PDS. The two main components of food security in Kerala are the PDS and the Supplementary Nutrition Programme (SNP). SNP targets the vulnerable among the poor- the pregnant women, the preschool children and the school meals programme for children in the primary schools. Both these programmes have been in existence for more than three decades now. Given the food deficit nature of the state, the availability of food grains at subsidized / reasonable prices is important not only for the officially declared population below the poverty line but also the vast majority of the people. Kerala is an exceptional case in food security matters, because of its food deficit nature and its good record in food distribution matters. There were several achievements in the functioning of PDS in Kerala before the introducing TPDS.

Introduction of TPDS in Kerala has influenced its PDS in many ways. First, because 25 percent of Kerala's population have been termed BPL by the Planning Commission, the guaranteed and subsidised allocation of grains for BPL households under the TPDS accounts for only 10 per cent of the previous PDS ("lifting") supply. Government of Kerala has earmarked 42 percent of households in the state as BPL and is providing the BPL subsidy to these households from the State budget. Kerala being a food-deficit state, in the pre-TPDS period, the state's own production accounted for 20 percent of grain requirements, the PDS accounted for 32 percent and the rest came from private trade. If the allocation to the APL is stopped, then the PDS allocation to Kerala, it is estimated, will account for 3.8 per cent of the grain requirements of the state, as opposed to the 32 percent the PDS was providing earlier. Thus, TPDS has changed the share of the PDS in the total grain requirements of Kerala. This has had implications on domestic availability of rice and on prices. Second, Government of Kerala has continued to provide additional grains to BPL category households and also maintained its entitlements for APL category households. Third, because of the various schemes and the different prices under the TPDS scheme certain distortions have been created, consumers have information problems when PDS prices are changed frequently, rolled back, and differentiated according to scheme and card. Besides, there is confusion among consumers as to the appropriate prices to be paid. It would be better if the TPDS scheme had remained unchanged for a few years at least, after the switch, as the constant change in prices led to information problems among consumers and opened up scope for malpractice by people who made use of the confusion regarding the scheme to charge higher prices. Fourth, there is evidence that ration shops are becoming unviable and are closing down. With the higher APL prices, ration shops have lost their advantage in relation to private stores for the majority of the population and it is reported that people have begun to shift to private traders. With a smaller number of ration cards to serve, and upper bounds on margins that can be charged to BPL consumers, the net profits of fair price shop owners/dealers are lower under the TPDS than before. Since there are some economies in costs, such as in the case of transport, the distribution of smaller quantities is likely to make many shops unviable.

Before moving to TDPS in 1997, Kerala was recognized for having the best PDS in India, catering to the needs of almost all of its citizens in the state and yielding a significant impact on nutrition (Kumar 1979)[12]. However, as a result of TPDS adoption there have been many drawbacks, like, (1) the new policy left Kerala with less than 10 percent of the previously allocated goods (Swaminathan 2002) [26], (2) the new policy led to drastic reduction of the Above Poverty Line (APL) subsidy resulting in many APL households leaving the PDS thus shrinking the customer base of ration shops and leading many of them to shut down (Krishnakumar 2000) [11]. In the wake of a collapsed PDS, Kerala was by far "the worst hit" because of TPDS adoption (Suchitra 2004) [25]. Hence, in the late 1990s, Kerala Government decided to use ICT adoption as a means to break out of the TPDS crisis.

ICT adoption (computerization) has been one of the major achievements of the PDS in Kerala. In fact, Kerala is quite ahead of most other states in India in respect of ICT adoption in PDS, and most other states in India have enough scope to replicate the Kerala model. ICT adoption in PDS minimized the menace of leakage associated with PDS systems in India. Illegal diversion of PDS commodities can be minimized by way of ICT adoption, because ICT enhances the transparency in all transactions. ICT adoption ensures two major benefits: (i) prevention of diversion, and (ii) secure identification at ration shops. ICT adoption in PDS in Kerala has been



done in three phases, viz. (i) Digitization of data on all ration card holders in 2001, (ii) Software construction for using at Taluk Supply Offices (TSOs), and (iii) Ration shop computerization.

Suggestions and Conclusion

While ICT adoption has got certain obvious benefits like minimization of leakages from the system, there are some issues that are still persisting. These include, incentives for corruption still persists, as corruption has become a requirement for economic survival. Hence, the benefits of ICT adoption get bypassed so as to ensure survival of the shops. Such incentives for corruption need to be removed so as to ensure that the system is more transparent and also corruption-free. The obvious benefits of ICT include (i) prevention of access to non-entitled households, (ii) detection of illegal sales from ration shops, and (iii) Option for citizens to opt out of the system if they suspect cheating by ration dealers. Hence, the focus on ration dealers alone and the prevalence of incentives for corruption have to be curtailed to ensure enhanced transparency and high quality public services.

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