

Does Caste matter in Analyzing Inequalities in Kerala? Explanations from NSSO 61st and 66th Rounds

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Abstract

In recent years, the state of Kerala has witnessed a flurry of social movements among Adivasies and Dalits who have articulated their marginalization stories. The state has also witnessed the highest recorded inequality (in 2009–10) among the states in India in recent years. These developments marked the withering away of Kerala's well-known development experience—the Kerala Model. The story of marginalization and the sporadic social movements from marginalized caste groups in recent years buttress our understanding that there is a worsening of between-caste inequalities in Kerala. However, the increase in inequality can be due to an increase in either within- or between-caste inequalities. This study carefully analyzes the inequality by decomposing the Gini coefficient into between-caste groups and within-caste groups using the Yitzhaki method (Yitzhaki, 1994). For this study, data from the NSSO 61st and 66th rounds of consumption expenditure surveys and field-based research are used. The study contends that the initial endowments of certain communities, the emergence of new breed elites, and the state's reduction in welfare spending are the causes of high inequalities in the state.

Key Words: Kerala Model, Caste, Inequality, Distribution

1) Why should we focus on caste?

Over the last three decades, the state of Kerala has witnessed high growth, with the highest recorded inequality (in 2009–10) among all the states in India, although the human development indicators remain the highest in India (Shyam 2010). The high growth and worsening inequality in recent years marked a clear departure from the well-known development experience—the Kerala Model of Development. The social reform movements, anti-caste movements (in southern Kerala) and anti-feudal movements (in northern Kerala), and communist movements during the late 19th and early 20th centuries—the unprecedented working-class mobilizations during the 1960s and 1970s—played a crucial role in transforming Kerala into a model state. Moreover, the governments in power responded positively to the organized demands of the working classes through social provisioning and redistributive policies, which brought about unprecedented improvements in people's lives with low per capita income (Franke et al., 1999; United Nations, 1975; Ramachandran, 1997). It has often been claimed that the afore-mentioned factors reduced the caste and class disparities in the state¹. However, of late, Kerala witnessed a flurry of social movements from the *Dalits*, *tribals*, and other vulnerable groups, raising the question of land deprivation² (Rammohan 2008; Ravi Raman 2002; Bijoy 1999). This period also marked a substantial cut in social spending by the state (Isaac et al., 2006). These new trends buttress our understanding that there has been an increase in caste groups' inequalities over the years. The increase in inequality can be either due to an increase in intergroup

¹ The marginalization story of *Dalits* came to the fore way back in the 1970s, amidst the euphoria created by the Kerala model of development (Shivanandan, 1976). Subsequently, studies on fisherfolks also revealed that they were out of Kerala's development experience (John Kurian, 1995). The backwardness of Dalits, *Advasis*, fisherfolks, etc. is always branded as an outlier phenomenon as these peoples constitute around 10–12% of the population and claim that the central tendency in Kerala's economic development is equitable and a model for others to emulate.

² There have been a number of movements of scheduled castes and tribes in Kerala of late (the Chengara land struggle and the *Muthanga Advasi* struggle are the prominent ones). These struggles are related, one way or another, to land. For detailed discussion on this issue, see Ravi Raman (2002) and Rammohan (2008).

inequality or due to intragroup inequality. However, none of the studies on Kerala attempted a macro-empirical study to understand the intergroup and intragroup inequalities on a caste axis. This study aims to fill this lacuna. In this study, consumer expenditure surveys from 2004–05 to 2009–10 are used to estimate the consumption levels of different classes and socio-economic groups and examine how these groups have benefited from the much-debated growth and development processes over the years. This study also examines the nature of inequality by looking at whether inter-caste or intra-caste inequality or both have contributed to the overall increase in inequality. This study uses the Yitzhaki methodology (Yitzhaki 1994) to decompose the Gini coefficient into inter-group and intra-group components.

2) Defining a Caste Structure for Kerala

It is very well known that the caste system in India is believed to be nearly 3,000 years old (Deshpande 2000). After the advent of *Christianity and Islam* in Kerala, the caste system became more complex³. Many lower castes used conversion to Christianity and Islam as a vent from a rack rented social order at different points in time (Fuller 1976). For an economist, the job of defining a caste structure is simplified by the nature of the available data, which divides the population into scheduled castes (SC), scheduled tribes (ST), backward-class Hindus, backward-class Christians, Muslims, upper-caste Hindus, and upper-caste Christians.

3) Data and Limitations

The data used in this chapter are from the National Sample Survey Office (NSSO) on consumption expenditure data, rounds 61st (2004–05) and 66th (2009–10). In the 61st round, the sample survey contains 5250 households from Kerala, out of which 3300 are from rural areas and 1950 are from urban areas. In the 66th round, there are 4452 sample households, of which 1846 are urban households and the remaining 2606 are rural households. All the results that are presented in the study are expressed as per capita consumer expenditure by incorporating household size into household monthly consumption expenditure. Monthly per-capita consumption expenditure (MPCE) is adjusted to the Consumer Price Index (2009-10 = 100). Moreover, field research-based data are also used to explain the inequality dynamics⁴.

Since the upper-end consumption groups are underrepresented in the sample, there is an inherent bias in the consumer expenditure surveys of the NSSO (inequality, therefore, is underestimated). This has a bearing on determining the relative position of class among each other. Moreover, consumption is usually more equal than income distribution.

4) Analyzing Kerala's Caste Inequality

In terms of the overall story of changing inequality in Kerala, the main observation is that there is an increase of almost 8 points in the Gini coefficient between 2004–05 and 2009–10. This is a big change after the occurrence of equal growth in the 1980s (Prasad 2010). After the economic reforms, the story of Kerala's growth has been highly unequal among sectors. By decomposing this inequality along axes like rural, urban, and caste groups, it can break down the increase in inequality into comprehensible structures to draw meaningful conclusions about the nature of inequality.

4.1 Yitzhaki Methodology of decomposing the Gini Coefficient

The Gini decomposition analysis proposed by Shlomo Yitzhaki is to split overall inequality into inter group component and intra group components and to estimate how much of the total inequality can be explained by the inter-group and intra-group components⁵. Moreover, this method offers a frame work to

³ Christianity and Islam came to Kerala around the 1st and 14th centuries AD, respectively (Kurian, 2000:190–191).

⁴ An extensive field survey was conducted across Kerala from August 2012 to January 2013 to understand the dynamics of inequality.

⁵As mentioned above, this framework and its description are also available in (Wolff and Zacharias 2009) (Zacharias and Vakulabharanam 2009, and Vakulabharanam 2010) apart from the original description in Yitzhaki (1994).

examine the stratification dynamics of the population and its sub-groups. A brief description on decomposing the Gini Coefficient is given below.

Using the Yitzhaki decomposition methodology (Yitzhaki, 1994), the G can be split into inter-group inequality (I_b) and a remainder (I_r) that can be interpreted as intra-group inequality:

$$G = I_b + I_r \quad (1)$$

The amount of inter-group inequality is:

$$I_b = \frac{2 \text{cov}(\mu_i, \overline{F_{oi}}(y))}{\mu}, \quad (2)$$

where y is consumption, μ is mean consumption for all persons, μ_i is mean consumption for group i , and $\overline{F_{oi}}(y)$ is the mean rank of group i in the overall distribution.

The remainder term is calculated as:

$$I_r = \sum_i s_i G_i O_i, \quad (3)$$

Where, s_i is the share of group i in aggregate consumption, G_i is the Gini coefficient of the consumption distribution within group i , and O_i is the overlap index for group i . The overlap index measures the degree to which the range of consumption in each sub-group overlap with the range of consumption for all population. Hence, the index of overlapping is actually an index describing the extent to which the different populations are stratified. The amount to which group i overlaps with the overall distribution is defined as:

$$O_i = \frac{\text{cov}_i(y, F_{oi}(y))}{\text{cov}_i(y, F_i(y))}, \quad (4)$$

Where $F_{oi}(y)$ is the function that assigns to the members of group, i their ranks in the overall distribution, F_i is the function that assigns to the members of group, i their ranks in the consumption distribution within that group, and cov_i indicates that the covariance is according to the distribution within group i .

The minimum value of O_i is given by the share of sub-group 'i' in the population and its maximum value is equal to 2. When the index equals the minimum possible value, it suggests that the group in question is a perfect stratum, i.e. it occupies an exclusive segment of the overall distribution. If a particular group has a range of consumption that coincides with the range of consumption of all persons then the index will be equal to 1. Finally, if the index is greater than 1, the distribution of consumption within the group is much more polarized than in the overall distribution. This can happen if the members of the group constitute two strata, one that has higher and the other that has lower than the average consumption of the whole population (Milanovic and Yitzhaki 2002:162–163).

The overlap index (4) can be further decomposed to identify the overlapping of sub-group i with all other sub-groups that comprise the population. Hence, total overlapping of sub-group i , O_i , is composed of overlapping of i with all sub-group, including group i itself. This further decomposition of O_i is:

$$O_i = \sum_j p_j O_{ij} = p_i O_{ii} + \sum_{j \neq i} O_{ij} = p_i + \sum_{j \neq i} p_j O_{ij} \quad (5)$$

Where, $O_{ij} = \frac{\text{cov}_i(y, F_j(y))}{\text{cov}_i(y, F_i(y))}$ is the group by group overlap index; overlapping of group j by group i and p_i is share of group i in overall population (Frick et.al, 2004).

The decomposition results are presented below. Table 1 presents the decomposition results of the detailed caste structure from 2004–05 to 2009–10. From the result, it is clear that interclass inequality increased during the period.

The caste groups like upper caste Hindus, backward caste Hindus, Muslims, and upper caste Christians explain a major chunk of within-caste inequality. The interesting result that comes out of the analysis is that backward caste Hindus alone explain 31% of total intracaste inequality. The groups like backward caste Hindus and scheduled tribes experienced polarization as these groups' overlap index crossed one in both periods. Upper-caste Hindus, scheduled castes, and Muslims experienced stratification as their overlap index declined over the years. It is also turned out that scheduled tribes, scheduled castes, and Muslims experienced a reduction in their respective consumption shares and, therefore, their Gini coefficients. Moreover, upper-caste Hindus, backward-class Hindus, upper-caste Christians, and upper-caste Christians experienced an increase in their Gini during this period. The caste structure based on MPCE, which is shown below, gives an idea about the level of consumption expenditure and changes in caste inequality over the years.

4.3 Caste Structure

Table 2 presents a detailed caste structure by disaggregating Hindu and Christian groups on the basis of caste group. This disaggregation broadens our understanding of the changes in caste structure over the years and how different caste groups have benefited from economic growth. From the table, it is clear that upper-caste Hindus and upper-caste Christians recorded the highest consumption levels, and in terms of change (defined as the rate of change in the ratio of the class mean to the population mean over the period), these groups gained more as compared to the rest. The scheduled tribes and scheduled castes have the lowest level of MPCE in both periods. In terms of change, the scheduled castes are the biggest losers. These results are only a prelude to the detailed discussions on inequality.

5) Discussions and Explanations

The caste dynamics in the late 19th and early 20th centuries played a crucial role in the distributional gains of various caste groups. The failure of vast sections of Dalits, Advasies, and Namboodiri Brahmins to take modern schooling, employment, etc. during the late 19th and early 20th centuries pushed these caste groups to the margin while other caste and religious groups were breaking new ground (Ravi Raman 2010: 34–35). A sizable number of people belonging to castes like Nayers⁶, and in later years, Ezhavas⁷, and a vast majority of Syrian Christians earned upward mobility by entering into new spheres of economy, education, and profession as early as in the 20th century⁸. By venturing into commercial activities, upward mobility among Muslims became more pronounced after the onset of Gulf migration during the 1970s (Osella et al., 2007). This resulted in the emergence of elites in the Muslim community. However, a vast majority of people from the Muslim community still live on the margins of society⁹ (Kabeer 2010: 87–98). There had been a widespread conversion of Dalit and marginalized communities into Christianity during the 18th and 19th centuries in South Kerala to escape from the clutches of the rack-rented caste system (Ramachandran 1997: 303–304). These groups constitute the majority of backward-class Christians. Moreover, the coming of the Portuguese missionary endowers in the 16th century resulted in the wide spread conversion of fishermen into Christianity in Kerala (Fuller 1976). The majority of them are Roman Catholics with Latin rites (ibid.). As in the case of Dalit Christians, this group is also part of the backward class of Christians. With this background information, the polarization stratification and high intragroup contributions of certain groups can be explained. From Table 2, it is clear that the gain of upper-caste Hindus and Christians (mainly Nayers and Syrian Christians) from the growth process and the loss of scheduled castes and scheduled tribes explain the intergroup inequality. In recent years, Kerala has witnessed the emergence of a new breed of super-rich Christians, Ezhavas, and Muslim communities (Field Survey Notes 2012–13). This class

⁶Nayers came to include 20 sub-castes (Fuller 1975: 299). Among Nayers, *Kiriyattils Nayers* enjoyed the highest social status. They took on the role of landlords and shared *Kannam* tenancy rights (a superior tenancy right) with *Ambalavasies*. The other Nair groups were traditionally house servants, tenants, and farm laborers of *Namboodari* estate (Gough 1961: 306-309).

⁷ Ezhavas are the largest caste group in Kerala. They were considered untouchables and ritually superior to scheduled castes. They were a small landowning and titled elite and a large mass of landless and small tenants who were largely illiterate and eked out a living by manual labor like toddy tapping, agricultural workers, and petty trade (Gough 1961: 405).

⁸ Ezhavas and Syrian Christians were barred from taking up government jobs till the end of the 19th century (Jeffrey, 1976). Nayers were allowed to take menial and low-grade jobs in the government during this period (ibid.).

⁹ Kerala Muslims as a social group is not monolithic. It does have caste features, which are observed in Hinduism and Christianity. Muslims, barbers, and fishermen are considered untouchable by the "mainstream" Muslims until recently (Field Study Notes 2012–13).

exercises control in booming sectors like real estate, construction, tourism, etc. (ibid.). Moreover, almost all caste groups (except scheduled castes and scheduled tribes¹⁰) witnessed an increase in the number of petty owners who engage in petty trade, mining, small-scale construction activities, etc. (ibid.). The presence of neo-super-rich and petty owners partly explains the contributions to high intra-group inequality among upper-caste Hindus, backward-caste Hindus, Muslims, upper-caste Christians, and backward-caste Christians.

The austerity measures by the governments as a part of economic reforms too played their part in augmenting inequality by worsening the conditions of the poor, which spread across all communities in Kerala. The post-reform period witnessed a reduction in public expenditure on universal programs like health care, the public distribution system, etc. This invariably created stratification among the poor, as only those who had the wherewithal could buy and consume these goods and services. To reduce the burden on the food bill, Kerala introduced the targeted public distribution system (TPDS) in 1997 in line with the union government's policy. In subsequent years, there has been a drastic reduction in consumption of rice from the public distribution system. The per-capita consumption of rice from the public distribution system in Kerala declined from 5.25 kg in 1993–94 to 2.09 kg in 2009–10 in rural areas and 4.94 kg to 1.60 kg in urban areas during the same period (NSSO 50th and 66th rounds). The working classes bear the brunt of this policy, as agricultural workers, non-agricultural workers, and urban workers experienced a drastic reduction in per-capita PDS consumption of rice. The exclusionary process of the poor from the public health system is more revealing from the recent studies on health care systems and morbidity patterns (Navneetham et al., 2009; Dileep, 2008; Aravindan, 2006). Health service utilization statistics from the NSSO survey show that 65% of total inpatient care services were obtained from private health services in 2006. In 1995–96, 60.3% of the total inpatients used private health services. The average inpatient medical expenditure, as revealed by the NSSO survey, increased from Rs. 2547 in 1995–95 to Rs. 4960. However, a KSSP sample survey of 5696 households across Kerala in 2006 reveals that the one-time expense for inpatients in private hospitals is Rs. 10,445 and in government hospitals, it is around Rs. 6609.5 (Aravindan 2006). The severity of the problem that Kerala's health care system suffers could be understood only by looking at the morbidity profile of Kerala. The prevalence rate of morbidity is 243/1000 people, as against the all-India rate of 91/1000 people in 2004–05. Moreover, it is found that the occurrence of morbidity is biased towards the poor and uneducated rather than the rich (Navneetham et al., 2009). The reduction in government expenditure on public health care after the economic reforms adversely affected the modernization of the public health care system in Kerala. This led to the deterioration of the quality of the public health care system, and poor people were compelled to use private health care facilities. This led to a massive rise in health care expenditure and inflicted a heavy toll on the purchasing power of the working classes of different caste groups in Kerala. The Dalits and Advasies bear the brunt of reductions in social spending, as these groups do not have any fallback options in the form of assets¹¹.

6) Conclusions

From the above discussion, it is clear that there exists a sharp with-in and between-caste inequality in Kerala, and it has been on the rise over the years. The initial endowments of caste groups like Nayers, Ezhavas, Muslims, and Christians in education and employment and the emergence of a new breed of elites and petty owners from the dominant caste groups explain the within-caste group inequality. Moreover, it is also clear that the withdrawal of government from social overhead expenditures too played its part in accentuating the with-in and between-caste inequalities, as these policies inflicted a heavy toll on the working classes in different caste groups.

¹⁰ The scheduled tribes in southern Kerala are comparatively better off than their counterparts in north Kerala in terms of land holding and income levels (Kunhaman 1985). This could be the reason for the polarization of this group, as revealed from the decomposition analysis.

¹¹ In Kerala, 85.4% of Scheduled Castes and 66.1% of Scheduled Tribes did not own any land other than homestead land in 2003 (NSSO Land-holding Survey, 59th Round).

Table 1: Decomposition on Caste Axis

Caste	2004-5					2009-10				
	Consumption Share	Gini	Overlap Index	Contribution	Contribution %	Consumption Share	Gini	Overlap Index	Contribution	Contribution %
Overall		0.393		0.393	100		0.473		0.473	100.00
Intra-caste				0.364	92.58				0.419	88.69
Upper Caste Hindus	0.18	0.395	0.856	0.061	16.7	0.214	0.580	0.790	0.098	23.44
Backward Class Hindus	0.303	0.396	1.005	0.12	33.11	0.285	0.452	1.013	0.130	31.13
Scheduled Castes	0.073	0.309	1.008	0.023	6.28	0.044	0.269	0.966	0.012	2.75
Scheduled Tribes	0.009	0.389	1.107	0.004	1.02	0.007	0.293	1.047	0.002	0.51
Muslims	0.212	0.389	1.051	0.087	23.87	0.197	0.335	0.998	0.066	15.74
Upper Caste Christians	0.156	0.354	0.846	0.047	12.83	0.186	0.514	0.847	0.081	19.34
Backward Class Christians	0.068	0.378	0.875	0.023	6.19	0.066	0.464	0.975	0.030	7.10
Inter-Caste				0.029	7.42				0.053	11.310

Source: Author's estimation from NSSO 2004-05(Round: 61) and 2009-10(Round: 66) unit record data.

- Consumption share is the share of each group in total consumption
- Contribution is the absolute contribution of each term to total Gini
- Contribution % is the proportion of the contribution of each term to total Gini

Table 2: Caste Structure (MPCE in Rs) (2009-10=100)

Caste group	2004-5			2009-10			Ratio Growth Rate
	Population%	MPCE	MPCE Ratio	population %	MPCE	MPCE ratio	
Upper Caste Hindus	14.64	1854.13	1.23	13.09	3379.48	1.64	33.56
Backward Class Hindus	30.82	1482.63	0.98	30.74	1911.26	0.93	-5.62
Scheduled Castes	10.5	1055.76	0.70	8.17	1116.30	0.54	-22.56
Scheduled Tribes	1.58	825.07	0.55	1.34	1067.13	0.52	-5.22
Muslims	23.67	1354.00	0.90	26.97	1509.15	0.73	-18.32
Upper Caste Christians	12.99	1808.96	1.20	13.84	2776.02	1.35	12.37
Backward Class Christians	5.8	1773.44	1.17	5.85	2318.38	1.12	-4.24
Total	100.00	1510.56	1.00	100.00	2062.124	1.00	0.00

Source: Source: Author's estimation from NSSO 2004-05(Round: 61) and 2009-10(Round: 66) unit record data.

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