CHAPTER 7

SUMMARY AND CONCLUSION

In this final chapter, an attempt has been made to recapitulate the salient features of the study and bring out the significant conclusions emerging from the foregoing analysis. On the basis of these conclusions, suggestions have been offered for improving the performance of the Public Distribution system and lessening difficulties experienced by the Food and Civil Supplies Departments at the state level and the ration card holders to make the PDS a success in Tamil Nadu.

In India times the Public Distribution system is visualized both as an anti-inflationary and anti-poverty measure. In its anti-inflationary sense its main thrust is to provide inflation-protected supplies of some selected essential commodities to the consumer. In this sense the PDS strives to soften the hardships caused by inflation, which leads to the erosion of purchasing power, particularly in the hands of the fixed income groups or those who are price takers. It does not generate additional purchasing power like the conventional poverty alleviation measures instead it helps to maintain the real value of the purchasing power.

The review of literature of the PDS makes it clear that the PDS is the by-product of the market situation of the shortage of supply of commodities because of the condition of war, low production, high demand and other natural calamities like drought or flood.

During the past 50 years, the PDS has evolved and functioned in response to changes in the economic situation, its scope has been broadened or narrowed, the commodities covered have changed from year to year, and the quantum of per head
ration has also increased or decreased. However, the essential features and the overall perspective have remained more or less the same.

In spite of the package of legal measures, long experience and various adaptations, it was realized that the PDS is not working effectively. Hence, an intimate knowledge about the constraints of the system and the extent of benefits derived by the vulnerable sections of the society is necessary to evolve a suitable approach to operate the system. It was decided to make an intensive study of the working of the PDS based on the following objectives:

i. To evaluate thoroughly the Public Distribution System in Tamil Nadu for its performance efficiency.

ii. To obtain the beneficiaries' reactions to the services rendered and to identify the determinants of consumer satisfaction.

iii. To identify the changing importance of the PDS objectives, the problems anticipated, and policy options and measures to achieve the stated objectives through a Delphi study.

iv. To analyze the inter and intra-year variations in the open market price of rice and to understand the regulatory mechanism of the government in the rice sector.

v. To construct a model by identifying the inter-linkages of different parameters and to suggest specific measures to make the PDS operations more effective.

The present study has focused primarily on an analysis of the past performances of PDS in Tamil Nadu. The analysis emphasized the factors influencing procurement, ration off-take, open market demand, open market supply and open market price. The general performance of PDS on the consumption levels and consumer gains are also analyzed. To understand the working of the regulatory mechanism and its interactions with the open market forces, an econometric model was developed. The study relied on
both the published and primary data. The primary data was collected from 240 beneficiaries on the basis of two stage random sampling with stratification at final stage and taking income as the criteria for stratification.

7.1 **PDS IN TAMIL NADU: SUMMING UP**

The study of the Public Distribution System in Tamil Nadu has shown that it is well organized with a vast network of Fair Price Shops. It had 21,985 FPS by December, 1992 which represented ten times increase over the corresponding figure in 1977. The number of FPS in rural areas in the state during 1992 was 16,865 which constituted 76 per cent of the total number of FPS. The percentage of FPS run by cooperative societies was 94 at the state level. For the state as a whole, there was on an average, one FPS for 1200 persons in 1992 and located in such a manner that generally none would have to travel more than 2 kms in order to buy PDS supplies. These figures are indicative of the dependence on FPS.

All the families in the state, irrespective of income group were entitled to get rationed items from the FPS. There was a wide gap between the demand made by state officials and allotment given by the central Food and Civil Supplies office. In comparison to different income groups, the lower income group households were found to suffer greater nutritional inequalities and a higher market dependence for food purchases. There is no relation between what was demanded by the districts in the state and what the state considered necessary for the district to meet the situation. There was no formula or scientific study to make a reasonable assessment of the requirements of the districts.

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“A village-A-Fair Price Shop” scheme has been introduced to ensure the availability of services with easy reach of the consumers who reside in the remote areas.
rural areas. To serve the public in far flung, hilly and inaccessible areas, 30 mobile shops were pressed to service.

By setting up a state owned Civil Supplies Corporation, the Government has been able to disengage the PDS from the private traders. TNCSC is entrusted with the responsibility of procurement, storage, milling, processing, transportation, and the distribution of essential commodities. In addition to these responsibilities the corporation is also responsible for running the PDS.

Apart from these schemes, the state government has also taken a few legislative measures such as the “Regulation of Trade orders” and “The Tamil Nadu scheduled commodities (distribution by card system) order 1982” in order to protect the interest of the consumers by regulating the trade of essential commodities effectively.

In order to strengthen the system, several methods of supervision and controls have been introduced. Both TNCSC and the co-operatives have appointed “Area Officers” who carry out periodic checks to ensure the availability of stock, proper distribution, correct weights etc. The government has also issued orders to the Block Development Officer, extension officers and gram sevaks to inspect the FPS during their visits to the respective areas. The supervision is further supplemented by appointing the Food Cell Police Force and Taluk level Vigilance Committees which includes non-officials as members of the advisory bodies to inspect the FPS. They are empowered to check the quantity and quality of the commodities issued by the FPS.

Thus, the state government has taken several steps to organize the PDS in the state by not only providing the necessary infrastructure, legislative measures but also the necessary financial assistance in the form of subsidies to extend the services in the remote areas.
The Government has succeeded in streamlining the PDS activities in the state fairly well. However, it must be mentioned that all is not that well with the system, despite the efforts taken to ensure the smooth running of the PDS activities in the state.

The analysis of secondary data (for the period 1966-1990) has revealed the following:

The per capita production of foodgrains in the state was lower at 134 kgs per year in 1991-92 as compared to 150 kgs in 1981-82. The per capita availability of rice turned out to be just 282 grams per day in 1989 and 275 grams per day in 1990 which itself was lower compared to the recommended level of consumption. This was due to the increase in food production being offset by the increase in population. The supply data from 1966 to 1991 show that there had been statistically significant trends in per capita availability. The availability had fluctuated and increased as much as 1.5 or 38 per cent or fell by 2 or 35.7 per cent in a single year.

The monthly per capita consumption of rice in rural areas of the state declined from 11.5 kgs in 1961-62 to 9.57 kgs in 1987-88. In urban areas of the state a similar trend had been discernible and per capita monthly consumption had declined from 11.57 kgs to 9.24 kgs in 1987-88. The total consumption of rice for the state worked out to be 61.84 lakh tonnes in 1987-88 and 65.29 lakh tonnes in 1991-92.

A comparison of actual production of rice with estimated requirements points out to a widening gap ranging from 14.09 per cent in 1991-92 and 23.69 per cent in 1990-91. The actual consumption levels in Tamil Nadu compared with the requirements for the same period points out to a shortfall by 15 per cent in the rice production. Thus, neither the PDS nor the central allocation has stabilized per capita availability of rice and consumption level in Tamil Nadu.
One important indicator of the government policy is the ratio of government purchases to net production. Two features of procurement emerge from the analysis (a) The proportion of procurement to net production varies from 1.46 per cent to 26.14 per cent. The low proportion of procurement to net production varied from 1.46 per cent to 5.83 per cent indicating that there had been no attempt by the state to secure a commanding position in the food trade and (b) the perverse relationship between production and procurement indicates a large quantity being procured in a bad year and vice versa in a good year.

Rice production showed an increasing trend but procurement varied between 1.40 and 26.14 per cent. Distribution of rice ranged between 1.40 and 29.8 per cent of net production. Procurement of rice as a percentage of distribution fluctuated between 37.35 to 250. This shows that the government in 10 out of 25 years, had distributed less than what was procured. Similarly, in other years procurement was less than the distribution. This shows that the state is not yet self-sufficient and PDS is not consistent in its operations.

Government sale of rice met open market demand during the reference period ranging between 1.42 per cent to 24.69 per cent. The Government removed the income ceiling (February, 1993) and standardized the scale of supply at 12 kgs per card per month. This quantum of rice supplied per card constitutes one fifth of the total requirements. Whether this concessional food supply can be availed of by the low income population depends on their purchasing power. Moreover, the rural-urban migration has resulted in the swelling of the ranks of urban poor population. Such migratory population, in spite of their long stay in urban areas are not eligible to draw supply from PDS due to the very nature of their jobs. The government finds it difficult to draw a satisfactory policy to cover such vulnerable sections of the society. All of them
are now dependent on the open market supplies. This is in contradiction to the established aim of public distribution system

The findings from the model analysis are:

The estimation of procurement equation shows a positive relationship between procurement and zonal restrictions. An inverse relationship exists between procurement volume and rice price differential. The policy implications are (a) zonal restrictions are necessary. When the government restricts the movement of rice from surplus zone to deficit zone it "bottles up" the surplus area and creates a situation of excess of supply. The open market prices in the surplus zone is likely to be depressed and the government can mop up the surplus with ease. The simulation results confirm the fact (b) The procurement price has to be kept more or less at the level of open market price inorder to make procurement operations more effective.

The elasticity of procurement with respect to farm harvest price to procurement price turns out to be much higher than that of net output. The elasticity of issues with respect to issue price (-4.75) is an important indicator showing that for every one per cent increase in ration price, the off-take will be lowered by 4.75 per cent and this in turn exerts pressure on open market demand for rice.

The results of time series analysis on demand show that the per capita income and issue price were major influences on demand for rice. Food grain demand changes in proportion to population growth and the effect of the income growth on food depends on the income elasticity of demand. Per capita income at constant price grows at 14.1 per cent per annum. The expenditure elasticity of demand for rice as calculated from the sample survey is 0.6. Applying the expenditure elasticity coefficient to the growth of income, the income effect of foodgrains is of the order of 0.8. To meet the demand arising from population and income growth, rice production would have to grow by 2.0
per cent per annum in future (1.2 per cent due to population growth and 0.8 per cent due to income growth)

The coefficient of variation for administered procurement price index (68.32) was higher than the open market price index (52.52). Similarly, the coefficient of variation for government intervention activities was very high. For example, the variability in PDS issues was 68.32 compared to the variability in procurement activities 54.35. The analysis indicates that the government activities regarding administered prices and administered activities have not reached a level of stability and hence the PDS administration should try to formulate and implement alternative policy measures to control and achieve reasonable stability.

The coefficient of variation of open market supply of rice was high (22.73) compared to variation in open market demand (11.05). This influences the open market price index. The price stability as aimed by PDS could only be achieved by proper management of open market demand-supply on one side and by proper public procurement and distribution on the other.

The correlation coefficient between Open Market Demand (OMD) and Issue Price Index (ISPI) was 0.77 which implies the inverse relationship between these variables. If the open market price and ISPI were very close, the Open Market Price for rice would be greater. To release the pressure on OMD, the ISPI must be kept at a lower level. But, ceteris paribus, the larger the size of population covered by PDS, the higher would be the level of subsidy. This, therefore, favours the exclusion of higher income groups from the purview of PDS.

To evaluate the contribution of PDS to the stability in open market price of rice, the fluctuations in monthly prices were examined in two steps. First, the extent and the pattern of month to month variations in wholesale price index of rice were probed.
Secondly, the nominal prices were decomposed into trend, pure seasonal and irregular components to overall fluctuations in normal prices. The index of seasonal prices showed substantial seasonal variations. The rice price generally achieved a peak during November - December and touched a low level during March - April. Annual variations in the open market price shows instability in the prices of rice. The fluctuation in monthly price of rice (January 74 - December 1991) were examined by using different indicators like range, trend and co-efficient of variation. Fluctuations in monthly wholesale price index exceeded 95 points in 1975. The range came down to 66 points in 1983, and to 39 points in 1989 but increased to 99 points in 1991. The secular trend shows an increasing trend. The co-efficient of variation in the price works out to 32.36.

All these results confirm the existence of price instability in the state. During the course of the analysis there was no evidence found to suggest that PDS has been effective in containing the rice prices. The above analysis has also brought out the urgent need for a PDS in Tamil Nadu focussing on the protection of economically vulnerable population.

Some of the important findings from the of the primary data are given below:

The analysis has revealed that a majority of the respondents (88.7%) were aware of the objectives of PDS. Not only they are aware but also very emphatic about the social accountability of PDS. Hence they have assigned the first rank for the important objective of protecting the vulnerable sections of the society. None of the respondents depends entirely on PDS for their requirements. About 74 per cent of the total consumption of rice, 16.67 per cent of wheat, 59.2 per cent of sugar, 58 per cent of kerosene and 100 per cent of coarse grains were met by open market. The excessive dependence on open market purchases particularly by the vulnerable sections of the society is neither desirable nor economically feasible in view of the exorbitant open market price.
A comparison of income-expenditure patterns of various income groups revealed that the lower income group had accounted for 78.2 per cent of their income on food. Using consumption data of sample households, Engel elasticity of food was estimated to be 0.68. Income was treated as an independent variable instead of total expenditure.

There is a gap existing between monthly requirements and actual consumption of rice by lower income groups. The households with low income (< Rs. 1000/month) required 65.20 kg of rice per month but actually consumed 41.75 kg which is less than the standard requirements. This gap is due to lack of purchasing power. Higher income groups opt for open market purchases based on a perception of better quality. Hence, the government can exclude the higher income group from the purview of PDS. The lower income people would be protected if the entire quantity of rice required for their consumption were made available through fair price shops.

Around 80 per cent of the respondents were happy with the present working hours of FPS but felt that the working hours were not tailored to suit the convenience of daily wage earners.

Nearly 45.42 per cent of the respondents rated the behaviour of the FPS employees as indifferent and 18.75 per cent as rude, whereas 35.42 per cent rated the behaviour of the staff as courteous.

Around 43.75 per cent of respondents in Central Madras, 31.25 per cent in South Madras and 33.75 per cent in North Madras said that they were not given the ration quota on the allotted day. All the commodities were not available at the same time on the allotted day is a fact born out of this responses.
The major complaint about FPS continues to be improper weighing (notably sugar). Around 61.67 per cent of respondents were not happy with the weighing procedures.

Expectations of beneficiaries were analyzed through factor analysis and two factors were extracted. The first factor consists of price, quality, weights, scale of supply and availability of rationed products. This first factor explains 66.5 per cent of total variance, indicating that the PDS should make available certain essential commodities to the people in places that are easily accessible, at prices that are affordable, of quality that is readily acceptable. The affordability for the poor and availability for the non-poor should be the main aim of public distribution system. The second factor consists of location and distance and which explains 22.1 per cent of variance, that FPS should be located nearer to the place where the greatest number of beneficiaries live. Travel time and cost thereby are minimized.

Based on consumer satisfaction ratio, (out of ten variables) only location and distance of Fair Price shops scored a value greater than one. This means that the customers are not satisfied with other attributes of consumer satisfaction like weighing procedure and scale of supply.

About 60% of respondents welcomed the idea of setting up all women, FPS mainly, because the rations are mostly being drawn by women. They felt that women are more patient than men and the interaction would be cordial and effective.

Majority of the respondents welcomed the idea of running the fair price shops by the Co-operatives. Some structural changes are necessary in the present Co-operatives. There is a need for evolving a structure which will be basically cooperative in character with active participation of consumers.
The Delphi study suggest that the primary aim of any PDS operation should be of a protective nature to the vulnerable sections of the society. Further, the PDS should be able to stabilize both the open market price and per capita availability of foodgrains. Certain policy suggestions emanating from the panel are building up of an effective information system, collection of land revenues in terms of foodgrains, revamping of the administrative setup and dual pricing of essential commodities with ceiling on maximum pricing in the open market.

7.2 SUGGESTIONS

There exists a gap between the expectations and satisfaction of beneficiaries. This gap should be narrowed down by proper planning. A few suggestions are

**Strengthening and streamlining the PDS.**

There is a need to devise ways and means for strengthening the working of the PDS to achieve equitable distribution of essential items in the state in general and in remote, and inaccessible areas in particular. The base of the PDS should be strengthened and streamlined through the effective administrative set up at all levels, planned expansion of FPS through co-operatives, proper supply management with in the reach of the poor, drive against malpractice's and creation of infrastructure facilities.

**Attention to Drought hit areas**

Drought hit areas in the state require proper attention and a special subsidized scheme should be implemented in these areas.
Maintenance of Quality of essential items and proper weighing

Stress should be laid on ensuring better quality of controlled commodities in order to avoid public resentment. The district civil supplies office should check the quality of rationed items before releasing them for distribution. An inquiry into the charges of inferior quality of controlled commodities should be made and periodically raids should be conducted for this purpose. The bags should be properly weighed at the time of delivery at the godowns so that there would not be complaints of shortages by the FPS. All the items including sugar and palmolein oil should be released at all levels after weighing them, so that losses incurred in transit would be checked. Certain additional steps would be required for ensuring regular, systematic and effective servicing of the cardholders and prevention of diversion to unauthorized channels. Pre-packaging in small convenient, re-usable packets, with pre-cleaning of cereals, pulses etc. With official seal and verification of quality and weight would go a long way in making the PDS an effective retailing mechanism. Such cleaning and pre-packaging are of great value from the angle of hygiene, prevention of adulteration and under weighing, and prevention of unauthorized diversion. For edible oil there would be needed poly-packs of rather small size, say 250 gms, 500 gms as well, because a large number of persons may find it difficult to go in for the larger packs. Pre-packaging should be done for improved quality, quick handling, longer shelf life without deterioration and would make diversion and re-sale at higher prices difficult.

Who should be served by PDS has not yet been clearly decided. Ration cards are issued to all citizens irrespective of their income and their requirements. The ration cards should be used only for buying ration products. Presently, it is being used for multi-purpose activities like obtaining loans, applying for passports, driving license and gas connections and so on. This is to be prevented.
To make PDS more effective, it should be directed to the vulnerable sections of the society. In other words, it should be changed to a target-based programme. A separate counter should be operated to provide subsidized goods for the target group with a different set of norms and administrative procedures. For others, the FPS should become a local point where most essential items of daily needs are available at reasonable prices.

The entitlements are to be fixed for the target group in such a manner that a reasonably large portion of the demand for these commodities should be satisfied by the FPS.

The Government of Tamil Nadu has recently reduced the quantity of kerosene for households who are having one or two LPG gas cylinders. The diversion of kerosene has been reduced to an appreciable extent. Likewise, quantity of rice, wheat, edible oil, etc. is also to be reduced on the basis of income.

About 86% of the respondents were not aware of the order that purchasing ration products on others' family card is a criminal offense. The public should be educated that purchasing of essential commodities on others' cards and pledging a ration card are criminal offenses.

There should be strict vigilance on and supervision of FPS. The FPS which indulges in unfair trade practices should be punished severely. What is needed is strict enforcement of existing laws.

Proper training should be given to the employees of FPS to behave properly with the customers.
Consumer councils should be established and their functioning should be made effective so as to increase the socio-economic awareness of the public. Government must encourage public participation in the operations of PDS.

7.3 POLICY IMPLICATIONS

The price of foodgrains is directly related to demand-supply gap. If the PDS objective is to maintain a stable price for foodgrains, the demand-supply gap is to be narrowed down. In the short run, the appropriate buffer stock operation may help to narrow the gap and reduce fluctuations. In the long run, the options open to the government are increasing the production, procurement and also a check on the population growth. The effectiveness of PDS depends on both supply and distribution arrangements. On the supply side, local procurement is the most important source, and when the procurement price is close to the open market price, farmers will not resist procurement. The policy implications are Zonal restrictions are highly necessary. The inverse relationship of procurement to the farm harvest price indicates that the procurement price has to be kept more or less at the level of open market price in order to make the procurement operations effective.

Procurement and purchasing programmes of Civil Supplies Corporation are an important and at times critical part of their total operation. This obviously requires skill in the purchasing function when supplies are being obtained directly from growers. It must be appreciated that market orientation of corporation as recommended will be of considerable help to it in bringing continued efficiency and cost saving in their purchasing activity too. Receptivity to environment and keeping aware of market trends will be instrumental in avoiding possible pitfalls.

On the distribution side, the effectiveness of the system depends on a number of factors like the proximity of FPS, the gap between the open market price and the ration
price, the regulatory mechanism, commodity composition, social awareness and the logistics of physical distribution. The effectiveness of the PDS in meeting consumption requirements of the poor can be influenced by properly identifying target groups and minimizing leakage. The PDS could be used as a device for buffer-stock operations.

The main issue which Civil Supplies Corporation has to face is whether it is merely a procurement and physical distribution agency or it is prepared to and gear for developing a marketing orientation and outlook. There is a difference between the two. Restricting the management objectives to allocation and physical distribution approach may appear simple and convenient. However, the job of the corporation does not end when supplies of stocks are made available at the godowns or even at fair price shops. Sensitivity to consumer needs and convenience can be developed only if TNCSC considers itself a via-media of providing and enhancing consumer satisfaction and not merely meeting their needs for essential goods. As needs are relative and subject to change the following interactive model which allows for response and feedback links should be considered.

The above model reveals that the TNCSC is not merely a procurement and distribution agency. The major objective of the corporation is strengthening consumer satisfaction.
movement and providing consumer satisfaction by making free availability of essential goods.

The question of food security has to be examined in a broader perspective than conventionally done. PDS is a market-mechanism essential to ensure food availability at reasonable prices and guards against food insecurity caused by instability in food prices and production. The ability to acquire food can be ensured by policies towards employment generation and poverty alleviation. Therefore, the appropriateness of policy packages for ensuring food security in a given sector depends upon the size and composition of the population. The relevance and required magnitude of these policy instruments would vary depending upon causes, nature and dimension of food insecurity in a given region. These factors, in turn, depend upon the rural institution, the factors that influence production and consumption of food, the nature and composition of unemployment etc. Over reliance on any one of these instruments would result in inefficient and ineffective policy. In general, what is called for is a well-integrated policy package that will be sensitive to the causes of food insecurity in different regions.