**POLARIZATION, INEQUALITY AND INCLUSIVE GROWTH: KERALA'S EXPERIENCE IN THE REFORM PERIOD**

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**Abstract**

*The study puts forth and illustrates Kerala’s contemporary situation a proposition that increasing inequality is inherent in the faster economic growth propelled by the neo-liberal policy regime, tends to inhibit the progress in poverty-reduction, and eludes “inclusive growth”. The periods coincide with the periods of high levels of polarization in terms of income measured in terms of their proxy measured in terms of consumption expenditure. The gaps is widening within and across group identities also.*

# 1.0 Introduction

The relation between growth and distribution has long been seriously discussed in economic literature but has remained contentious on Kuznet’s famous hypothesis postulating an inverted ‘U’ relationship between income and inequality. Recently, some empirical studies covering larger number of observations did not find evidence of inverted-U curve pattern of relationship between growth and inequality for individual countries. Also some studies showed that since the mid-eighties developing countries recording fast economic growth witnessed a simultaneous rise in levels of inequality and polarization that led to slow-down in the progress of poverty reduction. The recent trend in the literature on growth and distribution therefore is to challenge the old notions and advance alternative propositions (e.g. high growth trajectories affect income distribution adversely; the higher the level of inequality, the less impact economic growth has for reducing poverty, for any given level of growth; countries can moderate inequality and still achieve reasonable growth rate and so on) for empirical scrutiny. The present paper puts forth and illustrates with Kerala situation a proposition that the increasing inequality and polarization is inherent in the faster economic growth propelled by the neo-liberal policy regime, tends to inhibit the existence of the much hailed Kerala model, and eludes “inclusive growth “in the reform period.

**2.0 Inclusive growth,** **Inequality and polarization**

Interestingly, not so long ago “pro-poor growth” was set as a primary development goal. To some scholars, the term aligns awkwardly the twin objectives of “faster growth” and “greater equity” and hence the development goal is to be referred as “poverty reduction more or less. Now it has become fashionable to talk of seeking the goal of “inclusive growth”. Why is this sudden change in the development goal? Has the pro-poor growth strategy failed to deliver on its promise? Is greater equity now passé? Is poverty not a problem now? Has the relevance of poverty-reduction as a development goal collapsed? Or is it that the “inclusive growth” strategy is only an extension of “pro-poor growth” strategy to cover inequalities in social, political, and regional and other non-economic arena. Answers to such questions are warranted towards justifying the current effort towards popularising “inclusive growth” as the new development goal. Admittedly, there is some haziness in the measurement, and duelling definitions (e.g. the poverty equivalent growth rate of Kakwani vs. the distribution-corrected growth rate of Ravallion) make clarity of the concept further blurred. That shortcoming of “pro-poor growth” concept cannot be a valid reason for silently replacing it (poverty reduction) with the new goal of “inclusive growth”. For, the newly jostled “inclusive growth” is a multi-dimensional concept and hence more diffused in meaning and difficult in measurement. There remains no consensus as yet on how to define or measure inclusive growth though the issue has generated a certain amount of policy and academic debate (Ali and Son, 2007a).

Perhaps, the idea of propagating the development goal of “inclusive growth” has originated from the realisation that the process of fast growth has enabled some sections of society to appropriate disproportionately and exclude some other sections from the benefits of growth. The excluded ones are mostly the poor, deprived, disadvantaged and discriminated in economic, political, and social spheres as a result of rising inequality. It is the apprehension of the exclusion of a large number of people from, and the political compulsion of bringing them within the fold of, the benefits of faster growth to legitimise the neo-liberal economic regime that must have prompted the popularisation of the new concept of “inclusive growth”. Indeed, the newly coined concept of “inclusive growth” has at the core of analytical framework, the relationship between growth, inequality and poverty. Thus viewed, poverty reduction and providing distributional justice are viewed as critical sub-sets of “inclusive growth” and the central concern of “inclusive” growth strategy revolves around the trend in the inequality and reducing polarization will be having debilitating effect on poverty reduction in society.

A review of the ongoing discussions on the meaning and measurement of “inclusive growth” would make the above point clear. It is but beyond our brief to make a critical review of the attempts being made to define and measure “inclusive growth” We however note here the views of international organisations, which are strong advocates of the neo-liberal policy regime. To the World Bank (2006), inclusive growth is “ the only sure means for correcting the deeply ingrained regional imbalances, inequities and for consolidating economic gains:” as inclusive growth is the growth “with emphasis not only on the distribution of economic gains but also on the security, vulnerability, empowerment and sense of full participation that people may enjoy in social life”. To the Asian Development Bank “inequality is growing across the region, within countries and between urban and rural areas… Some groups experience systematic discrimination based on their gender, ethnicity, caste, age, beliefs or other socio economic status, perpetuating their chronic poverty and exclusion, sometimes causing conflicts and exacerbating the conditions of fragile states” (ADB 2007). The concept is then defined “as growth that not only creates new economic opportunities but also one that ensures equal access to the opportunities for all segments of society, particularly for the poor” (Ali, 2007 a). It follows from the foregoing illustrative definitions of “inclusive growth” that distributive justice (polarization and inequality) and poverty are the two critical aspects of its analytical core as is the case with “pro-poor growth”.

India had adopted poverty reduction and redistribution as the central goal of its development strategy for over 50 years but has recently switched over to the “inclusive growth” with the basic goals of raising economic growth and making the growth more “inclusive” (Planning Commission 2006) though the concept is not precisely defined. the process of inclusive growth implies one wherein the distribution of income moves in favour of the poor as a part and parcel of the growth process itself; in the Indian context inclusiveness in the economic sense has to be accompanied by socio-political processes that simultaneously and systematically break the social barrier of discrimination based on caste, gender, religion and ethnicity. We agree that “inclusive growth” is larger in scope than “pro-poor growth”, yet we can argue that the central issue in both strategies refers to poverty, deprivation and discrimination associated with increasing inequality that accompanies fast growth and hence we have to examine the relationship between growth, inequality and poverty in the assessment of “inclusive growth” strategy. In other words, inclusive growth has to address inequality issue as well as the poverty reduction goal. It is not then sufficient for ‘inclusive growth’ to confine to re-distributive approach to tackle inequality, it has to focus on creating productive employment opportunities and making them equally accessible to all (Sen and Ali 2007a).

In the perspective outlined above, we accept the importance of an “inclusive growth” strategy that creates opportunities through sustainable growth and making the opportunities available to all including the poor. Its importance is derived from the fact, as acknowledged by the ADB in the Asian context that “rising income inequalities and the persistence of unacceptably high non-income inequality pose a clear and present danger to sustaining growth, and the inclusive growth that focuses on opportunities for all while eliminating extreme deprivation will need to address economic, social, and political inequality…” (Ali 2007 b)

The growth is more redistributive and inclusive when there is a reduction in the inequality and polarization in the society. This can be possible only if the development reaches to all without a distributive lag. Though Kuznet’s suggest an increased polarization in the preliminary stages of growth but it should narrow down as the growth gets faster so that benefits reaches to all and it become inclusive.

In the present study the analysis is confined to the economic dimension for want of our expertise in other disciplines. Besides, much of social discrimination is usually propelled by poverty and deprivation. The basic question for our analysis is this: does movement of the economy on the fast growth trajectory as a result of the shift to market-oriented liberalisation and globalisation policies (i.e., neo-liberal policy regime) ensures greater equity and thus more inclusive growth? The available evidences suggest that corresponding to the fast growth rate, employment growth has been far lower and increase in real wages has been slower, though the differences in the employment and real wages between the bottom and top quintiles of the labour force has increased significantly over the last decade ( Pal and Ghosh 2007, Ghosh and Chandrashekhar 2003,). And these naturally lead to rising income and non-income inequalities and are associated with the inequalities in access to opportunities meaning thereby the exclusion of some sections of society from the benefits of fast growth. Our proposition is that the increased inequality and polarisation are inherent in the fast growth propelled by neo-liberal policy regime, impedes the speed of poverty reduction, and thus eludes “inclusive growth”. We substantiate this proposition by analysing the contemporary situation in Kerala state.

**3.0 Inequality and polarisation: basic understanding of the issue**

Among economists working on inequality, particularly on its implications for conflict, one issue that has received considerable attention in recent times is “polarization.” A broad definition of polarization is that it is the “appearance (or disappearance) of groups in a distribution” (Chakravarty 2009, p. 105). Several authors have argued that polarization is intimately connected with conflict.Polarization measurement has been recently proposed as a relevant variable to characterize income distributions. Nowadays, polarization is widely accepted as a distinct concept from inequality. In fact, polarization concentrates the income distribution on several focal or polar modes, whereas inequality relates to the overall dispersion of the distribution. A more bipolarized income distribution is one that is more spread out from the middle, so there are fewer individuals or families with middle level incomes (Wolfson, 1994 and 1997). Therefore, polarization measures can be used to complement the analysis of an income distribution. Further we can say that it will get more polarized if the distribution is getting towards two poles and its getting further skewed (Esteban and Ray 1994).

Though in economics, a burgeoning literature on polarization has emerged in roughly the past two decades. There are broadly two different notions of polarization in this literature. The first, “bipolarization” is motivated by the idea that the presence of a sizeable middle class can mute (at least to a certain extent) conflict that could arise if the population were to be divided into masses of rich and poor The seminal studies here are Foster and Wolfson (1992) and Wolfson (1994), although the idea that the middle class is a stabilizing force is a rather old one and can be traced back at least to Aristotle. In *The Politics*, Aristotle discusses the virtues of the middle class and how it can balance the vices of the two extreme classes (i.e. the rich and the poor). The conception of the process of polarization as one in which the middle diminishes in importance, breaking up the society into groups (poles) is also old. Marx and Engels discuss the class that stands in the middle (i.e. between the proletariat and the capitalists, e.g. the *petty bourgeoisie*) and its fragility - given the likelihood that in the process of capitalist development, people belonging to the lower end increases that gets into ultimate polarization and gets into class war with capitalist society gets divided into two classes confronting each other - the capitalists and the workers

Foster and Wolfson (1992) and Wolfson (1994) demonstrate the main principles/axioms that characterize the process of polarization and distinguish it from inequality (traditionally understood). These are “increasing spread” and “increasing bipolarity” from the middle and identified it as a pattern of inequality in the western world though it does not look into emergence of middle class which will be gradually move into poles. This is generally measured in polarization which is almost an improved version of inequality measures

The second view that one can discern in the literature, focuses on polarization in a more general sense - through an arbitrary number of groupings.This has also been referred to as the “identification-alienation” framework: individuals belonging to a particular group identify with one another and are alienated from those belonging to another group. Polarization is a group phenomenon and would increase if there is stronger identification among people within a group or if alienation among groups is more intense. The seminal studies here are Esteban and Ray (1994) and Duclos et al. (2004) where we find polarization of different groups such as sector, gender, caste etc which can act as group identities.

It is worthwhile to point out here that the study of inequality and polarization in the Indian context (as in many other contexts) is far from a purely intellectual exercise. India has been adopting a set of far-reaching pro-market policy reforms since the early 1990s (although there were antecedents for these policies in the 1980s). Considerable debate exists on how much one can credit these reforms for the growth that India has been experiencing, and on the other consequences of these reforms (e.g. poverty reduction). Inequality has emerged as a contentious issue in this debate: on the one hand are the supporters of the reforms ( Bhagwati 2010; Panagariya 2008, ), who argue that inequality is not a cause of concern and/or has not worsened, while on the other hand are others (e.g. Sarkar and Mehta 2010; Vakulabharanam et al. 2010; Himanshu 2007; Himanshu and Sen 2004 a,b; Nagaraj 2000 Motiram and Sarma 2011, Subramanian and Prasad 2008 ), who argue that inequality has worsened. Surely, some of this disagreement has to do with different sources of data, different ways of measuring inequality, and even different ways of thinking about inequality.

Here we try to look up on Kerala, which is one of the Indian states among the federation known for its egalitarian form of development in the early stages then hailed by the international agencies and different scholars. So it is fascinating to look up on inequality and polarization in the reform when we are fancied to talk on inclusive growth.

**4.0 Rationale of Kerala-focussed study**

We opted to illustrate the proposition with the evidence from a state-region in India as some recent empirical studies (e.g. Datt Gaurav and Martin Ravallion, 1998) showed that some states in India performed much better than others in reducing poverty and explored the role of state-specific conditions (e.g. initial social-infrastructure conditions, levels of inequality etc.) in explaining the differential performance. How successful a state-region would be in achieving the goal of “inclusive growth”? What should be the process and the type of economic growth? How to deal with the prevailing labour market conditions? Answers to such interesting questions naturally would also depend upon the specificities of state-regions. It stands to reason that region-focused studies on trends in economic growth and inequality during any period of ongoing economic reforms based on market-orientation and globalisation are instructive to design appropriate policies for achieving “inclusive” growth.

The choice of Kerala state for the region-focussed study is guided by the consideration that development experience of Kerala has always received attention at national and international levels. The discussions and debates on the so-called “*Kerala Model of Development,*” which in a nut shell stressed that the state could achieve high levels of physical quality of life and distributive justice with radical legislations (e.g. land reforms), progressive social sector policies including larger and growing government expenditure on education, health etc. and public action, despite its slow economic growth during the pre-reform era, illustrate the point. However, some concerns on sustaining the progress achieved in health, education and other social welfare fronts were raised, as the success in achieving economic growth was limited. And, the successive coalition governments, which alternated between the Right wing and Left wing political parties voted to power through democratic elections more or less every five years, gave differential emphasis on growth vis-à-vis distribution in economic policies and practices. In any case, under India’s constitutional set-up a state government has limited autonomy to pursue its own independent economic policies.

Every state is to follow “perforce” the national government’s basic economic policies irrespective of their adverse impact on specific conditions of given state regions. Kerala cannot be an exception. And instructively, the Kerala economy has been moving on a high growth trajectory since the late eighties and in particular since the mid-nineties under the influence of market-oriented policy reforms extended by the Central Government. And casual observations indicate signs of rising inequality. It is, therefore, of academic interest and policy relevance to make an attempt at empirical study of the trends in economic growth, inequality in income distribution, and polarization that can hamper poverty reduction in the contemporary Kerala and to note caution, if any, in achieving the newly jostled development goal of “inclusive growth”.

**5.0 Data sources**

There is no secondary data source for tracing the trend in income inequality in India and its state-regions. We, therefore, depend upon National Sample Survey Organisation (NSSO) quinquennial series of household consumption expenditure surveys to study trends in inequality and polarization in per capita expenditure (proxy for income). These surveys started in 1972-73 (27th round) give detailed consumer expenditure data for 1983 (38th round), 1987-88 (43rd round) 1993-94 (50th round) 1999-2000 (55th round) and 2004-05 (61st round) and 2009-10 (66th round. The data for other time points viz., 1993-94, and 2004-05 and 2009-10 (type 2 schedule) represent the consumption levels (proxy for income distribution) during the post-reform period are mostly used in our paper. The 38th round is used when we need comparison with pre reform period.

**6.0 Methodology and tools of analysis**

Here we try to look at the distributional change in the Kerala economy in the reform period, basically looking up on two aspects of distribution: inequality and polarization. The notion of inequality is measured by using most conventional measure of Gini coefficients based on Lorenz ratios. Where we measure distributive deviation from an ideal situation being all are equal. Larger the gini ratio, larger is inequality and the value remains in between 0 and 1.the gini measure holds the Pigou-Dalton principle of transfers and get affected by both progressive and regressive transfers.

Foster and Wolfson (1992) and Wolfson (1994) demonstrate the main principles/axioms that characterize the process of polarization and distinguish it from inequality (traditionally understood). These are “increasing spread” and “increasing bipolarity.” To illustrate the former, consider an income distribution and a transformation that makes a rich person richer or a poor person poorer, without affecting the middle (i.e. median). This would result in a movement away from the middle, thereby increasing polarization. They developed wolfson index of polarization which is primarily based on Lorenz ratios, and it satisfies The Pigou-Dalton principle of transfers and also the property of *Scale Invariance*. The index is given as



where *µ* and *m* are the mean and median, respectively. This index lies in [0,0.25]. *L(0.5)* is the ordinate of the Lorenz curve at the 50th percent, i.e. the share (of income, wealth, expenditure etc.) held by the poorer half of the population, and *G* is the Gini coefficient. Larger the value of index, larger is bipolarization.

Many studies building upon this work have appeared since the 1990s, and these have suggested other indices (e.g. Wang and Tsui 2000; Chakravarty and Majumder 2001; Rodriguez and Salas 2003). For our purposes, it is important to consider the “compromise” relative bipolarization index of Chakravarty (2009, pp. 115-117), which is based upon the insight that polarization is concerned with deviations from the middle (i.e. median). The Compromise Bipolarization index is given as



Where m is the median of the population X(x1, x2......) with population n and ε is a numeric positive number between 0 and 1, For a given distribution, the higher the value of , the higher is the value of the index. The index follows axioms are Normalization, Symmetry, Population Principle, Increased Spread, and Increased Bipolarity (the last two were discussed above). Normalization says that for a perfectly equal distribution, the index of polarization is zero. Symmetry is essentially anonymity, implying that only the incomes (or wealth, expenditure etc., and not the people who possess these) matter. Population principle guarantees that cloning the entire distribution does not matter for the index of polarization. Since it is a relative index, it also satisfies the property of Scale invariance

Given that there are several bipolarization indices, there is a possibility that these could disagree. Chakravarty (2009, pp. 117-121) has therefore suggested the ideas of “relative bipolarization dominance” and “relative bipolarization curve” similar to the ideas of Lorenz dominance and Lorenz curve, respectively from inequality measurement. The idea again is to look at the deviations from the median. Formally, consider a distribution *x* = (*x*1,*x*2,...,*xk*) in non-decreasing order with a median *m*. The relative bipolarization curve is given by:

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*RB(x, i/j)* is the index for the individual corresponding to the median. Note that on the horizontal axis, we have the poorest 1%, 2% etc. of the population: *j* (=*1,2,<k*) is the index for an individual and so *j/k* is the rank of the individual in percentage terms. The ordinate is the aggregate shortfall from a hypothetical distribution where everyone has an income equal to the median, normalized by the total income in such a distribution. A distribution is said to be less bipolarized if the curve lye below other one or the values of Relative Bipolarization index are less than other distribution.

Beyond these, we use group wise polarization, which is more realistic than bipolarization, where we look how income polarization happening across distinct identities. Individuals belonging to a particular group identify with one another and are alienated from those belonging to another group. Polarization is a group phenomenon and would increase if there is stronger identification among people within a group or if alienation among groups is more intense. The seminal studies here are Esteban and Ray (1994) and Duclos et al. (2004).

 Here we measure the degree of polarization Zhang and Kanbur (2001) use the ratio of the between-group component to the within group component as a index of polarization. This seems reasonable to us given that if there is no alienation across groups, the between component would be zero; similarly, if there is perfect identification among groups, the within component would be zero (thereby making the index large - tending to infinity). We use the index constructed based on both log mean deviation index and theil index.

**7.0 Growth Trajectories**

To begin the empirical analysis, we note that a number of studies (e.g. CDS 2006) have already documented on the basis of the data on the Net State Domestic Product the movement of Kerala economy on a high growth trajectory in the post-reform era. Another detailed exercise, therefore, is at the cost of wasteful repetition. However, as our interest is on the distribution of personal income, a quick look at the growth trends in per capita income (net state domestic product) in different sub-periods of Kerala’s long growth history seems useful. Here instead of dividing the long period into sub-periods based on exogenous factors by using regression models (on the lines of Pushpangadan and Parameswaran (2006). we made an attempt to derive sub-periods (growth phases) based on the policy shift in terms of economic reforms along with the initial two periods by breaking up after 1991.

We estimated growth trend in per capita income (PCNSDP) by using exponential growth function and identified three phases viz., (1) slow growth phase, (2) stagnation phase and (3) high growth phase in Kerala economy since 1961.

Table 1

 Three distinct phases (sub-periods) in the long-term trend in per capita NSDP

|  |  |  |
| --- | --- | --- |
| Character of the phase | Length of the phase | Annual growth rate |
| Slow growth phase | 1961-62 to 1969-70 | 2.2 per cent |
| Stagnation phase | 1970-71 to 1987-88 | 0.40 per cent |
| High growth phase | 1988-89 onwards (2009-10) | 7.44 per cent |
| first 10 years of reform | 1991-2000-01 | 4.97 percent |
| second period of reform | 2001-02-2009-10 | 9.4 percent |

 *Source*: calculation based on NSDP data reported in State Planning Board*,*

 *Economic* *Review (*various issues.)

Overall, Kerala has been witnessing consistently faster growth rates in per capita income for more than a decade since the late eighties. The period coincides with the paradigm shift in the Central government’s growth strategies and basic economic policies in favour of market oriented liberalisation and globalisation. It then stands to reason that neo-liberal regime when extended to Kerala has resulted in putting economic growth of the state on a high growth trajectory. And the level of per capita income (at current prices), which remained below all-India average throughout sixties, seventies and eighties, crossed the national level (of Rs.7940) in 1993-94 and remained above the national level since then and is above 27000 in 2009-10 in 1993-94 prices.

The pattern of growth shows that service sector is growing fast than other sectors. It got more prominent after reforms with generation of employment also got momentum. Slow growth rates of agriculture and unregistered manufacturing sectors imply that the fast growth process has been bypassing the labour-absorbing sub-sectors with the result that the employment and real earnings of a large segment of the population remained low and stagnant. If we agree with Garry Field (2007), “what matters for inequality is not the rate of economic growth or the level of national income but the type of economic growth,” it stands to reason that the rising inequality in income distribution with the fast pace and the type of economic growth has tended to be inevitable under neo-liberal policy regime in Kerala.

The next step in our analysis, therefore, is to trace the trend in inequality in Kerala during pre-reform and post-reform periods. The objective is to shed light on the effect of the fast and the type of economic growth triggered by market-oriented reforms on the trend in inequality in personal income distribution.

**8.0 Trends in Inequality**

We have traced trends in the income distribution (inequality) by using monthly per capita consumer expenditure as a proxy and estimating the value of Gini Coefficient in 1983, 1987-88, 1993-94, 1999-2000, 2004-05 and 2009-10. Interestingly, Kerala today ranks at the top among Indian states in per capita consumption expenditure though its rank in terms of per capita NSDP is relatively lower! This is partly because a state’s NSDP is estimated by exclusion of migrants’ remittances and in the case of Kerala, where migrants’ remittances, according to some scholars (e.g. Zachariah and Rajan, 2004) has been equivalent to around 25 per cent of NSDP, the exclusion gives a significant underestimation of the actual per capita income. In a sense, therefore, the use of consumption data as a proxy for income gives a picture of inequality.

Reverting to the trends in inequality, we first look (see the Table 3) at the distribution pattern of total consumption expenditure (per cent share in total) by deciles in Kerala in 1993-94 and 2004-05 and note the changes before tracing the trends in Gini coefficients. It appears that share of the 1st decile (poorest households) marginally declined from 2.81 per cent in 1993-94 to 2.41 in 2004-05 then to 2.44 in 2009-10 whereas that of last decile (richest) increased from 29.90 per cent to 34.31 per cent and 45.52 in rural Kerala. The corresponding figures for urban Kerala were 3.11, 2.15 2.10 and 24.05, 31.37 and 41.12 percent respectively. In fact, the increase in the shares in total expenditure was confined only to the last decile (richest) both in the rural as well as urban Kerala during the reform period. This can be due to increased private spending on health and education that can be traced from the surveys.

Table 2

MPCE decile-wise distribution of total consumption expenditure (%)

|  |  |  |  |
| --- | --- | --- | --- |
| Deciles | 1993-94 | 2004-05 | 2009-10 |
| Rural | Urban | Rural | Urban | Rural | Urban |
| 1 | 2.81 | 3.11 | 2.41 | 2.15 | 2.44 | 2.10 |
| 2 | 4.56 | 4.75 | 3.95 | 3.94 | 3.37 | 2.92 |
| 3 | 5.59 | 5.84 | 4.9 | 5.07 | 4.01 | 3.71 |
| 4 | 6.56 | 6.9 | 5.82 | 6.11 | 4.66 | 4.56 |
| 5 | 7.37 | 7.96 | 6.72 | 7.16 | 5.41 | 5.64 |
| 6 | 8.52 | 9.15 | 7.77 | 8.27 | 6.26 | 6.84 |
| 7 | 9.82 | 10.5 | 9.03 | 9.61 | 7.41 | 8.47 |
| 8 | 11.53 | 12.38 | 11.05 | 11.55 | 9.08 | 10.63 |
| 9 | 14.35 | 15.37 | 14.04 | 14.76 | 11.84 | 13.99 |
| 10 | 28.9 | 24.05 | 34.31 | 31.37 | 45.52 | 41.12 |
|  | 100 | 100 | 100 | 100 | 100.00 | 100.00 |

 *Source:* Estimated from NSSO Household Consumer Expenditure Surveys

The change in the distribution pattern of total consumption expenditure in 2004-05 over 1993-94 is indicative of the trend of rising inequality in consumer expenditure (proxy for income) during the period 1993-94 and 2004-05 under the neo-liberal policy regime. We now turn to work out GINI coefficients based on deciles distribution of consumer expenditure (used as a proxy for income) for Kerala and all-India to get a comparative picture of the levels of inequality at different time points representing different phases in the economic growth (see the Table 4)

It is instructive to note that the value of Gini coefficient has declined marginally in rural as well as urban areas and thus the overall pattern of inequality improved between 1983 and 1987-88, a period of growth recovery in PCNSDP, in Kerala. The trend of falling value in Gini ratio is seen to have continued till 1993-94, the year, which signalled the impact of the paradigm shift in India’s growth strategy and in the case of Kerala the sharp upward movement in the growth rate of the macro economy along the high growth trajectory. The all-India pattern is also found to be similar to that of Kerala except that there is an increase in the urban Gini value at the national level.

Table 3

Trends in Consumption Inequality (Gini coefficient) in Kerala and India

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 38th round | 43rd round | 50th round | 55th round\* | 61st round | 66th round |
|  | 1983 | 1987-88 | 1993-94 | 1999-2000 | 2004-05 | 2009-10 |
| Kerala Urban area | 0.39 | 0.381 | 0.343 | 0.374 | 0.41 | 0.441 |
| Kerala Rural area | 0.32 | 0.312 | 0.301 | 0.329 | 0.382 | 0.412 |
| Kerala (U+R) combined | 0.352 | 0.343 | 0.319 | 0.348 | 0.392 | 0.421 |
| India Urban area | 0.341 | 0.332 | 0.343 | 0.374 | 0.375 | 0.367 |
| India Rural area | 0.308 | 0.3 | 0.286 | 0.311 | 0.305 | 0.299 |
| India(U+R) combined | 0.321 | 0.313 | 0.311 | 0.339 | 0.336 | 0.328 |

Source: Estimated from NSSO Household Consumer Expenditure Surveys

the data of NSS 55th round using an appropriate correction factor for mixed reference (MRP) methodology on the lines of Deaton and Dreze (2002) or others. The overall pattern of inequality in Kerala has followed the all-India pattern marked by a fall in the Gini ratio during the period of initial growth momentum (rather recovery) of the post-reform period. If one were to venture drawing an inference, the fact that level of inequality is seen reduced during the periods of growth recovery and the initial shift to a high growth trajectory in Kerala, implies that a moderate growth rate of an economy can be achieved with moderated inequality.

The situation, however, is seen to be different with the intensification of economic reforms to achieve higher rate of growth, ignoring the distributional impact. As Kerala economy is made to move up onto higher growth trajectory through a process and type of economic growth based on “excessive” liberalisation and globalisation policies of neo-liberal regime, the level of inequality is worsened as manifested in the higher values of Gini coefficients in 1999-2000 and 2004-05 a as compared to those in 1993-94. Indeed, it is disturbing to note that urban Gini ratio takes a value higher than 0.4, a value internationally considered as representing excessive inequality. Clearly, the level of inequality in Kerala has been rising along with the higher growth rate.

In the recent period, we can see a decline in the inequality in the national level with a slight fall from 0.8 and 0.6 percent in the urban and rural in the period from 2004-05 to 2009-10 shows a pattern in line with postulate of inverted U shape thanks to different welfare schemes like rural employment programme and NRHM. While in Kerala inequality went up both sectors to their all-time high.

In other words, the quest for higher growth rate through intensification of neo-liberal policy regime has resulted in the rising inequality in Kerala. Instructively, the level of inequality is of higher magnitude in Kerala in comparison with the national level. To put it rhetorically, Kerala, which had the tradition of pursuing progressive legislations, policies and public action for distributive causes when adopted unbridled market-oriented policies with enhancement of the private sector in the economy has ended with the rising inequality along with higher growth rate.

It would be interesting to compare the trend in inequality in Kerala with that in other major Indian states. We estimated Gini coefficients at different intervals of time for major Indian states and found that Kerala has the highest level of inequality, as indicated by Gini ratios, in urban, rural areas Incidentally, Kerala, which has the highest value of Urban, Rural Gini Coefficients in all periods (1993-94, 2004-05 and 2009-10), we can see almost all the state dispersion increased in the period of 1993-2004-05 with larger divergent in the urban areas rather than rural areas. In the period between 2004-05 to 2009-10, pattern is not much clear for all the states with some states reports a decline in inequality while some shows an increase. In the urban inequality measure, states like Assam, Bihar, Gujarat, J&K, Karnataka, Kerala, TN and Bengal showed a an increase in the last 5 years while Assam, Bihar, Kerala, MP, Orissa, Punjab, West Bengal showed an increase in the gini measure over time.

Table 4

Trends in inequality (Gini coefficients) in major states

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| States | URBAN |  | RURAL |  |
| 1993-94 | 2004-05 | 2009-10 | 1993-94 | 2004-05 | 2009-10 |
| Andhra Pradesh | 0.323 | 0.374 | 0.369 | 0.289 | 0.294 | 0.28377 |
| Assam | 0.288 | 0.321 | 0.326 | 0.179 | 0.199 | 0.238 |
| Bihar | 0.311 | 0.341 | 0.361 | 0.225 | 0.213 | 0.258 |
| Gujarat | 0.291 | 0.31 | 0.322 | 0.24 | 0.272 | 0.271 |
| Haryana | 0.283 | 0.364 | 0.347 | 0.313 | 0.339 | 0.290 |
| Jammu & Kashmir | 0.288 | 0.252 | 0.288 | 0.243 | 0.248 | 0.217 |
| Karnataka | 0.318 | 0.368 | 0.369 | 0.27 | 0.265 | 0.265 |
| Kerala | 0.343 | 0.41 | 0.441 | 0.301 | 0.382 | 0.412 |
| Madhya Pradesh | 0.33 | 0.406 | 0.352 | 0.28 | 0.277 | 0.291 |
| Maharashtra | 0.357 | 0.378 | 0.363 | 0.306 | 0.311 | 0.262 |
| Orissa | 0.307 | 0.353 | 0.344 | 0.247 | 0.285 | 0.287 |
| Punjab | 0.28 | 0.402 | 0.339 | 0.283 | 0.296 | 0.305 |
| Rajasthan | 0.293 | 0.372 | 0.341 | 0.265 | 0.251 | 0.234 |
| Tamilnadu | 0.347 | 0.358 | 0.346 | 0.312 | 0.321 | 0.278 |
| Uttar Pradesh | 0.326 | 0.366 | 0.353 | 0.281 | 0.29 | 0.258 |
| West Bengal | 0.338 | 0.383 | 0.384 | 0.254 | 0.273 | 0.285 |

Source: Estimated from NSS household consumer expenditure surveys

We clubbed Jharkhand with Bihar, Utharakhand with UP and Chhattisgarh with MP for the last two rounds.The pattern of inequality reveals that there is a rapid increase in the dispersion in the society based on the expenditure pattern that can be shown as proxy of income. Such a pattern reveals that there is an increased divergence but needs not be getting polarized in the bipolar system of haves and have not. In the next section we look up on how the society is getting polarized within the groups and across groups in terms of income measured with a proxy of consumer expenditure.

**9.0 Polarization of income: trends and pattern**

Polarization is a broader concept and is wider than inequality. It does look on the spread of the distribution to the poles in the case of bipolar distributions; basically look on how much the distribution move from middle class to the poles. While in the case of multiple polarization, it looks up on the distribution pattern among multiple classes or social entities. To understand the magnitude and direction of bipolarization, we use Wolfson index and Compromise Bipolarization index constructed based on different rounds of NSS data across the period of reforms.

Table 5

Polarization Indices for Kerala and India

|  |  |  |
| --- | --- | --- |
|  | Kerala | all india |
|  | Wolfson | Compromise Bipolarization index | Wolfson | Compromise Bipolarization index |
| Rural |  |  |  |  |
| 1983 | 0.062 | 0.339 | 0.063 | 0.326 |
| 1993-94 | 0.057 | 0.31 | 0.055 | 0.298 |
| 2004-05 | 0.67 | 0.319 | 0.057 | 0.307 |
| 2009-10 | 0.071 | 0.338 | 0.59 | 0.308 |
| Urban |  |  |  |  |
| 1983 | 0.069 | 0.373 | 0.071 | 0.376 |
| 1993-94 | 0.063 | 0.341 | 0.071 | 0.377 |
| 2004-05 | 0.078 | 0.351 | 0.079 | 0.42 |
| 2009-10 | 0.079 | 0.392 | 0.075 | 0.39 |
| combined |  |  |  |  |
| 1983 | 0.066 | 0.356 | 0.065 | 0.349 |
| 1993-94 | 0.06 | 0.325 | 0.064 | 0.341 |
| 2004-05 | 0.073 | 0.335 | 0.071 | 0.375 |
| 2009-10 | 0.075 | 0.355 | 0.69 | 0.345 |

 Source: Estimated from NSS household consumer expenditure surveys

The wolfen index and Compromise Bipolarization index (with ε as 0.3 as suggested by Chakravarty 2009) for both India and Kerala are given in table 5. It is clear that state was less polarized in the pre reform period in both urban and rural areas with witnessed a decline between 1983 to 1993-94. This pattern was visible in the national level with an exception in the urban India, where it was slowly getting polarized even in the early years of reform in terms of both indices. In between 1993-94 and 2004-05, we can see, it’s getting polarized in both sectors with the degree is higher in the urban areas. The pace of rise in the polarization is much higher than all India levels, while in the last period, state is getting more and more polarized with both the index are above national averages and the urban figures across the nation show a slight decline. Relative bipolarization index values are given in table 6 across various rounds of NSS surveys. From the table, it is clear that level of polarization to the poles went up after 1993-94 by looking at the relative bipolarization index of various periods.

Table 6

Relative Bipolarization indices for Kerala across different time period

|  |  |
| --- | --- |
| j/k | RB(x,j/k) |
| 1983 | 1993-94 | 2004-05 | 2009-10 |
| 0 | 1 | 1 | 1 | 1 |
| 5 | 0.1167 | 0.1101 | 0.1125 | 0.1131 |
| 10 | 0.0913 | 0.0867 | 0.0888 | 0.0892 |
| 15 | 0.0699 | 0.0665 | 0.0685 | 0.0688 |
| 20 | 0.0516 | 0.0494 | 0.0509 | 0.0512 |
| 25 | 0.0362 | 0.0347 | 0.0358 | 0.036 |
| 30 | 0.0235 | 0.0226 | 0.0234 | 0.0235 |
| 35 | 0.0134 | 0.0129 | 0.0134 | 0.0135 |
| 40 | 0.0061 | 0.0059 | 0.0061 | 0.0061 |
| 45 | 0.0016 | 0.0015 | 0.0016 | 0.0016 |
| 50 | 0 | 0 | 0 | 0 |
| 55 | 0.0016 | 0.0016 | 0.0017 | 0.0017 |
| 60 | 0.0065 | 0.0064 | 0.007 | 0.007 |
| 65 | 0.0152 | 0.0152 | 0.0164 | 0.0165 |
| 70 | 0.0283 | 0.0283 | 0.031 | 0.0312 |
| 75 | 0.0469 | 0.0468 | 0.0517 | 0.052 |
| 80 | 0.072 | 0.072 | 0.0805 | 0.0809 |
| 85 | 0.1058 | 0.1063 | 0.101 | 0.1007 |
| 90 | 0.1527 | 0.1538 | 0.1764 | 0.1773 |
| 95 | 0.2223 | 0.2243 | 0.2317 | 0.2463 |

 Source: Estimated from NSS household consumer expenditure surveys

Getting the fact that the society is moving away from egalitarian in much speed after the reforms and when the state is moving to higher periods of growth. This can weaken the slogan of inclusive growth in the state with society is moving to poles of haves and have-nots. This can be due to the difference in the pattern of growth in different sectors and widening gaps in the wage levels that reflects in widening gap in the society.

Dimensions on which disparities could manifest themselves are visible in pluralized society like that of India. Caste is a prominent factor among them. Different studies , Gupta 1993, Chatterjee 1993 Dev and Ravi 2007, Motiram and Sarma 2011 have identified multipolarized distribution of income across social groups and is widening in India, we try to look up on polarization across the caste groups in Kerala,. For that we created Zhang-Kanbur index based on both log mean deviation and theil index of inequality, other than caste parameters, we looked on widening gap across sectors and regions of the state.

We have analyzed some of these dimensions and the results are reported in Table 7, which give Zhang-Kanbur index across caste, sector and region across different NSS rounds for state of Kerala to look into group polarization. Zhang-Kanbur index shows that, the basic story of decreasing polarization during 1983-1993 and increasing polarization during 1994- 2005 remains to increase further. The polarization is increasing in urban rural front after 1990s which was expected in line with various studies across India. Several studies (e.g. Mishra and Reddy 2009; Vakulabharanam et al. 2010; Vakulabharanam and Motiram 2011) have pointed out both increasing agrarian distress since late 1990s and increasing rural-urban disparities. In Kerala, we can see urban rural difference was getting widened after reforms and the distribution is getting more polarized over the years showing widening gap. In the last 5 years, though index is high, it remained stagnant showing that there is not much difference over time and is expected to come down. The regional inequality was on a hike in the early reform period and is slowly coming down in the recent years as the backward regions are catching up.

Table 7

Multidimensional Polarization indices (Zhang-Kanbur index)

|  |  |  |
| --- | --- | --- |
| **Subgroups** | **Log M.D.** | **Theil** |
|
|  | W | B | T | B/W (%) | W | B | T | B/W (%) |
| 1.    Castes |  |  |  |  |  |  |  |  |
| Rural |  |  |  |  |  |  |  |  |
| 1983 | 0.159 | 0.008 | 0.167 | 5.038 | 0.192 | 0.008 | 0.2 | 4.153 |
| 1993-94 | 0.142 | 0.007 | 0.149 | 4.846 | 0.179 | 0.007 | 0.186 | 3.818 |
| 2004-05 | 0.156 | 0.014 | 0.169 | 8.817 | 0.21 | 0.014 | 0.224 | 6.495 |
| 2009-10 | 0.166 | 0.015 | 0.177 | 8.817 | 0.224 | 0.015 | 0.238 | 6.495 |
| Urban |  |  |  |  |  |  |  |  |
| 1983 | 0.2 | 0.005 | 0.205 | 2.3 | 0.229 | 0.005 | 0.233 | 1.991 |
| 1993-94 | 0.205 | 0.008 | 0.212 | 3.919 | 0.253 | 0.007 | 0.259 | 2.704 |
| 2004-05 | 0.225 | 0.03 | 0.253 | 13.289 | 0.28 | 0.028 | 0.307 | 10.174 |
| 2009-10 | 0.239 | 0.032 | 0.269 | 13.289 | 0.298 | 0.03 | 0.327 | 10.174 |
| combined |  |  |  |  |  |  |  |  |
| 1983 | 0.18 | 0.01 | 0.191 | 5.736 | 0.216 | 0.01 | 0.225 | 4.749 |
| 1993-94 | 0.179 | 0.011 | 0.19 | 6.412 | 0.228 | 0.011 | 0.239 | 5 |
| 2004-05 | 0.205 | 0.032 | 0.235 | 15.674 | 0.273 | 0.032 | 0.305 | 11.667 |
| 2009-10 | 0.218 | 0.034 | 0.251 | 15.674 | 0.291 | 0.034 | 0.325 | 11.667 |
| Rural/Urban |  |  |  |  |  |  |  |  |
| 1983 | 0.166 | 0.01 | 0.176 | 5.736 | 0.199 | 0.009 | 0.207 | 4.749 |
| 1993-94 | 0.165 | 0.011 | 0.175 | 6.412 | 0.21 | 0.011 | 0.22 | 5 |
| 2004-05 | 0.189 | 0.03 | 0.217 | 15.674 | 0.252 | 0.029 | 0.281 | 11.667 |
| 2009-10 | 0.201 | 0.032 | 0.231 | 15.674 | 0.268 | 0.031 | 0.299 | 11.667 |
| region |  |  |  |  |  |  |  |  |
| 1983 | 0.188 | 0.003 | 0.191 | 1.811 | 0.222 | 0.003 | 0.225 | 1.529 |
| 1993-94 | 0.185 | 0.006 | 0.190 | 3.089 | 0.234 | 0.006 | 0.239 | 2.432 |
| 2004-05 | 0.227 | 0.009 | 0.235 | 4.056 | 0.296 | 0.009 | 0.305 | 3.072 |
| 2009-10 | 0.242 | 0.010 | 0.251 | 4.017 | 0.316 | 0.009 | 0.315 | 2.758 |

Source: Estimated from NSS household consumer expenditure surveys

Castes are divided into ST, SC and others, after 2004-05 we clubbed OBC with others to do a comparison possible. Region is broadly divided into north Kerala (7 districts from Kasargod to Thrishur) and south Kerala and pooled samples.

#### 10.0 Concluding Observations

Granted that certain degree of inequality is bound to develop in a growing economy, the Kerala experience with high growth under neo-liberal regime raises apprehensions on the secular relation between income growth inequality due to lack of balance between the two as well as the sustainability of a growth rate which is distribution blind. This leads to numerous questions as regards the nature and source of growth as well as its inclusive/exclusive character. Interestingly, the comparative scenario of growth and inequality in pre and post reform era is not encouraging as we experience more polarization when we celebrate high path of growth and structural shift in the economy. We can see a widening gap between haves and have-nots that questions much hailed Kerala experience of development.

The policy implications of the findings on Kerala situation are clear: policies that reduce inequality are critical for reducing incidence of poverty and for making the growth more inclusive. What should be the basic features of policies for reducing inequality?( Giovanni and Cornia, 2001) Should redistribution policies be based on the conventional paths of land and asset reforms or income transfer from the rich to the poor through fiscal policies? Or should the policies be based on redefining and remoulding the neo-liberal reforms and the manner of their implementation for faster growth suiting the specificities of individual states? These are too complex questions to be addressed here. The aim of the present study is modest and is to emphasise in the light of Kerala experience that one cannot ignore or be indifferent to, the current trend of rising inequality and polarization that accompanies the high growth trajectories under neo-liberal policy regime. This sends out a note of caution regarding celebration of growth with a blind eye on inequality. The finding of our study should be a matter of serious concern to policy makers, who have now fashionably coined the slogan of meeting the goal of achieving inclusive growth. One thing seems clear from Kerala experience, simultaneous policies of achieving growth rate should targeting balanced sectoral growth for creating employment opportunities and making them accessible to all and seeking reduced level of inequality and polarization are necessary (ie. growth with equity) for achieving economic dimensions of the development goal of “inclusive growth”.

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