

Inter State Disparity in Consumption Pattern in India During 1972-73 to 2009-10

S. Lakshmy

Research Scholar, Department of Commerce
University of Calcutta, Kolkata
e-mail : s.lakshmy85@gmail.com

Ratan Kumar Ghosal

Professor, Department of Commerce
University of Calcutta, Kolkata
e-mail : ratankumarghosal@rediffmail.com

Abstract : This paper examines the nature and pattern of inter-state disparity in the consumption pattern of the major states of India using the National Sample Survey Organization's large sample quinquennial data during the period from 1972-73 to 2009-10. It is found that there has been an increasing tendency in the disparity in the consumption pattern across the states. However, the states are found to have witnessed an increasing trend in real MPCE in varying degrees with increasing inter-state variations in rural and urban areas. Although rural inequality is indicative of a marginal decline, there is a consistent increase in the urban inequality measured by Gini Coefficient. Further we also find a drastic modification in the consumption pattern in favour of non-cereal and non-food components across the different states both at the rural and urban level. The analysis thus helps us substantiate clearly that the cross state inequality in consumer expenditure seems to have increased over the period and has become more divergent.

Key-words : Inequality, consumption, growth, Gini coefficient.

1. Introduction

It is well recognized that one of the crucial problems facing our economy has been the inequality which has varied dimensions. The varied dimensions of inequality have been reflected in terms of inequality in income, wealth, consumption etc. One can think of such dimensions of inequality across the regions, income classes, religion, castes and also across consumption baskets. It is true that immediately after independence of our economy the major objectives were ending of poverty, inequality and ignorance. But even after the elapse of 67 years after independence it is found that a vast majority of our population both in rural and urban India are suffering from abject poverty. Further although the degree of inequality in the distribution of income vis-à-vis consumption has been reduced but its magnitude still remains at a higher degree. Moreover the rural urban disparity in respect of consumption is also found to be of higher order and for the urban sector it reveals a tremendous increasing trend.

Though the impact of various strategies of development is yet to come out the data on inequality and poverty tell us a very sad scenario both at the aggregative and cross state scenario—both in rural and urban area. It has been found that the inequality in the distribution of Monthly Per Capita Expenditure (MPCE) in the rural areas has increased tremendously between the periods 1993-94

to 2009-10. The Lorenz ratio has been increasing steadily with the urban Lorenz ratio higher than the rural Lorenz ratio. When the inter-state poverty ratios are compared it is seen that all the 16 states have shown a decline in the poverty ratios. Further it has been found in the 66th round of survey of NSSO 2009-10 that the real MPCE has marginally increased from Rs. 158.10 in 1987-88 to Rs. 187.79 in 2009-10. In case of urban area however the same has increased from Rs. 249.92 in 1987-88 to Rs. 235.03 in 2009-10 during the last 24 years. During the same period the prices of commodities increased by 394% for rural area and 400.03% for urban area. So the improvement in the living standard is rather far from what was expected under the various policy regimes.

Thus it is clearly understood that growth in India in the post-reforms period was driven by consumption expenditure growth. Indian consumer has largely benefited from the reforms and has been able to increase the per capita consumption substantially. Therefore consumption expenditure is considered to be a better indicator of the economic well-being of people. It is considered to be a fair indicator of human living standards, since it aggregates the monetary value of all goods and services actually consumed during a particular reference period. This includes consumption out of purchase, home produce, free collection, gifts etc. Due to lack of availability of proper income data, consumption data is always considered a proxy of the income levels. Under this backdrop we would like to study the nature and pattern of consumption expenditure and the different dimensions of it. The pattern of growth of consumption expenditure is not uniform across the different states, income classes, item groups, rural-urban areas etc. giving rise to consumption inequality and the different facets. These different dimensions of consumption inequality have an impact on the level of living of households causing disparity in the level of living. The main focus of this study is to analyze the trend of consumption inequality and its impact across the different levels of income classes, states and at the rural and urban level.

Brief Review of Literature

There is indeed a vast literature on poverty and inequality which is mainly based on MPCE (Ghosal, 2005, 2009, 2011; Himanshu, 2010; Sengupta, 2008; Sen, 2000; Paatmaik; 2010, Ravillion; 1998, Datt; 1999, Chauhan; 2005, Datt and Ravillion, 2002). One can safely classify the literature according to its nature; focus etc. into the different categories. There are some studies which focus on the understanding of the general trend of inequality (Ghosal; 2012, 2014, Datt; 2002, Sen and Himanshu, 2004, Pal and Ghosh, 2007). In most of these studies it is found that the growth of income is accompanied by the existence of poverty and inequality which is puzzling indeed (Ghosal, 2012). The decadal annual growth rates NSDP reveal a mixed picture over the period and it also reveals a tremendous inter-state variability measured in terms of the time profile of the values of coefficient of variation. It seems that some of the states could not take advantage of the market economy. The withdrawal of the public sector from the development process also was a major reason contributing to the interstate disparity in the initial phase of economic reforms. But the variability seems to have declined substantially with the progress of the economic reforms thereby reducing the interstate inequality. Among the other studies some are concentrated in the analysis of poverty and inequality in the cross country level. (Ghosal; 2005, 2009, 2010). It has been seen that even after globalization and economic reforms the incidence of poverty in most of the countries is very high. The most

important factor contributing to inequality in the well beings of the countries has been found to be differential in real per capita income.

The other group of studies concentrated on the study of aggregate and cross state analysis of poverty and inequality. (Ghosal; 2005, 2010, Chauhan; 2005). It is found that the goals of removal of poverty, inequality and ignorance after independence were not achieved in our country. The cross state differentials in the incidence of poverty and its magnitude of decline are found to be high and the same is increasing at an alarming high rate. Literature is also very rich in analyzing the level and impact at the rural urban areas highlighting the rural-urban divide (Patnaik, 2010, Deaton and Dreze, 2010, Krishnaswamy, 2012). Inter-state rural variability measured through the coefficient of variation is found to have declined in the pre reform period followed by an increasing trend in the post reform period although the degree of variability has been found to be low. A similar trend is seen in the urban inter-state inequality also. The growth has been more pro rich during the post reform period. It can be thus safely concluded that in rural areas growth in MPCE across states has caused a decline in inequality whereas in urban areas inequality has increased with a growth in MPCE. Also a higher base level inequality in income causes higher inequality. There was a substantial increase in rural and urban MPCE over the years till 2001-12. But the rural households continue to be worse off than their urban counterparts in terms of MPCE and the rural urban divergence in expenditure has widened over the period. The rural-urban expenditure divergence has dropped over the last few years, presumably because intense public intervention policies for rural employment and welfare have paid off (Krishnaswamy, 2012).

There were also a vast number of studies concentrating on the measurement of magnitude of poverty and inequality, across the states both in the rural and urban areas. (Himanshu; 2010, Sengupta; 2008, Patnaik; 2010). These studies try to analyze the shift in consumption pattern at the urban rural level and the reasons causing the shift in pattern. It was found out that poverty has declined between 1993-04 and 2004-05 but the substantial part of the decline has occurred in 1999-2005. But doubt has been expressed regarding substantial fall in poverty in both rural and urban areas. There are few studies which have been tried to examine the composition of consumption expenditure for estimating the demand trend for various items in the economy (Rao 2000, Kumar and Mathur 1996, Satyasai and Vishwanathan 1996 and Meenakshi 1996). It was opined that it was difficult to arrive at an estimate at the rural-urban disparity in cereal consumption due to manual labor independently. The main reason for higher cereal intake in rural India as compared to urban India has been due to the higher manual labour in these areas. Although this trend is seen to be declining, still it constitutes around 50% of the rural-urban differences. Again though the cost of obtaining urban goods in rural India has declined, but it is still high as compared to the urban prices. Consequently 25 percent of higher per capita consumption of cereals in rural India can be attributed to cross elasticity of demand.

The review of literature, however, reveals that most of the studies in this area are dated and very few have focused on inter regional disparity in real consumption expenditure. Keeping this backdrop in mind, the proposed study aspires to take a humble attempt to bridge the gap in the existing literature. The proposed study aims to examine (i) the nature and trend in inequality in consumption

in India since the post reform period (ii) to look into whether there is any change in the consumption pattern of people in India (iii) to make an assessment of the nature of the disparity in consumption between rural and urban states. The rest of the paper is designed as follows: Section II discusses data and methodology used in this paper; Section III analyses the nature of inequality in consumption. Section IV examines the changes in the consumption pattern at the interstate level. Finally, section V presents the concluding observations.

2. Data and Methodology

Based on the objectives of study, the analysis of the consumption expenditure inequality across state is done on the basis of MPCE (at constant 1993-94 prices) and the inequality is measured in terms of Gini Coefficients for the major states from 1972-73 to 2009-10. The analysis is also done at the rural and the urban level. Therefore, the MPCE and Gini coefficients have been used for the all India level and for the major Indian states for both rural and urban areas. The data in this respect are taken from various NSSO rounds. The secondary data has been used from CSO's official website (www.indiastat.com) and other data taken from the annual reports of Planning Commission of India. To analyze the nature of consumption inequality at the all India level for the period of 1972-73 to 2009-10, firstly the Gini coefficients for both the rural and urban areas for the 15 major Indian states are computed. A close analysis of the data will enable us to understand the trend of consumption inequality across the Indian states and at the all India level. Again in order to highlight the nature of inequality of MPCE of both rural and urban areas we have expressed MPCE data at constant 1993-94 prices. To obtain consumption expenditure at constant prices, we have employed the Consumer Price Index of Agricultural Labourers (CPIAL) as the deflator in the rural areas, and the Consumer Price Index of Industrial Workers (CPIIW) in the urban areas. To understand the degree of variability in the MPCE across the states and over time we have computed the profile of coefficient of variation.

3. Analysis of Consumption Pattern at the Aggregate Level

The main aim of this section is to understand and analyze the pattern of consumption expenditure at the aggregate level. It is seen that there has been a small but steady increase in MPCE over the reference years of our study, in both the rural and the urban areas, with inequality, as measured by the Gini coefficient, displaying a sudden spurt in urban India in the 2000s-plausibly the result of a combination of liberalized economic policies and initiatives. One can see that in rural India, the shares in consumption expenditure of the poorest two deciles and of the richest decile have increased in 2009-10 as compared to 1971-72, while the shares of deciles 4 to 9 have actually declined. In urban India, the shares of all but the richest two deciles have declined. In the rural areas, the ratio of the richest decile's mean income to that of the poorest decile increases from 6.07 in 1970-71 to 6.35 in 2009-10, and the corresponding increase, in the urban areas, is from 8.37 to 10.74. This suggests rising over-time disparity, which is much more pronounced in urban than in rural India. It is clearly seen that the absolute decile-wise increase in mean income from the base to the terminal years keeps systematically increasing with the decile in both the rural areas and the urban ones.

Table-1 : MPCE (Rs) trends in India (at constant 1993-94 prices)

	1972-73	1977-78	1983	1987-88	1993-94	1999-00	2004-05	2009-10
MPCE rural	219.86	249.48	258.62	280	281.40	305.50	322.83	342.44
MPCE urban	364.72	356.19	397.2	426	474.19	524.19	618.99	607.48

Source : Authors computation

The table-1 above shows estimates of all-India average MPCE various quinquennial surveys of consumer expenditure. For rural India, real MPCE is seen to have grown from Rs. 219.86 in 1972-73 to Rs. 342.44 in 2009-10—an increase of 90% over 40 years. In urban India there has been a substantially higher growth in real MPCE from Rs. 364.72 in 1972-73 to Rs. 607.48 in 2009-10—an increase of over 100% in the 40 year-period since 1972-73. A closer look at the Coefficient of variation (CV) of real MPCE is also helpful in analyzing the level of consumption inequality. It is seen that the CV has increased from 17.97 in 1972-73 to 29.86 in 2009-10 signaling a high rate of growth in inequality. The CV has shown consistent increase till 1987-88 where it reduced to 17.01. With the inception of the reform it has registered a consistent increase across the period showing a wide gap across the income classes.

We have also computed the relative shares of bottom and top 30% of population in total MPCE. Now if the share of bottom 30% population in expenditure classes registers a decline and top 30% register an increase, then this will mean that the poor are getting poorer and the rich are getting richer. In rural India it is found that there has been an increase of 0.6 percentage points in the share of consumption expenditure of the bottom 30% population and an increase of 0.2 percentage points in the share of consumption expenditure of the top 30% population during 1973-2010. However, in urban India, the consumption inequality and the share of consumption expenditure of the bottom and top 30% population indicates that poor are getting poorer and rich are becoming richer during the period 1973-2010. It is seen that the share consumption expenditure of the bottom 30% populations has declined by 2.1 percentage points and the shares of consumption expenditure of the top 30% population has increased by 3.9 percentage points.

A better understanding of the consumption pattern at the aggregate level can also be understood by the composition of the MPCE across the country (Table-2). The changes in the composition and preference of certain items of consumption demonstrate the changing pattern of consumption expenditure in our country. The share of food is seen to have declined by about 24 percentage points to 48.6% in the rural sector and by about 26 percentage points to 38.5% in the urban sector. Cereals have registered the largest decline in share among all the item groups—from 40.6% to 12% in rural India and from 23.3% to 7.3% in urban India. Again the share of food and share of cereals fall appreciably with rise in MPCE level. In rural India as a whole, for instance, the share of food falls from over 68% in the lowest MPCE class (Rs. 0-235) to under 34% in the highest (Rs. 1155+).

Table-2 : % Share of Food and Non-Food Expenditure in Total MPCE

Item groups	RURAL		URBAN	
	1972-73	2009-10	1972-73	2009-10
Cereals	40.6	15.6	23.3	9.1
Gram	0.6	0.2	0.3	0.1
cereal sub	0.5	0.1	0.1	0
pulses & products	4.3	3.7	3.4	2.7
milk & products	7.3	8.6	9.3	7.8
edible oil	3.5	3.7	4.9	2.6
egg, fish & meat	2.5	3.5	3.3	2.7
Vegetables	3.6	6.2	4.4	4.3
fruits & nuts	1.1	1.6	2	2.1
Sugar	3.8	2.4	3.6	1.5
salt & spices	2.8	2.4	2.3	1.5
beverages, etc.	2.4	5.6	7.6	6.3
food total	72.9	48.6	64.5	38.5
pan, tobacco, intox.	3.1	2.2	2.8	1.2
fuel & light	5.6	9.5	5.6	8
clothing & bedding	7	4.8	5.3	4.7
Footwear	0.5	1	0.4	0.9
misc. g. & services	8.7	26	19.2	37.8
durable goods	2.2	4.7	2.2	6.7
non-food total	27.1	51.4	35.5	61.5
total expenditure	100	100	100	100

Source : Computed from different NSSO Reports

In urban India the fall in the share of food is steeper. It is observed that with higher average MPCE, a lower share of cereals in total expenditure is witnessed. It has been observed that the share of cereals is closely correlated with MPCE class. The share of non-food expenditure has registered a consistent increase in both rural and urban India since 1972-73. Pan, tobacco and intoxicants exhibit a distinct downward trend, especially in urban areas, while fuel and light appear to show an increase in share in

the last decade. Clothing and bedding show an overall fall and the share of durable goods appears to be picking up. The greatest gainer in share of expenditure is clearly the “miscellaneous goods and services” category (including education and medical care). The share of this group has soared from 8.7% to 26% in rural India and from 19% to 40% in urban India.

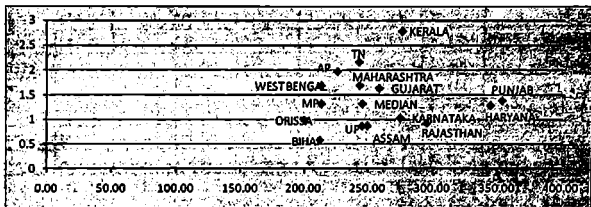
It has been noted in the literature on consumption that the per capita cereal consumption of the Indian population has been declining in both rural and urban areas over the past two or three decades. For all sections of the population, this fall is distinctive. Over years diet has become more varied especially in the middle and upper income groups. Calorie needs may be changing in especially in urban India because labor-saving devices are becoming increasingly available in the household, in the workplace, and in transportation. This also is an indication of the improved purchasing power of the different income classes across rural India. Therefore it is seen that the quality of life across the different consumption classes has improved at the same time as inequality in consumption across different consumption classes has increased.

4. Cross State Analysis of Consumption Pattern in India

This section aims to understand the difference in the growth of consumption expenditure across the different states and the extent of inter-state inequality. To study the pattern of real growth in the level of living in Indian states the combined MPCE of the major Indian states is taken. The relative positions of each of the fifteen major states have been studied in detail. Firstly the best five states in terms of MPCE combined level in 1972-73 were Punjab, Haryana, Rajasthan, Haryana and Karnataka while the most impoverished states were Orissa, Bihar, West Bengal and Madhya Pradesh. The other states remained more or less close to the national average. In 2009-10 the states of Punjab, Haryana, Maharashtra and Gujarat maintained their lead position though Kerala had emerged as the new leader. Bihar and Orissa continued to be the worst performing states being accompanied by Uttar Pradesh and Madhya Pradesh respectively. Values of Spearman rank correlation of real MPCE combined of a state with respect to that of the previous round remained very high: 0.925, 0.911, 0.771, 0.825, 0.927, 0.998 and 0.826 through 1972-73 to 2009-10 respectively. The CV of MPCE of the major states is seen to increase from 17.97 in 1972-73 to 21.41 in 1983 signaling increase in the level of inequality. Then it witnessed a sudden fall to 19.15 signaling a drastic decline in level of inequality at all India level in 2004-05. But in 2009-10 witnessed a sudden increase in CV to 29.86 projecting a rising level of inter state inequality. It is noticed that across the period of research most of the states have been growing at widely varying rates.

The figure clearly shows interstate variability in terms of the growth of MPCE. On the left block of the diagram (low base, low growth) are the states like Bihar and Orissa, while on the top right (high base, high growth) are the states of Kerala, Punjab, Gujarat, Tamil Nadu, Haryana and Maharashtra. The states of Andhra Pradesh, West Bengal and Madhya Pradesh appear in the top left block (low base, high growth) and Karnataka, Assam and Rajasthan on the bottom right (low growth, high base). Therefore it is clear that the states with higher expenditure level are largely the states, which have achieved higher growth rates during the period of investigation. Thus divergence is the general trend among Indian states in recent times in terms of living.

Chart 1 : Scatter plot of base level MPCE (1972-73) and growth rates of MPCE of major Indian states



In analyzing the trend of consumption expenditure across the different states the performance of the state at the rural and urban areas are also considered separately (table-3 and table-4). Andhra Pradesh has shown a consistent increase in real MPCE in both rural and urban India. It was at the fourth position at Rs 376.38 (rural) and Rs 674.15 (urban) respectively in 2009-10. Assam has shown a dismal increase in rural real MPCE since 1993-94 and its urban MPCE was at Rs 523.81 much below the all India MPCE Rs 607.48 for 2009-10. Bihar has been one of the states with the lowest rural and urban MPCE over the 8 quinquennial periods. Surprisingly for the state of Haryana the growth of real rural MPCE was more consistent than the urban real MPCE. But for Karnataka the urban real MPCE has been growing steadily since the post reform period till 2004-05. In 2009-10 the urban MPCE drastically declined to Rs 583.67. Karnataka has not had a very favorable growth story in the rural sector. Kerala has registered a consistent increase in rural real MPCE since 1972-73 but showed a sharp increase in urban real MPCE in 2009-10 by 73.5% p.a. at Rs 905.78. Orissa with Bihar has always the lowest real rural MPCE. But the urban real MPCE of the state started declining only after 2000.

Table-3 : Trend in Rural Real MPCE of Major Indian States (1972-73 to 2009-10)

States	1972-73	1977-78	1983	1987-88	1993-94	1999-00	2004-05	2009-10
Andhra Pradesh	198.04	223.19	258.91	283	288.70	281.23	325.85	376.38
Assam	242.34	226.89	266.70	272	258.11	270.59	325.16	318.45
Bihar	206.02	206.83	204.04	242	218.30	245.30	249.73	251.29
Gujarat	233.82	259.75	297.79	285	303.32	349.37	340.40	367.16
Haryana	339.10	364.01	400.64	380	385.01	460.34	486.40	514.39
Karnataka	206.70	231.14	261.74	264	269.38	301.28	292.75	297.79
Kerala	261.16	308.11	356.37	374	390.41	498.17	574.39	683.03
Madhya Pradesh	193.83	205.70	232.21	251	252.01	249.02	258.68	294.10

Maharashtra	201.89	258.05	243.98	285	272.66	303.93	305.55	373.06
Orissa	176.60	172.88	180.28	226	219.80	211.55	237.57	252.03
Punjab	353.42	450.45	450.11	432	433.00	478.84	482.39	546.13
Rajasthan	271.18	407.99	341.70	315	322.39	344.44	340.52	370.48
Tamil Nadu	208.08	219.82	229.40	273	293.62	328.40	336.36	357.20
Uttar Pradesh	223.46	264.48	265.44	263	273.83	295.06	310.11	305.90
West Bengal	192.42	206.56	218.73	265	278.78	286.70	324.12	315.50
all-India	219.86	249.48	258.62	280	281.40	305.50	322.83	342.44
CV	22.50	30.31	26.98	19.57	20.82	26.63	27.46	31.76

Source : Various Reports of NSSO

Rajasthan which has had a decline rural and urban real MPCE across the years suddenly slipped to the 10th position in 2009-10 registering a 27% decline in urban MPCE at Rs 568.03. In the rural areas, the states which have registered more than 80% growth in MPCE during 1973-2010 are Andhra Pradesh, Kerala and Maharashtra. In the urban areas, such states are Andhra Pradesh, Gujarat, Kerala, Maharashtra Punjab and West Bengal. A closer look at the C.V across the year indicates that the inequality has shown a fluctuation at the all India level. In rural India there has been a consistent increase in the consumption inequality since the post reform period where as in urban India inequality seems to have reduced from 1987-88 to 2004-05. But it again increased in 2009-10.

Table-4 : Trend in Urban Real MPCE of Major Indian States (1972-73 to 2009-10)

States	1972-73	1977-78	1983	1987-88	1993-94	1999-00	2004-05	2009-10
Andhra Pradesh	336.59	375.5	401.1	398	408.6	470.37	521.86	674.15
Assam	307.47	326.8	335.5	467	458.57	502.73	593.23	523.81
Bihar	265.35	294.75	295.5	323	353.03	377.97	381.75	371.43
Gujarat	319.16	414.36	394.7	416	454.18	558.64	612.5	632.31
Haryana	366.51	387.15	466.3	498	473.92	560.5	584.75	645.58
Karnataka	479.48	470.24	641.4	385	746.93	750.35	698.81	583.67
Kerala	345.97	385.33	419.1	461	423.14	539.52	521.87	905.78
Madhya Pradesh	308.02	346.15	403.4	408	493.83	548.43	647.4	499.66
Maharashtra	329.64	387.54	374.1	484	408.06	456.7	502.15	759.18
Orissa	440.69	489.93	478.9	390	529.8	592.54	566.58	484.69
Punjab	352.25	358.27	361.8	467	402.54	389.84	427.33	677.89
Rajasthan	402.86	469.62	464.9	412	510.73	587.27	721.45	568.03
Tamil Nadu	321.91	373.22	395.5	430	424.73	479.7	483.78	571.09
Uttar Pradesh	372.83	381.25	403.7	375	438.29	606	585.06	464.29

S. Lakshmy and Ratan Kumar Ghosal

West Bengal	274.16	306.33	317.9	432	388.97	428.92	458.74	590.48
all-India	364.72	356.19	397.2	426	474.19	524.19	618.99	607.48
CV	16.71	14.99	20.18	11.06	20.03	18.29	17.35	21.73

Source : Various Reports of NSSO

A closer examination of the values of the Gini Coefficients of MPCE for all the eight quinquennial NSS rounds (1972-2010) for the rural and urban sectors of the 15 major states reveals that in the rural areas, the inequality has declined in 11 states during 1972 - 2010 whereas it has increased in other states (Table-5). Maximum decline in the value of rural Gini coefficient has been observed for the state of Rajasthan (28.8%) followed by West Bengal (21.64%). Other States that have registered a decline are Bihar (21.53%) Gujarat (16.23%), Karnataka (13.92%), Madhya Pradesh (4.58%) Maharashtra (13.55%), Orissa (16.03%), Punjab (6.19%) and Tamil Nadu (2.94%).

Table-5 : Gini Coefficient of Major Indian States (Rural)

State	1972-73	1977-78	1983	1987-88	1993-94	1999-00	2004-05	2009-10	% Point Change
A.P	0.273	0.298	0.294	0.301	0.284	0.233	0.288	0.278	1.83
Assam	0.18	0.179	0.192	0.222	0.176	0.2	0.197	0.244	35.56
Bihar	0.288	0.259	0.256	0.264	0.223	0.206	0.208	0.226	-21.53
Gujarat	0.302	0.285	0.257	0.233	0.236	0.234	0.268	0.253	-16.23
Haryana	0.277	0.288	0.272	0.281	0.301	0.238	0.323	0.301	8.66
Karnataka	0.273	0.321	0.303	0.292	0.265	0.241	0.264	0.235	-13.92
Kerala	0.31	0.353	0.33	0.323	0.287	0.27	0.341	0.417	34.52
M.P	0.306	0.331	0.295	0.29	0.277	0.243	0.269	0.292	-4.58
Maharashtra	0.31	0.462	0.285	0.331	0.303	0.258	0.31	0.268	-13.55
Orissa	0.312	0.301	0.267	0.267	0.243	0.244	0.282	0.262	-16.03
Punjab	0.307	0.303	0.279	0.295	0.265	0.239	0.278	0.288	-6.19
Rajasthan	0.316	0.464	0.343	0.303	0.26	0.208	0.248	0.225	-28.80
T.N	0.272	0.319	0.325	0.323	0.306	0.279	0.315	0.264	-2.94
U.P	0.277	0.299	0.29	0.279	0.278	0.245	0.287	0.356	28.52
W.Bengal	0.305	0.292	0.286	0.252	0.252	0.225	0.273	0.239	-21.64
All India	0.302	0.337	0.298	0.291	0.281	0.26	0.297	0.291	-3.64
CV	11.81	22.34	12.70	11.27	13.12	9.28	14.10	18.69	

Source: Various Reports of NSSO and Author's computation

The state of Assam has witnessed the maximum increase in Gini coefficient (35.56%) followed by Kerala (34.52%), Uttar Pradesh (28.52%), Haryana (8.66%) and Andhra-Pradesh (1.83%). The C.V of the Gini Coefficient has shown a consistent increase from 11.81 in 1972-73 to 13.12 in

1993-94. It fell significantly to 9.28 in 1999-00. With the inception of the early 2000s, the C.V consistently increased to 18.69 in 2009-10. Interestingly, the share in consumption expenditure of the bottom 30% population has remained at the same level or gone up in the rural areas of 12 states. The States where the share has declined are Assam, Haryana and Kerala. The percentage share of the top 30% population has declined in the States of Bihar, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan Uttar Pradesh and West Bengal. The analysis clearly shows that there has been a reduction in consumption inequality across the different states in the rural areas.

In the urban areas, the inequality (Gini Coefficient) has not declined in any state during 1972-2010 (Refer to Table 6). The states where the Gini Coefficient has increased most are Gujarat (35.54%), Andhra Pradesh (28.62%) and Kerala (27.69%), the least increment in Gini Coefficients is seen in the states of Bihar (2.79%), Karnataka (3.41%) and Madhya Pradesh (4.60%) respectively. The share in consumer expenditure of bottom 30% population also declined in all the states. The share of top 30% increased in all the states with special reference to Kerala, Gujarat and Andhra Pradesh. The C.V has increased from 11.34 in 1972-73 to 12.28 in 2009-10 indicating that the gap between rich and poor is increasing in urban areas.

Table-6 : Gini Coefficient of Major Indian States (Urban)

State	1972-73	1977-78	1983	1987-88	1993-94	1999-00	2004-05	2009-10	% Point Change
A.P.	0.297	0.319	0.327	0.361	0.32	0.313	0.37	0.382	28.62
Assam	0.267	0.324	0.276	0.337	0.287	0.31	0.314	0.324	21.35
Bihar	0.323	0.304	0.301	0.297	0.306	0.323	0.33	0.332	2.79
Gujarat	0.242	0.308	0.264	0.285	0.287	0.287	0.304	0.328	35.54
Haryana	0.315	0.317	0.313	0.297	0.28	0.287	0.361	0.36	14.29
Karnataka	0.323	0.342	0.334	0.334	0.315	0.323	0.365	0.334	3.41
Kerala	0.39	0.395	0.374	0.387	0.337	0.321	0.4	0.498	27.69
M.P.	0.348	0.377	0.306	0.331	0.327	0.315	0.393	0.364	4.60
Maharashtra	0.367	0.362	0.337	0.352	0.352	0.348	0.371	0.41	11.72
Orissa	0.347	0.323	0.296	0.324	0.304	0.292	0.348	0.389	12.10
Punjab	0.313	0.38	0.319	0.278	0.276	0.29	0.393	0.371	18.53
Rajasthan	0.333	0.301	0.304	0.346	0.29	0.28	0.367	0.378	13.51
T.N.	0.315	0.333	0.348	0.348	0.344	0.381	0.358	0.332	5.40
U.P	0.312	0.327	0.319	0.329	0.322	0.329	0.37	0.329	5.45
W.Bengal	0.338	0.317	0.327	0.353	0.333	0.342	0.376	0.384	13.61
All India	0.341	0.345	0.33	0.352	0.34	0.343	0.373	0.382	12.02
CV	11.34	8.82	8.70	9.15	7.78	8.66	7.65	12.28	

Source : Various Reports of NSSO and Author's computation

From the above analysis of the Gini Coefficient at the interstate level it is plausible to conclude that there has been no uniformity in the trend. Overall rural inequality is seen to decline marginally whereas there has been a consistent increase in inequality across the different states in urban areas. It is alarming to identify that the states of Kerala and Gujarat which have been the forerunner in the growth of MPCE across the different quinquennial are the states to have witnessed higher rapid growth in the value of Gini Coefficient there by implying a high rate of consumption inequality. Again the state of Bihar which has been suffering a low growth of MPCE across the quinquennial periods, is also the state to be leading as far a decline in consumption inequality is concerned.

5. Concluding Observations

The following conclusions emerge from our study.

First, almost all the states have achieved a substantial increase in real consumption expenditure. A closer look at the CV of real MPCE is also helpful in analyzing the level of consumption inequality. It is seen that the CV has increased from 17.97 in 1972-73 to 29.86 in 2009-10 signaling a high rate of growth in inequality. The CV has shown consistent increase till 1987-88 where it reduced to 17.01. But the inception of the post reform period it has registered a consistent increase across the period showing a wide gap across the income classes.

Second, the share of food and share of cereals fall appreciably with rise in MPCE level. It is observed that with higher average MPCE, a lower share of cereals in total expenditure is witnessed. It has been observed that the share of cereals is closely correlated with MPCE class. The share of non-food expenditure has registered a consistent increase in both rural and urban India since 1972-73. The greatest gainer in share of expenditure is clearly the "miscellaneous goods and services" category (including education and medical care). The share of this group has soared from 8.7% to 26% in rural India and from 19% to 40% in urban India.

Third, the reasons for the above trend may be because the calorie needs may be changing in especially in urban India because labor-saving devices are becoming increasingly available in the household, in the workplace, and in transportation. As a result of the sedentary lifestyle of individual across the higher income classes the calorie intake has shown a decline across the population with an inclination to shift towards other food items and improved purchasing power of the different income classes across rural India.

Finally, in the rural areas, the states which have registered more than 80% growth in MPCE during 1973-2010 are Andhra Pradesh, Kerala and Maharashtra. In the urban areas, such states are Andhra Pradesh, Gujarat, Kerala, Maharashtra Punjab and West Bengal. The C.V of the Gini Coefficient (rural) has shown a consistent increase from 11.81 in 1972-73 to 13.12 in 1993-94. It fell significantly to 9.28 in 1999-00. With the inception of the early 2000s, the C.V consistently increased to 18.69 in 2009-10. In the urban areas, the inequality (Gini Coefficient) has not declined in any state during 1972-2010. The C.V has increased from 11.34 in 1972-73 to 12.28 in 2009-10 indicating that the gap between rich and poor is increasing in urban areas. The analysis thus helps us substantiate clearly that the cross state inequality in consumer expenditure seems to have increased over the period and has become more divergent. By observing the trend of MPCE and Gini coefficient

of the 15 major states it is observable that inequality has shown an upward trend especially in the post reform period. Also, there is an evidence of greater urban inequality than rural inequality in most of the states.

References

- Chaudhuri S. and Gupta N. (2009). "Levels of living and poverty patterns : A District-Wise analysis for India", *Economic and Political Weekly*, February 28, XLIV(9), pp. 94-110.
- Chauhan, S.S.S. and Singh, S. (2005). *Poverty and Inter State Disparities inequality Development, Poverty Inequality India* edited by K. Nageshwar Rao, Deep and Deep Publishers.
- Datt, G. (1999). "Has Poverty Declined Since Economic Reforms?", *Economic and Political Weekly*, 34(50).
- Datt, G. and Ravillion, M. (2002). "Is India's Economic Growth Leaving the Poor Behind?" *Journal of Economic Perspectives*, 16(3), Summer, pp. 89-108.
- Deaton, A. and Drèze, J. (2010), "Nutrition, Poverty and Calorie Fundamentalism: Response to Utsa Patnaik", *Economic and Political Weekly*, April 3, xlv(14), pp.78-80.
- Ghosal, R.K. (2005). "Globalization and Inequality", *Indian Economic Journal*, 53.
- _____. (2009). "Cross Country Differentials inequality Economic Growth and Inequality in South Asia-A Panel Data Approach", *Indian Economic Journal*, 57(1), pp.132-155.
- _____. et. al. (2005). *Cross State Differential Inequality and Rural Poverty In India, Poverty Inequality India* edited by K. Nageshwar Rao, Deep and Deep Publishers.
- _____. (2010). "Inter-State Disparity in Growth, Poverty and Inequality in India—A panel Data Approach", *Asian Economic Review*, 52(20), pp. 357-375.
- _____. (2012). "Growth, Poverty and Inequality Paradox in India: A Panel Data Approach", Paper Prepared for the 32nd General Conference of The International Association for Research in Income and Wealth, August 5-11, Boston, USA.
- _____. (2014). "Growth, Inequality and Diversification In Consumption Pattern In India—An Empirical Analysis", Paper Prepared for the IARIW 33rd General Conference, August 24-30, Rotterdam, Netherlands.
- Ghosal R.K and Chattopadhyay A.K. (2002). *Cross State Differentials in Rural Poverty in India, Poverty Inequality India* edited by K.Nageshwar Rao, Deep and Deep Publishers.
- Gulati, A. (2014). Driven by diet diversification, consumption patterns of Indians are reforming.<http://indiatoday.intoday.in/story/driven-by-diet-diversificationconsumption-patterns>. Accessed on 12-03-2014.
- Hiranshu, (2010). "Recent Trend inequality Poverty and Inequality", *Economic and Political Weekly*, February 10, pp. 497-508.
- Jayaraj D. and Subramanian S. (2012). "On the 'Inclusiveness' of India's Consumption Expenditure Growth", *World Institute for Development Economic Research, Working Paper No. 2012/57*, June, pp. 1-40.
- Kumar, P. and Mathur, V.C. (1996). "Structural Changes in the Demand for Food in India", *Indian Journal of Agricultural Economics*, 51, pp. 664-673.
- Meenakshi J.V. (1996). "How important are changes in taste? A state level analysis of food demand", *Economic and Political Weekly*, December 14, pp. 3265-3269.

- Morisset, M. and Kumar, P. (2011). "Trends and Pattern of Consumption of Value Added Foods in India", Paper Presented at the 7th Annual Conference on Economic Growth and Development held at Indian Statistical Institute, December 15-17, New Delhi.
- Pal, P. and Ghosh, J. (2007). "Inequality in India: A survey of recent trends", DESA Working Paper No. 45 ST/ESA/2007/DWP/45, pp. 1-30.
- Pattnaik, U. (2010). "A Critical Look at Some Propositions on Consumption and Poverty", *Economic and Political Weekly*, February 6, XIV(6).
- _____ (2010). "Trends in Urban Poverty under Economic Reforms: 1993-94 to 2004-05", *Economic and Political Weekly*, January 23, XIV(4).
- Krishnaswamy, R. (2012), "Pattern of Consumer Expenditure in India Some Revelations", *Economic and Political Weekly*, September 8, xlvil(36).
- Radhakrishna, R. and Ravi, C. (1992). "Effect of Growth, Relative Price and Preferences of Food and Nutrition", *The Indian Economic Review*, Special Number in memory of Sukhamoy Chakravarty, 27, pp. 30-41.
- Rao, Hanumantha, C.H. (2000). "Declining Demand for Food grains in India—Causes and Implications", *Economic and Political Weekly*, January 22, pp. 201-206.
- Ravillion, M. (1998). "Farm Productivity and Rural Poverty in India", *Journal of Development Studies*, V-34, pp. 62-85.
- Satyasai K.J.S. and Vishwanathan, K.U. (1996). "Commercialisation and Diversification of Indian Agriculture", *Economic and Political Weekly*, November 9-16, pp. 3027-3028.
- Sengupta, A. et al. (2008). "India's Common People: Who Are They, How Many Are They and How Do They Live?", *Economic and Political Weekly*, March 15, pp. 49-63.
- Sen, A. (2000). "Estimates of Consumer Expenditure and its Distribution: Statistical Priorities after NSS 55th Round", *Economic and Political Weekly*, 35(51).
- Sen, A. and Himanshu (2004), "Poverty and Inequality in India-II—Widening Disparities during the 1990s", *Economic and Political Weekly*, September 25, pp. 4361-4375.