SOCIO-ECONOMIC ASPECTS AND FOOD SECURITY IN SLUMS OF DELHI

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MASTER OF PHILOSOPHY

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CERTIFICATE

I, Miss KUMARI LAKSHMI, certify that, the thesis entitled "**Socio-Economic Aspects and Food Security in Slums of Delhi**", submitted by me for the degree of Master of Philosophy is my bonafide work and may be placed before the examiners for evaluation.

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However, I am solely responsible for the shortcomings which may be found in this work.

KUMARI LAKSHMI
M.Phil IV Sem

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CHAPTER I

INTRODUCTION

The presence of slums and squatter settlements in a society is a clear indication of the failure of a society and government to provide adequate habitat for human development. They are also constant reminder of the loopholes in urban planning. The term 'slum' is used to indicate housing which falls below a certain level which is necessary to contribute to human development.

In Delhi an addition of 70,000 migrants to the capital's population each year, takes place.[1] Growth of population has brought about degradation in the quality of living, also the slums and squatters have multiplied manifold. The essential infrastructure of the cities has reached the verge of collapse. According to an estimation, seventy percent of Delhi's population lives in substandard conditions.

In Delhi, there are four types of slums, viz. (1) notified slums (2) unauthorized colonies, (3) resettlement colonies (4) squatters (jhuggies).

1. Notified slums are distributed in defined pockets. Two old city of Shahjahanabad (walled city) been notified as slums. These slums accommodated around 10 lakh population I 1985.

2. Unauthorized colonies are areas developed by private colonizers with profitable layout plan without any regard to the need of the

[1] H.S. Gill, (1992). Housing the Poor – An Analysis with Special Reference to Slum Colonies in Delhi. Unpublished Thesis, SSS/CSRD, J.N.U., New Delhi, pp. 1-20.

community facilities as well as basic amenities required for the individual plot. "The number of unauthorized colonies was recorded 9 as upto March 1991 and population living in these areas were estimated to be around 17 lakh in December 1990".[2]

3. Resettlement colonies are called so because under the slum clearance programme (1960-70), municipality/D.D.A. has allotted small developed plots and modestly built up tenements to jhuggi-dwellers in planned and developed colonies.

4. Squatter (jhuggi – jhopri) clusters are spread over all the city in Delhi. It is conglomeration of homes built up without regular foundation on public land meant for future development (on drain sides, on the side of railway tracks, on the bank of river Yamuna. These squatters are made of straw, mud, loose bricks, tin, wood, corrugated sheets etc. without a regular foundation, jhuggies are not arranged, in a particular order and haphazard development has taken place.

United Nations Urban Land Policies[3] defines slum as a building, group of buildings or areas characterized by overcrowding, deterioration, insanitary conditions or absence of facilities on amenities which because of these conditions or any of them endanger the health, safety or morals of its inhabitants or the community.

As defined by Slum Area (Improvement and Clearance) Act, 1956 as slums are those areas where the buildings are in any respect unfit for

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[2] Ibid.

[3] K.R. Rao and M.S.A. Rao, Cities and Slums : A Study of Squatters Settlement in the City of Vijayawada, Concept Publishing Company, New Delhi, 1964.

human habitation and are by reason of dilapidation, over crowding, faulty arrangements of streets, lack of ventilation, light or sanitation facilities or any combination of these factors are detrimental to safety, health and moral.

Deccan Herald[4] in one of its articles mentioned slums as having small tenements, narrow lanes and a lack of sanitation with no thought for the quality of life.

Birdi[5], in his book said that slums are, physically, areas of the city with inadequate housing deficient facilities, over crowding and congestion, and socially, slums is a way of life, having a special character with its own set of norms and values as reflected in poor sanitation, health values, health practices, deviant behaviour and social isolation.

A compact area with collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions was considered as 'slum'.[6]

Habitat – II, 1996 (a follow up of Habitat – I 1976) has brought out two basic terms of global importance : adequate shelter for all and Sustainable Human Settlement Development in Urbanising World. But none of the people living in despair in urban areas may be aware about all these happenings worldwide.

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[4] Deccan Herald, 21 July, 1987, Bangalore.
[5] H.D. Birdi, Delhi – Slums and Law : A Comparative Study of Indian and Foreign Law, ISSD, New Delhi, 1982.
[6] NSS, 49th Round, 1999 (January – June).

To achieve the aim of sustainable human settlement development, over stressed metropolitan cities need to be relieved through their integrated development along with their hinterlands. Also desirable is a more widespread urbanization for an equitable spatial development, and equitable provision of housing and related services for all sections of the society. Effective steps for raising the income levels of the poor had to be simultaneously taken. Otherwise, socio-economic well being and quality of life of these people will forever remain low.

1.1 OBJECTIVES

1. To attempt a brief account of socio-economic aspects of one of the slum i.e. Dhapa Colony.

2. To identify the relationship between different variables, to interpret the role of the factors influencing the slum character.

3. To study and analyse PDS at the national level (42nd round NSS data)a NCT Delhi Level) (49th round NSS data, State sample), Commodity, Income and region wise; and at the slum (of Delhi) level (May 1999 data).

4. To find out the extent to which the public distribution system meet the essential consumption needs of beneficiary, the important relationship that exist between the consumers and the administration, also the varies facets of the relationship between the consumer and the retail outlet or FPS.

1.2 DATA SOURCES

Primary

Data regarding identification of the household, household composition and income, housing particulars, savings and borrowings, details of durable and semi durable household goods possessed, public distribution system and -expenditure and purchase of various commodities the household during 30 days preceding the date of survey had been collected from sample of 153 households. Primary data of the kind which was collected on the basis of the interview held with the respondent, and by filling the structured questionnaire prepared for the survey. Primary data is actually the basis for my study which has highlighted several aspects of the slum population.

Secondary

Although a number of studies appeared on the subject but these studies are mostly description in nature or are based on secondary data besides for who have used survey data. Data regarding slum statistics were collected from the NSS 49th round, slums in India, Jan-June 1993 which gave much clearity to my study.

a) The main reason behind this was non-availability of comprehensive information on utilisation of PDS in India. The only source of information was data from micro survey and data on off take published in Bulletin on food statistics

b) The data from the 42nd round of the national sample survey on "Utilisation of public distribution system" collected during July 1986 - June 1987, and published in 1990.

c) Report on public distribution system in Delhi, 49th round, taken during 1993-94, however has solved the problem of non-availability of data to a significant extent. It has made it possible to evaluate various aspects of PDS performance in India as well as in Delhi. But it appears that since the publication of this data, few important empirical studies appeared in this field, but researchers have not fully utilised this useful and comprehensive information on PDS wherelse none had been done in Delhi. Thus, the need for an empirical study of Delhi's performance of PDS based on this source of data can hardly be overemphasized.

1.3 QUALITY OF DATA AND LIMITATIONS

In the household survey an attempt have been made to collect as accurate data as possible. Cooperation from the households was possible through Pradhan in the slum. However some of the respondents did not cooperate, majority of the respondents, there was no difficulty in obtaining the data. During the data collected process, I had introduced certain cross checks and in case of most of the schedule there was no difficulty. For instance, cross tabulation between caste by age has been calculated, which cross checks the frequency counts for both and reflects the accuracy of the data.

Income of the households is generally considered to be difficult to obtain. This is because some persons are reluctant to report their income because of income tax purposes. However, there was little resistance in revealing income of the members of the households as majority of them were nowhere near the income tax range.

It was observed that households were, to some extent hesitant to report the subconnection of electricity and income. This is because, the practice of tapping electricity without permission from nearby main connections is illegal.

In the slums there are households from different castes, religion and regions. All the households do not like to allow an outsider to enter their rooms, in a particular section of the slum, therefore I did not insist for data on size of the room(s).

Consumption expenditure over items from PDS and open market were collected. In many of the cases amount of money spent on each item bought from open market for the same quantity was varying from one households to other households. There were cases when the respondent was not sure of the amount and money spent over the food items in a month, and a figures were provided.

1.4 LITERATURE REVIEW

Literature on slums were available in a large number but very few were picked up which was relevant for my study. Slums and squatters are the component of our urban system and contribute a significant quality of labour force to urban labour market and generate adequate income to sustain the urban economy but the slum dwellers are denied the very basic amenities for their sustenance. They live in very squalid conditions. Kundu (1991)[7] in his attempt to examine the magnitude of disparity in the access to the basic facilities of the poor people, said that, absence of protected water and sewerage and

[7] A. Kundu, Micro Environment in Urban Planning, Access of Poor to Water Supply and Sanitation, Economic and Political Weekly, Vol. 26, No. 37, 1991, pp. 2167-71

sanitation facilities in slums creates serious environmental problems to the people.

In spite of all the problem, the slum people are struggling hard to live and they are trying to create better environment for their descendants so that they may become more dignified members of the society than their ancestors.

Sandhu (1985)[8] in his study mentioned that not all slums are areas of darkness and despair. Their poverty may be economical but not socio-cultural. Roy (1992)[9] gave a detailed account of the slum situation in Calcutta, taking into account the sanitation, water and toilet facilities. He points out that even though the facilities are upto the mark of satisfaction, the problem of garbage disposal, sewerage and water logging and flooding are major threats to the environment of the buster dwellers.

Shafi (1995)[10] in his article about slum conditions in Delhi mentioned that the national capital becoming the slum capital of India with 929 jhuggies clusters containing a population of 1.7 million which is incidentally more than its 1947 population. He also mentioned that teaming slums are lacking safe drinking water, elementary hygiene and basic sanitation, with putrefying garbage heaps lead to the spread of diseases.

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[8] R.S. Sandhu, Slums: Areas of Darkness and Despair? Eastern Anthropoligist, Vol.38, No. 2, April-June, 1985, pp.151-60.

[9] P. Roy and Others, "Measuring Bustee Environment in Calcutta", Social Change, Vol. 22, No. 1, March 1992, pp.120-39.

[10] S.S. Shafi, India's Urban Crisis, Patriot, 16 January 1995.

D'Souze (1978)[11] has remarked that unplanned and haphazard growth of the metropolitan cities in India was a factor for rapid development of the blighted areas. He also studied the nature of urban planning, renewal, housing for the poor and socio-economical characteristics of the slums in the background of urban poverty. The studies though providing a rich understanding of the urban problems of India, ignore the extraneous factors like nature of policy, the mechanizations of market economy and maneuvering of the industrial class over the very growth of urbanisation.

Tanuja (1973)[12] while analysing the morphology of residential areas in Indian cities has discussed the nature and characteristics of slums. She cited the examples from Kanpur and Delhi, she points out that slum development in India indicates that it is the result of overcrowding and haphazard growth of cities. Immigrants hired by job opportunities in industrial units also take up other occupations, such as pretty shopkeeping, domestic servants, etc.

About the places where the slums and squatters have emerged, Mehta and Kulkarni (1983)[13] examined the various factors responsible for choice among slum dwellers to live therein. The response of slum dwellers to their environment is best manifested in their separate physical entity. One can always mark the slum pockets quite definitely in any urban areas.

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[11] De Souza, The Challenges of Urban Poverty, An Introduction in Indian City: Poverty, Ecology and Urban Development (ed.), De Souza, A. Manohar Publications, 1978.

[12] K.L. Tanuja, Morphology of Residential Areas in Indian Cities, Singh, R.R. (ed.), op.cit., pp. 188-193.

[13] S. Mehta & P. Kulkarni, Location Choice among Slum Dwellers, A Human Response to Urban Environment in Environment Management (Ed.) L.R. Singh et.al. The Allahabad Geographical Society, 1983, pp. 188-196.

A Bharat Sevak Samaj (1958)[14] survey deals with the characteristics of slum families, it's demographic aspects, employment opportunities and status, income standards, health facilities available and status of health and levels of education as well as accommodation and Rent.

Md. Abdul Quader Miah and Karl E. Weber (1990)[15], throws light on slum upgradation, which is based on field research carried out by the first named author in partial fulfilment of the requirements for the award of the doctor of engineering degree. His draft dissertation entitled "Affordability dynamics and slum upgrading: A model based on evidence from Dhaka, Bangladesh" has been completed and submitted for evaluation.

B.S. Saini (1988)[16] has dealt with traditional practice and new realities, training professionals for community - oriented work as professionals as middlemen: learning by doing.

Gopal Krishanan, (1984)[17] examines demographic factors including slum population, average size of the household, religious composition, caste composition, linguistic composition, time of arrival of the migrants households, and reason of migration. Also economic situations including monthly income patterns, transistor ownership patterns occupational and structure of the household heads, Journey to work of the household heads, skill availability pattern and registration with employment exchange have been looked upon.

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[14] Bharat Sevak Samaj (1958) Slums of Old Delhi, Report of the Social Economic Survey of the Slum Dwellers of Old Delhi, Atma Ram and Sons, New Delhi.
[15] Miah (Abdul Quader) and Weber (Karl), Social Indicators for Slum Upgrading: Evidence from Dhaka, Bangladesh, Ekristics, May/June, 1990, pp. 181-188.
[16] Saini, (B.S.), Training Professionals for Slum Improvement and Rural Development in the Third World, Ekristics. Jan/June, 1988, pp.85-87.
[17] Krishnan, G. and Others, The Siliguri Slums: A Situational Analysis, 1984.

Housing conditions incorporating house site ownership pattern, area size of house sites, type of houses, distribution of houses by number of rooms, availability of open space in houses, availability of separate kitchen space, kind of fuel used and households living in rented accommodation have also been examined. Availability of water, medical services, child inoculation, education, nutrition and sanitation conditions are observed. The role of voluntary organisations have looked upon. Latter the correlation matrix among various important indictors has been worked out to assess the possible relationships existing.

In reviewing the **literature on PDS**, it is noted that few serious attempt has been made to study the relationship between certain socio-economic variables and utilisation of PDS by population as a whole or certain specific section of population and/or food security in slums.

B. Siddappa (1992)[18], the study analysed that the benefit derived by the households from the cloth scheme has varied from block to block and district to district, even though there is a similar operational procedure all over the state. The study analysed the impact of rationing on the consumption levels of low income groups (below Rs. 3500 income per annum) and the gains derived by them through the green card scheme.

[18] Siddappa, (B), Public Distribution System: A Case Study of Gulbarga District in Karnataka, Southern Economist, 30(19), pp. 13-15.

S. Mahendra Dev, M.H. Suryanarayana (1991)[19] attempts to verify the objective of stabilising the general living standards of the population, particularly the poor and insulate them against rising prices, using the latest available NSS data on utilisation of PDS for the period July 1986 - June 1987 which was collected as part of the 42nd round survey on social consumption.

S. Mahendra Dev (1996)[20] has looked at the coverage of the poor under PDS and distribution of PDS quantities across fractile groups using 1986-87 household level data, which has done for all groups, social groups and economic groups. He has also tried to assess whether employment programmes like EGS (the term 'EGS' refers to not only the EGS in Maharashtra but also for all public works programmes including JRY, NRY, etc) can substitute the PDS in both rural and urban areas. Finally, in this study, we discuss the issue of targetting and strategies needed for effective functioning of PDS.

Kamal Nayan Kabra (1989)[21] talks of large number of market forces which influence the households decision to obtain the PDS supplies. Similarly, a large number of administrative arrangements determine whether a household would be able to avail of the PDS supplies. Before we come to a discussion of these factors, let it be understood that if every one was to opt for the PDS supplies, it will turnout to be game in which some can gain at the expense of many. This is because

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[19] Dev. S. Mahendra and M.H. Suryanarayana, Is PDS Urban Biased and Pro Rich? Economic Political Weekly, Oct 12, 1991, pp.2357-2362.

[20] Dev. S. Mahendra, Food Security: PDS Vs. EGS, A Tale of Two States, EPW, July 6, 1996, pp. 1752-1764.

[21] Kabra, K.N. On the Inadequate size, Urban Bias and 'Universal Coverage' of Public Distribution System, Quarterly Economic Report of the Indian Institute of Public Opinion, 32(4) (128), Jul-Dec 89, pp. 31-39.

the size of PDS operation is grossly inadequate compared to the requirements based on number of person entitled and the quantities each one is entitled.

He also mentioned that the relative share of PDS supplies vis-a-vis the open market supplies is an important variable determining, the effectiveness of the PDS. Secondly he has pointed out that both the relative share of the PDS supplies in net production and their rate of growth show sizeable and significant interstate variations, even within the states, it is urban, industrial districts which account for a large part of the total off-take. Also, an important manifestation of the relatively small size of the PDS, segment of the food market is then spread. He has also highlighted the comparison of PDS off-take, and the consumption expenditure on food of the relatively poor as well as national number of beneficiary population, to show its extent of coverage as a percent of total population. Another study which a book "The public distribution system in India" by K.N. Kabra was a great help. Utilisation and access to PDS and issue of ration cards, scale of rations, periodicity of ration issue, complaints and grievances of consumers. The next point deals with consumers and the retail outlet and finally the socio-economic indicators of the sampled population and the need for target group orientation.

1.5 METHODOLOGY

The methodology followed in the study is simple tabulation of the relevant variables.

Preparation of the questionnaire

The relevant socio-economic variables like age, caste, religion, income, etc. were incorporated in the questionnaire. (Copy of the questionnaire is placed in the appendix).

Household survey: The pretest survey was conducted in a south Delhi slum i.e. Dhapa colony, situated in R.K. Puram, Sector II. As is pointed out, a structured questionnaire was used for the collection of household data after pre-testing.

Survey period: The household survey was conducted during May to June, 1999.

Preparation of slum layout

A layout of the slum was prepared after visiting the slum and a block was demarcated in the slum, on the basis of well defined landmarks (mainly bounded by roads on two sides, Nala on one and flats on the other) for further household survey. The houses of the demarcated block were listed.

Random survey

The houses were selected for the survey in a systematic manner where the first house was selected randomly and the subsequent houses were selected using random interval of 7 and covering 15 percent of the houses in the selected block.

Sample Size

The number of household which surveyed were 153 only and detailed data was collected.

Collection of secondary data

Secondary data was collected from various sources (as mentioned earlier).

Data Analysis

Data was analysed with the help of frequency analysis (Number of occurrence of the particular phenomenon analysed) and simple tabulation.

Primary data were further cross tabulated to ascertain the clear picture of the relationships among two (or more) variables.

Analysis of Secondary data were also incorporated and interpreted to substantiate the findings of the study.

1.6 THE CHAPTERIZATION SCHEME OF THE PRESENT STUDY:

Chapter One introduces which is further devoted to objectives, hypothesis, sources of data, quality of data and limitations, literature review, methodology and plan of the study.

Chapter Two starts with a detailed analysis of the slum statistics showing estimated number of slums and their percent distribution by States and U.T. Following which the socio-economic attributes of the slum of Delhi which includes discussion on the locational pattern. The second part deals with the demography including slum

population, religious composition, sex ratio, caste, marital status, age composition of population, and level of education, the third part deals with the economy of the slum incorporating monthly income, occupational structure, distance to work place or educational institutions, mode of conveyance and household goods. The fourth part deals with saving and borrowing including average saving last months, present total saving, deposit, borrowing reasons amount borrowed last month, total indebtedness, borrowing sources and security of loans. The fifth part deals with housing incorporating house site ownership pattern, household bought, amount paid, living duration, location and structure of the houses, type of structure, distribution by number of rooms and availability of services, which also cross examines various variables and summaries.

Chapter three starts with a discussion of the public distribution system and the analysis of 49th round NSS data of Delhi. The second part deals with coverage and organisational network. The third part of the chapter contains an analysis of 49th round (1993-94) data of Delhi. The fourth part deals with the definition of ration card, the procedure for issuing ration cards, commodity coverage, scale of issue, periodicity of purchase, issue prices, Fair price shop, and disfunctionalities. The fifth part deals with the conclusion.

Chapter Four deals with the consumer and the public distribution system, its utilisation excess and viability. Part one of the chapter deals with the issue of ration cards, time taken to get one, physical condition of the card, number of visits to civil supplies office, administrative procedure filling of forms, inspection before issue, choice of PDS by household, reported factors effecting consumer

utilisatioin, awareness of entitlement, periodicity of issue, consumer responses on quality, reasons for poor quality PDS supplies, reasons for not complaining, location and distance to FPS, reported days when FPS opens during a week, time spent by consumer at FPS and inter household transfer of entitlement. The part two deals with the gaps in the amount recorded and specified by the government in the ration card, the gaps in the permitted purchase and actual purchase of the items, relative purchase from PDS per capita purchase of various items both from PDS and open market and income expenditure over food items. Relationship between two (or more) variables have seen for more clarity and understanding, and finally concludes.

Chapter five summaries the findings of the study held in the slum of Delhi i.e. Dhapa colony dealing with socio-economic aspects and food security and recommends finally.

CHAPTER II

SOCIO-ECONOMIC ASPECT OF THE SLUM

INTRODUCTION

Development is a very sensitive indicator of a country and its various regions. It's not merely a simple phenomenon but a complex socio-economic process. The intricate pattern of regions display a great variety of mutual links in terms of both analytical relationship as well as social, economic, political and institutional intervention. Regional disparity in socio-economic development has become an extremely sensitive issue in recent times with serious social and political ramifications. Balanced growth is a necessary condition for the harmonious development of vast nation like India. The present situation reveals that some states are more advanced and developed in all respect, while others are relatively backward. Even in each state, some regions are more developed than the others. In contrast some are still close to the primitive mode of life. This is also found in the most developed nations in small pockets. The mere difference is of magnitude and the levels of living. One can assume the gap in the levels of living through the differences between economic development in various districts which is widely known as disparity in other words.

The number of slums and their distribution as a whole, which can be seen in Table 2. It is interesting to note that apart from declared slums, there are many others undeclared slums and these are substantial in number in every state. The highest number of slums have been recorded in Maharashtra, constitutes about 20 per cent of

the total number of slums of India, followed by West Bengal (14 per cent), Andhra Pradesh (11.4 per cent) and Karnataka (11 per cent).

It is surprising to see that there are no slums in Arunachal Pradesh, Goa, Jammu & Kashmir, Manipur, Mizoram, Nagaland, Tripura, Andaman & Nicobar, Dadar Nagar & Haveli, Daman & Diu and Lakshadweep. It may be possible that either the data of slums are not recorded or there is no concept of slums. Another interesting feature is recorded for Assam, Himachal Pradesh, Kerala and Pondicherry where all slums are undeclared, the number has not been recorded on official papers. In all, most of the states possesses undeclared number of slums, in disproportionate manner.

In consonance with the main objective, this chapter attempts a brief account of one of the slum i.e. Dhapa Colony. It not only throws light on locational pattern, slum population, religious composition, sex ratio, marital status, age structure, level of education, age-specific education, present monthly income, occupational structure, distance to work place or educational institutions, mode of conveyance, household goods, but also savings and borrowings, indebtedness, housesite ownership pattern location and structure of households and distribution by number of rooms. It also highlights the availability of bathroom, electricity, sanitation, present use of house/room, nutrition and sources of energy for cooking.

Discussion in this chapter has been arranged into the following sections:-

2.1 Locational pattern, 2.2 Demography, 2.3 Economy, 2.4 Saving and borrowing, 2.5 Housing, 2.6 Availability of services.

Table 2: Table showing estimated number of slums and their percent distribution By States/UTs.

State/U.T.	Estimated Number of Slums			Percent Distribution of Slums		Total Distribution
	Declared	Undeclared	Total	Declared	Undeclared	
Andhra Pradesh	1494	4950	6443	23.19	76.81	11.44
Arunachal Pradesh	-	-	-	-	-	-
Assam	-	274	274	-	100	0.49
Bihar	140	2265	2404	5.82	94.18	4.27
Goa	-	-	-	-	-	-
Gujrat	1241	1348	2590	47.92	52.08	4.60
Haryana	220	1045	1265	17.39	82.61	2.25
Himachal	-	23	23	-	100	0.41
J&K	-	-	-	-	-	-
Karnataka	4685	1322	6007	77.99	22.01	10.67
Kerala	-	481	481	-	100	0.85
M.P.	1447	1356	2803	51.62	48.38	4.98
Maharashtra	4829	6375	11204	43.10	56.90	19.90
Manipur	-	-	-	-	-	-
Meghalaya	105	-	105	100	-	0.19
Mizoram	-	-	-	-	-	-
Nagaland	-	-	-	-	-	-
Orissa	133	1602	1735	7.67	92.33	3.08

Contd.....

Punjab	220	307	526	41.83	58.17	0.93
Rajasthan	183	567	750	24.4	75.6	1.33
Sikkim	7	7	14	50	50	0.02
Tamil Nadu	594	3471	4065	14.61	85.39	7.22
Tripura	-	-	-	-	-	-
U.P	1072	2008	3080	34.81	65.19	5.47
W.B.	1498	6330	7828	19.14	80.86	13.90
And & Nocobar	-	-	-	-	-	-
Chandigarh	25	-	25	100	-	0.04
Dadar Nagar Haveli	-	-	-	-	-	-
Daman & Diu	-	-	-	-	-	-
Delhi	2474	2204	4678	52.89	47.11	8.31
Lakshadweep	-	-	-	-	-	-
Pondihery	-	12	12	-	100	0.02
Total	20364	35946	56311			100.00

Source : Based on Slums in India, NSS, 49th Round, January – June 1993.

2.1 LOCATIONAL PATTERN

Dhapa Jhugi Jhopri Colony finds St. Thomas Church in the north east corner while in the north west corner has Mandarappa Madrasi Mandir and Kendriya Vidayalaya lies in the central position in the north.

Towards the east, is the place for open air defecation and further down D.D.A. flats are extending throughout the length not only in the east but also in south and west. The colony is well surrounded by roads that makes it in a very strategic location.

Inside the slum, there lies an extensive park in the west while 'Ganda Nala' extends the entire length in the north which serves as the line of discontinuity between the slum and the Mandappa Mandir, K.V., St. Thomas Church. Pradhan's house is located inside the colony which can be easily approached from the entrance. Near the entrance Hanuman Mandir and Clinic are located just besides each other. In the interior lies an educational and vocational training center which serves as the center for solace ot many who otherwise wouldn't have been helped.

2.2 DEMOGRAPHY

It is important to look into the demographic structure of the population in Dhapa colony slum represented by each household member's sex and age. It also provides a base for analysis for the purpose of comparison in the fields of education, occupation and marriage patterns.

Slum Population

The survey recorded a total population of 10,000 persons in the Dhapa colony slum which , which is one of the 1500 slums of Delhi.

The average size of the household worked out as 5.68 persons, which is slightly higher than the urban Delhi 's average household size i.e. 5.43.[1]

Table: 2.2.1 Table showing distribution of religious groups of the surveyed slum.

Value	Frequency	Percent
Hindu	140	91.5
Muslim	11	7.2
Christians	2	1.3
Total	153	100.0

Source : Primary Data

The Hindus, constituted about 92 per cent of the households, and the Muslims made about 7 per cent of them, were the two main religious communities inhabitant the slum. A very high degree of segregation by religious communities was seen, thus a typical characteristic feature of the slums.

Table:2.2.2 Table showing caste structure of the surveyed slum.

Value	Frequency	Percent
SC	27	17.6
ST	2	1.3
Other Castes	124	81.0
Total	153	100.0

Source : Primary Data

[1] NSS 46th Round, Household Expenditure in Delhi : June to July, 1991 (State Sample), Govt. of India, Delhi.

Among the total households, about 18 percent belonged to a variety of scheduled castes. Scheduled tribes accounted for about a per cent of the total population.

Table:2.2.3(a) Table showing Sex Ratio of the slum

Value	Frequency	Percent
Male	555	63.86
Female	314	36.13
Total	869	100.0

Source : Primary Data

In this slum, Males exhibit greater percentage of the population i.e. about 64 where else females show smaller percentage, which is only about 36. The sex ratio is calculated as 566/1000 males, which reflects very low sex ratio. This kind of sex ratio throws light on migration to urban areas for better employment and income exclusively by the male members of the families.Majority of the migrants are unmarried wherelse in the case of married females and children generally stay back which justifies this kind of sex ratio.

Table:2.2.3(b) Table showing marital status of the slum

Value	Frequency	Percent
MARRIED	459	52.82
UNMARRIED	407	46.84
DIVORCED	1	.12
SEPERATED	1	.12
WINDOW/WIDOWER	1	.12
Total	869	100.0

Source : Primary Data

Therefore one also find that only 53 per cent people were found married while 46.84 per cent people were not yet married. One each was divorced, separated and widowed persons.

Age Structure

To assess the variation in the distribution of the population over age, age composition of population is considered important to examine which not only gives a clear indication of the dependent and working population but also highlights future population growth.

Table 2.2.4 Table showing distribution of broad age groups

Age Group (Years)	Frequency	Percent
<-14	310	35.67
15-35	464	53.39
36-60	85	9.78
60->	10	1.5
Total	869	100

Source : Primary Data

There are about 37 percent people under dependent population and about 63 percent under working population, where the major portion of working population are between age group 15-35 that is about 53 per cent while only about 10 per cent fall under 36-60 years, which gives a clear indication of higher migration under 35 years, for the purpose of better work opportunities, and only about a percent fall under 60+ age category.

Level of Education

Education is a cogent vehicle of social and psychological change. The nature and rates of social development among the slum dwellers may

be reflected in their levels of literacy, educational attainment and enrolment in the schooling children of 6 to 14 years of age. Young age groups may be a product of relatively easy access to schools, greater awareness and greater efforts by government and voluntary agencies during the post independence era.

The literacy rate was found to be only about 54 per cent which is much below the Delhi's average i.e. as many as 74.03 [2] per cent people were recorded as literate. Another about 13 per cent are not applicable for education. About a percent were nursery goers.

Table 2.2.5 Table showing level of education among slum dwellers

Value	Frequency	Percent
Illiterate	355	40.9
1-5	185	21.29
6-8	112	12.89
9-12	143	16.46
Not applicable	46	5.3
Nursery	6	.7
B.A./BSC	15	1.7
M.A/MSC	3	.3
I.COM	1	.1
C.A.	2	.2
Total	869	100.0

Contd . . .

Source : Primary Data

Only about 21 persons have attained education till primary school, about 13 per sons have education uptill middle school, about 16

[2] Census of India, 1991, Series 31 – Delhi, Part III – B Series, Economic Tables, Directorate of Census Operations, Delhi.

percent could manage till higher secondary school. Merely 0.1 per cent is an I. Com., about 2 per cent showed persons completing B.A., 0.2 per cent are C.A. and 0.3 per cent are M.A..

2.3 ECONOMY

To have an idea of the financial condition of the surveyed households of the slum the household monthly income are worked out by adding each member's individual income of the respective households. The average monthly income and the per capita income is calculated to have a better picture of the economic status of the slum.

Table: 2.3.1 Table showing individual present monthly income

Value	Frequency	Percent
No Income	157	18.1
Upto 500	369	42.5
500-1000	3	.3
1000-1500	27	3.1
1500-2000	98	11.3
2000-2500	100	11.5
2500-3000	49	5.6
3000-3500	32	3.7
3500-4000	10	1.2
4000-4500	17	2.0
4500-5000	2	.2
5000-5500	4	.5
6000-6500	1	.1
Total	869	100.0

Contd . . .

Source : Primary Data

A great majority of the households in the slums i.e. 43 percent belonged to the low income group.

Table: 2.3.2 Table showing household monthly income

Income group	Frequency	Percent	Rate of change
upto-5000	116	75.82	-
5000-10000	25	16.34	-78.45
10000-15000	6	3.92	-76
15000-20000	3	1.96	-50
20000-25000	3	1.96	-
Total	153	100	

Source : Primary Data

About 76 percent people fall under this category of upto 5000 Rs. per month. Another about 16 percent fall under the category 5000-10000 Rs. per month. About 4 per cent come under Rs. 10,000-15,000 category. Where else in the income group 15,000-20,000 and 20,000-25,000 Rs., per month there is mere 2 per cent each.

From the lowest income group upto 5000 to the next income group Rs. 5000-10,000, there has been a fall of 78 percent. From 5,000-10,000 to Rs. 10,000-15,000 there has been fall in percentage of people under this category is about 76 percent where else in the income group 15,000-20,000 thee has been 50 percent decline, while the highest income category showed no change.

Mean monthly income = 4395.42/month/HH

Per capita income = 773.88/month

Annual per capita income = 9286.56/year

The mean of the household income was about Rs. 4395 per month. The average size of the household being 5.6 persons in the slum, the per capita income was calculated as Rs. 774 per month and Rs. 9287 per year.

Table: 2.3.3(a) Table showing occupational structure by various skills and sectors.

Type	Frequency	Percent
Skilled	78	8.98
Unskilled	269	30.96
Govt. sector	24	2.76
Private sector	323	37.17
Total	869	100

Source : Primary Data

It reflected that there were about 9 per cent people as skilled workers which includes Electrician (1.2%), Clerk (0.2%), Driver (3.1%), Tailor (1.5%), Businessmen (0.6%), Carpenter (0.2%), Tutors (0.2%), Mechanics (0.6%), Factory employee (0.7%), Cook (0.2%), Teacher (0.2%), Property dealer (0.1%) and Typist (0.1%).

Where else there were about 31 percent as unskilled workers which includes daily wage labour (11.3%), field worker (0.7%), shopkeeper (3.9%), Photostats shop labour (0.2%) tradner (7%), security guard (2.2%), vendor (1.8%), conductor (0.2%), phone booth worker (0.3%), domestic help (1%), rickshaw puller (0.2%), kabari (0.2%), courier delivery man (0.1%), waiter (0.2%), peon (0.3%), transport worker (0.1%), health club sweeper (0.1%) and vegetable seller (0.5%).

Government services primarily as security guard (2.2%), clerk (0.2%), DTC Bus conductor (0.2%) and peon (0.1%) engaged about 3 percent

of them. Another 37 percent were in private services working with industrial, business and transport establishment. Hardly a percent were engaged in industrial services.

Table 2.3.3 (b) : Table showing occupational structure

Type	Frequency	Percent
Unemployed	30	3.5
Housewife	127	14.6
Student	182	20.9
Self employed	63	7.23
Factory worker	6	.7
Serviceman	278	31.99
Retired	1	.1
Not applicable	182	20.94

Source : Primary Data

The data on the occupation of the household residents revealed that there were about 4 percent unemployed though were eligible for work, there were about 15 percent house wives, 21 percent as students, about 7 percent as self employed, around 21 percent were not applicable for work, about a percent was factory workers and about 32 percent as service men. Slum dwellers were found to be predominantly engaged in informal tertiary occupations, very few were in secondary and none were found to be in primary sector.

Distance to Work Place or Educational Institutions (in kms)

This is an important indicator as to examine the reasons for which they are settled in the particular prime land in the city, for instance nearness to the job place or the easily available free educational

facilities. The survey revealed that majority of them did not travel longer distance. It reflects that they are well located and not situated in any kind of outskirts out of city's facilities, indicates why there are migration taking place on such a large scale, in search of better facilities and job opportunities.

Table 2.3.4 : Table showing distance to work place or educational institutions (in kms)

Distance (Kms.)	Frequency	Percent
0-3	321	36.94
3-8	45	5.18
8-18	31	3.57
18-40	27	3.11
Not applicable	121	13.9
Changeable	324	37.3
Total	869	100

Source : Primary Data

Slum dwellers were found not travelling long distances to reach their work places or educational institutions, between 0 and 3 kms, there were about 37 percent people travelling, out of which, about 3 percent didn't travel any distances for their work, rather had the establishments right at home.

About 5 percent travelled between 3 to 8 kms, between 8 and 18 kms, only about 4 percent travelled and between 18-40 kms only about 3 percent were found commuting. While between 31 to 40 kms only 0.23 percent were found travelling.

Many of the labours and drivers did not have fixed places but had to move from one place to another part of Delhi, about 14 percent of them fell in this category. This confirms that slum dwellers have the tendency to concentrate in the proximity of their work place.

Mode of Conveyance

The introduction of newer means of transportation has revolutionised the mobility and interaction of the slum people with the city dwellers. In this light, an analysis of the nature of acquisition of these amenities by the slum dwellers would reveal its impact on their mobility behaviour.

Table 2.3.5 : Table showing mode of conveyance

Modes	Frequency	Percent
N.A	341	39.2
By foot	243	27.96
By bus	192	22.1
By cycle	83	9.6
By three wheeler	9	1.0
By car	1	0.12
Total	869	100

Source : Primary Data

About 28 percent were dependent to travel by foot to their work places or to the academic institutions. Another 22 percent travelled by bus, while 1.0 percent had three wheeler as their conveyance and only 0.12 percent could afford the car. The one who had the can was the pradhan of the slum.

As it clearly indicates that they were majorly dependent on the cheap source of travelling as their income and their status didn't allow any lavish means of transport.

Household Goods

The possession of various goods in the slum area would reflect the diffusion of innovations in the field by social, economic, political and technological developments, which may provide both greater insight to

their awareness of the outside world (for instance audio-visual media) and higher living standards of the slum dwellers.

Table 2.3.6 (a) Table showing distribution of households possessing wrist watch

State of possession	Frequency	Percent
No	73	47.7
Yes	80	52.3
Total	153	100

Source : Primary Data

Table 2.3.6 (b) : Table showing distribution of households possessing fan

State of possession	Frequency	Percent
No	46	30.1
Yes	107	69.93
Total	153	100

Source : Primary Data

Table 2.3.6 (c) Table showing distribution of households possessing radio/tape

State of possession	Frequency	Percent
No	116	75.8
Yes	37	24.2
Total	153	100

Source : Primary Data

Table 2.3.6 (d) Table showing distribution of households possessing cooler.

State of possession	Frequency	Percent
No	111	72.5
Yes	42	27.5
Total	153	100

Source : Primary Data

Household goods were taken as one of the criteria to determine economic influence of the households. Around 52 percent households possessed wrist watches. Around 70 percent households had fans. Radio/Transistor were present in around 24 percent household .About 28 percent only had coolers.

Table 2.3.6 (e) : Table showing distribution of households possessing sewing machine

State of possession	Frequency	Percent
No	124	81.0
Yes	29	19.0
Total	153	100

Source : Primary Data

Table 2.3.6 (f) Table showing distribution of households possessing bicycles

State of possession	Frequency	Percent
No	77	50.33
Yes	76	49.7
Total	153	100

Source : Primary Data

Table 2.3.6 (g) Table showing distribution of households possessing scooter/motorcycle

State of possession	Frequency	Percent
No	147	96.1
Yes	6	3.9
Total	153	100

Source : Primary Data

Only 19 percent households could effort sewing machine About 50 percent enjoyed having by cycle, hardly about 4 percent households had scooter/three wheeler.

Table 2.3.6 (h) Table showing distribution of households possessing car.

State of possession	Frequency	Percent
No	152	99.35
Yes	1	0.65
Total	153	100

Source : Primary Data

Table 2.3.6 (i) Table showing distribution of households possessing television

State of possession	Frequency	Percent
No	57	37.3
Yes	96	62.7
Total	153	100

Source : Primary Data

Table 2.3.6 (j) Table showing distribution of households possessing wall clock

State of possession	Frequency	Percent
No	63	41.2
Yes	90	58.8
Total	153	100

Source : Primary Data

Only a little more than one percent household could maintain a car. Television sets were found in about 63 percent household (which was black and white). Wall clock was found in about 59 percent household.

Table 2.3.6 (k) Table showing distribution of households possessing auto

State of possession	Frequency	Percent
No	143	93.5
Yes	10	6.5
Total	153	100

Source : Primary Data

Table 2.3.6 (l) Table showing distribution of households possessing fridge

State of possession	Frequency	Percent
No	151	98.7
Yes	2	1.3
Total	153	100

Source : Primary Data

Table 2.3.6 (m) Table showing distribution of households possessing telephone

State of possession	Frequency	Percent
No	152	99.3
Yes	1	.7
Total	153	100

Source : Primary Data

Autos were present in only about 7 percent household and the major percent did not have. About 28 percent had cooler in their house hold. Majority in case of fridge and phones only 1.3 and 0.7 percent household respectively had one.

All house goods taken together about 71 percent didn't have one, on the other hand while merely about 29 percent possess either one or more goods, which is quite expected in slum area which reflects poor status of living.

2.4 SAVING AND BORROWING

Saving and borrowing are considered as an indicators to determine the degree of security in terms of money for the slum dwellers as well as makes the possibility of their stay longer and in many cases permanent.

Table 2.4.1 Table showing savings of the slum dwellers

Value	Frequency	Percent
Regular	50	32.7
Occasional	38	24.8
Never	65	42.5
Total	153	100

Source : Primary Data

There were about 33 percent households who regularly save; about 24 percent occasionally save where else about 43 percent never save, what ever they earn through their respective work, is consumed in varies expenditures.

Table:2.4.2 Table showing average saving last month

Rupees	Frequency	Percent
No income	97	63.4
Upto 500	19	12.4
500-1000	20	13.1
1000-1500	7	4.6
1500-2000	4	2.6
2000-2500	1	.7
3000-3500	1	.7
3500-4000	1	.7
5500-6000	2	1.3
Total	153	100

Source : Primary Data

There were about 63 percent households who had no amount saved last month. About 12 percent had saving upto 500, about 13 percent had saving from Rs. 500 to 1000, about 5 percent each had saving from Rs.1000 to 1500 and Rs. 1500 to 2000. While only a percent each households were between varies categories i.e. Rs. 2000 to 2500, Rs. 3000 to 3500, Rs. 3500 to 4000 and Rs. 4500 to 5000. Where else between Rs. 5500 and 6000 there were about 1 percent households.

There has been steep decline in the number of households saving in each category, from Rs. 1000 to 2500, where as its remained constant

between Rs. 2500 to 5000 , where as there is a slight rise in the category Rs. 500 to 1000.

Table:2.4.3 Table showing present total saving

Rupees	Frequency	Percent
No savings	110	71.9
Upto 1000	14	9.2
1000-10000	12	7.8
10000-20000	4	2.6
20000-30000	2	1.3
30000-40000	5	3.3
40000-50000	3	2.0
70000-80000	1	.7
80000-90000	1	.7
90000-1 lakh	1	.7
Total	153	100

Source : Primary Data

In terms of present of total saving, there were about 72 percent households having no saving at all. Where else about 9 percent had total saving upto Rs. 1000, about 8 percent had between Rs. 1000-10,000, about 3 percent had saving from Rs. 10,000 to 20,000. Between 20,000 and 30,000 Rs, there were merely about 1 percent households, between 30,000 to 40,000 there were about 3 percent households, while only 2 percent were between 40,000 to 50,000. None were found between 50,000-60,000 and 60,000-70,000 Rs of saving a percent each fell under the category of Rs. 70,000-80,000, 80,000-90,000 Rs, and 90,000- 1 lakh Rs. we can clearly see that majority of them nearly two – third of the households had no total savings, while another larger percentage had saving below 1000 Rs and almost negligible percent having saving money more than 70,000 Rs. It also reflected that where people had no savings at all on the

other had some of them could manage to save upto 1 lakh Rs., which reflects a great degree of disparity.

Table:2.4.4 Table showing Deposit

Value	Frequency	Percent
No saving	112	73.20
At home	17	11.11
Bank	25	16.34
Total	153	100

Source : Primary Data

About 73 percent households had no savings deposited any where i.e. at home, post office, bank, insurance, provident fund or relatives. Another around 11 percent deposited their savings at home where as rest of the around 16 percent deposited in the Bank.

Table:2.4.5 Table showing borrowing frequencies

Value	Frequency	Percent
Never	62	40.5
Regular	31	20.3
Occasional	60	39.2
Total	153	100

Source : Primary Data

Near about 41 percent households never needed to borrow , while around 20 percent regularly borrow and rest of the around 39 percent occasionally borrow.

Table:2.4.6 : Table showing amount borrowed last month

Rupees	Frequency	Percent
No borrowing	100	65.4
Upto 2500	41	26.8
2500-5000	5	3.3
5000-7500	2	1.3
7500-10000	3	2.0
10000-12500	1	.7
12500-15000	1	.7
Total	153	100

Source : Primary Data

Among the household who borrow, about 27 percent borrowed upto 25,00 Rs last month, around 3 percent borrowed between 2,500 to 5000 Rs., around 1 percent borrowed between 5,000 to 7,500 Rs., 2 percent of them borrowed between 7,500 to 10,000 Rs., around 1 percent each borrowed between 10,000 to 12,500 Rs and between 12, 500 to 15,000 Rs.

Table 2.4.7 Table showing total indebtedness

Rupees	Frequency	Percent
No indebtedness	98	64.1
Upto 1000	5	3.3
1000-10000	33	21.6
10000-20000	10	6.5
20000-30000	2	1.3
30000-40000	1	.7
40000-50000	1	.7
50000-60000	2	1.3
60000-70000	1	.7
Total	153	100

Source : Primary Data

Till now the households showed the pattern of indebtedness in this manner, about around 3 percent households had debt upto 1000 Rs. about 22 percent had taken between 1000 to 10,000 Rs, where else around 7 percent were between 10,000 to 20,000 Rs debt, another around 1 percent borrowed between 20,000 to 30,000 Rs, while around 1 percent each were between 30,000 to 40,000 Rs, 40,000 to 50,000 Rs. and 60,000 to 70,000 Rs. Rest of around 1 percent households had debt between 50,000 to 60,000 Rs. Maximum number of households fell in the category of debt between 1000 to 10,000 Rs, where else higher amount category had less number of households falling under them.

Table 2.4.8 Table showing borrowing sources

Values	Frequency	Percent
Not borrowed	55	35.9
Money lender	10	6.5
Grocer	13	8.5
Employer	13	8.49
Friends	20	13.07
Relatives	19	12.42
Others	7	4.58
Neighbours	26	16.99
Total	153	100

Source : Primary Data

There were several different sources on which these households relied upon, they were money lenders, grocer, employer, chit fund, banks, friends, relatives, neighbours and others for borrowing money. About 7 percent households borrowed from money lender, about 9 percent of them were dependent on Groccer, about 8 percent from employer

about 11 percent from friends about 10 percent borrowed from relatives about 3 percent of them approached others, around 10 percent were dependent on other neighbours , while a percent each borrowed from employer as well as friends, neighbours as well as employer, Grocer as well as others and neighbours as well as others, while about 1 percent households each were borrowing from friends as well as others, neighbours as well as relatives, employer as well as neighbours, friends as well as neighbours, and relatives as well as neighbours.

Table2.4.9: Table showing borrowing reasons

Values	Frequency	Percent
Not borrowing	57	46.7
Household expenses	45	29.41
Ceremonies	8	5.23
Illness	11	7.19
Travel	0	0
Business	10	6.55
Others	5	3.27
Household expenses & illness	11	7.19
Illness & business	2	1.31
Illness & others	3	1.96
Household expenses & business	1	.65
Ceremonies & household expenses	1	.65
Total	153	100

Source : Primary Data

There were several reasons for borrowing money from different sources, about 29 percent households had borrowed for household expenses, around 7 percent had borrowed for household expenses as well as illness and around a percent had for household expenses as well as are ceremonies. Around 5 percent house hold had borrowed for

ceremonies while around 7 percent had taken for illness, around 1 percent had taken for Business as well as illness, another around 2 percent had borrowed for illness as well as other purpose.

About 7 percent had borrowed for business, and about 3 percent households borrowed for other purposes.

Table 2.4.10 Table showing security of loan

Values	Frequency	Percent
Not borrowing	6	3.9
No security	5	3.27
Others	4	2.6
Child labour	14	9.15
Self labour	139	90.8
Relatives	49	32.02
Total	153	100

Source : Primary Data

When surveyed about 3 percent households had no security of loans, in about 91 percent cases the head of the household was earning, 9 percent cases even children were earning while about 32 percent cases relatives who were residing in their houses were also adding to their households; income .

2.5 HOUSING

In urban areas of the country there is a serious shortage of housing and this shortage is rather acute in the metropolitan cities. Within the metropolitan cities housing is not uniformly distributed. One of the main reasons for the presence of slums in the metropolitan cities is the shortage of housing. In the slums, apart from scarcity of rooms for shelter, the condition of the structure, type of building materials, provision of kitchen, toilet, bathroom and sanitation are deplorabe.

The simple distribution of households over number of living rooms does not show the actual scarcity of room. During the survey it was noticed that the size of the rooms are very small and in some cases the rooms are so small that one may have difficulty to call them a room. There were some households which have horizontal partition in some portion with a raised cot or some projected wooden shelf supported from the bottom and the people accommodate themselves on either side of the partition.

In the slum, houses were a closely built on either side of the narrow lanes. The roof materials of the structure include, tins, asbestos and earthen tiles and the floor materials are either kutchha or pucca.

House site ownership pattern

The ownership of house is a dichotomous variable where there are only two possibilities for the households, either of owning a home or not owning a house.

Though claiming a legal ownership of the site on which they have their houses by slum dwellers is a controversial issue, which is definitely causing lot of problems in Delhi today, (due to the recent eviction problems).

Table 2.5.1 Table showing ownership pattern

Rupees	Frequency	Percent
0 (owners)	131	85.6
16.0	1	.7
45.0	1	.7
200.0	1	.7
300.0	1	.7
400.0	3	2.0
450.0	1	.7

Contd . . .

500.0	11	7.2
600.0	3	2.0
Total	153	100.0

Source : Primary Data

About 86 percent of them were due owners, while about 14 percent were the rentiers. The amount paid by the rentiers varied from Rs. 16 to 600. Almost a percent each paid Rs. 16, Rs. 45, Rs. 200, Rs. 300 and Rs. 450, while 2 percent each paid Rs. 400 and Rs. 600. Rest of around 7 percent households paid Rs. 500.

Table 2.5.2 Table showing household bought

Values	Frequency	Percent
Made	83	54.2
Bought	45	29.4
N.A. (Reneteers)	25	16.3
Total	153	100

Source : Primary Data

Out of around 86 percent households, who were the owners, nearly around 54 percent of them made their houses while around 29 percent households were bought from the previous owner.

Table 2.5.3 Table showing amount paid

Values	Frequency	Percent
Govt. or Govt. agency	6	3.9
Private person	45	29.4
N.A.	102	66.7
Total	153	100

Source : Primary Data

About 4 percent of them claimed that they paid some money for seeking permission to build this Jhuggi/House while around 29

percent of them paid to some private person, where else in around 16 percent cases it was not applicable.

Table 2.5.4 Table showing living duration

Years	Frequency	Percent
< 1	13	8.50
1-5	46	25.50
5-10	59	38.50
10-15	51	19.84
15-20	10	6.50
25-30	3	2.00
Total	153	100

Source : Primary Data

About 9 percent households, people were living in their Jhuggies for less than an year, another around 26 percent cases were living between one to five years, not less than around 39 percent cases they lived in their houses from 6 to 10 years, between 11 and 15 years another 19 percent households lived, while around 7 percent households were established between 16 to 20 years and only 2 percent fell under the category of 21 years to 30 years. Maximum number of people were found living between 6 to 10 years, beyond that there is a constant sharp fall. This reflects that since 1970's there has been waves of migration flowing towards capital city in search of better opportunities and better standard of living. From 1970 to 1979 it reveals constant rise in migration, which slowly began to decline from 1979 to 1999.

Table 2.5.5 Table showing location and structure of the household

Value	Frequency	Percent
Basement	1	0.7
G. Floor	151	98.7
First floor	1	0.7
Total	153	100.0

Source : Primary Data

Almost around 99 percent houses were on the ground floor, where else a percent each were found to be on the first floor and in the basement.

Table 2.5.6 Table showing type of structure

Value	Frequency	Percent
Pucca	6	3.9
Semipucca	143	93.5
Kutcha	3	2.0
Others	1	0.7
Total	153	100.0

Source : Primary Data

About 94 percent houses were semi Pucca, about 4 percent houses were Pucca, a another 2 percent houses were Kutcha and only a percent were found to be others, which was worst than Kutcha house. All of the semi Pucca houses were thatched, or supported by bamboos, which looked quite unsafe. Overall houses in this slum appeared to be in poor state.

Table 2.5.7 Table showing distribution by number of rooms

Numbers	Frequency	Percent
1.0	122	79.74
2.0	22	14.4
3.0	8	5.2
5.0	1	.7
Total	153	100

Source : Primary Data

Majority of the households had single room i.e. about 80 percent of them, about 14 percent of the surveyed houses had 2 rooms, another about 5 percent had 3 rooms while remaining 1 percent houses had 5 rooms, that was a single case. All the houses were built very close to each other , there wasn't any space in between the houses, in most of the cases, as mentioned earlier, that about 94 percent were semi Pucca houses with attached roof, which discourages the possibility of building multistorey houses first of all. Secondly, the income levels of the houses were not that high that they could afford more than one room. But owing to the small, single room houses, houses looked very congested and unarranged.

2.6 AVAILABILITY OF SERVICES

The quality of life indicators include water supply, electrification of households, availability of toilet and bathroom facilities, possession of ration cards and kind of fuel used, hence it is important to look into these aspects in details.

1. Water Supply

The condition of water supply in the slum of the city is very poor. There is excessive pressure on tap water supply and a large number of households share the same source of water supply. There is a sizeable

proportion of households who do not have facility of water supply within the houses and collect from public stand posts. Apart from this the low pressure of water supply in some cases, supply for short houses aggravates the situation.

The slum area was supplemented with varies kinds of water supply sources, i.e. public stand post, tap, hand pump and other kinds.

Table 2.6.1(a) Table showing source of water supply

Value	Frequency	Percent
Tap	11	7.2
Hand pump	44	28.8
Public stand post	97	63.4
Others	1	.7
Total	153	100

Source : Primary Data

Table 2.6.1.(b) Table showing type of water connection

Value	Frequency	Percent
Private	6	3.9
Joint	1	.7
Community	144	94.1
Others	2	1.3
Total	153	100.0

Source : Primary Data

Table 2.6.1. (c) Table showing if the connections were private

Value	Frequency	percent
N.A.	148	96.7
Unmetered	3	2.0
Others	2	1.3
Total	153	100.0

Source : Primary Data

Table 2.6.1 (d) Table showing if the connections were community

Value	Frequency	Percent
N.A	17	11.1
No	136	88.9
Total	153	100

Source : Primary Data

Table 2. 6.1 (e) Table showing number of users of community tap

Value	Frequency	Percent
1-10	4	2.61
10-50	12	7.84
50-100	20	13.1
100-200	91	59.5
200-300	22	14.38
400-500	3	2.0
500-600	1	.7
Total	153	100

Source : Primary Data

About 7 percent of the total households were fetching water from taps, another about 29 percent were dependent upon handpump, where else the major section of the households about 63 percent are taking water from public standpost, rest of a percent were dependent on other sources.

Varies kinds of water connections were provided in the slum, they had both private and community and in same cases joint connections as well. Maximum section near about 94 percent were having community connections, followed by about 4 percent privately

installed water points, about 1 percent, other kinds and only about 1 percent as joint connections. All the private connections were unmetered, and in the case of community water points too no money was paid for the water.

The number of users in case of community water point varied from 1 household to about 600 households. About 1 to 10 households fetching water from the same point were about 3 percent, 10 to 50 households dependent on the water point were about 8 percent, 50 to 100 households dependent on one water point were about 13 percent, another about 60 percent households were in the category 100 to 200, this was the highest percentage in this range. Wherelse about 14 percent of them were falling under 200 to 300 households, merely 2 and about 1 percent were in the class 400 to 500 and 500-600 households respectively.

2. Type of latrine

This is one of the basic essential amenity. None of the houses reported having a personal toilets facility.

Varies kinds of latrines are under use in the slum area varying from flush latrines, night soil connection type, septic tank with flush toilet and other kinds,. In this particular slum toilets were provided by Sulabh Shouchalay, which had water supplied to them only through taps in the toilets and had no flushes attached to them.

Table 2.6.2. (a) Table showing type of latrine

Value	Frequency	Percent
Septic tank with flush toilets	6	3.9
Others	147	96.1
Total	153	100

Source : Primary Data

In about 96 percent household's cases, their dependence was primarily on open defecation. Where else few of the houses about 4 percent, relied upon mobile toilets provided again by Sulabh itself.

All the households were using community toilets only, or defacate in open spaces. The conditions of toilets is very poor, since toilets are very small in size, it is not kept clean and lacks privacy, none had their own toilet facilities.

Table 2.6.2. (b) Table showing availability of bathroom

Value	Frequency	Percent
Private	11	7.2
Joint	2.0	1.3
Community	139	90.8
Others	1	.7
Total	153	100

Source : Primary Data

Very few people could effort to have a separate bathroom, though around 7 percent households only could effort a private bathroom, about 1 percent of the total were dependent on other's private bathroom and jointly used it. Another around 91 percent used community bathrooms and rest of around 1 percent used other modes.

Majority of the slum dwellers used community bathrooms provided to them by sulabh. Another thing was noticed during the survey, even though when no separate space or room was provided for bathing, the same room used for living and cooking was being used by the female members of the family for bathing and washing their clothes.

3. Electricity

electrification of household in slum areas are of great concern to all. It reflects the technological advancement in an area.

Electricity connections were available in nearly all the houses, but no amount was paid in a month for electricity charges ever, majority of them had illegal connections extended from street electric poles to their houses, by paying some money to private electrician for providing them connections.

Table 2.6.3. Table showing availability of electricity

Value	Frequency	Percent
No meter	149	97.39
Combined meter	4	2.6
Total	153	100

Source : Primary Data

About 97 percent households had electricity available without any meter while rest of about 3 percent households had combined meter, still no money was either collected by vidhyut board or paid.

4. Sanitation

Rooms were quite small sized in the slum which gave no additional space for the garbage, hence they were forced by the circumstances to remove it regularly.

All the households confirmed to this, while during the survey what being noticed was that walls were full of clothes hanging on them, a separate compartment was made with the help of bamboo sticks above their beds to keep empty bags and baggages. Their cooking space looked greasy and dark, due to oil spilling out of the stoves.

5. Present use of house/room

Houses were put to different uses, from residential only to residential cum commercial, residential cum industrial and only commercial.

Table 2.6.5. Table showing present use of house

Value	Frequency	Percentage
Only residential	145	94.8
Residential cum commercial	6	3.9
Only commercial	2	1.3
Total	153	100

Source : Primary Data

In about 95 percent of the houses surveyed were purely residential, while there were none found with any industrial establishment though there was one vocational and educational center in the locality. About 4 percent of the households were both residential and commercial, which had shops running in them, ranging from tailoring to grocery.

6. Nutrition - Ration Card holding pattern

Where else only about 1 percent households were only for commercial purposes, as they had their houses somewhere else in the same slum for residential purposes.

Table 2.6.6. Table showing nutrition – ration card holding pattern

Possession Of Ration Card		
Value	**Frequency**	**PERCENT**
H.H. with ration card	122	79.7
H.H. without ration card	31	20.3
Total	153	100
Failing to get ration card	12	38.71
Total	31	100

Source : Primary Data

Only about 80 percent of the households had been issued ration cards, which enabled them to purchase some necessity of life, such as rice, wheat and sugar at a subsidized rate. Rest of the about 20 percent did not have the card, out of 31 households, (12 households) about 39 percent failed to get the ration card.

7. Fuel

Table 2.6.7. Table showing various type of fuels in use

Value	Frequency	Percent
Firewood	5	3.27
Electric heater	19	12.42
Kerosene stove	122	79.74
Gas	7	4.58
Total	153	100

Source : Primary Data

No less than about 80 percent household used kerosene stoves, another about 12 percent used electric heater as their cooking mode, where else about 5 percent households only could effort cooking gas, and another about 3 percent households were dependent on firewood, generally collected from the open field or sometime purchased from the market, as the source of energy for cooking purposes. Cooking gas as fuel could be afforded by a negligible number of households.

A continued use of firewood is against the tenets of environment conservation, it also effects a person's health adversely, especially women. There could be seen a positive correlation between kind of fuel used and number of rooms possessed by the households.

2.7. RELATIONSHIP AMONG SEVERAL VARIABLES

Despite attempts to reduce incidences of slum formation, their number is on the increase in the big cities of developing countries, encompassing ever growing proportions of their populations. Planners

have been paying increased attention to improving the situation, notably by way of upgrading. In doing so, heavy emphasis has mostly been laid on physical development. Economic development is sometimes entailed as well. Considerably less attention has been paid to social development although it is equally important. This study of slum dwellers social characteristics recognizes the relevance of that hitherto widely ignored or neglected aspect.

2.7.1 Caste

The cross examination of the variables provide further clear picture of the relationships in details to interpret the role of the factors influencing the slum character.

Caste has an important role in the slum area, especially when it is seen in the light of various other factors, several interesting facts, come to the light. It is a supposition that other castes whether in villages or the slums exhibits better standards. Other castes have better earning status, educational qualifications, possession of facilities, better age structure (low base of population) and balanced population revealing better sex ratio than the SC's and STs.

Table 2.7.1(a) Table showing caste by HH monthly income

PMIN (Rs)	SC (27 H.H)	ST (2 H.H)	Others (124 H.H)*	Total
UPTO 5000	20 (74.07)	2 (100)	94 (75.81)	116
5000-10,000	5 (18.52)	-	20 (16.13)	25
10,000 – 15,000	2 (7.41)	-	4 (3.23)	6
15000-20000	-	-	3 (2.42)	3
20000 – 25000	-	-	3 (2.42)	3
Total	27	2	124	

Source : Based on Primary data
* Number of households
** Percent are in parenthesis

Caste by monthly income

About 74 per cent households of SC, all of the ST houseolds and 76 per cent of other caste household earn upto Rs. 5000. Another 19 per cent household of SC and 16 per cent households of other caste earn between 5000 - 10000 Rs. About 7 per cent household of SC and 3 per cent household of other castes earn between 10000-15000 Rs. While 2.42 per cent each of other castes are earning between 15000-20000 and 20000-25000 Rs.

It can be noted that the other castes are recorded at apex in the higher income categories followed by SC and ST, where STs are observed in the lowest income group only.

Table 2.7.1 (b) Table showing caste by education

Education	Caste		
	SC	ST	Others
N.A.*	21 (0.78)	1 (0.5)	99 (0.81)
Illiterate	52 (1.93)	1 (0.5)	227 (1.83)
Nursery	-	-	6 (0.05)
Primary	35 (1.31)	3 (1.5)	146 (1.18)
Middle and high	42 (1.56)	3 (1.5)	211 (1.70)
Graduate (equivalent) and above	5 (0.19)	-	16(0.13)
Total	155	8	706

Source : Based on Primary data
* Children below 6 years
** Percent are in parenthesis

About 0.78 persons of SC household, 0.5 persons of ST and 0.81 persons of other castes are not applicable for studies, 1.93 persons of SC households, 0.5 of ST households and 1.83 persons of other caste households are uneducated. Wherelse only other castes recorded about half a persons as nursery goers. Around 1.31, 1.5 and 1.18 persons of SCs, STs and other castes households respectively, are educated till primary school. Around 1.56 persons of SC household 1.5 persons of ST household and 1.7 persons of SC household castes respectively are educated till middle school, while about 0.19 persons of SC households, and 0.13 persons of other caste households educated as graduates and above.

It can be clearly seen that the nursery education is only popular among the other castes while SCs and STs did not report a single case. Major concentration of educated people are among the middle school level of education. Other castes are reported at the apex as middle school educated followed by SCs and STs. There are none as graduates and above among STs while SCs rank higher comparing other castes households.

2.7.2 Renteers and Owners

As a new migrant enters the city, he or she at once tries to get acquainted with the existing employment opportunities and alternative avenues to making it in the city. As time passes, the migrant settles for a certain trade or work. At this stage, his or her rate of change of income reduces. This phenomenon partly explains why owners have higher income than renteers. Sometimes it may reveal that the other castes are better off, are majorly as owners than the SC and the STs in the slums.

Table 2.7.2 Table showing rent by monthly income (H.H)

PMIN	Owners (131 HH)	Renteers (22 HH)	Total
Upto 5000	96 (73.28)	20 (90.91)	116
5000-10000	24 (18.32)	1 (4.55)	25
10000-15000	4 (3.05)	2 (9.09)	6
15000-20000	3 (2.30)	-	3
20000-25000	3 (2.30)	-	3
Total	131	22	153

Source : Based on Primary data
** Percent are in parenthesis

About 73 per cent of owners households and 91 per cent of renteer's household earn between 0-5000 Rs. About 18 per cent of owners and 5 per cent of renteers households earn between 5000-10000 Rs. Around 3 per cent of owners and 10 per cent of renteers earn between 10000 - 15000 Rs., while earners between 15000-20000 and 20000-25000 are observed only among the owners i.e. about 2 per cent each households.

The above table reveals that the owners are earning better than the renteers while the maximum concentration of renteers is observed in the 0-5000 Rs. Category only.

2.7.3 Religion

An attempt has been made to see whether religions vary over age composition, whether they have broad base registered in a particular religion revealing a high population growth rate, as Muslims tend to have broader base. Secondly it may also be noticed that Hindus have an edge over the other two religion having better income as well as literacy may also be high in the case of Hindus, while Muslims

generally report the higher illiteracy ratio wherelse higher levels of education is generally attained by Hindus comparing the other two.

Table 2.7.3 Table showing religion by education

Education	Religion		
	Hindu (140 H.H)**	**Muslim (11 H.H)**	**Christian (2 H.H)**
N.A.*	1.3 (13.1)	16 (21.6)	1 (14.3)
Illiterate	252 (31.98)	28 (37.8)	-
Nursery	6 (0.77)	-	-
Primary	169 (21.7)	14 (18.92)	1 (14.3)
Middle and high	237 (30.08)	16 (21.62)	5 (71.43)
Graduation (equivalent) and above	21 (2.66)	-	-
Total	788 (100)	74 (100)	7 (100)

Source : Based on Primary data
* Children below 6 years ** Number of households *** Percent are in parenthesis

Around 0.74, 1.45 and 0.5 person of each household by Hindu, Muslim and Christians respectively are not applicable to study. About 2, 2.55 persons of each household of Hindus and Muslim respectively are uneducated. Only Hindus about 0.04 person of each household have reported to be as nursery goers. Around 1.21, 1.27 and 0.5 persons of each household of Hindu, Muslim and Christian respectively are educated till primary school.

Hindu households have recorded 30 persons, Muslim households have 22 persons and Christians have 71 persons as secondary educated. About 3 persons of Hindu households have been registered as graduates and above.

It can be clearly seen that the Muslims are recorded as the highest uneducated persons followed by Hindus while none have appeared in

Christian community. Only Hindu have been observed as the nursery goers, it may be that they are most aware people in terms of children's education. Muslim have been seen at Apex when noted as the primary educated people followed by Hindus and Christians. Wherelse Christians have been observed leading in secondary school educated, followed by Hindus and Muslims wherelse Hindus are the only community recorded as graduates and above.

2.7.4 Education

The better educated ones might have higher aspirations and stronger accomplishments, which leads to setting down and staying on in the city ultimately and permanently. The levels of formal education and skills among slum dwellers are low. Yet male members are recorded in higher income group and highly placed in terms of occupation, attained higher levels of education and skills than others.

Table 2.7.4 (a) Table showing education by sex

Edu/Sex	N.A.*	Illiterate	Nursery	Primary	Middle and high	Graduation (equivalent) and above
Male	60 (49.2)	146 (52.14)	4 (66.7)	121 (65.76)	204 (79.69)	21 (100)
Female	62 (50.8)	134 (47.86)	2 (33.3)	63 (34.2)	52 (20.31)	-
	122 (100)	280 (100)	6 (100)	184 (100)	256 (100)	21 (100)

Source : Based on Primary data
* Children below 6 years ** Percent are in parenthesis

Table 2.7.4. (a) highlights that among unapplicable for education about 49 per cent are male and rest of them 50 per cent are females. Among uneducated about 52 and 47 per cent are male and females

respectively. Nursery goers record about 66 per cent as males and 33 per cent as females. Those as primary constitute 66 per cent as males and 34 per cent as females. About 80 per cent and 20 per cent of the secondary educated people are males and females respectively. All of the graduates and above are only males.

This show clearly that education on among males are not only better than their female counterpart but are also highly educated than the females.

Education by Occupation

Table 2.7.4 (b) Table showing education by present occupation

EDU/SEX	N.A.*	Illiterate	Nursery	Primary	Middle and high	Graduation (equivalent) and above
0	-	8 (2.9)	-	6 (3.3)	8 (3.13)	-
Sec	-	2 (0.7)	-	-	2 (0.78)	3 (14.29)
Serv	4 (3.28)	134 (47.86)	-	35 (19.02)	160 (62.50)	13 (61.90)
N.A.	114 (93.44)	41 (14.64)	6 (100)	22 (11.96)	4 (1.56)	5 (23.81)
Total	122 (100)	280 (100)	6 (100)	184 (100)	256 (100)	21 (100)

Source : Based on Primary Data
* Children below 6 years ** Percent are in parenthesis

Table 2.7.4 (b) shows that 3 per cent of the unappliable for studies are under service sector which rest of them about 93 are not applicable for jobs. While about 3 per cent of the uneducated are unemployed, only about a per cent are under secondary sector, 48 per cent are under service sector, and rest of the 15 per cent are not applicable for jobs.

Wherelse about all of them as nursery goers are not applicable for jobs. About 3 per cent of the primary educated people are unemployed, 19 per cent are under service sector and rest of the 12 per cent are not applicable for jobs. Among the secondary educated people about 3 per cent are recorded as unemployed, about a per cent are under secondary sector, 63 per cent are as service sector worker. Among the secondary school educated people about 3 per cent are recorded as unemployed, 1 per cent are under secondary sector, 63 per cent are as service sector workers, and 2 per cent are not applicable for jobs. Of the graduates, 14 per cent are the secondary sector worker and 62 per cent are under service sector and 24 per cent are not applicable for jobs.

From the table the conclusion can be drawn that service sector has the maximum number of primary educated falling in it, comparing the rest of the occupation category. Maximum concentration of the secondary educated are again found in the service sector. It can also be seen that none of the graduates and above are unemployed and the concentration is again noted among service sector workers.

Table 2.7.4 (c) Table showing education by individual monthly income

Edu/PMIN	N.A.*	Illiterate	Nursery	Primary	Middle and high	Graduation (equivalent) and above
No income	-	119 (42.5)	-	27 (14.7)	69 (26.95)	5 (23.81)
N.A.**	116 (95.08)	29 (10.4)	6 (100)	122 (66.3)	32 (12.5)	1 (4.76)
Upto 2000	4 (3.28)	100 (35.71)	-	21 (11.41)	100 (39.06)	5 (23.81)
2000-4000	-	31 (11.07)	-	14 (7.61)	51 (19.92)	9 (42.86)
4000-6000	-	3 (1.07)	-	-	4 (1.56)	1 (4.76)
Total	122 (100)	280 (100)	6 (100)	184 (100)	256 (100)	21 (100)

Source : Based on Primary Data

* Children below 6 years ** Children below 15 years *** Percent are in parenthesis

Table 2.7.4 (c) reveals that around 95 percent are not applicable for earning while 3 per cent earn between 0 to 2000 Rs. About 42 per cent of the uneducated were not earning any money, 10 per cent are not applicable for earning, 3 per cent are earning between Rs. 0 to 2000, 11 per cent are earning between Rs. 2000 and 4000 and rest of the 2 per cent are earning between Rs. 4000 and 6000. All of the nursery goers are not applicable for earning. 15 per cent of the primary are not earning, 66 per cent are not applicable for income, 11 per cent are earning between Rs. 0 to 2000, and 8 per cent are earning between Rs. 2000 and 4000. About 27 per cent of the secondary school educated are not having any income 13 per cent are not applicable to earn, 39 per cent are earning between Rs. 0 and 2000. 20 per cent are earning between Rs. 2000 and 4000 and rest of the 2 per cent are earning between Rs. 4000 and 6000. About 24 per cent of the graduates and above are not having any income 5 per cent are not applicable to earn, 24 per cent are earning between Rs. 0 to 2000. 43 per cent are earning Rs. 2000 to 4000 and rest of the 5 per cent are earning between Rs. 4000 to 6000.

2.7.5 Present monthly income

It is important to see in a slum area, that which age group is earning and about how much to examine the possible trend of inflow of people from other places in search of better jobs and opportunities and also to arrest the child labour if at all in practice. Policies and plans can be formulated to provide kind of employment opportunities. It is also import to see whether it is only (male migrants coming) specific migration is taking place, however, the income of male section of society generally tends to be higher than the female counterparts.

Table 2.7.5 Table showing individual present monthly income by sex

	Sex		
PMIN	**Male**	**Female**	**Total**
No income	65 (29.1)	158 (70.9)	303 (100)
Not applicable	165 (54.46)	138 (43.95)	223 (100)
Upto 2000	210 (92.1)	18 (7.9)	228 (100)
2000-4000	108 (100)	-	108 (100)
4000-6000	7 (100)	-	7 (100)

Source: Based on primary data * Percent are in parenthesis

Present monthly income by sex

Table 2.7.5 reveals that about 29 Per cent and 71 per cent are the males and females respectively, fall in not earning category. About 54 per cent and 44 per cent of the not applicable for earning belong to male and female respectively.

About 92 and 8 per cent males and females respectively, are earning between Rs. 0 and 2000, wherelse all of the earners from Rs. 2000 to 4000 and 4000 to 6000, are only males.

This clearly indicates that males in all the income groups are in better position of earning than the females, who have been observed only in the income group Rs. 0 to 2000.

This section analyses certain socio-economic factors that influence the level of utilisation of PDS by the poorer section. The factors which could be responsible for low level of utilization of this facility among the poor are many and varied, but a discussion of all these may not be possible. Besides, some of these factors are difficult to quantify. In the

chapter best efforts are made to identify and discuss some of the important factors.

Kabra and Ithyearh have stated that on the basis of information relating to socio-economic status of sampled household, one could easily identify specific status or religions or groups where PDS has been a failure and requires effective thrust with regards to this important public policy.

On the basis of information relating to these indices and level of utilization of PDS existing in various regions of our country, one can find out the type of correlation that may exist between, these in diverse regions of the country. This is an immediate need for certain concrete changes in administrative design and policy to effectively improve functioning of PDS in these very states.

CHAPTER III

PUBLIC DISTRIBUTION SYSTEM: DISTRIBUTION CONTROL, MECHANISM, MANAGEMENT, COVERAGE AND ANALYSES

3.1. INTRODUCTION

The distribution of essential commodities at subsidized rates to people in general and to the poor in particular through the PDS has been viewed as on anti- inflationary and anti-poverty strategy. The main thrust has supposedly been on the poor. This is sought to be achieved through selective issuing of ration cards, coverage of commodities, reaching various regions, touching different income levels, and system of issuing rations. The major shortcomings for the system and trends have been analyzed here in the context of the needs and affordability of the poor. Both at the national (42nd round) and state level (49th Round NSS).

Assessment of utilisation of Public Distribution system for the period June 1987 - July 1986 (NSS data, 42nd round survey on social consumption.

It is important to ask whether with the increased tempo of the PDS operations the poor have benefited; and what is the efficacy of the PDS in distributing food to the poor. Many empirical studies have shown severe biases in the inter-regional distribution of the PDS supplies. States with high incidence of poverty such as Bihar, Orissa and Madhya Pradesh received a lower share from the central pool.

Table 3.1.1 Table showing PDS in rural and urban areas : All India

Commodity	Rural			Urban			
	Total Qty purchased	PDS Qty purchased	Per Capita PDS Qty	Total Qty purchased	PDS Qty purchased	Per Capita PDS Qty	Percentage of total purchased in Rural areas
(1)	(000 kgs) (2)	(000 kgs) (3)	(Kgs) (4)	(000 kgs) (5)	(000kgs) (6)	(Kgs) (7)	(8)
Rice	2136573.00	358089.63	0.6330	768462.00	146161.47	0.8753	71.01
Wheat	1027946.00	129932.37	0.2297	524129.00	101314.14	0.6067	56.18
Bajra	157763.00	1640.73	0.0029	18362.00	179.95	0.0010	90.11
Jowar	289299.00	6596.17	0.0116	57324.00	854.12	0.0051	88.53
Other cereals	218858.00	9257.69	0.0164	36642.00	1315.45	0.0079	87.58
Pulses	238386.00	1001.22	0.0018	111647.00	569.39	0.0034	63.74
Edible oils	164374.00	18146.89	0.0320	87934.00	12759.22	0.0764	58.72
Sugar	440714.00	269716.97	0.4768	154994.00	72506.19	0.4340	78.88
Coal	90167.00	4481.30	0.0079	177387.00	20204.38	0.1210	18.15
Kerosene	587981.00	152051.89	0.2688	213474.00	126526.04	0.4577	54.58

Source : 42nd round NSS (June 1987 to July 1987).

Table 3.1.1shows, that in case of all commodities except coal more than 50 per cent of the total quantity purchased under the PDS is in the rural sector. This percentage varies from 90 per cent in the case of bajra to 55 per cent for kerosene. For staple foodgrains like rice and wheat the percentages are 71 and 56 per cent respectively. For sugar, 79 per cent of the PDS purchases are made in the rural sector. It is only in the case of coal that the percentage is much lower at 18 percent.

However, it may be noted that data relate to actual quantities purchased from the PDS and not the quantities delivered to the PDS outlets and this may be because a large section of the rural

households are self-employed in agriculture. Keeping this limitaiton in mind, the analysis reveals that, in the case of rice the per capita PDS is 0.63 kg in rural areas and 0.88 kg in the urban areas. Among the other foodgrains, it is only in the case of wheat and pulses that the rural areas have lower per capita PDS than the urban. It is interesting to note that per capita sugar from PDS is 0.48 kg in rural areas and 0.43 kg in the urban. However, in the case of kerosene the rural population buys much lower per capita quantity (0.27) than the urban (0.76) from the PDS. One major reason for this disparity could be low deliveries of kerosene to rural areas as compared to the urban.

Table 3.1.2 Table showing PDS per market dependent : All India

	Rural	Urban
Rice	1.107	1.063
Wheat	0.761	1.051
Bajra	0.076	0.033
Jowar	0.157	0.062
Other cereals	0.125	0.058
Pulses	0.000	0.124
Sugar	0.613	0.463
Edible oil	0.037	0.810
Kerosene	0.303	0.910
Cloth	0.267	0.210
Coal	0.493	1.213

Source : 42nd round NSS (June 1987 to July 1987).

Table 3.1.2 shows PDS purchase per market dependent (PDSPMD) for rice is higher for the rural sector (1.107 kg) than for the urban (1.063 kg). Thus, for rice which is one of the most important items of sale under PDS, there seems to be a rural bias. Similar is the case with sugar which accounts for about one-third of the total sales under the

PDS. For other items the rural urban disparity is either reduced or remain the same.

Table 3.1.3 Table showing relative dependence on PDS

	PDS Qty purchase as per cent of total purchase	
Commodity	**Rural**	**Urban**
Rice	16.76	19.02
Wheat	12.64	19.33
Bajra	1.04	0.98
Jowar	2.28	1.49
Other cereals	4.23	3.59
Pulses	0.42	0.51
Edible oil	11.04	14.51
Sugar	61.20	46.78
Coal	4.97	11.39
Kerosene	25.86	59.27
Std cloth	3.85	2.43

Source : 42nd round NSS (June 1987 to July 1987).

The relative dependence on PDS in rural and urban India. This measures for the different commodities supplied by PDS are given in Table 3.1.3.

The data show that the all-India level there are some differences in the extent of dependence on the PDS between rural and urban areas. This difference varies between commodities. Whereas in the case of rice there is only a marginal difference in dependence between the two areas, it is quite substantial in the case of kerosene (26 per cent for rural and 59 per cent for urban). In th ecase of wheat the relevant percentages are around 13 and 19 for the rural and urban areas respectively. It is only in the case of sugar that relative dependence on

PDS is much higher for rural (61 per cent) than urban India (47 percent).

Table 3.1.4 (a) Table showing percentage of quantity of purchase from PDS to total purchase by item and population group - All India (Rural)

Fractile Group	Rice	Wheat	Sugar	Kerosene
0-10	16.92	9.45	54.59	51.69
10-20	15.26	9.73	56.20	4.92
20-40	17.58	14.03	51.66	47.69
40-60	15.49	12.82	47.94	47.57
60-80	17.88	14.10	77.15	46.97
80-90	17.78	13.40	37.29	47.35
90-100	16.26	13.59	32.81	47.38
All	16.76	12.64	61.20	25.86

Source : 42nd round NSS (June 1987 to July 1987).

Table 3.1.4(a) gives percentage dependence on the PDS (in terms of quantity) by population and commodity groups for rural sector at the all-India level. From the table it can be seen that in case of rice bottom two decile groups obtain about 16 per cent of the total quantity purchased from the PDS while the same holds good for the general population. In case of wheat the bottom 20 per cent gets 9.59 per cent much lesser than the top 20 per cent i.e. 13.50 per cent. In case of sugar, the bottom 20 per cent gets much higher (about 56 per cent) than the top 20 per cent (about 35 per cent) from the PDS. In case of kerosene the bottom 10 per cent (52 percent) gets higher than

the top 10 per cent (about 47.38 per cent), almost all the classes have nearly the same percent except for the 10-20 fractile group i.e. about 5 per cent only. More or less, all the population groups depend uniformly to the same extent on the PDS with respect to all commodities even though there are slight variations.

Table 3.1.4 (b) Table showing percentage of quantity of purchase from PDS to total purchase by item and population group - All India (Urban)

Fractile Group	Rice	Wheat	Sugar	Kerosene
0-10	21.52	12.34	58.40	55.41
10-20	21.40	16.60	54.52	58.32
20-40	18.45	18.12	51.30	57.32
40-60	19.60	23.58	45.92	60.91
60-80	18.24	20.00	42.85	60.10
80-90	16.70	22.11	40.71	60.74
90-100	14.65	19.50	36.26	60.67
All	19.02	19.33	46.78	59.27

Source : 42nd round NSS (June 1987 to July 1987).

Table 3.1.4(b) gives details for the urban areas. In case of rice and sugar the poor gets a higher proportion of the purchase from the PDS wherelse for wheat and kerosene it is the other way round.

3.2 Coverage

The distribution of foodgrains through PDS as one of the important forms of government intervention in the operation of the market. The government of India as incurring a food subsidy amounting to over Rs. 5000 crores per annum. Besides the central government, some of the state governments are incurring substantial expenditure towards public distribution of foodgrains. In such a situation it is but natural to ask whether the food as reaching the deserving person. Whether the coverage as goods and some attempts are made below to examine the coverage of the system in Delhi.

In the states of Punjab, Orissa, Bihar, U.P. and Haryana, more than 95% of the rural population does not purchase any cereals from the PDS. In Manipur and Rajasthan of 75 million, more than 90% of the persons do not purchase any cereals from PDS. The picture in the urban areas of these states is also similar in terms of coverage.

In the eastern states of West Bengal, Sikkim and Assam, more than 70% of the estimated rural population of 59 million persons, does not purchase any cereals from the PDS. In the Urban areas of West Bengal and Assam, the coverage is higher. In West Bengal 60% of population purchase cereals from PDS.

In the states of Maharashtra, Gujarat, Karnataka, Tamilnadu and Andhra Pradesh, of the rural population of 173 million, 40 to 55% of the population does not purchase from PDS. In the Urban areas of these states, of the total population of 75 million, 35 to 70% does not purchase from PDS.

The state of Kerala is in a class by it self. There is compulsory rationing in whole of the states. Nearly 90% of the population purchases cereals from ration shops in both, rural and urban areas.

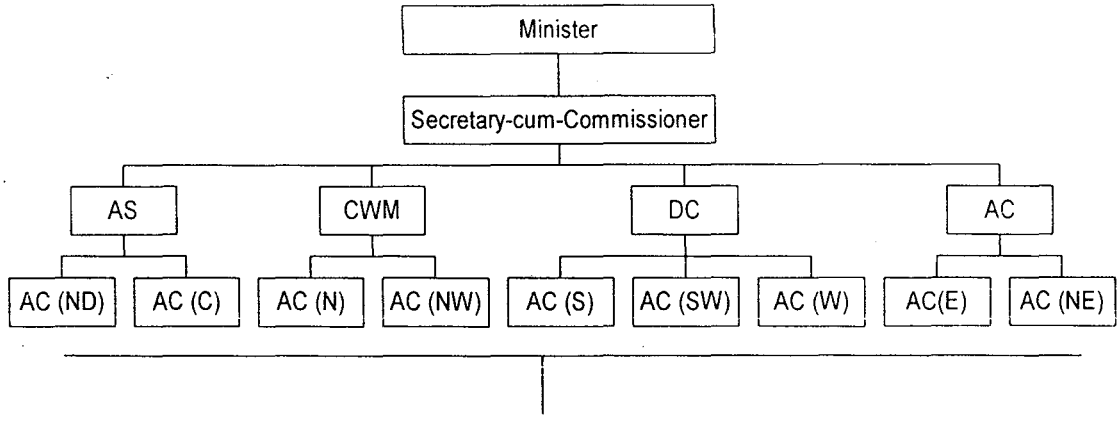
Urban Delhi is also a special case. More than 70% of the population purchases cereals from ration shop. Among other states, and Union territories, J and K, Mizoram, Tripura, and Goa show varied picture. High urban coverage are common. The rural populations are not as well covered.

3.3 Organisational network of PDS in Delhi

State food corporation performs of the functions, of the food corporation of India as that corporation delegates to it. State receipts the central allocation, procures purchases, determines consumer issue price, commodity coverage, ration scales, periodicity of sale and profit margins to FPS.

The genuine superintendence, direction and management of the affairs and business of a state food corporation vests in a board of directors. Delhi has various officials in the districts to carry out the responsibilities i.e. Commissioner (food supplies and consumer affairs), Additional secretary, Dy. Commissioner, Assistant Commissioner, FSO (food supply officer), Superintendents, while inspectors and clerks carry out the functions in the circle.

Chart : Food and Civil Supplies Department (Government of NCT of Delhi)



FSO and its supporting staff

AS	:	Additional Secretary
CWM	:	Controller Weights and Measures
DC	:	Deputy Commissioner
AC	:	Assistant Commissioner
SO	:	Food and Supplies Officer

Source : K Block, Vikas Bhawan, ITO, New Delhi.

3.4 Public distribution system in Delhi

The special feature of the PDS, in Delhi, is that, unlike in most of other states commodities are being distributed to all the card holders irrespective of the income group to which they belong.[1]

[1] Recently the Delhi government has changed the policy, commodities like sugar will not be available to income tax year from the month of July 2000.

Table 3.4.1 Table showing year-wise statistical data relating to the public distribution system in Delhi.

Description	1990	1991	1992	1993	1994	1995
No. of foodcards (in 000)	2362	2516	2617	2764	2845	2970
Rate of increase (%)	-	6.52	4.01	5.62	2.93	4.39
No. of cereal units (in 000)	20312	21238	22047	23124	24077	25330
Rate of increase	-	4.56	3.81	4.89	4.12	5.20
No. of sugar units (in 000)	11866	12489	13075	13796	14389	15222
Rate of increase	-	5.25	4.69	5.51	4.30	5.79
Fair price shops	3579	3555	3547	3422	3264	3183
Rate of increase	-	0.67	-0.23	-3.52	-4.62	-2.48
No. of licensed shops of kerosene oil	1840	1876	1931	1958	2029	2227
Rate of increase	-	1.96	2.93	1.40	3.63	9.76

Source : Delhi Statistical Handbook 1996.

Table 3.4.1 shows that there has been a steady increase in the number of foodcards since 1990 to 1995. It has increased by about 7 per cent from 1990 to 91, by 4 percent from 1991-92, by 6 per cent from 1992 to 1993, by 3 percent from 1993 to 1994 and by 4 percent from 1994-1995. Number of cereal units has shown a rising trend ranging around 4 percent to around 5 percent from 1990 to 1995. Number of sugar units has also registered a rising trend ranging between around 4 percent to around 6 percent during the time period 1990 to 1995. Number of licensed shops of kerosene oil has also reflected the similar pattern, recording an increase ranging between 1.40 percent to around 10 percent over the same time period.

On the other hand the number of fair price shops have recorded an opposite trend. It has declined ranging between -0.23 percent (from 1991-1992) to -4.62 percent (from 1993 to 1994), during the time period 1990 to 1995. This fall may be responsible for the poor coverage in Delhi.

Table 3.4.2 (a) Table showing per thousand distribution of household by mode of purchase from PDS (only) and other sources (only) by item of purchase.

Mode of purchase

(Urban)

Items	Does not purchase	Daily	Weekly	Fortnightly	Monthly	As and when needed	Total
Rice	3	7	21	367	565	37	1000
Wheat	7	1	3	462	518	9	1000
Sugar	0	6	22	273	673	21	1000
Kerosene	3	6	38	145	778	30	1000

Source : Report on public distribution system in Delhi, 49th round, 1993-94.

Table 3.4.2 (b) Table showing per thousand distribution of household by mode of purchase from PDS (only) and other sources (only) by item of purchase.

Mode of purchase

(Rural)

Items	Does not purchase	Daily	Weekly	Fortnightly	Monthly	As and when needed	Total
Rice	12	3	6	412	515	52	1000
Wheat	222	0	0	339	431	8	1000
Sugar	0	0	3	282	659	56	1000
Kerosene	0	0	17	585	398	0	1000

Source : Report on public distribution system in Delhi, 49th round, 1993-94

It is evident from Table 3.4.2 in both urban and rural Delhi, concentration of purchase is recorded monthly followed by fortnightly for all the items, except for kerosene in rural areas where purchases are more fortnightly than monthly. There are considerable number of people who also buy weekly and as per needs in both rural and urban sectors with regards to various items.

Table 3.4.3 Table showing percentage of quantity of purchase from public distribution system to total purchase by items of purchase and fractile groups by monthly per capita expenditure

Item of purchase

(In percentage)

Fractile group	Urban				Rural			
	Rice	Wheat	Sugar	Kerosene	Rice	Wheat	Sugar	Kerosene
0-10	70	83	71	79	98	86	90	100
10-20	77	91	61	79	98	68	75	100
20-40	71	85	63	77	78	65	73	85
40-60	75	85	61	78	80	46	62	93
60-80	62	74	62	80	66	58	59	75
80-100	36	48	56	81	42	31	49	79

Source : Report on public distribution system in Delhi, 49th round, 1993-94

In Table 3.4.3 exhibits that in urban Delhi, the bottom 20 fractile group is purchasing more than the upper 20 fractile group, in terms of rice, wheat and sugar while kerosene's percentage of purchase is more among the top 20 fractile group. The hike in the price of kerosene oil may be reason for purchasing less.

Percentage of quantity purchased from PDS by bottom 20 and top 20 fractile group varies from 74 to 36 for rice, 87 to 48 for wheat, 66 to 56 for sugar and 79 to 81 for kerosene.

In the rural areas, the bottom 20 fractile group is again purchasing more than the top 20 fractile group, in terms of all the items i.e. rice, wheat, sugar and kerosene. Here kerosene among the lower 20 fractile group has a universal purchase.

Percentage of quantity purchase from PDS by bottom 20 and top 20 fractile group varies from 98 to 42 for rice, 77 to 31 for wheat, 82 to 49 for sugar and 100 to 79 for kerosene.

To conclude it can be stated that both in urban and rural areas, the lower fractile groups are the major dependent on public distribution system their monthly purchase.

Table 3.4.4 Table showing percentage of quantity purchased from PDS to total purchase

Commodity	Urban	Rural
Rice	63	71
Wheat	77	54
Atta	28	19
Sugar	61	64
Edible oil	00	00
Kerosene	78	86

Source : Report on public distribution system in Delhi, 49th round, 1993-94

The purchase of the main cereals from PDS ranged between 60-70 percent in urban areas out of the total purchase of the month by the ration card holders. In case of rice, 63% and 71% purchase are from PDS for wheat it is 77% and 54% out of the total monthly purchase respectively for rural and urban areas.

The preference for going to PDS outlets in case of atta is found to be low perhaps due to availability of this item at comparable rates in the open market. The purchase of sugar was over 60 percent in both rural and urban areas. The purchase of edible oil is nil because this item is mostly supplied through super bazaars without insisting for the ration card. Kerosene purchase from PDS comes to as high as 78 percent and 86 percent in urban and rural areas respectively.

In case of wheat and atta only there seems to be an urban bias in terms of percentage purchase from PDS, where rice, sugar and kerosene purchases are better in rural areas.

Table 3.4.5 Table showing per thousand distribution of households using only public distribution system for purchase of selected commodities over fractile groups of monthly per capita expenditure for each item of purchase.

Fractile group of MPCE	Item of purchase							
	Urban				Rural			
	Rice	Wheat	Sugar	Kerosene	Rice	Wheat	Sugar	Kerosene
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0-10	98	90	122	90	95	137	209	99
10-20	112	112	89	106	124	123	162	129
20-40	220	226	179	222	195	212	242	203
40-60	238	239	187	221	181	176	83	169
60-80	205	209	216	218	207	180	167	199
80-100	127	124	207	143	198	172	137	201

Source : Report on public distribution system in Delhi, 49th round, 1993-94

Table 3.4.5 shows that, in both the urban and rural areas, the lower 20 fractile group of MPCE and upper 20 fractile group of MPCE; when seen in the light of percent distribution of households using only public distribution system for purchase of rice, wheat, sugar and kerosene; revealed better performance than the later.

The range of percent distribution of households using only PDS for purchase of selected commodities in urban sector over, lower 20, 20-80 and upper 20 fractile groups of MPCE for rice is 21, 66 and 13 percent respectively. For wheat over lower 20, 20-80, and upper 20 fractile groups is 20, 67 and 12 percent respectively. For sugar over lower 20, 20-80 and upper 20 fractile groups is 21, 58 and 21 percent respectively. For kerosene over lower 20, 20-80 and upper 20 fractile groups is 20, 66 and 14 percent respectively.

In the rural sector, for rice, over lower 20, 20-80 and upper 20 fractile groups the percent varies from 22, 58 and 20 respectively. For wheat, it varies from 25, 57 to 17 percent over lower 20, 20-80 and upper 20 fractile groups respectively. For sugar, it varies between 37, 49 and 14 percent over 0-20, 20-80 and 80-100 fractile groups, while for kerosene, it varies between 23, 57 and upper 20 fractile groups respectively.

The degree of dependence on PDS for cereals in urban sector is found to be very high in respect of households spread over fractile group 20-80, largely representing lower and middle MPCE is in the order of 66 percent wherelse it was about 13 percent for the fractile group of 80-100 representing the households mostly in the higher MPCE. Similar trends were noticed in case of the item kerosene as well. The situation in rural sector is not in any way different from urban sector. The

performance is seen best among the middle fractile group followed by lower 20 and upper 20 fractile groups, as a rule in all the items in both rural and urban sectors.

Table 3.4.6 Table showing per thousand distribution of households using sources other than public distribution system for purchases of selected commodities over fractile groups of monthly per capita expenditure MPCE for each item of purchase

Fractile group	Item of purchase							
	Urban				Rural			
0-10	32	29	51	61	16	23	0	0
10-20	35	25	61	97	1	52	26	0
20-40	106	110	233	273	137	122	134	208
40-60	122	111	185	182	127	187	45	66
60-80	233	231	227	227	252	272	344	404
80-100	472	494	243	160	467	344	451	322

Source : Report on public distribution system in Delhi, 49th round, 1993-94

The percentage of households not purchasing the PDS more or less shows an increasing trend with the increase in income levels of households.

In urban sector, the dependence on sources other than PDS shows higher percent in the upper than the middle and lower fractile groups for rice and wheat. While middle fractile group is leading followed by upper and lower fractile groups for sugar and kerosene.

In the urban areas, for rice, the range varies between 7 percent, 46 percent and 47 percent for 0-20, 20-80and 80-100 fractile groups respectively. For wheat varies between 5 percent, 45 percent and 49 percent for 0-20, 20-80 and 80-100 fractile groups respectively. For sugar it varies between 11 percent, 65 percent and 24 percent for 0-20, 20-80 and 80-100 fractile groups respectively. For kerosene it is between 16 percent, 68 percent and 16 percent respectively.

In the rural sector, the reliance on sources other than public distribution system reveals the greater dependence of the middle fractile group followed by higher and lower fractile groups.

The range varies for rice between 2 percent, 51 percent and 47 percent for 0-20, 20-80 and 80-100 fractile groups respectively. For wheat it varies between 8 percent, 50 percent and 34 percent for 0-20, 20-80 and 80-100 fractile groups. For sugar it varies between 3 percent, 52 percent and 45 percent for 0-20, 20-80 and 80-100 fractile groups respectively while for kerosene it varies between 0 percent, 68 percent and 32 percent over lower 20, 20-80 and upper 20 fractile groups.

In case of cereals, the dependence of households in the fractile group of MPCE 80-100 as relating high on other sources to the tune of 47 percent to 49 percent, in urban areas, 46 percent to 34 percent, and in rural areas, when compared to the position in other fractile group of MPCE, namely 0-20, 20-40, 40-60 and 60-80. It can therefore be seen that the fractile groups 0-80 tend to rely more on PDS for the selected items of daily use.

Table 3.4.7 Table showing percentage of purchase of an item from public distribution system to total value purchased during a period of one month by items of purchase and fractile group

	Item of purchase							
	Urban				Rural			
Fractile group / Items	Rice	Wheat	Sugar	kerosene	Rice	Wheat	Sugar	Kerosene
0-10	65	83	60	66	97	55	86	100
10-20	70	89	56	64	98	29	68	100
20-40	65	02	56	65	77	34	67	74
40-60	63	83	54	66	74	18	55	84
60-80	47	67	52	64	59	12	51	60
80-100	19	36	48	65	33	31	44	68

Source : Report on public distribution system in Delhi, 49th round, 1993-94

In the urban Delhi, in case of rice, value of purchase from PDS ranged between 65-70 percent in the lowest fractile groups 0-20. In the 20-60 class it was over 60 percent whereas in 80-100 group it was less than 20 percent. The position with respect to wheat also maintained the same trend. Coming to sugar, in urban out of the total value of purchases, nearly 60 percent of it was made from PDS in 0-20 fractile group. In the fractile class 20-80 over 50 percent of the value of purchases were made from PDS. However, when it comes to 80-100 class the percentage of value of purchase from PDS was less than 50 percent mark.

In the rural Delhi the sample survey revealed that the value of purchase from PDS for different fractile classes revealed a higher percentage value for lower group and a lower percentage value for the higher group. In 0-20 class percentage value of purchases stood at 97 percent and for middle fractile group of 20-80 it ranged between 59-77 percent and in 80-100 class it was about 30 to 35 percent. In case of wheat out of the total value of purchase 84% percent was drawn from the PDS in 0-10 fractile class. On the contrary it was only a little over 30 percent in 80-100 class. Coming to kerosene, it was worthwhile to notice that the percentage of purchases in 0-20 class from PDS was found to be cent percent as it is the main sources of energy and medium of cooking for the lower income groups. In the purchase of sugar from PDS, the bottom and higher fractile classes exhibited quite extreme trends namely, 0-10 class made its 86 percent of value of purchases from PDS alone and the rest of 14 percent was from the other sources and on the contrary 90-100 class resorted to 38 percent of total value of sugar purchased from PDS and the remaining 62 percent from the open market.

Table 3.4.8(a) Table showing per thousand distribution of households not purchasing from public distribution system over fractile groups by reason for not purchase for each item.

Reason for not purchasing from PDS

(Urban)

Items	Per 1000 of h.h not purchased from PDS		No ration card		Not required		Not available		Quality not satisfactory		Not available in required quantity		Credit not possible		Others	
	0-20	80-100	0-20	80-100	0-20	80-100	0-20	80-100	0-20	80-100	0-20	80-100	0-20	80-100	0-20	80-100
Rice	67	472	110	210	0	623	172	349	50	566	624	0	1000	0	48	326
Wheat	54	494	135	244	61	242	70	209	39	559	0	1000	1000	0	0	470
Sugar	112	243	114	213	0	0	325	675	0	491	0	0	1000	0	0	563
Kerosene	157	160	151	164	0	0	437	0	0	0	0	0	0	0	0	0

Source : Report on public distribution system in Delhi, 49th round, 1993-94

Table 3.4.8(b) Table showing per thousand distribution of households not purchasing from public distribution system over fractile groups by reason for not purchase for each item.

Reasons for not purchasing from PDS

(Rural)

Items	Per 1000 of h.h. not purchased from PDS		No ration card		Not required		Not available		Quality not satisfactory		Not available in required quantity		Credit not possible		Others	
	0-20	80-100	0-20	80-100	0-20	80-100	0-20	80-100	0-20	80-100	0-20	80-100	0-20	80-100	0-20	80-100
Rice	18	467	0	249	0	448	0	0	28	550	0	0	0	0	0	1000
Wheat	75	344	0	143	24	347	0	0	48	448	0	0	0	0	423	289
Sugar	26	453	0	313	0	0	297	703	0	1000	0	0	0	0	0	624
Kerosene	0	322	0	267	0	0	0	0	0	0	0	0	0	0	0	0

Sourxce : Report on public distribution system in Delhi, 49th round, 1993-94

In the urban Delhi, in case of rice, lower 20 fractile group complained of credit not possible (100%) and not available in required quantity (62%), while the upper 20 fractile group complained of non requirement (62%) and quality not satisfactory (57%) is the major reason for not purchasing from PDS. In case of wheat, the 0-20 fractile group, gave credit not possible (100%), and no ration cards (14%) as reasons, while the 80-100 fractile group, gave not available in required quantity (100%) and quantity not satisfactory (56%) as reasons for not purchasing from PDS.

In case of sugar, the 0-20 fractile group complained of non availability (33%) and the 80-100 fractile group complained of non availability (68%) and quantity not satisfactory (49%) as reasons for not purchasing from PDS. In case of kerosene, the 0-20 fractile group gave non availability (44%) and no ration cards (15%), while 80-100 fractile group gave no ration card (16%) as reasons for not purchasing.

Overall, the lower income group complained of credit not possible, not available in required quantity, no ration card, non availability as main reasons for excluding themselves from the system which varied from 100 to 14 percent across various items. On the other hand the upper income group were affected by non requirement, quality not satisfactory, not available in required quantity as the main reasons for not availing the PDS facility, which ranges between 100 to 16 percent across various items.

Table 3.4.8. shows that, in the rural areas, in case of rice, the lower 0-20 fractile group gave quality not satisfactory (3%) and the upper 80-100 fractile group gave quality not satisfactory (55%), and not required (45%) as reasons for not purchasing from PDS. In the case of wheat, the 0-20 fractile group gave quality not satisfactory (48%) and others (42%) while 80-100 fractile group

gave quality not satisfactory (45%) as reasons for not buying items from PDS.

In case of sugar, among the lower 20 fractile groups complained of non availability (30%) while the upper 20 fractile groups complained of non availability (70%) as reasons for not buying from PDS. In case of kerosene, the upper 20 fractile groups complained of not possessing ration cards as reason for excluding from PDS while the lower 20 fractile group didn't report any complains.

Overall the lower 0-20 fractile group mainly held non satisfactory quality, non availability, and the upper 80-100 fractile group mainly held non satisfactory quality, non requirement, non availability and non availability of ration cards are the major factor responsible for their not participating in the system.

Table 3.4.9 Table showing allocation of wheat and rice by government of India and lifting month wise (in MTS)

Month	Allocation *		% of lifting of wheat to the respective allocation	Lifting **	% of lifting of rice to the allocation	
	Wheat	Rice		Wheat		Rice
	(1)	(2)				
4/99	60400	12890	2.10	1270.1	12.43	1602.3
5/99	60400	12890	0.17	103	25.16	3242.5
6/99	60400	12890	0.11	64	30.25	3899.8
7/99	60400	12890	0.48	289.2	38.72	4990.6
8/99	60400	12890	0.03	2037.8	44.08	5682
9/99	60400	12890	7.32	4421.2	63.55	8192.1
10/99	60400	12890	12.02	7261	58.65	7560.4
11/99	60400	12890	14.22	8586.4	48.93	6306.9
12/99	60400	12890	13.70	8272.3	37.44	4825.8
1/2000	60400	12890	11.23	6783.9	35.26	4544.8
2/2000	60400	12890	8.29	5006.3	32.09	4136.3
3/2000	60400	12890	8.98	5423.2	42.11	5427.9
4/2000	62640	13610	0.35	218.5	2.90	394.3

Source : * Govt. of India, Ministry of Consumer Affairs and Public Distribution.
** Delhi State Civil Supplies Cooperation Limited, F.C.I.

From the Table 3.4.9, it can be seen that the % of lifting of wheat to the respective allocation has fallen from April 1999 to June 1999. There has been a sudden increase recorded in the month of September which has been rising, till November. Again it has recorded decline from December 1999 onwards. The highest lifting has been recorded in the month of November, whereas it has been recorded doing comparatively better during October 1999 to January 2000 only. Still it can be seen that, the percentage of lifting is very poor, highest percent recorded as only 14 percent.

In the case of rice, lifting as a percentage of allocation has risen continuously since April 1999 to September 1999, after which it has recorded a continuos fall till February 2000. It shows a sudden rise in the month of March 2000, from 32 to 42 percent. After that percentage of rice decline to an alarming level of mere 3 percent. The highest percent of wheat lifting to respective allocation has been recorded during September 1999 i.e. 64 percent. Overall wheat off-take central pool shows a better trend compared to rice. The quality or the price fluctuations of above two commodities may be the cause of such a poor off-take.

The main items usually distributed through PDS includes cereals like Rice, Wheat and other essential items like sugar and kerosene oil etc. as per the data available from the Govt. of NCT Delhi, deptt. Of food and supplies. By 1994-95, there were about 28.45 lakh ration card holders and 3264 fair price shops (FPS) catering to the requirements of the public in Delhi under the public distribution system. Out of this, 2894 Fair price shops were located in urban area and 370 in rural area of Delhi.[2]

[2] Report on PDS in Delhi, Ministry of Civil Supplies, Consumer Affairs & Public Distribution,Govt. of India.

As per national sample survey data of 49th round : January – June 1993 (state sample) the purchase of cereals like Rice and wheat from PDS was to the tune of 63-77% in urban areas. In rural, it was to the extent of 71% for rice and 54% in case of wheat. The percentage of purchase of sugar from PDS in both rural and urban areas was above 60% out of total requirements of ration card holders in a month. The quantum of purchase of kerosene in percentage terms from PDS was found to be as high as 86% of the total quantity purchased in rural sector. In urban sector it was around 78%.

The critical analysis of the relative use of PDS among cross section of consumers represented by various fractile groups of monthly per capita expenditure has indicated that the system was more popular among lower and middle income groups than in higher income groups. In urban areas out of every 1000 householders purchasing from PDS, only 13% are in the fractile group of 80-100 but it was more than 20% in other classes viz. 0-20, 20-40, 40-60 and 60-80 fractile class. This trend is witnessed in rural areas also.

The survey also revealed that the main reason for not going to PDS in respect of the selected items is either due to not having ration cards or unsatisfactory quantity of the commodities supplied through PDS.

3.5 Ration card

It is a document which certifies the number of entitled to PDS supplies, states the ration scales, periodicity etc., of PDS supplies and carries the record of the actual purchases of these supplies. Ration cards are accepted as a proof of being a bonafide resident, citizen and of tenancy and required when applying for LPG

connection, for admission to schools, for registration for buying cars and scooters, for registration of partnership deeds etc.[3]

The procedure for issuing ration cards

In the urban areas, one has to make an application to the civil supplies authorities for obtaining a ration card. In the rural areas, ration cards are issued by village panchayat or village patwari or some equivalent institution or agency.[4]

Any person permanently residing or intending to do so in the union territory of Delhi and who desired to have household ration card issued, applies to the food and supplies officer of the circle concerned in which he /she resides on intends to reside, as the case may be furnishing true and correct information in such form as the commissioner prescribes. The food and supplies officer before issuing a house hold ration card, makes such enquiry as he may deems fit for verification of information furnished by the applicant.

The food and civil supplies officer issues household ration cards to homeless persons who has not fixed or identifiable place of dwelling for a period not exceeding six months at a time and increases the period of validity up to one year in those cases where there is record of continuous issue/renewal of the card for the previous three years.[5]

In Delhi, there are 3159130 PRC's (Permanent Ration Cards), 420412 JRC's (Jhuggi Ration Cards) and 5264 TRC (Temporary Ration Cards).[6]

[3] Kabra, K.N., The PDS in India, pp. 63-71.
[4] Ibid., p. 70.
[5] Part IV, Delhi Gazette – Extraordinary, Delhi Administration : Delhi. Food and Supply Department, ORDER, pp. 7-8.
[6] As per 24.2.2000

Permanent Ration Cards issued to those residents who are living or intend to live in Delhi permanently, are inquired about by the circle inspector (food and supply department and then issued a permanent ration card. Temporary ration cards are issued to the migrants for the duration of three to six months as well as to the government and private employees for six months or so. Jhuggi Ration cards are issued to those residents who encroached government lands. They get the status of the permanent ration card holders. Nevertheless JRC is written on top, so that if there is some policy to distribute sugar only to JRC, then they could be identified easily. There is a fixed time allotted for issuing (usually within two months) by the government. They are identified by the voter's list.[7]

3.6 COMMODITY COVERAGE

Partly on account of the importance of cereals in the consumption basket, and partly on account of the national food policy, major cereals are covered by PDS in all the states. Wheat and rice which are the main cereals produced and consumed in the country are supplied everywhere under the PDS. Besides that sugar and Kerosene oil are also distributed under the umbrellas of the PDS.[8]

3.7 Scale of issue

Another important aspect of the PDS is the determination of ration scales or entitlements for every adult and child for the commodities supplied through PDS channels. The decision is based on certain assumptions about the demand and need concerning the average consumption pattern in a particular area. Many factors regarding supply, availability, production patterns, overall surplus and deficit position of the commodities concerned also exercise their influence.

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[7] Food and Supplies Offices, K Block, Vikas Bhawan, Delhi.
[8] Op. cit., p. 72.

The ration scale should be adequate and meaning ful and remain stable over a reasonably long period of time and the fixed entitlements be normally available.[9]

In Delhi, entitlements are made according to the family size rather than per households. 700 grams of sugar is considered one unit for each individuals wherelse 1.25 kgs. of cereals is considered one unit for a child below 12 years and 2.50 kgs. of cereals is one unit for a person above 12 yrs, which is the double of the below 12 yr's unit.[10]

3.8 Periodicity of purchase

The PDS is not only a system of pre-determined, fixed price, fixed quantity supply of some select essential goods. It is also the system with a certain fixed periodicity of purchases.

Delhi, permits fortnightly purchases, in all the districts for the cereals while sugar can be purchased on a monthly basis.[11]

3.9 Issue prices

Central issue prices are fixed by government of India for the states while the retail issue prices are fixed by the State Government for the cereals and by the Government of India for sugar.

In case of Above Poverty Line (APL), population which is the only category existing in Delhi, Central issue prices for sugar is Rs 12.79/kg , for wheat and rice it is Rs. 9 and Rs. 11.80 per kg respectively. The retail issue price for sugar and wheat is is Rs. 12 and Rs.7.32 respectively[12]. The revised retailed issue price for sugar, wheat and rice are Rs. 13, 9.50 and 12.30 respectively.

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[9] Op.cit., pp. 76-77.
[10] Vikas Bhawan, Food and Supplies and Consumer Affairs, Govt. of India, New Delhi.
[11] Op.cit, p. 77.
[12] As per 4.6.1999.

Retail prices incorporate the transport cost from F.C.I. (i.e. 0.15 per kg. and profit margins for the FPS dealers i.e. 0.35 per kg).[13]

3.10 Fair price shop (FPS)

An agency licensed for acting as a retail outlet, is known as FPS. The corporation generally, acts as a wholesale distribution agency to the FPS, though in some cases they also run a few retail outlets, of their own.

Authorisations in some states, given on the basis of inviting applications. Many state governments have an prescribed application form and have specifically laid down criteria on the basis of which district authorities choose the PDS licence. Many states have laid down a clear cut set of priorities and guidelines regarding the choice of authorised FPS dealers.

Preferences has generally been given, next only to co-operatives, to people belonging to scheduled castes, and scheduled tribes, unemployed persons, educated un-employed, ex-servicemen and war-widows.[14]

3.11 Disfunctionalities

With the present level of PDS supplies, civil supply authorities cannot meet their obligation of keeping the licensed retail outlets well stocked and regularly replenished with commodities. It is often seen that government, fails to maintain a regular supply line with the present level of procurement and stocks and thus fall back upon the easier option of erratically reducing their supply obligations, by lowering the entitlements of ration card holders. Large scale voluntary exclusion of the relatively better off and vocal sections of the population provides ideal conditions for the diversion of PDS supplies to unauthorised buyers, there by not only reducing the access to the poorer sections, but also leading to

[13] Vikas Bhawan, Food and Supplies and Consumer Affairs, Govt. of India, New Delhi.
[14] Op.cit, p. 96.

concerned or involuntary exclusion of the poor due to large scale diversion.[15]

The absence of efficient functioning of PDS, would push large sections of the poor and vulnerable population,. towards the uncontrolled open market, thereby accelerating the speed of inflation and the counter inflationary impact of the PDS is significantly weakened. Some people may not obtain ration cards or may not succeed in doing so, some manage to obtain ration cards that may be called 'bogus ration cards.' One fairly common practice is to inflate the number of family members by including the names of servants, benamies, relations, pets etc., Some people are included with a view to prove that the concerned person belong to a particular family, so that the issue of succession may be decided in their favour. In many cases people inflate the ration units in order to get larger quantities of sugar and edible oil, though in most cases the objective was to obtain extra edible oil.[16]

A poor person will be worse off in a dual market system, if he gets only a small proportion of his total requirement through the PDS, which operates against their interest by raising the open market prices. Casual labours on daily wages, migrant workers, and those without proper residential addresses are either not using or not covered by the PDS. They are doubly disadvantaged because they are not only not covered by the PDS but also have to pay higher prices for their entire purchases in the open market. Another problem in the PDS is the amount of leakages of food grains and other commodities in the form of losses in the transport and storage and diversion to the free market as sometimes, shop owners make bogus entries in the ration cards.[17]

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[15] Op.cit. , pp. 10-11.
[16] Op.cit, pp. 70-71.
[17] Dev. S. Mahendra Food Security : PDS Vs. EGS, A Tale of Two States, EPW, pp. 1759.

CHAPTER-IV

THE CONSUMER AND THE PUBLIC DISTRIBUTION SYSTEM: UTILIZATION ACCESS AND VIABILITY

The present chapter, our study is pertained to the question of the extent to which the public distribution system meets the essential consumption needs of beneficiaries. This was the major question on which we collected information from a sample of about 153 households from the slum area "Dhapa colony", with the help of a detailed questionnaire. Not only the chapter takes up for detailed analysis, about the important relationships that exist between the consumers and the administration but also turns attention to various facets of the relationship between the consumer and the retail outlet or FPS and deals with the extent to which the present public distribution system meets the essential consumption needs of the sampled households. Discussion in the chapter is arranged in the following pattern:-

(a)Gateway to access – the issue of ration cards, (b) Time taken for the issue of ration cards, (c) Administrative procedure, (d)Choice of PDS made by household, (e) Reported factors effecting consumer utilisation, (f) Awareness and inter household transfer of entitlement , (g) Periodicity of ration issue, (h) Consumer responses on quality, (I) Reasons for poor quality PDS supplies, (j) Reasons for not complaining, (k) Location and distance to FPS, (l) Reported days when FPS opens during a week, (m) Time spent by consumer at FPS, (n) Consumer expenditure of the household during 30 days preceding the date of survey. (o) Cross examination of variables.

4.1. THE ISSUE OF RATION CARDS

The possession of a ration card confers upon any person or household an entitlement to essential commodities made available through the public distribution system on terms and conditions specified by the civil supplies department.

Table 4.1 (a): Table showing possession of ration card

Value	Frequency	Percent
House hold with ration card	122	79.7
House hold without ration card	31	20.3
Total	153	100

Source : Primary Data

For the entire sample at the slum level, around 80 percent of the household possessed the ration card while the rest 20 percent are not able to get primarily due to their status of occupancy as renteers.

Table 4.1 (b): Table showing physical condition of the card

Value	Frequency	Percent
Well maintained	97	79.51
Badly maintained	18	14.75
Maintained by the F.P.S. Shop	6	4.92
Total	122	100

Source : Primary Data

A ration card is not merely a document which enables one to draw commodities from FPS but are accepted as a proof of being a bonafide

resident, citizen and also required when applying for LPG connection for admission to schools, for registration, for buying vehicles etc.

In about 80 percent cases ration card was well maintained, which reflects infrequent use of the document but may also indicate the care with which the card is maintained. In about a little less than 15 percent cases, the card was not maintained, because of very frequent use of cards coupled with the quality of paper used for printing the document. In about 5 percent cases, the ration card was illegally maintained by the FPS shop. However in a city like Delhi its not very easy to acquire a ration card, one has to waste both time and money for having it which is the key to many things. It's the only legal document which relied upon as a proof of residence which gets you not only the ration but things like gas connection, passport and other all a house site.

4.2 TIME TAKEN FOR THE ISSUE OF RATION CARD

Table 4.2 (a): Table showing time taken for the issue of ration card

Value	Frequency	Percent
One week	33	27.05
Two weeks	19	15.57
One month	19	15.57
Two months and above	51	41.80
Total	122	100

Source : Primary Data

Time taken for the issue of ration card to the household, is given in table 4.2(a), one sees that about 27 percent households reported having taken one week, while around 16 percent each took two weeks and a month respectively to obtain the ratio card after making an application. Wherelse in around 42 percent cases it took 2 months and above respectively. About 57 percent cases, the delivery of ration cards were delayed and it required more than 2 weeks to finally obtain one, due to administrative delays and bottlenecks and red tapism.

Table 4.2 (b) Table showing number of visit to civil supplies office

Value	Frequency	Percent
Once	35	28.69
Twice	12	9.84
Thrice	9	7.38
Four times	11	9.02
Five times	16	13.11
Six times or more	39	31.97
Total	122	100

.Source : Primary Data

However around 29 percent of the households reported that they only had to visit the civil supply office once only. On the contrary as many as around 54 per cent had to visit the civil supply office for four or more than four times to acquire the ration card.

Table 4.2(c) : Table showing filling of forms by number of visits paid at the office

Filling of forms	No. of visits							
	N.A	**1**	**2**	**3**	**4**	**5**	**6+**	**Total**
Households filling application form themselves	3	14 (43.75)	5 (41.67)	3 (33.33)	5 (45.45)	6 (37.5)	17 (43.59)	53
Households not filling application form themselves	-	14 (43.75)	5 (41.67)	6 (66.67)	5 (45.45)	7 (43.75)	16 (41.03)	53
Household getting form filled up and paying money	-	4 (12.5)	2 (16.67)	-	1 (9.09)	3 (18.75)	6 (15.38)	16
Total	3	32	12	9	11	16	39	122

Source : Based on Primary Data

* Percentage are in parenthesis.

About 44 percent each of single visit are those households who are filling forms themselves. At the same time also around 44 per cent are not. On the other hand, remaining about 13 percent are paying some amount of money for getting their forms filled up. As far as response of the households for the visits to civil supplies office is concerned. About 42 percent each of 2 visits made at the office are again both who filled and didn't filled up the forms themselves, while 17 percent are paying some money for the process. About 33 percent and 67 percent are those who filled up and didn't fill up the forms themselves respectively, made 3 visits at the office. About 45 percent

each who belong to those who filled up and didn't fill up the form themselves, respectively, and the rest of the about 10 percent of them paid some money, made 4 visits at the office. Around 38 and 44 percent are those who filled up and didn't fill up the form themselves respectively and rest of paid some money made 5 visits. While those around 44, and 41 percent are filling the form themselves and not filling themselves respectively, and the remaining 15 percent were the ones who paid some money, made 6 and more visits at the office.

This indicates that households who have paid some money and getting the forms filled up by others, are few . It may be said that they are in turn leading to corruption and malpractices, and that is how they are making their number of visits lesser.

These persistent attempts for obtaining a card may also reflect the intense need for rationed supplies and/or ration cards in this slum.

4.3. ADMINISTRATIVE PROCEDURE

The administrative procedures adopted for the issue of ration cards differ from state to state. However, there are certain general procedures prevalent in most cases. The potential beneficiary is required to formally apply for a ration card, usually on a specified form. This application is then processed and verified by the civil supplies authorities. This stage in the procedure can lead to the inspecting and verifying staff not being fully satisfied with the details provided in the application.

Table 4.3(a) : Table showing households filling/not filling forms

Value	Frequency	Percent
House holds filling application form themselves	53	43.44
Households not filing application form themselves	53	43.44
House holds getting form filled up and paying money	16	13.12
Total	122	100

Source : Primary Data

There was no difference between households filling and not filling the application forms themselves.

In about 43 percent cases, households filled up the form themselves, whereas an equally large number who required assistance in correctly filling up the application form. Some times services (filling up of application form) were usually provided by touts who often charge a fairly high price for the services provided in another about 13 percent cases.

It is seen that in 100 percent cases, inspectors had come for verification prior to the issue of the ration card.

Table 4.3(b) : Table showing choice of PDS by household

Value	Frequency	Percent
Choice of FPS made by households	11	9.02
Choice of FPS not made by house holds	111	90.98
Total	122	100

Source : Primary Data

It's also evident from Table 4.3(b), that most of the households did not have a choice regarding the retail outlet to which they were attached, and was found to be as high as around 91 percent. However, there were notable exceptions, as in about 9 percent cases, choice of FPS was made by household. The flexibility of choice was exercised by those who were the influential and friends of the FPS dealers, for the availability of better quality or may be more amount than their entitlement.

4.4. REPORTED FACTORS EFFECTING CONSUMER UTILISATION

The extent to which PDS meets the consumption requirements for the three commodities i.e. wheat, rice and sugar reflects the consumer utilisation. Many factors can be highlighted for explaining the extent to which the PDS is viable to meet the essential consumption requirements of its users. The consumers were given a choice to mark any number of factors out of these, as the possible reasons for not being able to buy the commodities from FPS either in part or in full.

Table 4.4(a) : Reported factors effected consumer utilization

Value	Frequency	Percent
Absence of any factor	25	20.49
Waste of time	30	24.59
FPS inconveniently located	30	24.59
Ill treatment by the retailer	10	8.20
Poor qualities	27	22.13
Supplies not available on credit	1	0.82
Stocks not available at FPS	15	12.30
Lack of purchasing power	31	25.41
Total	169**	138.53**

Source : Primary Data

** The frequency and percentage has double count and overlapping in many cases.

As seen in table 4.4(a), about 20 percent households reflects absence of any factors effecting their utilization. Wherelse around 25 percent each complained of waste of time due to inconvenient location of FPS and lack of purchasing power. Another about 22 percent complained of poor qualities as a main factor while little more than 12 percent faced the problem inadequate availability of at FPS.

Table 4.4(b) : Table showing reported factors effecting consumer utilization by actual purchase from PDS

	Income					
Factors affecting consumer utilisation	**0-5000**	**5000-10000**	**1000-15000**	**15000-20000**	**20000-25000**	**Total**
Absence of any factor	15 (60)	6 (24)	2 (8)	2 (8)	0	25 (100)
Waste of time	16 (53.33)	7 (23.33)	7 (23.33)	0	0	30 (100)
FPS inconveniently located	4 (13.33)	6 (20)	16 (53.33)	2 (6.67)	2 (6.67)	30 (100)
Ill treatment by the retailer	1 (10)	3 (30)	4 (40)	2 (20)	0	10 (100)
Poor qualities	14 (51.85)	7 (25.93)	5 (18.52)	0	1 (3.70)	27 (100)
Supplies not available on credit	1 (100)	0	0	0	0	1 (100)
Stocks not available at FPS	13 (86.67)	1 (6.67)	1 (6.67)	0	0	15 (100)
Lack of purchasing power	16 (51.61)	8 (25.81)	7 (22.58)	0	0	31 (100)

Source : Primary Data
* Percentage are in parenthesis.

As far as, no problems with the quality of PDS is concerned, 60 percent people belong to the income category 0-5000, followed by 24

percent in 5000 to 10000, 8 percent in10000 to 15000 and 8 per cent in 15000nto 20000income group. None were recorded among the highest income group 20000 to 25000. Waste of time as a factor affected 53 per cent belonging from 10000 to 15000 group, 20 per cent belonged to 5000 to 10000 income group, 13 per cent belonged to 0 to 5000 group. While 7 per cent each belonged to 15000 to 2000 and 2000 and 25000 group. The least were recorded in the highest two income groups.

About 53 per cent complains of FPS being inconveniently located fall in 0 to 5000 category about 23 per cent each fell in the next two categories while none were recorded above 15000 income category. About 10, 30, 40 and 20 per cent complained of ill treatment by the FPS dealer belonged to income category 0-5000, 5000 to 10000, 10000 to 15000, 15000 to 20000, 20000 to 25000 respectively. None were recorded in the highest income group. About 52 per cent belong to 0-5000 group, 26 percent belong to 5000 to 10000 group, about 19 per cent and 4 per cent fell in the 10000 to 15000 and 20000 to 25000 income group respectively complained of poor quality. All of those who complained of supply not available on credit belonged to 0-5000 income group. About 87 per cent among 0-5000 group, and 7 per cent each among 5000-10000, 10000 - 15000 income group complained of stocks not available at FPS. About 52 per cent 26 per cent, 0 to 5000, 10000 and 10000 to 15000 income group respectively complained of lack of purchasing power and there were none recorded among the two highest income groups.

It is observed that the concentration of complains can be found among the lower income groups while few are seen among 15000 to 20000 group and almost negligible found among the highest group. It

can be said that the richer sections may be basically dependant on the other sources or might be getting better quality through good personal relationship and influence. While the poor who are actually targeted to be reached through PDS not availing the best of quality and might be leading to large scale diversion to open market and may be getting affected by inflated market prices.

4.5. AWARENESS AND TRANSFER OF ENTITLEMENT

The effectiveness of the PDS is, to a considerable extent, dependent on the scale of rations provided to each card holding individual or household. The scale is usually fixed per ration unit, however at times it is fixed in terms of a certain quantity per ration card. The figures related to consumer awareness of the correct entitlement and changes in entitlement are tabulated in table 4.5.

Table 4.5 (a) Table showing awareness of temporary correct utilization

Value	Frequency	Percent
Yes	55	45.08
No	67	54.92
Total	122	100

Source : Primary Data

Table 4.5(b) Table showing awareness of change of entitlement

Value	Frequency	Percent
Yes	21	17.21
No	101	82.79
Total	122	100

Source : Primary Data

It is evident that around 45 percent only were aware of the correct entitlement, wherelse little more than 17 percent household were aware of the change in entitlement. Lack of awareness regarding quantum and changes in entitlements reflect the consumers ignorance or a certain level of indifference. It might have been due to the ideal conditions for diversion and illegal sale of ration supplies in the black market.

The adequacy of the scale of entitlement may also be very effectively reflected by the number of households, who resort to the transfer of entitlements from friends and relatives by borrowing or lending of ration cards.

Table 4.5 (c) : Table showing transfer of entitlement

Value	Frequency	Percent
N.R.	1	0.65
H.H. Borrowing card	13	8.50
H.H. not borrowing card	139	90.85
Total	153	100

Source : Primary Data

On the basis of table 4.5 (c) where figures on the transfer of entitlements are presented, it is seen that as many as around 91 percent households claimed of never having borrowed other's card.

However, it is quite plausible to presume that the prevalence of the practice of borrowing cards could be due to intake never below the normal consumption requirements of a household.

4.6 PERIODICITY OF ISSUE

The period of time over which a household is permitted to draw its ration entitlements is one of the most critical factors affecting utilisation and thereby the degree of access to the PDS.

Table 4.6 (a) Table showing periodicity of actual issues

Issue	Frequency	Percent
Fortnightly	76	62.30
Monthly	46	37.70
Total	122	100

Source : Primary Data

Table 4.6(a) provides us informations regarding related to the percentage distribution of the sampled households according to their actual periodicity of the same households. As for the actual periodicity reported, we find that around 38 percent of the sampled households possessing ration cards, reported a monthly issue period. Households reporting fortnightly issue were about 62 percent. For cereals one can avail the facility twice a month. While sugar can be drawn only once a month, so may be some people due to lack of time or money might be purchasing only once.

Table 4.6(b) Table showing periodicity of preferred issue

Value	Frequency	Percent
Daily issue	4	3.28
Weekly issue	12	9.84
Fortnightly	73	59.84
Monthly	30	24.59
Others (as and when needed)	3	2.46
Total	122	100

Source : Primary Data

It should be further noted that a little more than 3, around 10 percent and nearly 60 percent preferred daily, weekly and fortnightly issue period, respectively. While around 25 percent preferred monthly issue period.

Here its obvious that majority of them preferred fortnightly issue period. The more frequently the beneficiary is allowed to draw his or her rations on the basis of his needs and possibilities, the greater the likelihood of a better utilisation rate through the PDS. This may be due to the fact that a shorter issue period permits a greater staggering of purchases according to one's needs by providing a higher frequency of purchases, bringing about the necessary complimentarily between irregular income flows and the availability of essential commodities from the PDS.

Shorter issue period, like a fortnight, has significant beneficial consequences in relation to the operation and viability of a retail outlet as well.

Table 4.6(c) Table showing preferred issue period by Households present monthly income

Preferred Issue	PMINC (Rs.)				
	Upto 5000	**5000-10000**	**10000-15000**	**15000-20000**	**25000-25000**
Daily	2 (2.02)*	2 (13.33)	-	-	-
Weekly	8 (8.08)	2 (13.33)	2 (50)	-	-
Fortnightly	61 (61.62)	7 (46.67)	2 (50)	2 (100)	1 (50)
Monthly	26 (26.26)	3 (20)	-	-	1 (50)
Others (as and when needed)	2 (2.02)	1 (6.67)	-	-	-
Total	99 (100)	15 (100)	4 (100)	2 (100)	2 (100)

Source : Primary Data

* Percentage are in parenthesis.

Majority of the 0-5000 monthly income group preferred fortnightly issue i.e. about 62 per cent followed by monthly (26 percent), weekly (about 9 per cent) and both daily and others (2 percent). The income group 5000-10000 preferred fortnightly issue (about 47 per cent), followed by monthly (20 per cent), both daily and weekly (13 per cent) and others. The income group 10000-15000 preferred weekly and fortnightly issue equally. Between 15000 and 20000 income group preferred only fortnightly issue while the income group 20000 - 25000 preferred fortnightly and monthly issue equally.

It can be seen that the income category 20000-25000 recorded fortnightly and monthly as well as the 15000-20000 group recorded fortnightly as the only preferred issue. While daily issue have been only preferred by the 0-5000 and 5000-10000 income group, who may be majority of them as the daily wage earners.

4.7. COMPLAINTS AND GRIEVANCES OF CONSUMERS

The quality of goods sold under the PDS can be affected at different stages. Such as the procurement stage, the transportation stage, and even at the retail level through adulteration, it is important to know the fact as to who in their perception is responsible for this bad quality. Moreover, it is equally important to know if the consumer has formally complained to the authorities regarding these problems and , if not, the reasons as to why he does not complain. Such responses are an important indication of his level of satisfaction, as well as cynicism , and reflects his appreciation or apathy towards the administration.

Table 4.7(a) : Table showing reasons for poor quality PDS supplies

Value	Frequency	Percent
Government	49	40.16
Adulteration by FPS dealers	53	43.44
Poor storage facility (FPS)	4	3.28
Others (both govt. and FPS dealers)	16	13.11
Total	122	100

Source : Primary Data

As seen in the table 4.7(a), reasons for poor quality PDS supplies, indicates that about 40 percent of the sampled households possessing ration cards hold government responsible for it, as 43 percent think adulteration is done by FPS dealer, a little more than 3 percent hold poor storage facility responsible, around 13 percent hold other factors like both govt. and dealers irresponsibility and the climate, as causes. It is important to see what factors in their opinion are responsible for the substantial quality and also the degree of awareness to some extent.

Table 4.7(b) Table showing reasons for not complaining

Value	Frequency	Percent
Satisfied	3	2.46
Whom to complain	8	6.56
Useless	91	74.59
Others*	20	16.39
Total	122	100

Source : Primary Data

* One person's complain will not make any difference.

In the table 4.7(b), merely 2 percent were satisfied with the quality,

around 7 percent were unaware as to whom to complain wherelse majority of them, about 75 percent thought it was useless to complain, and rest of the 16 percent were of the opinion that one persons complain will make no difference. It is interesting to note that as many as 75 percent thought it was useless to complain, reflecting a high degree of cynicism and found the situation quite frustrating. It is noticeable that it could be a reflection of the ineffectiveness of the redressal machinery of the government and thus require immediate attention.

4.8. CONSUMER RESPONSE ON QUALITY

The bad quality can be indicated in terms of the supply of broken grain which results mainly from improper milling, supplies can be insect- infested due to improper storage, packing or for that matter due to inferior quality of packing materials used. Grains supplied through the PDS may contain a large proportion of chaff, and finally bad quality may be reflected in supplies contaminated with dust, sand, and other foreign matters.

Table 4.8 Table showing consumer's response on quality.

	Broken gains		Insect infected supply		Large quantity of chaff		Dust sand, foreign matters	
Value	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	105	86.07	93	76.23	105	86.07	105	86.07
No	17	13.93	29	23.77	17	13.93	17	13.93
Total	122	100	122	100	122	100	122	100

Source : Primary Data

Consumer responses on each of these aspects of quality are tabulated in table 4.8. The complaints related to broken grains,

existence of dust, sand and foreign material, which was noted in about 86 percent of the cases each, while around 76 percent complained of insect infected supplies. This data set reflects high degree of awareness of the quality of the food supplied by PDS but highly poor quality supplied to the consumers.

4.9 LOCATION AND DISTANCE TO FPS

Table 4.9(a) Table showing location and distance to FPS

(FPS in the village of residence)

Value	Frequency	Percent
Yes	80	65.57
No	42	34.43
Total	122	100

Source : Primary Data

An attempt is made to look into the important aspects in terms of the consumers perspective regarding retail activity, such as various issues related to the location of a convenient retail outlet. In the table 4.9 (a) as its seen that as many as around 66 percent of the sampled households possessing ration cards reported having a shop in their close approximately to their residence there is a delivery van coming to the slum which acts as a FPS.

While only 34 percent reported not having a retail outlet in the place of residence. Hence, it indicated that majority of them had to travel to sector 4 R.K. Puram i.e. distance of about 2 kms for obtaining ration supplies.

The degree of utilisation observed for our sample, only goes to indicate that the mere existence of a retail outlet does not automatically lead to better utilisation. Also related to the issue of location is the distance which has to be covered by the consumer to reach his retail outlet..

Table 4.9(b) Table showing distance to FPS

Value	Frequency	Percent
0-1 K.M	80	66
1-2 K.M	31	25
2-5 K.M	11	9
Total	122	100

Source : Primary Data

In table 4.9 (b) it is seen that as may as around 66 percent report residing within 0 to 1 kms from the retail outlet, this only goes to show a fairly well located network of retail outlets, especially from the point of view of consumers. About 25 percent were residing within 1 to 2 kms, 9 percent were residing within 2-5 kms, which were the households who made the choice of FPS themselves.

Table 4.9(c) Table showing time spent by consumer in obtaining supplies from PDS

Value	Frequency	Percent
Upto 15 MIN	46	36.89
16-30 MIN.	19	15.57
31-60 MIN	14	11.48
61-120 MIN	25	20.49
> 120 MIN.	18	14.75
Total	122	100

Source : Primary Data

Furthermore, the time spent by consumer travelling and queuing up at the FPS would also reflect the effort involved in obtaining supplies.

In table 4.9(c), it reflects that about 37 percent spent time upto 15 minutes, around 16 percent of them spent time between 15-30 min., about 11 percent spent time between 31 to 60 min., while around 20 percent spent time between 61 to 120 min., wherelse nearly 15 percent spent more than 2 hours to obtain food supplies which was owing to either travelling longer distance from place of their residence or the choice or availability of the mode of conveyance as well the duration of queuing up till they got their turn.

4.10. REPORTED DAYS WHEN FPS OPEN DURING A WEEK

Apart from other facts, it would be interesting to look into the consumers responses related to the number of days in a week on which they find the shops open, of course, even the opening of a shop for six days a week may not mean much, if the shop is not properly stocked. However, the number of days in a week on which the shop does not open indicates to some extent the regularity with which the retail network is operating.

Table 4.10 Table showing reported days when FPS open during a week

Types	Days	Frequency	Percent
Mobile delivery van	1	28	22.95
	2	9	7.38
	3	2	1.64
	4	3	2.46
	5	2	1.64
FPS	6	78	63.93
		122	100

Source : Primary Data

FPS remain open all seven days a week while the households reported less than 7 are the ones who obtain issue from the mobile delivery vans, hence it can be conferred that the mobile delivery van is not efficient enough to be continued and there is an immediate need for a change. An FPS is required to be opened in the place of the residence soon, where it is presently serving.

The response is quite satisfactory as about 64 percent of them have reported that the shop was open for six out of the seven days in a week. About 2 percent each for 5, 4 and 3 days, around 7 percent reported for 2 days, while rest of around 23 percent reported for 1 day, a week.

4.11 CONSUMPTION EXPENDITURE OF THE HOUSEHOLD DURING 30 DAYS PRECEDING THE DATE OF SURVEY

In order to achieve the objective of poverty alleviation, the physical entitlements are fixed for each essential commodities provided under the distribution system. However, there were differences observed between the fixed entitlement by the distribution system and the entitlements specified by the ration shops or the FPS.

4.11.1DIFFERENCE BETWEEN ACTUAL AND RECORDED ENTITLEMENT

Table 4.11.1(a): Table showing difference between actual and recorded entitlement for rice

Value (kg)	Frequency	Percent
-7.5 to (-5)	3	2.46
-5 to (-2.5)	6	4.92
2.5 to 6.25	4	3.28
6.25 to 10	4	3.28
Total	122 (100)	13.94

Source : Primary Data

For rice about 2 percent reported 7.5 to 5 kgs less than the actual entitlement whereas majority of them 5 percent were observed between 5 to 2.5 kgs less than the actual entitlements and entitlements recorded in the ration card by the dealers. Wherelse in case of reporting more than the actual entitlement were about 3 per cent each, reported between 2.5 to 6.25 to 6.25 to 10 kgs. It reveals that there are existence of malpractices either by the FPS dealer or the consumer, as the ration card denotes spurious scales of commodities in several cases.

Table 4.11.1(b) Table showing difference between actual and recorded entitlement for sugar

Value	Frequency	Percent
-1.8 to (-1.1)	3	2.46
-1.1 to (- 0.4)	7	5.74
0.5 to 0.95	2	1.64
0.95 to 1.4	1	0.82
Total	122 (100)	10.66

Source : Primary Data

As far as the recorded entitlement, for Sugar is concerned, around 2 percent was observed between -1.8 and -1.1 and a little less than 6 percent were recorded between -1.1 and -.4 kgs, which was less than the actual entitlement. On the other hand around 2 per cent and 1 per cent were recorded more entitlement than the actual one which fell in the 0.5 and 0.95, and 0.95 and 1.4 kgs category.

Table 4.11.1(c) Table showing difference between actual and recorded entitlement for Wheat

Value	Frequency	Percent
-12.5 to (- 6)	11	9.02
-6 to)-0.5)	50	40.98
2.5 to 8.75	2	1.64
8.75 to 15	2	1.64
Total	122 (100)	53.28

Source : Primary Data

For Wheat a little more than 9 percent was recorded having 12.5 to 6 kgs less than the actual entitlement while around 41 percent were observed having 6 to 0.5 kgs less than the actual entitlement. Wherelse around 2 percent each were recorded having 2.5 to 8.75 and 8.75 to 15 kgs more than the actual entitlement.

It reveals that around 7 per cent in rice, 8 per cent in sugar and 50 per cent in wheat entitlement are recorded less than the actual. Wherelse around 7 per cent in rice, 2 per cent in sugar and 3 per cent in wheat entitlement are recorded more than the actual entitlement, this clearly reveals malpractices both by the FPS dealer and the influential customers, needs serious attention especially regarding wheat records, where half of them are getting less than the actual entitlement.

4.11.2. UTILISATION OF THE FACILITY

Attempt has been made to look into whether, the consumers have purchased the commodities from the FPS, to the fullest of the amount specified by the PDS and to capture the leakages.

Table 4.11.2(a) Table showing difference between actual and purchased quantity in percent for rice

Value	Frequency	Percent
-15 to (-7.75)	15	12.30
-7.75 to (-0.5)	16	13.11
2 to 24	43	35.25
24 to 50	5	4.10
Total	122 (100)	64.76

Source : Primary Data

A little more than 12 percent bought 15 to 7.75 kgs less than the actual entitlement, around 13 percent bought 7.75 to 0.5 kgs less than the entitlement wherelse majority of them i.e. 35 percent bought from 2 to 24 kgs more than the entitlement whereas about 4 percent bought 24 to 50 kgs more than the entitlement.

Table 4.11.2(b) Table showing difference between actual and purchased quantity in percent for wheat

Value (kg)	Frequency	Percent
-2.9 to (- 15.5)	14	11.48
-15.5 to (-2)	33	27.05
2 to 16	19	15.57
16 to 30	6	4.92
Total	122 (100)	59.02

Source : Primary Data

Around 11 percent bought 29 to 15.5 kgs. less whereas a little more than 27 percent bought 15.5 to 2 kgs of wheat less than the

entitlement. On the other hand around 16 percent and 5 percent purchased 2 to 16 kgs. and 16 to 30 kgs respectively, more than the entitlement.

Table 4.11.2(c) Table showing difference between actual and purchased quantity in percent for sugar

Value (kg)	Frequency	Percent
-0.1 to (- 6.8)	2	1.64
-6.8 to (-13.5)	44	36.07
0.1 to 2.9	38	31.15
2.9 to 5.7	2	1.64
Total	122 (100)	70.5

Source : Primary Data

Around 2 percent and about 36 percent are buying 0.1 to 6.8 kgs and 6.8 to 13.5 kgs respectively less than the actual entitlement wherelse around 31 percent and 2 per cent are buying 0.1 to 2.9 kgs and 2.9 to 5.7 kgs respectively, more than the actual entitlement.

It is obvious that in case of rice, wheat and sugar 25 percent 39 and 38 percent cases respectively are buying less than the entitlement. This reveals that they have to depend on the other sources due to either unavailability of items or poor quality sold by the dealers.

A little more than 39 percent cases in rice; around 20 percent in wheat, and 33 percent in sugar /Gur reported having drawn more than the entitlement, reflects that there must be leakages either by the FPS dealers or the consumers. There may be practices of bogus ration cards or spurious entries by the FPS dealers.

4.11.3. RELATIVE PURCHASE FROM PDS

It is important to verify, to look into the extent to which the PDS meets the family requirements of wheat, rice and sugar, to asses the performance of the public distribution system in covering the households and its validity in real terms.

Table 4.11.3(a) Table showing relative purchase of rice from PDS

Value (%)	Frequency	Percent
0 – 25	33	27.05
25- 50	23	18.85
50- 75	17	13.93
75 –100	49	40.16
Total	122	100

Source : Primary Data

As far as the distribution of family requirement of rice in value terms is concerned around 27 per cent cases PDS provided only 0 to 25 per cent, around 19 per cent cases 25 to 50 per cent, 14 percent cases from 50 to 75 per cent and rest of the 40 per cent cases hence provided between 75 to cent per cent.

Table 4.11.3(b) Table showing relative purchase of wheat from PDS

Value (%)	Frequency	Percent
0 – 25	52	42.62
25- 50	14	11.48
50- 75	10	8.20
75 –100	46	37.70
Total	122	100

Source : Primary Data

In about 43 percent cases PDS provided only 0 to 25 percent, little more than 11 percent cases between 25 to 50 percent, about 8 percent cases between 50 to 75 percent and nearly 38 percent cases between 75 to cent percent of the family requirements of wheat.

Table 4.11.3(c) Tables showing relative purchase of sugar from PDS

Value (%)	Frequency	Percent
0 –25	21	17.21
25 – 50	16	13.11
50 – 75	16	13.11
75 – 100	69	56.56
Total	122	100

Source : Primary Data

PDS provided around 0 to 25 per cent of the requirement of sugar/Gur in around 17 percent cases, 25 to 50 percent and 50 to 75 percent requirement in about 13 percent cases each and 75 to cent percent in 57 percent cases.

It is interesting to mention here that majority of families, i.e. about 43% are buying wheat between 0 to 25 percent only from PDS, of their total requirement, while majority of families i.e. around 40 percent are buying rice between 75 to 100 percent of their total requirement. In case of sugar, around 57 percent of the families of the sampled population were buying between 75 and 100 percent. It can be seen

that the PDS functioned relatively better with respect to sugar compared to rice and wheat.

4.11.4 MONTHLY PER CAPITA PURCHASE OF FOOD ITEMS

In order to examine the level of nutritional standards, the purchase of various food items per member of the household has been worked out.

Table 4.11.4(a) Table showing total and PDS (only) per capita purchase for rice

P/Cap(total)/month (PDS + open market) | P/Cap (PDS)/month

Value (kg)	Frequency	%	Value (kgs)	Frequency	%
0-11.25	104	67.97	0-2.5	48	39.34
11.25 - 22.5	29	18.95	2.5 – 5	45	36.89
22.5 - 33.75	12	7.84	5 - 7.5	17	13. 93
33.75 - 45	8	5.23	7.5 – 10	12	9.84
Total	153	100	Total	122	100

Source : Primary Data

In around 68 percent cases the per capita rice purchase of the total purchase (open market and PDS) is in the category of 0 to 11.25 kgs, around 19 percent cases is in the category of 11.25 and 22.5 kgs, and little less than 8 percent case is between 22.5 and 33.75 kgs and about 5 per cent is in the category of 33.75 and 45 kgs. About 0.7 percent each who purchased 80, 100 and 150 kgs were running private shops.

Wherelse in little more than 39 percent cases the per capita rice purchase of the PDS is in the category of 0 and 2.5 kgs, in about 37 percent cases is between 2.5 to 5 kgs, in around 14 percent and 10 percent cases is in the category of 5 to 7.5 and 7.5 to 10 kgs respectively.

Table 4.11.4(b) Table showing total and PDS (only) per capita purchase for wheat

P/cap(PDS)/month			P/cap(total)/month (PDS + open market)		
Value(kgs)	Frequency	%	Value(kgs)	Frequency	%
0-2.5	60	49.18	0-11.25	104	67.97
2.5 - 5	28	22.95	11.25 - 22.5	29	18.95
5 - 7.5	17	13.93	22.5 - 33.75	11	7.19
7.5 - 10	17	13.93	33.75 - 45	9	5.88
Total	122	100	Total	153	100

Source : Primary Data

In about 68 percent cases the per capita wheat purchase of the total purchase (open market and PDS) is in the category of 0 and 11.25 kgs, in around 19 percent cases is in the category of 11.25 and 22.5 kgs, in 7 percent cases is between 22.5 and 33.75 kgs and a little less than 6 percent cases is in the category of 33.75 and 45 kgs. There were 0.7 percent cases who bought 80, 90 and 100 kgs for commercial purposes as well.

In about 49 percent cases, the per capita wheat purchases of the PDS is between 0 and 2.5 kgs, in little less than 23 percent cases is between 2.5 and 5 kgs, in nearly 14 percent cases is in the category of 5 and 7.5 and between 7.5 and 10 kgs.

Table 4.11.4(c) Table showing total and PDS (only) per capita purchase for Sugar

P/cap(total)/month P/cap(PDS)/month

Value (Kgs)	Frequency	%	Value(Kgs)	Frequency	%
0 - 2.5	128	83.66	0-2	114	93.44
2.5 - 5	14	9.15	2-4	4	3.28
5 - 7.5	7	4.58	4-6	3	2.46
7.5 - 10	3	1.96	6-8	1	0.82
Total	153	100	Total	122	100

Source : Primary Data

Around 93 percent cases, the per capita sugar of the total purchase (from open market and PDS) is in the category of 0 to 2 kgs., in nearly 3 percent cases the per capita purchase is in the category of 2 and 4 kgs, about 2 per cent is between 4 to 6 kgs and rest of the 0.82 per cent is in the category of 6 to 8 kgs.

In about 84 percent cases, the per capita sugar consumption of the PDS purchase is in the category of 0 and 2.5 kgs, in about 9 percent case, is between 2.5 and 5 kgs, around 5 per cent is between 5 and 7.5 kgs and rest of the 2 per cent is between 7.5 and 10 kgs. There was 0.65 per cent cases which reported per capita purchase of 100 kgs, which includes the shopkeeper who bought sugar for business purpose as well.

Table 4.11.4. (d) Table showing monthly per capita purchase of pulses from open market (only)

P/cap (total)/month

Value (Kgs)	Frequency	Percent
0.18 - 3.89	82	53.59
3.89 - 7.60	49	32.03
7.60 - 11.3	20	13.07
11.3 – 15	2	1.31
Total	153	100

Source : Primary Data

Around 54 per cent cases, the per capital pulses purchase from the open market is in the category of 0.18 to 3.89 kgs and nearly 32 percent is observed between 3.89 to 7.6 kgs, about 13 per cent is between 7.6 and 11.3 while about a per cent is in the category of 11.3 and 15 kgs. There were 0.65 per cent each, where the per capita purchase were around 27, 45 and 100 kgs, which includes purchase for commercial purposes along with the household purpose.

Table 4.11.4(e) Table showing monthly per capita purchase of edible oil from open market (only)

P/Cap (total)/month

Value (lts)	Frequency	Percent
0 – 1.5	54	35.29
1.5 – 3	65	42.48
3 – 4.5	20	+13.07
4.5 – 6	11	7.19
Total	153	100

Source : Primary Data

As far as the per capita edible oil purchase from the open market is concerned, around 35 per cent fall in the catcgory of 0 to 1.5 while about 42 per cent is in the bracket of 1.5 to 3 lts. 13 percent fall between 3 to 4.5 and rest of the 7 per cent purchase between 4.5 to 6. Around 0.65 per cent each, purchase per capita edible oil of 10, 15 and 48 lts respectively but it also includes the commercial purchase along with household purpose. The majority of them have purchased 1.5 to 3 lts., (42%).

Table 4.11.4(f) Table showing monthiy per capita purchase of Meat from open market (only)

P/Cap (total) / month

Value (kgs)	Frequency	Percent
0.17 - 5.11	89	58.17
5.11 - 10.06	11	7.19
10.06 - 15	3	1.96
Total	153	100

Source : Primary Data

Around 58 percent cases household's per capita purchase of meat is in the category of 0.17 and 5.11 kgs, a little more than 7 percent household's per capita purchase is in the bracket of 5.11 and 10.06 kgs while for nearly 2 percent household's per capita is between 10.06 and 15 kgs, who were exclusively non vegetarian, per capita purchase stands between 10.06 to 15 kgs.

Table 4.11.4(g) Table showing monthly per capita purchase of Milk/Milk products from open market (only)

P/Cap (total) / month

Value (lts)	Frequency	Percent
0 – 7.5	129	84.31
7.5 – 15	21	13.73
15 – 22.5	1	0.65
22.5 – 30	2	1.31
Total	153	100

Source : Primary Data

Around 84 percent cases the per capita purchase of Milk/Milk product is in the category of 0 to 7.5 lts, in nearly 14 percent cases, between 7.5 to 15 lts, in a little less than a percent cases is between 15 and 22.5 lts while the rest of the 1.31 percent cases reported per capita purchase between 22.5 and 30 lts.

Table 4.11.4(h) Table showing monthly per capita purchase of spices from open market (only)

P /Cap (total) / month

Value (kgs)	Frequency	Percent
0.14 - 1.86	74	48.37
1.86 - 3.57	44	28.76
3.57 - 5.29	22	14.38
5.29 - 7	10	6.54
Total	153	100

Source : Primary Data

Approximately 48 percent cases the per capita purchase on of spices is falls in the category of 0.14 to 1.86 kgs, around 29 percent cases is

between 1.86 to 3.57 kgs., 14 percent cases is between 3.57 to 5.29 kgs. and a little less than 7 percent cases is between 5.29 and 7 kgs. Around 0.65 and 1.31 per cent cases per capita purchase were made 27 and 8 kgs respectively which includes purchase for the commercial purposes as well.

Table 4.11.4(i) Table showing monthly per capita purchase of Veg/Fruits from open market (only)

P/Cap (total)/month

Value(kgs)	Frequency	Percent
1 - 5.67	142	92.81
5.67 - 10.33	7	4.58
10.33 – 15	1	0.65
Total	153	100

Source : Primary Data

Approximately 93 percent cases the per capita purchase of Veg/Fruits is between 1 and 5.67 in around 4.58 per cent cases consumption is in the category of 5.67 to 10.33 to 9 and a little less than 1 percent household's per capita consumption is from 10.33 to 15 kgs. In about 0.65 per cent cases each per capita purchase were made around 30, 45 and 75 kgs which includes commercial purposes as well.

4.11.5. INCOME EXPENDITURE OVER FOOD ITEMS

It is worthwhile to look into the degree of utilisation of the PDS for different expenditure groups to examine whether different groups of people are able to make use of the PDS facilities to varying extents. For the purpose, the proportion of the consumption of rice, wheat and sugar from PDS for families in different expenditure groups has been worked out. Families are divided into four expenditure groups.

Monthly consumption expenditure ranges between Rs. 89.1 and Rs. 1786.45 for the first group, between Rs 1786.45 and 3483.8 for the second, between Rs. 3483.8 and Rs. 5181.15 for the third and between Rs. 5181.15 and Rs. 6878.5 for the last group.

Table 4.11.5 Table showing proportional consumption expenditure of rice, wheat and sugar from PDS to total consumption expenditure over food.

Income level	Value (Rs)	Rice (%)	Wheat(%)	Sugar(%)
Lowest	89.1 – 1786.45	11.35	18.32	10.06
Low	1786.45 – 3483.8	10.28	18.27	10.04
Middle	3483.8 – 5181.15	9.90	18.18	10.03
High	5181.15 – 6878.5	9.72	17.92	10.03

Source : Primary Data

As far as rice is concerned the lowest expenditure and low expenditure group are able to get about 11.35 and 10.28 percent of their consumption for rice from PDS respectively. The middle and high income group are getting respectively 9.90 and 9.72 percent of their consumption for rice from PDS. The lowest expenditure group has the highest percent access to PDS followed by low, middle and high expenditure group.

The lowest expenditure group and low expenditure group are able to get respectively 18.32 and 18.27 percent of their expenditure of wheat from the PDS respectively. Whereas the middle and higher expenditure group is getting 18.18 and 17.92 percent of their expenditure of wheat from PDS respectively.

In the case of wheat it is projecting the similar trend that the lowest expenditure group is leading the access to PDS followed by low, middle and high expenditure group.In case of sugar, the lower and low expenditure group is getting 10.06 and 10.04 percent of their expenditure of sugar from PDS respectively. While the middle and high expenditure group is able to get about 10.03 percent each of their expenditure of sugar from PDS respectively. Here again, the lowest expenditure group is found at the apex of access to PDS followed by low, middle and high expenditure group.

One can concludes that the PDS was able to supply the large part of a family's demand for the lowest expenditure group and the smaller part for the highest expenditure group in the case of rice, wheat and sugar. The proportion of rice, wheat and sugar obtained from the PDS declined with increases in the level of expenditure.

4.12. INTERRELATIONSHIP BETWEEN DIFFERENT VARIABLES

4.12.1 RATION CARD POSSESSION PATTERN

Ration card is the facility provided to those who are the permanent residents of the place, hence exhibit better occupational status than the non card holders. Further, the card holders have higher income as they have settled in a particular trade or service longer than the renteers.

Table 4.12.1(a) Table showing ration card by present occupation

Present occupation	Owners	Renteers
Unemployed	19 (0.16)	3 (0.10)
Secondary sector	6 (0.05)	0 (0)
Service sector	293 (2.40)	59 (1.90)
N.A.*	155 (1.27)	25 (0.81)
Total	756	113

Source : Based on Primary Data
* Children below 15 years
** percentage are in parenthesis

About 0.15 and 0.11 persons of every household of the card holders and the non card holders respectively are unemployed. While 0.05 persons of the ration card holders only are working under secondary sector. Wherelse about 2.34 and 2.11 persons of each household of the card holder and the non card holders respectively are service sector worker while 1.24 and about a person(s) of every household of the card holders and the non card holders respectively are the ones who are not applicable for jobs.

It indicates that in the secondary sector only the ration card holders appear. Wherelse in the service sector card holders have slight edge over its counterpart. While the card holders have more people as not applicable for working than its counterpart. The ratio between the unemployed to employed for the card holders and the non card holders are 0.06:1 and 0.04:1 respectively. The card holders have a better ratio comparing the non-card holders.

Table 4.12.1(b) Table showing ration card by present monthly income (H.H)

PMIN	Ration card		Total
	Yes (Owners)	No (Renteers)	
Upto 5000	93 (76.23)	23 (74.19)	166
5000-10000	19 (15.57)	6 (19.35)	25
10000-15000	4 (3.28)	2 (6.45)	6
15000-20000	3 (2.46)	-	3
20000-25000	3 (2.46)	-	3
Total	122	31	153

Source : Based on Primary Data

About 76 per cent of card holders and 74 per cent of non-card holders earn upto 5000 Rs., about 16 per cent of card holders and 19 per cent of non-card holders earn between 5000-10000 Rs., about 3 per cent of card holders and 6 per cent of non-card holders earn between 10000-15000 Rs., while about 2 per cent each earn between 15000- 20000 and 20000 – 25000, belong to the card holders only.

It is apparent from the table that, card holders are the only ones who appeared in the last 2 higher classification, while non-card holders are concentrating majorly in the lowest income group, only meager per cent can be seen in the next two higher income categories.

4.12.2 PER CAPITA PURCHASE BY INCOME

The relationship between dependence of poor on PDS and percapita purchase of cereals i.e. rice, wheat and sugar could be of either way, i.e. dependence of poor on PDS is high due to higher per capita purchase of cereals is due to higher dependence of poor on PDS.

On one hand, it has been argued that if per capita purchase of cereals is high, the total demand would also be high, then with relatively inelastic supply of cereals (specially in case there are restrictions on interstate mount of food grains) open market price would be higher. To meet such a situation, government has adopted market system where government maintains a separate public distribution system which provides basic amenities of life at fixed prices which have necessarily to be lower than open market price. But there it must also be noted, as pointed by Dantwala (1967) that existence of dual market system itself would raise the open market prices of food grains still further. Therefore, when open market price of cereals rise, PDS price being low and fixed, the gap between PDS and open market price would also rise, as a result people in general ad vulnerable section in particular, who are most severely affected by price rise would prefer to

buy more and more quantities from PDS. In such a situation of PDS can maintain higher supplier dependence of poor on PDS would be high. On the basis of this argument one can postulate hypothesis that higher the percapita purchase, higher would be dependence of poor on PDS.

But on the other hand, it has been argued that if PDS is working efficiently in a state, i.e. providing good quality foodgrain regularly and in adequate quantity as well as covering a sizeable proportion of poor population then in that case poor people, with a given amount of purchasing power, can buy comparatively larger amount of food grains from FPS than in the absence of PDS, because PDS provides items at a price which is lower than open market, which implies higher dependence of poor on PDS for goods/items. Due to their higher dependence on PDS, which given sum of money, their per capita cereals and sugar purchase would be high.

4.12.2(a) Table showing percapita purchase of rice by present HH monthly income.

(in kgs)

PCP^/ PMIN (Rs.)	**0-2.5**	**2.5-5**	**5.7.5**	**7.5-10**	**Total**
Upto 5000	37 (77.08)	35 (77.78)	13 (76.47)	9 (75)	93
5000-10000	4 (8.33)	8 (17.78)	4 (23.53)	3 (25)	19
10000-15000	2 (4.17)	1 (2.22)	1 (5.88)	-	4
15000-20000	2 (4.17)	1 (2.22)	-	-	3
20000-25000	3 (6.25)	-	-	-	3
Total	48 (100)	45(100)	17(100)	12(100)	122

Source : Based on Primary Data
* Percentage are in parenthesis ^ Percapita purchase

In Table 4.12.2(a) it can be clearly seen that per capital rice purchase is above 75 percent in all the categories of the earners upto 5000 Rs. Whereas the earners between 15000 to 20000 are not purchasing beyond 4 per cent in any category as well as the 20000 to 25000 income category do not report more than 6 percent. It is interesting to see, above 15000 Rs. Income category do not appear beyond 5 kgs purchase of rice.

4.12.2(b) Table showing per capita purchase of wheat by present HH monthly income.

(in kgs)

PCP^/ PMIN	0-2.5	2.5-5	5-7.5	7.5-10	Total
Upto 5000	45 (75)	23 (82.14)	13 (76.47)	12 (70.59)	93
5000-10000	8 (13.33)	5 (17.86)	4 (23.53)	5 (29.41)	19
10000-15000	4 (6.67)	-	-	-	4
15000-20000	2 (3.33)	-	-	-	3
20000-25000	1 (1.67)	-	-	-	3
Total	60 (100)	28 (100)	17 (100)	17 (100)	122

Source : Based on Primary Data
* Percentage are in parenthesis ^ Percapita purchase

Table 12.2.2(b) reveals almost the similar trends, the upto 5000 income category are showing per capita purchase of wheat not less than 70 percent in any of the per capita purchase category. Whereas from income category 10000 onwards do not report beyond about 7 per cent which is also falling in the 0 to 2.5 per capital purchase of wheat category. The highest income category 20000 to 25000 report of a mere about 2 per cent per capita purchase i.e. in 0 to 2.5 per capita purchase category of wheat. Not even a single case has been reported beyond 2.5 kg per capita purchase for income categories more than 10000 Rs.

4.12.2(c) Table showing per capita purchase of sugar by present HH monthly income.

(in kgs)

PCP^/ PMIN	**0-2.5**	**2.5-5**	**5-7.5**	**7.5-10**	**Total**
Upto 5000	88 (77.19)	2 (50)	2 (66.67)	1 (100)	93
5000-10000	17 (14.91)	1 (25)	1 (33.33)	-	19
10000-15000	3 (2.63)	1 (25)	-	-	4
15000-20000	3 (2.63)	-	-	-	3
20000-25000	3 (2.63)	-	-	-	3
Total	114 (100)	4 (100)	3 (100)	1 (100)	122

Source : Based on Primary Data
* Percentage are in parenthesis ^ Percapita purchase

In Table 4.12.2 (c) it reflects that the lower income group i.e. 0 to 5000 Rs. are revealing per capita purchase of about 77 per cent, 50 per cent, about 67 per cent and 100 per cent in 0 to 2.5, 2.5 to 5, 5 to 7.5 and 7.5 to 10 per capita purchase category respectively. The 15000 income onwards are showing about 3 per cent per capita purchase that to only in the lower most per capita purchase category i.e. 0 to 2.5 kgs.

It can be said that high income category shows considerably low share among the high per capita purchase from PDS and show lesser dependence on PDS and vice versa.

CHAPTER V

SUMMARY

It is interesting to note that apart from declared slums, there are many others undeclared slums and these are substantial in number in every state. The highest number of slums have been recorded in Maharashtra, constitutes about 20 per cent of the total number of slums of India, followed by West Bengal (14 per cent), Andhra Pradesh (11.4 per cent) and Karnataka (11 per cent).

It is surprising to see that there are no slums in Arunachal Pradesh, Goa, Jammu & Kashmir, Manipur, Mizoram, Nagaland, Tripura, Andaman & Nicobar, Dadar Nagar & Haveli, Daman & Diu and Lakshadweep. Another interesting feature is recorded for Assam, Himachal Pradesh, Kerala and Pondicherry where all slums are undeclared, the number has not been recorded on official papers. In all, most of the states possesses undeclared number of slums, in disproportionate manner.

The survey for my study recorded a total population of 10,000 persons in the Dhapa colony slum, which is one of the 1500 slums of Delhi. The average size of the household worked out as 5.68 persons, which is slightly higher than the urban Delhi 's average household size i.e. 5.43.

The Hindus, constituted around 92 per cent of the households, and the Muslims made 7 per cent of them, were the two main religious communities inhabitanting the slum. A very high degree of segregation by religious communities was seen, showing a typical characteristic feature of the slums.

The sex ratio is calculated as 566/1000 males, which reflects very meager female ratio. This kind of sex ratio throws light on migration that takes place to urban areas for better employment and income

,exclusively by the male members of the families.Majority of the migrants are unmarried wherelse in the case of married females and children generally stay back which justifies this kind of sex ratio which exists. Therefore one also finds that only 53 per cent people were found married while around 47 per cent people were not yet married.

There are about 37 percent people under dependent population and about 63 percent under working population, where the major portion of working population are between age group 15-35 that is about 53 per cent while only about 10 per cent fall under 36-60 years, which gives a clear indication of higher migration under 35 years, for the purpose of better work opportunities,and only about a percent fall under 60+ age category.

The literacy rate was found to be only about 54 per cent which is much below the Delhi's average i.e. as many as 74.03 per cent people were recorded as illiterates. A great majority of the households in the slums belonged to the low income group.About 82 percent people fell under H.H. income category of upto 5000 Rs. per month. Another about 12 percent fell under the category 5000-10000 Rs. per month. Where else in the income group 15,000-20,000 and 20,000-25,000 Rs., per month there was merely 1 per cent each recorded.

Slum dwellers were found to be predominantly engaged in informal tertiary occupations, very few were in secondary and none were absorbed in primary sector.Slum dwellers were found not travelling long distances to reach their work places or educational institutions, the study confirms that slum dwellers have the tendency to concentrate in the proximity of their work place. As it clearly indicates that there were majority of them dependent on the cheap modes of conveyance ,as their income and status didn't allow any lavish means of transport.

All house goods taken together about 71 percent didn't have one or the other goods while merely about 29 percent possessed either one or more goods, which is quite expected in slum areas, reflecting poor standard of living .

There were about 33 percent households who regularly saved; 25 percent occasionally saved where else 43 percent never saved, what ever they earnt through their respective works, was consumed in varies expenditures. There were about 63 percent households who had no amount saved last month. In terms of present total saving, there were about 72 percent households, having no savings at all. It also reflected that where people had no savings at all, on the other hand some of them could manage to save upto 1 lakhs Rs., which reflected a great degree of disparity existing even in the slums. About 73 percent households had no saving deposited any where i.e. at home, post office, bank, insurance, provident fund or relatives. Maximum number of households fell in the category of debt between 1000 to 10,000 Rs. There were several reasons for borrowing money from different sources, majority about 30 percent households had borrowed for household expenses. In about 91 percent cases ,the head of the household was the one who was earning.

About 86 percent of them were the owners, while about 14 percent were the rentiers. Since 1970's it was noticed that there had been waves of migration flowing towards capital city in search of better opportunities and better standard of living. From 1970 to 1979 ,it reveals constant rise in migration, which slowly began to decline from 1979 to 1999.

About 94 percent houses were semi Pucca. All of the semi Pucca houses were thatched, or supported by bamboos, which looked quite unsafe which discouraged the possibility of building multistory houses. Secondly, the income levels of the houses were not that high that they could afford to build more than one room. But due to the small rooms,

houses looked very congested and unarranged.. Overall houses in this slum appeared to be in poor state. Majority of the households had single room i.e. about 80 percent of them. All the houses were built very close to each other , there wasn't space in between the houses, in most of the cases.

The major section of the households about 63 percent were taking water from public standpost. Majority of household near about 94 percent were having community connections. All the private connections were unmetered, and in the case of community water points too ,no money was paid for the water.The number of users in case of community water points varied from 1 household to about 600 households.

In this particular slum toilets were provided by sulabh shouchalaya, which had water supplied to them only through taps in the toilets and had no flushes attached to them. In about 96 percent cases, their dependence was primarily on open defecation. All the households were using community toilets only, none had their own toilet facilities. Another about 91 percent used community bathrooms. Another thing was noticed during the survey, no separate space or room was provided for bathing, the same room used for living and cooking was being used by the female members of the family for bathing and washing their clothes.

Electricity connections were available in nearly all the houses, but no amount was been paid for electricity, majority of them had illegal connections extended from street electric poles to their houses, by paying some money to private electrician for providing them connections.

Rooms were quite small sized in the slum which gave no additional space for the garbage disposal, hence they were forced by the circumstances to remove it regularly.In about 95 percent of the houses surveyed were purely residential.

Only about 80 percent of the households had been issued ration cards, which enabled them to purchase some necessities of life, such as rice, wheat and sugar at a subsidized rate. Not less than about 80 percent household used kerosene stoves, as their cooking mode.

The cross examination of the variables provide further clear picture of the relationships in details to interpret the role of the factors influencing the slum character.

It can be noted that the other castes are recorded at apex in the higher income categories followed by SC and ST, where STs are observed in the lowest income group only. It can be clearly seen that the nursery education is only popular among the other castes while SCs and STs did not report a single case. Major concentration of educated people are among the middle school level of education. Other castes are reported at the apex as middle school educated followed by SCs and STs. There are none as graduates and above among STs while SCs rank higher comparing other castes households.

It reveals that the owners are earning better than the renteers while the maximum concentration of renteers is observed in the 0-5000 Rs. Category only.

It can be also seen that the Muslims are recorded as the highest uneducated persons followed by Hindus while none have appeared in Christian community. Only Hindu have been observed as the nursery goers, it may be that they are most aware people in terms of children's education. Muslim have been seen at Apex when noted as the primary educated people followed by Hindus and Christians. Wherelse Christians have been observed leading in secondary school educated, followed by Hindus and Muslims wherelse Hindus are the only community recorded as graduates and above.

This show clearly that education on among males are not only better than their female counterpart but are also highly educated than the females. The service sector has the maximum number of primary educated falling in it, comparing the rest of the occupation category. Maximum concentration of the secondary educated are again found in the service sector. It can also be seen that none of the graduates and above are unemployed and the concentration is again noted among service sector workers.

It had been noted during the survey that there are 7 cases (children) reported in the income group upto 2000 Rs. which uncovers the reality that child labour is also in practice in slum areas.

This clearly indicates that males in all the income groups are in better position of earning than the females, who have been observed only in the income group Rs. 0 to 2000.

When secondary data analysed for Delhi, the year-wise statistical data relating to the public distribution system reveals that there has been a steady increase in the number of ration cards since 1990 to 1995.On the other hand the number of fair price shops have recorded an opposite trend. It has declined ranging between -0.23 percent (from 1991-1992) to -4.62 percent (from 1993 to 1994), during the time period 1990 to 1995. This fall may be responsible for the poor coverage in Delhi.

In both urban and rural Delhi, concentration of purchase is recorded monthly followed by fortnightly for all the items, except for kerosene in rural areas where purchases are more fortnightly than monthly.It can be stated that both in urban and rural areas, the lower fractile groups are the major dependent on public distribution system their monthly purchase. In case of wheat and atta only there seems to be an urban bias in terms of percentage purchase from PDS, where rice, sugar and kerosene purchases are better in rural areas.

The degree of dependence on PDS for cereals reflects that the performance is seen best among the middle fractile group followed by lower 20 and upper 20 fractile groups, as a rule in all the items in both rural and urban sectors.

The percentage of households not purchasing the PDS more or less shows an increasing trend with the increase in income levels of households. It can therefore be seen that the fractile groups 0-80 tend to rely more on PDS for the selected items of daily use.

In Delhi, the sample survey revealed that the value of purchase from PDS for different fractile classes revealed a higher percentage value for lower group and a lower percentage value for the higher group.

In urban Delhi, the lower income group complained of credit not possible, not available in required quantity, no ration card, non availability as main reasons for excluding themselves from the system which varied from 100 to 14 percent across various items. On the other hand the upper income group were affected by non requirement, quality not satisfactory, not available in required quantity as the main reasons for not availing the PDS facility, which ranges between 100 to 16 percent across various items.In rural Delhi, overall the lower 0-20 fractile group mainly held non satisfactory quality, non availability, and the upper 80-100 fractile group mainly held non satisfactory quality, non requirement, non availability and non availability of ration cards are the major factor responsible for their not participating in the system.

The percent of lifting of wheat to the respective allocation shows the percentage of lifting is quite poor, for instance, in case of wheat, the highest percent recorded was 14 only. The quality of the price fluctuations of rice and wheat may be the cause of such a poor off-take.

The main items usually distributed through PDS includes cereals like Rice, Wheat and other essential items like sugar and kerosene oil etc. as per the data available from the Govt. of NCT Delhi, deptt. Of food and supplies. By 1994-95, there were about 28.45 lakh ration card holders and 3264 fair price shops (FPS) catering to the requirements of the public in Delhi under the public distribution system. Out of this, 2894 Fair price shops were located in urban area and 370 in rural area of Delhi.

As per national sample survey data of 49th round : January - June 1993 (state sample) the purchase of cereals like Rice and wheat from PDS was to the tune of 63-77% in urban areas. In rural, it was to the extent of 71% for rice and 54% in case of wheat. The percentage of purchase of sugar from PDS in both rural and urban areas was above 60% out of total requirements of ration card holders in a month. The quantum of purchase of kerosene in percentage terms from PDS was found to be as high as 86% of the total quantity purchased in rural sector. In urban sector it was around 78%.

The critical analysis of the relative use of PDS among cross section of consumers represented by various fractile groups of monthly per capita expenditure has indicated that the system was more popular among lower and middle income groups than in higher income groups. In urban areas out of every 1000 householders purchasing from PDS, only 13% are in the fractile group of 80-100 but it was more than 20% in other classes viz. 0-20, 20-40, 40-60 and 60-80 fractile class. This trend is witnessed in rural areas also.

The survey also revealed that the main reason for not going to PDS in respect of the selected items is either due to not having ration cards or unsatisfactory quantity of the commodities supplied through PDS.

When secondary data analysed for Delhi, the year-wise statistical data relating to the public distribution system reveals that there has been a steady increase in the number of ration cards since 1990 to 1995.

On the other hand the number of fair price shops have recorded an opposite trend. It has declined ranging between 0.23 percent (from 1991-1992) to 4.62 percent (from 1993 to 1994), during the time period 1990 to 1995. This fall may be responsible for the poor coverage in Delhi.

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The degree of dependence on PDS for cereals reflects that the performance is seen best among the middle fractile group followed by lower 20 and upper 20 fractile groups, as a rule in all the items in both rural and urban sectors. The percentage of households not purchasing the PDS more or less shows an increasing trend with the increase in income levels of households. It can therefore be seen that the fractile groups 0-80 tend to rely more on PDS for the selected items of daily use.

In Delhi, the sample survey revealed that the value of purchase from PDS for different fractile classes revealed a higher percentage value for lower group and a lower percentage value for the higher group.

In urban Delhi, the lower income group complained of credit not possible, not available in required quantity, no ration card, non availability as main reasons for excluding themselves from the system which varied from 100 to 14 percent across various items. On the other

hand the upper income group were affected by non requirement, quality not satisfactory, not available in required quantity as the main reasons for not availing the PDS facility, which ranges between 100 to 16 percent across various items.

In rural Delhi, overall the lower 0-20 fractile group mainly held non satisfactory quality, non availability, and the upper 80-100 fractile group mainly held non satisfactory quality, non requirement, non availability and non availability of ration cards are the major factor responsible for their not participating in the system.

The percent of lifting of wheat to the respective allocation shows the percentage of lifting is quite poor, for instance, in case of wheat, the highest percent recorded was 14 only. The quality of the price fluctuations of rice and wheat may be the cause of such a poor off-take.

For the entire sample at the slum level, around 80 percent of the household possessed the ration card while the rest 20 percent are not able to get primarily due to their status of occupancy as renteers. In about 80 percent cases ration card was well maintained. About 57 percent cases, the delivery of ration cards were delayed and it required more than 2 weeks to finally obtain one, due to administrative delays and bottlenecks and red tapism.

As many as around 54 per cent had to visit the civil supply office for four or more than four times to acquire the ration card. Households who have paid some money and getting the forms filled up by others, are few. Some times services (filling up of application form) were usually provided by touts who often charge a fairly high price for the services provided in another about 13 percent cases. It is seen that in 100 percent cases, inspectors had come for verification prior to the issue of the ration card.

There were notable exceptions, as in about 9 percent cases, choice of FPS was made by household. The flexibility of choice was exercised by those who were the influential and friends of the FPS dealers, for the availability of better quality or may be more amount than their entitlement.

Around 25 percent each complained of waste of time due to inconvenient location of FPS and lack of purchasing power. Another about 22 percent complained of poor qualities as a main factor. It is observed that the concentration of complains can be found among the lower income groups while few are seen among 15000 to 20000 group and almost negligible found among the highest group. It can be said that the richer sections may be basically dependant on the other sources or might be getting better quality through good personal relationship and influence. While the poor who are actually targeted to be reached through PDS not availing the best of quality and might be leading to large scale diversion to open market and may be getting affected by inflated market prices.

It is evident that around 45 percent only were aware of the correct entitlement, wherelse little more than 17 percent household were aware of the change in entitlement. As many as around 91 percent households claimed of never having borrowed other's card. Households reporting (actual) fortnightly issue were about 62 percent. Nearly 60 per cent preferred fortnightly issue period.

The income category 20000-25000 recorded fortnightly and monthly as well as the 15000-20000 group recorded fortnightly as the only preferred issue. While daily issue have been only preferred by the 0-5000 and 5000-10000 income group, who may be majority of them as the daily wage earners.

43 percent assumed of adulteration being done by FPS dealer.

It is interesting to note that as many as 75 percent thought it was useless to complain, reflecting a high degree of cynicism and found the situation quite frustrating. The complaints related to broken grains, existence of dust, sand and foreign material, which was noted in about 86 percent of the cases each.

34 percent reported not having a retail outlet in the place of residence. Hence, it indicated that majority of them had to travel to sector 4 R.K. Puram i.e. distance of about 2 kms for obtaining ration supplies. Around 66 percent report residing within 0 to 1 kms from the retail outlet, this only goes to show a fairly well located network of retail outlets, especially from the point of view of consumers.

About 37 percent spent time upto 15 minutes, around 16 percent of them spent time between 15-30 min., nearly 15 percent spent more than 2 hours to obtain food supplies which was owing to either travelling longer distance from place of their residence or the choice or availability of the mode of conveyance as well the duration of queuing up till they got their turn.

The response is quite satisfactory as about 64 percent of them have reported that the shop was open for six out of the seven days in a week. It reveals that around 7 per cent in rice, 8 per cent in sugar and 50 per cent in wheat entitlement are recorded less than the actual. Wherelse around 7 per cent in rice, 2 per cent in sugar and 3 per cent in wheat entitlement are recorded more than the actual entitlement.

It is obvious that in case of rice, wheat and sugar 25 percent 39 and 38 percent cases respectively are buying less than the entitlement. A little more than 39 percent cases in rice; around 20 percent in wheat, and 33 percent in sugar /Gur reported having drawn more than the entitlement.

The majority of families, i.e. about 43% are buying wheat between 0 to 25 percent only from PDS, of their total requirement, while majority of families i.e. around 40 percent are buying rice between 75 to 100 percent of their total requirement. In case of sugar, around 57 percent of the families of the sampled population were buying between 75 and 100 percent. It can be seen that the PDS functioned relatively better with respect to sugar compared to rice and wheat.

In little more than 39 percent cases the per capita rice purchase of the PDS is in the category of 0 and 2.5 kgs, in about 37 percent cases is between 2.5 to 5 kgs, in around 14 percent and 10 percent cases is in the category of 5 to 7.5 and 7.5 to 10 kgs respectively. In about 49 percent cases, the per capita wheat purchases of the PDS is between 0 and 2.5 kgs, in little less than 23 percent cases is between 2.5 and 5 kgs, in nearly 14 percent cases is in the category of 5 and 7.5 and between 7.5 and 10 kgs. In about 84 percent cases, the per capita sugar consumption of the PDS purchase is in the category of 0 and 2.5 kgs, in about 9 percent case, is between 2.5 and 5 kgs, around 5 per cent is between 5 and 7.5 kgs and rest of the 2 per cent is between 7.5 and 10 kgs. There was 0.65 per cent cases which reported per capita purchase of 100 kgs, which includes the shopkeeper who bought sugar for business purpose as well.

The PDS was able to supply the large part of a family's demand for the lowest expenditure group and the smaller part for the highest expenditure group in the case of rice, wheat and sugar. The proportion of rice, wheat and sugar obtained from the PDS declined with increases in the level of expenditure.

It indicates that in the secondary sector only the ration card holders appear. Wherelse in the service sector card holders have slight edge over its counterpart. While the card holders have more people as not

applicable for working than its counterpart. The ratio between the unemployed to employed for the card holders and the non card holders are 0.06:1 and 0.04:1 respectively. The card holders have a better ratio comparing the non-card holders. Card holders are the only ones who appeared in the last 2 higher classification, while non-card holders are concentrating majorly in the lowest income group, only meager per cent can be seen in the next two higher income categories.

It can be said that high income category shows considerably low share among the high per capita purchase from PDS and show lesser dependence on PDS and vice versa.

Recommendations

The environment needs of the slum are urgent. This slum has also been continued as garbage dumping sites for the city. The drainage conditions could not be worse. The brick laying of the paths could be taken up too for slum improvement.

Provision of community latrines could be a great help, especially for the women, as about 96 per cent of them defecated in open. It would be advisable to provide for latrines at different points in the slum, instead of putting up all the public latrines at one place. Some specific households could be allocated to each latrine. It would be a great help in its maintenance and greater utilisation of this facility.

As majority of them had illegal connections extended from street electric poles to their houses, by paying some money to private electrician for providing them connections, also 97 per cent households had electricity available without any meter. The Vidhyut Board or the government must take concrete steps.

There is excessive pressure on public tap water supply, and a large number of households share the same source of water supply. There is a need for provision of more water points. Pressure of water and duration of water supply must also be taken care of, which otherwise aggravates the situation.

Child education can not be ignored only other castes reported having children going for nursery education. This could be either due to lack of motivation for getting educated or non-availability of the facilities. The facility of mid-day meal to the school children in the slums could serve as a great incentive. Further, there could be vocational education imparted together with the formal education.

The generation of economic opportunities, especially for women, was imperative, as it would add to the economy of the households, thereby helping the nutritional and housing standards among other things.

None were reported having employed in the primary sector, though they belong to the rural background. Activities like, rearing of milch cattle and raising of poultry could be making it a big success.

The issue of ration cards to all the slum dwellers should be taken up on priority basis. As well as there is an immediate need for identifying the households who are below poverty line for taking special care of their needs.

Administrative procedure must take care of people's need. There shall be check on poor quality supplied to the consumers, as noting less than 85 per cent people complained of the same. People did not know the changes in the quantum of entitlement correctly in most of the cases, awareness of the same is a must. Complains and grievances of the consumers should be given full attention to.

There were lapses in terms of actual and recorded entitlement as well as the actual and purchased quantities for the items purchased from the PDS. The government machinery is required to check the malpractices and corruption on both the consumer's and dealer's part.

The households which reported less than 7 days for FPS having opened during a week, are the ones who obtain issue from the mobile delivery vans, hence it can be conferred that the mobile delivery van is not efficient enough to be continued and there is an immediate need for a change.

APPENDIX - I

THE ADMINISTRATIVE FUNCTIONAL FRAMEWORK OF PUBLIC DISTRIBUTION SYSTEM

Central Government	1. Obtaining supplies: procurement & Imports
	2. Procurement price, issue prices to states; subsidies
	3. Guidelines to states on the design of PDS
	4. Allotments to states
	5. Promote means of production of food grains and other food stuffs.
	6. Set up, or assist in the setting up of, rice mills, flour and other food stuffs.
State governments	1. Receipts of Central allocation
	2. Procurement in the state
	3. Purchase from other states
	4. Warehousing
	5. Determination of :
	(i) Consumer issue price
	(ii) Commodity coverage
	(iii) Ration scales
	(iv) Rules for issue of ration cards, FPS licence
	(v) Profit Margins to FPS
	(vi) Periodicity of sale

Contd....

	6. Allotments to District & Transport Arrangements
District of lower Agencies	1. Lifting stocks; warehousing
	2. Issue of ration cards
	3. licensing of FPS dealers
	4. Arranging/ Ensuring lifting by FPS dealer
	5. Enforcement Inspection vigilance

IMPORTANT DECISION AT VARIOUS LEVELS

Centre	1. Commodity coverage
	2. Total PDS supplies procurement & import/ export + inventories
	3. Size of covered population; Exclusions
	4. Nature of PDS support total or supplementary
	5. Preferential Treatment to area or population group
	6. Difference between open market price & PDS issue price.
	7. Size of subsidy.
States	1. Matching of supplies with needs by intra-state procrument
	2. Adequate and well-dispersed warehousing
	3. Capacity to buy from other states
	4. Inclusion of additional goods

Contd...

	5. Appropriations of issue price in relation to open market price
	6. Commodity coverage;
	7. Periodicity;
	8. Ration scale
	9. Cost & Ease of getting ration card;
	10. Location & behaviour of FPS
	11. Adequacy of profit margins
	12. Adequacy & regularity of allotment
	13. Public, private or co-operative transport of stocks to FPS
	14. Transport charges, zoning for the purpose.
District & Local Agencies	1. Delivery to FPS of assured quality and quantity.
	2. Proper storage by FPS
	3. Cost & case of betting
	4. Variation in state govt. determined scales.
	5. Ensuring regularity in lifting of stocks by FPS for round the year availability
	6. Need for reserve stocks; Rate of State deliveries to FPS
	7. Govt. monitoring of stocking & sales performance of FPS

APPENDIX - II

1.1 Occupational Structure

Types	Value	Frequency	Percent
Unemployed	.0	22	2.5
Labour	1.0	98	11.3
Fieldwork	2.0	6	.7
Shopkeeper	3.0	34	3.9
Photostat shop	4.0	2	.2
Housewife	5.0	127	14.6
Student	6.0	182	20.9
Electrician	7.0	10	1.2
Mali	8.0	61	7.0
N.A. (< 15 yrs)	9.0	134	15.4
Security guard	10.0	19	2.2
Vendor	11.0	16	1.8
Clerk	12.0	2	.2
Driver	13.0	27	3.1
Conductor	14.0	2	.2
Tailor	15.0	13	1.5
Phone booth	16.0	3	.3
Cleaning/washing	17.0	9	1.0
Businesses	18.0	5	.6
Carpenter	19.0	2	.2
Rickshawpuller	20.0	2	.2
Tutions	21.0	2	.2
Mechanics	22.0	5	.6
Kabari	23.0	2	.2
Factory worker	24.0	6	.7
Private post office	25.0	1	.1

Contd....

Cook	26.0	2	.2
Waiter	27.0	2	.2
Painter	29.0	3	.3
Peon	30.0	1	.1
Transport	31.0	1	.1
Sweeper	32.0	1	.1
Fruit seller	33.0	4	.5
Property dealer	34.0	1	.1
Typist	35.0	1	.1
Seeking a job	37.0	4	.5
Undertraining	38.0	4	.5
Retired	39.0	1	.1
Above 60 yrs	40.0	48	5.5
Total		869	100.0

1.2 Distance to Work Place or Educational Institutions (in kms).

Distance(Kms.)	Frequency	Percent
.0	23	2.6
.5	197	22.67
1.0	43	4.9
1.5	12	1.4
2.0	29	3.3
2.5	1	.1
3.5	3	.3
4.0	8	.9
4.5	1	.1
5.0	13	1.5
5.5	3	.3
6.0	3	.3

Contd....

6.5	7	.8
7.0	3	.3
8.0	4	.5
10.0	11	1.3
11.0	1	.1
12.0	4	.5
14.0	4	.5
15.0	9	1.0
17.0	2	.2
20.0	11	1.3
25.0	7	.8
28.0	2	.2
30.0	5	.6
35.0	1	.1
40.0	1	.1
1000.0	121	13.9
2000.0	324	37.3
Total	869	100.0

1000 = Changeable 2000 = Not applicable

1.3 Living duration

Years	Frequency	Percent
.0	2	1.3
.5	11	7.2
1.0	2	1.3
1.5	5	3.3
2.0	6	3.9
2.5	2	1.3
3.0	4	2.6
4.0	7	4.6

Contd...

5.0	13	8.5
6.0	2	1.3
7.0	10	6.5
8.0	11	7.2
8.5	1	.7
9.0	14	9.2
10.0	21	13.7
11.0	1	.7
12.0	10	6.5
13.0	5	3.3
14.0	5	3.3
15.0	8	5.2
16.0	4	2.6
18.0	1	.7
19.0	1	.7
20.0	4	2.6
22.0	2	1.3
30.0	1	.7
Total	153	100

1.4 No. of Users of Community Tap

NO. OF USERS	FREQUENCY	PERCENT
1	2	1.3
4.0	1	.7
10.0	1	.7
15.0	1	.7
20.0	3	2.0
25.0	1	.7

Contd....

50.0	7	4.6
60.0	2	1.3
100.0	18	11.8
110.0	1	.7
120.0	1	.7
125.0	1	.7
150.0	32	20.9
180.0	11	7.2
200.0	45	29.4
210.0	1	.7
220.0	1	.7
250.0	17	11.1
270.0	1	.7
300.0	2	1.3
500.0	3	2.0
600.0	1	.7
Total	153	100.0

APPENDIX III

QUESTIONNAIRE

A. IDENTIFICATION OF THE HOUSEHOLD

1. Relationship with the head of household

    1. Head
    2. Spouse of the head
    3. Married son/daughter
    4. Spouse of married son/daughter
    5. Unmarried son/daughter
    6. Grand son/daughter
    7. Father/mother/father-in-law/ sister-in-law
    8. Brother/sister/brother-in-law/ sister-in-law
    9. Servant/employee/other.

2. Does the family have a ration card?

    1. Yes 2. No

3. Caste

    1. Scheduled Caste
    2. Scheduled Tribe
    3. Other (Please specify)

4. Religion

    1. Hinduism
    2. Islam
    3. Christian
    4. Sikkism
    5. Jainism
    6. Budhism
    7. Zrosstriansim
    8. Others

5a. Monthly rent paid (actual in Rs.); O, if owner

5b. How long have you been living in this house/jhuggi (in years)

5c. Did you buy this house/jhuggi?

5d. Did you pay any money for permission to build this house/jhuggi?

1. Govt. or Govt. Agency
2. Private person
3. Didn't pay any money

B. HOUSEHOLD COMPOSITION AND INCOME

S. No.	Name	Relation to self	Age	Sex	Marital status	Education	Present occupation	Distance of work piace (in kms) educational institution if student (in kms)	Mode of conveyance	Present monthly income (Rs.)
1	2	3	4	5	6	7	8	9	10	11

H = Head, W = Wife, S = Son, D = Daughter, W's = Wife's sister, W'b = Wife's brother, H's = Head's or Husband's sister, H'b = Head's/Husband's brother, Sl.L. = Sister-in-law, B.I.L. = Brother-in-law, G.F = Grand Father, G.M. = Grand Mother, C = Cousin

C. HOUSING PARTICULARS

1. Location of the house
   - i) Basement
   - ii) Ground Floor
   - iii) First Floor
   - iv) Second Floor
2. Number of rooms in the house
3. Type of structure
   - i) Pucca
   - ii) Semi pucca
   - iii) Kutcha
   - iv) Other
4. Source of water supply
   - i) Tap
   - ii) Hand pump
   - iii) Public standpost
   - iv) Other
5. Type of water connection
   - i) Private
   - ii) Joint
   - iii) Community
   - iv) Other

7a. If private
   - i) Metered
   - ii) Unmetered

7b. If community, do you pay the water charges?
   - i) Yes
   - ii) No

7c. If yes, average amount paid in a month for water charges

7d. In case of joint/community tap, number of households using it

8. Availability of latrine

i) Private

ii) Joint

iii) Community

iv) Others

9. Type of latrine

i) Flush latrines

ii) Night soil collection

iii) Septic tank with flush toilet

iv) Others

10. Availability of bathroom

i) Private

ii) Joint

iii) Community

iv) Others

11. Availability of Electricity

i) With meter

ii) No meter

iii) Combined meter for property

iv) others

12a. If metered, average amount paid in a month for electricity charges (Rs.)

12b. Garbage

i) Removed regularly

ii) Removed occassionally

iii) Others

13. Present use of house/room

i) Only residential

ii) Residential cum commercial

iii) Residential cum industrial

iv) Only commercial

D. SAVINGS AND BORROWINGS

1. Do you have saving?
    i) Regular
    ii) Occassional
    iii) Never
2. Amount saved last month (Rs.)
3. What is your present total saving (Rs.)
4. Where do you deposit your saving (give two main places)
    i) No saving
    ii) At home
    iii) Post office
    iv) Bank
    v) Insurance
    vi) Provident fund
    vii) Relatives
5. Do you borrow
    i) Never
    ii) Regular
    iii) Occassional
6. Amount borrowed last month (Rs.)
6. What is your total indebtness (Rs.)
7. Reason for borrowing (give two main reasons)
    i) Not borrowed
    ii) Household expenses
    iii) Ceremonies
    iv) Illness
    v) Travel
    vi) Business
    vii) Other specify

8. Source of borrowing (give two main reasons)

i) Not borrowed

ii) Money lender

iii) Grocer

iv) Employer

v) Chit fund

vi) Banks

vii) Friends

viii) Relatives

ix) Neighbours

x) Others

10. Security of loan (mention two main reasons)

i) Not borrowing

ii) No security

iii) Ornaments

iv) Land

v) Bond

vi) Utensils

vii) Any other (please specify)

viii) Child labour

ix) Self's labour

x) Relatives

E. DETAILS OF DURABLE AND SEMI DURABLE HOUSEHOLD GOODS POSSESSED

Wrist watch	Wall clock
Fan	Cooler
Radio/transistor	Exhaust fan
Sewing machine	Fridge
Bicycle	Others
Scooter/motor cycle	
Car	
T.V.	
Auto	

PUBLIC DISTRIBUTION SYSTEM

1a. THE ISSUE OF RATION CARDS

POSSESSION OF RATION CARD	FAILING TO GET ONE
1. No response	1. H.H. failing to get ration card
2. H.H. with ration card	2. No response
3. H. H without ration card	

PHYSICAL CONDITION OF THE CARD

1. Well maintained	4. Maintained by the FPS
2. Tolerably maintained	
3. Badly maintained	

2. TIME TAKEN FOR THE ISSUE OF RATION CARDS

TIME TAKEN	NO. OF VISITS TO CIVIL SUPPLIES
1. No response	1. No responses
2. One week	2. Once
3. Two weeks	3. Twice
4. One month	4. Thrice
5. Two months	5. Four times
6. > Two months	6. Six times or more

ADMINISTRATIVE PROCEDURE.

FILLING OF FORMS	INSPECTION BEFORE ISSUE
1. No response	1. No response
2. H.H. filling application form themselves	2. Inspector visiting H.H
3. H.H. not filling forms themselves	3. Inspector not visiting H.H.
4. H.H getting the form filled up and paying money	

4. CHOICE OF PDS BY HOUSE HOLD

i) No response

ii) Money charged

iii) Money not charged

iv) Choice of FPS made by HH

v) Choice of FPS not made by HH

5. REPORTED FACTORS EFFECTING CONSUMER UTILISATION

i) Absence of any factor

ii) Waste of time

iii) FPS inconveniently located

iv) Ill treatment by the retailer

v) Poor qualities

vi) Supplies not available on credit

vii) Stocks not available at FPS

viii) Lack of purchasing power

6. AWARENESS OF ENTITLEMENT

AWARENESS OF CORRECT ENTI.			AWARENESS OF CHANGE IN ENTI.		
1. Yes	No	N.R.	1. Yes	No	N.R

7. PERIODITY OF ISSUE

ACTUAL	PREFERRED
1. N.R.	1. N.R.
2. Daily issue	2. Daily Issue
3. Weekly issue	3. Weekly issue
4. Fortnightly	4. Fortnightly
5. Monthly	5. Monthly
	6. Others

8. CONSUMER RESPONSES ON QUALITY

BROKEN GRAIN	INSECT INFECTED SUPPLIES	LARGE QUANTITY OF CHAFF	DUST SAND FOREIGN MATTER
☐ Y	☐ Y	☐ Y	☐ Y
☐ N	☐ N	☐ N	☐ N
☐ N.R. .	☐ N.R.	☐ N.R.	☐ N.R.

9. REASONS FOR POOR QUALITY PDS SUPPLIES

i) Govt.

ii) Adulteration by FPS dealers

iii) Poor storage facility

iv) Others

10. REASONS FOR NOT COMPLAINING

i) No complaints

ii) Satisfied

iii) Whom to complain

iv) Useless

v) Others

11. LOCATION AND DISTANCE TO FPS

FPS IN VILLAGE OF RESIDENCE	DISTANCE TO FPS
1. N.R.	1. N.R.
2. NO	2. 0-1 KM
3. YES	3. 1-2 KM
	4. 2-5 KM

12. REPORTED DAYS WHEN FPS OPENS DURING A WEEK

N.R.

1

2

3

4

5

6

13. TIME SPENT BY CONSUMER AT FPS

i) N.R.

ii) 1-15 MIN

iii) 16-30 MIN

iv) 31-60 MIN

v) 61-120 MIN

vi) 120 MIN

14. CONSUMPTION EXPENDITURE OF THE HOUSEHOLD DURING 30 DAYS PRECEDING THE DATE OF SURVEY

	Purchased from PDS/FPS			**Purchased from open market**	
	Entitlement	**Actually purchased**			
Items	**Quantity (Kgs)**	**Quantity (Kgs)**	**Value (Rs.)**	**Quantity (Kgs)**	**Value (Rs.)**
1	4	5	6	10	11
Rice					
Wheat					
Cereals					
Gram, puises					
Milk & products					
Veg. & Fruit					
Meat					
Edible oil					
Sugar & gur					
Beverages					
Salt & spices					

15. Inter household transfer of entitlement

i) N.R.

ii) H.H. Borrowing card

iii) H.H. Not borrowing card

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