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Devoted to Studies on Social Exclusion, Marginalised Groups and Inclusive Policies

Poverty in Karnataka: Caste and Regional Dimensions

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**Poverty in Karnataka:
Caste and Regional Dimensions**

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Foreword

Indian Institute of Dalit Studies (IIDS) has been amongst the first research organisations in India to focus exclusively on the development concerns of marginalised groups and socially excluded communities. Over the last twelve years, IIDS has carried out several studies understanding different aspects of social exclusion and discrimination against the historically marginalised social groups such as the Scheduled Castes, Scheduled Tribes, religious minorities, women and the disabled persons in India and other parts of the sub-continent.

The working paper on “Poverty in Karnataka: Caste and Regional Dimensions” examines the issues of poverty in the context of caste. This paper has tried to incorporate a rigorous investigation based on NSSO consumption expenditure. This study reflects on the situation of poverty across social and religious groups in Karnataka keeping in mind that the issue has not been dealt adequately in the past. The results of this paper show that poverty is high among the SC, STs and Muslims and they are over-represented in the low expenditure groups. The FGT estimates also show that the depth and relative deprivation is higher for these groups. This paper also attempts to study the contribution of each social and religious group in the overall poverty showing a substantially higher contribution by SC while comparing their household share. Their contribution is particularly high in Southern region and urban areas. The unexplained effect which is considered as the effect of discrimination is substantially high that does not explain the differences in probability of being poor between ‘HHC and SC’ and ‘HHC and Muslim’.

We hope that this Working Paper would help in generating awareness and further deliberation across members of the academic fraternity, students, researchers, activists, civil society organisations and policy-making bodies.

Sanghmitra S. Acharya
Director

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Poverty in Karnataka: Caste and Regional Dimensions

Ajaya K. Naik, Nitin Tagade and Chandrani Dutta*

1. Introduction

Karnataka is one of the developed states in the southern part of India with a geographically diverse population along with stark regional disparities (Vyasulu and Vani, 1997; Kurian, 2000; and Murgai et al. 2003). The Northern districts of the state are relatively poor as compared to that of southern districts (Murgai et al. 2003). The Raichur district in Karnataka is listed as the most backward districts in India (Chaudhuri and Gupta, 2009). The major reason for the backwardness of Northern Karnataka in contrast to the developed Southern belt is accorded to water scarcity because of low precipitation and lack of other perennial sources of water. It has certainly perpetuated vulnerability with respect to climate change in the region (NCDHR, 2013). The linkage between extreme environmental and poor living conditions is further becoming stronger due to the lack of productive assets, human capital, casualisation of employment, limited occupational mobility and high degree of underemployment (Biradar, 2012) which has often become causes and effects of poverty for the marginalised poor communities in times of extreme climatic conditions like droughts. Another fact which remained unfocussed in the state is that the backward regions were dominated by large population concentration of Scheduled Castes (SCs) and Muslims which has never been studied as the major cause of low development in the region. Therefore, poverty in Karnataka needs to be studied from the lens of low endowments among the marginalised, especially, increasing landlessness and marginal landownership among SCs. Even the Human Development

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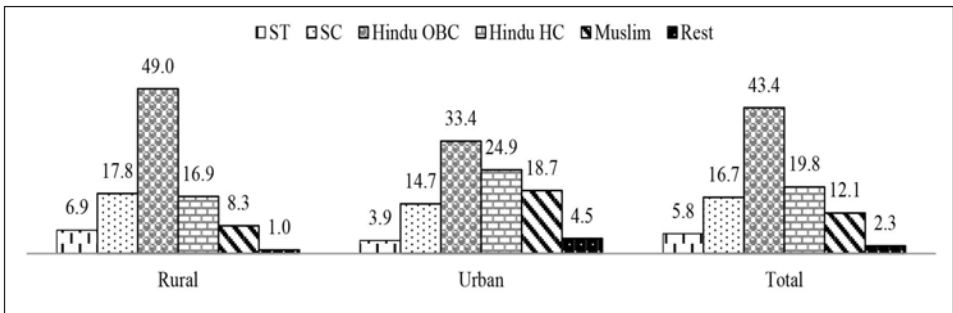
Report 2005 reported that majority of SC households owning land remain un-irrigated and thus unproductive adding to their miseries (GoK, 2006). All these factors in the purview of the changing climate pushed the marginalised population more into the vicious circle of poverty. Therefore, poverty among Dalits in Karnataka reflect how these communities remain far from the realm of development not only in terms of geographical distance (underdeveloped North comprising districts like Bijapur, Belgaum, Raichur and the developed South, comprising Mysore, Bangalore Urban), but also from the reach of state specific and centrally sponsored interventions, which has social and political connotations.

With this backdrop, the focus of this paper is to unlock the various dimensions of consumption expenditure and poverty level in the context of caste structure. In specific, we shall try to understand the pattern of consumption expenditure, incidence of poverty, strength of factors influencing poverty and risk of being poverty across socio-religious groups on the one hand and on the other hand, we shall provide the contribution of different social groups in the overall poverty of the state. The estimates have been analysed on the basis of Consumer Expenditure data obtained from National Sample Survey of 68th round conducted during 2011–12. It is to be noted that both poverty and income inequality have been estimated on the basis of Monthly Per Capita Consumption Expenditure (MPCE). The poverty ratios are estimated on the basis of official poverty line by using Tendulkar method and the consumption based on Mixed Recall Period (MRP). This working paper is divided into eight sections. The background of this paper is illustrated in the first section while sections II illuminates the share of population and social and economic background of socio-religious groups. In section III, we tried to understand the pattern of average MPCE across socio-religious groups by various dimensions. In sections IV and V, incidence and spread of poverty is discussed across social groups and regions in the state followed by examining the heterogeneity in terms of economic classes, respectively. In section VI, the attempt has made to examine relative strength of the factors determining the poverty of various social groups. In section VII, inequality and its decomposition is discussed following a conclusion in the last section of the paper.

2. Demography, Economic and Non-Economic Parameters

The socio-religious groups in Karnataka form six groups namely, Scheduled Tribes (STs), Scheduled Castes (SCs), Hindu Other Backward Castes (HOBC), Hindu High Caste (HHC), Muslims and the residual called here as Rest. The demographic profile of different socio-religious groups in Karnataka is presented in Figure 1. The share of HOBC constitutes the highest 43.4 per cent of the population in the state followed by about 20 per cent HHC, 17 per cent SCs, 12 per cent Muslims and about 6 per cent STs. In both rural and urban areas, HOBCs and HHCs dominate with a two-third in the rural areas and 58 per cent in urban areas. The Muslim population is 18.7 per cent in urban areas and 8.3 per cent in the rural areas.

Figure 1: Distribution of Population across Socio-religious Groups in Karnataka



Source: NSSO 68th round on Consumption Expenditure, 2011-12

The economic and non-economic features of the households across socio-religious groups are presented in Table 1. In Karnataka, total households are 13342 thousand. Of which, highest 43.7 per cent belongs to HOBC, 21.5 per cent HHC, 16.4 per cent SC, 10.5 per cent Muslims and 5.5 per cent STs. Rural share of the households is relatively high among ST, HOBC and SCs.

The household size is relatively high among Muslims and HOBCs and it is low among ST, SC and HHCs. The monthly per capita consumption expenditure (MPCE) in Karnataka is Rs. 1940 with large variations across socio-religious groups. It is substantially high among HHC with Rs. 2784 and the lowest Rs. 1354 among STs followed by Rs. 1489 among SCs and Rs. 1796 among HOBCs. The landownership is substantially high in rural areas among STs

and SCs. However, the share of households among SCs and STs also suffers from the marginal land ownership with almost 80 per cent and 70 per cent of the households respectively fall under the landless and marginal land holding. The share of households with an adult member having highest educational level above the higher secondary level is also low to about 11 per cent among SCs and STs as compared to 36.2 per cent among HC households.

Table 1: Socio-economic Features of the households across Socio-religious Groups in Karnataka

Characteristics	ST	SC	HOBC	HHC	Muslim	Others	Total
No. of Households (HH) (in 000)	730.8	2194.4	5832.8	2870.1	1398.2	315.7	13342.0
Share of Households (%)	5.5	16.4	43.7	21.5	10.5	2.4	100.0
Rural Share of Households (%)	73.8	67.6	68.5	48.2	46.4	25.7	61.0
Average HH size (in number)	5.3	5.2	5.5	5.2	6.3	5.3	5.5
Average MPCE in current price (in Rs.)	1354	1489	1796	2784	1668	3620	1940
Share of HH own land in rural areas (in %)	92.8	96.3	94.1	88.9	86.1	97.5	92.9
Share of HH with landless and marginal land owned in rural areas (in %)	69.5	79.5	64.2	61.0	79.4	85.6	68.2
Share of HH having any adult literate (in %)	63.0	72.4	79.0	76.1	74.0	95.2	76.0
Share of HH with highest education level is high level (in %)	11.0	11.1	19.8	36.2	16.1	41.1	21.5

Source: NSSO 68th round on Consumption Expenditure, 2011-12

3 Consumption Expenditure

The average MPCE across socio-religious groups in Karnataka for 2011-12 is presented in Table 2. In the state, average MPCE is Rs. 1940 at the aggregate level which varies between the lowest Rs. 1395 in rural areas and the highest Rs. 2899 in urban areas. In terms of average MPCE, Karnataka is placed well above the national average including both in rural and urban areas. The stark variation in average MPCE is also evident at the regional level. The four NSSO regions are classified into Northern and Southern region which indicates that the average MPCE is almost double in the latter region as compared to the former region. The households belonging to Northern region have Rs.

1300 average MPCE while it is Rs. 2520 in Southern region.

The average MPCE by socio-religious groups reveals wide disparity. The lowest average MPCE is Rs. 1354 among STs and the highest is Rs. 2784 among HHCs. The average MPCE among SCs is above the state average i.e. Rs. 1489, but it is lower than any other socio-religious groups except the STs. The average MPCE among Muslim households is also much lower than Rs. 1796 among HOBCs.

Table 2. Average MPCE across Socio-religious Groups in Karnataka (In Rs.)

Socio-religious Groups	Place of Residence		Region		Total
	Rural	Urban	North Region	South Region	
ST	1192	1867	1192	1638	1354
SC	1282	1931	1177	1800	1489
HOBC	1476	2620	1328	2099	1796
HHC	1398	4445	1438	4402	2784
Muslim	1239	2001	1212	2399	1668
Total*	1395	2899	1300	2520	1940
All India	1269	2475			1645

Source: NSSO 68th round on Consumption Expenditure, 2011-12

Note: * All households including residual.

The variations in average MPCE across socio-religious groups are also starkly netted at the regional level. The average MPCE across socio-religious groups in Northern region is lower than the Southern region. In Northern region, average MPCE among SC households (Rs. 1177) is the lowest followed by Rs. 1192 among STs and the highest is Rs. 1438 among HHC followed by Rs. 1328 among HOBCs and Rs. 1212 among Muslims.

The regional variations are further affected by the rural urban divide and the ranking of the socio-religious groups in terms of average MPCE disturbs (see, Table 3). In Northern region, the average MPCE is Rs. 1179 in rural areas and Rs. 1618 in urban areas. In rural areas, variation in average MPCE across socio-religious groups is small with the lowest average MPCE Rs. 1114 among Muslims followed by Rs. 1140 among SCs and Rs. 1158 among STs. In

fact, the highest ranking of average MPCE also shifts to HOBCs with Rs. 1216 followed by Rs. 1188 among HHC. The average MPCE in urban areas shows a similar pattern in accordance with the aggregate level indicating the lowest among STs (Rs. 1300) and the highest among HHC (Rs. 2046).

In Southern region, the average MPCE is Rs. 1649 in rural areas (which is slightly higher than that of urban areas of the Northern region of Karnataka) and Rs. 3630 in urban areas (which more than double of that of in urban Northern region) (see, Table 3). Unlike rural Northern region, the variations in average MPCE across social groups are not smaller and also do not deviate from the aggregate pattern. The average MPCE in rural Southern region is the lowest. It is Rs. 1252 among STs followed by SCs and HOBCs and the highest is among HHC followed by among Muslims. In urban Southern region, the lowest average MPCE is Rs. 2275 among SCs followed by Rs. 2642 among Muslims and Rs. 2818 among STs, but the highest is Rs. 5735 among HHCs followed by Rs. 3017 among HOBCs.

Table 3: Average MPCE by Regions in Rural and Urban Karnataka (In Rs.)

Socio-religious Groups	Northern Region		Southern Region	
	Rural	Urban	Rural	Urban
ST	1158	1300	1252	2818
SC	1140	1304	1467	2275
HOBC	1216	1729	1670	3017
HHC	1188	2046	1910	5735
Muslim	1114	1333	1680	2642
Total*	1179	1618	1649	3630

Source: NSSO 68th round on Consumption Expenditure, 2011-12

Note: * All households including residual.

Another dimension to this, the average MPCE across socio-religious groups by the household type is presented in Table 4. The household type shows the economic status of the households depending on their source of income. The results are particularly estimated by combining both rural and urban due to the low sample size. The results show that the lowest average MPCE is Casual labour households followed by Self-employed households. The highest MPCE is among Other and Regular Salaried households. The STs, SCs, OBCs and Muslims have the lower MPCE than the average of the household type. The

exception to this is the causal labour households where these households have higher MPCE than the average.

Table 4: Average MPCE by household type in Karnataka (In Rs.)

SRG	SE	Regular	CL	Others	Total
ST	1416	2243	1064	2251	1368
SC	1492	2169	1224	1759	1505
HOBC	1699	2683	1226	2329	1822
HHC	1839	4894	1166	4573	2867
Muslim	1636	2267	1198	2811	1688
Total*	1704	3280	1200	3173	1979

Source: NSSO 68th round on Consumption Expenditure, 2011-12

Note: 1. * All households including residual.

2. Abbreviations indicates SE- Self-employed in agriculture and non-agriculture in rural areas and self-employed in urban areas, RS- Regular Salaried in both rural and urban areas, CL- Casual labours in agriculture and non-agriculture in rural areas and casual labour urban areas; and Others include households which does not have any income economic activities.

4. Incidence of Poverty

The earlier studies have largely dealt with the regional dimensions of poverty and other development indicators in Karnataka as discussed in the introductory section of this paper. Contrary to the earlier studies, we extend our analysis further to understand poverty across socio-religious groups. As mentioned earlier, we re-classify the four NSSO regions into two regions namely, Northern Karnataka and Southern Karnataka due to the low sample size. The incidence of poverty is estimated by using the state specific official poverty line (PL) using Tendulkar Method (Table 5). In the State, poverty is 21.2 per cent in 2011-12 with substantially high incidence in rural areas (24.5 per cent) as compared to the urban areas (15.3 per cent). While comparing with poverty levels at the national level, it is relatively low in Karnataka, particularly in rural areas. Nevertheless, urban poverty in the state is marginally higher than that of national level. In the state, three groups namely SCs, STs and Muslims have substantially high incidence of poverty as compared to that of HHC and HOBC. This is also true in the case of both rural and urban areas. The poverty among SCs, STs and Muslims accounts for 33.2 per cent, 31.5 per cent and 26.5 per cent, respectively. The proportion of poor among HOBC and HHC is relatively low, particularly in urban areas. It

is 17.8 per cent among HOBC and 13.7 per cent among HHC in the state. The poverty in rural areas is 20 per cent and 19 per cent respectively and 11.6 and 7 per cent respectively in urban areas.

The regional disparity in poverty is a crucial issue in the state where the incidence is about four times higher in the Northern region as compared to Southern region. Poverty is equally high in rural and urban areas of Northern region. In both the regions, poverty is the highest among both SCs and STs. Among SCs, the poverty is about 51 per cent in Northern region and 16 per cent in southern region with relatively higher in rural areas as compared to that of urban area. Among STs, it is 40 per cent and 16.5 per cent respectively in Northern and Southern regions. The poverty among STs is substantially high in urban areas of Northern region. Among Muslims, it is 38 per cent in Northern regions as compared to that of 8 per cent in Southern regions. On the other hand, poverty among HHC is 22.5 per cent in Northern region as compared to 3.2 per cent in Southern region. Thus, the poverty is relatively high among three major groups namely SCs, STs and Muslims. However, a huge disparity exists on the basis of regions in the state. Therefore, we further analyze the situation of inter-group poverty situation in the context of regional divide.

Table 5: Incidence of Poverty by socio-religious group and NSS region in Karnataka

Socio-religious group	All			Northern Region			Southern Region		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
ST	30.8	33.7	31.5	36.2	52.6	40.1	21.2	2.1	16.5
SC	37.1	25.0	33.2	50.9	48.9	50.5	19.0	11.9	16.0
HOBC	20.2	11.6	17.8	30.9	29.8	30.7	12.2	3.5	9.5
HHC	19.2	7.1	13.7	23.9	19.1	22.5	7.8	0.7	3.2
Muslim	30.0	23.8	26.5	37.1	39.4	38.1	5.1	8.9	8.0
Rest	14.8	4.2	7.2	38.9	28.9	29.7	14.1	0.5	4.7
Total	24.5	15.3	21.2	34.3	33.9	34.2	13.1	4.7	9.4
India	25.7	13.7	21.9						

Source: NSSO 68th round on Consumption Expenditure, 2011-12

Note: The Northern region is the Inland Northern region while remaining three regions namely Coastal & Ghat, Inland Eastern and Inland Southern regions were combined for generating Southern region.

The poverty ratio also differs by household type (Table 6). The lowest poverty is among HHC households among all the household types. The HOBCs exhibits the second lowest position, but comparing with HHCs, the differences are substantial. In most of the household type, the highest poverty is encountered by SC, STs and Muslims. The casual labour household have the highest poverty ratio (35.7 per cent) which is more than four time higher than that of regular salaried households (8.1 per cent) and more than double of that self-employed households (19.9 per cent). Among casual labour households, the highest poverty is among STs (50.6 per cent) followed by SCs and Muslims (more than 37 per cent for both). Among self-employed households, the highest poverty is encountered by the SC households (37.4 per cent) followed by Muslims (25.3 per cent) and STs (19.5 per cent, and among regular salaried, the poverty is almost double among SCs (15.7 per cent) that the average level (8.1 per cent).

Table 6: Incidence of Poverty by Household Type across Socio-religious Groups in Karnataka

SRG	SE	Regular	CL	Others	Total
ST	19.5	11.9	50.6	13.8	31.6
SC	37.4	15.7	37.8	25.1	32.9
HOBC	17.7	3.9	31.2	18.5	17.6
HHC	14.8	6.2	29.4	4.9	13.4
Muslim	25.3	18.4	37.5	9.3	26.4
Total [^]	19.9	8.1	35.7	13.4	20.9

Source: NSSO 68th round on Consumption Expenditure, 2011-12

Note: ^ All households including residual.

5. Heterogeneity among Poor

In the previous sections, substantial variations were pointed out in terms of average MPCE and poverty across socio-religious groups in Karnataka. The variations are further profound after observing the different layers of parameters such as regions, place of residence and household type. However, the poor themselves are not the homogeneous category. They are bound to be heterogeneous because of the different layers of economic groups within the broader definition of well-being. Therefore, we shall try to unfold heterogeneity among the poor by classifying total population into six groups based on the poverty line . These groups include:

1. Extremely Poor [includes the population having MPCE upto 0.75 times of poverty line (PL)]
2. Poor [includes the population having MPCE between 0.75 times of PL to the PL]
3. Marginally Poor [includes the population having MPCE between PL to 1.25 times of PL]
4. Vulnerable [includes the population having MPCE between 1.25 times of PL to 2.0 times PL]
5. Middle Income [includes the population having MPCE between 2.0 time of PL to 4.0 times PL]
6. High Income [includes the population having MPCE above 4.0 time of PL]

Based on the above mentioned classification, the results of population distribution are presented in Table 5. In Karnataka, about 4 per cent of the total population is extremely poor whose consumption expenditure is less than 0.75 times of PL (Table 7). The proportion of this is higher for urban areas (5.5 per cent) which explains the extreme inequality in urban centers of the state. The proportion of poor population whose consumption expenditure is between 0.75 times of PL to PL accounts for 17 per cent of the total population. This accounts for about 22 per cent in rural areas and about 10 per cent in urban areas. There are some households who are marginally escaped above the official poverty line whose consumption expenditure could be more than 1.25 times more than the PL and which may fall below the PL due to small variation in the uncontrolled factors. The share of these marginally escaped poor population is much higher than those who are evenhanded poor accounting for 18.7 per cent. Thus, a large chunk of the population is out of the purview of the poverty line. These altogether becomes 39.6 per cent of the total population in the state and the share is substantially higher in rural areas to 47.2 per cent and 26 per cent in urban areas. There is another dimension to this, and that is the non-poor population who are also not homogenous in nature. There is a segment of population who barely live in the comfort zone whose consumption expenditure is between 1.25 times to 2 times of PL. This segment is vulnerable to fall below the poverty line or close to poverty because of any variation in the economy. The proportion of population is 33 per cent in state and 36.5 per cent in rural area and 27.6 per cent in urban area. The middle income accounts for about 20 per cent

of the population with about 31 per cent in urban area and 12.4 per cent in rural. The last richest group whose consumption expenditure is more than 4 times than the poverty line accounts for about 8 per cent with a substantial proportion in urban area (15.7 per cent) and 2.8 per cent in rural area.

Table 7: Distribution of Population by different Expenditure Groups in Karnataka (In %)

Level of Consumption Expenditure	Rural	Urban	Total
Extremely Poor (up to 0.75 PL)	2.8	5.5	3.9
Poor (0.75 PL to PL)	21.7	9.8	17.0
Marginally Poor (PL to 1.25 PL)	23.7	10.7	18.7
Marginally Poor and Below (< 1.25 PL)	47.2	26.0	39.6
Vulnerable (1.25 PL to 2.0 PL)	36.5	27.6	33.0
Middle Income (2.0 PL to 4.0 PL)	12.4	30.7	19.5
High Income (>4.0 PL)	2.8	15.7	7.8
Total	100.0	100.0	100.0

Source: NSSO 68th round on Consumption Expenditure, 2011-12

The social and religious dimension of this heterogeneity is another layer of deprivation which is foundational to the discrimination faced by certain identity groups. The distribution of population by expenditure groups across socio-religious groups is presented in Table 8 which shows that the proportion of extremely poor is the highest. It is 6.7 per cent among SCs which is almost four time higher than HHC households (which has the lowest proportion of extremely poor population.) The share of extremely poor population is also higher. It is 5.7 per cent among Muslims followed by 3.6 per cent among HOBCs and 2.6 per cent among STs. The next expenditure groups have a substantial share of SCs, STs, Muslims and HOBCs population is either poor or marginally poor. Therefore, these three groups are overrepresented by ST population (56.5 per cent), SCs (50.6 per cent) and Muslims (49.4 per cent); while the lowest is belonging to HHC and HOBCs (30.1 per cent and 36.4 per cent, respectively).

Table 8: Distribution of Population by Expenditure Groups across Socio-religious Groups in Karnataka

Expenditure Groups	ST	SC	HOBC	HHC	Muslim	Total*
Extremely Poor (up to 0.75PL)	2.6	6.7	3.6	1.7	5.7	3.9
Poor (0.75PL to PL)	29.0	26.2	14.0	11.6	20.7	17.0
Marginally Poor (PL to 1.25PL)	24.9	17.7	18.8	16.8	23.0	18.7
Marginally Poor and Below (< 1.25 PL)	56.5	50.6	36.4	30.1	49.4	39.6
Vulnerable (1.25PL to 2PL)	28.6	31.2	37.2	29.8	29.5	33.0
Middle Income (2PL to 4 PL)	13.2	15.1	21.2	20.1	16.4	19.5
High Income (>4PL)	1.8	3.1	5.2	20	4.7	7.8
Total	100	100	100	100	100	100

Source: NSSO 68th round on Consumption Expenditure, 2011-12

Note: * All households including residual.

The unequal representation as per the social and religious status may also be explained by representation of the population as compared to their total population in the state (Table 8). The first two groups i.e. extremely poor and poor have substantially high proportion of SC and ST population as compared to their total population in the state. For example, the highest 39.4 per cent of the HOBCs, about 29 per cent of SCs, and 18.2 per cent of Muslims are extremely poor. However, their share of population is much higher in the case of HOBCs and HHCs (43 per cent and 20 per cent, respectively) while the share of total population of SCs and Muslims is much less to 16.6 and 12.3 per cent, respectively. Similarly, the trend is equally applicable in the case of poor group, and only HOBCs have marginally higher representation in Marginally Poor group. Thus, the SCs and Muslims are over-represented among extremely poor and poor group whereas HOBCs are marginally over-represented in marginally poor group and HHCs are well under-presented in all the groups. On contrary to this, the HHCs have been extremely over-represented in the last group i.e. high income group. HOBCs are over represented in Middle income group on the one hand and on the other hand, SCs, STs and Muslims are under-represented in both middle and higher income group.

Table 9: Distribution of Population across Socio-religious Groups by Expenditure Groups in Karnataka

Expenditure Groups	ST	SC	HOBC	HHC	Muslim	Total*
Extremely Poor (up to 075PL)	3.8	28.8	39.4	8.9	18.2	100.0
Poor (0.75Pl to PL)	9.8	25.5	35.4	13.7	14.9	100.0
Marginally Poor (PL to 1.25PL)	7.7	15.8	43.2	18.0	15.2	100.0
Marginally Poor and Below (< 1.25 PL)	8.2	21.3	39.5	15.2	15.4	100.0
Vulnerable (1.25PL to 2PL)	5.0	15.7	48.4	18.0	11.0	100.0
Middle Income (2PL to 4 PL)	3.9	12.9	46.6	20.6	10.4	100.0
High Income (>4PL)	1.3	6.6	28.6	51.1	7.4	100.0
Total	5.7	16.6	43.0	20.0	12.3	100.0

Source: NSSO 68th round on Consumption Expenditure, 2011-12

Note: * All households including residual.

6. Probability of Being a Poor

In the previous section, we found that the incidence of poverty substantially differs across regions and socio-religious groups. The differential in the incidence of poverty is the outcome of various attributes in terms of socio-economic factors that determine the levels of poverty. The importance of the factors would differ from person to person and region to region depending on the context. Therefore, in this section, we attempt to understand different factors associated with the household that significantly influence their probability of being poor by estimating logit equation (Table 9). The logit model provides an understanding of how the likelihood of being poor (i.e., being below the poverty line) would change in response to a change in the value of a poverty influencing variable. These changes to the probabilities (or likelihood) associated with a variable refers to the change in the outcome probability of the other variables remaining unchanged. For discrete variable, the unit change in the value of a variable refers to a move from a situation in which the variable takes the value unity to a situation in which the variable takes the value zero, the value of the other variables remaining unchanged. In this model, all the independent variables are discrete in nature except the area of land possession.

Table 9: Probability of being a poor household in Karnataka

	dy/dx	Std. Err.	z	P>z
ST	0.095	0.019	4.92	0.00
SC	0.085	0.015	5.67	0.00
HOBC	0.033	0.013	2.51	0.01
Muslim	0.061	0.015	3.97	0.00
Adult literate in HH	-0.009	0.012	-0.71	0.48
Rural	-0.054	0.010	-5.65	0.00
highest education of HH members low*				
highest education of HH members medium	-0.040	0.013	-3.00	0.00
highest education of HH members high	-0.110	0.012	-8.93	0.00
Region North	0.132	0.009	14.36	0.00
Regular salaried HH*				
Self-employed HH	0.046	0.011	4.33	0.00
Casual labour HH	0.099	0.015	6.45	0.00
Others HH	-0.006	0.015	-0.39	0.70
Land area possessed	-0.004	0.003	-1.61	0.11

Note: * reference group

The marginal probabilities are reported in Table 3 showing that after controlling the other factors, caste and religion significantly increased the probability of being poor ST, SC, HOBC and Muslim households, compared to their HHC counterparts. In other words, compared to the HHC households, households from all other social groups were more likely to be poor even after equalizing for non-caste/religious attributes. For example, the probability of being poor was increased by 9.5 percentage points for a ST household, 8.5 percentage points for a SC household and six percentage points for a Muslim household over that of a HHC household. Furthermore, the results show that several poverty reducing factors impacted differently in reducing poverty that includes: a household living in a rural areas would decline poverty by 5.4 percentage points as compared to a household in urban areas, having highest education level of any member in the households is medium and higher level of education would decline the poverty by 4 and 11 percentage points, respectively as compared to that of a household having any member with

low educational level, living in Northern regions of the state would increase the poverty by 13 percentage points as compared to a household living in Southern region, a household of self-employed and casual labour would have 4.6 and 10 percentage points higher poverty as compared to that of salaried household.

6.1. Differences in the Likelihood of Being poor: Attributes Versus Unexplained Effects

The preceding section showed that the probability of being poor is higher among HOBC, Muslims, SCs and STs as compared to the HHC counterpart. The lowest probability of a being poor for HHC can be attributed to the advantage they enjoy in terms of asset endowment (i.e. asset ownership) that helps them to come out of the poverty trap. In addition to this, the partial reason of the lowest probability of being poor for HHC may also be attributed to the advantage of high returns on the assets like education, land possession, place of residence, region. For example, a high level education of adults in a household would result in a lower probability of being poor for all households, but this effect would be stronger for HHC as compared to the household of other groups like SC, ST, Muslim and HOBC.

As observed in the preceding section, the likelihood of a being poor is smaller for HHC households as compared to that of SC, ST, Muslims and HOBCs in Karnataka. This could be due to the differences in either the asset endowments or the rate of returns on the assets. The differences in the asset endowments are the outcome of the unequal ownership over previous generations while the differences in the rate of returns show the negative impact of the discrimination based on the social identity of the household. Following this, the differences in the probability of a being poor between HHCs and other social groups would be explained in terms of how much is the contribution of the asset ownership and rate of returns on the assets. Since the attributes as well as coefficients of both the groups are different, therefore it is necessary to evaluate the attributes that influence the probability of being poor by using common as well as respective coefficient of both the groups. When the attributes are evaluated at the common coefficient of both the groups, the differences in the probability would be due to the differences in the asset ownership i.e., explained difference. This is called as the explained difference

while the remaining difference is the residual or unexplained difference . Table 10 shows that more than 12 per cent to 25 per cent of the difference between HHC and SC households in their respective proportion of poor households is explained by difference in the asset endowments. The remainder (75 per cent to 87.5 per cent) could not be explained by the asset endowment and therefore it is plausibly attributed to differences in rate of returns between HHC and SCs.

Table 10: Attributes versus unexplained effects in Explaining differences in the likelihood of being a poor household

	HHC Versus SC		HOBC Versus SC		HHC Versus Muslim	
	Coef.	Share (%)	Coef.	Share (%)	Coef.	Share (%)
Raw	-0.140	100	-0.120	100	-0.120	100
@first Group Coefficients						
Attributes Effect	-0.017	12.5	-0.053	44.0	-0.032	26.7
Unexplained Effect	-0.122	87.5	-0.067	56.0	-0.088	73.3
@Second Group Coefficients						
Attributes Effect	-0.035	24.9	-0.053	43.9	-0.070	58.4
Unexplained Effect	-0.105	75.1	-0.068	56.1	-0.050	41.6

Source: Author's calculations based NSSO 68th round on Consumption Expenditure

Note: The First Group refers to HHC and HHC and the second group refers to SC and Muslim in respective coloumn

7. Contribution to and Risk of Poverty

In section II, we have estimated the incidence of poverty by using the official poverty line for Karnataka. It is also known as Head Count Ratio (HCR). However, the problem with the HCR is that it does not consider the depth of poverty. In other words, the depth of poverty indicates the distance of MPCE of a poor household from the poverty line. The other important aspect of the poverty is the relative poverty, inequality between the poor, and decomposition of poverty by groups. The index proposed by Foster, Greer and Thorbecke (1984) incorporates all these aspects of poverty. The technical aspect of the estimation of the contribution to poverty and risk of poverty is

illustrated here based on Barooah et al. 2015.

Suppose that a population of N households can be subdivided into K subgroups (indexed, $k=1\dots K$) with N_k households in each subgroup. Then by the decomposability property, the aggregate FGT index can be written as the weighted average of the FGT index for each group.

$$FGT(\alpha) = \sum_{k=1}^K \left(\frac{N_k}{N} \right) FGT^k(\alpha)$$

Where $FGT(\alpha)$ is the index calculated over all the households, $FGT^k(\alpha)$ is the index calculated over households in group k ($k=1\dots K$), and α is the parameter of the index.

The *percentage contribution* that group k makes to overall poverty is defined as:

$$\frac{\left[\frac{N_k}{N} \times FGT^k(\alpha) \right]}{FGT(\alpha)} \times 100$$

The *risk of poverty* of group k , denoted ρ_k , is defined as the ratio of the group FGT value to the overall FGT value:

$$\rho_k = \frac{FGT^k(\alpha)}{FGT(\alpha)}$$

$\rho_k > 1$ implies that poverty in group k is greater than poverty in the population; conversely, $\rho_k < 1$ implies that poverty in group k is less than poverty in the population.

Table 11 and Table 12 show the per cent contribution of the overall poverty by socio-religious groups in Karnataka. The FGT index is referred as $FGT(\alpha)$ for a parameter $\alpha \geq 0$. When $\alpha=0$, $FGT(0)$ is the HCR—it measures the proportion of households that are poor; when $\alpha=1$, $FGT(1)$ is the aggregate poverty gap; and when $\alpha=2$, $FGT(2)$ incorporates relative deprivation (as measured by inequality among the poor) along with the head count and the aggregate poverty gap. The result shows that the largest contribution to poverty in Karnataka, irrespective of whether poverty is measured by the HCR ($\alpha=0$), or by the HCR and the depth of Poverty ($\alpha=1$), or by the HCR and the depth

of poverty and relative deprivation ($\alpha=3$) – was made by HOBC households i.e., more than one-third of the overall poverty is contributed by this group in the state which is even higher in the case of rural areas to more than 40 per cent. The next largest contributor to poverty was SC households i.e., more than one-fourth of the overall poverty with marginally higher contribution in rural areas. The contribution of the poverty by SCs is 26.2 per cent on the HCR but it increased to 33.6 per cent as the depth of poverty and relative poverty is taken into account. This is also true in both rural and urban areas. On the other hand, the contribution of poverty by STs and HHC is the lowest with declining pattern as the measure moves from $\alpha=0$ to $\alpha=2$. In the case of Muslims, the contribution of poverty is substantially high to about 29 per cent, but it declines to 27 per cent if the depth of poverty gap and relative deprivation is considered ($\alpha=2$).

Table 11: Percentage contribution by different socio-religious groups to overall poverty

Socio-religious group	Rural Households				Urban Households				All Households			
	$\alpha=0$	$\alpha=1$	$\alpha=2$	Share (%)	$\alpha=0$	$\alpha=1$	$\alpha=2$	Share (%)	$\alpha=0$	$\alpha=1$	$\alpha=2$	Share (%)
ST	8.7	7.3	5.2	6.6	8.5	7.6	6.0	3.7	8.7	7.4	5.6	5.5
SC	26.9	29.0	36.6	18.2	24.1	27.0	29.3	13.6	26.2	28.3	33.6	16.4
HOBC	40.3	42.6	42.6	49.1	25.4	23.2	23.4	35.3	36.4	35.8	34.7	43.7
HHC	13.3	12.8	10.2	17.0	11.6	12.4	12.5	28.5	12.8	12.6	11.1	21.5
Muslim	10.1	8.3	5.3	8.0	29.2	28.5	27.4	14.4	15.1	15.3	14.5	10.5
Rest	0.6	0.1	0.0	1.0	1.2	1.5	1.3	4.5	0.8	0.6	0.6	2.4

Source: Author's calculations based NSSO 68th round on Consumption Expenditure

Note: When $\alpha=0$, FGT(0) is the HCR—it measures the proportion of households that are poor; when $\alpha=1$, FGT(1) is the aggregate poverty gap; and when $\alpha=2$, FGT(2) incorporates relative deprivation (as measured by inequality among the poor) along with the head count and the aggregate poverty gap.

Table 12 shows the percentage contribution to poverty by socio-religious groups in Northern and Southern regions of Karnataka. The results provide ample evidence to support Dr. Ambedkar's demand for the separate settlement for SCs. In a conference at Nagpur in 1942, he demanded separate settlement for the SCs because of the discriminatory behavior of the upper castes in every sphere of life affecting the development process of SCs.

The contribution of OBCs is half of the overall poverty in Southern region of Karnataka in contrast to about 32 per cent in Northern region. The next highest contribution is of SCs to more than 27 per cent in Southern region in contrast to about 26 per cent in Northern region. On the contrary to this, the HHC contributed only about 6 per cent, and the Muslims contributed 7.5 per cent to the overall poverty in Southern region in contrast to 15 per cent and 17.4 per cent respectively in Northern region. The contribution of STs is relatively lower in Southern region as compared to Northern regions, but it increases as the other dimensions of poverty are incorporated.

Table 12: Percentage contribution by different socio-religious groups to overall poverty

SRG	North Households				South Households			
	$\alpha = 0$	$\alpha = 1$	$\alpha = 2$	Share (%)	$\alpha = 0$	$\alpha = 1$	$\alpha = 2$	Share (%)
ST	9.1	7.1	5.0	3.6	7.1	8.4	9.0	5.5
SC	25.8	28.4	34.0	15.8	27.3	27.5	31.2	16.4
HOBC	32.2	32.4	32.7	49.6	50.4	50.7	46.2	43.7
HHC	15.0	14.7	12.7	19.7	5.8	3.5	1.9	21.5
Muslim	17.4	16.7	15.0	7.5	7.5	9.3	11.5	10.5
Rest	0.4	0.6	0.6	3.8	1.9	0.6	0.2	2.4

Source: Author's calculations based NSSO 68th round on Consumption Expenditure

Note: When $\alpha=0$, FGT(0) is the HCR—it measures the proportion of households that are poor; when $\alpha=1$, FGT(1) is the aggregate poverty gap; and when $\alpha=2$, FGT(2) incorporates relative deprivation (as measured by inequality among the poor) along with the head count and the aggregate poverty gap.

Thus, the contribution of poverty is highest by the HOBCs followed by SCs, STs and Muslims in Karnataka. If the contribution of different groups to poverty measured as HCR poverty is compared with the share of households in the respective groups, then the SC households contribute disproportionately large to the share of household across socio-religious groups in both rural and urban areas as well as in Northern and Southern regions of the State. In rural and urban areas, the contribution of SCs to the overall poverty is substantially high to 26.9 per cent and 24.1 per cent respectively as compared to that of their household share of 18.2 per cent and 13.6 per cent respectively. In Northern and Southern regions, the contribution of poverty by SCs is 25.8 per cent and 27.5 per cent respectively as compared to their

household share of 34 per cent and 16.4 per cent respectively. On the other hand, the comparative contribution of poverty by HHC is lower as compared to their share of households, particularly in urban areas and Southern region. These results are reflected in Table 13 and Table 14 showing the highest more than 2 times higher risk of poverty among SCs to the overall poverty rates in the state. The risk of poverty among SCs is also marginally higher in rural areas and Southern regions in the State. The risk of poverty among HHC is substantially lowest across socio-religious groups in the state.

Table 13: Risk of poverty of different socio-religious groups by place of residence

Socio-religious group	Rural Households			Urban Households			All Households		
	$\alpha = 0$	$\alpha = 1$	$\alpha = 2$	$\alpha = 0$	$\alpha = 1$	$\alpha = 2$	$\alpha = 0$	$\alpha = 1$	$\alpha = 2$
ST	1.26	1.05	0.76	2.20	1.96	1.56	1.49	1.27	0.95
SC	1.51	1.62	2.05	1.63	1.83	1.99	1.57	1.69	2.01
HOBC	0.82	0.87	0.87	0.76	0.69	0.70	0.84	0.83	0.80
HHC	0.78	0.75	0.60	0.47	0.50	0.50	0.65	0.64	0.56
Muslim	1.22	1.00	0.64	1.56	1.52	1.47	1.25	1.27	1.20
Rest	0.60	0.14	0.02	0.28	0.33	0.30	0.34	0.27	0.25

Source: Author's calculations based NSSO 68th round on Consumption Expenditure

Note: When $\alpha=0$, FGT(0) is the HCR—it measures the proportion of households that are poor; when $\alpha=1$, FGT(1) is the aggregate poverty gap; and when $\alpha=2$, FGT(2) incorporates relative deprivation (as measured by inequality among the poor) along with the head count and the aggregate poverty gap.

Table 14: Risk of poverty of different socio-religious groups by regions

Socio-religious group	North Households			South Households		
	$\alpha = 0$	$\alpha = 1$	$\alpha = 2$	$\alpha = 0$	$\alpha = 1$	$\alpha = 2$
ST	1.17	0.92	0.64	1.75	2.08	2.22
SC	1.48	1.62	1.94	1.71	1.72	1.95
HOBC	0.90	0.90	0.91	1.01	1.01	0.92
HHC	0.66	0.65	0.56	0.34	0.20	0.11
Muslim	1.12	1.07	0.96	0.85	1.05	1.31
Rest	0.87	1.25	1.31	0.50	0.16	0.06

Source: Author's calculations based NSSO 68th round on Consumption Expenditure

Note: When $\alpha=0$, FGT(0) is the HCR—it measures the proportion of households that are poor; when $\alpha=1$, FGT(1) is the aggregate poverty gap; and when $\alpha=2$, FGT(2) incorporates relative deprivation (as measured by inequality among the poor) along with the head count and the aggregate poverty gap.

8. Conclusion

The focus of this paper is to investigate the situation of poverty across social and religious groups in Karnataka in the background that the issue has not been dealt adequately by earlier studies. The major focus of the earlier studies was to understand the regional attributes of poverty finding Northern districts being less developed due to inadequate irrigation facilities and concentration of large population belonging to marginalized and minority communities. The results in this paper collaborate with the earlier studies in terms of higher incidence of poverty in rural areas and also in Northern part of the state. However, there is a substantial variation in the MPCE and level of poverty by socio-religious groups looking from various dimensions like the region, place of residence, household type. We find that the consumption expenditure is substantially low and poverty is high among SC, ST and Muslims. The share of extremely poor is much higher among these groups. They are substantially over-represented in the low expenditure groups on the one hand and on the other hand, the HHCs are well over-represented in the richer expenditure group. In fact, the logit model again provides econometric evidences to the above findings. The results show that a household living in rural areas is less likely to be poor as compared to that of in urban areas. This is largely because of the reasons that the risk of poverty among STs and Muslims is low in rural areas as compared to that of in urban areas (which is evaluated using FGT(2)). The marginal probability of Muslim households being less likely to be poor could also be substantiated on the basis of the higher share of unexplained effects in explaining the differences in the likelihood of being a poor household (ranging between 42 to 73 per cent). The other factors having significant impact on poverty declines include social and religious background, highest level of education, and occupational background of the household. Factors such as the households belonging to Hindu high caste, living in rural areas and Northern region, a member with highest level education is medium or high in the household, and regularly salaried household decline the probability of being poor. These attributes explain some part of the differentials in the incidence of poverty between

various groups. The remaining difference is called as the unexplained effect which may occur due to either the differences in the asset endowments or rate of returns. The results show a substantially higher proportion of unexplained effect between HHC and SCs and Muslims indicating the presence of discrimination against SCs and Muslims in the State. The contribution of each social and religious group in overall poverty is another contribution of this paper showing a substantially higher contribution by SC while comparing their household share. Their contribution is particularly high in Southern region and urban areas. Overall, the results that have been produced from this paper clearly show that the poverty is high among the SC, STs and Muslims and the depth and relative deprivation is also relatively high among these groups. The unexplained effect is substantially high that does not explain the differences in probability of being poor between 'HHC and SC' and 'HHC and Muslim'. The 'invisible hand' of Adam Smith for the marginalized communities is working in adverse manner. Therefore, there is a need to have some policy to make the hand 'visible' for socially inclusive growth.

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