Flood is an Opportunity to Redistribute Resources for Income Equality- A Study on Consumption Disparity of Rural Households in Kerala.

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Abstract: *The term welfare and inequality are interrelated. Inequality may take various forms in in different situations such as income, wealth, consumption, life style, nature of region etc. In rural Kerala, the consumption expenditure is not only unequal but also increasing. During the floods, the government of Kerala took all the possible measures to save lives and provide emergency assistance. Now, the focus will shift to rebuilding the economy. The paper analyse the selected households characteristics in rural Kerala and shows the areas to be focussed in rebuilding process of Kerala in order to achieve equitable distribution of Income.*

INTRODUCTION

Equality plays a crucial role in nation's developmental concept. Equity, growth, self-reliance and modernization were the four general objectives of the five year plans in India. 'NITY Aayog' also highlighted equality as its one of the seven pillars of Effective Governance. But there is an increasing tendency of income inequality in Rural Kerala; the consumption expenditure is not only unequal but also increasing.

The fundamental psychological law of consumption proves the positive relation between consumption and income of the people. Per capita consumption expenditure is used for the comparison of living standard between countries or regions and it consider as one of the indicator for development. Kerala stood one among the top in Per capita Income and first place in Monthly Per capita Consumption Expenditure (MPCE) in Indian States. But the district wise distribution shows the increasing tendency of inequality in consumption expenditure. The district of Wayanad is an exception from this situation.

During the floods, the government of Kerala took all the possible measures to save lives and provide emergency assistance. Now, the Government has been focusing to rebuild the economy with all its efforts. It is the right time to correct the economy from its economic inequality.

Objectives of the Study

The redistribution of income is possible only with the identification of the area of inequality. Therefore the study focused the following objectives

1. To identify the level of inequality in rural Households of Kerala
2. To find the areas to be focused for the rebuilding process of Kerala

Methodology

The data used for the analysis has been taken from the Unit level data of National Sample Survey Organization (NSSO) with 2604 Households and their Consumption Expenditure. Two survey periods were covered, i.e. 58th and 68th round. The total population for each distribution has been cross-classified into 10 (j = 1,2, . . . , 10) expenditure classes in an ascending order and into 14(i = 1,2,. . . , 14) exhaustive and mutually exclusive groups for decompositions. The study mainly used the Thail's Index because the property of 'Decomposability' is only in this Index. Decomposability is an additional property of an inequality metric that is desirable from an empirical point of view. This means that if a particular economy

is broken down into sub-regions, and an inequality metric is computed for each sub region separately, then the measure of inequality for the economy as a whole should be a weighted average of the regional inequalities plus a term proportional to the inequality in the averages of the regions.

Theil's index

A key feature of these measures is that they are fully decomposable, i.e. inequality may be broken down by population groups or income sources or using other dimensions, which can prove useful to policy makers. Another key feature is that researchers can choose a parameter α that assigns a weight to distances between incomes in different parts of the income distribution. For lower values of α, the measure is more sensitive to changes in the lower tail of the distribution and, for higher values, it is more sensitive to changes that affect the upper tail (Atkinson and Bourguignon, 2015). Zero, One and two are most common values for α. When α=0, the index is called "Thiele's L" or the "mean log deviation" measure. When α=1, the index is called "Thiele's T" index or, more commonly, "Theil index". When α=2, the index is called "coefficient of variation". Similarly to the Gini coefficient, when income redistribution happens, change in the indices depends on the level of individual incomes involved in the redistribution and the population size.

THE LEVEL OF CONSUMPTION INEQUALITY IN RURAL KERALA

The study conducted by Chatterjee and Bhattacharya (1994), G S Chatterjee (1976)[1]examined the disparities in level of living in India by using Per -capita consumption expenditure. Amit Basole and Deepankar Basu (2015) had written an article on "Non-Food Expenditures and Consumption Inequality in India". This paper contributes to the ongoing debate about economic inequality in India during the post-reform period. It analyzes consumption inequality through the hitherto neglected lens of non-food expenditure. They show that inequality within food and nonfood groups has declined, even as overall expenditure inequality has increased over time. They suggest that the rise in overall expenditure inequality is due to the increased weight in the household budget of non-food spending, which tends to be more unequal than food spending. They also show that inequality is very different across broad non-food items. Durables, education, healthcare, and consumer services show the most rapid increases in real expenditure, and also display the highest levels of inequality[2].

The consumption expenditure disparity analyses the consumption inequality of Rural Households of fourteen Districts in Kerala. The study finds a remarkable disparity in consumption expenditure of rural Kerala. Per-capita consumption expenditure along with inequality in consumption expenditure has been increased among rural households in Kerala. The per capita consumption expenditure of last decile group is about five times higher than the first decile group in 2002. And that is about ten times higher in 2012. The value of Gini coefficient of 2002 and 2012 are 0.268 and 0.405 respectively.

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[1] G S Chatterjee, (1976) "*Disparities in per-capita Household Consumption in India: A note*", Economic and Political Weekly, Vol 11, No. 15, Page 557-567.

[2] Amit Basole and Deepankar Basu (2015), "Non-Food Expenditures and Consumption Inequality in India",UMass Amherst Economics,WP 2015-16,(2015)

Figure 1
Lorenz Curve of rural households in Kerala
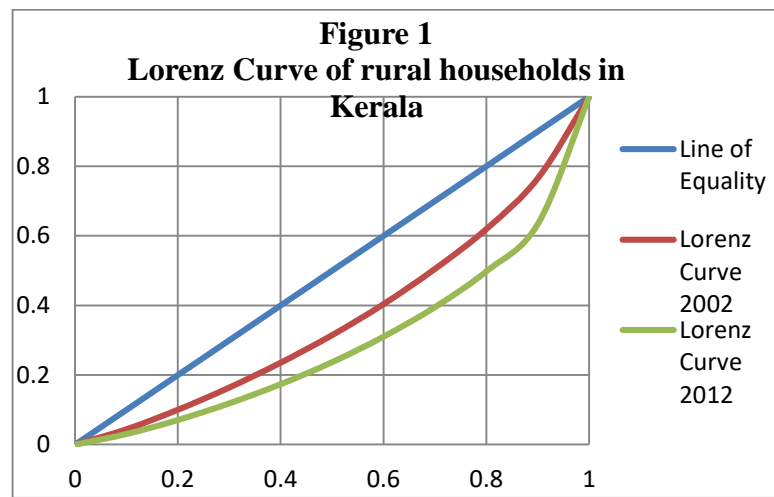
Source: Derived from 58th (2002) and 68th (2012) Round NSSO Unit level data.

The Lorenz curve shows that the 90 percent of the people spends nearly 60% to the total expenditure. And rest 10 % people spends nearly 40 % to the total consumption expenditure in 2012 in Rural Kerala.

The inequality redundancy has been increased from 0.12 to 0. 29 which show more than 100 present increase in inequality in consumption expenditure of rural Kerala. That means the gap between the line of equality and Lorenz Curve becomes widened. District wise Theil's Index of Rural Kerala shown in following table.

Table 1				
District wise Theil's Index of Rural Kerala				
District		**Theil-T Redundancy**	**Theil-L Redundancy**	**Symmetric Redundancy**
Kasargod	2002	0.082	0.073	0.077
	2012	0.143	0.137	0.14
Kannur	2002	0.073	0.074	0.074
	2012	0.389	0.315	0.352
Wayanad	2002	0.117	0.125	0.121
	2012	0.095	0.092	0.093
Kozhikode	2002	0.083	0.086	0.084
	2012	0.171	0.152	0.162
Malappuram	2002	0.099	0.096	0.098
	2012	0.201	0.182	0.192
Palakkad	2002	0.113	0.105	0.109
	2012	0.243	0.217	0.23
Trissur	2002	0.135	0.127	0.131
	2012	0.335	0.323	0.329
Ernakulam	2002	0.158	0.159	0.158
	2012	0.386	0.347	0.367
Idukki	2002	0.099	0.092	0.095
	2012	0.297	0.255	0.276
Kottayam	2002	0.294	0.262	0.278
	2012	0.394	0.353	0.373
Alappuzha	2002	0.118	0.116	0.117

	2012	0.26	0.245	0.253
Pathanamthitta	2002	0.181	0.158	0.169
	2012	0.205	0.192	0.199
Kollam	2002	0.081	0.078	0.08
	2012	0.501	0.421	0.461
Thiruvananthapuram	2002	0.121	0.115	0.118
	2012	0.244	0.223	0.233
RURAL KERALA	2002	0.12	0.114	0.117
	2012	0.309	0.27	0.29

Source: Derived from 58th (2002) and 68th (2012) Round NSSO Unit level data.

There is an increase in the Theil Redundancy in rural Kerala from 0.117 in 2002 to 0.29 in 2012. That means the inequality in consumption expenditure is widened during this period. The entire districts have been the same pattern of increases in inequality except Wayanad. This is the only district which shows the decreased Theil's Redundancy in consumption expenditure i.e., from 0.121 to 0.093. Kollam have the remarkable increase in inequality in consumption expenditure from the Theil's redundancy of 0.08 to 0.461 followed by Kannur and Idukki from 0.074 to 0.352 and 0.095 to 0.276 in 2002 to 2012 respectively.

The Theil's index, GINI index, Hoover index etc. shows the same result in the analysis. Therefore, there is significant inequality in consumption expenditure between and within the rural area of fourteen districts of Kerala and this inequality has been increasing except Wayanad.

INEQUALITY AND HOUSEHOLD CHARACTERISTICS
There are a complex set of factors and its interactions to determine and influence household expenditure. These factors include household income, household type, occupation, education, social, cultural, religious, and a lot more. The following section analyses the income disparity on the basis of some selected household characteristics with respect to Monthly Per capita Consumption Expenditure (MPCE).

Religion and Monthly Per-Capita Consumption   Expenditure
There are significant differences between religion and monthly per capita consumption expenditure. The one way ANOVA test specifies that there is a significant difference in MPCE and Religion. These groups are not equal in consumption expenditure.

Table 2					
ANOVA					
Correlation between MPCE$_{MRP}$* and Religious Category					
MPCEMRP					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	886589360.31	3	295529786.77	12.64	0.00
Within Groups	60774279926.17	2600	23374723.05		
Total	61660869286.48	2603			

Source: Derived from NSSO 68th (2012) Round Unit level data

Among various religious groups in rural Kerala, Muslims have the lowest MPCE of just Rs. 93.65 in a day. At the other end of the spectrum, the Christian community enjoys a much better lifestyle as the average household spending among them is Rs. 132.09 per day, while the same for Hindu community is Rs. 102.57.

Table 3				
Religious category and Monthly Per capita Consumption Expenditure of Rural Kerala				
	Mean Expenditure	Std. Deviation	Minimum	Maximum
Muslim	2809.5	4250.3	610.4	66616.8
Hindu	3077.2	4671.9	423.8	94253.7
Christian	3963	5918.3	419	89031.4

Source: Derived from NSSO 68th (2012) Round Unit level data

Social Group and Monthly Per-Capita Consumption   Expenditure

Social Group is classified in to four head under the study such as Scheduled Tribes, Scheduled Casts, Other Backward Class and other forward classes.

Table 4				
Social Groups and Monthly Per capita Consumption Expenditure of Rural Kerala				
	Mean Expenditure	Std. Deviation	Minimum	Maximum
Scheduled Tribes	1915.2	1262.5	451.2	6848.2
Scheduled Casts	1975.6	1575.2	423.8	11833.8
Other Backward Class	2983.6	4598.2	434.3	94253.7
Other forward class	4059.8	5955.9	419	89031.4

Source: Derived from NSSO 68th (2012) Round Unit level data

The daily per capita consumption expenditure of the scheduled Tribes in rural Kerala is Rs. 63.84 and that of Scheduled Caste is Rs.65.85 per day. The daily per capita expenditure of other backward class is Rs.99.45 and 135.33 for the other forward class. The consumption expenditure of other forward class has been nearly two times higher than that of SC and ST

Household Type and Monthly Per-Capita Consumption Expenditure

The household type based on the means of livelihood of a household. The broad household types in rural areas to be used here are self-employed, regular wage/salary earning, casual labour and others. A household which does not have any income from economic activities will be classified under 'others'. Further self-employed classified as self-employed in agriculture, self-employed in non-agriculture, and casual labour categorized as casual labour in agriculture and casual labour in non-agriculture.

Table 5				
Household type and Monthly Per capita Consumption Expenditure of Rural Kerala				
	Mean Expenditure	Std. Deviation	Min	Max
Casual labour in agriculture	1851.8	1671.4	419	18622.2
Casual labour in non-agriculture	2074.4	1588.7	451.2	16974.3
self-employed in non-agriculture	2994.3	3160.1	609.2	31662.3
Others	3561	5046.1	434.3	64731.7
self-employed in agriculture	4094	4946.6	701.3	49014.8
regular wage/salary earning	4264.8	8252.1	623.7	94253.7

Source: Derived from NSSO 68th (2012) Round Unit level data

There is significant difference between household types in monthly per capita consumption expenditure among rural Kerala, hence the standard of living too. Among various households type in rural Kerala,

Casual labour in agriculture and casual labour in non-agriculture have the lowest living standard with the average per capita consumption expenditure of Rs. 61.72 and 69.15 in a day. On the other hand, the regular wage/salary earning type and self-employed in agriculture type enjoys a much better lifestyle with an average per capita spending of Rs. 142.16 and 136.46 per day respectively.

Regular Salaried and Monthly Per-Capita Consumption Expenditure

It is the normal phenomena that the regular salaried households have more consumption expenditure than non-salaried households. There is significant difference in regular salaried and non-salaried households in rural Kerala. Among the salaried households, per capita consumption expenditure in rural Kerala is Rs. 136.39 per day and that of non-salaried households is Rs 97.33 per day.

Table 6				
Regular salaried Households and Monthly Per capita Consumption Expenditure of Rural Kerala				
Regular Salary	Mean Expenditure	Std. Deviation	Minimum	Maximum
No	2919.8	3611.1	419	64731.7
Yes	4091.8	7679.7	623.7	94253.7

CONCLUSION

According to latest reports of the state government, 1,259 out of 1,664 villages spread across its 14 districts were affected. The seven worst hit districts were Alappuzha, Ernakulam, Idukki, Kottayam, Pathanamthitha, Thrissur, and Wayanad, where the whole district was notified as flood affected. The level of inequality is very high in these districts. Particularly, the districts of Kannur, Trissur, Ernakulam, Kottayam and Kollam must have special attention in rebuilding process due to high inequality. The government has to take serious effort to redistribute the existing income in different sections of the society. Otherwise these problems increase the existences of haves and have notes in the society.

Suggestions

➢ A rejuvenating policy must be implemented in order to strengthen the economic performance as well as welfare of the people. Otherwise the inequality will widen.

➢ The policymakers pay much more attention to the 'marginalized' sections in the economy with a real motive of uplifting them to the front.

➢ Consider the casual labour in agricultural sector in rebuilding process in order to reduce inequality.

➢ For reducing inequality, each region has to find new source of income from the locality itself and redistribute among the vulnerable sections that are socially or economically backward in the same region.

Therefore, the process of rebuilding should be based on equity. It is an opportunity to redistribute the income in the economy and reduce the income inequality.

References

1. Amartya Sen (1997) On economic Inequality,1973 (Enlarged edition with a substantial annex after a Quarter Century with James Foster, Oxford 1997)
2. Amit Basole and Deepankar Basu (2015), "Non-Food Expenditures and Consumption Inequality in India",UMass Amherst Economics,WP 2015-16,(2015)
3. E. Balachandran, (1998) A Consumption Society in Distress, Economic and Political Weekly, Vol. 33, No. 42/43 (Oct. 17-30, 1998), p. 2700 Published by: Economic and Political Weekly
4. G S Chatterjee, (1976) "Disparities in per-capita Household Consumption in India: A note", Economic and Political Weekly, Vol 11, No. 15, Page 557-567.
5. K C Zachariah and S Irudaya Rajan, (2004) Gulf Revisited Economic Consequences Of Emigration From Kerala Emigration and Unemployment, Working Paper, September 2004, Centre for Development Studies, Thiruvananthapuram and SANEI, New Delhi.
6. K.P.Sunny (1988), "Consumption Behaviour in Kerala: A Study of National Sample Survey Data", 1965/66 to 1983, 1988, pp.100.
7. K. Pushpangadan, (March 2003) Remittances, Consumption and Economic Growth in Kerala: 1980-2000, Working Papers 343, , Centre for Development Studies, Trivandrum.
8. M. Ali-ud-din Khan, An Emperical Study into the Relation of Income and Consumption Using Cross-Sectional Data, ASEE 2014 Zone I Conference, April 3-5, 2014, University of Bridgeport, Bridgpeort, CT, USA
9. Process and procedures of National Sample Survey Organization 58th and 68th Round.
10. Samir Show, (2016), Nature Of Income And Expenditure Of rural And Urban Households: A Micro Level Study In Bankura District Of Westbengal, International Journal of Agricultural Sciences and Veterinary Medicine, ISSN:2320-3730 Vol.4,No.1,February2016
11. Sooryamoorthy, (1993), "*Consumption to Consumerism, In the context of Kerala,"* Classical   Publishing Company, New Delhi.