

Performance of Targeted Public Distribution System in Kerala

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IEG Working Paper No. 358

2015

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ACKNOWLEDGEMENTS

The author is grateful to Kerala University for funding this study by providing Senior Research Fellowship.

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ABSTRACT

Targeted Public Distribution System was introduced in the country following the failure of the Universal PDS to serve below the poverty line and poorest of the poor households. It is being implemented in the country through a three-tier structure which consists of Antyodaya, BPL (Below Poverty Line) and APL (Above Poverty Line) households. The present study enquires the extent to which the food grains and the ration subsidy reached the rural and urban households under the PDS and how many households moved out of official poverty line expenditure due to ration income in the State of Kerala. Around 10 percent of rural poor households moved out of official poverty line due to income transfer from Public Distribution System in 2004-05. And the corresponding figure among the urban poor households was around 12 percent. Around 43 percent of rural poor and 42 percent of urban poor in the state moved out of the poverty line expenditure in 2009-10 due to income subsidy obtained from Public Distribution System. It is understood that around half of the subsidised food grains to be distributed to BPL-AAY (Antyodaya Anna Yojana) beneficiaries are diverted without showing any sign of improvement from 2004-05 to 2009-10. The analysis of NSSO data on Public Distribution System in 2004-05 and 2009-10 proves that the PDS subsidy is not well targeted to the poor and vulnerable sections of the society. The major share of PDS subsidy reached the above poverty line classes of expenditure in rural and urban areas. Even the half of BPL or AAY subsidy reached the above poverty line classes of expenditure. However, the per capita distribution of income subsidy from PDS declined along with higher monthly consumption expenditure classes.

Keywords: Public distribution, Kerala, poverty, targeting, income transfer

JEL classifications: O2, I38

1 INTRODUCTION

In 1997, the Union Government implemented targeted public distribution system (TPDS) as the universal public distribution system had failed to serve below poverty line (BPL) consumers, particularly in poverty-ridden states. Under the targeted PDS, food grains are being distributed to BPL households at heavily subsidised prices and to APL households at marginally subsidised prices. The task of identification of the poor was entrusted to the states, based on the methodology of the Expert Group on the Estimation of Poverty and number of poor chaired by the late Lakdawala. It focused only on the real poor and vulnerable sections of the society such as landless agricultural labourers, marginal farmers in rural areas, and daily wage earners in the informal sector and, slum dwellers in urban areas. The Prime Minister launched the Antyodaya Anna Yojana (AAY) on 25 December 2000 to focus the TPDS towards the poor and the vulnerable sections of society. By this scheme, 10 million poorest of the poor families was issued food grains at highly subsidised rate of rupees 2 per kg for wheat and rupees 3 per kg for rice. The scale of issue was increased to 35kg per family per month wef 2002 April from the initial 25kg.

This paper discusses the performance of the TPDS in the food grain deficit state of Kerala under three sections: (1) PDS and income transfer; (2) the impact of the TPDS on poverty; and (3) the effectiveness of the TPDS.

2 PUBLIC DISTRIBUTION SYSTEM AND INCOME TRANSFER

The amount of income transfer depends upon PDS issue price, open market price and the quantity of concerned item being purchased from fair price shops. It is measured by multiplying the quantity of purchased from PDS with the difference between open market and PDS prices. The cost on purchasing PDS items has been deducted from income transfer. Therefore, it is defined as

$$IT = (PM-PR) Q^{PDS}$$

Here, IT = Income transfer

PM = Open market price

PR = PDS issue price

Q^{PDS} = Quantity purchased from PDS

The data on utilisation of PDS items published by National Sample Survey Organisation in 2007 and 2013 have been used for measuring the income transfer.

The NSSO classified all households into twelve classes based on monthly per capita household consumption expenditure. In 2004-05 data, the first eight classes of expenditure in

rural Kerala and the first four classes of expenditure in urban Kerala were below the official poverty line. The details concerning the distribution of house holds among the different expenditure classes and the volume of income subsidy reached out to each expenditure classes have been given in the tables.

The sample households have been grouped into different categories for the purpose of analysis. They are extreme poor and moderate poor households which comprise first and second four classes of monthly per capita consumption expenditure in rural areas of the state. The last four classes of expenditure are officially above the poverty line.

As far as urban areas are concerned, the first and second two classes of expenditure constitute extreme poor and moderate poor respectively. The remaining eight classes of monthly per capita consumption expenditure were above the official poverty line expenditure. They are grouped as above the poverty line middle level and higher level MPCE classes. The analysis measures the income transfer reached out to all households and BPL or AAY households separately in rural and urban areas of the state.

The 2009-10 NSSO data classified households into ten classes based on monthly per capita consumption expenditure. The first two decile classes in rural and urban areas are poor. Of the above poverty line classes, the first and the last four decile classes constitute the middle level and the higher level expenditure classes respectively in rural and urban areas.

Table 1 Monthly income transfer among rural households with AAY/BPL ration cards in 2004-05

MPCE Class	Rice (rupees)	Wheat (rupees)	Sugar (rupees)	Kerosene (rupees)	Total (rupees)
0-235	186.95	0.00	2.96	-0.70	189.21
235-270	164.18	15.21	1.50	16.32	197.21
270-320	153.94	13.19	3.92	15.37	186.42
320-365	120.44	10.85	0.86	25.91	158.06
365-410	92.11	5.31	0.68	21.05	119.15
410-455	113.58	5.38	1.16	31.46	151.58
455-510	113.29	8.05	2.29	8.00	131.63
510-580	89.64	6.95	1.43	15.30	113.32
580-690	82.45	6.20	1.09	11.06	100.8
690-890	83.08	4.65	1.10	24.47	113.3
890-155	68.22	6.89	0.96	11.95	88.02
1155 & more	51.39	4.60	1.37	13.72	71.08

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2004-05

Table 2 PDS income transfer among rural households in 2004-05 (Rupees)

MPCE Class	Rice	Wheat	Sugar	Kerosene	Total
0-235	127.01	0	3.30	-0.3	130.01
235-270	102.76	8.12	0.96	12.72	124.56
270-320	127.21	8.98	2.31	32.54	171.04
320-365	80.25	4.26	0.36	18.03	102.9
365-410	62.06	4.00	0.50	25.46	92.02
410-455	64.99	4.00	0.52	18.91	88.42
455-510	64.71	5.00	1.23	12.79	83.73
510-580	51.17	7.21	0.85	17.53	76.76
580-690	41.92	6.13	0.50	12.04	60.59
690-890	32.39	4.22	0.40	16.41	53.42
890-1155	22.78	5.15	0.31	10.32	38.56
1155 & more	12.65	3.92	0.24	11.03	27.84

Table 3 Income Transfer to AAY/ BPL Card holders in Urban Kerala in 2004-05 (Rupees)

MPCE Class	Rice	Wheat	Sugar	Kerosene	Total
0-335	168.97	9.42	1.21	30.99	210.59
335-395	159.71	7.07	2.57	13.50	182.85
395-485	114.67	9.13	2.00	37.71	163.51
485-580	80.14	11.69	2.51	21.57	115.91
580-675	86.49	4.38	1.05	5.73	97.65
675-790	79.62	8.89	2.74	13.59	104.84
790-930	93.65	13.34	2.78	20.53	130.30
930-1100	46.12	15.38	1.22	29.70	92.42
1100-1380	27.27	14.96	1.21	20.57	64.01
1380-1880	20.46	1.40	0.00	24.61	46.47
1880-2540	64.54	0.40	0.56	16.38	81.88
2540 & more	46.88	0.00	0.00	21.31	68.19

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2004-05

Table 4 Income Transfer to All Households in Urban Kerala in 2004-05(Rupees)

MPCE Class	Rice	Wheat	Sugar	Kerosene	Total
0-335	105.85	4.36	0.76	25.89	136.86
335-395	87.19	7.07	1.08	8.20	103.54
395-485	65.35	7.42	1.01	21.51	95.29
485-580	39.79	8.00	0.99	17.32	66.10
580-675	34.00	4.00	0.32	13.80	52.12
675-790	26.25	5.85	0.77	20.07	52.94
790-930	31.63	7.57	0.77	18.68	58.65
930-1100	17.34	5.40	0.65	17.96	41.35
1100-1380	10.34	4.96	0.26	14.37	29.93
1380-1880	3.92	2.41	0.05	10.35	16.73
1880-2540	4.12	2.99	0.017	9.48	16.61
2540 & more	2.35	1.80	0.15	5.74	10.04

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2004-05

During 2004-05 in rural Kerala, the poor households on an average obtained rupees 93 as monthly ration subsidy whereas the poor households with BPL or AAY ration cards gained 139 rupees. An income of rupees 128 reached the extreme poor and of rupees 83, the moderate poor. The extreme and moderate poor households with BPL or AAY ration cards obtained rupees 179 and rupees 126 respectively as monthly ration income. Above the poverty line households gained rupees 41 as ration income whereas it was rupees 95 among the households with BPL or AAY ration cards. (table 5)

The urban poor households obtained on an average rupees 89 as monthly ration income whereas rupees 157 reached the poor households with BPL or AAY ration cards. The extreme and moderate poor households gained the monthly ration income of rupees 119 and of rupees 77 respectively. The corresponding figures among the households with BPL or AAY ration cards are rupees 198 and rupees 137. An income of rupees 32 reached the above poverty households in urban areas of the state whereas it was rupees 95 among the above poverty line households with above poverty line or AAY ration cards. (table 6)

Table 5 Income Transfer to Different types of Households in Rural Kerala in 2004-05

Types of HHS	BPL or AAY HHS(Rupees)	All HHS(Rupees)
Extreme Poor	179.24	128.00
Moderate poor	126.80	83.13
Poor	139.28	93.03
Middle level Expenditure Class	107.99	56.09
Higher MPCE classes	78.74	31.35
All classes	113.44	55.16

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2004-05

Table 6 Income Transfer to Different types of Households in Urban Kerala in 2004-05

Types of HHS	BPL or AAY HHS(Rupees)	All HHS (Rupees)
Extreme Poor	198.72	119.09
Moderate poor	137.74	77.35
Poor	157.79	89.20
Middle level Expenditure Class	107.18	51.36
Higher MPCE classes	62.30	18.79
All classes	118.10	41.89

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2004-05

The 66th round NSSO data on Public Distribution System and Other Sources of Household Consumption classified the households into ten classes based on monthly per capita consumption expenditure. In 2009-10, 12% of rural households and 12.10% of urban households were below the poverty line expenditure of rupees 775.30 and rupees 830.70 respectively.

The below poverty line rural households in the state obtained rupees 312.13 as monthly ration income from Public Distribution System in 2009-10.(table. 9) The corresponding figure among urban households was rupees 296.84 (table. 10). An amount of rupees 324.60 reached the extreme poor households in the rural areas and of rupees 290.31 the moderate poor (table 9). It was rupees 299.19 and rupees 270.40 respectively as far as urban households are concerned. The middle expenditure class obtained rupees 201.70 as monthly ration income from PDS whereas it was rupees 103.15 among higher expenditure classes in rural areas. The corresponding figures among urban households were rupees 181.83 and rupees 62.27. (table 10)

Table 7 Monthly PDS income transfer per household in 2009-10 in Rural Kerala (Rupees)

Decile Class of MPCE	Rice	Wheat	Sugar	kerosene	Total
1	258.59	21.03	14.20	30.78	324.60
2	224.12	23.13	12.18	30.88	290.31
3	161.07	18.40	11.72	25.93	217.12
4	132.52	21.060	6.97	20.03	180.58
5	148.11	18.84	7.81	31.99	206.75
6	128.61	14.66	8.71	28.24	180.22
7	124.79	16.21	7.16	22.05	170.21
8	74.17	11.48	3.67	14.94	104.26
9	64.34	12.78	2.43	16.33	95.88
10	43.47	13.25	2.31	11.91	70.94
All Classes	128.89	17.07	7.12	20.55	173.63

Source: NSSO Report on PDS and Other Sources of Household Consumption 2009-10

Table 8 Monthly income transfer per household in 2009-10 in urban Kerala (Rupees)

Decile class of MPCE	Rice	Wheat	Sugar	kerosene	Total
1	230.50	30.42	15.81	22.46	299.19
2	200.47	25.79	13.23	30.91	270.40
3	160.74	28.24	10.59	29.82	229.39
4	115.06	19.44	5.75	16.84	157.09
5	101.55	19.34	5.91	18.79	145.59
6	82.68	14.12	5.41	14.95	117.16
7	60.99	15.53	1.86	20.73	99.11
8	46.72	9.33	1.84	13.28	71.17
9	27.90	10.79	0.54	13.76	52.99
10	22.54	9.02	0.55	7.71	39.82
All classes	81.91	17.71	5.19	18.50	123.31

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2009-10

Table 9 Monthly income transfer per household from PDS in 2009-10 in Rural Kerala (Rupees)

Types of Households	Income Transfer
Extreme Poor	324.60
Moderate poor	290.31
Poor	312.13
Middle class	201.70
Higher Expenditure class	103.15
All classes	173.80

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2009-10

Table 10 Monthly income transfer per household from PDS in 2009-10 in Urban Kerala (Rupees)

Types of Households	Income Transfer
Extreme Poor	299.19
Moderate poor	270.40
Poor	296.84
Middle class	181.83
Higher Expenditure class	62.27
All classes	138.34

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2009-10

The per household distribution of ration income among expenditure classes progressively declined in rural and urban areas. The poor households with BPL or AAY ration cards in rural and urban areas benefited in a big way due to the purchase of PDS items. It is significant to note that a sizeable portion of ration income reached the above poverty line classes of expenditure in 2004-05 and 2009-10.

2 PUBLIC DISTRIBUTION AND POVERTY

This part analyses the impact of Targeted Public Distribution System on poverty among the rural and urban households in the state in 2004-05 and 2009-10

Planning Commission is the nodal agency in estimating the poverty in rural and urban areas. The estimates were based on the consumption expenditure survey of NSSO at 1973-74 (rupees 49.09 per capita per month at 1973-74 prices in rural areas and 56.64 rupees in urban

areas) The state specific rural and urban poverty lines were updated by using the consumer price index of agricultural labourers for rural areas and consumer price index for industrial workers in urban areas. This methodology focused on the purchasing power needed to meet the specific caloric norms with some margin for non-food consumption needs.

Following the severe criticism of official poverty estimates, the Planning Commission set up an expert group under the chairmanship of Suresh Tendulkar to examine the issue in detail and suggest a new poverty line and estimates. The committee suggested a new methodology to arrive at state wise and all India rural and urban poverty lines for 2004-05

The expert group emphasised that the poverty estimates would continue to be done on the basis of NSSO data on private household consumption expenditure. It also decided to move away from anchoring the poverty lines to a calorie intake norm following the mismatch between calorie consumption data of NSSO and other specialised surveys. Moreover, NSSO shifted the base of its consumption survey to Mixed Reference Period (MRP) which consists of data on one year's consumption expenditure of low frequency items (clothing, footwear, durables, education and institutional health expenditure) and 30 days for all the remaining items. It recommended MRP-equivalent of urban poverty line basket of household goods and services to separate the poor from non-poor. The new poverty lines are broader in scope as it is calculated after assessing the adequacy of private household expenditure on education and health.

Impact of Public Distribution on poverty is measured by adding the ration income with actual monthly consumption expenditure of each classes. The sum of actual monthly per capita consumption expenditure and ration income measures the real monthly per capita consumption expenditure. The difference between the market price and PDS price has been multiplied with the quantity of concerned commodity purchased from PDS outlets. The analysis is done based on National Sample Survey data collected in 2004-05 and 2009-10. The NSSO report titled Public Distribution System and Other Sources of Household consumption gives data for rural and urban households. The analysis has been done separately for 2004-05 and 2009-10. The rise in MPCE of households is measured by adding the ration income with actual monthly per capita consumption expenditure.

The real monthly per capita consumption expenditure of rural poor households rose by 14.13 percent (from rupees 176.73 to rupees 205.82) among the extreme poor and by 3.18 percent (from rupees 523.50 to rupees 540.83) among the moderate poor (Table 11) in 2004-05.

The corresponding figures among the rural poor households with BPL or AAY ration cards are 19.32 percent (from rupees 176.76 to rupees 219.06) and 4.62 percent (from rupees 523.56 to rupees 549.01). The monthly per capita consumption expenditure of urban poor

households rose by 9.21 percent (from rupees 277.13 to rupees 305.23) among the extreme poor class and by 1.80 percent (from rupees 582.35 to rupees 593.05) among the moderate poor class whereas it was 13.5 percent (from rupees 277.13 to rupees 320.37) and 3.33 percent (from rupees 582.35 to rupees 602.40) respectively among urban poor households with BPL or AAY ration cards. (Tables 12 & 12 A). Around 10 percent of rural poor households moved out of official poverty line due to income transfer from Public Distribution System in 2004-05. And the corresponding figure among the urban poor households was around 12 percent.

The monthly per capita consumption expenditure of extreme poor in rural areas increased by 13% from rupees 604.30 to rupees 682.90 in 2009-10 due to the income subsidy from Public Distribution System and that of moderate poor by 9.85% from rupees 713.53 to rupees 783.82 (table.13). On an average the MPCE of rural poor in the state rose by 11.61% from rupees 650.95 to rupees 726.53.

As far as urban households are concerned, the MPCE of poor increased by 10.31% from rupees 702.06 to rupees 774.46 in 2009-10. The monthly per capita consumption expenditure of extreme poor and moderate poor rose by 11.10% and 8.63% from rupees 657.28 to rupees 730.25 and from rupees 764.61 to rupees 830.56 due to income subsidy from Public Distribution System. (Table- 14)

Around 43 percent of rural poor and 42 percent of urban poor in the state moved out of the poverty line expenditure of rupees 775.30 and rupees 830.70 respectively in 2009-10. Around 42.5 percent of total poor in the state moved out of poverty line due to income subsidy obtained from Public Distribution System.

Table 11 Impact of PDS income transfer on poverty among rural households in Kerala in 2004-05

MPCE Class	Ave. Actual MPCE (Rs)	Ave. Real MPCE (Rs)	Percentage Rise
0-235	176.73	205.82	14.13
235-270	256.73	284.60	9.79
270-320	292.77	331.03	11.56
320-365	343.80	366.82	6.28
365-410	388.83	409.42	5.03
410-455	432.14	451.92	4.38
455-510	480.09	498.82	3.75
510-537	523.50	540.83	3.18

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2004-05

Table 11 A Impact of PDS income transfer on poverty among rural households with AAY or BPL cards

MPCE Class	Av. Actual MPCE (Rs)	Ave.Real MPCE (Rs)	Percentage Rise in MPCE
0-235	176.73	219.06	19.32
235-270	256.73	300.85	14.67
270-320	292.77	334.47	12.47
320-365	343.80	379.16	9.33
365-410	388.83	415.49	6.42
410-455	432.14	466.05	7.28
455-510	480.09	509.54	5.78
510-537	523.56	549.01	4.62

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2004-05

Figure 1 Impact of PDS income transfer on the poverty of rural households with AAY and BPL cards (percentage rise)

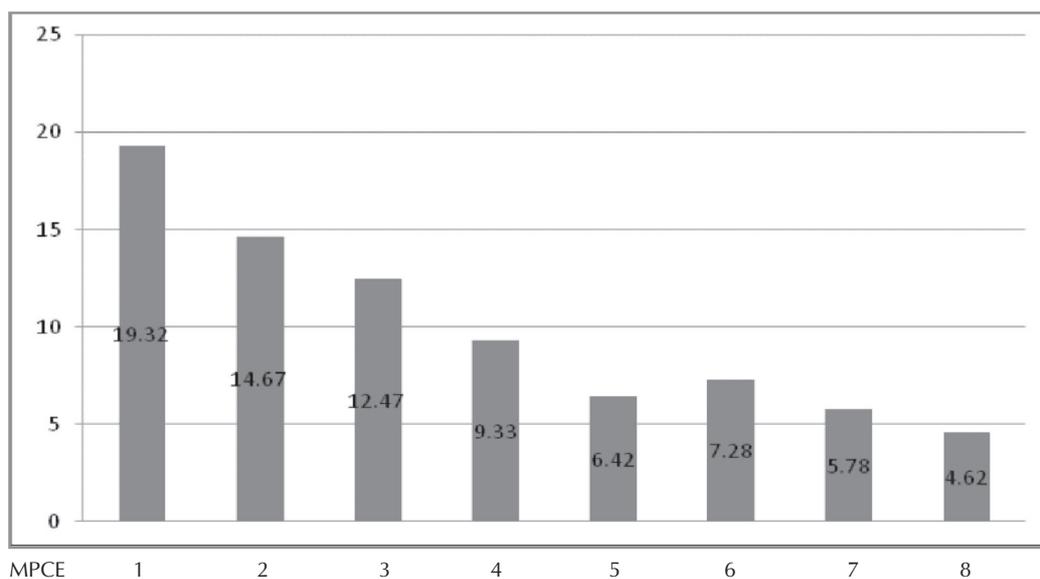


Table 12 Impact of PDS income transfer on the poverty among Urban Households in 2004-05

MPCE Class	Av.Actual MPCE(Rs)	Ave.Real MPCE(Rs)	Percentage Rise in MPCE
0-335	277.13	305.23	9.21
335-395	366.88	388.14	5.48
395-485	442.04	461.61	4.24
485-580	535.61	549.18	2.47
580-584	582.35	593.05	1.80

Source : NSSO Report on PDS and Other Sources of Household Consumption in 2004-05

Table 12 A Impact of PDS income transfer among the poverty of Urban Households with BPL or AAY Cards in 2004-05

MPCE Class	Av.Actual MPCE(Rs)	Ave.Real MPCE(Rs)	Percentage Rise in MPCE
0-335	277.13	320.37	13.50
335-395	366.88	404.43	9.28
395-485	442.04	475.61	7.01
485-580	535.61	559.41	4.25
580-584	582.35	602.40	3.33

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2004-05

Figure 2 Impact of PDS income transfer on MPCE of urban poor with AAY/BPL cards in 2004-05(in percent)

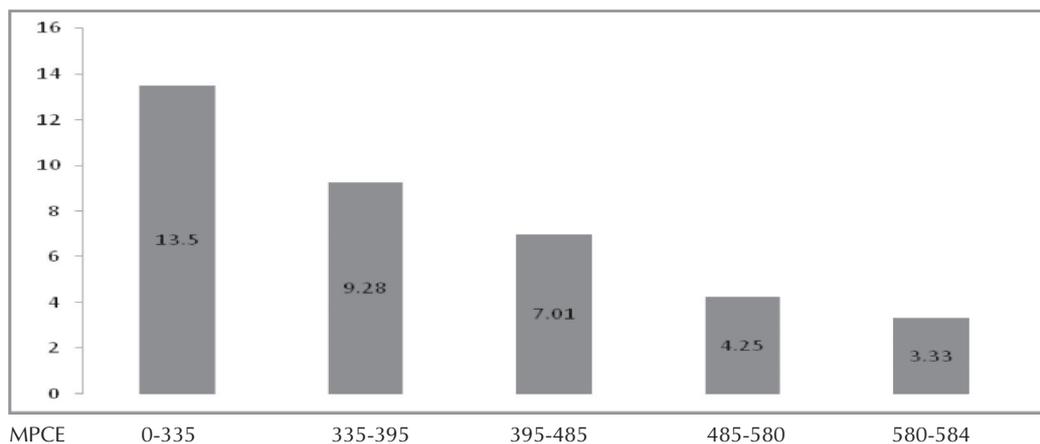


Table 13 Impact of PDS income transfer on the MPCE of Rural Poor in 2009-10

MPCE class	Actual MPCE (Rupees)	Real MPCE (Rupees)	Percentage rise
Extreme poor	604.30	682.90	13
Moderate poor	713.53	783.82	9.85
Poor	650.95	726.53	11.61

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2009-10

Table 14 Impact of PDS income transfer on the MPCE of Urban Poor in 2009-10

MPCE class	Actual MPCE (Rupees)	Real MPCE (Rupees)	Percentage rise
Extreme poor	657.28	730.25	11.10
Moderate poor	764.61	830.56	8.63
Poor	702.06	774.46	10.31

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2009-10

Figure 3 Impact of PDS income transfer on MPCE of rural poor in 2009-10 (in percent)

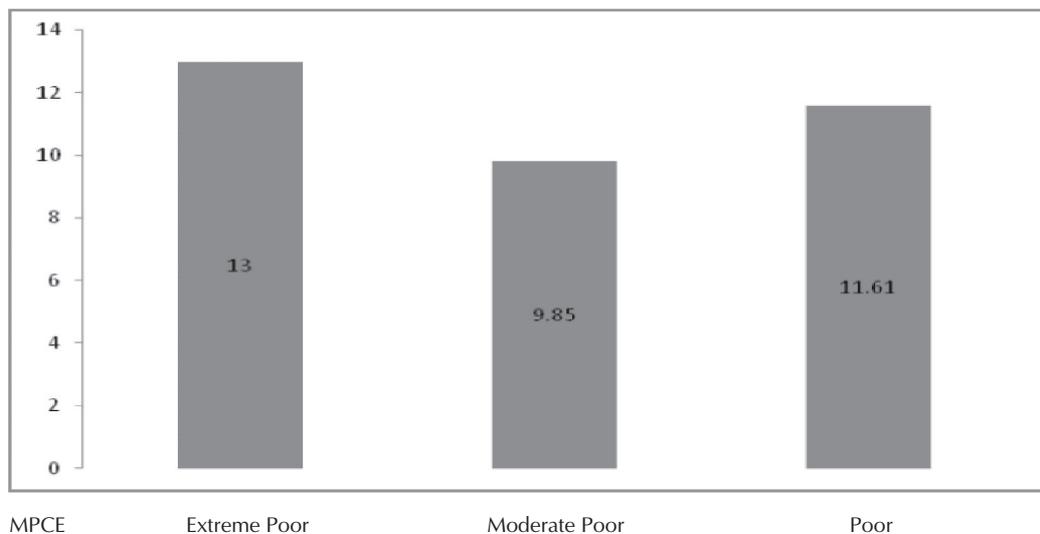
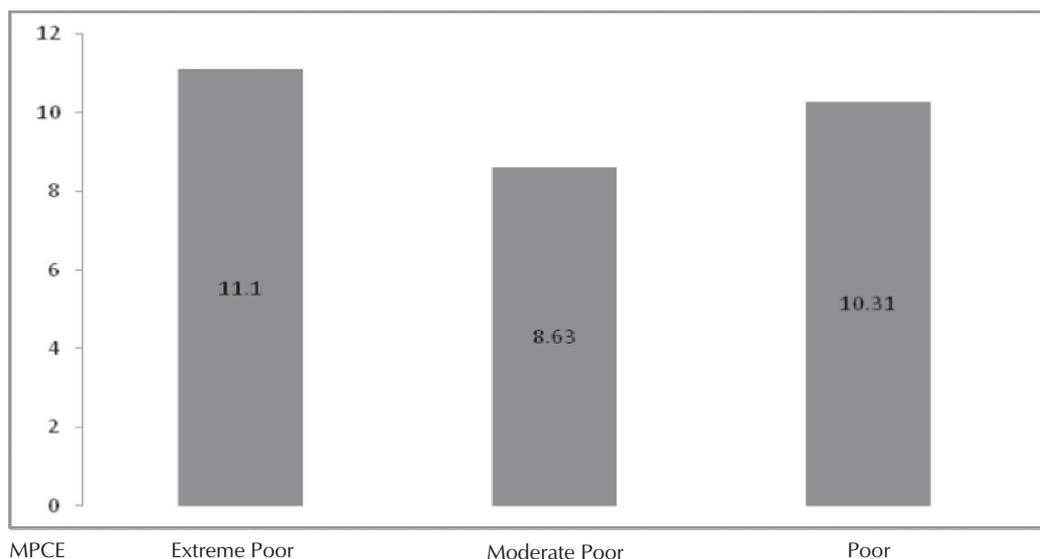


Figure 4 Impact of PDS income transfer on the MPCE of urban poor in 2009-10 (in percent)



Diversion of PDS Food grains

From the data, it is understood that around half of the subsidised food grains to be distributed to BPL-AAY beneficiaries are diverted without showing any sign of improvement from 2004-05 to 2009-10. Around half of the rice meant for distribution to AAY-BPL house holds in rural areas did not reach the beneficiaries in 2004-05. On an average 18 kg of AAY-BPL food grains per household was diverted in rural areas. The major share of PDS wheat to be distributed to AAY-BPL households in rural and urban areas did not reach the beneficiaries. The urban areas of the state witnessed same rate of diversion of food grains. During 2009-10, around 18kg of rice each month to be distributed to poorest of the poor beneficiaries in rural areas was diverted. The corresponding figure among urban households was 21.40 kg. The monthly diversion of food grains in rural and urban areas amounted to around 15kg. (Tables 17 & 18)

Table 15 Diversion of PDS food grains in 2004 -05 in rural Kerala

Household type	Monthly Distribution (Kg)		Monthly Off take (Kg)		Diversion	
	Rice	Wheat	Rice	Wheat	Rice	Wheat
AAY - BPL	28.31	6.57	15.868	0.869	12.442	5.70
All Households	7.15	1.99	7.314	0.713	0.00	1.28

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2004-05

Figure 5 Diversion of PDS rice in rural Kerala in 2004-05 (%)

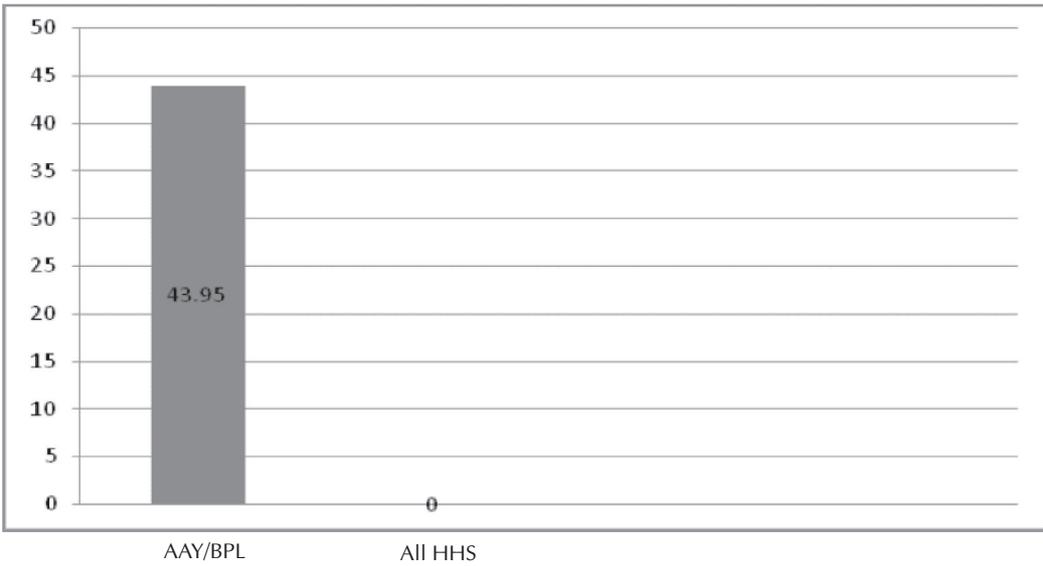


Figure 6 Diversion of PDS rice in urban Kerala in 2004-05 (%)

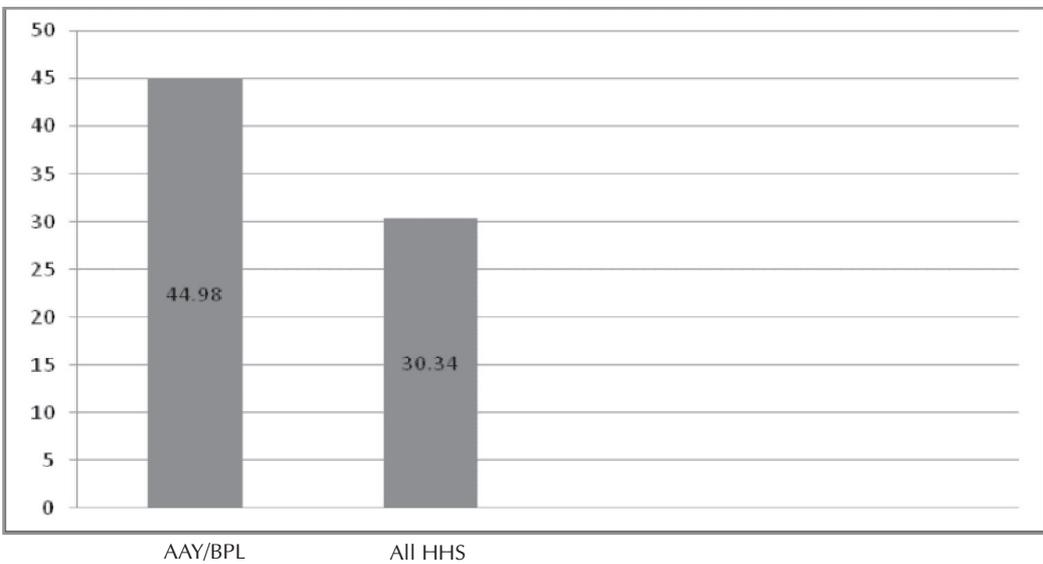


Figure 7 Diversion of PDS wheat in rural Kerala in 2004-05 (%)

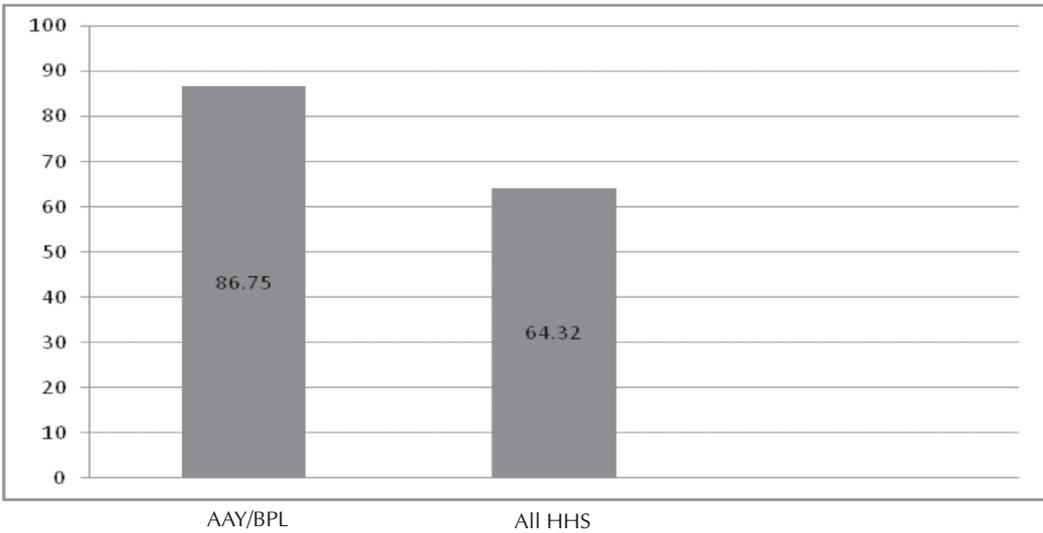


Figure 8 Diversion of PDS wheat in urban Kerala in 2004-05 (%)

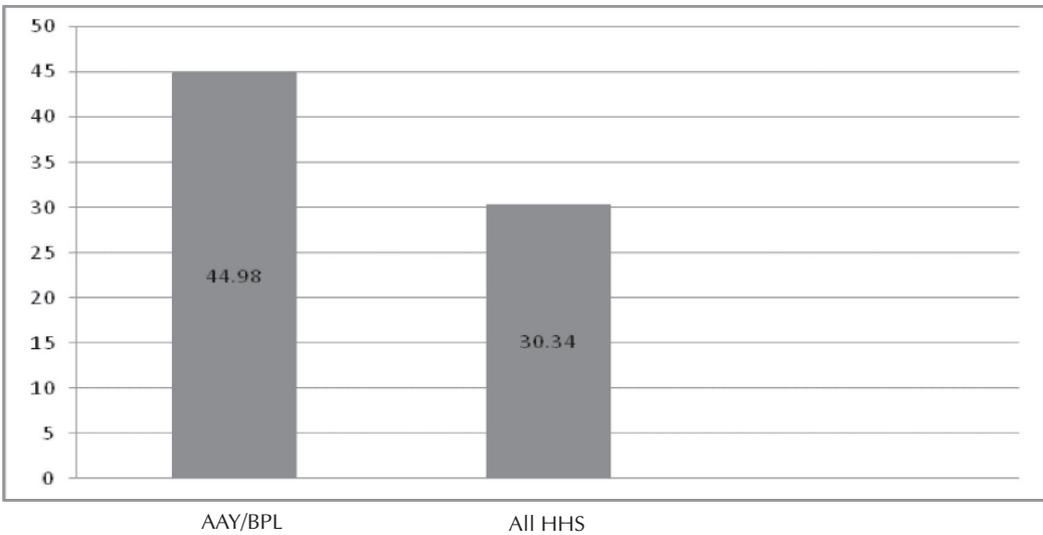


Table 16 Diversion of PDS food grains in urban Kerala in 2004 -05

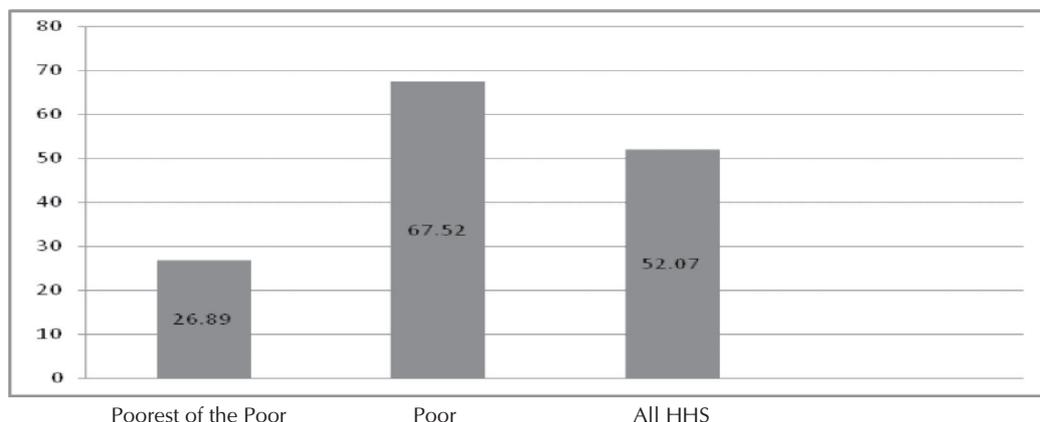
Household type	Monthly Distribution (Kg)		Monthly Off take (Kg)		Diversion	
	Rice	Wheat	Rice	Wheat	Rice	Wheat
AAY - BPL	28.31	6.57	15.575	1.399	12.735	5.17
All Households	7.15	1.99	4.981	0.687	2.169	1.303

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2004-05

Table 17 Diversion of PDS food grains in rural Kerala in 2009-10

Household type	Monthly Distribution (Kg)		Monthly Off take (Kg)		Diversion	
	Rice	Wheat	Rice	Wheat	Rice	Wheat
Poorest of poor	34.84	1.90	16.545	1.389	18.30	0.511
Poor	27.73	4.48	14.914	1.455	12.816	3.025
All Households	10.91	2.42	8.429	1.65	2.48	0.77

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2009-10

Figure 9 Diversion of PDS wheat in rural Kerala in 2009-10 (%)**Table 18** Diversion of PDS food grains in urban Kerala in 2009-10

Household Type	Monthly Distribution (Kg)		Monthly Off take (Kg)		Diversion	
	Rice	Wheat	Rice	Wheat	Rice	Wheat
Poorest of the poor	34.84	1.90	13.436	1.928	21.40	0.00
Poor	27.73	4.48	15.809	1.661	11.921	2.819
All Households	10.91	2.42	6.266	1.076	4.644	1.344

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2009-10

Figure 10 Diversion of PDS rice in rural Kerala in 2009-10 (%)

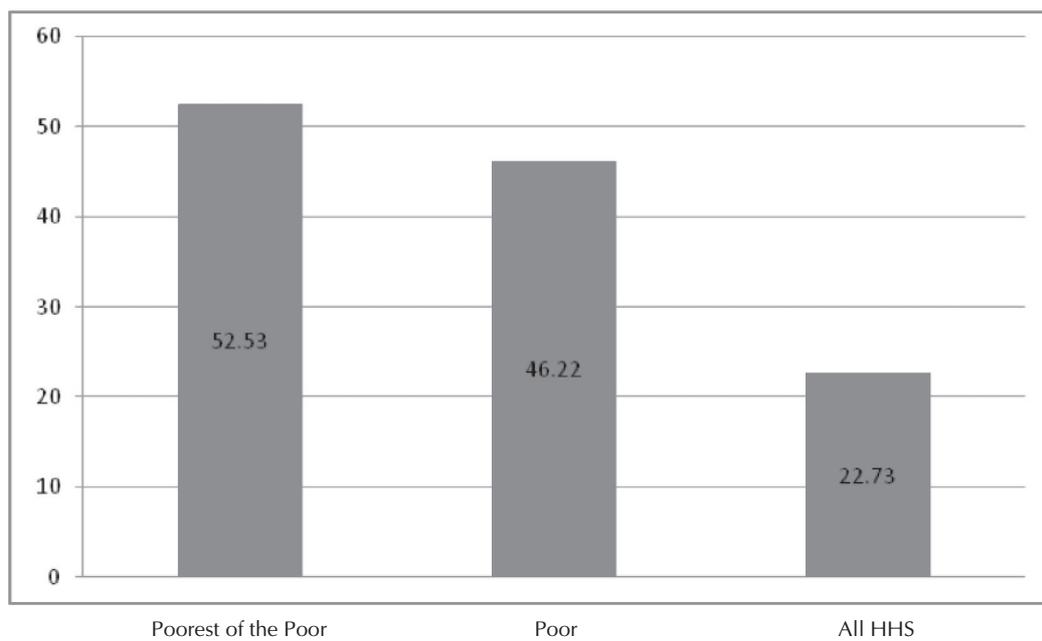


Figure 11 Diversion of PDS wheat in rural Kerala in 2009-10 (%)

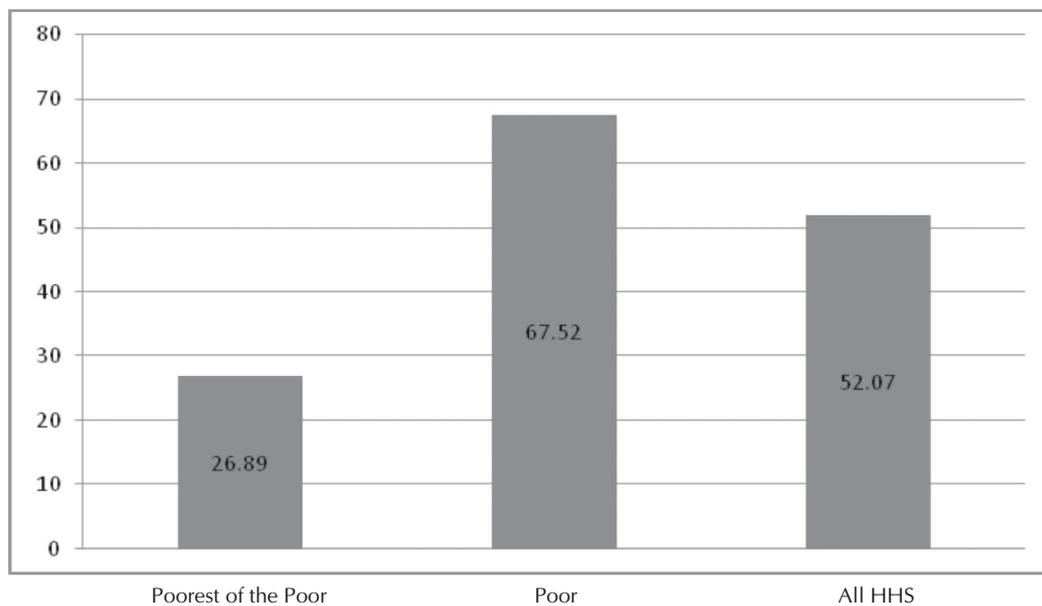
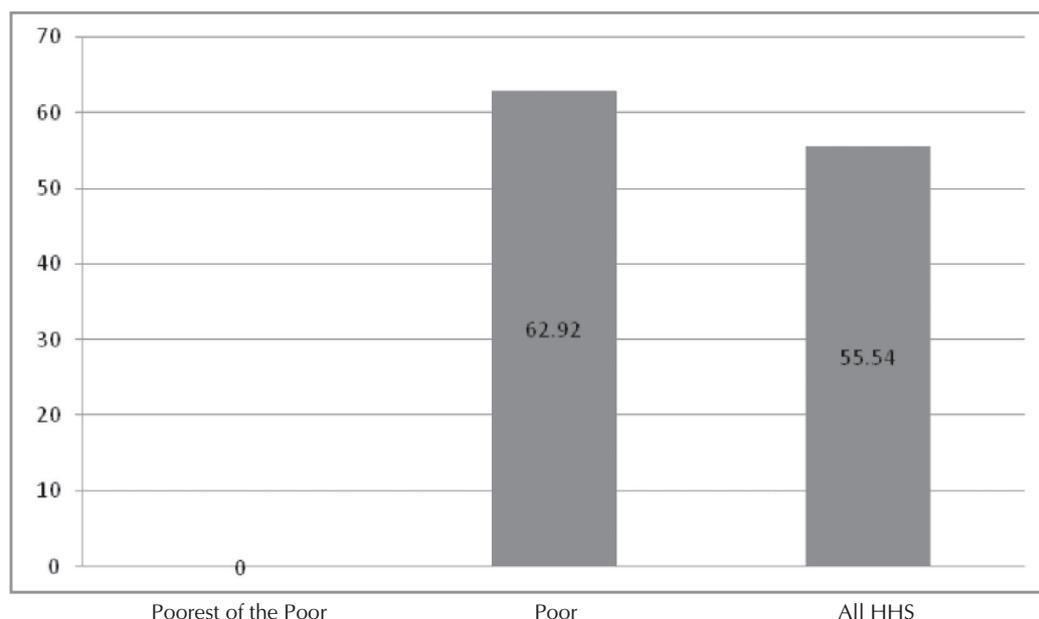


Figure 12 Diversion of PDS wheat in urban Kerala in 2009-10 (%)



3 EFFECTIVENESS OF TARGETING

Targeting involves the division of entire population into BPL and APL based on income or expenditure criterion. The success of targeting depends upon the selection of eligible households. Targeted distribution system has two types of errors which are errors of exclusion and errors of inclusion. Error of exclusion here implies the households below the poverty line have not been issued BPL or AAY ration cards. Similarly, the inclusion error means the households actually above the poverty line expenditure are given the BPL or AAY ration cards. The extent of exclusion and inclusion errors are estimated based on 2004-05 National Sample Survey data published by the Ministry of Statistics and Programme Implementation, Government of India. The error in the identification excluded eligible households in urban and rural areas from the subsidised food distribution scheme.

In rural Kerala, only 49 percent of the officially below poverty line households was issued Antyodaya or BPL ration cards. This tantamounted to high error of exclusion of eligible households from the subsidised food grain distribution scheme. Similarly, 26.45 percent of the APL households obtained AAY or BPL ration cards implying sizeable leakage of ration subsidy to the higher expenditure classes. (Table 23). Targeted PDS in rural areas experiences high error of inclusion as of the total Antyodaya or BPL ration cards issued, around 60 percent reached the above poverty line classes of expenditure.

In urban Kerala, around 50 percent of the officially below poverty line households was issued Antyodaya or BPL ration cards whereas around 17 percent of the officially above poverty line households obtained Antyodaya or BPL ration cards. Of the total Antyodaya or BPL ration cards issued, more than 63 percent reached the above poverty line expenditure classes. (table 24). High error of inclusion of ineligible households will cost the exchequer of the Government in the form of huge food subsidy bill and will jeopardise the objective of eliminating hunger and poverty from the state. Only half of the agricultural labour households with the lowest monthly per capita consumption expenditure of rupees 690.77 obtained BPL-AAY ration cards. Similarly only 40 percent of casual labour households in urban areas with lowest MPCE of rupees 830.9% gained BPL-AAY ration cards. All Scheduled Tribe households in rural areas of the state in 2004-05 were below the official poverty line expenditure of rupees 537.31. Only two-third of the below poverty line Scheduled Tribe households was given AAY-BPL ration cards. The distribution of BPL-AAY ration cards declined along with the increasing size of land in rural areas. However, around 83 percent of landless or households did not obtain the ration cards in rural areas

Table 19 Percentage distribution of different types of Ration cards. Per 1000 number of households

Household type	Per 1000 no. of hhs possessing ration card of type					Av. MPCE (RS)	Est. no of households(00)	No. of sample households(00)
	2	3	4	5	6			
1	AAY	BPL	Others	No card				
Self-employed in non-agriculture	5	221	650	124	1000	1134.28	9801	609
Agricultural labour	49	477	314	216160	1000	690.77	9595	491
Other labour	16	390	453	169141	1000	792.81	15272	756
Self-employed in agriculture	6	130	453	169141	1000	792.81	15272	791
Others	17	116	671	195	1000	1307.72	9691	653
All	18	277	571	134	1000	1013.15	54738	3300
Estimated no. of households (00)	994	15175	31228	7331	54738	-	-	-
No. of sample households	47	816	2063	401	3300	-	-	-

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2004-05

Table 20 Percentage distribution of Ration cards to Different types of Households in Urban areas

Household type	Per 1000 no. of hhs possessing ration card of type					Av. MPCE	Est. no of (RS)households(00)	No. of sample households(00)
	2	3	4	5	6			
1	AAY	BPL	Others	No card	All	7	8	9
Schedule Tribe	20	80	604	297	1000	1515.74	109	10
Schedule Caste	43	432	339	186	1000	756.19	1308	146
OBC	8	218	596	179	1000	11874.79	10399	1219
Others	2	108	674	216	1000	1671.81	5642	575
All	9	198	602	192	1000	1290.89	17458	1950
Estimateted No. of households (00)	149	3449	10507	3353	17458	-	-	-
Number of Sample households	25	421	1164	340	1950	-	-	-

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2004-05

Table 21 Distribution of Ration cards to Different types of Social Groups in Rural areas

Household type	Per 1000 no. of hhs possessing ration card of type					Av. MPCE (RS)	Est. no of households(00)	No. of sample households(00)
	2	3	4	5	6			
1	AAY	BPL	Others	No card	All	7	8	9
Schedule Tribe	308	365	165	163	1000	518.05	1198	54
Schedule Caste	26	595	279	100	1000	753.11	5993	330
OBC	8	273	574	145	1000	995.62	31124	1889
Others	14	163	700	124	1000	1191.32	16422	1027
All	18	277	271	134	1000	1013.15	54738	3300
Estimateted No. of households	994	15175	31238	7331	54738	-	-	-
Number of Sample households	47	418	2036	401	3300	-	-	-

Source : NSSO Report on PDS and Other Sources of Household Consumption in 2004-05

Table 22 Distribution of Ration cards to households possessing different size of land in rural areas

Household type	Per 1000 no. of hhs possessing ration card of type					Av. MPCE (RS)	Est. no of households(00)	No. of sample households(00)
	2	3	4	5	6			
1						7	8	9
	AAY	BPL	Others	No card	All			
Less than 0.01	0	133	35	832	1000	937.06	968	34
0.01 - 0.40	26	385	390	199	1000	848.49	18540	981
0.41-1.00	16	240	659	85	1000	1047.59	32070	2017
1.01-2.00	0	71	895	35	1000	1439.89	2278	189
2.01 -4.00	0	0	966	34	1000	1585.29	552	53
Above 4.01	0	0	883	117	1000	2652.00	115	15
All sizes	18	277	571	134	1000	1013.15	54738	3300
Estimated no. of households (00)	994	15175	31238	7331	54738	-	-	-
No. of sample households	47	816	2036	401	3300	-	-	-

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2004-05

Table 23 Distribution of different types of ration cards per 1000 households in rural areas

Household type	Per 1000 no. of hhs possessing ration card of type					Av. MPCE (Rs)	Est. no of households (00)	No. of sample households
	AAY	BPL	Others	All				
0-235	158	262	130	450	1000	176.73	769	25
235-270	84	568	257	92	1000	256.73	426	25
270-320	69	521	354	56	1000	292.77	740	42
320-365	25	402	331	242	1000	343.80	1254	68
365-410	62	440	367	131	1000	388.83	1729	93
410-455	28	411	414	147	1000	432.14	2217	128
455-510	23	475	438	64	1000	480.09	2856	152
510-580	24	369	463	144	1000	546.16	4518	238
580-690	20	356	505	120	1000	630.87	6152	343
690-890	11	291	570	128	1000	778.51	10360	588
890-1155	12	227	635	126	1000	1005.98	7771	495
1155 & more	5	136	722	137	1000	2160.08	15946	1103
All classes	18	277	571	134	1000	1013.15	54738	3300
Estimated no. of households (00)	994	15175	31238	7331	54738	-	-	"
No. of sample households	47	816	2036	401	3300	"	"	"

Source: NSS Report No. 510. Public Distribution System and Other Sources of Households Consumption.

Of the total monthly subsidy of more than 300 million rupees distributed among rural households in 2004-05 in the state through PDS only 134 million rupees reached the poor (Table 25). Even the higher monthly per capita consumption expenditure households obtained 74 million rupees as subsidy from Public Distribution System during the same period. More than 166 million rupees reached the above poverty line households. The amount of subsidies distributed across different types of households has been above poverty line given in the table.

Table 24 Distribution of BPL- AAY ration cards to MPCE classes in urban areas

Household type	Per 1000 no. of hhs possessing ration card of type					Av.MPCE (Rs)	Est. no of households (00)	No. of sample households
	AAY	BPL	Others	No Card	All			
						7	8	9
0-335	131	528	220	121	1000	277.13	377	80
335-395	77	351	555	17	1000	366.88	431	64
395-485	16	501	379	105	1000	442.04	786	144
485-580	2	374	512	105	1000	535.61	1253	160
580-675	9	281	590	120	1000	630.93	1403	163
675-790	6	241	618	135	1000	727.08	1603	183
790-930	7	272	671	50	1000	861.86	1658	176
930-1100	1	254	554	191	1000	1015.42	1567	174
1100-1380	3	161	604	232	1000	1242.62	2311	215
1380-1880	0	50	671	279	1000	1607.92	2608	253
1880-2540	0	39	619	342	1000	2164.88	1510	148
2540 & more	0	23	701	276	1000	4806.78	1953	190
All classes	9	198	602	192	1000	1290.89	17458	1950
Estimated no. of households (00)	149	3449	10507	3353	17458	-	-	"
No. of sample households	25	421	1164	340	1950	-		""

Source: NSSO Report on PDS and Other Sources of Household consumption

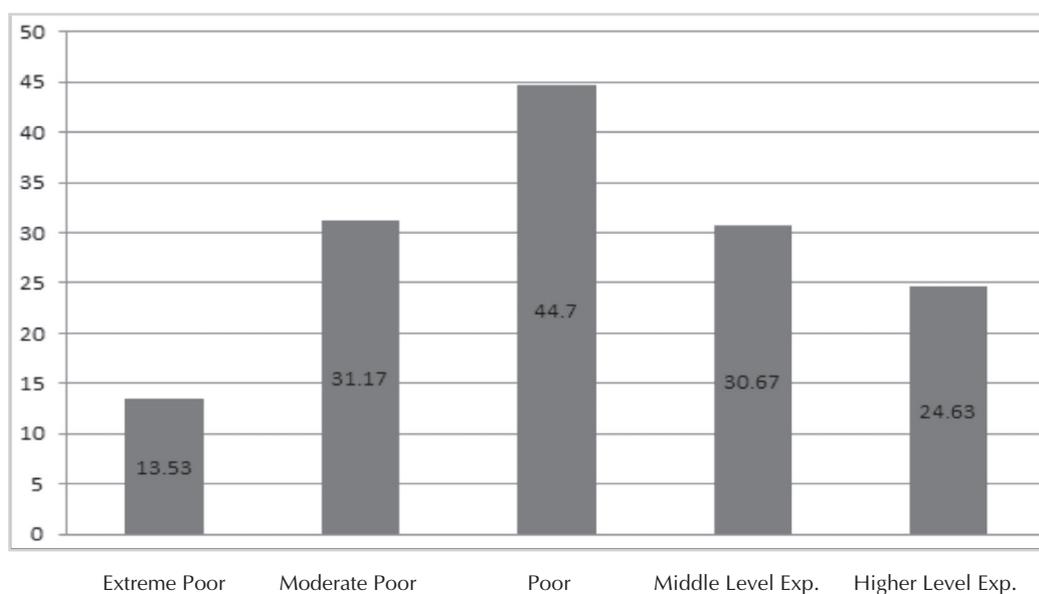
During 2004-05 an amount of subsidy to the tune of rupees 73 million reached the urban households in a month. Of this, the poor households in the state obtained only 25 million rupees as subsidy from Public Distribution System whereas more than 47 million rupees reached the above poverty line households. And the share of subsidy gained by the higher expenditure classes was 15 million rupees. The amount of subsidy distributed among different types of households is given in the table.

Table 25 Monthly distribution of PDS income subsidy in 2004-05 among rural households

MPCE Households	Amount of subsidy (Million rupees)	Percentage distribution
Extreme poor	40.86	13.53
Moderate poor	94.11	31.17
Poor	134.97	44.70
Middle level expenditure	92.62	30.67
Higher level expenditure	74.36	24.63
Total	301.95	100.00

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2004-05

Figure 13 Distribution of PDS income subsidy among rural households in Kerala in 2004-05 (%)



The 2004-05 National Sample Survey on Public Distribution System provided separately data with regard to the off take of rice, wheat, sugar and Kerosene by the households holding AAY or BPL ration cards. The rural house holds having AAY or BPL ration cards obtained 183 million rupees as subsidy in a month from Public Distribution System. Of which, 92 million rupees reached the poor and rupees 91 million rupees the non- poor. Even

the higher monthly per capita consumption expenditure classes having AAY or BPL cards gained the subsidy of 32 million rupees from Public Distribution System. The details are given in the table 26.

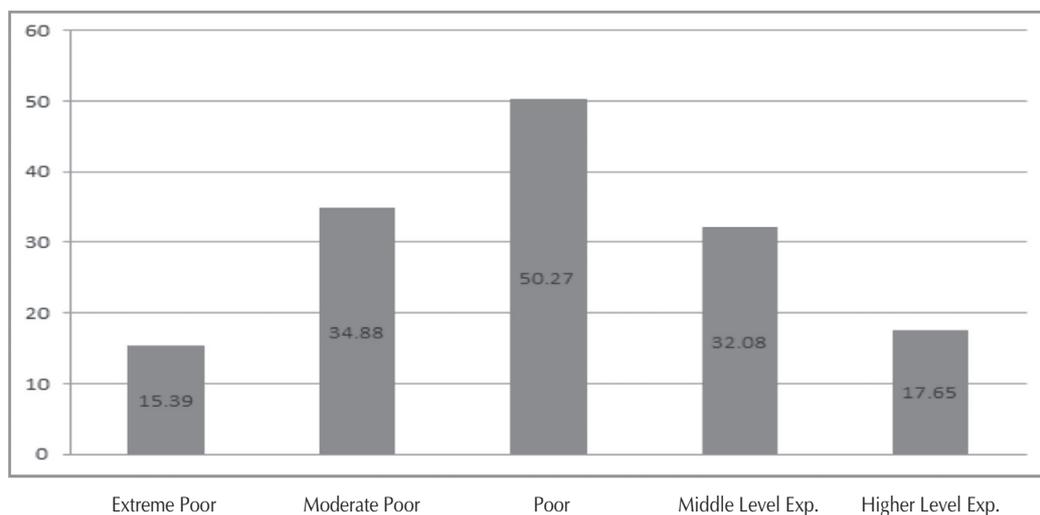
Table 26 Monthly Distribution of PDS income Subsidy to AAY/BPL rural households in Kerala in 2004-05

	Subsidy (Million Rupees)	Percentage	HHS percent
Extreme poor	28.19	15.39	9.73
Moderate poor	63.90	34.88	31.18
Poor	92.09	50.27	40.91
Middle level expenditure	58.76	32.08	33.68
Higher level expenditure	32.33	17.65	25.41
Total	183.18	100.00	

Source: NSSO Report on PDS and Other Sources Household Consumption 2004-05

The urban households with BPL or AAY ration cards obtained monthly subsidy of 42 million rupees in 2004-05. Of which more than 20 million rupees reached the poor whereas the corresponding figure among non-poor households was 21.66 million rupees. The quantum of subsidy gained by the higher monthly consumption expenditure classes was rupees 3.8 million. The table 27 contains details with regard to the distribution monthly subsidies to different types of households.

Figure 14 Distribution of PDS income subsidy among rural AAY/BPL households in Kerala in 2004-05 (percent)



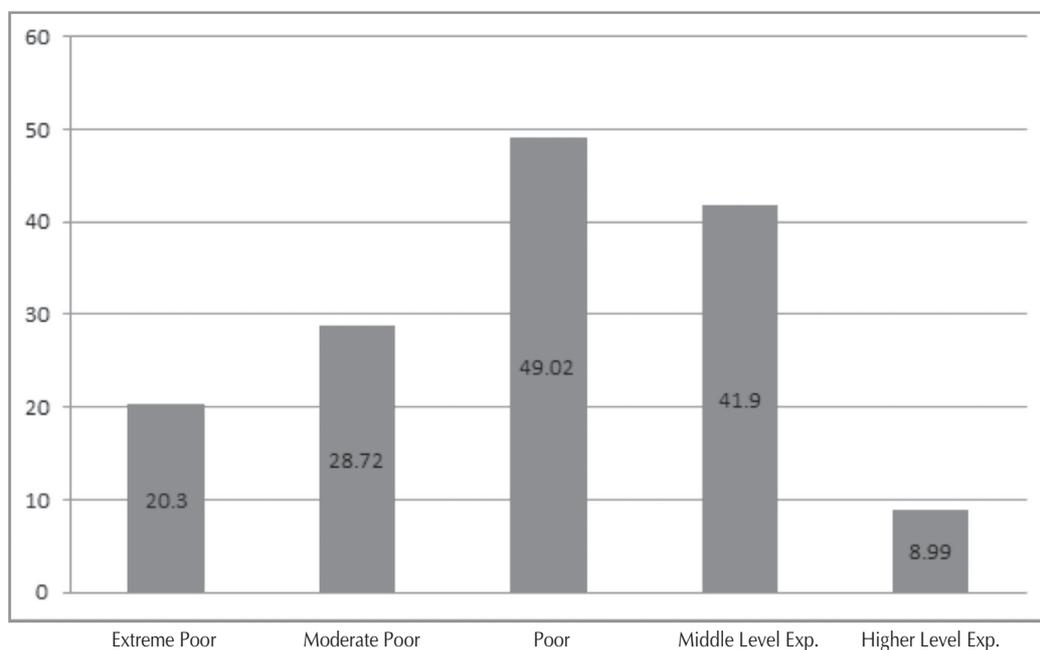
In 2009-10 of the total monthly subsidy of 971.17 million rupees distributed among rural households, 273.73 million rupees reached the poor. The subsidy obtained by the non – poor and higher monthly per capita consumption expenditure households were 697.44 million rupees and 286.63 million rupees respectively. (Table 28)

Table 27 Monthly Distribution of PDS income subsidy to BPL or AAY urban households in 2004-05

	Subsidy (Million Rupees)	Percentage distribution	HHS percent
Extreme poor	8.63	20.30	12.07
Moderate poor	12.21	28.72	24.63
Poor	20.84	49.02	36.70
Middle level expenditure	17.84	41.99	46.27
Higher level expenditure	3.82	8.99	17.04
Total	42.50	50.98	

NSSO: Report on PDS and Other Sources of Household Consumption in 2004-05

Figure 15 Distribution of PDS income subsidy among urban AAY/BPL households in Kerala in 2004-05 (%)



The urban households gained 269.85 million rupees as monthly subsidy from Public Distribution System in 2009-10. Of which 88.16 million rupees reached the poor and the corresponding figure among non-poor house holds was 181.69 million rupees. The subsidy obtained by the higher monthly consumption expenditure classes amounted 64.64 million rupees (table 29)

Table 28 Monthly distribution of PDS income subsidy in 2009-10 among rural households

MPCE households	Amount of subsidy (in Million Rupees)	Percentage Distribution
Extreme poor	126.46	13.02
Moderate poor	147.27	15.17
Poor	273.74	28.19
Middle level expenditure	410.81	42.30
Higher level expenditure	286.63	29.51
All classes	971.18	100.00

Source: NSSO Report on PDS and Other Sources of Household Consumption 2009-10

Figure 16 Distribution of PDS income subsidy among urban households in Kerala in 2004-05 (%)

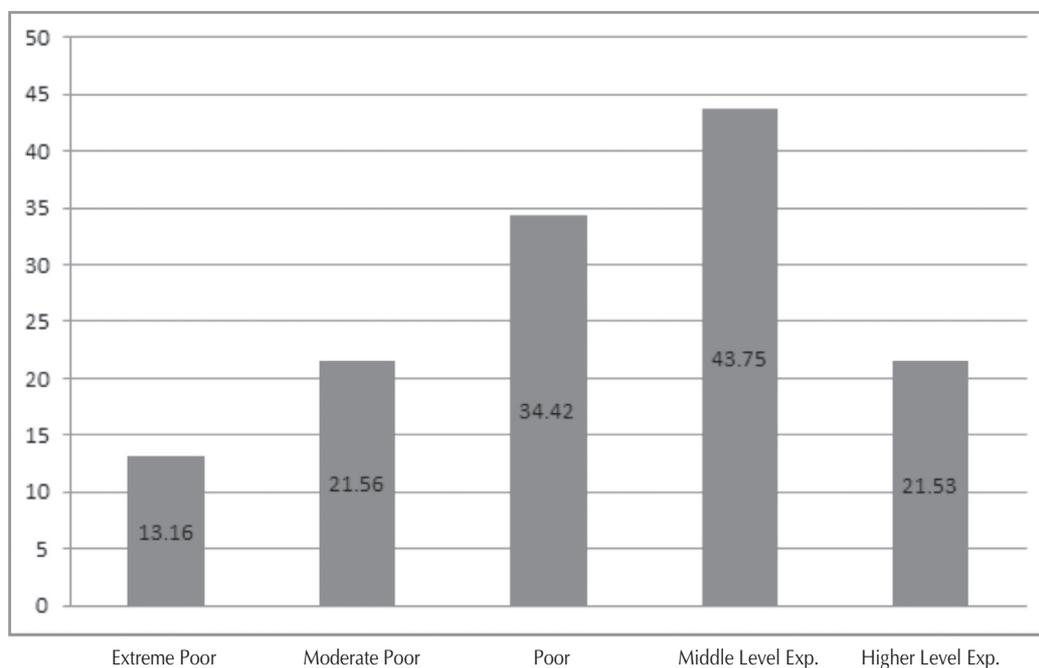


Table 29 Monthly distribution of PDS income subsidy in 2009-10 among urban households

MPCE households	Amount of subsidy	Percentage Distribution (in Million Rupees)
Extreme poor	43.14	15.99
Moderate poor	45.02	16.68
Poor	88.16	32.67
Middle level expenditure	117.05	43.38
Higher level expenditure	64.64	23.95
All classes	269.85	100.00

Source: NSSO Report on PDS and Other Sources of Household Consumption in 2009-10

Figure 17 Distribution of PDS income subsidy among urban households in Kerala in 2004-05 (%)

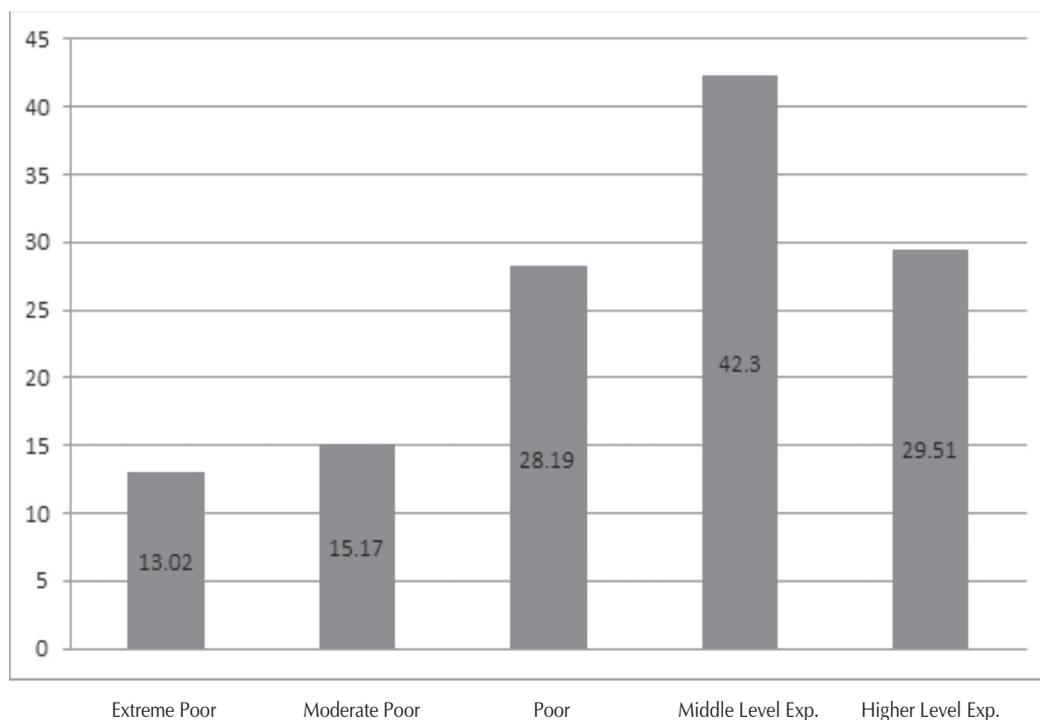


Figure 18 Distribution of PDS income subsidy among rural households in Kerala in 2009-10 (%)

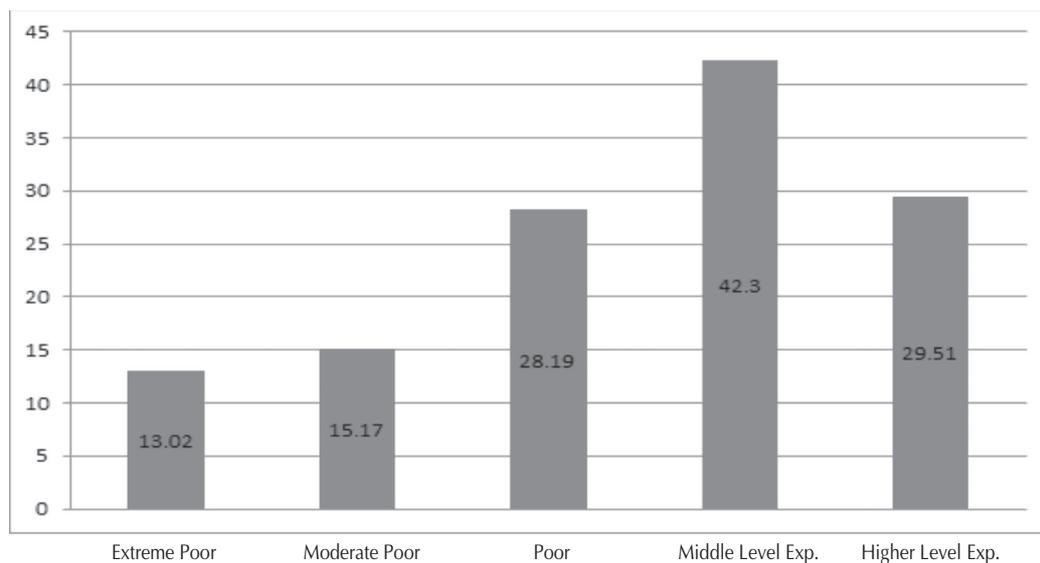
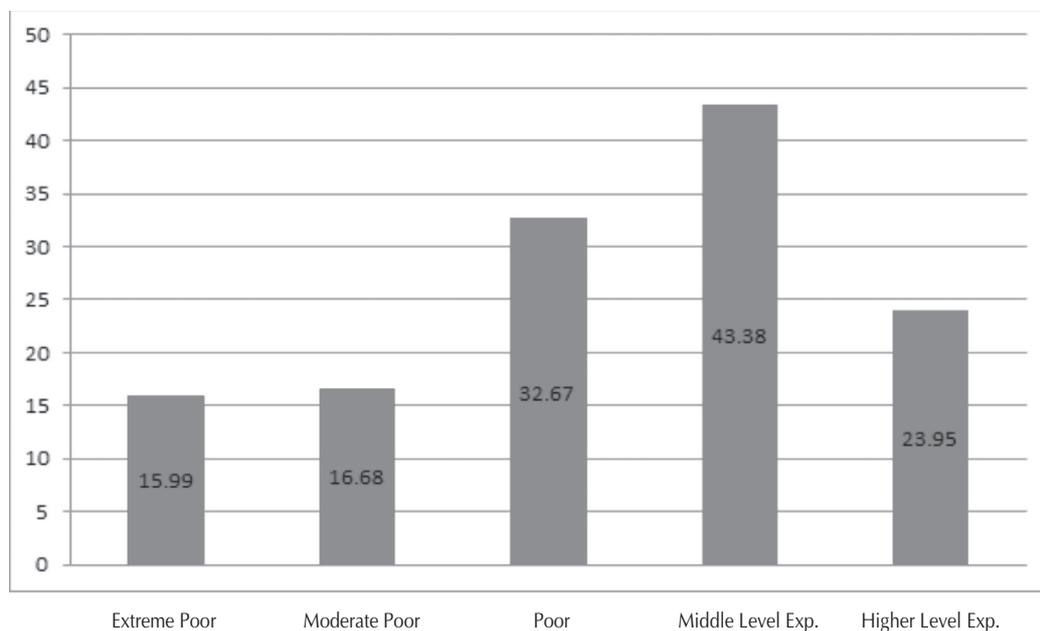


Figure 19 Distribution of PDS income subsidy among urban households in Kerala in 2009-10 (%)



The objective of targeting the PDS subsidy to the poor and vulnerable sections of the society is not fulfilled. Of the total PDS subsidy of 375.09 million rupees distributed in 2004-05 in the state, only 160.36 million rupees reached the poor. This means that around 60 percent of the PDS subsidy reached the above poverty line classes of expenditure. However, the average per household distribution of subsidy declined along with the higher expenditure classes.

The extreme rural poor households constituting around 6% of total rural households obtained more than 13% of rural subsidy. Whereas the moderate poor households comprising 20.68% of rural households gained 31.17% of rural subsidy. Around one fourth of the PDS subsidy reached the higher monthly per capita consumption expenditure households which constituted more than 40% of rural households. More than 55% of rural PDS subsidy reached the non-poor households constituting 73.50% of rural households in 2004-05.

Around two-third of the total PDS subsidy distributed among urban households in 2004-05 reached the above poverty line classes of expenditure. The extreme poor households in urban areas constituting around 5% of urban households of the state obtained 13.16% of urban PDS subsidy. The corresponding figures among moderate poor households were 11.68% and 21.56%.

In 2004-05, the BPL or AAY households obtained a monthly subsidy of 225.68 million rupees. Of this only 112.93 million rupees reached the poor implying a heavy leakage of half of the subsidy meant for distribution to the poor and vulnerable sections of the society.

In 2009-10, of the income subsidy of 1241.02 million rupees distributed in the state only 361.90 million rupees reached the poor. This implies that more than 70% of PDS income subsidy reached the non-poor classes of expenditure. For analysis the first two decile classes of expenditure in rural and urban areas are counted as poor. The first two decile classes of expenditure in rural and urban areas constitute 15.82% and 15.19% respectively of poor whereas the corresponding figure estimated by Planning Commission were 12.00% and 12.10%.

The per capita household distribution of subsidy from Public Distribution declined along with higher expenditure classes. The extreme rural poor constituting around 7% of rural households obtained 13.02% of PDS subsidy, whereas the moderate poor rural households comprising around 9% of rural households gained 15% of rural subsidy. Around one third of PDS income subsidy having distributed in rural area reached the higher expenditure classes which constituted around half of the rural population. At least 28.19% of rural PDS income subsidy reached the rural poor households whereas the corresponding figure among urban households was 32.67%. The extreme poor households in urban areas comprising around 7.05% of urban households of the state obtained around 16% PDS income subsidy.

The corresponding figures among moderate poor households were 8.14% and 16.68%. The higher monthly per capita consumption expenditure households in the urban areas amounting half of urban households gained one fourth of income subsidy having distributed in urban areas from PDS.

The total PDS income subsidy distributed in the state rose from 375.09 million rupees in 2004-05 to 1241.03 million rupees in 2009-10 implying a spectacular rise of 330%. The share of poor rose by 225.68% from 160.30million rupees to 361.90 million rupees during the same period. It is significant to note that the volume of subsidy distributed to the poor declined by around 14% from 42.75% in 2004-05 to 29.16% in 2009-10.

The above analysis of NSSO data on Public Distribution System in 2004-05 and 2009-10 proves that the PDS subsidy is not well targeted to the poor and vulnerable sections of the society. The major share of PDS subsidy reached the above poverty line classes of expenditure in rural and urban areas. Even the half of BPL or AAY subsidy reached the above poverty line classes of expenditure. However the per capita distribution of income subsidy from PDS declined along with higher monthly consumption expenditure classes.

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