

Available Online at ESci Journals

Journal of South Asian Studies



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

Syam Prasad*

Department of Economics, Central University of Kerala, Kerala, India.

ABSTRACT

he relation between growth and distribution (inequality) 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 a large 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 simultaneous rise in levels of inequality and slow-down in the rate of poverty reduction. The recent trend in the studies on economic growth and distribution therefore is to challenge the earlier 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 yet achieve reasonable growth rates and so on) for empirical scrutiny and remains a matter of concern. Development policy tends to replace "pro-poor growth" (poverty reduction) which was the primary development goal until recently and to propagate with pomp, the concept of "inclusive growth". Exploring the reasons for the divorce of "pro-growth" strategy and reviewing ongoing discussions on the definition of "inclusive growth", reducing inequality and poverty remains the core of inclusive growth strategy which is accorded prominence in the reform period. The present study reviews issues of inequality and polarization in the case of "inclusive growth" with reference to the reform periods. The study puts illustrates with Kerala's contemporary situation, a proposition that increasing inequality is inherent in the faster rate of economic growth propelled by the neo-liberal policy regime, tends to inhibit progress in poverty-reduction and eludes "inclusive growth". The periods of growth coincide with the periods of high levels of polarization in terms of incomes measured in terms of their proxy measured in terms of consumption expenditure. The gaps is widening within and across group identities also.

Keywords: Kerala, inclusive growth, inequality, poverty reduction, polarization, development policy, empirical scrutiny.

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 a large 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-1980's, developing countries recording fast economic growth

* Corresponding Author:

Email ID: prasadnatural@gmail.com

© 2013 ESci Journals Publishing. All rights reserved.

witnessed simultaneous rise in levels of inequality and polarization that led to slow-down in the progress of poverty reduction. The recent trend in the studies on economic growth and distribution therefore is to challenge the earlier 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's economic growth, a proposition that increasing inequality and polarization is inherent in the faster economic growth propelled by

SOUTH ASIAN

the neo-liberal policy regime, tends to hamper poverty alleviation in the much hailed Kerala model, and thus eludes "inclusive growth "in the reform period.

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. Of late it has become fashionable to talk of seeking the goal of "inclusive growth". Why this sudden change in the development goal? Has the "propoor growth" strategy failed to deliver on its promise? Is greater equity now passé? Is poverty not a problem Has the relevance of poverty-reduction as a now? development goal collapsed? Or is it that the "inclusive growth" strategy is only an extension of "pro-poor growth" strategy to gloss over inequalities in the social, political, 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), ensure that clarity of the concept is further blurred. Perceived shortcomings in the "pro-poor growth" concept cannot be a valid reason for silently replacing poverty reduction with the new goal of "inclusive growth". The newly-coined "inclusive growth" remains a multi-dimensional concept and hence more diffused in terminological exactitude and rather difficult in measurement. No consensus has evolved yet on how to define or measure inclusive growth though the issue has generated a certain amount of policy and academic debate (Sen and Ali, 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 societv to appropriate assets disproportionately and exclude some other sections from the benefits of growth. The excluded ones are mostly the poor, deprived, disadvantaged and discriminated against in the economic, political, and social spheres as a result of rising inequality. It is possibly the apprehension of the exclusion of a large number of people and the political compulsion of bringing them 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 the analytical framework, the convoluted 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 the "inclusive" growth strategy revolves around the trends in inequality and reducing polarization and their 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 beyond our brief to critically review 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" (Asian Development Bank, 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, 2007a). 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" model 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 that distribution of income moves in favour of the poor as an integral part 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 barriers of discrimination based on caste, gender, religion and ethnicity. While agreeing that "inclusive growth" is larger in scope than "pro-poor growth", it can be argued that the core issue in both strategies refers to reduction in levels of poverty, deprivation and discrimination associated with increasing inequality that accompanies fast-paced growth and hence the need to examine the relationship between growth, inequality and poverty while assessing the "inclusive growth" strategy. In other words, inclusive growth has to address the inequality issue as well as the poverty reduction goal. It is not then sufficient for 'inclusive growth' to be confined to re-distributive approaches 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, the importance of an "inclusive growth" strategy that creates opportunities through sustainable growth and making the opportunities available to all including the poor, is acceptable. Its importance is derived from the fact, as acknowledged by the ADB in the Asian context, which "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, 2007b).

The growth is more redistributive and inclusive when there is reduction in inequality and polarization in society. This can be possible only if the results of development reach all, without a distributive lag. Though Kuznets suggests an increased polarization in the preliminary stages of growth, this should narrow down as growth accelerates so that benefits reach all and becomes more inclusive.

In the present study the analysis is confined to the economic dimensions only for want of expertise in other disciplines. Besides, much of the social discrimination is usually propelled by poverty and deprivation. The basic question for our analysis is whether 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 even slower, while differences in the employment and real wages between the bottom and top quintiles of the labour force has increased significantly over the last decade (Ghosh and Chandrashekhar, 2003; Pal and Ghosh, 2007). And these widening gaps naturally lead to rising income and nonincome inequalities and are associated with inequalities in access to opportunities resulting thereby in the exclusion of some sections of society from the benefits of fast-paced growth. It is suggested that increased inequality and polarisation are inherent in the fastgrowth processes propelled by the neo-liberal policy regime and this impedes speed of poverty reduction and thus delays "inclusive growth". It is proposed to substantiate this proposition by analysing the contemporary situation in Kerala, India.

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). Several authors have argued that polarization is intimately connected with conflict. Polarization measurement has been recently proposed as a relevant variable to characterise income distributions. Nowadays, polarization is widely accepted as a concept distinct 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 an income distribution analysis. Further it can be stated that income distribution will get more polarized if the distribution is moving towards two poles and is getting further skewed (Esteban and Ray, 1994).

In economics, a burgeoning literature on polarization

has emerged in the past two decades with 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) conflicts that could arise if the population were to be divided into masses of the rich and the poor. The seminal studies here are by Foster and Wolfson (1992 and 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 and that ensures ultimate polarization erupting into a class war. 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 (as is traditionally understood). These are "increasing spread" and "increasing bipolarity" from the middle and identified as a pattern of inequality in the western world though refraining from venturing into reasons for the emergence of the middle class which will gradually move to the poles. This is generally measured in polarization terms which serve as 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 other groups. 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 were by Esteban and Ray (1994) and Duclos et al. (2004 of different groups such as sector, gender, caste, etc. which can act as group identities) where we find polarization. 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 being a purely intellectual exercise. India has been adopting a set of farreaching 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 reforms (Panagariya, 2008; Bhagwati, 2010) who argue that inequality is not a cause of concern and/or has not worsened, while others (Nagaraj, 2000; Himanshu and Sen, 2004a,b; Himanshu, 2007; Subramanian and Prasad, 2008; Sarkar and Mehta, 2010; Vakulabharanam et al., 2010; Motiram and Sarma 2011) argue that inequality has worsened. Surely, some of this disagreement arises due to different sources of data, different ways of measuring inequality and even different ways of thinking about inequality.

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

RATIONALE OF A KERALA-FOCUSSED STUDY

We opted to illustrate the proposition with the evidence from a small state in India as some recent empirical studies (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 would a state 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 regionfocussed study is guided by the consideration that the 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 success in achieving economic growth was limited. Also, 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 impacts 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. However, casual observations indicate signs of rising inequality. It is, therefore, of academic interest and policy relevance to attempt an empirical study of the trends in economic growth, inequality in income distribution and polarization that can hamper poverty reduction in contemporary Kerala and to note caution, if any, in achieving the newly coined development goal of "inclusive growth".

DATA SOURCES

There is no secondary data source for tracing the trends 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) provide 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 data is used when we need comparisons with pre-reform period data.

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 measures 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 between 0 and 1. The Gini measure holds the Pigou-Dalton principle of transfers and gets 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 (as 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 the 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:

$$\frac{u}{b}\left(\frac{1}{2}-L\left(0.5\right)-\frac{G}{2}\right)$$

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 the 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) 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:

$$\frac{(1/n\sum_{i=1}^{n}[m-x_i]^{\epsilon})^{1\notin}}{m}$$

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 polarization, the higher is the value of the index. The index follows axioms of 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. As it is a relative index, it also satisfies the property of Scale Invariance.

Given that there are several bipolarization indices, there is a distinct possibility that there could be areas of relative disagreement in measuring polarization Chakravarty (2009) 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 measurements. The idea again is to look at the deviations from the median. Formally, consider a distribution $x = (x_1, x_2,..., x_k)$ in non-decreasing order with a median *m*. The relative bipolarization curve is given

by:

$$RB\left(x,\frac{j}{k}\right) = \frac{1}{km} \sum_{j \le i < k} (m - x_i) if x_j < m$$

$$= \frac{1}{km} \sum_{k \le i < i} (x_i - m) if x_j \ge m$$

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 Table 4. The point is the formula to the population of the population of the population.

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 lies below another one or the values of Relative Bipolarization index are less than other distribution values with its low index scores.

To measure the degree of polarization, Zhang and Kanbur (2001) used the ratio of the between-group component to the within group component as an index of polarization. This seems reasonable 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 and tending to infinity). We use the index constructed based on both log mean deviation index and Theil index.

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's 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 per capita) in different sub-periods of Kerala's long growth history, appears to be 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 shifts in terms of economic reforms along with the initial two periods by breaking up after 1991 based on growth pattern.

We estimated growth trends 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.

Phase Description	Phase Period	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 decade of Reforms	1991 to 2000-01	4.97 percent
Second Decade of Reforms	2001-02 to 2009-10	9.4 percent

Table 1. Three Distinct Phases (sub-periods) in Long-term Trends of per capita NSDP.

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. The level of per capita income (at current prices), which remained below all-India average levels throughout the sixties, seventies and eighties, crossed the National level (of Rs.7940) in 1993-94 and remained consistently above the national level since then and is above 27000 in 2009-10 (at 1993-94 prices).

The pattern of growth shows that the tertiary sector is growing faster than other sectors. This trend became more prominent after reforms were introduced in 1991 as generation of employment also got the desired momentum. Slow growth rates in the primary sector (agriculture) and secondary sector (unregistered manufacturing), imply that the fast growth process has been achieved, bypassing the labour-absorbing subsectors 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 has increased with the fast pace and the type of economic growth inevitable under the neo-liberal economic policy regime in Kerala. The next step in our analysis, therefore, is to trace the trend in inequality in Kerala during pre-reform and postreform periods. The objective is to shed light on the effect of the fast type of economic growth triggered by market-oriented reforms on the trend of rising inequality in personal income distribution.

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 Coefficients 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 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 relative inequality.

Reverting to the trends in inequality, we first review (data at Table 3) the distribution pattern of consumption expenditure by deciles to the total aggregated expenditure in Kerala in 1993-94 and 2004-05 and note the changes before tracing the trends in Gini coefficients. It appears that the share of the 1st decile (poorest households) marginally declined from 2.81 per cent in 1993-94 to 2.41 in 2004-05 and then increased slightly to 2.44 in 2009-10 whereas that of the last decile (richest) increased from 29.90 per cent to 34.31 per cent and 45.52 in rural Kerala, for the same periods. The corresponding figures for urban Kerala for the same periods were 3.11, 2.15 2.10 for the poorest people and 24.05, 31.37 and 41.12 percent for the richest people, respectively.

Deciles	1993	1993-94		2004-05		2009-10		
Declies -	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		

 Table 2. MPCE decile-wise distribution of total consumption expenditure (%).

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 periods 1993-94 and 2004-05 under the neo-liberal policy regime.

We now need 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 points of time representing different phases in economic growth (see Table 4). It is instructive to note that the value of Gini coefficients 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 per capita NSDP, in Kerala. The trend of falling value in Gini ratios continued till 1993-94, when the impact of the paradigm shift in India's growth strategy was felt and in the case of Kerala, a sharp upward movement occurred in the growth rate of the macro-economy along the high trajectory path. 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.

	38th round	43rd round	50th round	55th round*	61st ound	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). 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 at drawing an inference, the fact that level of inequality reduces during periods of growth recovery and the initial shift to a high growth trajectory in Kerala implies that a moderate growth rate in 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 rates of growth, ignoring the distributional impact. As Kerala's economy is made to move up onto higher growth trajectory through a process of economic growth based on "excessive" liberalisation and globalisation policies of neo-liberal regime, the level of inequality is enhanced as manifested in the higher values of Gini coefficients in 1999-2000 and 2004-05 when compared to those in 1993-94. Indeed, it is disturbing to note that the 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 higher growth rates.

In the recent period, a decline is observed in inequality at the National level with a slight fall from 0.8 and 0.6 percent in the urban and the rural economies during the period from 2004-05 to 2009-10. This shows a pattern in line with postulates of inverted U-shape, thanks to different welfare schemes like rural employment programme and NRHM. However, in Kerala inequality went up in both sectors to their all-time high levels.

In other words, the quest for higher growth rate through intensification of the neo-liberal policy regime has resulted in rising inequality in Kerala. Instructively, the level of inequality is of higher magnitude in Kerala in comparison with the National level. To put it mildly, Kerala which had a tradition of pursuing progressive legislations, policies and public action for distributive causes then 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 the urban and 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. During the period from 2004-05 to 2009-10, the pattern is clear for all the states with some states reporting a decline in inequality while others show an increase. In the urban inequality measure states like Assam, Bihar, Gujarat, Table 4. Trends in inequality (Gini coefficients) in major states.

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.

Statas	_	Urban		Rural				
States	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		

We clubbed Jharkhand with Bihar, Utharakhand with UP and Chhattisgarh with MP for the last two rounds.

Source: Estimated from NSS household consumer expenditure surveys.

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 an increased divergence but need not reflect increasing polarisation in the bipolar system of haves and have-nots. In the next section, we dwell upon how society is getting polarized within groups and across groups in terms of incomes measured as a proxy for consumer expenditure.

POLARIZATION OF INCOME: TRENDS AND PATTERNS

Polarization is a broader concept and is wider than inequality. It does review the spread of the distribution to the poles in the case of bipolar distributions; basically studying how much the distribution moves from middle class to the poles. While in the case of multiple polarization, it assesses 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. The Wolfson 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 the state was less polarized in the prereform period in both urban and rural areas with witnessed a decline between 1983 to 1993-94. This pattern was visible at the National level with an exception for urban India, where it was slowly getting polarized even in the early years of reform in terms of both indices. Between 1993-94 and 2004-05, we can assess polarization in both sectors with the degree being higher for urban areas. The acceleration in polarization is much higher than all India levels, while in the last period, Kerala is getting more and more polarized with both the indices above national averages and the urban indices 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 levels of polarization to the poles went up after 1993-94 by reviewing the relative bipolarization index for various periods.

It can be surmised that society is moving away from egalitarian trends faster after the reforms when the state is moving to higher periods of growth. This can weaken the slogan of inclusive growth in the state with society moving towards poles of haves and have-nots. This is possibly due to different growth patterns in different economic sectors and widening gaps in wage levels that reflects the widening gaps in the society.

	К	Cerala	All India					
	Wolfson Index	Compromise Bipolarization Index	Wolfson Index	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				

Table 5. Polarization Indices for Kerala and India.

Source: Estimated from NSS household consumer expenditure surveys.

Table 6. Relative Bipolarization Indices for Kerala across	
Different Time Periods.	

: /]-	Relative Bipolarization (x,j/k)						
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			
Sourcou	Estimated	from MCC	hougohold	aanauman			

Source: Estimated from NSS household consumer expenditure surveys.

It can be surmised that society is moving away from egalitarian trends faster after the reforms when the state is moving to higher periods of growth. This can weaken the slogan of inclusive growth in the state with society moving towards poles of haves and have-nots. This is possibly due to different growth patterns in different economic sectors and widening gaps in wage levels that reflects the widening gaps in the society.

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

Some of these dimensions have been analysed and the results are reported in Table 7, which provides the Zhang-Kanbur Index across caste, sector and regions across different NSS rounds for Kerala to look into group polarization. Zhang-Kanbur Index shows that, the basic premise of decreasing polarization during 1983-1993 and increasing polarization during 1994-2005, remains as inconclusive. That polarization is increasing in urbanrural areas after the 1990s was expected in line with the findings of 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, urban rural differences were getting widened after reforms and the distribution is increasingly more polarized over the years due to widening gaps. In the last 5 years, though The Zhang-Kanbur 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 high in the early reform period and is slowly coming down in the recent years as the backward regions are catching up with the more developed areas.

Subgroups	Log M.D.				T	heil		
	W	В	Т	B/W (%)	W	В	Т	B/W (%)
				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	l			
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, OBCs are clubbed with others to enable a comparison. The state is broadly divided into North Kerala (7 districts from Kasargod to Trichur) and South Kerala and pooled sample.

CONCLUDING OBSERVATIONS

Granted that certain degrees of inequality are 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 and 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 the pre-reform and post-reform eras is not encouraging as we experience more polarization when we celebrate high growth rates and structural shifts in the economy. We can see a widening gap between haves and have-nots that questions the much-praised Kerala experience of development.

The policy implications of the findings for Kerala 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 questions too complex to be addressed here. The aim of the present study is modest and in the light of Kerala experience, emphasises that one cannot ignore or remain indifferent to the current trend of rising inequality and polarization that accompanies the high growth trajectories under the neo-liberal policy regime. This paper ends on a note of caution as regards celebrating growth with a blind eye towards rising inequality. The findings of our study should be a matter of serious concern to policy makers who have now coined the fashionable slogan of "achieving inclusive growth". One conclusion is apparent from Kerala's experience, that policies aimed at achieving desired growth rates should simultaneously target balanced sectoral growth by creating employment opportunities and making them accessible to all and seeking reduced levels of inequality and polarization (i.e. growth with equity) for achieving the economic and development goal of "inclusive growth".

REFERENCES

- Ifzal, Ali and Hyun Hwa Son. "Measuring Inclusive Growth." *Asian Development Review* 24, no.1 2007a, pp 11-31.
- Ifzal, Ali. "Pro-Poor to Inclusive Growth: Asia Prescriptions." *ERD Policy Brief Series* (Asian Development Bank), no. 48, 2007b.
- Asian Development Bank (ADB), Inclusive Growth and Poverty Reduction in the New Asia and Pacific, Manila, 2007.
- Bhagwati, J. N. "Indian Reforms: Yesterday and Today." The 3rd Prof. Hiren Mukherjee Memorial Annual Parliamentary Lecture, 2010.
- Chakraverty, S. R. Inequality, Polarization and Poverty: Advances in Distributional Analysis. New York: Springer, 2009, 115-121.
- Chakravarty, S. R. and A. Majumdar. "Inequality, Polarization and Welfare: Theory and Applications," *Australian Economic Papers* 40 (2001): 1-13.
- Chandrasekhar, C. P. and Jayati Ghosh. *The Market that failed: A decade of Neoliberal Economic Reforms in India.* New Delhi: Left word Books, 2002. Revised edition 2004.
- Chatterjee, P. *The Nation and its Fragments*. Minneapolis: University of Minnesota Press, 1993.Deaton, Angus and Jean Dreze. "Poverty and Inequality in India: A re-examination." *Economic and Political Weekly* 37, no. 36 (September 7-13, 2002): 3729-

3748.

- Dev S., Mahendra and C. Ravi. "Poverty and Inequality: All-India and States, 1983-2005." *Economic and Political Weekly* (February 10, 2007): 509-521.
- Duclos, J. Y., J. M., Esteban and D. Ray. "Polarization: Concepts, Measurement, Estimation." *Econometrica* 72 (2004): 1737-1772.
- Esteban, J. and Ray, D. "Comparing Polarization Measures." 2010. Accessed April 20, 2011. http://www.nyu.edu/econ/user/debraj/Papers/E stRayChapter.pdf.
- Fields, Garry S. "How much should we care about changing Income Inequality in the context of Economic Growth?" *Journal of Policy Modelling* 29 (2007): 577-585.
- Foster, J. E. and M. C. Wolfson. "Polarization and the Decline of the Middle Class: Canada and the US." Oxford Poverty & Human Development Initiative (Working paper), no. 31 (July 2, 1992): 1-30.
- Ghosh, Jayati and C. P. Chandrasekhar, eds. *Work and Wellbeing in the age of Finance*. New Delhi: Tulika Books, 2003.
- Gupta, D. *Social Stratification*. New Delhi: Oxford University Press, 1993.
- Himanshu. "Recent Trends in Poverty and Inequality: Some Preliminary Results." *Economic and Political Weekly* 42, no. 6 (February 10, 2007): 497-508.
- Mishra, S. and D. N. Reddy. *Agrarian Crisis in India*. New Delhi: Oxford University Press, 2009.
- Nagaraj, R. "Indian Economy Since the 1980s: Virtuous Growth or Polarization?" *Economic and Political Weekly* 35 (2000): 2831-2839.
- Panagariya, A. India: *The Emerging Giant.* New York: Oxford University Press, 2008.
- Pal, Parthapratim and Jayati Ghosh. "Inequality in India: A survey of recent trends." DESA (Department of Economics and Social Affairs – United Nations) Working Paper, no. 45 (July 2007): 1-28. Accessed August 12, 2011. www.un.org/esa/desa/pa pers/2007/wp45_2007.pdf
- Planning Commission. Towards Faster and More Inclusive Growth: An Approach to the 11th Five-Year Plan, New Delhi, 2006.
- Pushpangadan and Parameswaran. "Service-led Growth of Kerala: Its Nature and Implications." In *Kerala Economy, Crouching Tiger and Sacred Cows*. Edited by Sunil Mani et. al. Kottayam: D.C. Books, 2006.
- Rodriguez, J. and R. Salas. "Extended Bipolarization and Inequality Measures." *Research on Economic*

Inequality 9 (2003): 69-83.

- Sarkar, S. and B. S. Mehta. "Income Inequality in India: Pre- and Post-Reform Periods." *Economic and Political Weekly* XLV (2010): 45-55.
- Sen, Abhijit and Himanshu. "Poverty and inequality in India: Getting closer to the truth." *Economic and Political Weekly* (January 25-31, 2005): 338-349.
- Sen, A. and Himanshu. "Poverty and Inequality in India-I." *Economic and Political Weekly* 39 (2004a): 4247-4263.
- Sen, A. and Himanshu. "Poverty and Inequality in India Growing Disparities in the 1990s." *Economic and Political Weekly* 39 (2004b): 4361-4375.
- Vakulabharanam, V., W. Zhon, and X. Jinjun. "Does Class Count? *Class Structure and Worsening Inequality in China and India.*" Paper presented at the 31st General Conference of The International Association for Research in Income and Wealth, St. Gallen, Switzerland, 2010.
- Vakulabharanam, V. and S. Motiram. "Political Economy

of Agrarian Distress in India Since the 1990s." In *Understanding India's New Political Economy: A GreatTransformation?.* Edited by S. Ruparelia, S. Reddy, J. Harriss and S. Corbridge. London: Routledge, 2011.

- Wang, Y. Q. and K. Y. Tsui. "Polarization Orderings and New Class of Polarization Indices." *Journal of Public Economic Theory* 2 (2000): 349-363.
- Wolfson, M. C. "When Inequalities Diverge." *The American Economic Review.* (1994): 353-358.
- Wolfson, M. "Divergent Inequalities: Theory and Empirical Results." *Review of Income and Wealth* 43, no. 4 (1997): 401-21.
- World Bank, 'India: Inclusive Growth ad Service Delivery, Building on India's Success', Development Policy Review, Reprint No.34580-IN, Washington DC, 2006.
- Zhang, X and Kanbur, R. "What Difference Do Polarization Measures Make: An Application to China." *Journal of Development Studies* (2001): 85-98.