MAJOR RESEARCH PROJECT

"A Study On Consumer Satisfaction Towards Public Distribution System"

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Under The Guidance of Mrs. Deepshree Assistant Professor



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CERTIFICATE FROM THE INSTITUTE

This is to certify that the project repo	ort entitled, "A STUDY ON CONSUMER SATISFACTION
TOWARDS PUBLIC DISTRIBUTION	N SYSTEM", is bonafide record of work done by Mr. Ateendra
Tiwari submitted to Delhi School of Ma	anagement, DTU in partial fulfillment of the requirements for the
award of the degree of MASTER OF	BUSINESS ADMINISTRATION under my supervision and
guidance.	
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STUDENT DECLARATION

I hereby declare that this project work entitled "A STUDY ON CONSUMER SATISFACTION

TOWARDS PUBLIC DISTRIBUTION SYSTEM" is a record of the project work carried out by me

under the guidance of Mrs. Deep Shree, Assistant Professor of MBA Department of Delhi School of

Management, DTU T in partial fulfillment of the requirements for the award of the degree of MASTER OF

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I also declare that this project report has not been submitted by me, fully or partially for the award of

any other degree, diploma, title or recognition before.

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Executive Summary

Poverty is a problem which is faced by the people. The government has taken more steps and programme to overcome the problem. Public distribution system was established to provide food at a subsidized rate. So the researcher has attempted to study the satisfaction and the perception of the consumer towards public distribution system. The study also reveals some suggestion to the government for the betterment of their working of the public distribution system.

Public Distribution System (PDS) is a poverty alleviation programme and contributes towards the social welfare of the people. PDS is considered as principal instrument in the hands of State Governments for providing safety net to the poor against the spiraling rise in prices of essential commodities. Customer's intensity of purchase at fair price shops depends on the quality of services extended at fair price shops.

It was found in this study that problems like leakages, poor quality, under weighment, non-availability of controlled as well as non-controlled articles during certain times, non-availability of ration cards, bogus cards, etc., affect the efficiency of the system. Hence, the channel of distribution needs to be promoted. Ensuring the availability of essential articles as per allotment as and when required by the cardholders, ju increased margin to cooperatives, and better salary to employees, reduction in the number of cards to be handled by a FPS, maintaining and updating the Notice Boards at every FPS, formation of vigilance committees at every FPS level and providing more role to women SHGs are the viable options put by the sample respondents to strengthen the PDS, which cannot be ignored. Further the continuance of Universal System will help to provide safety net to the poor against spiraling market prices of essential commodities. Though primarily employee of the PDS retail outlet should be made responsible for eradicating the problem of bogus cards, effective coordination between local bodies, revenue authorities and lead and link societies will alone be able to eradicate this problem.

The purpose of setting-up Public Distribution System will be nullified, unless real beneficiaries have not utilized the products offered at fair price shops optimally. Unless, customers are satisfied with regard to services offered at fair price shops, they may not make use of service of fair price shops to a maximum extent. Thus, in this study a serious attempt has been made to identify the factor that enhances customer's satisfaction by adopting convenient sampling, feedback obtained from 150 card holders and analyzing them through tests.

Given widespread malpractices in Public Distribution System, several papers have been written discussing the feasibility of PDS, its market distorting mechanisms and alternatives to PDS. My paper wishes to deviate from the above and instead focus on the implementation of PDS at the state level. It focuses on the last mile delivery i.e. the process by which subsidised grains makes its way to the beneficiaries via the various Fair Price shops (FPS) and the challenges encountered in the process. This paper focuses on the implementation of PDS in Delhi. The major findings

of the paper are: (1)Besides the broad categories of Above Poverty Line (APL), Below Poverty Line (BPL) and Antyodaya Anna Yojana (AAY), in Delhi the APL category is further subdivided in two tiers. (2)Obtaining a new ration card does not mean eligibility for drawing rations. (3) New ration cards are being issued despite minimal role played by them in drawing ration. This spills over several unintended inefficiencies to other schemes. Fourth, there are massive leakages in the system, which reduce the effectiveness of PDS. It is primarily because of lack of incentives with FPS keeper and low economic viability of the FPSs. Fifth, level of diversion faced by different groups differ. BPL and AAY card holders get most of their entitlement whereas a wide variation in entitlement can be observed for APL general stamped card holders. Sixth, vigilance mechanism is weak. There is possibility of a nexus between local politicians and FPS keepers which renders the vigilance mechanism ineffective. Seventh, despite widespread problems people choose PDS over cash transfers. This preference reflects that corrective measures are needed instead of completely scrapping the scheme and replacing it with other schemes. Lastly, current policy reforms are discussed and further recommendations are suggested.

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CHAPTER I

1.1 INTRODUCTION

India's public distribution system (PDS) is the largest food security program in the world, which covers nearly 60% of the population and costs Rs 1.45 trillion—close to 1.4% of the national income. PDS has often been criticalized for its structure, incessant corruption and leakages, and inclusion and exclusion errors in identifying the beneficiaries. The rolling out of the National Food Security Act (NFSA), 2013, and the overhauling of PDS in some states has created an aspiration that the system can be made effectual in making the households not only food secure, but also nutrition secure.

Consumer satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance or outcome in relation to his or her expectation. As this definition makes clear, satisfaction in a function on perceived performance and expectations. If the performance falls short of expectations, the consumer is satisfied or delighted. If the performance exceeds the expectation, the consumer is highly satisfied or delighted, high satisfaction or delight creates an emotional bond with the brand, not just a rational performance .the result is high consumer loyalty. They analyzed the results to develop seven dimensions of customer satisfaction for product. They are Capability, Usability, Performance, Reliability, Install-ability, Maintainability and Documentation.

Public Distribution System is among the most expansive policy initiatives of the Government of India. It began as a measure to ensure self-sufficiency at the national level and went on to become a major food safety net for the poor. However, it was soon marred by various inefficiencies and malpractices, which led to severe critic of the scheme. Several studies began questioning the feasibility of PDS in terms of its budgetary incidence, its market distorting nature and if free markets can play the role that is currently played by PDS. However, it is to be noted that various inefficiencies, which are condemned by the opponents of PDS, are not a result of faulty economic policy per se, but the unintended consequences arising from the implementation of the policy. Implementation of PDS is under the purview of the state governments. State governments vary widely in their performance with regard to PDS. This paper attempts to study the implementation of PDS in Delhi and discover the nuances that go into transforming PDS as a policy in

principle to a policy that is in effect on ground. This paper doesn't comment on whether free markets are better than PDS. It assumes PDS to be given and instead restricts its analysis to the implementation challenges of the system and ways to improve it.

Objectives of food policy

The need to disseminate high yielding varieties with the advent of green revolution in early 1960's, the importance placed on self-sufficiency and the objective of ensuring low priced food to the consumers led to establishment of Food Corporation of India (FCI) and Agricultural Prices Commission (APC) in 1964-65. The food policy of India is primarily executed by procurement of food grains by FCI from the farmers at prices set by the APC1. (Gulati, Kumar et all, 2007) The overall objectives of food policy in India since 1960's have been to

- i. Ensure reasonable support prices to the farmers.
- ii. Ensure consumer prices do not rise unduly.
- iii. Avoid excessive price fluctuations and reduce disparity of prices between states. iv. Build up sizeable buffer stocks of wheat and rice from imports and internal procurement. (GOI, 1965)

1.2 OBJECTIVES OF THE STUDY

Primary objective:

❖ To know the consumer satisfaction towards public distribution system.

Secondary objective

- * To know the perception of consumers towards public distribution system.
- ❖ To know the products that are frequently purchased by the consumers.
- ❖ To offer some suggestion to the government for betterment of public distribution system.

1.3 SCOPE OF THE STUDY

- ❖ The study is based upon the consumer satisfaction towards the Public Distribution System.
- The study is used to identify the products that are frequently bought by the consumer and to analyze the perception towards the product.
- ❖ To offer some suggestions for the betterment of the product in PDS.

1.4 LIMITATION OF THE STUDY

Time period

❖ A period of 45 day was a little short for the investigator for an in depth study of the subject was not possible.

Non co-operation

❖ There was certain degree of or reluctance shown by some consumers to answer for the questionnaire.

Busy

❖ Investigator not collected information's from consumers as they were busy because of some official matters. They were no available on their house. That was also one of the prime limitations.

1.5 LITERATURE REVIEW

P.S.George (1974) has attempted to analyze public distribution of food grains and their income distribution effects in Kerala. He has tried to estimate the possible impact of rationing on incomes of the consumers using the relationship. The results for Kerala suggest that the system is economically viable. Further, ration rice, according to this study, accounted for a major share of rice consumption of consumers belonging to low income groups. Gupta basing on certain assumption has projected food grains requirements for PDS up to 1980, for all India, such projections are assumed to help policy makers in their procurement efforts.

Subba Rao (1980)² has attempted to estimate food requirement for the State of Andhra Pradesh under certain assumptions. While working out these estimates he has assumed a supply level of 12 ozs. (340 grams) per consumption unit. He concluded that ultimately the benefit of public distribution is zero or negligible.

Ravindra Kumar Verma(1983)³ The Public Distribution System (PDS) was introduced in virtually all the states of Ind ia, but Kerala's PDS was the one which evolved as the most efficient and effective measure of food security. The salient features of the model were its universal coverage, high levels of utilisation, physical access made possible through a vast network of retail outlets, rural bias and progressive utilisation of the system. The present paper reveals the near breakdown of the system in Kerala after the introduction of the Targeted Public Distribution System (TPDS) and points out its wide ramifications.

Madhura Swaminathan(1985)⁴ Evidence on calorie intake and nutritional outcomes establishes that chronic hunger and food in security persist today on a mass scale in India. !e liberalization-induced policy of narrow targeting of the Public Distribution System (PDS), a programme of food security that provides a minimum quantity of cereals at subsidized prices, has resulted in worsening food insecurity. Recent evidence from the 61st round of the National Sample Survey in 2004-2005 establishes that targeting has led to high rates of exclusion of needy households from the system and clear deterioration of coverage in States like Kerala where the universal PDS was most effective.

Fathima P. Jacob., (1992)⁵ Public Distribution System in India is a consumer side intervention in the food market. There are two basic aspects of evaluating the effects of policy intervention in Public Distribution System. One is to analyze the overall percapita availability of cereals and other is percapita consumption and it's the government policy to ensure whether the objectives of the Public Distribution System has been achieved.

K.S Chandresekar(**1999**)⁶ analysed the working of the public distribution system in Thirunelveli district such as allotment, liftment and off take of essential commodities in the district. He highlighted the problems of public distribution system in Thirunelveli district such as poor quality of essential commodities supplied, non-display of information on the notice boards regarding the availability of commodities and business hours not convenient to cardholders.

Suryanarayana (2000)⁷ in his study contest the view the that poverty in India has declined in the

suitability of the database and its implications for the observed trends in poverty estimates in the context of structural changes in the rural economy. He contends that the statistical estimates do not show a real reduction in poverty but only a reduction in over estimation of poverty for the initial year followed by its under estimation for the later years.

Ahmed Tritah (2003)⁸ Using propensity score matching methods I found That while the PDS has a poor record on reaching the poor, conditional On having access to PDS, the subsidy is entirely consumed. Moreover I found that food subsidies going through the PDS exert a multiplier Effect on quantity consumed. This findings point to a revaluation Of the impact of PDS with respect to its main objective which is food Security. I propose a new poverty measure, integrating the food content of poverty lines and shows that relative to this poverty line PDS has benefited the poor.

Subramanian(2004)⁹ examined the relative significance of various factors accounting for poverty in rural Tamil Nadu. The study showed that the level of poverty was positively associated with inequality in consumption and negatively associated with real wage rate and net domestic product in agriculture per head of rural population. If ameliorative measure are to be thought of top priority should be given to the reduction in inequality of consumption compared to raising real wage rate and net domestic product in agriculture per head of rural population.

Thanga Pandian(2005)¹⁰ He stated that the essential commodities would be supplied on all the days of a month at the convenience of the public instead of supplying them on certain specific days. He has offered employees of Fair Price Shop some suggestion like attend their work in time and distribute the commodities with correct weight without making them stand in long queues.

Jos Mooij (2006)¹¹ According to him the network of Public Distribution System dealers was quite reasonable. There was one PDS dealers allocated for every 1,630 people. He stated that only a part of the Public Distribution System food grain reached the cardholders, many poor people had no red cards. Food grains were often not reaching the PDS shops in the villages. He concluded that, there was large scale misappropriation of food grains at all levels. The distribution of cards to BPL families was unsatisfactory.

Mahadavappa Eraiah, (2008)¹² He explained about the purpose of Public Distribution System was to act as price supporting programmes for the consumers during the periods of food shortage of the 1960. On the other it acted as an instrument of price stabilization and become a countervailing force against private traders who were try to exploits the situation of security of food. The basic aim was to provide

essential commodities like rice, wheat, sugar, and edible oil and kerosene at subsidized prices. However the supply of food under Public Distribution System made a clear demarcation between urban rural consumers.

Manharan,(2009)¹³ has observed that the central government takes measures to uplift the poorest people through this effective welfare schemes. Most of the below poverty line and under nutritious people are provided food grains through Public Distribution System at free of cost. Most backward districts and trial belts are benefited by this scheme and food security is also provided by the central government with the cooperation of State Government.

Somesh Srivastava (2010)¹⁴ The Government of India is making frantic efforts to tackle the food security issue. The country has more than 300 million hungry and malnourished people. On the other hand thousands of tonne food grain is rotting in Government granaries. There is certainly a management problem. There is requisite policy deficit also. The Government is trying hard to address both. Scholars and social activists are suggesting universal public distribution system. But it can complicate the issues further. Cash credit limit accounts facility in banks for above poverty line population (APL) can go a long way in addressing the food security problem of India.

Dr. B. K. Gairola (2011)¹⁵ Public Distribution System in the country facilitates the supply of food grains to the poor at a subsidised price. Essential items such as Selected cereals, sugar and kerosene at subsidized prices to holders Of ration cards is the objective of efficient Public Distribution System. The PDS also helps to modulate open - market prices for commodities That is distributed through the system. Government accords great Importance to the objective of measuring outcomes of PDS so as to Ensure that equal distribution system serves up the purpose for which it was set up.

CHAPTER II

2.1 RESEARCH METHODOLOGY

Methodology

The effectiveness and challenges of PDS in reaching the masses has been assessed on the basis of personal and group interviews of ration card holders, conducted in circles 56, 57 and 58. These circles cover areas around Gharoli, Kondali, east Vinod Nagar, west Vinod Nagar, Khichripur, Kalyanpuri, Mandawali, Patparganjetc in East Delhi. Thereafter, interviews with Fair Price Shop (FPS) owner, the Food and Supply Officer (FSO), the Assistant Commissioner and the Additional Commissioner of the Dept of Food Supplies and Consumer Affairs, Delhi, have been conducted to obtain a holistic viewpoint on the challenges of execution and shortcomings of the system. This has further been supplemented by participation in the 'Bhagidari workshop' conducted by the Govt. of Delhi on 5th July 2012. Finally, a modest attempt has been made to suggest ways to make the system more effective.

The study is based on the findings of the India Human Development Survey (IHDS), a panel survey undertaken jointly by researchers from the National Council of Applied Economic Research and the University of Maryland in 2004-05 and 2011-12. The goal of IHDS-I (2004-05) and IHDS-II (2011-12) has been to trace changes in the daily lives of Indian households in an era of rapid transformation. Therefore, by documenting these changes in the way people live, work, educate their children, care for their aged parents, and deal with ill health, these surveys seek to infuse the development discourse with the lived experiences of ordinary people. IHDS-I and IHDS-II provide a rich empirical database that is available free of charge to a wide range of researchers in India and abroad. At present, more than 7000 users have downloaded these data and more than 200 papers and dissertations have been published using them. This report contains two types of data analyses. First descriptive statistics are presented to show changes in household use of TPDS in 2004-05 and 2011-12. Second, multivariate analyses using Propensity Score Matching (PSM) and Fixed Effects Regressions are presented to ensure that households with and without access to TPDS subsidies are compared with similar households in cross-sectional data as well as with their own consumption patterns across the two rounds and thereby hold unobserved food preferences constant.

Initial Challenges

Problems with food policy became prominent from 1980's onward. Issues like mounting costs, low accountability, urban bias, movement restrictions etc began drawing criticism. Liberal policy environment from 1990's and a series of influential studies led to liberalization of agriculture. Also, during late 1990's, world prices of cereals plunged downwards, in effect discouraging exports. This led to upward revision of procurement prices, much above the levels of recommendation by CACP, in an effort to protect the interest of the producer. At the same time, several studies suggested that benefits of PDS accruing to the poor were almost negligible even when the food subsidy bill was mounting. This called for increasing efficiency in targeting and thus gave birth to the revamped PDS or the Targeted PDS (TPDS) in 1997.

Progression to Targeted Public Distribution System (TPDS)

TPDS implied that now the universal population was sub-divided into Above Poverty Line (APL) and below poverty line (BPL), based on income criteria. Prior to TPDS, a universal PDS involved high errors of inclusion, meaning a large part of population which were not the actual beneficiaries benefitted from the subsidy. The process of targeting, however, involves large errors of exclusion wherein a substantial part of actual poor remain uncovered by the subsidy, simply due to an arbitrary process of defining what constitutes a 'poor'. Thus, by 2000, there existed record high levels of buffer stocks as a result of higher procurement propelled by a high procurement price and lower stock used in disbursement under TPDS. Such a situation led to increased costs of maintaining buffer stocks. Moreover, it in very difficult to reduce high levels of buffer stock. This is because a huge buffer stock indicates to the farmers that in the near future, government would begin selling grains in the open market which would lead to lower prices in the future. The farmers find it more advantageous to sell their grain to the government at the prevailing MSP than to receive a lower price in the future. In early 2000's, a substantial portion of the buffer stock was exported abroad at half the cost of acquisition. Such a policy came under scanner by trading partners who challenged the legality of the process under WTO obligations. It was eventually scrapped in 2002. By 2006, the situation prevailing until 2005 was reversed with buffer stocks falling at an all time low and subsequent concerns of missing the buffer stock norms set by the government. Market prices for wheat were well above MSP and imports of wheat were authorized in February 2006 (USDAFAS). As for the objectives of PDS, some of them have lost their importance as compared to others, for instance rationing at the time of shortages. Theoretically, price stabilization assumes a greater importance owing to integration with world markets. Also, food security in the backdrop of high levels of prevailing malnutrition and chronic hungers makes a strong case in favour of PDS. The actual effectiveness of the PDS however continues to receive criticism on grounds of inefficiencies and costs, and several studies call for greater role of private sector in the food market.

Execution of PDS

The implementation of PDS varies across states. This paper studies the execution of the scheme in New Delhi. For the ease of administration, Delhi is sub-divided into 70 circles. Each circle corresponds to an assembly constituency. The total number of fair price shops (FPS) as in May 2012, were 2491 and the number of kerosene oil depots (KOD) were 2356. FPS distributes limited quantity of specified commodities depending on the kind of ration card. In the paper, fair price shops are used inter changeably with PDS shops. The essential commodities that may be sold through PDS are specified by gazette notification from time to time2 .Presently, the essential commodities distributed at subsidized prices via PDS include wheat, rice, sugar and kerosene. Types of ration cards and their complexities There are 3 main types of ration cards-APL, BPL and Antyodaya Anna Yojana (AAY). AAY cards pertain to the 'poorest of the poor', those who cannot afford to purchase grains even at BPL prices. Anyone possessing a BPL or an AAY card is directly eligible for purchasing from the ration shops. However, a person possessing APL card becomes eligible for ration only if the ration card is stamped. Stamped APL cards are further divided into Jhuggi ration cards (JRC), Resettlement Colonies ration card (RCRC) and general stamped APL cards. Each card has different quantities and prices that its holders are entitled to. Also note that all stamped APL cards are ineligible for purchasing sugar. In case of kerosene, the beneficiaries are confined to BPL, AAY and APL-JRC card holders. Also, if a family uses LPG cylinders in case of APL-JRC, BPL and AAY, it becomes ineligible for purchasing kerosene and is instead offered a subsidy of Rs 40/- on LPG cylinders. Moreover, it needs to be stressed that a ration card pertains to a family. A family is defined as a group of people using the same stove to cook. This implies that a specific amount of grain is issued on one card irrespective of the number of family members. It is 35kg of grains that is given specificard irrespective of whether there are 10 members or just 2.

Misuse of Ration Cards

Despite the minimal role played by newly issued unstamped ration card in guaranteeing subsidized food,

people continue to file applications for new ration cards. This reflects the fact that ration card which was primarily to implement the PDS has begun to play roles other than just a tool to access subsidized food. It is popularly used as an identity card as well as an address proof. Several important policies acknowledge ration card as an identity proof. This leads to certain unintended inefficiencies as explained below. Government Funded Pension Schemes According to government sources, the officials receive several requests to change the date of birth mentioned in the ration cards, so that people can become eligible for pensions much before they are actually due. Relocation and Rehabilitation Policy The Delhi Urban Shelter Improvement Board (DUSIB) undertakes schemes for construction and provision of free housing to people who live in 'Jhuggi-Jhopri' and other unauthorized residential areas. Ration card is a very important document in the process of allocation of homes. It acts as an address proof. In fact, the Food and Supply Officer (FSO) is a member of the committee which prepares and approves the eligibility list. He is primarily responsible for validating the ration cards of the applicants. In most schemes, households possessing ration cards issued on or before 1998 are seen as intended beneficiaries. Many FSOs' get requests for either change in the dates mentioned on the ration cards or approval of the ration cards irrespective of the date. In many cases, FSOs' get requests for approving bogus cards i.e. ration cards which are possessed by ineligible persons. Take for example, a person who purchases a ration card issued to another person. By law, ration cardsare not transferable. However several people at the time of purchasing a particular house in a jhuggi also try and purchase ration cards of the previous owner which pertains to the particular address. Using these purchased ration cards they seek to become eligible for relocation homes provided by DUSIB. Since validation of the ration cards lie with the FSO, these ineligible people use several means ranging from bribery to pressure from local political leaders, to get the ration card validated. Thus, the use of ration cards for purposes other than distribution of subsidized grains tends to create vested interests among the common man and the officials. It breeds a culture of corruption and leads to development of methods used to circumvent the law.

Problems Faced By Card Holders

There are one set of people, who possess ration cards which cannot draw ration at all. Then there are another set of people who are 'lucky' enough to receive ration on their cards. The effectiveness and challenges of PDS in reaching the masses is assessed by the latter set, people who are eligible for drawing ration. Absenteeism of the PDS shopkeepers The most persistent problem faced by card holders' deal with absenteeism of the PDS shopkeepers. PDS shops are supposed to work Monday to Saturday from 9am to

1pm and 3pm to 7pm.However, in most cases shops are open for not more than 10 days in a month. Some of them are opened for as less as 2-3 days in a month and for time as less as 2-3 hours on these days. There is neither a stipulated date nor a fixed time. Each PDS shop handles about 1000 cards. Such a short time for purchase leads to several beneficiaries being denied access to purchase subsidized grains. Also the fact that card holders are not informed about the opening of the shops, entail them to make futile visits to the shops almost every day, just in case the shop opens and they miss the opportunity. This adds to their transportation costs and cuts into the subsidy they effectively receive. Lack of Incentives of PDS Shopkeepers PDS shopkeepers are inefficient partly since fair price shops are economically unviable. The commission received by PDS shopkeepers amount to Rs 35 per quintal of grain i.e. 35 paisa per kg and 18 paisa per litre of kerosene. This amount has not been revised since 1995. As per a fair price shop owner, this unchanged commission in a period of steeply rising prices is the sole motivation behind diversion of PDS grains and other illegal activities undertaken by the PDS shopkeepers. The problem is further accentuated as PDS shop owners bear the cost of storage, transportation cost from central godowns to their shops plus the added cost of hired labour, all of which have been rising over time.

Ways of Diversion

It is interesting to look into ways by which PDS shop keepers divert subsidized grains meant to be distributed under PDS, in the open market. One way is to give lower quantity or charge a higher price. This is primarily done by not maintaining proper records. For instance, a ration card has two columns- one for date of purchase and the other for quantity purchased. None of these columns are appropriately filled by the shop owner. In most cases the shop owner simply signs the ration cards. Also, the shop owner is supposed to maintain registers with entries corresponding with that of the ration cards. Now, a shop owner may sell only 30 kg of grain instead of 35 kg and make an entry of 35 kg in his register, thus indicating that the entire amount is sold to the consumer when in reality he has siphoned off 5 kg of the quota. There is no way to cross verify the registers with the ration cards since the details are not filled in the ration cards at the first place. Also, it is easy to fool majority of the customers as shop owners act as the primary source of information for them. In most cases, it is he who decides what quantity is sold and passes it of as the government's decision. In order to sell the grain that the PDS shop owner has siphoned from the customers participating in the PDS and selling it in the open market, the shop owner either needs to maintain bogus registers or sell to miscreants possessing bogus ration cards. Bogus registers refer to wrongly filled registers

which show that quota of each card has been fully sold to the card holder, whereas in reality the shop owner still has a stock of grain remaining with him. Using bogus registers, a shop owner shows his previous stock to be zero, so that he is eligible for again purchasing the same amount of grain from the government that he did in the last month, while selling the siphoned stocks of grain in the open market. In certain areas of Delhi like Vasant Vihar, where participation of card holders is relatively less as compared to other parts of the city, a major part of diversion takes place through bogus registers. In addition, sale on bogus cards represent sale of PDS grains to illegitimate persons at prices lower than market prices but higher than PDS prices, thus giving the shopkeeper a margin for profits. Another way often employed by shopkeepers is by changing the PDS grain with inferior quality grain, thus selling the better quality PDS grains in the open market while selling poor quality grains to theration card holders. Further, it is interesting to note that most of BPL and AAY card holders were receiving their entire entitlement of 35 kg grain and 6 kg sugar on a regular basis. However, most of the variation in the quantity of grains purchasedwas found to be on APL general stamped cards. Probing further, I realized the reason to be that even though government entitles APL general stamped cards to receive 35 kg of grain, it is not a promised quantity. It is their maximum entitlement. The quantity they receive depends on the amount that is left after distribution of 35 kg grain to each BPL and AAY card. Their minimum entitlement is supposed to be 22 kg.3 This implies that the grain that is entitled to APL general card holders keeps varying. This is a potential source of leakage. The shop keepers take advantage of this situation by fixing this quantity at the minimum (in many cases below minimum) and passing it off as the government's decision, while siphoning of a part of the actual entitlement.

Vigilance and Enquiry

The accountability mechanism primarily comprises of grievance redressal. A person can lodge a complaint in the food and supplies department of the Delhi Government. An enquiry is undertaken by the department. In case a discrepancy is found with the PDS shop, the shop is temporarily suspended. Further if the malpractice involves more than 50 kg of grain, an FIR is lodged with the Delhi police under Essential commodities Act, 1955. However, on the basis of interviews it was found that most people were resistant tolodge complaints, fearing hostility of the PDS shop keeper and the fact that he may stop selling grains to them in future in case of inaction. Other than this, there is a circle vigilance committee comprising of food inspectors, headed by the MLA of respective circle. This committee is responsible for surprise checks on the fair price shops.

However, the effectiveness of this committee doubtful, given the widespread level of irregular practices. With this respect, there is also an incentive of PDS shopkeepers to be in good books of the local politicians, wherein a PDS shop keeper may help in garnering vote banks for the politicians since he is in routine contact with a large number of card holders. This hints at a probable nexus that might exist between PDS shop keepers and the local politicians which render the circle vigilance committee ineffective. Thus, it is primarily the weak mechanism of accountability and transparency which has led to under performance of the scheme in reaching out to the primary beneficiaries. In a way, the middle strata in the hierarchy of stakeholders comprising of the circle officers, the local politicians, the food inspectors, the PDS shop owners etc have come to enjoy pseudo power which is exercised on the final beneficiaries which suggests that what they receive is not their right or entitlement but a mere donation from the hands of the powerful.

Introduction

Research methodology is the systematic way to solve the research problem. The methodology adopted for the current research work is submitted in the proceeding section of this chapter.

Title of the Research work

The title of research work is a study on consumer satisfaction towards public distribution system.

Research Design

Descriptive research design is a scientific method which involves observing and describing the behavior of a subject without influencing it in any way.

Sampling design

In order to carry out the current research work, the researcher used convenient sampling.

Sampling method

Sampling is the process of collecting information as a representative part of the population.

Data collection

The methodology used for the project work is through the collection of primary and secondary data.

Primary data

Data collected by the investigator directly for the purpose of investigation is known as primary data. For this project work primary data mainly through.

- > Personal interviews with general public.
- Questionnaires with consumers.

Secondary data

The investigator may use of the data collected by other for the purpose of the investigation. This in know as secondary data. The main sources of secondary data needed to prepare this project report were obtained from:

- **➤** Books
- > internet
- > journals
- > Magazine and government publication.

Tools for analysis

❖ Percentage Analysis:

Percentage of respondents =
$$\frac{\text{Number of respondents}}{\text{Total respondents}} \times 100$$

***** Weighted Average Method:

Under the *weighted average inventory method*, the cost of goods available for sale (beginning <u>inventory</u> plus net purchases) is divided by the number of units available for sale to obtain a weighted-average cost per unit. Ending inventory and <u>cost of goods sold</u> are then priced at this average cost.

Formula =
$$\frac{ewx}{ew}$$

Chi-square

Chi-square test is an important non-parametric test. The analysis of dependent and independent variable.

Formula =
$$\frac{(Oi - Ei)^2}{Ei}$$

Here Oi - Observed frequency
Ei - Expected frequency
Df-degree of freedom

Significant level-5%

CHAPTER III

3.1 INTRODUCTION OF PUBLICDISTRIBUTION SYSTEM:

Public Distribution System (PDS) is a poverty alleviation programme and contributes towards the social welfare of the people. Essential commodities like rice, wheat, sugar, kerosene and the like are supplied to the people under the Public Distribution System at reasonable prices. PDS is a boon to the people living below the poverty line. Public Distribution System is the primary social welfare and antipoverty programme of the Government of India. The Government of India from the year 1992 in order to serve and provide essential commodities to the people living in remote, backward and hilly areas has initiated revamped Public Distribution System (RPDS). Government introduced Targeted Public Distribution System (TPDS) in the year 1997. Central Government and State

Governments have been actively involved in steering the operations for the success of the Public Distribution System and it is considered as a principal instrument in the hands of State Governments for providing safety net to the poor against the spiraling rise in prices of essential commodities.

Public distribution system was first introduced during World War II in 1939, as a war-time rationing measure. Its scope was extended during the Bengal famine of 1943. However, by 1950's, the government had begun withdrawing from the grain market. PDS re- gained its importance, as a major component of poverty alleviation and food security, during the food shortages and droughts of the mid- sixties. Droughts of 1965-66 caused India to be highly dependent on food aid from the US, which had adverse implications on India's foreign policy. Food and foreign exchange shortages led India to seek loans from the IMF in exchange of massive devaluation of the rupee that led to mounting inflation. Such a situation highlighted the need for self-sufficiency during periods of shortage.

Protecting consumers from unfair trade practices in the changing business environment and to create awareness and guide them for taking appropriate legal remedies is another vital function. Creating awareness among consumers, providing legal and institutional framework for getting effective and quick remedies through State Consumer Disputes Redressal Commission and District Consumer

Disputes Redressal Fora are the focus of the consumer welfare policy of this Government.

Some Governments follow universal public distribution system, under which no distinction is made between BPL and APL families. Though, Government of India is advocating targeted public distribution system (TPDS), these states are of the opinion that effective targeting of BPL is not administratively feasible and socially risky as it may lead to large scale exclusion errors depriving genuine BPL and vulnerable families from the benefit of public distribution system. Targeting is not followed in the State for the following reasons:

- (i) Poverty being a relative concept, there is no acceptable criteria or methodology for errorfree enumeration, as indexing method is also not free from defects. There are chances of large exclusion error, as seen in many other States implementing TPDS, resulting in high social cost.
- (ii) Poverty being a dynamic one, the status of a family at the time of enumeration keeps changing. Natural calamities like drought, flood may alter the position drastically and push large number of vulnerable APL families into poverty trap. The Government system may not be flexible enough to react quickly to such a situation.
- (iii) Problems of agency bias in enumeration and field-level problems in enumeration makes targeting an administratively difficult task and more risky in terms of attaining the goal of better food security.

Thus, the State Government, out of its own experience feels that universal public distribution system assures better food security compared to targeted public distribution system. However, this state is following limited targeting by providing AAY cards to cardholders identified by local bodies as poorest among the poor. Enactment of National

Food Security Act is under serious consideration of the Government of India wherein all BPL families assured of supply of 25 kilogram per month. This Government has suggested that Government of India should undertake BPL survey with flexible criteria to accommodate vulnerable APL families for implementing the Act effectively.

The "NSS Report No. 508: Level and Pattern of Consumer Expenditure, 2004 05" indicates that rice constitutes 93% of cerealsn consumed in rural areas while it is 91% in urban areas. The report also indicates that the rice consumption per head per month in rural areas is 10.165 kg and 8.632 kg in urban areas.

Movement of commodities to fair price shops is regulated through pre designated route charts to prevent enroute diversion. A system of advance liftment is followed wherein 60% of previous month's

allotments are lifted and supplied to each fair price shop without waiting for the allotment orders. Availability of sufficient stocks in fair price shops is monitored by District Collectors, officials of Civil Supplies department, Revenue and Cooperative departments. Based on entitlements, net allotment is made after taking into account closing stock every month. Based on allotments, commodities are indented by respective agencies running fair price shops and taken delivery according to the sales and storage space in shops. Thus, availability of essential commodities is ensured in all public distribution system outlets.

Types of ration cards and their complexities There are 3 main types of ration cards-APL, BPL and Antyodaya Anna Yojana (AAY). AAY cards pertain to the 'poorest of the poor', those who cannot afford to purchase grains even at BPL prices. Anyone possessing a BPL or an AAY card is directly eligible for purchasing from the ration shops. However, a person possessing APL card becomes eligible for ration only if the ration card is stamped. Stamped APL cards are further divided into Jhuggi ration cards (JRC), Resettlement Colonies ration card (RCRC) and general stamped APL cards. Each card has different quantities and prices that its holders are entitled to. Also note that all stamped APL cards are ineligible for purchasing sugar. In case of kerosene, the beneficiaries are confined to BPL, AAY and APL-JRC card holders. Also, if a family uses LPG cylinders in case of APL-JRC, BPL and AAY, it becomes ineligible for purchasing kerosene and is instead offered a subsidy of Rs 40/- on LPG cylinders. Moreover, it needs to be stressed that a ration card pertains to a family. A family is defined as a group of people using the same stove to cook. This implies that a specific amount of grain is issued on one card irrespective of the number of family members. It is 35kg of grains that is given specific card irrespective of whether there are 10 members or just 2.

TARGETTED PUBLIC DISTRIBUTION SYSTEM

The Targeted Public Distribution System (TPDS) was launched in 1997 to benefit the poor and to keep the budgetary food subsidies under control to the desired extent following failure of the earlier PDS system. Conceptually, the transition from universal PDS to TPDS was a move in right direction, as it was designed to include all the poor households and raise the unit subsidy and ration quota considerably for them. The objective of keeping the budgetary consumer subsidy in check was proposed to be met through sale of food grains to APL households at Economic Cost and confining the budgetary food subsidy to about sixty

five million identified BPL families. Though the supply of the requisite quantity of food grains for distribution at BPL prices was to come from the Central Pool, the success of TPDS in terms of meeting its stated objectives depended largely on the ability of State Governments in identifying the genuine poor families, restricting the number of poor families to the number estimated by Planning Commission and in putting in place an effective and efficient delivery system. At the instance of the Planning Commission and the Ministry of Consumer Affairs, Food & Public Distribution, Programme Evaluation Organisation took up the evaluation of

TPDS to reflect on the following issues

- Efficacy of the delivery mechanism in improving access to PDS for the poor;
- Off-take by the poor and its determinants;
- Viability of Fair Price Shops (FPSs) & its implications;
- Types and magnitudes of targeting errors and their implications on welfare and budgetary consumer subsidy;
- Extent of leakages and diversions of subsidized food grains;
- Delivery cost across the States; and
 - Overall performance of TPDS.

GOALS OF PUBLIC DISTRIBUTION SYSTEM

The goal of PDS does not restrict itself with the distribution of rationed articles. Making available adequate quantities of essential articles at all times, in places accessible to all, at prices affordable to all and protection of the weaker section of the population from the vicious spiral of rising prices is the broad spectrum of PDS. More specifically, the goals of PDS are:

- ➤ Make goods available to consumers, especially the disadvantaged /vulnerable sections of society at fair prices.
- ➤ Rectify the existing imbalances between the supply and demand for consumer goods; Check and prevent hoarding and black marketing in essential commodities.
- Ensure social justice in distribution of basic necessities of life.
- > Even out fluctuations in prices and availability of mass consumption goods.

➤ Support poverty-alleviation programmes, particularly, rural employment programmes, (SGRY/SGSY/IRDP/ Mid day meals, ICDS, DWCRA, SHGs and Food for Work and educational feeding programmes).

3.2 CONSUMER SATIFICATION

MEANING

Essentially, consumer satisfaction is the extent to which consumers are happy with the products or services provided by a business. It is an important concept in business, because happy customers are those most likely to place repeat orders and explore the full range of services offered.

DEFINITION

According to the Department of Marketing at Washington University, there is no single definition of consumer satisfaction. However, all the definitions in the literature and from consumers describe consumer satisfaction as a reasoned or emotional response to a product, service or consumer experience at a particular time.

MEASUREMENT

Consumer satisfaction can be measured using survey techniques and questionnaires. Questions typically include an element of emotional satisfaction coupled with an element of behavioral satisfaction, or loyalty to a particular product or service.

FACTORS AFFECTING CONSUMER SATISFACTION

Consumers are most likely to report satisfaction with goods and services if they are made to feel "special" by the provider. In other words, if the staff of a company pays attention to the individual needs of its customers, before, during and after the sales process, they are more likely to return.

Consumer satisfaction is the overall impression of consumer about the supplier and the products and

services delivered by the supplier. Following are the important factors that could affect consumer satisfaction:

- Departmentwise capability of the supplier.
- Technological and engineering or re-engineering aspects of products and services.
- Type and quality of response provided by the supplier.
- Supplier's capability to commit on deadlines and how efficiently they are met.
- Consumer service provided by the supplier.
- Complaint management.
- Cost, quality, performance and efficiency of the product.
- Supplier's personal facets like etiquettes and friendliness.
- Supplier's ability to manage whole consumer life cycle.
- Compatible and hassle free functions and operations.

The above factors could be widely classified under two categories i.e. suppliers behavior and performance of product and services. The supplier's behavior mostly depends on the behavior of its senior subordinates, managers and internal employees. All the functional activities like consumer response, direct product and maintenance services, complaint management etc. are the factors that rely on how skillful and trained the internal and human resources of the supplier are. The second category is regarding all the products and services. This depends on the capability of supplier to how to nurture the products and service efficiently and how skilled the employees are. It's all about how the skills are implemented to demonstrate engineering, re-engineering and technological aspects of the products and services. The quality and efficaciousness of the products is also an important factor that enables compatible and hassle free functions and operations. This bears to lower maintenance and higher life of the product which is highly admired by the consumers.

If the product is having some problem or compatibility issues and requires frequent maintenance and support than the consumers could get irritated and possibilities of sudden divert is there which lead to supplier's financial loss. In the same way if the product is expecting huge amount of financial and manual resources then consumers could get a feeling of dissatisfaction and worry. However, if these aspects are

handled efficiently by giving class services and dealing with complaints effectively then dissatisfied consumers could be converted into long time satisfied consumers and retaining them becomes easy.

It is practically impossible for the supplier to provide all the above explained features. There are always some positive as well as negative features in products and services which could lead to delight or irritate consumers. The final opinion is the sum of overall experiences which a consumer percept. But it is also true that more the positive aspects, the more the consumer is satisfied. Hence the aim of the supplier should be always to enhance these positive feelings among all the consumers to increase consumer satisfaction. The supplier must identify how to enhance these positive aspects to maximum level by analyzing the consumer's data and information using CRM system. The individual liking and disliking of consumers differ from consumer to consumer. It is hence required to target a consumer and identify individual requirement to make them satisfied.

Having discussed the above factors that affect consumer satisfaction we can say that higher the satisfaction level, higher is the sentimental attachment of consumers with the specific brand of product and also with the supplier. This helps in making a strong and healthy consumer-supplier bonding. This bonding forces the consumer to be tied up with that particular supplier and chances of defection are very less. Hence consumer satisfaction is very important panorama that every supplier should focus on to establish a renounced position in the global market and enhance business and profit.

Chapter IV

QUESTIONNAIRE A Study on Consumer Satisfaction towards Public Distribution System

Demographic Profile:

1.	Name	• • • • • • •	•••••					
2. Gen	der (a)Male □ (b)	Femal	е 🗖					
3. Age	(a)Below 20 □	(b)21-	30 □ (c)3	31-40	☐ (d)Above 40) _□		
4. Mar	ital Status (a) Married □	(b) Un	married [] (c) Di	vorce \square (d) Wi	dow		
5. Edu	cation Qualificatio (a) School Level		o) Diploma		c) graduation \Box	(d) others \square	
6. Occ	upation (a) Government E (d) Business Mar		, ,		Employee 🗆 ((c) F	armer □	
7. Mor	thly Income (a)Below 5000 (d)15000-20000	•	*		* *	00		
8. Whi	ch colour Of Card (a) Green Cards			rds 🗆	(C) Brown Car	d 🗆	1	
9. Wh	at Is Your Opinion (a)High □ (b)	Ū	Ü	ce of th		ic Di	istribution S	System.
10 .Wł	nich Kind Of Produ	act You	ı Buy Frequ	ently.				
	(a)Rice		(b)Wheat		(c)Cooking Oil		(d)Sugar	
	(e)Kerosene Oil		(f)Dhal		(g) Rava		(i) Maida	□.

11. Mention the Day v	vhich you fe	el Comfortabl	e to Buy Produ	cts In Public distri	bution system
Monday	Tuesday	□ Wed	lnesday 🗆	Thursday 🗆	Friday
Saturday	Sunday				
12.Level Of Satisfact	ion Towards	s public distri	bution System		
Particulars	Highly	Satisfied	Neutral	Dissatisfied	Highly
	satisfied				Dissatisfied
Convenient Store					
Location					
Working Hours					
Price					
Service					
Display Of Goods List					
Festival Offers					
Quality					
Quantity					
Packaging					

Availability

13. Level Of Agreement Towards Public Distribution System

Particulars	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Low quantity					
products					
Improper quality					
Proper balance					
amount					
Unavailability of					
products					
Distributing of old					
stock					
Low response					
from store					
incharge					
Long waiting					
hours in que					
Invalidity of					
measuring device					
Enough storage					
capacity in store					
			1		

GENDER OF THE RESPONDENT

S.NO	GENDER	NO OF RESPONDENT	PERCENTAGE
1	Male	88	59
2	Female	62	41
	Total	150	100

AGE OF THE RESPONDENT

S.NO	AGE	NO OF RESPONDENT	PERCENTAGE
1	Below	6	4
2	21-30	32	21
3	31-40	44	29
4	Above	68	45
	TOTAL	150	100

EDUCATION QUALIFICATION OF THE RESPONDENT

S.NO	EDUCATION QUALIFICATION	NO OF RESPONDENT	PERCENTAGE
1	School Level	60	40
2	Diploma	32	21
3	Graduation	46	31
4	Others	12	8
	Total	150	100

OCCUPATION OF THE RESPONDENT

S.NO	OCCUPATION	NO OF RESPONDENT	PERCENTAGE
1	Government Employee	28	19
2	Private Employee	68	45
3	Farmer	18	12
4	Business Man	32	21
5	Other	4	2
	Total	150	100

MONTHLY INCOME OF THE RESPONDENT

S.NO	MONTHLY INCOME	NO OF RESPONDENT	PERCENTAGE
1	Below 5000	24	16
2	5000-10000	36	24
3	10000-15000	34	23

4	15000-20000	24	16
5	Above 20000	32	21
	TOTAL	150	100

KIND OF CARD HOLDERS

S.NO	COLOR	NO OF RESPONDENT	PERCENTAGE
1	Green	96	64
2	White	48	32
3	Brown	6	4
	Total	150	100

PRICE OF THE PRODUCT IN PDS

S.NO	OPINION REGARDING PRICE	NO OF RESPONDENT	PERCENTAGE
1	High	36	24
2	Medium	63	42
3	Low	51	34
	Total	150	100

PRODUCTS FREQUENTLY PURCHASED BY THE RESPONDENT

	TOTAL	PERCENTAGE
RICE	38	25%

WHEAT	18	12%
COOKING OIL	22	15%
SUGAR	24	16%
KEROSENE	28	19%
DAL	8	5%
RAVA	10	6%
MAIDA	2	1%
TOTAL	150	100

CONVENINENT STORE LOCATION

S.NO	LEVEL OF SATISFACTION	NO OF RESPONDENT	PERCENTAGE
1	Highly Satisfied	42	28
2	Satisfied	66	44
3	Neutral	34	22
4	Dissatisfied	6	4
5	Highly Dissatisfied	2	1
	Total	150	100

PRICE SATISFACTION

S.NO	LEVEL OF SATISFACTION	NO OF RESPONDENT	PERCENTAGE
1	Highly Satisfied	36	24
2	Satisfied	74	49
3	Neutral	32	21
4	Dissatisfied	6	4
5	Highly Dissatisfied	2	1

Total 150 100	Total	150	100
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SERVICE SATISFACTION

S.NO	LEVEL OF SATISFICATION	NO OF RESPONDENT	PERCENTAGE
1	Highly Satisfied	12	8
2	Satisfied	34	23
3	Neutral	70	47
4	Dissatisfied	26	17
5	Highly Dissatisfied	8	5
	Total	150	100

QUALITY

S.NO	QUALITY	NO OF RESPONDENT	PERCENTAGE
1	Highly Satisfied	36	24
2	Satisfied	58	39
3	Neutral	28	19
4	Dissatisfied	12	8
5	Highly Dissatisfied	16	11
	Total	150	100

AVAILABILITY

S.NO	LEVEL OF SATISFICATION	NO OF RESPONDENT	PERCENTAGE
1	Highly Satisfied	28	19
2	Satisfied	36	24

3	Neutral	22	15
4	Dissatisfied	36	24
5	Highly Dissatisfied	28	19
	Total	150	100

ENOUGH STORAGE CAPACITY IN STORE

S.NO	LEVEL OF AGREEMENT	NO OF RESPONDENT	PERCENTAGE
1	Strongly Disagree	16	11
2	Disagree	10	7
3	Neutral	48	32
4	Agree	44	29
5	Strongly Agree	32	21
	Total	150	100

LEVEL OF SATISFICATION TOWARDS PDS

WEIGHTED AVERAGE METHOD

S.NO	PARTICULARS	TOTAL SCORE
1	Convenient Store Location	2.07
2	Working Hours	2.09
3	Price	2.28
4	Service	2.89
5	Display Of Goods List	2.77
6	Festival Offers	2.52
7	Quality	2.43
8	Quantity	2.72
9	Packaging	2.53

10	Availability	3.00
Mean score		2.53

INTERPRETATION:

From the above table it is inferred that the mean score is 2.53. The factors such as service, display of goods list, quantity & availability scores are above 2.53. such as 2.89, 2.77, 2.72 & 3.00. hence these factors are highly dissatisfied by the respondents.

The factors such as convinIent store location , working hours, price,festival offers,quality& packaging scores are below.2.53.such as 2.07,2.09,2.28,2.52,2.43&2.53 respectively. Therefore these factors are dissatisfied by the respondents.

LEVEL OF AGREEMENT TOWARDS PDS

S.NO	PARTICULARS	TOTAL SCORE
1	Low Quantity Products	4.30
2	Improper Quality	3.43
3	Proper balance amount	3.29
4	Unavailability Of Products	3.67
5	Distributing Of Old Stock	3.91
6	Low Response From Store In charge	3.57
7	Long Waiting Hours In Queue	3.95
8	Invalidity Of Measuring Device	3.33
9	Enough storage capacity in store	2.56
	Mean score	3.80

INTERPRETATION

From the above table it is inferred that the mean score is 3.80. The factors such as low quality products,

distributing of old stock & long waiting hours in queue scores above 3.80 such as 4.30, 3.91, &3.95 respectively. Hence these factors are strongly agreed by the respondents.

The factors such as Improper Quality, Proper balance amount, Unavailability Of Products, low response from store incharge ,invalidity of measures & enough storage capacity .scores below 3.80 such as 3.43, 3.29,3.67, 3.57,3.33&2.56 respectively. Therefore these factors are agreed by the respondents.

CHI SQUARE

GENDER AND PRICE

			Price			
Gender	Highly Satisfied	Satisfied	Neutral	Dissatisfied	Highly Satisfied	Total
Male	16	40	24	6	2	88
Female	20	34	8	-	-	62
Total	36	74	32	6	2	150

 H_0 - There is no significant relationship between gender and price.

H₁-There is a significant relationship between gender and price.

CHI SQUARE:

Calculated x^2 value = 12.81 Degree of freedom = 4 Table value = 9.488 Significant level = 5 %

INFERENCE:

It is inferred from the above table that the calculated value of chi square value is greater than the table value. Hence the null hypothesis is rejected.

So there is a significant relationship between gender and price.

GENDER AND QUALITY

			Quality			
Gender	Highly				Highly	
	Satisfied	Satisfied	Neutral	Dissatisfied	Dissatisfied	Total
Male	18	36	14	8	12	88
Female	18	22	14	4	4	62
Total	36	58	28	12	16	150

H₀ - There is no significant relationship between gender and quality.

 H_1 – There is a significant relationship between gender and quality.

CHI SQUARE:

Calculated x^2 value = 13.18 Degree of freedom = 4 Table value = 9.488 Significant level = 5 %

INFERENCE:

It is inferred from the above table that the calculated value of chi square value is greater than the table value.

Hence the null hypothesis is rejected. So there is a significant relationship between gender and quality

GENDER AND QUANTITY

			Quantity	ý		
Gender	Highly				Highly	
	Satisfied	Satisfied	Neutral	Dissatisfied	Dissatisfied	Total
Male	10	20	40	10	8	88
Female	22	8	18	4	10	62
Total	32	28	58	14	18	150

 H_0 - There is no significant relationship between gender and quantity.

H₁-There is a significant relationship between gender and quantity.

CHI SQUARE:

Calculated x^2 value = 16.78 Degree of freedom = 4 Table value = 9.488 Significant level = 5 %

INFERENCE:

It is inferred from the above table that the calculated value of chi square value is greater than the table value.

Hence the null hypothesis is rejected. So there is a significant relationship between gender and quantity.

AGE AND PRICE

	Price					
Age	Highly				Highly	
	Satisfied	Satisfied	Neutral	Dissatisfied	Dissatisfied	Total
Below 20	3	2	1	-	-	6
21-30	7	18	7	-	-	32
31-40	11	25	8	-	-	44
Above 40	15	29	16	6	2	68
Total	36	74	32	6	2	150

 H_0 - There is no significant relationship between age and price.

 H_1 – There is a significant relationship between age and price.

CHI SQUARE:

Calculated x^2 value = 27.24

Degree of freedom = 12Table value = 21.026Significant level = 5 %

INFERENCE:

It is inferred from the above table that the calculated value of chi square value is greater than the table value.

Hence the null hypothesis is rejected. So there is a significant relationship between age and price.

AGE AND QUALITY

	Quality					
Age	Highly				Highly	
	Satisfied	Satisfied	Neutral	Dissatisfied	Dissatisfied	Total
Below 20	-	1	-	2	3	6
21-30	6	11	8	3	4	32
31-40	10	25	5	2	2	44
Above 40	20	21	15	5	7	68
Total	36	58	28	12	16	150

H₀ - There is no significant relationship between age and quality.

 H_1 – There is a significant relationship between age and quality.

CHI SQUARE:

Calculated x^2 value = 27.81 Degree of freedom = 12 Table value = 21.026 Significant level = 5 %

INFERENCE:

It is inferred from the above table that the calculated value of chi square value is greater than the table value.

Hence the null hypothesis is rejected. So there is a significant relationship between age and quality.

MARITAL STATUS AND SERVICE

	Service					
Marital Status	Highly				Highly	
	Satisfied	Satisfied	Neutral	Dissatisfied	Dissatisfied	Total
Married	6	14	44	10	4	78
Un	6	18	24	16	4	68
Married						
Divorce	-	2	2	-	-	4
Total	12	34	70	26	8	150

H₀ - There is no significant relationship between marital status and service.

H₁ – There is a significant relationship between marital status and service.

CHI SQUARE:

Calculated x^2 value = 19.76 Degree of freedom = 8 Table value = 15.507 Significant level = 5 %

INFERENCE:

It is inferred from the above table that the calculated value of chi square value is greater than the table value.

Hence the null hypothesis is rejected. So there is a significant relationship between marital status and service.

OCCUPATION AND PRICE

	Price						
Occupation	Highly				Highly		
	Satisfied	Satisfied	Neutral	Dissatisfied	Dissatisfied	Total	
Government	8	12	6	0	2	28	
Employee							
Private Employee	14	32	18	4	-	68	
Farmer	10	4	2	2	-	18	
Business Man	4	22	6	-	-	32	
Other	-	4	-	-	-	4	
Total	36	74	32	6	2	150	

H₀ - There is no significant relationship between occupation and price.

 H_1 – There is a significant relationship between occupation and price.

CHI SQUARE:

Calculated x^2 value = 35.11 Degree of freedom = 16 Table value = 26.296 Significant level = 5 %

INFERENCE:

It is inferred from the above table that the calculated value of chi square value is greater than the table value.

Hence the null hypothesis is rejected. So there is a significant relationship between occupation and price.

MONTHLY INCOME AND PRICE

	Price					
Monthly Income	Highly				Highly	
	Satisfied	Satisfied	Neutral	Dissatisfied	Satisfied	Total
Below 5000	-	18	6	-	-	24
5000-10000	12	12	8	4	-	36
10000-15000	8	20	6	-	-	34
15000-20000	8	10	6	-	-	24
Above 20000	8	14	6	2	2	32
Total	36	74	32	6	2	150

H₀ - There is no significant relationship between monthly income and price.

 H_1 There is a significant relationship between monthly income and price.

CHI SQUARE:

Calculated x^2 value = 30.38 Degree of freedom = 16 Table value = 26.296 Significant level = 5 %

INFERENCE:

It is inferred from the above table that the calculated value of chi square value is greater than the table value.

Hence the null hypothesis is rejected. So there is a significant relationship between monthly income and price.

CHAPTER V

5.1 MAJOR FINDINGS

- ❖ Majority (45%) of the respondents are the age group of above 40.
- ❖ Majority (52%) of the respondents are married.
- ❖ Majority (45%) of the respondents are private employee.
- ❖ Majority(24%) of the respondents are the income level of 5000 to 10000
- ❖ Majority (64%) of the respondents are using green card.
- ❖ Majority (25%) of the respondents are frequently buy rice in Public distribution.
- ❖ Majority (25%) of the respondents are comfortable to buy product on Sunday.
- ❖ Majority (44%) of the respondents are satisfied with the stores conveniently located.
- ❖ Majority (59%) of the respondents are satisfied with the stores working hours.
- ❖ Majority (49%) of the respondents are satisfied with the price.
- ❖ Majority (47%) of the respondents are neutral with the service
- ❖ Majority (33%) of the respondents are neutral with the display of goods list.
- ❖ Majority (41%) of the respondents are satisfied with the festival offers.
- Majority (36%) of the respondents are disagree with the service provided in public distribution system.
- ❖ Majority (39%) of the respondents are satisfied with the quality.

- ❖ Majority (39%) of the respondents are neutral with the quantity.
- ❖ Majority (31%) of the respondents are agree with the low quality products.
- ❖ Majority (35%) of the respondents are strongly agree with the improper quantity.
- ❖ Majority (23%) of the respondents are neutral with the proper balance amount.
- ❖ Majority (33%) of the respondents are strongly agree with the unavailability of products.
- ❖ Majority (40%) of the respondents are strongly agree with the distributing of old stock.
- ❖ Majority (36%) of the respondents are strongly agree with the low response from store incharge.
- ❖ Majority (44%) of the respondents are strongly agree with the long waiting hours in the que.
- ❖ Majority (32%) of the respondent are neutral with the enough store capacity.

5.2 SUGGESTIONS

The following suggestions were made for the consumer satisfaction towards public distribution system based on the findings of this study.

- The public distribution system department should take step to increase the performance of the public distribution system.
- The public distribution system department should allot separate date for separate wards.
- The public distribution system department should list out the price of all the product in public distribution system stores.
- The public distribution system department should periodically check the availability of the product in public distribution system stores.

- The quantity of the products distributed can be increased.
- The Quality of the rice can be improved.
- The public distribution should provide good quality products to the consumers.
- The public distribution system should reduce the waiting hours of the consumers
- The public distribution system should have an enough storage capacity.

Policy Reforms and Recommendations

Presently, corrective reforms are guided by several initiatives of the Food and supply Dept. of Delhi Govt. Some of them are:

SMS alerts: The food and supply dept. sends sms to all the beneficiaries who have registered their mobile numbers, informing them about the delivery of grains from the central go-downs to their respective PDS shops. This allows them to be informed about the time of delivery and to estimate the timing of distribution accordingly. Also, it makes the PDS owner accountable to the people, at least with regard to delays in distribution. The sms can be received by anyone in general public as well. All they need to do is register their mobile numbers on the food and supply department's website. This increases public accountability and allows other institutions like NGOs to monitor the performance of a particular PDS shop.

End to end computerisation of PDS: The food and supply dept. has taken to computerisation for integrating all its stakeholders on one portal. The main objectives include authentication of beneficiaries, easy access to information by the beneficiaries via their website and through sms and improvement in internal administrative efficiency. It is based on a single unified information system inclusive of 7 modules. An example of a module is ration card management module which prepares, manages, links/de-links card to FPS and activates/deactivates cards. Similarly, there are 6 others such as food grain allocation module, sms module, FCI release order module etc.

"Kerosene Free" Delhi: The Delhi govt is all set to launch its new scheme on Aug 15, 2012 which entails provisioning of a filled LPG cylinder, regulator, an ISI marked gas stove having two burners and a rubber tube to approximately 3.56 lakh poor families, belonging to BPL, AAY and APL-JRC. This is a step towards making Delhi the first kerosene free city in India. This scheme has been launched in light of the fact that much of the subsidized kerosene did not reach the poor and was diverted to the black market.5 Augmenting the efforts of the department, there are few other recommendations which can be implemented to further strengthen the system and ensure delivery of the scheme to the intended beneficiaries. These are as follows:

Shift towards a system of per head entitlement: As mentioned above, every stamped card is entitled 35 kg of ration irrespective of the number of members in the family. A family with 10 members draws equal amount of ration as a family of 2. Thus, effectively per head the larger family gets 3.5kg whereas the smaller family gets 17.5 kg per head. Thus, a mechanism which ensures equal distribution per person would help in increasing micro level self-sufficiency without subsequent rise in budgetary incidence. It would also discourage smaller families from lending their excess ration to unintended beneficiaries.

Fixing the quantity entitled to APL stamped general cards: As seen above, one potential source of variation in the amount of grains received by people occurred because APL stamped card holder was given the amount that was left after distribution to the other eligible ration cards. The minimum which was guaranteed was 22 kg of ration. This led some of the PDS shopkeepers to fix the quantity at 20 kg (below minimum) and sell the same to the APL stamped card holders for a fairly long time, without giving them any hiked quantities that was supplied by the government periodically. Any hike in quantity rarely reaches the actual beneficiaries. In some areas like Gharoli and Kondali, APL stamped cards received just 20 kg of grain from the shopkeepers whereas at the same time in other areas like Mandawali and Khichripur people received 25kg of grains on their APL cards. It would be a good idea to guarantee a fixed quantity to APL stamped card holders at a level which can realistically be supplied by the government, even if it is lower than 35kg. This way people are aware of what they are entitled and PDS shop keepers cannot siphon any increase in quantity.

Packaging of grains in smaller denominations: Presently, grains are packed in sacks of 50 kg which is opened and redistributed by the PDS shop keeper to respective persons. Here, a shop keeper may choose to

weigh less grain or mix the grain with impurities. However, if grains can be delivered in packets of 10 kg and 5 kg, then 35kg grain can be sold to the consumers in sealed packets without any intervention by the shopkeeper. This would help in checking diversion. The system can be strengthen by introducing bar code tagging, similar to what is often used in bigger retailing outlets like Big Bazaar or Easy Day.

Revision of PDS shopkeepers' commission: As mentioned earlier, the primary motivation behind diversion and indifference stems from a low commission earned by the PDS shopkeepers. The problem increases as it is illegal for them to pursue any side business e.g. wheat grinding operations (chakki). They may only sell 10 other items, besides wheat, rice and sugar (essential commodities) in their shops. These items can be sold at market prices and includes dal, spices, ghee, vanaspati, candles, soaps, toothpaste, cold drinks, salt, and refined oil. The low commission and a small number of market priced commodities render the PDS shop economically unviable. It's been 17 years since 1995 when the last time PDS shopkeepers' commission was increased. It is strongly recommended that commissions be increased, matching with increasing price level and the rising costs. Since prices and commissions are decided by the central government, it is upon the central government to look into the same.

Increased decision making power to the states: It may be a good idea to evolve a system where the state governments have power to decide the essential commodities for distribution, their prices and commissions for PDS shopkeepers. Presently, procurement of grains, distribution of grains to the states and, fixing prices and quantities is under the purview of the central government. The state government has a minimal role in decision making, its job mainly limited to good implementation of the scheme. It would be worth considering decentralisation of procurement which can save huge transport costs. Also, state governments are better equipped to judge regional consumption pattern, for instance they may choose to introduce coarse grains like bajra or ragi if poor people in a particular state consume that in substantial amount. Finally, the cost of living varies across different parts of the country. Therefore, setting variable prices and commissions taking into account state level variations in standard of living instead of fixing uniform prices and commission for the entire country may lead to better disbursement of food subsidy by the central government.

Use of existing technologies: Use of GPS in trucks transporting grains from godowns to PDS shops, biometric verification at the time of purchasing grains, biometric entry and exit of PDS shop keepers etc are

some ideas which can be used to strengthen vigilance and accountability by reducing human dependence for the same.

Finally, it is important to de link ration card from other schemes and restricts its usage for the purpose of drawing ration. This would call for stopping the issue of unstamped ration cards which are mostly used as identity cards and address proofs. Rejection of ration cards as identity cards and address proofs would strengthen the system by substantially reducing incentives for corruption and bribery.

5.3 CONCLUSION

Government has taken all efforts to make the system more effective and ensure the availability, affordability and accessibility of public distribution system articles to the poor. But the responses of sample respondents of this study showed different picture and unearthed that public distribution system is suffering from problems like leakages, poor quality and under-weighing, non-availability of controlled as well as non-controlled articles As the main objective of public distribution system is to provide safety net to the poor against spiraling rise in price, the selling of non-controlled articles through FPS is not away from the scope of public distribution system.

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