

Full Length Research Paper

Public Distribution System in Tamil Nadu, India: Rice Supply Scheme of Prospects, Problems and Policy

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ABSTRACT

The Public Distribution System (PDS) is a poverty alleviation program and contributes towards the social welfare of the people. Essential commodities like rice, wheat, sugar, and kerosene are supplied to the people under the PDS at reasonable prices. As per the announcement of the Government of Tamil Nadu, from June 1 2011 onwards rice is supplied for free. Rice is an important and stable food for poor people where PDS acts as a backbone for the ones below poverty line. This study analyses the impact of free rice in the coastal region of Tamil Nadu. In this study multi-stage random sampling was used to select different coastal districts. The results show that only 17.4% of poor families are taking advantage of it while others are buying in open- and black markets. The system faces many problems inside and outside the state.

Key words: free rice, PDS, coastal region, impact, utilization, problems, Tamil Nadu

1. INTRODUCTION

A glance at statistics on nutrition and health status in India seriously disturbs the mind of socially concerned persons. Statistics reveal that 20% of the populations in the country are undernourished, 40% of children below the age of 3 are under-weight, and 33% of women in the age group of 15 to 49 have Body Mass Index (BMI) below normal.

According to the latest report (WHO 2010) on the state of food insecurity in rural India, more than 1.5 million children are at risk of becoming malnourished because of rising global food prices. A well-functioning universal PDS could be the means to

ensure adequate physical access to food at the local household levels (Madhura S. 1996).

M.S. Swaminathan (2010) opines that food security is based on continuous reforms of PDS, effective storage of food grains and a sustained effort to increase agricultural productivity. Jean Dreze (2012) suggests the introduction of a (quasi-universal system) based on specific inclusion criteria, as well as a system of food coupons which possess a unique identification number and hologram, extensively used in Tamil Nadu to track PDS grain to the household level. Community involvement and decentralized

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procurement have also been suggested for reducing corruption (Surojit 2009). According to Rajagopalan (2010), only 18 out of 31 states had been surveyed to identify below poverty line (BPL) families. In some states where surveys had been conducted, BPL families have been missed out, performance of Targeted PDS is considered to be poor in states with high number of BPL families and also lack of co-ordination between national and village level further impede its performance. Implementation of TPDS across states is also wrought with misappropriation. In the state of Tamil Nadu, BPL cards have been issued to the entire population by considering everyone to be below poverty line. The number of BPL cards issued in Andhra Pradesh exceeded the numbers registered below poverty in this state (Outlook Business 2009; Tritah, Ahmed 2003). There is an evidence of improvement in the Targeted PDS in most of other states (Jean D. & Reetika K. 2013).

In the state of Karnataka populist scheme “Anna Bhagya” launched on July 10 2013 ensuring 97 lakh BPL family and food safety (AAY = Antyodaya Anna Yojna) cardholders in the state would receive 30kg of rice at one rupee. It will ensure two square meals a day and provide nourishment to the families. The state food subsidy costs the government Rs. 460 crore a year.

In Andhra Pradesh, Government launched an ambitious scheme under which the beneficiaries could buy rice at one rupee per kg from the state formation day (i.e., November 1 2011). The scheme would benefit about 7.50 crore poor people in the state. There are as many as 2.01 crore white cardholders. For the state, the food subsidy would be Rs. 600 crore a year.

In Odisha state, 25 to 35kg rice at a price of one rupee is being distributed to the targeted groups from February 2013 on, i.e., to BPL, AAY, KBK, APL, and SC/ST hostels which has ensured an improvement in PDS (Jean Dreze and Reetika 2012).

But Tamil Nadu introduced a new scheme of free rice to poor people as well as a Universal PDS System. The present study examines the true beneficiaries of this system, the complaints in PDS outlets, PDS rice smuggling to neighboring states, and whether it is really effective in the state.

2. REVIEW OF LITERATURE

Venugopal (1992) examined the impact of the welfare scheme on the reduction of hunger. Sastry *et al.* (1990) attempted to estimate leakages in the PDS. Krishna Rao (1993) made a critical evaluation of the scheme. The impact of alternative intervention policies has been the topic of analysis of Radhakrishna and Indrakant (1988) and Indrakant (1992). These study provide with a cursory glance at the subsidized rice scheme of Andhra Pradesh and related to PDS distribution.

Bhaskar Dutta, Barat Ramaswami (2001): This paper compares the public distribution of food in Andhra Pradesh and Maharashtra. Based on the 50th round of National Sample Survey (NSS) household consumption survey data, the authors examine differences in utilization, extent of targeting, magnitude of income transfers and the cost-effectiveness of food subsidies. The findings suggest policy reforms in favor of self-targeting and greater operational efficiency.

B. Ramaswami and P. Balakrishnan (2002): Since public intervention is a pervasive influence on food prices, this paper asks whether and how the

inefficiency of state institutions matters to food prices. In the context of the wheat subsidy scheme in India, the paper models the implications of quality differences between public and private grain supply. As both are procured at similar prices, the lower quality of public grain marks the inefficiency of government operations. The paper proposes and empirically validates a method to test for demand switches that occur as a result of quality preference. As a result, a reduction in food subsidies increases food prices and hurts the poor even when they are not major recipients of the subsidy. This seeming paradox is contingent on the inefficiency of public interventions. Thus, the outcome will be different if the reduction in food subsidy were to be accompanied by reforms in the associated state agencies.

Mihir Rakshit (2003): This paper suggests a simple analytical framework in terms of which answers to questions of an optimal food policy package can be fruitfully sought. This, we believe, is a worthwhile endeavor since not only can some crucial sources of policy failure over the last quinquennium be appreciated in terms of our model, but the absence of such a framework seems to have led the High Level Committee set up to formulate a long term grain policy astray on some important issues in its otherwise well documented and persuasive report.

Ruthu Kattumuri (2011): Performance of PDS not only varies across states but more so between rural and urban centers. Scaling up involvement of multiple stakeholders including teachers, parents, civil societies, private organizations and religious communities would enhance accountability and performance of PDS in India.

Reetika Khera (2011): This paper estimates the proportion of grain diverted from the public distribution system to the open market in the past decade by matching official off take figures with household purchase reported by the National Sample Survey. At the all-India level, diversion of PDS grain remains a serious issue; however there are interesting contrasts at the state level. Based on trends in monthly per capita purchase of PDS grain and estimated diversion, states are categorized into three groups “functioning”, “reviving” and “languishing” states. The paper also discusses the possible reasons for the improvement in the PDS in the reviving states and questions the assessment of the PDS as uniformly and irreversibly dysfunctional.

Jean Drèze, Reetika Khera (2013): This article presents estimates of the impact of the public distribution system on rural poverty, using National Sample Survey data for 2009-10 and official poverty lines. At the all-India level, the PDS is estimated to reduce the poverty-gap index of rural poverty by 18% to 22%. The corresponding figures are much larger for states with a well-functioning PDS, e.g., 61% to 83% in Tamil Nadu and 39% to 57% in Chhattisgarh. With the Tamil Nadu Universal PDS in place, 60% of the surveyed people are satisfied and 40% remaining unsatisfied while this system faces more problems in rural and urban areas (Mahendran 2013).

Though number of studies has been conducted on PDS and food policy, this paper finds an impact of free rice distribution measured quantitatively to suggest an appropriate policy.

2.1 Socio-Economic profile of Tamil Nadu

Tamil Nadu lies on the southern tip of the country and is located in the North Latitude between 8 5' and 13. 35 and East Longitude between 76 5' and 80 20'. The state is bound by Kerala in the West, Andhra Pradesh and Karnataka in the North, Bay of Bengal in the East and Indian Ocean in the South. For administrative convenience, the state is divided into 31 districts, 76 revenue divisions, 220 revenue taluks, 1,127 revenue firkas and 16,564 revenue villages.

In the case of rural Tamil Nadu, the share of rural population has come down over the years from 65.84% in 1991 to 55.95% in 2001 and further to 51.55% in 2011. As the spatial temporal distribution of rainfall was good during the past years the performance of agriculture was stable. Incidence of poverty in rural Tamil Nadu was at 29.16% as per Union Planning Commission in 1999-2000. According to the Government of India, the Planning Commission in 2011-2012 issued its latest report on rural poverty with a monthly per capita expenditure of Rs. 880 and urban of Rs. 937. The State estimates an average monthly per capita expenditure as per Mixed Reference Period (MRP) of 1,570.61 (rural) and urban of 2,534.32 respectively.

The decline in poverty results from the increase in real per capita consumption in the state.

2.2 PDS in Tamil Nadu

Tamil Nadu has a universal PDS where all households are entitled to food from ration shops, including 20kg of rice per month. In many other states Targeted PDS could be accessed only by Below

Poverty Line (BPL) households. In those states, BPL lists are far from perfect because they cover too few households, and secondly, they come with a lot of exclusion errors. As a result, the Targeted PDS does not ensure food security in earlier time. But today the impact is particularly high in those states with a well-functioning PDS reinforcing recent evidence of the fact that PDS is now an important source of economic security for poor people in many states. But the Tamil Nadu state followed the old system of universal PDS where 35kg rice are distributed to AAY families and 20kg rice are distributed to rest of the families which are supplied through Civil Supplies and Co-operative Societies.

2.3 Politics and PDS in Tamil Nadu

In its election manifesto, the political parties (AIADMK and DMK) promised that free rice will be given to all people, and this was implemented soon after the elections. The PDS is a very good media to reach the people easily by the political parties in the state, and it often stands first in the list of schemes as a mean to lure or attract voters. As per a subsequent government order, the Chief Minister made an electoral promise regarding the provisioning of free rice to be distributed from June 1 2011 after ensuring proper working of the PDS independent of the party voted to power.

2.4 Coverage to the cardholders

This present system covers 18.62 lakh AAY beneficiaries and 1.83 crore cardholders who are entitled to free rice from 32,535 ration shops across the state. Every month either raw or boiled rice will be distributed to the

cardholders through the ration shops (fair price shops). The state government had been providing 3.82 lakh tons of standardized rice. This rice was distributed to the family members with 12-20kg proportionately except in Nilgris district where a minimum of 16kg and maximum of 24kg of rice were distributed per cardholder. Family cards, particular 16,721,538 rice cards, 18 lakh AAY and 186,261 full commodities cards. 1,076,552 sugar cards (except rice), 61,061 police cards (all commodities), and 60,827 non-commodities cards are in circulation in Tamil Nadu. In the state, a fair price shop covered in average a population of 2,217 (Table 1). Thiruvallur district has less fair price shops with on average a population of 3,748. As of 30.06.2013, there were 585 ration cards per fair price shops. The state food subsidy on free rice scheme increased to nearly Rs. 500 crore in a financial year.

2.5 Transparency in PDS status via SMS

In Tamil Nadu, the food department has put in place a system where any ration cardholder can send an SMS with the FPS number to receive instant information regarding the stock of each PDS commodity available in that outlet. This is an impressive arrangement, which illustrates the scope for effective IT-based transparency measures using straightforward technology.

3. SCOPE OF THIS STUDY

On December 26 2004, tsunami significantly affected the coastal regions of southern peninsular India. Especially in Tamil Nadu, 13 coastal districts were completely damaged. The coastal population was affected by Social-Economic problems in those districts. The World Bank, Government of India,

and other NGOs helped those areas by reconstructing of houses, improving agricultural lands, fishery infrastructure, animal husbandry, public infrastructure, creating green shelter-belts, and undertaking scientific studies in the affected coastal areas. After 7 years, the state government distributed free rice to all regions. The present study focused on tsunami-affected coastal areas purposively. The goal was to investigate whether it is effective and utilized properly by the poor people and whether the rural poverty and hunger rates are reduced in the selected study areas:

4. OBJECTIVES OF THE STUDY

1. To study the impact and utilization of the free rice in coastal region.
2. To study the problems, corruption and complaints in the coastal region.
3. To suggest policy oriented ideas.

5. METHODOLOGY OF THE STUDY

For this study, data was collected from nearly 5,200 households in 13 coastal districts by means of a household questionnaire on the background of household characteristics and individual opinions about PDS. This data was collected by group discussions and informal discussions with various coastal region people in the villages. In this study, multistage sampling technique was adopted with selection of districts, followed by selection of blocks, villages and finally of households. Two villages from each of 13 districts were chosen for the survey. The districts were selected through a purposive sample. Since the survey could not cover very large parts of the districts, whoever selected as a sample

from all regions had got adequate representation. The survey was carried out in 13 districts: Thiruvallur, Chennai, Kancheepuram, Villupuram, Cuddalore, Nagapattinam, Thiruvarur, Thanjavur, Pudukkottai, Ramanathapuram, Thoothukkudi, Tirunelveli, and Kanniyakumari. These districts have a fair geographic spread and also a high marine fish production with differing levels of developments from the South to the North coastal regions in Tamil Nadu. This study provides frequency analysis related to problems and success, and of policy of free rice distribution in PDS.

6. RESULTS

6.1 Socio-Economic characteristics in selected study areas

The present study describes the demographic variables in selected coastal regions. 13% of respondents were males and 86% were females whereby the female were more responding in this study.

Educational qualification with 10th Standard was at 71.6%, Higher Secondary (School) Certificate (HSC) was at 28.3%, and Faculty degrees were only at 4.8%. It shows that literacy rate is low in rural coastal areas. 79% of respondents were from rural areas and the remaining 21% were urban-based. In Coastal regions, the majority were Christian with 61.9%, followed by Hindu with 29.3%, and Muslim with 8.6%. In this study, fishermen were from the Christian community.

In the rural area, 84% families were joint families and 15.9% nuclear families. In this study, 13.2% of households owned irrigated land and 5.9% un-irrigated land.

The figures of livestock owned are cows and buffaloes with 7.9%, sheep and

goats with 12% and not owning any livestock was at 80.1%.

In rural areas, the percentage of households with mini transport vehicles bicycles was 76%, with two wheelers 17.2%, and with 4-wheelers 1% while 5.6% of households did not possess any of the above. The coastal life style improved because household assets like TVs, mixers, grinders, fans, washing machines etc. are widely available in rural areas.

With regard to family demographics, children below 14 years constitute 56.8%.

Membership in organizations was at 50.2% with Self-Help Groups (SHGs) and 45.8% with the National Rural Employment Guarantee Act (NREGA) while only 3.4% had no membership in any group. This finding suggests that rural empowerment increased. 24.2% of rural households have a saving account with the post office and 75.7% with a private bank.

6.2 Impact of PDS in Selected Study Area

The percentage of ration cards with all-commodities was at 68.1%, sugar cards was 11.8% AAY cards was 20% while 0.1% had no commodity cards at all (rich people). Last time or month, 83.25% of poor people bought full grains, 10% half, and 6.75% 1/3 grains. Most of poor people (89%) were satisfied with free rice. The main reason for satisfaction was good grain quality. 76% of the respondents agreed that weights are accurate in ration shops. This study concludes that most of poor families are depended on PDS food grains.

6.3 Utilization of PDS in selected study areas

The overall satisfaction on the functioning of local PDS outlets was rated better with 81.9%. 92.6% of the AAY families rated 35kg being sufficient. But only 42.8% of families allotted with 20kg rice rated it sufficient with the majority of 57.1% rating it is not sufficient because these families are buying additional rice from open- and black markets. 21.6% of poor families are buying from open markets where 35.5% are buying from black markets. The percentage of poor families with an average monthly consumption of 20kg rice only is 17.4%, with 20 to 30kg rice being 63.9% and with 30 to 40kg rice being 18.7%. Accordingly, a substantial percentage of poor families depend on open markets.

Poor families need additional rice. Their black market purchases of 10 to 20kg represent 27.6% and 20 to 25kg rice represent 7.8%. As for open markets, 20.6% buy additional 10 to 20kg of rice and 0.6% 20 to 25kg. For an average poor family this paper suggests 10 to 15kgs more rice per family. 26.4% of poor people spend Rs. 30 per kg rice in open markets (brand of IR-20) while 30.7% spend Rs. 15 per kg rice in black markets (the black market rice is the same as the PDS rice). Compared to the last 2 years, transaction of free rice and other activities on PDS was rated better with 89.2% while only 10.7% rated it stagnant.

6.4 Major problem in PDS

- smuggling of free rice from one state to other states
- black market developed in the context of free rice

Nearly 80% of the respondents reported that there is corruption in PDS. The reasons for this high figure are that some Above Poverty Line (APL) family cardholders are selling their ration cards at Rs. 100 for one month. Each black marketer has approximately 20 to 25 cards available (particular in each street). A small calculation yields that 25 cards trade at Rs. 2,500 for a person buying ration rice free of cost ($25 \times 20 = 500\text{kg}$). The next step consists of re-polishing the rice and resell to poor people at Rs.15 per kg ($500 \times 15 = 7,500$). The black market expenses are composed of the card rate of Rs. 2,500, the re-polishing charge with Rs. 750 (approximately) ($2,500 + 750 = 3,250$) yielding a single black marketer's profit of Rs. 4,250 ($7,500 - 3,250 = 4,250$) per month. Accordingly, the profit of selling rice ex-rates is huge. However, the main profit for black marketers is through smuggling of the rice from one state to other states.

6.5 Policy suggestion in PDS

This study suggested some new ideas. According to our findings, only 17.4% of families are taking advantage of PDS allotments with remaining 60% of the families buying in open- and black markets. For example: A BPL family buying 20kg rice from PDS needs an addition of 15kg which they will buy from open markets at a price tag of Rs. 30 per kg. The black market rate is at Rs. 15 per kg rice. Every family meeting the minimum requirement of 15kg additional rice spends ($15 \times 30 =$

Rs. 450 in open- and black markets $15 \times 15 = \text{Rs. } 225$). The state government supplies to BPL families the minimum requirement of 35kg rice at fixed, reasonable, and stable prices. 92% of AAY family cardholders responded that 35kg of free rice are sufficient. This study suggests that these cards should only entitle to free rice distribution but fix the price for APL families with higher prices for food grains. The black markets must be reduced and need strong law and order. The introduction of this system requires identification of BPL and APL families. At present this study suggests that 'targeting or quasi universal PDS' are more effective than universal PDS'. Simultaneously, there will be drastic reduction in the subsidy burden to be borne by the state government and thereby keep the rate of inflation under control.

7. CONCLUSION

The present study assessed the positive and negative aspects of the free rice distribution-scheme in coastal regions. The poor people are very satisfied and utilized the PDS to meet their private needs. Rural coastal people's lifestyle has improved and changed. The reasons are due to the distribution of free rice, color TVs, fans, mixers, grinders, transport and other welfare schemes for the poor people in the state. Socio-economic policies have made impact on the development of rural areas, particularly of coastal regions. However, as there is always room for improvement, modifying the existing policy may prove fruitful.

Table 1: Selected Study area, population, literacy, and fair price shops as of 31.03.2011

Districts	Area(sq.km)	Population* as 2011	Literates*	FPSs*	Per FPSs Population*
Thiruvallur	3550	3725697	2812839	994	3748
Chennai	174	4681087	3850472	1613	2902
Kancheepuram	4307	3990897	3065799	1404	2843
Villupuram	7190	3463284	2223605	1971	1757
Cuddalore	3706	2600880	1849805	1361	1911
Nagapattinam	2417	1614069	1227311	721	2237
Thanjavur	3476	2402781	1802291	1143	2102
Thiruvarur	2377	1268094	960036	684	1854
Pudukottai	4651	1618725	1126580	935	1731
Ramanathapuram	4175	1337560	986038	710	1884
Thoothukkudi	4621	1738376	1356564	900	1932
Tirunelveli	6810	3072880	2298262	1361	2258
Kanniyakumari	1684	1863174	1567580	727	2563
Total Tamil Nadu	130,058	72,138,958	52,413,116	32,535	2,217

Sources: Statistical Hand Book of Tamil Nadu 2012 (* in Numbers).

Table 2: Socio-Economic Characteristics of Sample Household in Coastal Region.

Gender	Frequencies (pre-testing)
Male	13
Female	86
Education	
10th Std	71.6
HSc	28.3
Degree	4.8
Area	
Rural	79
Urban	21.6
Religion	
Hindu	29.3
Muslim	8.6
Christian	61.9
Family	
Joint family	84
Single family	15.9
Land owned	
Irrigated area	13.2
Un-irrigated area	5.9
No-land	92.6
Live stock	
Cows and buffaloes	7.9
Sheep and goats	12
None-those	92.6
Transport	
Bicycle	76
Two wheeler	17.2
Four wheeler	1
None-those	5.6
Household assets: TV Mixer	100 available
Family Children	
Below 14years	56.8
Above 14to20years	43.1
Membership	
SHGs	50.2
NREGA	45.8
Non-membership	4
Occupation	
Agri-labor	Nil
Fishing-Industry, labor	4.1
Fisher man	84.5
Fishing market	5.7
Others	5.5
Accounts of families	
Post Office	24.2
Bank	75.7

Table 3: Impact of PDS in Selected Study Areas

Coverage of Cardholders	Frequencies (pre-testing)
All Commodities cards	68.1
Sugar cards	11.8
AAY cards	
Buying capacity	
Full grains	83.25
Half grains	10
1/3 grains	6.75
Satisfied free rice	
Satisfied	89.9
Dissatisfied	11
Main reasons	
Good Q&Q*	81
Poor Q&Q*	18.9
Depended PDS grains	
Depended	94.2
Not-Depended	5.7
Weights are Accurate	
Agree	76
Disagree	23.5

* Quality & Quantity

Table 4: Utilization of PDS Free Rice in coastal region

Overall Satisfaction	Frequencies (pre-testing)
Better	81.9
Worst	18
Free rice is sufficient	
AAY sufficient as 35kg	92.6
Not-sufficient	8.3
20kg sufficient	42.8
Not-sufficient	57.1
A M Consumption*	
20kg	17.4
20 to 30kg	63.9
30 to 40kg	18.7
Additional rice buying	
Open market	21.6
Black market	35.4
Buying rice - open market	
10 to 20kg	20.9
20 to 25kg	0.6
25 to 30kg	Nil
Buying rice - black market	
10 to 20kg	27.6
20 to 25kg	7.8
25 to 30kg	Nil
Spent price of rice	
Open market Rs. -30	26.4
Black market Rs. -15	30.7
Corruption & complaints	
Yes	79.5
No	21.4
Opinion 2 years PDS Better	
Worst	10.7

* Average Monthly Consumption in families

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