REGIONAL ANALYSIS OF GROWTH, POVERTY AND INEQUALITY IN INDIA

Dissertation submitted to Jawaharlal Nehru University
in partial fulfilment of the requirements
for the award of the degree of

MASTER OF PHILOSOPHY

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INDIA
2011

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DECLARATION

I, Nidhi Mittal, hereby declare that the dissertation entitled "**REGIONAL ANALYSIS OF GROWTH, POVERTY AND INEQUALITY IN INDIA**" submitted by me for the award of the degree of **MASTER OF PHILOSOPHY** is a bonafide work and that it has not been submitted so far in part or in full, for any degree to this or any other university.

(NIDHI MITTAL)

CERTIFICATE

It is hereby recommended that the dissertation may be placed before the examiners for evaluation.

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Dedicated to my dear Parents

Acknowledgements

First of all I thank God for his grace and blessings showered upon me during the whole process of my work. At the same time I would like to acknowledge that the present dissertation work would not have been possible without the admirable support, kind cooperation and affectionate guidance of my supervisor, Dr. Atul Sood. He not only spent his valuable time in improving this work but also guided me to have an overall understanding of the subject. I am greatly indebted to him for bearing with me and my mistakes.

I am indebted to all the faculty members of the Centre, Centre for the Study of Regional Development (CSRD) who shaped my thought and knowledge. I must especially thank Mr. Himanshu and Mr. Varghese for their technical assistance without which it would have been hard for me to do data processing. I am thankful to all the non-teaching staffs of CSRD, Exim Bank Library and Jawaharlal Nehru Central Library, without whose support this work would not have been completed.

I also want to thank Dr. Devendra Kumar, Economist Member, Central Advisory Board, Ministry of Labour and Employment who has been kind enough in providing me his valuable guidance and helped me to reach the place where I am today.

I express my gratitude to all my family members for being the source of inspiration and support behind my endeavours. I am especially grateful to my mother and father, for their blessings, love, concern, support and inspiration, which truly helped me, study this far. I am also grateful to my elder brother, sister-in-law, my sweet niece and nephew for their love and concern. I also thank my younger brother for his all time help, love and support to me in every aspect of my life.

I am extremely thankful to all my friends especially, Arvind, Awadesh, Neema and Veerpal and all my seniors especially, Ruchika Rani, Kapil Patidar and Amit Thorat for their help, encouragement and support and those left for being sweet to me. I also want to thank my roommate Ruchira for her help and confidence in me.

Last, but not the least, I thank Vineet for always trusting in my abilities and inspiring me during some of the toughest times in my academic career and for always being there whenever I needed him.

Having been privileged in receiving such love and support, I own responsibility for all the errors or emissions that might have crept into the work.

JNU, New Delhi
July, 2011

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List of Abbreviation

APCE	Average Per Capita Expenditure
BPL	Below Poverty Line
CAGR	Compound Annual Growth Rate
CSO	Central Statistical Organization
CV	Coefficient of Variation
HCR	Head Count Ratio
MRP	Mixed Reference Period
NAS	National Accounts Statistics
NSDP	Net State Domestic Product
NSS/NSSO	National Sample Survey Organization/Office
PCNSDP	Per Capita Net State Domestic Product
PGI	Poverty Gap Index
SDP	State Domestic Product
SPG	Squared Poverty Gap Index
URP	Uniform Reference Period
WWW, WLL etc	Win Win Win , Win Lose Lose etc.

STATES OF INDIA

ANP	Andhra Pradesh
ASM	Assam
BHR	Bihar
CTH	Chhattisgarh
DEL	Delhi
GJT	Gujarat
GOA	Goa
HPR	Himachal Pradesh

HRA	Haryana
J & K	Jammu & Kashmir
JHR	Jharkhand
KER	Kerala
KNT	Karnataka
MHR	Maharashtra
MPH	Madhya Pradesh
ORS	Orissa
PNB	Punjab
RJN	Rajasthan
TNU	Tamil Nadu
UPH	Uttar Pradesh
UTR	Uttaranchal
WBL	West Bengal

CHAPTER I

Introduction

1.1 Introduction

The so called "Shining India" image is acceptable only if all the citizens of the country are in the state of well being. If we compare the current of position of India with its position at the time of independence then India has achieved a lot at least in terms of growth of the economy. But India is still facing social evils like poverty, inequality, unemployment etc. The biggest challenge before the Indian policy makers is to eradicate poverty. Economists recognise that economic growth is major for poverty reduction. So the focus of all the economic planners is on increasing economic growth so that its trickle down effects can help reduce poverty. But in several cases even if there is high economic growth, there is either no poverty reduction or less than expected poverty reduction. It is because of an important variable named change in inequality which also affects poverty reduction. Inequality is influenced by economic growth and in turn gets affected by it. Most important issue here is the role of economic growth in reducing the poverty, however while doing that inequality would be an unavoidable aspect of study. Bourguignon (2004) states, "It is important to consider growth and income distribution simultaneously and to recognize that income distribution matters as much as growth for poverty reduction". In line with the above view, most of the literature which addresses the relation between poverty and economic growth also pays attention to inequality.

Most of the studies that analysed the relationship between growth, poverty and inequality have concentrated on aggregate and state level analysis only. India is a big and diversified country and therefore national outcomes are not able to reveal much about the internal dynamics of the economy. Moreover, in view of growing divergence within states, the policy recommendations emerging from state level analysis may not be as effective for the individual regions within each state. For this a sub-state level analysis is necessary. In this study an attempt has been made to understand the growth process in India, beyond the national averages. This study examines the debates and available data at a more segregated level i.e. region-wise analysis and empirically explores the inter-linkages between regional growth, poverty

and inequality. For this, the study relies on unit level data of two household surveys of NSS; 50th round (1993-94) and 61st round (2004-05).

1.2 Background

In India, issues related to growth, poverty and inequality trends, their interrelationship as well as the trickle down mechanism has attracted much attention especially over the last two decades. It has been found that despite high levels of growth of the Indian economy especially in the post reform decade, the levels of poverty and inequality are high.

A number of empirical studies examining the growth performance of various states and the nature of changes in poverty and inequality are available. This section brings together the reviews of the studies concerned with the analysis of growth, poverty and inequality. They provide useful insights. For clarity, this section is further divided into sub-sections. Section 2 reviews the studies relating to estimation of poverty line as well as trends in poverty, economic growth and inequality. Section 3 reviews the studies concerned with the relationship between growth and poverty, growth and inequality and interrelationship between these three variables.

1.2.1 Trends in Poverty, Economic Growth and Inequality

Over the last two decades, academic and public interest in matters of growth, poverty and inequality has grown substantially. There is a substantial amount of debate about the trends and pattern of these variables. This section reviews the literature related to these variables.

i). Growth Performance

Regional growth and disparities as well as balanced regional growth have been a matter of great importance for the scholars. Decades ago, the so called classical school including theorists like Smith, Ricardo, Malthus, Marx etc. laid the foundation of the theory of growth and development. After them theorists like Harrod, Domar, Kaldor, Pasinetti, Robinson, Solow, Swan, Myrdal, Rosenstein-Rodan, Nurkse, Lewis, Rostow, Hirschman, Prebisch, Singer, Arrow, Romer, Lucas, Krugman etc.

have developed different models on regional growth. All these models reveal that economic growth is a multifaceted phenomenon including a number of aspects.[1]

In India, since last few decades, scholar's interest in the issues of growth and development has expanded rapidly.

Indian debate is with respect to overall trend as well sectoral composition of growth; both rural versus urban sector and agriculture versus modern sector. Economists generally used per capita income to measure economic growth however in some cases they have used some other variable like per capita expenditure or so. Ahluwalia (2000) estimated growth rates of SDP and PCSDP in the 14 major states based on a log linear trend and found that the growth rate of combined SDP of all the 14 states taken together has increased in the post-reform period however there are considerable variation in the performance of individual states as shown by the degree of dispersion in growth rates across states. Deaton and Dreze (2002) found that during 1993-94 and 1999-00, there is a strong evidence of divergence in per capita consumption across states and their estimates of growth rates of per capita expenditure also found a significant increase in rural-urban inequalities at all- India level and also in most individual states.

Shetty (2003) and Bhattacharya and Sakthivel (2004) have done a detailed state-wise analysis of the regional disparity in growth rates of domestic product of major states in the pre and post-reform decade, both aggregate and sectoral. They found that in the post-reform decade there has been an overall increase in the SDP growth rates and growth rates in all states has roughly improved. Using coefficient of variation and Gini coefficients, they found that the Indian states are diverging more in the 1990's leading to a drastic increase in the regional disparities. Industrial states are growing much faster than the backward states and there is no evidence of convergence among the states. Also, there is an increase in the number of states whose growth rates have been higher than the average all-India growth rate and concluded that the growth was not equally shared by different regions of India. Bhanumurthy and Mitra (2004) also revealed that economic reforms were initiated at different levels across the states of India which in turn lead to wide regional variations. Krishna (2004) analysed the patterns and determinants of growth during 1960-2000 for 14 major states of India.

[1] Class Notes

He found that the all India growth rate had accelerated during the 1990s. However the interstate variability of growth rates has increased in this period. Some state seemed to have performed better at the expense of other states. Sen & Himanshu (2004) through there adjusted NSS data showed that the all-India urban MPCE grow more than double the rural MPCE and same is the case in the majority of NSS regions. Kohli (2006) suggested that India's economic growth has accelerated in the 1990's. Mohan (2008) also suggest an increase in real GDP growth in the Indian economy in the post reform period.

Eleventh Five Year Plan (2007–2012) has reported that the India has achieved rapid growth but without 'inclusiveness'. Disparities among states, regions within states and between urban and rural areas, have been increasing which shows that the gains of the rapid growth have not reached all parts of the country in an equitable manner. It has also been argued that widening income differentials between more developed and relatively poorer states are a matter of serious concern. Therefore there is a need for faster and inclusive growth. These regional disparities have been confirmed by various scholars.

ii). Poverty

There is an enormous literature on the estimation of poverty line and analysis of poverty related to the Indian economy.

a). Poverty Line: Yardstick For Measuring Poverty

In one of the oldest paper by Dadabhai Naoroji (1876) on poverty of India an attempt was made to estimate the so called poverty line. In this paper he tried to show that the gross output of Indian economy is not sufficient to provide subsistence to the whole population. For this he estimated subsistence based poverty line at 1867-68 prices. Dandekar and Rath (1971) estimated poverty using NSSO consumption expenditure and assuming a norm of 2250 calories per capita per day both for rural and urban areas. In 1962, a *Working Group* was set-up by the Planning Commission. It recommended poverty lines of a minimum of Rs. 20 and Rs. 25 per capita per month at 1960-61 prices for rural and urban population. Later it was modified on the basis of the recommendations of the *Taskforce on Minimum Needs and Effective Demand* (1979) appointed by Planning Commission. It defined poverty line as the per capita

expenditure level that could meet calories norm of 2,400 and 2,100 calories per capita per day in the rural and urban areas respectively. The poverty lines at the 1973-74 prices work out to be Rs 49.09 and Rs 56.64 per capita per month in rural and urban areas respectively. The poverty lines for later years were obtained by adjusting the 1973-74 values for price changes. In 1989, the Planning Commission constituted an Expert Group also known as the Lakdawala Committee to look into the methodology for estimation of poverty lines poverty at national and state level .The need for this committee had arisen mainly on account of uniform calorie norms being used across the states of India, fixed consumption basket, uniform deflation process across the states etc. In 1993, the group submitted its report and since then the methodology suggested by the *Expert Group on Estimation of Proportion and Number of Poor* (EGEP) for calculating poverty line has been used. Till now poverty basically refers to income poverty, which is measured in terms of the inability of people to purchase the minimum required calories. *Expert Group to Review the Methodology for Estimation of Poverty* (2009) appointed by the Planning Commission also known as Tendulkar committee has extended the definition of poverty to include deprivation in basic needs such as education, health etc. Therefore, new methodology apart from food includes total expenditure by households on clothing, footwear, education, institutional medical expenditure.

b). Poverty Trends

In India a number of studies have been undertaken to estimate the incidence of poverty at all-India level as well as at the state-level. Most of them rely on the household consumer expenditure data collected by NSSO, although, different methods have been used to estimate the incidence. Some of these used the poverty lines given by the working group while others estimated their own poverty lines by using calorie consumption norms. Moreover, different authors used different price indexes to update these poverty lines and sometimes different base year poverty lines. Therefore, using the same data sets different authors sometimes get different estimates of poverty. To estimate different aspects of poverty like depth, severity etc. different authors used different measures. Here an attempt has been made to review some of the recent and important studies on poverty in India.

Dubey and Gangopadhyay (1998) estimated head count ratios as well as FGT measures of poverty at the level of NSS regions using 43rd round (1987-88) and 50th round (1993-94) of the NSSO expenditure surveys. They found that the overall poverty rate fell from 47% in 1987-1988 to about 40% in 1993-94. Also, there are wide variations in poverty below the state level. Deaton and Dreze (2002) on the basis of head count ratios found a continuous decline in poverty in the 1990's. Sundaram and Tendulkar (2003a, 2003b) have done a detailed analysis of trends in poverty for all-India and 15 major states during the 1990's based on the mixed reference period. They found that there has been a decline in poverty at all-India level as well as in the majority of the states, however there was diversity across the states. But in the case of all-India urban population they observed a small rise rather than a decline during the 1990's. Jha and Sharma (2003) have done spatial analysis of rural poverty using Foster-Greer-Thorbecke (FGT) measures of poverty for 75 NSS regions for three NSSO rounds; 1987-88, 1993-94 and 1999-2000. They found that regional inequality in the incidence of poverty has persisted overtime and the economic reforms have been unable to make any significant change in the spatial distribution of poverty. Sen & Himanshu (2004) found that poverty has reduced in 1990s but the rate of poverty reduction was relatively less compared to previous decades. They also found that, there is no clear state-level pattern to divide NSS regions by poverty reduction performance and some conclusions that they have reached at the state level cannot be reached at the level of NSS regions. According to them, almost every major state had at least one rural or urban NSS region where the poverty ratio increased and also at least one region where this declined. Moreover, urban poverty reduction outcomes were worse than rural in most NSS regions. Bhanumurthy and Mitra (2004) in their paper confirmed decline in poverty in the 1990's at the all-India level. He also noticed huge rural-urban differences. At the state level, each of the major states recorded a decline in rural poverty in the 1990s; however, in urban areas except Andhra Pradesh and Orissa, all the other states show a decline in poverty. Also, the extent of decline varies considerably across the states. However they are not confirming the Sen & Himanshu (2004) view and found that the decline in poverty incidence in the 1990s was higher than during 1983 to 1993-94. Himanshu (2007) also found that poverty has reduced during 1993-94 and 2004-05 but suggests that substantial poverty reduction was during 1999-2005 and little poverty reduction during 1993-2000. Dev and Ravi (2007) using the headcount ratio, poverty gap index and squared poverty gap

index (FGT index) found that the there is a decline in total poverty in the post reform period. However, there are rural-urban differences at the all-India level. The rate of decline in the rural areas was higher in the post-reform periods as compared to urban areas. In contrast, Patnaik (2007, 2010) found that rural and urban poverty has risen substantially between 1993-94 and 2004-05, although to obtain rural and urban poverty lines she directly applied the official nutrition norm of 2,400 and 2,100 calories per day for rural and urban areas to the NSS data. The Expert Group (2009) has re-estimated poverty for 1993-94 and 2004-05 for all-India and states using the new methodology. In 1993-94, poverty ratio at the all-India (combined rural & urban) comes out to be 45.3%. For rural and urban areas it was 50.1% and 31.8% respectively. In 2004-05 it was 37.2% for all-India (combined rural & urban), 41.8% for rural areas and 25.7% for the urban areas. These estimates of the Planning Commission clearly show that all-India and rural as well urban poverty has decreased in the post reform decade.

iii). Inequality Trends

There are numerous studies in recent years on the trends of inequality in Indian states during 1990s. Ahluwalia (2000) found that inter-state inequality as measured by Gini coefficient has clearly increased during the 1990s. Deaton and Dreze (2002) also found that inequality in terms of per capita expenditure is increasing across states especially rural-urban disparities and inequality within urban areas. Shetty (2003) found that the Gini coefficient for the distribution of average per capita GSDP amongst states has risen over the past two decades. Sen and Himanshu (2004) found that during the 1990s consumption inequality has increased and specifically increased sharply in urban areas. Also, there is an increase in between state inequalities as well as the within state inequalities.

Himanshu (2007) confirmed that inequality measured by Gini ratios has increased in urban areas, of all states as well as at the all-India level. In rural areas also inequality has increased in all states except Bihar, Jharkhand, Karnataka, Madhya Pradesh and Rajasthan. Dev and Ravi (2007) also calculated inequality in consumption using Gini coefficient and found that in the post-reform period, inequality have increased significantly for both rural and urban areas however the rate of increase in urban areas has been much higher than the rural. Pal and Ghosh (2007) in their working

paper analysed the nature and causes of the patterns of inequality and poverty in India. They found that after the economic liberalization in 1990s inequality is increasing in both spatially and vertically and also there is persistent poverty. Sarkar and Mehta (2010) using different inequality measures and NSS data for the year 1993-94 and 2004-05 tried to analyse the income inequality in India for the pre-reform and post-reform periods. They found that the overall income inequality in the Indian economy has increased sharply during the post-reform period both for the rural as well as the urban areas.

1.2.2 Relationship

This section reviews the studies carried out during the last few decades to examine the nature of relationship between growth, poverty and inequality in India. These studies also analyses effects of sectoral growth on income distribution and poverty incidence.

i). Relationship between Economic Growth and Poverty

Various studies related to growth-poverty relationship are available in the literature. Most recent economists on the basis of cross-country analysis found that poor gets benefited from the growth (Dollar and Kraay, 2001; Richard H. Adams Jr., 2004).

Ahluwalia (1978) observed that in India there is a statistically significant negative relationship between agriculture growth and incidence of rural poverty which shows that growth in the agriculture sector is trickling down to reduce rural poverty. Kinan (1994) also found a strong negative link between agricultural growth and the incidence of rural poverty in India. However, Mitra (1992) found that in case of manufacturing and tertiary sector growth has trickled down only marginally to reduce urban poverty. Ravallion and Datt (1996) analysed the effects of the sectoral pattern of economic growth on poverty in India between 1951 and 1991 based on NSSO consumption distribution surveys (3rd round to 47th round). For this they have estimated the head count, the poverty gap and the squared poverty gap indices for rural and urban areas and used poverty lines as given by the Task Force (1979). They found that the rural growth has reduced poverty in both rural and urban areas while urban growth has reduced some poverty in urban areas but has no effect on rural poverty. In their sectoral analysis they found that the growth in the primary and tertiary sectors is reducing poverty in both rural and urban areas. However, secondary

sector growth did not reduce poverty in either rural or urban areas. The authors in a separate paper; Datt and Ravallion (2002) found that economic growth has not done more for India's poor but still higher aggregate economic growth is the most important element of the strategy for poverty reduction in India. Deaton and Dreze (2002) in their decomposition exercise to capture the effect of growth and distribution on poverty found that growth and poverty are highly correlated and growth has reduced the poverty rate in the 1990's. Sen & Himanshu (2004) noted that urban poverty was growing more, although the growth of urban MPCE was much higher than that of rural MPCE. They also found that during crisis in the early 1990s, poverty had increased significantly. In case of NSS regions they found that in richest urban region, there was high growth of total expenditure and significant decline in poverty ratios. However, poorest urban and richest rural areas, despite lower MPCE growth experienced significant decline in poverty ratios. In poorest rural regions MPCE growth was low and the number of poor also increased. The poverty ratio increased in the regions which were neither poorest nor richest. In this way, regions were exhibiting mixed trend and it is difficult to find a fixed pattern of transmission from growth to poverty. However, Bhanumurthy and Mitra, (2004) concluded that economic growth is beneficial for poverty reduction. Himanshu (2007) again found that the spatial pattern of poverty reduction is not in tune with what is usually assumed regarding spatial patterns of GDP growth. In rural areas of Assam, Bihar, Jharkhand and Uttar Pradesh where post reform SDP growth was less than the all-India average, poverty reduction was more. However, in urban areas all these poor states show less poverty reduction during 1993-2005. Dev and Ravi (2007) through the decomposition exercise concluded that the post-reform period growth was an important factor in reduction in poverty.

Existing literature shows that in most cases, economic growth is beneficial for poverty reduction. However, there might be other variables which are affecting this relationship. Therefore, there is not much debate on the significance of this relationship; however, there is considerable debate on its magnitude.

ii). Relationship between Economic Growth and Inequality

The relation between growth and inequality has been dealt with by a number of studies. Most of the literature related with the relationship between economic growth

and inequality indicates a significant negative relation between economic growth and inequality reduction. The growth–inequality debate can be traced back to Kuznets' hypothesis (1955), the famous inverted-U hypothesis. This hypothesis states that in a developing country during the early stages of economic growth as per capita income rises; inequality first increases then stables for some time and finally begins to fall after some point. It means that initially there is a positive correlation between the variables, after a certain point the correlation is zero, and then it becomes negative.

In case of India, it is said that income inequality has widened during the phase of acceleration in economic growth in the post-reform period. Bhanumurthy and Mitra (2004) found that inequality have risen in the process of economic growth. Moreover, there are wide regional variations in the economic growth and therefore it is expected that change in inequality due to growth would also be different across states. Himanshu (2007) also confirmed that relatively faster increase in GDP after economic reforms was not accompanied by high poverty reduction but by an increase in inequality. Nayyar (2008) in his study for 16 Indian states during 1978-79 to 2002-03 found that economic growth is leading to regional inequalities across the states of India as Indian states are converging to very different steady states.

iii). Relationship between Economic Growth, Poverty and Inequality

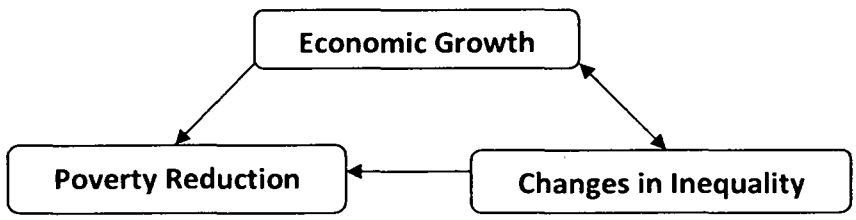
Kinan (1994) while observing factors affecting rural poverty, mentioned rural consumption levels, agricultural growth and inequality in rural consumption among other factors like infrastructure, inflation, population growth, environment and welfare programmes. He found a strong negative link between agricultural growth and the incidence of rural poverty and positive correlation between inequality in rural consumption and rural poverty for most states. However, Ahluwalia (2000) reveals that poverty can increase despite an increase in per capita income if the distribution worsens sufficiently. Jha (2000) examined the empirical relationship between economic inequality, poverty and economic growth by computing Gini coefficient, real mean consumption and the head count ratio, for rural and urban sectors in the 14 major Indian states using NSS data on consumption for the 13th to the 53rd Rounds. He found that inequality, poverty and mean consumption measures are converging across states but economic growth is achieved only at the expense of increase in inequality and is leading to less poverty reduction. Bhanumurthy and Mitra (2004)

found that inequality have risen in the process of economic growth and is accentuating poverty indicating that the adverse effects of rising inequality are offsetting the positive effects of growth on the poor. Sen and Himanshu (2004) addresses the same issue in their study using the NSS data found that despite higher growth in the 1990s, poverty reduction has deteriorated because of increased economic inequality as consumption increased largely for the relatively rich people. Bhaduri (2008) argued that the so called high rate of growth is 'predatory' in the sense it covers behind itself, the high rate of inequality and is biased against the poor. He also argued that the nature of growth is paradoxical which increases output and poverty at the same time. In contrast, Dhamija and Bhide (2010) on the basis of household surveys conducted by the National Council of Applied Economic Research (NCAER) found that faster rate of economic growth lead to a slower decline in poverty despite more equitable distribution of consumption in the 1990's.

Deaton and Dreze (2002) while decomposing the effect of growth and distribution on poverty found that growth alone would have reduced the poverty rate by more than what actually happened and revealed that there was an increase in inequality which leads to offsetting of some of the effects of growth on poverty. Dev and Ravi (2007) also decomposed change in poverty levels into changes due to growth and inequality components at all-India and state level. The exercise has clearly shown the adverse impact of the increase in inequality. In spite of higher overall growth in the post-reform period (1993-2005), the decline in poverty has been less because increased inequality in the post-reform period seems to have slowed down the rate of poverty reduction. In urban areas, the impact of distribution on reduction in poverty is much more adverse. Using the URP data, they found that if the distribution had remained the same, poverty would have been reduced by an additional 2.8 percentage points in rural areas and 4.32 percentage points in urban areas in the post-reform period.

Bourguignon (2004) found that there is a triangle relationship among growth, poverty and inequality and has portrayed this relationship via a diagram as shown below.

The Poverty-Growth-Inequality Triangle



Review of literature shows that there is a wide range of results with respect to the relationship between these variables. It all depends upon the relative effect of variables on each other. If the economic growth is accompanied by a decline in inequality then the poverty decreases as poor is getting relatively more benefit. However, if economic growth is leading to increase in inequalities by benefitting the non-poor more, than there is either increase or decrease or no effect on poverty depending upon the net effect of the positive (growth) and the negative (inequality) variable. Poverty will decrease if positive effect of growth overtakes the negative effect of inequality because in that case, extent of decrease in poverty due to growth is more than the increase in poverty due to an increase in inequality and poverty will increase if the opposite happens. In case both effects are equally effecting then there will be no change in poverty in spite of the fact that the economy is growing. A number of scholars in recent years have demonstrated that in the post reform period, positive impact of growth on poverty has been reduced by adverse distribution.

Conclusion

The results emerging from a large literature on the subject are the following. (i) Economic growth is the most important determinant of poverty reduction and there is a positive relationship between economic growth and decline in poverty, (ii) there is a positive relation between economic growth and increase in inequality and, (iii) inequality is a variable that mediates the impact of growth on poverty.

Most of the studies discussed above have presented the estimates for all-India and the states of India and usually they did not disaggregate below this level. The analysis of the Indian economy at the aggregate level might conceal certain relevant experiences faced at the disaggregated level. India is large and diversified country. It is necessary to understand the dynamics of economic growth, poverty and inequality at the more disaggregated level. Moreover, the above discussion has unfortunately neglected the spatial linkages as well as the neighborhood effect between these variables. These variables have a kind of spatial dependence and neighbor of each sate can affect its economic growth, inequality and poverty. It may happen that a region within a bad performing state is doing well because of the spill over effects of the good performing region in the neighbour state which is developed. For example: it has been argued that there is a poverty trap in some regions. It means that being poor and being in a poor

region is a factor for increasing poverty in that geographical region. Poverty itself acts as a barrier for poverty reduction. Therefore, spatial analysis of growth, poverty and inequality is done with the help of the maps. Jain, Sundaram and Tendulkar (1988) had examined the spatial distribution of regions along six dimensions of poverty and tried to identify spatial patterns of contiguity by mapping.

The questions remains that what explains the existence of differential trajectories of growth, poverty and inequality in different states and regions? To wholly understand the characteristics of growth we need to reach to the roots of the uneven regional growth in India. Institutions may play a very significant role in shaping the state wise and region wise growth and its outcomes like changes in poverty and inequality. The meaning of the term "institution" has many parallel layers. It usually means a structure of social order; formal (laws, regulations, political and juridical framework) and informal (customs, norms) as well as organisations (government, private). The term institutions not only includes social but also political and spatial framework. These institutions moulds, broadens and restrains the socio economic behaviour and organizational procedures of the societies and economies. The necessary condition for experiencing 'growth with development' involves the creation of appropriate socio-institutional framework. Acemoglu, Johnson and Robinson (2002); Rodrik and Subramanium (2004); Glaeser, Porta, and Lopez-De-Silanes (2004) etc. in their work has emphasized the significant role of geography and institutions in explaining the process of growth and development.

The Indian scholars have thought of only market led trickle down mechanism and more or less have ignored the role of institutional framework in understanding the dynamics of growth and its outcomes. The process of growth is such that it relies on both; market as well as institutions. In the developing economies like India markets are segmented and cannot take the responsibility of the development process. In fact the performance of the markets entirely depends on the particular institutional framework in which they are working. To identify and explain the hidden dynamics of growth it is necessary to analyse the prevailing spatial and institutional framework. In this study an attempt has been made to briefly discuss growth and its outcomes in relation to the role of institutions in India.

Against this backdrop, this paper attempts to reveal experiences of the individual regions as created by the NSS. Although the above literature had already indicated the kind of relationship we should expect.

1.3 Research Questions

This study is interested in analysing

1. How does the trickle down mechanism work at the regional or sub regional level?
2. To what extent higher economic growth is accompanied by increased income inequality?
3. What is the relationship between economic growth, poverty reduction and increase in inequality? Do these variables have any spatial pattern? Is there any different pattern at the sub regional level compared to the state level?

1.4 Hypothesis

1. Higher economic growth helps in poverty reduction.
2. Faster economic growth worsens income distribution.
3. Increasing inequality has a negative impact on quantum of poverty reduction.

1.5 Framework of the Study

The study is organized as follows. Chapter I introduces the issues to be focussed in the forthcoming chapters, reviews the literature and also gives research questions, hypothesis to be tested and the framework of the study.

Chapter II presents data set used, overall methodology and definitions & concepts used in the study. This section on data sources and methodology also gives a brief backdrop on how the data is compiled. Finally, this chapter also deals with the measures of growth, inequality and poverty and the issues of comparability between states and regions of 50^{th} and 61^{st} round.

Chapter III explores trends in growth, poverty and inequality. Firstly, it calculates growth rates of net state domestic product and average per capita expenditure across

major states as well as of the NSS regions for aggregate as well as for rural and urban areas. The following section examines the changes in poverty between 1993-94 and 2004-05 across the states and NSS regions of India measured by head count ratio, poverty gap index and squared poverty gap index to show three different dimensions of poverty; incidence, depth and severity. In the last section, inequality is computed via gini coefficients across major states using the consumption expenditure data from the same household surveys.

Chapter IV puts these together in the broader context of interrelationship between all these variables. It shows relationship economic growth of net state domestic product as well as average per capita expenditure with poverty and then with the inequality. Then these three variables are taken together and a score table is prepared to examine the nature of changes in all the states and regions.

Finally, Chapter V summarizes the study, highlights the key results obtained and presents the concluding remarks of the study with some comments on policy implications.

CHAPTER II

Concepts, Definitions and Measurement Issues

2.1: Data Sources

This study uses the following data sets:

i. Net State Domestic Product Series, Central Statistical Organization, Ministry of Planning and Programme Implementation, Government of India.

ii. National Sample Survey Organization (NSSO) Quinquennial Consumer Expenditure Surveys, 50^{th} and 61^{st} round conducted in 1993-94 and 2004-05, Schedule 1.0 (Consumption Expenditure Survey). Sch.1.0 of the NSS surveys deals with household consumer expenditure.

iii. Report of the Technical Group on Population Projections Constituted By the National Commission on Population, 2006; and Population Projections for India and States, 1991-2001, Registrar General, Census of India, Ministry of Home Affairs, Government of India.

iv. Report of the Expert Group to Review the Methodology for Estimation of Poverty, 2009, Planning Commission, Government of India.

(i) Net State Domestic Product

The Central Statistical Organization (CSO) data series on State Domestic Product at constant prices and State Domestic Product by industry of origin at constant prices has been used. The net state domestic product (NSDP) series of different time periods is based on different base periods. A proper comparison is possible if done through a common base. So, available data for different base years is taken and the data series with base year 2004-05 is extended backward on the basis of common year between the two connecting series. For this, the price correction factor i.e. ratio of 2004-05 series data to 1999-2000 series data at constant prices, for the common year for which data is available, is computed for each state and sector separately and is used as weights for extending 2004-05 series backward. Similarly, ratio of 1990-2000 series data (with new base) to 1993-94 series data for common year is used as weights for extending 1999-2000 series backward.

Also, there is a slight difference in the sectoral composition of SDP data for the base year 1993-94, 1999-2000 and 2004-05. For example, in 1993-94 series, primary sector aggregate is taken and therefore mining and quarrying is included in primary sector while in 1999-2000 and 2004-05 aggregation is done for Agriculture and Allied activities and therefore mining and quarrying is included in industry total. To avoid confusion in this study, the industrial classification adopted by CSO in 2004-05 series has been adopted for presenting NSDP data disaggregated by industry of origin. Accordingly, adjustments had been made. So, in final data series, Agriculture covers Agriculture, Forestry and Logging and Fishing; Industry covers Mining and Quarrying, Manufacturing (registered and unregistered), Construction, Electricity, Gas and Water supply and; Services covers Transport, Storage and Communication (including Railways, Transport by other means, Storage and Communication), Trade, Hotels and Restaurants, Banking and Insurance, Real Estate, Public Administration and Other Services.

For analyzing impact of growth on the Indian economy, the sectoral growth rate of net state domestic product is worked out for the states of India and these figures are compared with poverty and inequality outcomes. Then agriculture growth and tertiary sector growth has been separately calculated and the results are compared with rural and urban outcomes of poverty and inequality.

(ii) NSSO Consumption Expenditure Surveys

Estimates of poverty and inequality are based on consumption expenditure data from large scale quinquennial household surveys of the National Sample Survey Organization (NSSO). In NSS consumer expenditure survey, the variable named Monthly Per Capita Consumer Expenditure (MPCE) serves as an important indicator of standard of living and as a proxy of per capita income. This variable can be used at the national level, state level as well as regional level. As per capita net domestic product given by National Account Statistics (NAS) can be used for estimating economic growth, similarly per capita consumer expenditure given by NSS can be used for growth calculation.[1] As, our analysis includes NSS regions for which data is

[1] Bhalla (1997b) argued that there is a need to be consistent about deriving growth estimates from the same source as the poverty estimates. While exploring the growth-poverty relationship, one must be sure that both are obtained from the same source. Again in Imagine Bhalla (2003b, 2004b) he has argued that analysts should be consistent in that growth and poverty reduction should be derived from the same growth definition.

not provided by CSO, we will be using expenditure data provided by NSS for calculating regional economic growth. Therefore, average monthly per capita expenditure (APCE) is used as a proxy for income.

Comparability between NSS Rounds: According to the Report of The Expert Group to Review the Methodology for Estimation of Poverty (2009), 50th and 61st rounds of NSS are comparable to each other but 55th round is not comparable with any of these rounds. For 50th and 61st round, the URP based results are comparable. Also, the MRP based results of 50th and 61st round are comparable as the 50th and 61st round had collected information on the low frequency items on both 30 days and 365 days recall period. In the 55th round, difference has arisen due to change in the reference period. In the 55th round, information on food items is taken for two recall periods of 7 days and 30 days from the same households. Also, information on the low frequency items, namely, clothing, footwear, durable goods, education, and institutional medical expenses is collected only for reference period of 365 days. Therefore, we made use of unit level data from Consumption Expenditure Surveys (Schedule 1.0) for (i) NSSO, 50th round conducted in 1993-94 and, (ii) NSSO, 61st round conducted in 2004-05.

Area of Study: The domain of study is basically the NSS regions, however, wherever necessary state-wise analysis is also done. Also, both rural and urban areas in the states as well as in regions are analysed separately.

States: States includes Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal known as Major States. Together, these States accounted for nearly 94.7% of India's population in 2001. According to the Census 2001, these states had a population of 20 million or more. In addition we have taken some minor states: Delhi, Goa, Himachal Pradesh, Jammu & Kashmir, and Uttaranchal. According to the Census of 2001 these States of India had a population of less than 20 million. The analysis does not include Union Territories (UTs): Andaman & Nicobar Islands, Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Lakshadweep and Pondicherry and other minor states constituting Seven Sister States in North East: Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura.

NSS regions: In the analysis we have taken regions of all the major states of India with the exception of Uttaranchal which according to the census is a minor state. The analysis does not include Jhelum Valley region of Jammu & Kashmir because of unavailability of data in the 50th round. Also, regions of Union Territories (UTs) i.e. Andaman & Nicobar Islands, Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Lakshadweep and Pondicherry and Seven Sister States in North East: Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura are left unanalysed. Therefore in all, out of 78 regions we are analysing 63 regions. The composition of the regions in the 50th round as well in 61st round is given in table 2A.1 and 2A.2 of appendix A.

(iii) Projected Population Series

In India, after every census population projections has been made by Technical Group under the Chairmanship of Registrar General on behalf of the Planning Commission of India. These projections are done for three point of time, 1st March, 1st July and 1st October for total, rural as well as the urban population by sex. In this study two series are used. First is population projections from 1991 to 2001 and second is population projections from 2001to 2026. Also, we are using projected population as on 1st October for two years 1993 and 2004.[2]

(iv) The Tendulkar Committee Report: Poverty Line Used

The earlier official poverty lines were being criticised on account of their failure to capture cost of basic needs such as health and education. This issue get fuelled in recent years because of increasing household expenditure on education and health services. The Tendulkar Committee headed by Suresh Tendulkar has submitted its report named "Report of the Expert Group to Review the Methodology for Estimation of Poverty" in November, 2009. The group has suggested a new methodology for calculating state-wise and all- India poverty lines for 2004-05 for rural and urban areas separately. According to the new methodology, poverty lines are not calculated via calorie norm (2100 calorie for urban and 2400 for rural per day). Poverty lines will now be calculated on the basis of Mixed Reference Period (MRP) instead of

[2] 'Report of the Expert Group to Review the Methodology for Estimation of Poverty', Planning Commission of India has used projected population as on 1st March, 2001-2026 series. On the other hand, Central Statistical Organization uses projected population as on 1st October to convert data in per capita terms.

using Uniform Reference Period (URP). It will also incorporate private expenditure on health and education. It means that data for household expenditure data will be taken for last 365 days for low frequency items like clothing, footwear, education, institutional medical expenditure and for the last 30 days for all other items.

In this study, head count ratio, poverty gap index and squared poverty gap index are computed from the NSS consumption Expenditure data and the poverty lines as per the Tendulkar Committee. For regions in each state, the same poverty line has been used as that state. The state-specific poverty lines in rural and urban areas for 1993-94 and 2004-05 are given in table 2A.3 of appendix A.

NSSO 50th Round (1993-94): As we are using poverty lines based on MRP, we need to use MRP data for estimation purposes. For the 61st round, MRP data is given in the unit level data but in the 50th round the variable named "mpce-365 days" is not available i.e. in the 50th round the MRP data is not given directly. However, the information on low frequency items for 365 day reference period is given separately through which we can calculate MRP data. For this we made use of the unit level data. The methodology for estimating MRP data is mentioned in the next section on methodology.

2.2: Methodology

In the case of states the main problem is high inter-regional differences. In a large and diversified country like India, it can be misleading to examine the aggregate dynamics of growth, inequality and poverty. A poorest region in the state might be progressing better relative to better off regions within the same state. Therefore, an attempt has been made for a region- wise analysis based on the list of NSS regions provided by NSSO. According to 61st round of NSSO, there are 78 regions in India constituting 35 states. This study will analyse 65 NSS regions constituting 22 major states. The three variables: economic growth, poverty and inequality will be calculated as described in the forthcoming section on measures of growth, poverty and inequality. However, the changes in the variables are examined in terms of (i) net or absolute change[3]. (ii) Annual percentage rate of change[4].

Adjustments in Unit Level Data in the 50th Round

In the 50th round, for low frequency purchased items such as clothing, footwear, durable goods, education, and medical expenses (institutional) data is collected for two reference periods i.e. "last 30 days" and "last 365 days" and for all other items data is collected for reference period of "last 30 days" only.

All information for both 30 days and 365 days expenditure is recorded in a summary file named D376SUMR (U) containing summary of consumption expenditure. This file can be used for calculating mixed reference period data. However, there is a mistake in the data extracted from the summary file. NSSO has merged medical expenditure data; both institutional and non institutional expenditure with the educational expenditure data. Institutional expenditure data is collected for both 30 days and 365 days reference period while non institutional expenditure data is collected for only 30 days. Now the problem is that educational expenditure data which is collected for 365 days reference period now includes medical expenditure; Institutional and non institutional expenditure for both 30 days and 365 days. This problem has been resolved by separately computing educational expenditure, institutional medical expenditure and institutional medical expenditure from a file

[3] Net change is calculated as current period estimates minus the previous period estimates.
[4] Annual change is calculated via Compound Annual Growth Rate between two points of time formulae.

named D150L89R (U) containing detailed unit level data on education and medical expenditure. This information is then merged with the summary file to get a complete file containing separate data for all categories and for both 30 days and 365 days reference.

Computing Mixed Reference Period Data for the 50th Round

For calculating mixed reference period data, we have used unit level data of 365 days reference period for clothing & bedding, footwear, education, medical (institutional) and durable goods only and 30 days reference period data for all other items.

We have added "last 30 days" series for all items with "last 365 days" series on low frequency items. But here for low frequency purchased data is counted twice for both reference period 30 days and 365 days. For this we have calculated a separate series for low frequency items for 30 days reference period and subtracted it from the above calculated series. Therefore, the formula for calculating mixed reference period data can be written as

MRP = 30 days reference period data for all other items + 365 days reference period for low frequency items - 30 days reference period for low frequency items.

Quartile Classes

We have created quartile classes to divide all the states into four categories. This is done to compare the states in terms of their position with respect to the growth rates. Quartiles are the three points that divide a data set into four equal groups, each representing a fourth of the distribution. The median or second quartile divides the data into a lower half and an upper half. The lower quartile i.e. first quartile is the middle value of the lower half showing lowest 25% of data. The upper quartile i.e. third quartile is the middle value of the upper half and shows highest 25% or lowest 75% of data. Usually, they are denoted as Q_1, Q_2 and Q_3.

Maps

A map gives a clear visual picture and can be used to identify the patterns of contiguity. Maps can be used to design better policy and interventions. For instance, poverty maps can be used to target the very poor section of the society which might be concentrated in a particular region or is stuck in a geographical poverty trap. In this

study, we have generated detailed maps for states as well as for regions showing rate of economic growth, poverty and inequality during 1993-94 and 2004-05 via choroplething technique. In addition, composite / superimposed maps are created to analyze relationship between growth and poverty as well as growth and inequality. Finally, chorochromatic technique is used for analyzing the score table showing results of growth, poverty and inequality.

Score Table

We have prepared a table, across states and regions in which we have given scores like win (W) and lose (L). For example; we give a score for Win, Win, Win if there is positive outcome for growth, poverty, income distribution or Win, Lose, Lose if growth is positive and poverty and income distribution has worsened and so on. In this way we will get combinations like WWW, WWL, LWW ...etc. These classifications are then mapped to show the broad spatial patterns.

Coefficient of Correlation

To analyze the relationship between growth and poverty and between growth and inequality, the simple coefficient of correlation is calculated. The value of correlation coefficient varies from -1 to 1. Value of 1 implies that there is a perfect positive relationship between X and Y and Y increases as X increases. A value of -1 implies a perfect negative correlation which means that Y decreases as X increases. A value of 0 implies that there is no linear correlation between the variables.

2.3: Concepts and Definitions

A comprehensive evaluation requires that all the concepts, definitions and terms used in this study are clear. This section explains some important terms used in the study.

a) NSSO

The National Sample Survey Organisation (NSSO) or simply NSS was formed in 1950 and is a part of statistics wing of Ministry of Statistics and Programme Implementation (MOSPI), Government of India. It basically conducts socio-economic surveys and is one of the largest organisations which collect socio-economic data. It consists of four organizations; Survey Design & Research Division, Field Operations Division, Data Processing Division and Coordination & Publication Division.

b) NSS Regions (Agro-Climatic Regions)

The NSSO divides each state into several sub-regions. The basis of division is the different agricultural and climatic conditions in the given state and therefore these are called agro-climatic regions. A region is basically a group of contiguous districts having some similar geographical features like cropping pattern and population densities.[5] As a whole, NSS has formed 78 regions on the basis of agro-climatic regions in India.

c) Reference Period: URP vs. MRP

Different reference periods are used for collection of consumption data for different groups of items.

i) Uniform reference period (URP) is one in which 30-day recall period is used for collecting the consumer expenditure data for all the items of household consumption i.e. both food and non-food items.

ii) Mixed reference period (MRP) is one in which 365-days recall period is used for collecting the consumer expenditure data for items with low frequency of purchase, namely, clothing, footwear, durable goods, education, and institutional medical expenses(five non-food items) and 30-day reference period is used for all the remaining items of household consumption. In this

[5] Gujarat is the only exception where for region formation some districts are sub-divided on the basis of location of dry areas and distribution of tribal population.

way it is using reference periods of both 30 days and 365 days from the same household and that is why it is called mixed reference period.

d) Monthly Per Capita Expenditure

NSSO provides data on consumption expenditure at the household level. This consumption expenditure at the household level can be converted into per capita consumption expenditure by dividing it with the household size. Therefore, monthly per capita consumer expenditure is defined as total monthly consumer expenditure of the household over all items divided by the household size. A person's MPCE is same as that of the household to which that person belongs.

e) Consumption vs. Income

For calculating poverty, consumption values are considered more reliable as compared to the income values. It is mainly due to discrepancies in declared income and declared consumption. Generally declared income is lower than the declared consumption. Also, more information is available on the consumption variable because most of the socio-economic surveys focus more on the consumption expenditure. However, the measures of inequality based on the NSS consumption distribution is said to underestimate level of inequality in the country. Also, the discrepancy between household consumption expenditure as obtained from the NSS and the private consumption expenditure as measured by the CSO is said to be increasing and the main reason given is under-reporting of consumption expenditures by the higher income categories.

f) Economic Growth

Economic growth in simple terms refers to an increase in the amount of the goods and services produced by an economy (or say per capita product) over a period of time measured in percentage terms. In this study, it refers to the percentage change in the per capita income and mean expenditure calculated via compound annual growth rate using the CSO data series and NSS consumption expenditure data of the respective years.

g) Poverty

Poverty is a socio-economic phenomenon which does not have any rigid definition. According to World Bank (2000), "Poverty is pronounced deprivation in the well being. Planning Commission defines poverty "As inability to secure a minimum level of economic welfare". In simple terms, poverty is a condition of absolute deprivation in which a person or a section of population is deprived of the minimum standard of well-being or say, minimum level of income necessary to achieve basic standard of living. In this sense, poverty includes both material resources, like food, money, shelter as well as social resources, like education and health facilities.

h) Poverty Line

Extent of poverty in a country or region is measured by the number of people who live below a poverty line. A poverty line is a threshold in terms of income or consumption below which a person is considered poor. A poverty line basically divides the poor from the non-poor.

i) Absolute vs. Relative Poverty

Poverty can be defined either in absolute terms or in relative terms. Absolute poverty is defined as inability of a person to have that minimum level of income, to have access to the basic necessities of life like adequate food, clothing, shelter etc. In short, absolute poverty is defined as the percentage of population below a poverty line. For example, people living on less than Rs.100 per day. Therefore, absolute poverty measures the number of people below a fixed real poverty line. Relative poverty is defined as deprivation in comparison to the conditions prevailing in a country then poverty is a concept. In this poverty of one is relative to the richness of the other. One group is considered poor relative to the other, even if they may be enjoying reasonably good living standards. For example, people constituting the poorest 20% of the population. Therefore, relative poverty measures people below some relative poverty line. In this study, poverty is defined as an absolute concept. Absolute poverty is measured using headcount index, poverty gap, squared poverty gap and FGT index which is described in the forthcoming chapter.

j) Inequality

Inequality means different to different people; therefore, it can be defined in a number of ways. It usually refers to relative inequality among individuals and groups within a society. Generally, it is defined as dispersion of a distribution whether it be income distribution, consumption distribution or any other distribution. In this study, inequality refers to expenditure inequality i.e. disparities in relative consumption expenditure across the population. Moreover, in this study we are estimating gini coefficients based on the NSS consumption expenditure data.

k) Some Other Terms Used In The Study:

i) Trickle Down Effect

Todaro (1997) coined a term Trickle-down theory. This term is used for a mechanism in which benefits of economic growth seeps down automatically from top to bottom during the growth process. The mechanism is said to be working perfectly if the overall economic growth trickles down to the advantage of the poor.

ii) Pro-Poor Growth

Kakwani and Pernia (2000) have termed the situation where growth is benefitting the poor more as pro-poor growth. According to this definition, growth is "pro-poor" if and only if the incomes of poor grow faster than the population as a whole, i.e., inequality declines. For example: If economy is growing at the rate of 4% then income of poor is increasing by 5%.

iii) Inclusive Growth

Inclusive growth means that the growth should be fast as well as sustainable and for growth to be sustainable it should be broad based across the sectors and inclusive of the total population and not only poor. For example, economy growing at the rate of 8% and income of poor growing at the rate of 5%. Inclusive growth includes both the pace and pattern of growth. For growth to be inclusive it is necessary to improve productivity and create new employment opportunities. Eleventh five year plan also recognised that inclusive growth should be achieved.

2.4: Measures of Growth, Poverty and Inequality

Before the analysis, definitions as well as the measures of the three important variables should be clear. This chapter introduces several measures[6] of growth, poverty and inequality concentrating only on those which have received most attention in the literature. It also describes how to calculate and interpret these measures and also identifies their relative strengths and weaknesses. The only difference is that in this study consumption expenditure has been used as the proxy for the income variable for the actual calculations except in case of economic growth where we are using both.

2.4.1 DEFINING AND MEASURING GROWTH

Economists use many different methods to measure how fast the economy is growing. The most common way to measuring the economic growth is the change in aggregate or mean income or consumption.

2.4.1a Defining Growth

Economic growth is conceptualised as the increase in per capita domestic product or other measure of income or consumption. Usually, it is reported as the annual rate of change in income or consumption.

2.4.1b Measuring Growth

The most common ways to measure economic growth are:

1. Growth Rate

Growth rate (also called percent change or rate of change) is a useful indicator to know how much a variable is growing or declining in a particular region. It is also useful when we have to compare the growth or decline of indicator in two different regions. The growth rate, GR, from one period to another is calculated via following expression:

$$GR = \frac{P_1 - P_0}{P_0} 100$$

[6] Creedy, J. (1998) and Haughton & Khandker (2010)

In this formula,

P_1 = present Value

P_0 = past value

2. Average Annual Growth Rate /Annual Percentage Rate of Change

To further calculate the annual percentage change, divide the growth rate by the number of years between the present and past value. The annual growth rate, AGR, can be written as:

$$AGR = \left(\frac{P_1 - P_0}{P_0}\ 100\right)\frac{1}{N}$$

In this formula,

N = number of years between the present and past value.

3. Compound Annual Growth Rate (between two points of time)

The compound annual growth rate can be written as:

$$CAGR = \left\{\left[Log\left(\frac{P_1}{P_0}\right)\right]/N\right\} Antilog - 1$$

In this formula,

P_1 = present Value

P_0 = past Value

N = number of years between the present and past value

4. Compound Annual Growth Rate (time-series data)

The compound annual growth rate (CAGR) for the time-series data can be calculated using the measure of compound growth rate derived from log-linear regression equation model for the series(X) with respect to time (t).

$$\log X = \alpha + \beta t$$

where, β refers to instantaneous rate of growth.

To derive the compound growth rate, take the antilog of β, subtract 1 from it, and multiply the difference by 100. So the formula is

$$\text{Growth rate } r = [(\text{antilog } \beta)-1]$$

where, β is the regression coefficient.

2.4.2 Defining and Measuring Poverty

For measuring poverty, first we need an indicator of well being like income or consumption as well as a poverty line. Once the poverty line is defined, there are many indicators available for measuring poverty but the most commonly used measures include the headcount index, poverty gap, and squared poverty gap. All these measures are described in this chapter.

2.4.2a Defining Poverty

It is a situation where population or sections of the population are not able to maintain minimum levels of living. There are several definitions of poverty. The World Bank defines poverty as 'inability to attain minimum standard of living'. Therefore, a person is considered poor if his consumption or income level falls below some minimum level necessary to meet basic needs. This minimum level is called the "poverty line". Poverty lines vary in time and place because things that are necessary to satisfy basic needs vary across time as well as across societies.

2.4.2b Measuring poverty

As mentioned above poverty measurement needs information on welfare indicator as well as the poverty line. Poverty measurement includes the following steps:

(a) **Defining a measure of individual economic welfare:** Methods that are used to measure poverty are based either on incomes levels or consumption levels. Existing literature shows that a measure of consumption is more popular than current income. But the consumption measure should be comprehensive.

(b) **Defining a poverty line:** It means finding a level of measured welfare or say poverty threshold for this welfare measure, below which a person is considered poor.

There is a lot of debate on what should be the appropriate poverty line to be used while measuring poverty.

(c) **Constructing a measure of poverty:** Once welfare measure and the poverty line are defined, there are many measures available for estimating poverty like the headcount index, poverty gap and squared poverty gap.

2.4.2c Measurement Methods:

A poverty measure can be described as a summary statistic of the economic welfare of the poor in a society. There are many measures for poverty estimation like headcount index, poverty gap, squared poverty gap i.e. FGT (Foster-Greer-Thorbecke) index. A consistent framework requires that all the measures should be clearly defined and compared.

1. Headcount Index

The simplest method of measuring poverty is "headcount" ratio. It is simply the proportion of the population whose per-capita expenditures is below the poverty line.

The head count measure, HI, can be written as:

$$HI = \frac{q}{n}$$

where; q is poor population and n is the size of the population.

An increase in this value means the proportion of the population below the poverty line has increased implying a worsening of the poverty situation.

Head count index is simple to construct and easy to interpret and understand. But the poverty measured by head count index does not represent the whole picture of poverty. It only captures the prevalence (incidence) of poverty. It does not indicate how poor the poor are. Also, it ignores the extent of differences in the well-being between different poor households. It means that within the category of poor, it makes no distinction between them depending upon their actual levels of consumption. It assumes all poor are in the same situation. Therefore, index does not change overtime if individuals below the poverty line become poorer or richer. In this way, the poverty

ratio fails to capture the other dimensions i.e. intensity (depth) and inequality (severity) of poverty.

2. Poverty Gap Index

A measure for capturing the depth of poverty is the poverty gap index. Poverty gap is defined as the mean of the difference between income of the poor and poverty line, where gap for the non-poor is considered zero. Therefore, poverty gap is defined over the population as a whole. It measures the total income shortfall i.e. how far the poor are from the poverty line.

The total poverty gap, PG, can be written as:

$$PG = \frac{1}{n}\sum_{i=1}^{q}(z - y_i)$$

where; q is poor population, n is the size of the population, z is the poverty line, y_i is the income of individual i and the sum is taken only on those individuals who are poor.

The poverty gap index measures the extent to which individuals fall below the poverty line (the poverty gaps) as a proportion/percentage of the poverty line.

Therefore, poverty gap index, PGI, can be written as:

$$PGI = \frac{1}{n}\sum_{i=1}^{q}\frac{(z - y_i)}{z}$$

The poverty gap index basically captures the 'magnitude' of the effort needed to lift 'all' persons below the poverty line to the level of the poverty line. But it does not capture differences in the severity of poverty amongst the poor and ignore "inequality among the poor".

3. Squared Poverty Gap Index

A more comprehensive measure is the squared poverty gap which captures the severity of poverty. While, the poverty gap takes into account the difference between the income of the poor and the poverty line, the squared poverty gap takes into account the square of that difference i.e. poverty gaps are squared. Therefore, the

poverty gap is weighted by itself, giving more weight to the very poor. In this way, squared poverty gap captures the inequality among the poor which poverty gap index ignores.

The squared poverty gap, SPG, can be written as:

$$SPG = \frac{1}{n}\sum_{i=1}^{q}\left[\frac{(z - yi)}{z}\right]^2$$

A transfer from a poor to an even poorer would reduce the index and a transfer from a very poor to a less poor would increase the index.

In this way, squared poverty gap index measures the 'intensity' of efforts needed for the people who are progressively further below the poverty line to bring them out of poverty. But this index is very difficult to read and interpret.

4. Foster-Greer-Thorbecke Measures

The Foster-Greer-Thorbecke measure is a generalized measure of poverty. The headcount index, the poverty gap and the squared poverty gap are the first three measures of the FGT class (Foster-Greer-Thorbecke, 1984) of poverty measures. The general formula for this class of poverty is

$$FGT = \frac{1}{n}\sum_{i=1}^{q}\left[\frac{(z - yi)}{z}\right]^{\propto}$$

where; α is a "sensitivity" parameter.

When α is larger it means index puts more weight on the position of the poorest. Accordingly, above mentioned poverty measures depends on the parameter α which takes a value of zero for the headcount, one for the poverty gap, and two for the squared poverty gap.

In this way, FGT is composed of information on the extent of poverty (measured by the headcount ratio), the intensity of poverty (measured by the poverty gap index) and inequality among the poor (measured by the squared poverty gap). It also satisfies all four axioms of poverty measures; anonymity, population independence, transfer/distributional sensitivity and monotonicity.

2.4.3 Defining and Measuring Inequality

In literature, different measures of inequality have been used like variance, coefficient of variation, standard deviation of logarithms, Lorenz curves, Gini coefficients, Theil index, income share of the bottom 'x' percent of the population , ratio of mean expenditures of the bottom 20 relative to the top 20 percent etc. All the inequality measures are measuring relative income inequality. This section presents the basic method of measuring income distribution like the Lorenz curve and Gini coefficient in detail. Then some other measures of inequality are discussed in brief.

2.4.3a Defining inequality

Inequality is defined as dispersion of a distribution whether it be income distribution, consumption distribution or any other distribution. Here inequality refers to disparities in relative consumption expenditure across the population. Poverty and inequality are closely related to each other but inequality is a broader concept than poverty. Inequality is defined over the entire population, while poverty is defined as the proportion of the population below the poverty line. Also, poverty can be defined in absolute terms or relative terms but inequality is always relative.

2.4.3b Measuring inequality

Gini coefficient has been the most popular method for estimating income, however, a number of alternative methods exist. Some commonly used measures are discussed below.

1. Lorenz Curve

The Lorenz curve was developed by Max O. Lorenz in 1905 and is a useful device for visual impression of a distribution. It is basically a graphical representation of a distribution. It maps the cumulative income share on the vertical axis against the distribution of the population on the horizontal axis, moving from the poorest to the richest.

The first step is to arrange the individuals in ascending order of their incomes. Then it plots the proportion of people against the corresponding proportion of total income they received. In this way, it diagrammatically shows the relationship between the percentage of income recipients and the percentage of total income they received

during a time period. If each individual had the same income then the Lorenz curve will coincide with the diagonal– the line of perfect equality. The farther the Lorenz curve is from the diagonal, the greater will be the degree of inequality.

The problem with the Lorenz curves is that they can only provide a partial ordering of distribution in terms of their inequality. In a situation when two Lorenz curves intersect, ordering cannot be given. Even if they do not intersect we need an indicator to 'measure' the extent of difference. Therefore, for giving complete ordering specific measures of inequality are required.

2. Gini Coefficient

The Gini coefficient is the most commonly used measure of relative inequality. It is directly related to the Lorenz curve and is sometimes called Lorenz ratio. Graphically, it is defined as the ratio of area enclosed by the perfect equality line (the diagonal) and the Lorenz curve to the total area lying below the diagonal. The value of Gini coefficient lies between zero and one. If income is distributed equally, then Lorenz curve and the diagonal coincide and the Gini coefficient will be zero. If one individual receives all the income, the Lorenz curve would pass through the axis and the value of Gini-coefficient will be one. Therefore, zero means perfect equality and one means perfect inequality.

In practice, this approach of calculating the Gini coefficient is inconvenient because of difficulty in measuring the areas. The alternative way is to measure the Gini coefficient numerically via an expression in which the Gini coefficient depends on the ranking as well as the size of individuals' income.

The Gini coefficient, G, can be written as:

$$G = 1 + \frac{1}{n} - \frac{2}{n^2 z} \sum_{i=1}^{n} (n + 1 - i)\,(y_i)$$

where, z is mean income, n is the size of the population and y_i is the income of individual i.

A low Gini coefficient indicates more equal income distribution, while high Gini coefficient indicates more unequal distribution.

One disadvantage of the Gini coefficient is that it is not additive across groups, i.e. the total Gini coefficient of a society (country) is not equal to the sum of the individual Gini coefficients for its sub-groups (states). But it satisfies all four axioms for inequality measures; anonymity, scale independence, population independence and transfer principles.

3. Other Measures of Inequality

a). Theil Index: Another inequality measurement is Theil index. It is a part of a larger family of measures referred to as the General Entropy class. It is a weighted average of inequality within subgroups plus inequality among those subgroups. Individual contributions to the Theil index may be negative or positive but the value of Theil index is always positive. It is less commonly used than the Gini coefficient, but it has the advantage of being additive across different subgroups or regions in the country. Therefore, Theil index has decomposability that Gini index doesn't have but Theil index does not have a clear and straightforward representation. Gini index is more popular than Theil because of its association with the Lorenz curve which is easy to understand.

b). Share of the Poorest X%: Gini Coefficient and the Theil Index have a disadvantage of varying when the distribution varies. Any transfer of income between two individuals has an impact on these indices, irrespective of whether it takes place among the rich, among the poor or between the rich and the poor. A good measure should be concerned about the share of income of the people at the bottom. A better measure is the share of income that goes to the poorest 10 or 20 percent. Such a measure does not vary with changes in income for the top 20 percent at the advantage of the middle class.

c). Quintiles and Deciles: In this the population is divided into successive quintiles or deciles according to ascending income levels and then it determines the proportion of income received by each group. Common measure of income inequality is the ratio of incomes received by top 20% and bottom 40% of the population also called Kuznets ratio.

d). Decile Dispersion Ratio: It presents the ratio of the average income of the richest 10 percent of the population divided by the average income of the bottom 10 percent.

It can also be calculated for other percentiles for example dividing the average income of the richest 5 percent (the 95th percentile) by the poorest 5 percent (the 5th percentile). This ratio is readily interpretable, by expressing the income of the rich as multiples of that of the poor.

e). Coefficient of Variation: It is measured as standard deviation of the sample divided by the sample mean. The coefficient of variation, CV, can be written as:

$$CV = \frac{\sigma}{\bar{x}} 100$$

where σ is the standard deviation written as $\left(\sqrt{\frac{\Sigma(x-\bar{x})^2}{n-1}}\right)$, $\bar{x}$ is the sample mean and n is the number of observations.

Like the Gini Coefficient, it also satisfies the properties of anonymity, scale independence, population independence, and transfer principles.

Conclusion

The other measures of poverty are less commonly used therefore we limit our analysis to the most common ones which are already discussed. The headcount index is the most popular poverty measure and it is also used by the Planning Commission for measuring poverty. But for a rigorous analysis of poverty it is important to use poverty gap and squared poverty gap in addition to headcount index since these measures capture successively more detailed aspects of the poverty situation in a society. In case of inequality measures it can be said that the different measures generally rank the same set of distributions in different ways because of their differing sensitivity to incomes distribution.

Each measure has its own strengths and weaknesses. In this study, growth is measured using compound annual growth rate (between two points of time). For estimating poverty we are using headcount index, poverty gap and squared poverty gap to measure different aspects of the poverty in a society. For measuring inequality, we are using the most basic method i.e. the gini coefficients.

2.5: ISSUES OF COMPARABILITY BETWEEN NSS REGIONS OF 50TH AND 61ST ROUND

During the 50th Round (1993-94) of NSSO, India was comprised of 26 states (including Delhi) and 6 union territories having 78 NSS-regions. However, during 61st Round (2004-05) of NSS, India was comprised of 29 states and 6 union territories[7] but having same number of NSS-regions. The separate state of Jharkhand was carved out of Bihar, Chhattisgarh out of Madhya Pradesh and Uttaranchal out of Uttar Pradesh. Therefore, the number of states has increased to 29. Bihar, Madhya Pradesh and Uttar Pradesh have one less NSS-region than that of the 50th Round but Jharkhand, Chhattisgarh and Uttaranchal all are single region states formed from the previous regions of the concerned states. Therefore, the number of regions is same in both periods.

In the 61st round there were huge changes with respect to the composition of regions. For instance, some new districts have been formed by carving them out of the previous districts within the region or some other region within that state. If they were carved out of the districts within the same region then overall composition of the NSS region will remain the same. In that case there will be no compatibility problem as this analysis is confined to the level of NSS regions only and district level changes do not matter. But if any district in a region was carved, wholly or partly, out of the district in other NSS region then some adjustments and assumptions need to be made. Further, for some districts, name has been changed. In some other cases, there has been some reorganization of districts within the states across NSS-regions, for instance, some districts which were part of one region in the 50th round are now a part of other region within the same state.

For making the states and NSS regions of 61st round comparable with the NSS regions of the 50th round, some assumptions and adjustments need to be made in the 50th round.

For the study, 63 modified regions constituting 22 states of India have been used. The state codes and region codes for both rounds are given in table 2A.4 and 2A.5 of appendix A. The States are: Andhra Pradesh, Assam, Bihar, Chhattisgarh, Delhi, Goa,

[7] In 2001, three states, namely, Bihar, Madhya Pradesh and Uttar Pradesh were bifurcated to form separate states namely Jharkhand, Chhattisgarh and Uttaranchal.

Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttaranchal and West Bengal. According to the Census (2001), all these states are major states having a population of 20 million or more except Himachal Pradesh, Jammu & Kashmir and Uttaranchal which are considered minor states having a population of less than 20 million. Together, these states accounted for nearly 95% of India's population in 2001. In the analysis, we are not using **Union Territories (UTs)** including Andaman & Nicobar Islands, Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Lakshadweep and Pondicherry. **Seven Sister States in North East** including Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.

2.5.1: Three Newly Created States in the 61st round

1. **Jharkhand:** Jharkhand was previously a part of Bihar known as the southern region is now a separate state and in addition to Southern region it includes Garhwa, Chatra, Kodarma, Pakaur, Bokaro.

2. **Chhattisgarh:** Chhattisgarh previously was a part of Madhya Pradesh is now a separate state. In addition to the previous districts it includes 9 new districts named Koriya, Jashpur, Korba, Janjgir-Champa, Kawardha, Mahasamund, Dhamtari, Kanker, Dantewada.

3. **Uttaranchal:** Himalayan region in the 50th round is now a separate state called Uttaranchal. 4 new districts namely Rudraprayag, Champawat, Bageshwar, Udham Singh have been included in this region.

Adjustment

All the adjustments are made in the 50th round to make the states comparable with the 61st round. Before recognition as independent states, each of three new states was a NSS region in the 50th round, therefore the splitting up of these states become very easy. Southern Region of Bihar has been split to create separate state named Jharkhand. Chhattisgarh region of Madhya Pradesh has been split to create a separate state called Chhattisgarh. Himalayan region of Uttar Pradesh has been split to create separate state of Uttaranchal.

2.5.2: Compatibility Problem in Regions

To find the comparability problem in regions across two rounds, we will look at the problem regions and districts one by one for each state.[8]

1. **Andhra Pradesh, Jammu & Kashmir and Kerala:** In these states, there is no compatibility problem with respect to regions defined by NSSO in 50th and 61st round. In both rounds, there is similar numbers of regions with similar composition.
2. **Delhi, Goa and Himachal Pradesh:** These states are single region state with similar composition and therefore, region level analysis does not pose any problem.
3. **Assam:** Number of regions is same (3) but the composition differs. Dhemaji, Jorhat, Golaghat, Karimganz, Hailakandi which were part of Plains Western in 50th round are a part of Plains Eastern in the 61th round. Kokrajhar which was a part of Hills and Bongaigaon, Barpeta, Nalbari, Marigaon, Sonitpur which were part of Plains Eastern in 50th round are a part of Plains Western in the 61th round.
4. **Bihar and Jharkhand:** In the 50th round, there were three regions but in 61st round there are two regions. Jharkhand which was previously a part of Bihar known as the Southern region is now a separate state and in addition to Southern region, it includes Garhwa, Chatra, Kodarma, Pakaur, Bokaro. In the Northern region, two new districts; Sheohar and Supaul are added. In the Central region, six new districts; Banka, Lakhisarai, Sheikhpura, Buxar, Kaimur (Bhabua) and Jamui are added.
5. **Gujarat:** In Gujarat, number of regions is same but the composition differs. In the Eastern region, three new districts; Dohad, Narmada, Navsari are added. In the Plains Northern region, two new districts; Patan, Anand are added. In the Plains Southern region one district name Valsad has been deleted and one new district Navsari (2) has been added. In Dry Areas region one district name Mahesana has been deleted and one new district called Patan (2) has been added. In Saurashtra region one new district called Porbandar has been added.

[8] See appendix.

6. **Haryana:** In Haryana, the number of regions is same. In the Eastern region two new districts; Panchkula and Jhajjar are added and in the Western region one new district; Fatehabad has been added.
7. **Karnataka:** Number of regions is same (4) but the composition differs. In Coastal and Ghats region one new district named Udupi has been added. In Inland Eastern region no change has been made. In the Inland Southern region one new district called Chamarajanagar has been added. In the Inland Northern region five new districts namely Bagalkot, Koppal, Gadag, Haveri, Davanagere has been added.
8. **Madhya Pradesh and Chhattisgarh:** In the 50^{th} round there were seven regions and in 61^{st} round there are six regions. Chhattisgarh which was a part of Madhya Pradesh is now a separate state. In addition to the previous districts it includes nine new districts named Koriya, Jashpur, Korba, Janjgir-Champa, Kawardha, Mahasamund, Dhamtari, Kanker, Dantewada. In the Vindhya region a new district called Umaria has been added. In the Central region no change has been made. In the Malwa region one new district called Neemuch has been added. In the South region two new districts named Katni and Dindori has been added. In the South Western region two new districts called Barwani and Harda has been added. In the Northern region one new district called Sheopur has been added.
9. **Maharashtra:** Number of regions is same (6) but the composition differs. In the Coastal region one district named Greater Bombay has been deleted and two new districts called Mumbai Suburban and Mumbai has been added. In the Inland Western region no change has been made. In the Inland Northern region one new district called Nandurbar has been added. In the Inland Central region one new district called Hingoli has been added. In the Inland Eastern region one new district called Washim has been added. In the Eastern region one new district called Gondiya has been added.
10. **Orissa:** Number of regions is same (3) but the composition differs. In the Coastal region seven new districts namely Bhadrak, Kendrapara, Jagatsinghapur, Jajapur, Nayagarh, Khordha, Gajapati has been added. In the Southern region five new districts namely Baudh, Nuapada, Rayagada, Nabarangapur, Malkangiri has been added. In the Northern region five new

districts called Bargarh, Jharsuguda, Debagarh, Anugul, Sonapur has been added.

11. **Punjab:** Number of regions is same (2) but the composition differs. In the Northern region one new district called Nawanshahr has been added. In the Southern region 4 new districts called Fatehgarh Sahib, Moga, Muktsar, Mansa has been added.
12. **Rajasthan:** Number of regions is same (4) but the composition differs. In the Western region one new district called Hanumangarh has been added. In the North Eastern region two new districts named Karauli and Dausa has been added. In the Southern region one new district called Rajsamand has been added. In the South Eastern region one new district called Baran has been added.
13. **Tamil Nadu:** Number of regions is same (4) but the composition differs. In the Coastal Northern region four districts namely Madras, Chengai Anna (Chengalpattu), North Arcot Ambedhkar, and South Arcot has been deleted and 6 new districts namely Thiruvallur, Chennai, Kancheepuram, Vellore, Viluppuram, Cuddalore has been added. In the Coastal region five new districts namely Karur, Perambalur, Ariyalur, Nagapattinam, Thiruvarur has been added. In the Southern region three districts namely Kamarajar, Pasupomthevar Thirumanagar (Pasumpon Mathuamlingam), V. O. Chiudambaram have been deleted and four new districts namely Sivaganga, Theni, Virudhunagar, Toothukudi have been added. In the Inland region one district named Periyar has been deleted and two new districts namely Namakkal and Erode have been added.
14. **Uttar Pradesh and Uttaranchal:** In case of UP, there is a major change in the composition of regions. In the 50^{th} round there were five regions and in the 61^{st} round there are four regions. Himalayan region in the 50^{th} round is now a separate state called Uttaranchal. Hardwar which was a part of the Western region has been shifted to Himalayan (Uttaranchal) region. In addition, four new districts namely Rudraprayag, Champawat, Bageshwar, Udham Singh have been included in this region. One district named Bareily which was a part of Himalayan region has been shifted to Western region and six new districts namely J. Phule Nagar, Baghpat, G. Buddha Nagar, Hathras, Kannauj, Auraiya has also been added. In the Central region no change has been made. One

district named Sonbadra which was a part of Western region has been shifted to the Eastern region and one district named Maunath bhanjan has been deleted. In addition, 9 new districts called Kaushambi, Ambedkar Nag., Shrawasti, Balrampur, S. Kabir Nagar, Kushinagar, Mau, Chandauli, S.R.Nagar(Bhadohi) has been included. In the Southern region two new districts called Mahoba, Chitrakoot has been added.

15. **West Bengal:** Number of regions is same (4) but the composition differs. In the Himalayan region no change has been made. In the Eastern Plains region one district named West Dinajpur has been deleted and two new districts called Uttar Dinajpur and Dakshin Dinajpur has been added. In the Central Plains region one district named Burdwan has been deleted and one new district called Barddhaman has been added. In the Western Plains region no change has been made.

For convenience, all these problems are divided into three heads i.e. (i) districts which are carved out of the districts within the same region as well as district of other region but within that state, (ii) districts for which the name has changed and, (iii) districts which are shifted from one region to another within a state.

i). New Districts Carved Out Of Previous Districts Between 50th And 61st Round

Some districts are carved out of the districts within the same region as well as district of other region in same state. These regions are reported in table 2A.6 of appendix A.

One can see that almost all regions are compatible. Only in case of region named Punjab Southern, the district named Fatehgarh Sahib is a newly created district formed from parts of Patiala and Rupnagar. Patiala district forms the part of the southern region but Rupnagar district is a part of northern region. In this case, we assume that Fatehgarh Sahib is created out of the Patiala district within the same region as major of district Fatehgarh Sahib has been carved out of Patiala.

ii). Variations In Name Of Districts Between 50th And 61st Round

In the 61st round, names of some districts have been changed. In some cases there are variations only in spelling. But to avoid the confusions even the minor changes has been reported in table 2A.7 of appendix A.

iii). Reorganisation Of Districts Between 50th And 61st Round

There are some districts which are shifted from one region to another within a state. These districts and their reorganisations are reported in table 2A.8 of appendix A.

Possible Adjustments

All the adjustments need to be made in the 50th round regions to make them comparable with the 61st round.[9] In Uttar Pradesh, district Bareilly has to be moved from the Himalayan region to the Western region. District Sonbhadra has to be moved from the Western region to the Eastern Region and district Hardwar has to be moved from the Western region to the Himalayan region.

In Assam district Dhemaji, Jorhat, Golaghat, Karimganz, Hailakandi Bareilly has to be moved from the Plains Western to the Plains Eastern. District Bongaigaon, Barpeta, Nalbari, Marigaon, Sonitpur has to be moved from the Plains Eastern to the Plains Western. Similarly, Kokrajhar which was a part of Hills in 50th round has to be moved from the Hills to the Plains Western.

[9] On account of the official advice the possible adjustments are reported but are not used in the study. The regions as given in the original data have been used throughout the paper and are assumed to be comparable between the rounds.

CHAPTER III

Inter-Temporal Dynamics of Growth, Poverty and Inequality at the Regional Level in India

3.1 Introduction

Some states of India are lagging far behind the so called advanced states in terms of economic growth, poverty reduction and extent of inequality. Within states, two regions also experience similar set of differences in growth, poverty and inequality as these variables may not be evenly distributed within the large states. These differences are prevalent across rural and urban areas within and between states and regions. Therefore, it is necessary to analyse trends in rate of economic growth, poverty and inequality at the sub-state level.

Deaton and Dreze (2002) have found that the states have recorded varying growth rates both in terms of growth in state domestic product as well as in terms of growth in average per capita expenditure. In 1990's, northern and eastern states were lagging behind the southern and western states. Due to these regional disparities, economic inequality increased between the states. Poverty has declined in almost all the states but again the rate of reduction is different in different states.

In this chapter we analyze the pattern and rate of economic growth, poverty and inequality[1] at all-India, states[2] and NSSO regions level[3]. To find out regional disparities between the states and regions the coefficients of variation is calculated for per capita net state domestic product, average per capita expenditure, poverty ratio and gini coefficient.

[1] The analysis is done on the basis of (i) changes in percentage points per annum (net Change) and (ii) compound annual growth rate in NSDP, APCE, poverty ratio and Gini coefficients between the two surveys. The length of time from July 1993-June94 to July 2004-June05 is 11 years.

[2] Three states, namely, Bihar, Madhya Pradesh and Uttar Pradesh were bifurcated in 2001. All the measures were calculated for Jharkhand, Chhattisgarh and Uttaranchal separately.

[3] According to NSSO, India is comprised of 25 states and 7 union territories having 78 NSS-regions, however, for the analysis we are using 63 regions constituting 22 states of India have been used.

3.2: Growth outcomes in India, States and NSSO Regions between 1993-94 and 2004-05

It is well known that India has adopted a major set of economic policy reforms in 1991which unleashed high economic growth in India. However, individual states experienced different rates of growth. To analysis trends and pattern of growth across states and regions of the Indian economy is the subject matter of this section. Here, growth is shown as: (i) increase in per capita national state domestic product[4] and (ii) increase in average per capita consumption expenditure.[5] The change in the economic growth is examined in terms of annual percentage rate of change during the period measured via compound annual growth rate. Coefficient of variation [6] is also calculated to assess the degree of variability of growth rates, across the states and regions (excluding all-India) between both time periods. Change in the positions of the states within broad categories between the two surveys is analysed by creating four quartile classes. To analyse spatial patterns maps are created on the basis of these quartile classes.

The compound annual growth rates have been calculated for the period 1993-94 and 2004-05, both aggregate and sectoral.[7] Sectoral performance is examined for two sectors; agriculture and tertiary. These two sectors are taken because economic reforms had a negligible impact on industrial growth due to which the sectoral composition of India has faced a unique structural shift. The usual pattern of economic development exhibits that in initial stages of economic growth, the share of the primary sector decreases and that of the secondary sector increases and gradually it became the dominant sector of the economy. In the later stage when economy attains a high level of development, the tertiary sector takes over the secondary sector. However, in India, the tertiary sector became the largest sector before the full development of the secondary sector. Indian economy has straightway moved from an agriculture-based economy to an economy predominant in the services sector and has

[4] Population figures used at the state level are the projected populations and are obtained from the Registrar General, India.

[5] Average Per Capita Expenditure is the total monthly consumer expenditure of the population (nation, state or region) divided by the population (nation, state or region).

[6] The coefficient of variation is a more sensitive measure of small changes in disparity in the level of development than the change in state ordering and therefore, is an appropriate measure to assess regional disparities.

[7] For the purpose of analysis we have taken agriculture sector as the proxy for the rural sector and tertiary sector as the proxy for the urban sector of the economy.

bypassed the so called phase of industrial revolution. Various studies has pointed out and confirmed this phenomenon. Babu (2005) found that because of the ongoing structural change especially in 1990's the share of the primary sector in the gross domestic product has declined, secondary sector has registered a marginal increase in its share while the tertiary sector contributed nearly 45 percent of the GDP. According to Thamarajakshi (2003), services sector had achieved growth rates of over 8 percent and now accounts for 50 per cent of GDP. Sastry, Singh, Bhattacharya and Unnikrishnan (2003) also revealed than from a primarily agro-based economy during the 1970s, the Indian economy has emerged as pre-dominant in the services sector during the 1990s. Bhattacharya and Mitra (1990) found that the services sector in India is growing much faster than the commodity sector (agriculture and industry). Bhattacharya and Sakthivel (2004) confirmed that after the economic reforms, the tertiary sector rather than the secondary sector has become the engine of growth. In many states, tertiary sector has recorded the fastest growth and in most of them it now exceeds 40 percent of SDP. Papola (2005) has also examined the structural changes in the Indian economy and found that since the beginning of economic reforms the Indian economy has followed a growth pattern which is different from the one observed in historical development of today's developed and developing countries. The striking feature is the pre-eminence of the tertiary services sector as the major contributor to growth while industry has played only a minor role in India's economic growth. For India he used the term "post-industrial service economy". Kohli (2006) have also demonstrated that India's economic reforms were not those much able to influence the growth rate of manufacturing industry. This new growth pattern driven by the tertiary sector compels us to take tertiary sector as proxy of the urban sector instead of secondary sector.

The following sections examine the growth performance across the states as well as the NSS regions of India between 1993-94 and 2004-05; both growth in per capita net state domestic product as well as for growth in average per capita expenditure.[8] Expenditure growth is measured on the basis of mixed reference period.

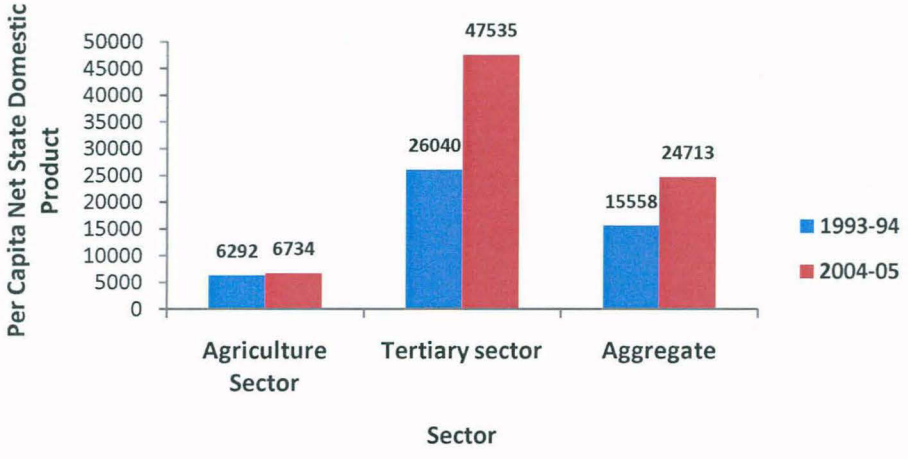
[8] CSO does not provide data for regions however study analyzes NSS regions; therefore expenditure data provided by NSS is used for calculating economic growth. Average per capita expenditure (APCE) will be taken as a proxy of income.

3.2.1 Growth in Per Capita Net State Domestic Product across States

Based on net domestic product at constant 2004-05 prices, growth rates in agriculture sector and tertiary sector have been calculated for all-India and individual states.[9]

Table 3A.1 (appendix B) shows that at the aggregate level, the per capita net state domestic product rose at the rate of 4.30% per annum between 1993-94 and 2004-05 however there are sectoral differences. Agriculture sector per capita net state domestic product rose at the rate of 0.62% per annum while tertiary sector per capita net state domestic product rose at the rate of 5.62% per annum. It can be clearly seen from the tables that the extent of increase is more in tertiary sector than the agriculture sector. Babu (2005) also found that aggregate growth of the economy in 1990's was mainly on account of the growth in the tertiary sector. Figure 3.1below shows the levels of per capita net state domestic product in the agriculture sector, tertiary sector as well as the aggregate values.

Figure-3.1 : Per Capita Net State Domestic Product



Source: Computed by author from CSO, NSDP data

It clearly shows that level of per capita net state domestic product in the tertiary sector has sharply increased during the 1990s and is contributing fairly to the overall growth in net state domestic product. Table 3A.2, 3A.3 and 3A.4 (appendix) presents the growth rates in per capita net state domestic product across states for agriculture sector, tertiary sector as well as for India as a whole between the two time periods.

[9] The agriculture sector includes agriculture, forestry and logging; and fishing. The tertiary sector includes: transport, storage and communication (including railways, transport by other means, storage and communication); trade, hotels and restaurants; banking and insurance; real estate; public administration; and other services.

The aggregate growth rate of the per capita net state domestic product is increasing for all Indian states (see appendix table 3A.2) but the growth rate is varying across the states. In poorer states of Assam, Madhya Pradesh and Uttar Pradesh the per capita net state domestic product has grown at the rate of below 2% per annum whereas Andhra Pradesh, Goa, Gujarat, Himachal Pradesh, Kerala, Tamil Nadu and West Bengal are growing at the rate more than the national growth rate of 4.30% per annum followed by Haryana and Karnataka growing at the rate of above 4% per annum.

The per capita net state domestic product originating from the agriculture sector has also grown in most of the states of India with a few exceptions (see appendix table 3A.3). The exceptions are Assam, Chhattisgarh, Delhi, Madhya Pradesh and Orissa where the growth rate is negative. The so called industrialized state of Gujarat has performed relatively well growing at the rate of 2.98% per annum. In fact it has outperformed the agriculturally prosperous states like Haryana and Punjab which are growing at the rate of only 0.40% and 1.00% per annum. Babu (2005) also reveals that Gujarat is only rich state which lags behind in the growth of tertiary sector but is doing relatively well in the agriculture sector. It shows that Gujarat is first strengthening its base before transforming itself into the service based economy. At the lowest level there is Bihar and Uttar Pradesh with a negligible growth rate of merely 0.33% and 0.10% per annum.

The growth rate of the net state domestic product in the tertiary sector is increasing in all states but again showing high variability (see appendix table 3A.4). Andhra Pradesh, Haryana, Karnataka, Kerala and West Bengal have shown growth rates more than the national average of 5.62 % per annum. At the lowest level there is Assam and Uttar Pradesh with a growth rate of below 2% per annum. Overall, it can be said that growth rates are increasing in almost all states although varying over a wide range of values. Mohan (2008) also suggest an increase in real GDP growth in the Indian economy in the post reform period.

Table 3A.5 (appendix) shows rank of the states in descending order of growth rate of per capita net state domestic product in agriculture sector, tertiary sector and in aggregate. It can be seen that Assam, Chhattisgarh, Madhya Pradesh and Uttar Pradesh are among the lowest growing states in both the sectors and in aggregate.

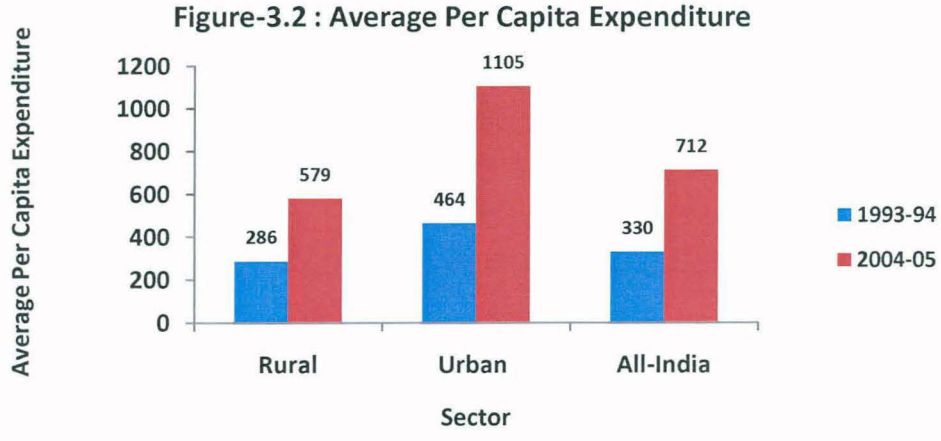
The coefficient of variation (CV) in aggregate per capita net state domestic product across states of India has increased from *47.76* in 1993-94 to *55.45* in 2004-05. For agriculture sector it has decreased from *47.51* in 1993-94 to *43.06* in 2004-05 while in the tertiary sector it has increased from *37.67* in 1993-94 to *42.18* in 2004-05 (see appendix tables 3A.2, 3A.3 and 3A.4). Sectorally, the spatial variability of per capita net state domestic product originating in the agriculture sector has come down while in the tertiary sector it has increased during the period. This reflects that in 2004-05 there has been even regional development in the agriculture sector and a widening up of the regional disparities in the tertiary sector.[10] But aggregate figures show that during the period there has been a widening up of the regional disparities across the states of India.

3.2.2 Growth in Average Per Capita Expenditure across States

Table 3A.6 (appendix) shows that at the all-India level, average per capita expenditure has grown at the rate of 7.24% per annum between 1993-94 and 2004-05. In the rural India it has grown at the rate of 6.62% per annum while in the urban India it has grown at the rate of 8.21% per annum. Here one can note that the extent of performance of urban areas is better than their rural counterpart.

Figure 3.2 below shows the levels of average per capita expenditure in the rural sector, urban sector as well as the aggregate value.

Figure-3.2 : Average Per Capita Expenditure



Source: Computed by author from NSS CES 50th and 61st Round unit level data.

[10] Note: A fall in coefficient of variation does not necessarily imply convergence. For this a proper test of convergence is required. Here, one can only say that regional disparity has not increased in the second period; in fact there are signs of narrowing down of regional disparity.

It can be clearly seen that urban sector is performing much better than the rural sector and is contributing to the all India increase in average per capita expenditure.

Table 3A.7, 3A.8 and 3A.9 (appendix) gives average per capita expenditure and their growth rates across the states of India for aggregate, rural and urban sector. For India as a whole, per capita expenditure has grown in all the states of India but there are differences in growth rates across the states (see appendix table 3A.7). Overall, all states performed well growing in the range of 5.76% per annum (Madhya Pradesh) and 9.33% per annum (Kerala). High regional imbalances in the growth pattern has also been confirmed by various scholars (Ahluwalia, 2000; Deaton and Dreze, 2002; Shetty, 2003; Bhattacharya and Sakthivel, 2004; Bhanumurthy and Mitra, 2004; Mohan, 2008 etc.).

In the rural sector per capita expenditure has grown in all the states of India but again there are differences across the states (see appendix table 3A.8). Fairly high average per capita expenditure growth rates have been registered in Haryana, Himachal Pradesh and Kerala growing at the rate of 8% and above.

In urban India all the states has experienced a very high growth rates in per capita expenditure (see appendix table 3A.9). The all India urban growth rate was as high as 8.21% per annum and many states have surpassed this rate of growth. These states include Andhra Pradesh, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Punjab, Tamil Nadu and West Bengal growing at the rate of 8.21% per annum or more. Interestingly, the states like Delhi, Jammu & Kashmir, Orissa and Uttaranchal recorded growth rates between 6-7% per annum but still they are lowest growing states as relative performance of other states was very high.

Table 3A.10 (appendix) shows rank of the states in descending order of the growth rate of average per capita expenditure in rural sector, urban sector and in aggregate. It can be seen that Delhi, Bihar, Madhya Pradesh, Orissa and Rajasthan are among the lowest growing states while Kerala is among the highest growing states in both the sectors as well as in aggregate.

The coefficient of variation (CV) in aggregate per capita expenditure across states has increased from *29.14* in 1993-94 to *30.15* in 2004-05. In the rural sector it has

increased from *29.61* in 1993-94 to *30.81* while in the urban sector it has decreased from *18.12* in 1993-94 to *17.29* in 2004-05 (see appendix tables 3A.7, 3A.8 and 3A.9). The coefficient of variation for both aggregate per capita expenditure and aggregate per capita net state domestic product confirms widening up of the regional disparities across the states of India during the period. However, in the rural sector there are signs of widening up of the regional disparities while in the urban sector there has been narrowing down of regional disparities during the period. But this result is not in tune with the result in the per capita net state domestic product in the agriculture sector where CV has decreased and in the tertiary sector where CV has increased.

To analyse the broad changes in the position of the states, we have divided all the states into four quartile groups as shown in table 3.1 below. Class I is showing the 25% states which are the lowest growing states while class IV is showing 25% states which are the highest growing states.

Table 3.1 : Quartile Classes according to Growth in Average Per Capita Expenditure across States

Sector		Rural	Urban	Total
Quartile Classes	I	Delhi, Madhya Pradesh, Rajasthan, Chhattisgarh, Orissa, Karnataka	Delhi, Orissa, Uttaranchal, Jammu & Kashmir, Madhya Pradesh, Rajasthan	Madhya Pradesh, Rajasthan, Orissa, Delhi, Chhattisgarh, Bihar
	II	Bihar, Uttar Pradesh, Jharkhand, West Bengal, Gujarat, Uttaranchal	Bihar, Uttar Pradesh, Himachal Pradesh, Maharashtra, Chhattisgarh, Assam	Uttar Pradesh, Jharkhand, Uttaranchal, Assam, Jammu & Kashmir, West Bengal
	III	Tamil Nadu, Goa, Punjab, Assam, Andhra Pradesh	Goa, West Bengal, Haryana, Jharkhand, Punjab	Goa, Karnataka, Punjab, Maharashtra, Gujarat
	IV	Maharashtra, Jammu & Kashmir, Himachal Pradesh, Haryana, Kerala	Gujarat, Karnataka, Tamil Nadu, Andhra Pradesh, Kerala	Andhra Pradesh, Himachal Pradesh, Tamil Nadu, Haryana, Kerala

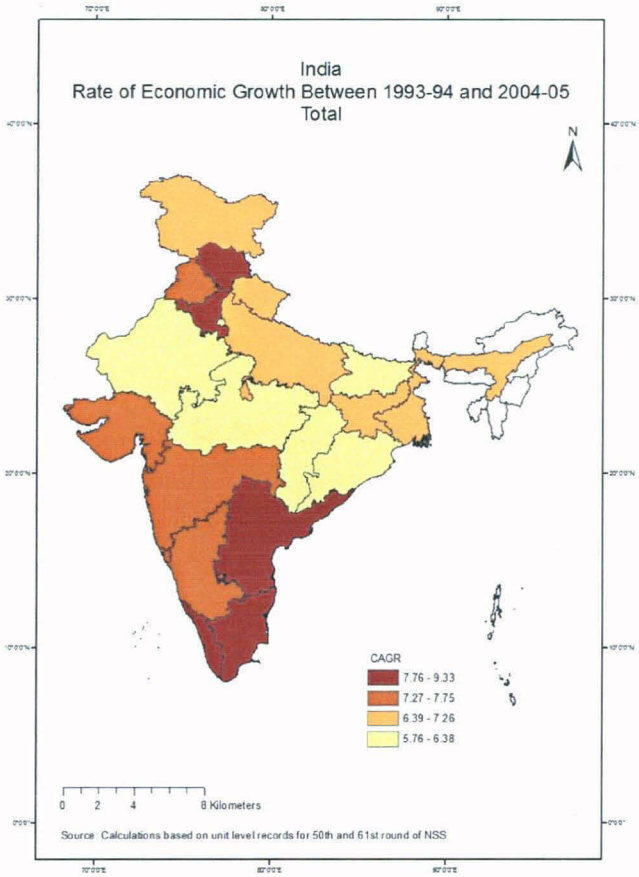
Source: Evaluated and tabulated by author from table 3A.7, 3A.8 and 3A.9.

It can be seen that Delhi, Madhya Pradesh, Orissa and Rajasthan is in the lowest quartile i.e. amongst the lowest growing states while Kerala is among the highest growing states for total as well as in both the sectors

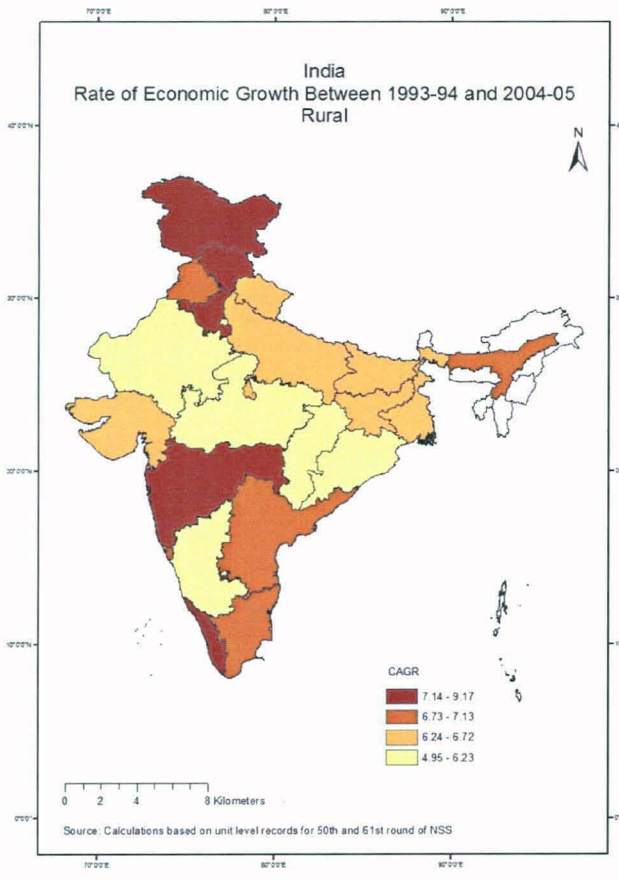
To identify the patterns of contiguity all the quartile classes are mapped. Map 3.1, 3.2 and 3.3 below presents the rate of growth in average per capita expenditure between 1993-94 and 2004-05 for all India as well as in the rural and urban areas separately. Although all the maps are self explanatory however we will analyse the important patterns of contiguity in brief. In the northern belt, the overall growth is induced by high growth in the rural sector while growth in the urban sector is relatively less. In contrast, in the coastal states, the overall growth rate is high which is mainly due to high growth in the urban areas of southern states and growth rate in the rural areas of the southern states is not that high. There is a long belt in the middle extending from Rajasthan to Orissa experiencing lowest growth overall as well as across the sectors. Maps are clearly reflecting regional disparities among the states of India.

Maps: Rate of Economic Growth across States between 1993-94 and 2004-05

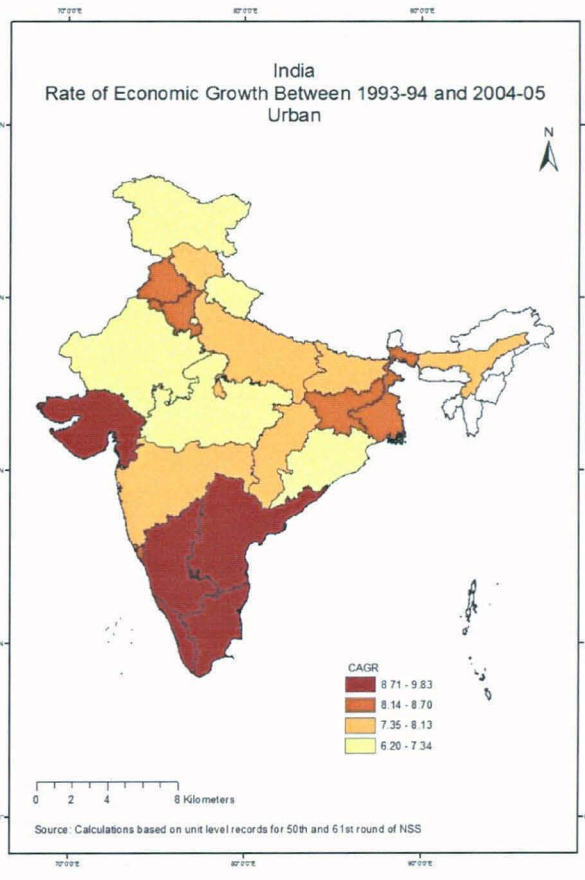
Map 3.1: Total



Map 3.2: Rural



Map 3.3: Urban



3.2.3: Average Per Capita Expenditure Growth across Regions between 1993-94 and 2004-05

In this section an attempt has been made to look at the growth situation more closely by looking at NSSO regional level.[11] The performance of each region is compared with the all India rates of growth as well as to the state to which it belongs. [12]

Table 3A.11, 3A.12 and 3A.13 (appendix) presents average per capita expenditure and its growth rates across NSSO regions for the total population, rural sector as well as for the urban sector. Across the NSSO regions also, there are wide differences. The per capita expenditure has been growing in the range of 3.96% per annum (Madhya Pradesh South) to as high as 10.18% per annum (Kerala Southern). The all-India growth rate in average per capita expenditure has been 7.24% per annum and out of 63 regions only 31 regions were able to grow at rate more than the national average. Across the rural regions of India (table 3.1.3b) out of 63 regions, 31 regions were growing at more than the national average of 6.62% per annum and out of these the regions like Andhra Pradesh Coastal, Haryana Eastern, Jammu & Kashmir Mountainous, Kerala Southern, Maharashtra Inland Western and West Bengal Himalayan has been performing very well and has been growing at the rate of 8% and above. In urban areas of NSSO regions only 26 regions out of 63 were able to surpass all-India average per capita expenditure of 8.21% per annum. Few regions like Andhra Pradesh Coastal, Karnataka Inland Southern, Kerala Southern, Rajasthan South Eastern, Tamil Nadu Coastal Northern and Uttar Pradesh Central has been performing extremely well growing at the rate of 10% and above.

The region-wise coefficient of variation in per capita expenditure For India as a whole has increased from *21.02* in 1993-94 to *28.68* in 2004-05. It shows that during the period, the spatial variability in growth rates of per capita expenditure across the different agro-climatic regions of India has increased. In the rural sector, unlike the state-wise coefficient of variation, the region-wise coefficient of variation in per capita expenditure in the rural sector has increased from *19.09* in 1993-94 to *26.16*

[11] Here we are analysing only 63 regions out of 78 regions leaving the regions of Union territories as well as the regions of north eastern states. Also, we are leaving the Jhelum valley region of Jammu & Kashmir due to non-availability of data in the 50th round.

[12] The situation in a particular region can be different from other regions within a state on account of agro-climatic conditions. Similarly, the situation in a particular region can be different from the other region within the same agro climatic zone in other states on account of local policies of that state.

and in the urban sector, unlike the state-wise per capita expenditure, the region-wise coefficient of variation in per capita expenditure has increased from *16.76* in 1993-94 to *21.83*. It shows that during the period, the spatial variability of per capita expenditure in the rural sector across the states has increased while across the different agro-climatic regions of India the spatial variability has decreased. In the urban sector according to the state-wise per capita expenditure there has been a narrowing down of the regional disparities while region-wise per capita expenditure shows that during the period there has been widening up of regional disparities.

To analyse the regional patterns of growth we have divided all the regions into four quartile classes and on its basis we have generated detailed maps showing the economic growth across the regions during 1993-94 and 2004-05. Map 3.4, 3.5 and 3.6 below are clearly reflecting region level disparities in India at both aggregate level as well as sectorally. In case of rural Madhya Pradesh, the neighbourhood effect is clearly visible. As such Madhya Pradesh is among the lowest growing states and out of its six regions, four regions are also among the lowest growing regions while one is in the second quartile. Only Madhya Pradesh South Western region is among the highest growing regions. It may be because of the spill over effects of the neighbour state Maharashtra which is among the highest growing states and specifically the neighbouring high growing region named Maharashtra Inland Eastern. Urban Madhya Pradesh is also among the lowest growing states but still Madhya Pradesh Malwa region is among the highest growing region because of the neighbourhood effect of one of the highest growing state Gujarat and more specifically due to its highest growing regions named Gujarat Eastern, Gujarat Plains Northern and Gujarat Plains Southern. Further, if we look for the contiguity, map does not depict any clear pattern but comparing performance of regions with the states, we find that the range of disparity at the sub-state level are more intense than the disparity between the states. The different regions within a state experience different rate of growth. For example, in high growing states like Andhra Pradesh there are four regions and all four are in different quartile class showing high intra-state disparities.

In conclusion it can be said that Indian economy has been growing over the period but its growth has been uneven across the states, across different geographic regions as well as across the rural and urban areas.

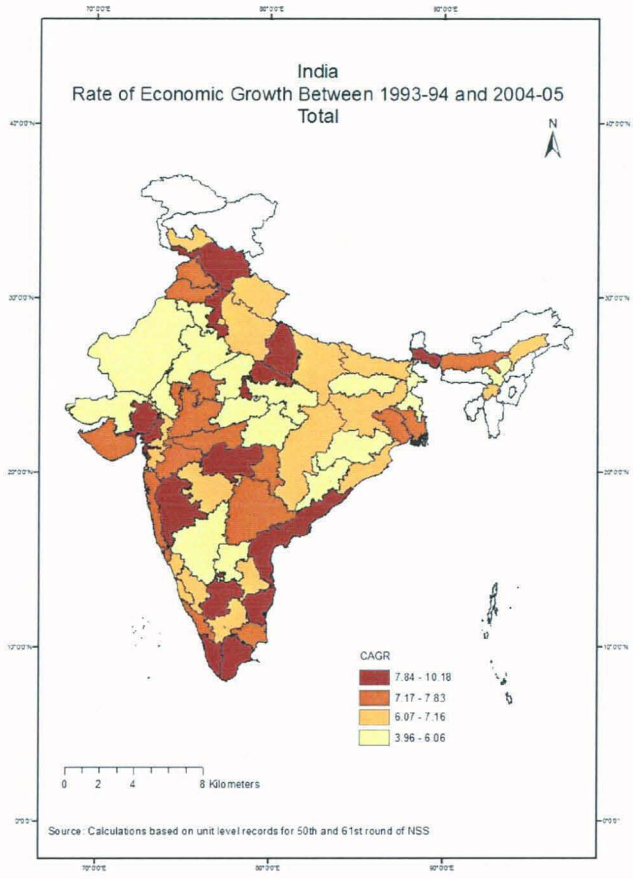
Table 3.2 : Quartile Classes according to Growth in Average Per Capita Expenditure across Regions

Sector		Rural	Urban	Total
Quartile Classes	I	MPH (South), MPH (Northern), MPH (Vindhya), ANP (South Western), ORS (Northern), DEL (Delhi), WBL (Eastern Plains), ASM (Hills), MHR (Coastal), RJN (Southern), ORS (Southern), RJN (Western), GJT (Dry Areas), MPH (Central), HRA (Western), BHR (Central)	MPH (Northern), HRA (Western), ASM (Hills), ORS (Northern), ORS (Southern), GJT (Dry Areas), MPH (Central), DEL (Delhi), MPH (South), UPH (Eastern), MHR (Inland Central), UTR (Uttaranchal), RJN (Western), KNT (Inland Northern), UPH (Western), KNT (Coastal & Ghats)	MPH (South), MPH (Northern), ORS (Southern), GJT (Dry Areas), ORS (Northern), MPH (Vindhya), ASM (Hills), HRA (Western), ANP (South Western), WBL (Eastern Plains), MPH (Central), RJN (Western), RJN (Southern), BHR (Central), KNT (Inland Northern), RJN (North Eastern)
	II	RJN (North Eastern), KNT (Inland Northern), GJT (Eastern), CTH (Chhattisgarh), UPH (Western), UPH (Eastern), KNT (Inland Eastern), TNU (Inland), KNT (Coastal & Ghats), MPH (Malwa), TNU (Coastal), RJN (South Eastern), TNU (Coastal Northern), ANP (Inland Southern), JHR (Jharkhand), PNB (Southern)	MPH (Vindhya), ORS (Coastal), BHR (Central), RJN (North Eastern), MPH (South Western), J & K (Outer Hills), ASM (Plains Eastern), WBL (Eastern Plains), RJN (Southern), ANP (South Western), MHR (Coastal), BHR (Northern), MHR (Inland Western), HPR (Himachal Pradesh), TNU (Southern), MHR (Eastern)	UPH (Eastern), DEL (Delhi), UPH (Western), CTH (Chhattisgarh), KNT (Coastal & Ghats), KNT (Inland Eastern), J & K (Outer Hills), BHR (Northern), ASM (Plains Eastern), GJT (Eastern), JHR (Jharkhand), MHR (Inland Central), UTR (Uttaranchal), ANP (Inland Southern), ORS (Coastal), TNU (Inland)
	III	ANP (Inland Northern), BHR (Northern), UTR (Uttaranchal), J & K (Outer Hills), ASM (Plains Eastern), GOA (Goa), WBL (Central Plains), MHR (Inland Central), ORS (Coastal), MHR (Inland Northern), GJT (Plains Southern), PNB (Northern), MHR (Eastern), WBL (Western Plains), KNT (Inland Southern), GJT (Saurashtra)	KER (Northern), TNU (Inland), CTH (Chhattisgarh), GOA (Goa), KNT (Inland Eastern), MHR (Inland Northern), WBL (Central Plains), GJT (Saurashtra), JHR (Jharkhand), ANP (Inland Southern), PNB (Northern), MHR (Inland Eastern), WBL (Western Plains), UPH (Southern), ANP (Inland Northern), J & K (Mountainous)	GOA (Goa), PNB (Southern), TNU (Coastal), RJN (South Eastern), WBL (Western Plains), ANP (Inland Northern), MHR (Coastal), MPH (Malwa), ASM (Plains Western), MPH (South Western), MHR (Inland Northern), WBL (Central Plains), KER (Northern), GJT (Saurashtra), MHR (Eastern), PNB (Northern)
	IV	ASM (Plains Western), GJT (Plains Northern), MPH (South Western), UPH (Central), TNU (Southern), MHR (Inland Eastern), KER (Northern), UPH (Southern), HPR (Himachal Pradesh), ANP (Coastal), MHR (Inland Western), J & K (Mountainous), WBL (Himalayan), KER (Southern), HRA (Eastern)	GJT (Plains Southern), ASM (Plains Western), GJT (Plains Northern), WBL (Himalayan), PNB (Southern), TNU (Coastal), GJT (Eastern), MPH (Malwa), HRA (Eastern), UPH (Central), KNT (Inland Southern), TNU (Coastal Northern), ANP (Coastal), RJN (South Eastern), KER (Southern)	TNU (Southern), HPR (Himachal Pradesh), UPH (Southern), MHR (Inland Eastern), MHR (Inland Western), GJT (Plains Northern), UPH (Central), J & K (Mountainous), GJT (Plains Southern), WBL (Himalayan), ANP (Coastal), TNU (Coastal Northern), KNT (Inland Southern), HRA (Eastern), KER (Southern)

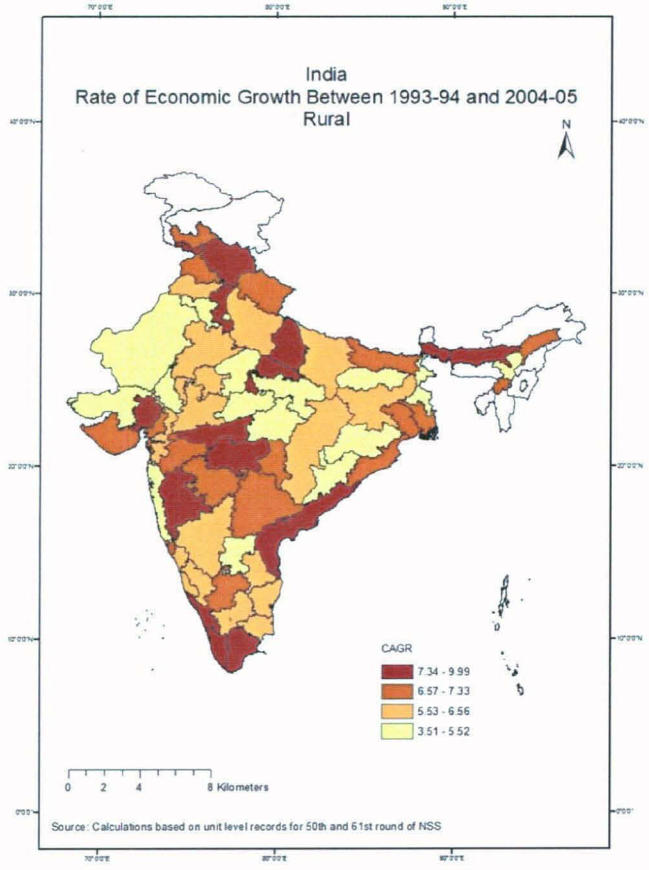
Source: Evaluated and tabulated by author from table 3A.11, 3A.12 and 3A.13.

Maps: Rate of Economic Growth across Regions between 1993-94 and 2004-05

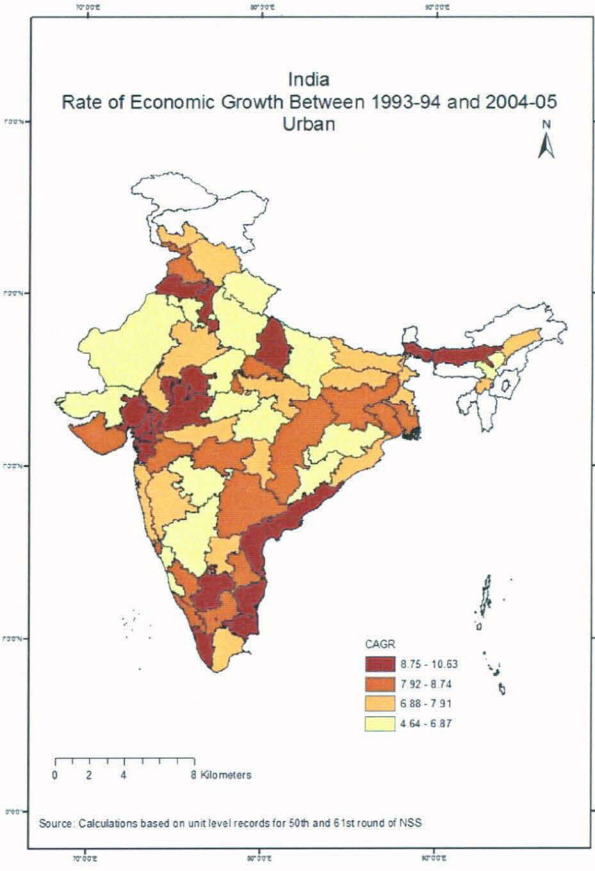
Map 3.4: Total



Map 3.5: Rural



Map 3.6: Urban



3.2: Levels of Poverty in India, States and NSSO Regions between 1993-94 and 2004-05

Over the last decade, Indian economy has grown at a very fast rate and according to majority of scholars it has also experienced considerable decline in the poverty rate. However, in a vast country like India, poverty levels vary significantly across states as well as across regions. This section presents the estimates of poverty at the all-India level, state level and the NSS region level.[13] The poverty situation is measured via three measures of poverty; 'head count ratio', 'poverty gap index' and 'squared poverty gap index' for examining three different dimensions of poverty i.e. incidence, depth and severity of poverty.[14]

Poverty is calculated on the basis of Mixed Reference Period.[15] The change in the poverty situation is examined in terms of (i) net or absolute change in the percentage of poor (ii) Annual percentage rate of change during the period (iii) Change in the ranking of the states between the two surveys.

3.2.1: Incidence of Poverty across States of India: 1993-94 to 2004-05

At the all- India level, the incidence of poverty fell by 7.99 percentage points between 1993-94 and 2004-05 and that also at the rate of 1.73% per annum (see appendix table 3.A.14). For rural India there has been a drop in the poverty ratio from 50.24 % in 1993-94 to 41.78% in 2004-05 i.e. a significant fall of 8.47% percentage points in just eleven years and that also at the rate of 1.66% per annum. Urban poverty fell by 6.21 percentage points and at the rate of 1.95% per annum. The extent of decline in rural area is more if we look at the net change but if we look at the rate of decline, per annum fall is more in urban areas. Many scholars has confirmed decline in poverty ratios over the last few decades (Jha, 2000; Deaton and Dreze, 2002; Sundaram and Tendulkar 2003; Bhanumurthy and Mitra 2004; Sen & Himanshu, 2004).

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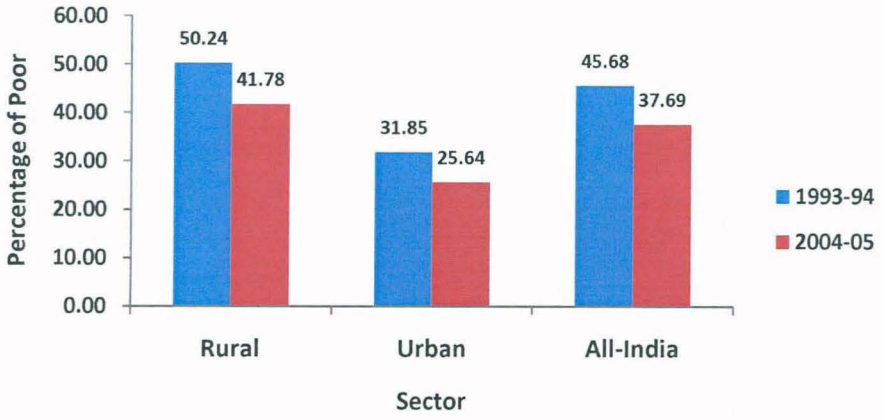
[13] Poverty is calculated on the basis of official poverty lines calculated as per the methodology of the Report of Expert Group (2009), Tendulkar Committee.

[14] The Head Count Index measures how widespread poverty is, the Poverty Gap Index measures how poor the poor are, and the Squared Poverty Gap Index measures the severity of poverty by giving more weight to the poorest of the poor.

[15] The Tendulkar Committee (2009) has calculated poverty lines on the basis of Mixed Reference Period (MRP) instead of using Uniform Reference Period (URP) to incorporate private expenditure on health and education.

Figure 3.3 shows the incidence of poverty in the rural sector, urban sector as well as the aggregate values.

Figure-3.3 : Incidence of Poverty



Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.15, 3A.16 and 3A.17 (appendix) presents state wise estimates of poverty using Tendulkar committee poverty lines.[16] The extent of decline varies considerably across the states for total population as well as for the rural and urban areas. For, India as a whole, all the states has registered a fall in the incidence of poverty, except for Goa and Madhya Pradesh where there is an increase in poverty rate by 1.80 percent per annum and 0.87 percent per annum (see appendix table 3A.15). In all other states there is a decrease in poverty ranging from 0.06 percent per annum (Chhattisgarh) to 6.23 percent per annum (Jammu & Kashmir). In terms of net change, the highest decline has been shown by Assam where poverty fell by 17.50 percentage points followed by Karnataka, Andhra Pradesh, Tamil Nadu and Jharkhand showing a sizeable decline of above 14 percentage points between the two time period.

In rural areas, there has been a drop in the poverty ratio for all states except Goa, Punjab and Madhya Pradesh where poverty has increased (see appendix table 3A.16). Karnataka is showing largest decline of 19.27 percentage points. In Goa, Punjab and Madhya Pradesh there is an increase in poverty rate of around 0.8 percent per annum.

[16] Report of Expert Group (2009) has given poverty lines for both 1993-94 and 2004-05, it is now possible to compare poverty ratios separately for the newly formed States of Jharkhand, Uttarakhand and Chhattisgarh. Here, we are using unit level data and recoding is done in the 50th round to estimate MPCE for these states.

In all other states the poverty there is a decrease in the rate of poverty ranging from 0.17 percent per annum (Chhattisgarh) to 7.33 percent per annum (Jammu & Kashmir).

For the urban counterpart poverty has shown a decline in most states except six states including Chhattisgarh, Goa, Jammu & Kashmir, Madhya Pradesh, Orissa, and Uttaranchal (see appendix table 3A.17). The other sixteen states has recorded a decline in head count ratios with Andhra Pradesh, Jharkhand and Tamil Nadu showing a sizeable decline of above 10 percentage points between the whole period. In Chhattisgarh, Goa, Jammu & Kashmir, Madhya Pradesh, Orissa, and Uttaranchal, there is an increase in poverty rate ranging from 0.004% per annum (Chhattisgarh) to 3.73% (Jammu & Kashmir). In all other states the poverty there is a decrease in the rate of poverty ranging from 0.10 % per annum in Rajasthan to 9.48% per annum in Himachal Pradesh. Many scholars have confirmed fall in the incidence of poverty in rural as well as in the urban areas (Sen and Himanshu, 2004; Himanshu, 2007).

In table 3A.18 (appendix) states are arranged in ascending order of the incidence of poverty for the two time periods. The ranking of the states throws up an interesting picture. In case of aggregate poverty, only Madhya Pradesh has slipped to the category of above all-India poverty states. It was replaced by Karnataka and Assam which has moved up the ladder to be among the states having poverty rates less than the national average. In case of rural poverty, in the first period, nine states out of twenty two were below the national average of 50.24 % but in the second period only seven states were below the decreased national average of 41.78%. However, the composition of the top and the bottom states has almost remain unchanged with some shuffling of positions among themselves. Jammu & Kashmir has moved up the ladder and came at the top position. Orissa, Chhattisgarh, Bihar, Maharashtra and Jharkhand were the same states as in the previous period having highest poverty rates. In the urban areas, eight states show poverty rates above the national average. Interestingly here almost all states are the same as those which form the rural list of states with above national average poverty rates in the second period. These states include Bihar, Orissa, Uttar Pradesh, Madhya Pradesh and Chhattisgarh. Uttaranchal which was at the 5^{th} position has slipped down to 16^{th} position having poverty rates even more than the national average. In contrast, Tamil Nadu, Andhra Pradesh and Jharkhand moved up the ladder to be among the states having poverty rates less than the national

average. It can be said that some states were able to persist in attaining relatively lower level of poverty incidence while other states revealed poor performance. It should be noticed that Bihar, Orissa, Uttar Pradesh, Madhya Pradesh and Chhattisgarh are constantly at the bottom positions in the second period.

To analyse the spatial patterns of poverty we have generated detailed maps showing the changes in poverty across the states during 1993-94 and 2004-05. We have divided all the states into four quartile classes where Class I is showing the 25% states experiencing lowest growth in poverty and class IV is showing 25% states which are experiencing the highest growth in poverty.

Table 3.3 : Quartile Classes according to Changes in Poverty across States

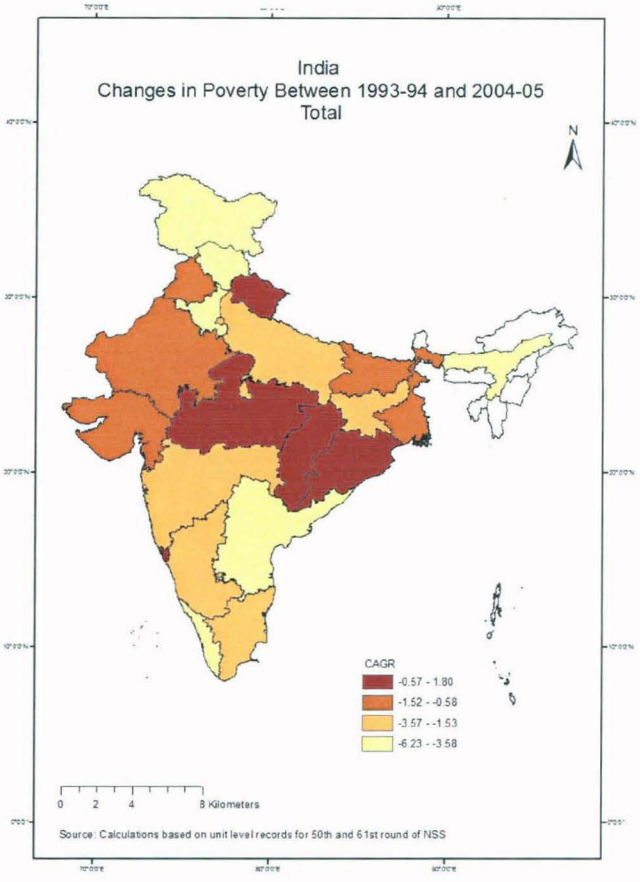
Sector		Rural	Urban	Total
Quartile Classes	I	Jammu & Kashmir, Kerala, Haryana, Assam, Karnataka, Andhra Pradesh	Himachal Pradesh, Jharkhand, Tamil Nadu, Andhra Pradesh, Punjab, Gujarat	Jammu & Kashmir, Kerala, Himachal Pradesh, Assam, Andhra Pradesh, Haryana
	II	Himachal Pradesh, Tamil Nadu, Jharkhand, Maharashtra, Uttar Pradesh, Rajasthan	Karnataka, Kerala, West Bengal, Assam, Delhi, Maharashtra	Karnataka, Tamil Nadu, Jharkhand, Maharashtra, Delhi, Uttar Pradesh
	III	Bihar, West Bengal, Gujarat, Uttaranchal, Delhi	Uttar Pradesh, Haryana, Bihar, Rajasthan, Chhattisgarh	Gujarat, West Bengal, Rajasthan, Bihar, Punjab
	IV	Orissa, Chhattisgarh, Punjab, Madhya Pradesh, Goa	Orissa, Madhya Pradesh, Uttaranchal, Goa, Jammu & Kashmir	Orissa, Uttaranchal, Chhattisgarh, Madhya Pradesh, Goa

Source: Evaluated and tabulated by author from table 3A.15, 3A.16 and 3A.17.

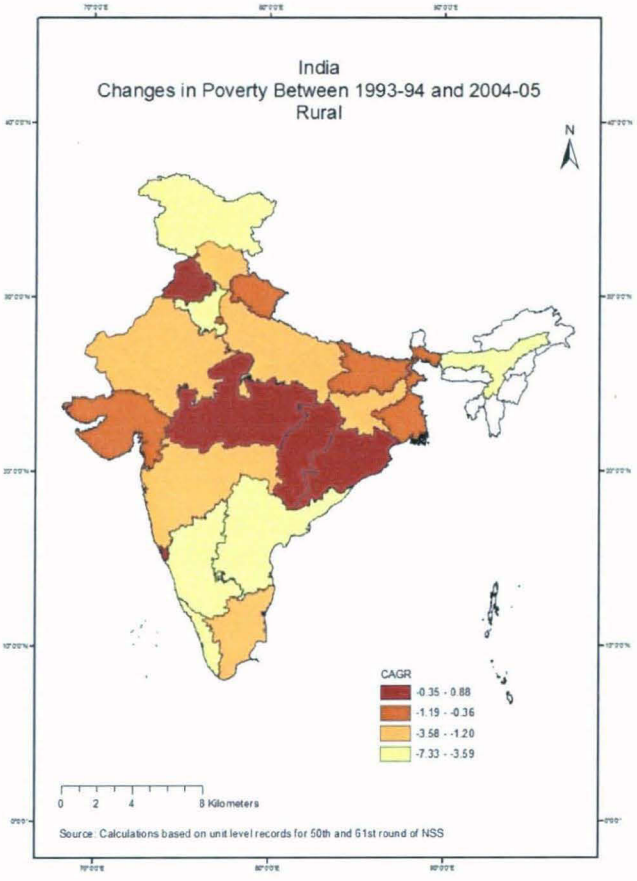
It can be seen that Andhra Pradesh is performing extremely well and is in the lowest quartile for total as well as across the sectors. Madhya Pradesh, Orissa and Goa are in the highest quartile showing bad performance in terms of poverty reduction during the period. Map 3.7, 3.8 and 3.9 below are showing growth in poverty ratios for total as well as for the rural and urban areas separately. Maps are clearly reflecting regional disparities with respect to poverty reduction among the states of India. Map shows that in general, coastal and western states are having highest decline in poverty growth rates while the belt including Madhya Pradesh, Chhattisgarh and Orissa is among the states having lowest decline (or in some cases an increase) in poverty rates during the period.

Maps: Changes in Poverty across States of India between 1993-94and 2004-05

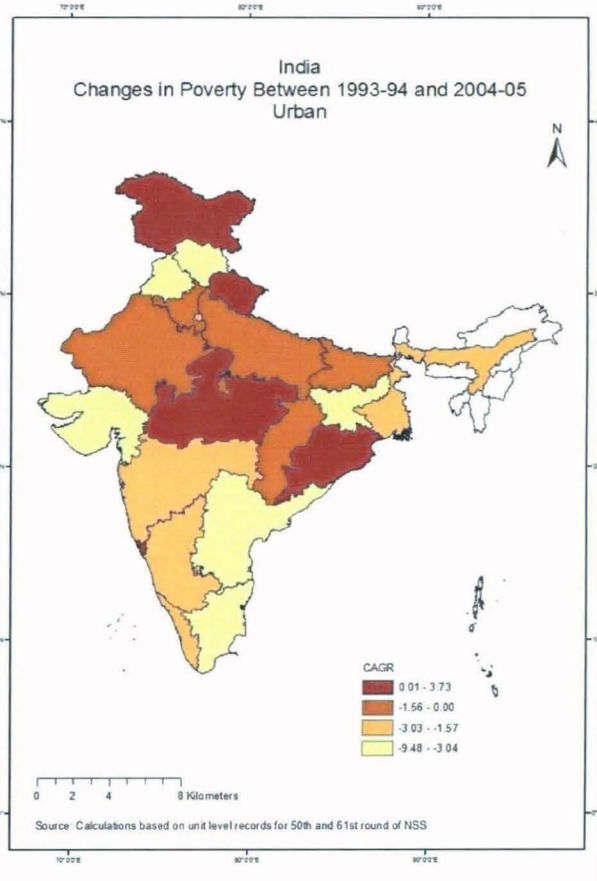
Map 3.7: Total



Map 3.8: Rural



Map 3.9: Urban



3.2.2: Incidence of Poverty across Regions of India: 1993-94 to 2004-05

In this section a detailed analysis of the prevalence and pattern of poverty at the NSS region level is carried out. This is to check whether the pattern of poverty at the NSS region level mirrors the national pattern.

Appendix table 3.2.3a shows the incidence of poverty in the NSSO regions for the total population of India.[17] It shows that during the period, out of 63 regions poverty ratios has decreased in 47 regions. If we compare the regions with the mother states then Madhya Pradesh gives the most interesting story. In Madhya Pradesh out of 6 regions, poverty ratios is increasing in 5 regions but still the overall increase in the state is only of 4.47 percentage points with the growth rate of just 0.87% per annum during the whole period. It is because of the sixth region named Madhya Pradesh South Western which has performed impressively well; decreasing poverty by 18.29 percentage points in 11 years and therefore to a large extent is able to overcome the poor performance of other regions. Poverty ratios are decreasing in all the regions constituting states like Haryana, Jammu & Kashmir, Kerala, Punjab, Tamil Nadu and Uttar Pradesh due to which all these states are performing very well. In the remaining states, overall poverty ratios have decreased because poor performance by one or more region has been balanced by other well performing regions within that state.

Across rural NSSO regions, out of 63 regions poverty ratios have decreased in 47 regions (see appendix table 3A.12). In the remaining 16 regions, poverty ratios has increased in the range of 0.23 percentage points in Rajasthan Western to as high as 13.70 percentage points in Orissa Northern. Out of these 16 regions, 5 regions belong only to Madhya Pradesh. But still the overall increase in poverty in Madhya Pradesh is by 4.48 percentage points only during the whole period growing at the rate of 0.80% per annum. Again it is because of the sixth region; Madhya Pradesh South Western which has performed very well. In Punjab, poverty ratio state has increased due to bad performance by both the regions.

In urban NSSO regions, out of 63 regions poverty ratios has decreased in 42 regions. In other regions there is an increase in poverty ranging from 0.004% per annum in Madhya Pradesh Malwa and Chhattisgarh to 14.03% per annum in Karnataka Coastal

[17] State specific poverty lines have been used for the estimation of HCR at the NSS region-level.

& Ghats. Comparing regions with their mother states shows that urban Punjab has performed very well as poverty ratio is decreasing in both the regions. In Tamil Nadu also, there is a decline in poverty ratios in all 4 regions. In Jammu & Kashmir poverty is increasing due to poor performance by both the regions. In Madhya Pradesh overall poverty is increasing because 3 regions named Malwa, South and Northern are not performing well.

Table 3.4 below shows the division of states into four quartile classes where Class I is showing the 25% regions experiencing lowest growth in poverty while class IV is showing 25% regions which are experiencing the highest growth in poverty. Mapping of the poverty outcomes across regions is facilitating easy identification of the lagging regions. Overall, central regions are the worst performers experiencing highest increase in poverty rates for aggregate and across the sectors during the two time periods. Orissa is experiencing highest growth in poverty ratios and its two regions are also experiencing high increase in growth rates of poverty. Only Orissa Coastal is experiencing a low increase in the growth rate of poverty because of being a coastal region or may be because of the neighbourhood effect of Andhra Pradesh and its Coastal region. Madhya Pradesh (rural) is also among the states experiencing highest increase in growth rates of poverty and following the mother state five regions are experiencing a high rise in the growth rate of poverty. Only in Madhya Pradesh South Western there is less increase in the growth of poverty during the period. The reason of this unusual performance can be the neighboring state Maharashtra experiencing a negative growth of poverty or its two regions; Maharashtra Inland Eastern and Maharashtra Inland Northern experiencing a medium increase in growth of poverty. If we look for contiguity, maps do not depict any clear pattern of contiguity. However, it can be clearly seen that the range of disparity within a state is more serious than the disparity between the states. For example, Andhra Pradesh is experiencing highest growth in poverty ratios but its four regions are in different quartile classes showing high intra-state disparities.

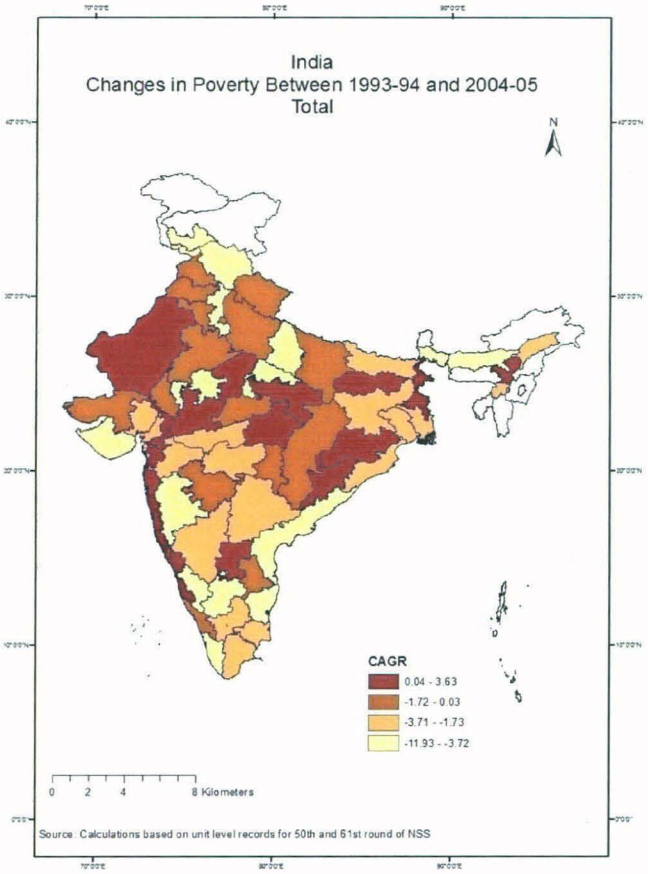
Table 3.4 : Quartile Classes according to Changes in Poverty across Regions

Sector		Rural	Urban	Total
Quartile Classes	I	J & K (Mountainous), KER (Southern), KNT (Inland Southern), WBL (Himalayan), KNT (Inland Eastern), ANP (Coastal), GJT (Saurashtra), HRA (Eastern), J & K (Outer Hills), MHR (Inland Western), ASM (Plains Western), RJN (South Eastern), UPH (Central), UPH (Southern), HPR (Himachal Pradesh), TNU (Southern)	KNT (Inland Southern), HPR (Himachal Pradesh), TNU (Coastal), ANP (Coastal), TNU (Coastal Northern), KER (Southern), WBL (Western Plains), JHR (Jharkhand), RJN (South Eastern), UPH (Southern), ASM (Plains Western), UPH (Central), TNU (Southern), J & K (Mountainous), PNB (Southern), PNB (Northern)	J & K (Mountainous), KNT (Inland Southern), KER (Southern) ,ANP (Coastal), WBL (Himalayan), KNT (Inland Eastern), HRA (Eastern), GJT (Saurashtra), J & K (Outer Hills), ASM (Plains Western), RJN (South Eastern), UPH (Central), TNU (Coastal Northern), MHR (Inland Western), UPH (Southern), HPR (Himachal Pradesh)
	II	TNU (Coastal), MPH (South Western), ANP (Inland Northern), ORS (Coastal), MHR (Inland Eastern), ASM (Plains Eastern), TNU (Coastal Northern), KNT (Inland Northern), JHR (Jharkhand), GJT (Plains Southern), MHR (Inland Northern), KER (Northern), BHR (Northern), WBL (Central Plains), HRA (Western), WBL (Western Plains)	GJT (Saurashtra), MHR (Eastern), KNT (Inland Eastern), GJT (Eastern), HRA (Eastern), WBL (Himalayan), GJT (Plains Northern), WBL (Central Plains), ANP (Inland Northern), GJT (Plains Southern), RJN (Southern), TNU (Inland), MHR (Inland Eastern), MHR (Coastal), BHR (Northern), DEL (Delhi)	TNU (Coastal), TNU (Southern), GJT (Plains Southern), MPH (South Western), ANP (Inland Northern), ORS (Coastal), MHR (Inland Eastern), ASM (Plains Eastern), JHR (Jharkhand), WBL (Central Plains), WBL (Western Plains), KNT (Inland Northern), GJT (Plains Northern), BHR (Northern), MHR (Inland Northern), TNU (Inland)
	III	TNU (Inland), MHR (Inland Central), GJT (Plains Northern), RJN (Southern), RJN (North Eastern), UPH (Eastern), MHR (Eastern), KNT (Coastal & Ghats), UPH (Western), GJT (Dry Areas), UTR (Uttaranchal), DEL (Delhi), ANP (Inland Southern), CTH (Chhattisgarh), ORS (Southern), RJN (Western)	MHR (Inland Western), ANP (Inland Southern), ORS (Coastal), MPH (South Western), MPH (Vindhya), MHR (Inland Northern), MPH (Central), KNT (Inland Northern), ASM (Plains Eastern), RJN (North Eastern), MPH (Malwa), CTH (Chhattisgarh), UPH (Western), WBL (Eastern Plains), GJT (Dry Areas), MHR (Inland Central)	DEL (Delhi), MHR (Eastern), RJN (Southern), KER (Northern), MHR (Inland Central), RJN (North Eastern), PNB (Northern), UPH (Eastern), HRA (Western), UPH (Western), ANP (Inland Southern), PNB (Southern), UTR (Uttaranchal), GJT (Dry Areas), CTH (Chhattisgarh), MPH (Central)
	IV	MPH (Central), BHR (Central), ASM (Hills), ANP (South Western), PNB (Northern), PNB (Southern), GOA (Goa), MPH (South), WBL (Eastern Plains), GJT (Eastern), MPH (Malwa), ORS (Northern), MPH (Vindhya), MHR (Coastal), MPH (Northern)	UPH (Eastern), KER (Northern), BHR (Central), ORS (Southern), ANP (South Western), RJN (Western), MPH (South), UTR (Uttaranchal), J & K (Outer Hills), GOA (Goa), HRA (Western), ORS (Northern), MPH (Northern), ASM (Hills), KNT (Coastal & Ghats)	ORS (Southern), MHR (Coastal), BHR (Central), RJN (Western), ASM (Hills), ANP (South Western), GJT (Eastern), MPH (Malwa), WBL (Eastern Plains), KNT (Coastal & Ghats), MPH (South), GOA (Goa), MPH (Vindhya), ORS (Northern), MPH (Northern)

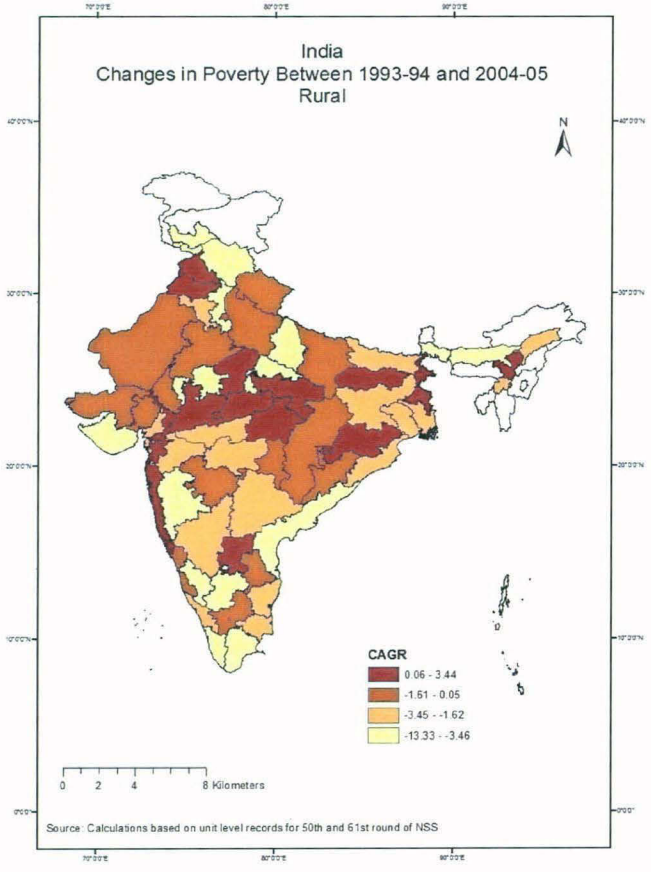
Source: Evaluated and tabulated by author from table 3A.19, 3A.20 and 3A.21.

Maps: Changes in Poverty across Regions of India between 1993-94and 2004-05

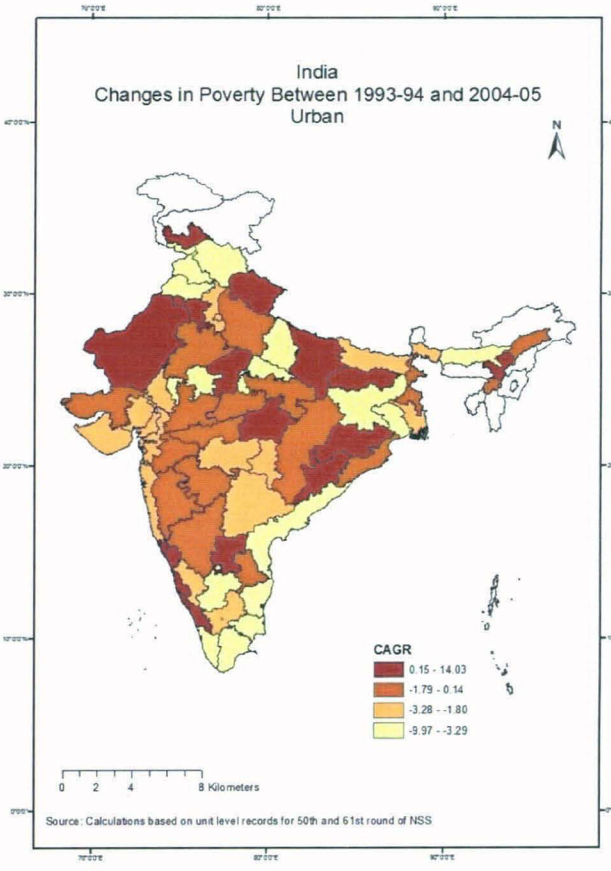
Map 3.10: Total



Map 3.11: Rural



Map 3.12: Urban



3.2.3: Intensity and Severity of Poverty across the States of India

In this section three different measures of poverty; head count ratio, poverty gap index and squared poverty gap index has been presented for two points of time both for rural and urban areas. As already discussed, these measures show three different aspects of poverty. The head count index measures the incidence of poverty, the poverty gap index measures the depth of poverty, and the squared poverty gap index measures the severity of poverty. Poverty is estimated using the official poverty lines given by the Tendulkar Committee (2009).

The behaviour of various measures of poverty across states in rural and urban India is given in appendix table 3A.22 and 3A.23. In rural India, results shown by PGI and SPG are in line with the changes in HCR with few exceptions like Chhattisgarh, Delhi, Goa, Madhya Pradesh, Orissa and Punjab. In Chhattisgarh, Delhi and Orissa there is a decline in HCR but they show a rise in PGI and SPG i.e. increase in both the depth and the severity of rural poverty. In contrast, Goa and Madhya Pradesh recorded a small rise in HCR but are showing a decline in both PGI and SPG i.e. a decline in both the depth and the severity of rural poverty. Interestingly Punjab show a very diverse pattern showing an increase in both HCR and PGI but a decrease in SPG i.e. increase in both the incidence and depth but a decline in the severity of rural poverty. With respect to the urban population, Bihar gives a contrasting story showing a decline in both HCR and SPG but a rise in PGI. Haryana recorded a decline in HCR but a rise in PGI and SPG. Chhattisgarh, Goa, Jammu and Kashmir, Madhya Pradesh, Orissa and Uttaranchal recorded an increase in all three measures of poverty. All remaining states recorded a decline in HCR as well a decline in both PGI and SPG. Himanshu (2007) in his analysis found that in Chhattisgarh and Orissa, poverty gap and squared poverty gap has increased in both rural as well as the urban areas indicating an increase in severity and depth of poverty.

3.2.4: Intensity and Severity of Poverty across Regions of India

Appendix table 3A.24 and 3A.25 shows the behaviour of various measures of poverty in rural regions of India. Out of 63 regions, only in 49 regions, the results are in line with the changes in HCR. Out of these 49 regions, 40 regions show a decline in all three alternative measures of poverty while other 9 regions show an increase in all three measures of poverty. Remaining 14 regions shows a varying trend. In Andhra

Pradesh South Western, Gujarat Eastern and Madhya Pradesh South there is rise in HCR and PGI but a decline in SPG. Gujarat Dry Areas, Maharashtra Eastern which recorded a decline in HCR and PGI shows a rise in SPG i.e. decrease in the incidence and depth but increase in the severity of rural poverty. Andhra Pradesh Inland Southern, Chhattisgarh, Delhi, Karnataka Coastal and Ghats and Orissa Southern recorded a decline in HCR and rise in both PGI and SPG while Assam Hills, Bihar Central, Goa and Punjab Northern show a rise in HCR but a decline in both PGI and SPG.

In the urban counterpart, out of 63 regions, in 49 regions, the results are in line with the changes in HCR. Out of these 49 regions, 35 regions show a decline in all three alternative measures of poverty while other 14 regions show an increase in all three measures of poverty. Remaining 14 regions shows a varying trend. In Andhra Pradesh South Western, Assam Hills, Jammu & Kashmir Outer Hills and Uttar Pradesh Eastern there is rise in HCR and PGI but a decline in SPG. Maharashtra Eastern, Orissa Coastal and Tami Nadu Inland are showing a decline in both HCR and PGI but a rise in SPG. Assam Plains Eastern, Madhya Pradesh Vindhya, Madhya Pradesh Central and Maharashtra Inland Northern recorded a decline in HCR but a rise in both PGI and SPG. In contrast, regions like Maharashtra Inland Central and Uttar Pradesh Western shows a rise in HCR but a decline in both PGI and SPG. Only Gujarat Dry Areas region is experiencing rise in HCR and SPG and a decline in PGI.

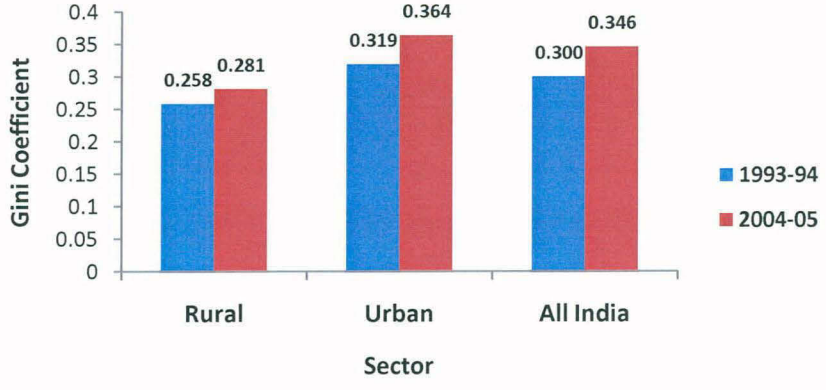
3.3: Inequality in India, States and NSSO Regions between 1993-94 and 2004-05

Inequality is another important issue which needs to be examined in detail. Poverty and inequality are closely related concepts but inequality is a broader concept than poverty. Inequality is defined over the entire population, while poverty is defined as the proportion of the population below the poverty line. Also, poverty can be defined in absolute terms or relative terms but inequality is always relative. This section examines trends in inequality across the states as well as the NSS regions of India between two points of time: 1993-94 and 2004-05. Gini coefficients are estimated on the basis of mixed reference period using the household consumption expenditure data of the respective years given by the NSS.[18] The change in the inequality situation is examined in terms of (i) net change in the gini figures and (ii) Annual rate of change during the period calculated via compound annual growth rate.[19]

3.3.1 Inequality across States of India between 1993-94 and 2004-05

Table 3A.26 (appendix) shows that at the all-India level, the gini coefficient has increased by 0.046 points between 1993-94 and 2004-05 and that also at the rate of 1.31% per annum. Figure 3.4 below presents the levels of inequality in the rural sector, urban sector as well as in aggregate which clearly reflects increase in inequality during the period.

Figure 3.4: Levels of Inequality



Source: Computed by author from NSS CES 50th and 61st Round unit level data.

[18] Gini coefficient is the most commonly used measure of relative inequality.

[19] We have estimated these inequality measures using household consumption expenditure from the National Sample Surveys as a proxy of per capita income. Therefore, we are considering only the expenditure inequality.

If we see across sectors, rural inequality has increased by 0.023 points and at the rate of 0.76% per annum while urban inequality rose by 0.046 points (same as all-India estimate) and at the rate of 1.22% per annum. It can be clearly seen that the extent of increase is more in urban areas than their rural counterpart. Across the states of India, the extent of increase in inequality varies considerably for total population as well as for the rural and urban areas. Table 3A.27, 3A.28 and 3A.29 (appendix) show gini coefficients across the states of India for India as a whole, the rural sector as well as for the urban sector. The sign of growth rate is positive in almost all the states and regions suggesting that the inequality has risen during the period.

Gini coefficients across states for India as a whole show that as compared to 1993-94, the overall inequality is higher in 2004-05 (see appendix table 3A.27). Inequality has decline only in Jammu & Kashmir. In all the other states there is an increase in inequality. In Andhra Pradesh, Chhattisgarh Goa, Gujarat, Haryana, Karnataka, Kerala, Punjab and Tamil Nadu inequality has increased by more than all-India increase in inequality. Chhattisgarh has registered a highest increase in inequality at the rate of 2.77 percent per annum.

If we see the trend in rural India between 1993-94 and 2004-05 it can be seen that there is a sharp increase in inequality (see appendix table 3A.28). Gini coefficients show a decline only in few states like Bihar, Jharkhand, Madhya Pradesh, Rajasthan and Tamil Nadu. In all the remaining states inequality has increased although at varying rates thus making overall rural inequality higher in 2004-05. In Chhattisgarh, Haryana and Kerala inequality has increased by more than 0.05 points in just eleven years. This is a fairly important and significant increase because gini coefficient is said to be a robust measure which takes time to increase.

For the urban counterpart inequality is showing a decline only in Himachal Pradesh and Jammu & Kashmir (see appendix table 3A.29). In all other states inequality has increased although at varying rates. In Assam, Bihar, Delhi, Gujarat, Jharkhand, Maharashtra, Orissa, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal inequality has increased in the range of 0.01 to 0.05 points while in Chhattisgarh inequality has increased by 0.11 points during 1993-94 and 2004-05. In Andhra Pradesh, Goa, Haryana, Karnataka, Kerala, Madhya Pradesh, Punjab and Uttaranchal inequality has increased in the range of 0.06 to 0.09 points. Most studies confirmed

rising economic inequality over the last two decades (Ahluwalia, 2000; Deaton and Dreze, 2002; Sen and Himanshu, 2004; Himanshu, 2007; Dev and Ravi 2007; Sarkar and Mehta, 2010).

To analyse broad changes in position of the states, we have divided all the states into four quartile classes where Class I shows 25% states experiencing lowest growth in inequality while class IV shows 25% states which are experiencing highest growth in inequality (see table 3.5). In general, low developed states like Bihar, Jharkhand and Rajasthan are experiencing lowest growth in inequality (or in some cases decline in inequality) while relatively developed states like Haryana, Punjab, Chhattisgarh, Kerala and Gujarat are experiencing highest growth in inequality showing that inequality increases in the process of growth and development.

Table 3.5 : Quartile Classes according to Changes in Inequality across States

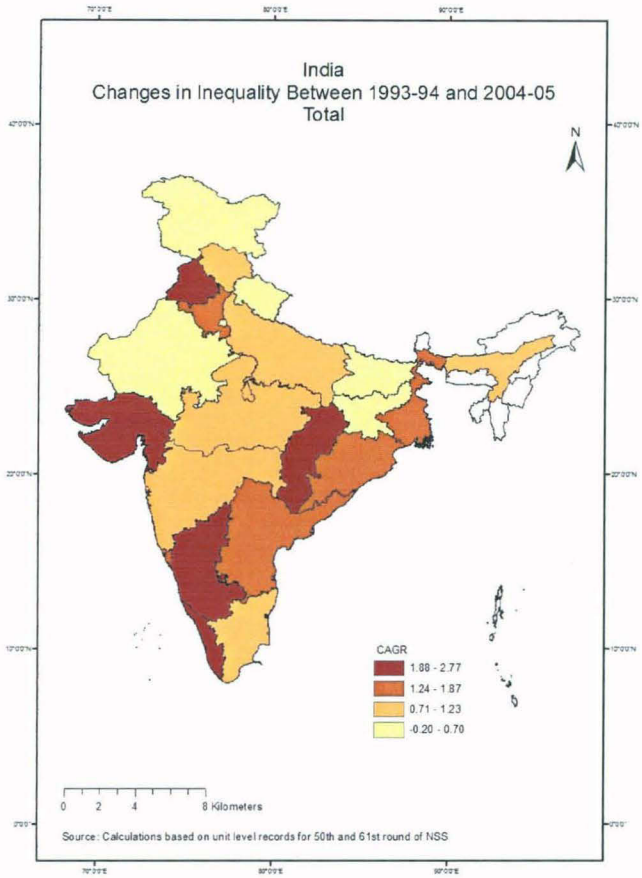
Sector		Rural	Urban	Total
Quartile Classes	I	Bihar, Rajasthan, Madhya Pradesh, Tamil Nadu, Jharkhand, Jammu & Kashmir	Himachal Pradesh, Jammu & Kashmir, Delhi, Jharkhand, Assam, Maharashtra	Jammu & Kashmir, Bihar, Delhi, Rajasthan, Uttaranchal, Jharkhand
	II	Uttar Pradesh, Karnataka, Uttaranchal, West Bengal, Andhra Pradesh, Maharashtra	Tamil Nadu, West Bengal, Bihar, Orissa, Gujarat, Uttar Pradesh	Uttar Pradesh, Maharashtra, Madhya Pradesh, Himachal Pradesh, Assam, Tamil Nadu
	III	Goa, Assam, Himachal Pradesh, Delhi, Orissa	Andhra Pradesh, Rajasthan, Madhya Pradesh, Karnataka, Kerala	West Bengal, Orissa, Andhra Pradesh, Goa, Haryana
	IV	Gujarat, Punjab, Haryana, Kerala, Chhattisgarh	Uttaranchal, Punjab, Haryana, Goa, Chhattisgarh	Karnataka, Gujarat, Kerala, Punjab, Chhattisgarh

Source: Evaluated and tabulated by author from table 3A.27, 3A.28 and 3A.29.

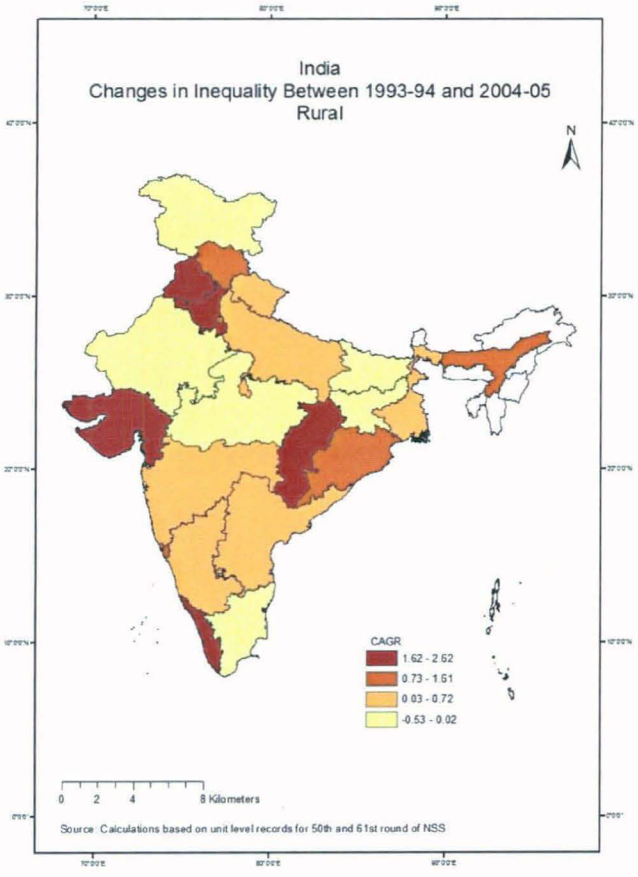
To identify spatial patterns of inequality we have created maps showing changes in inequality across states during 1993-94 and 2004-05. The region level disparities in the growth of inequality can be clearly seen. In general, northern and central states are performing relatively well. This performance is mainly contributed by decrease in inequality in the rural sector while urban sectors of the northern and central states are not performing that well.

Maps: Changes in Inequality across States of India between 1993-94 and 2004-05

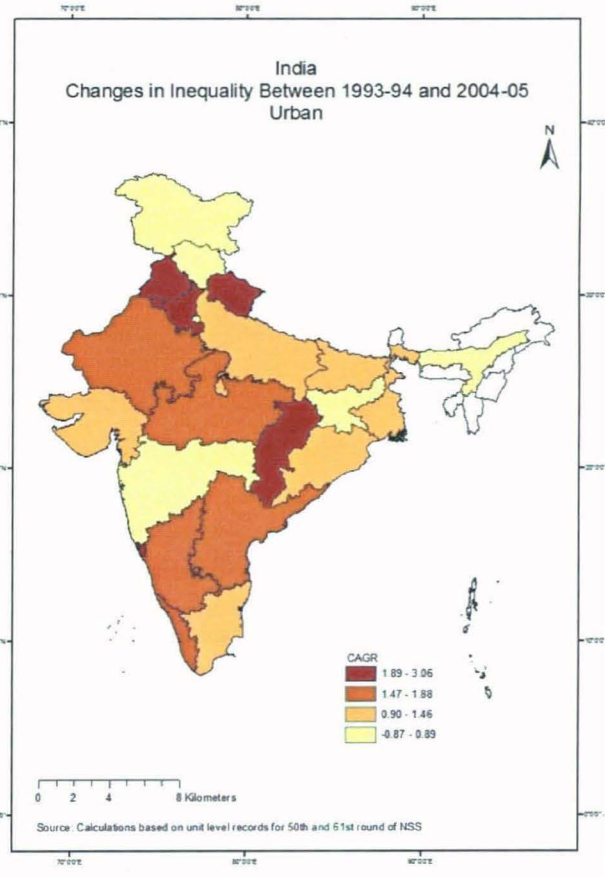
Map 3.13: Total



Map 3.14: Rural



Map 3.15: Urban



3.3.2: Inequality across Regions of India between 1993-94 and 2004-05

This section presents inequality trends across regions of India for India as a whole, rural regions and urban regions. For India as a whole, out of 63 regions gini has decreased only in 12 regions and the decrease is in the range of as low as 0.002 points in Madhya Pradesh Northern to only 0.053 points in Madhya Pradesh South (see appendix table 3A.30). In remaining 51 regions, gini has increased in the range of 0.009 points (Bihar Central and Uttar Pradesh Eastern) to 0.112 points (Madhya Pradesh Malwa). Across rural India, out of 63 regions gini has decreased in 19 regions and that also in the range of as low as 0.0001 points in Karnataka Inland Eastern to 0.112 points in Madhya Pradesh South (see appendix table 3A.31). In remaining 44 regions gini has increased. Growth rates show that there is an increase in inequality ranging from 0.09% per annum Uttar Pradesh Western to as high as 3.46% per annum in Haryana Eastern. Comparing regions with their mother states shows that inequality has declined in 19 regions: one each from Andhra Pradesh, Assam, Jammu & Kashmir, Haryana, Maharashtra, Tamil Nadu, Uttar Pradesh and West Bengal, two each from Bihar and Karnataka, three each from Madhya Pradesh, Rajasthan and a single region state of Jharkhand. Looking at the mother states reveals that gini has decreased only in few states like Bihar, Jharkhand, Madhya Pradesh, Rajasthan and Tamil Nadu. It shows that decline in gini in the remaining regions was not enough to neutralize the rise in gini in other regions of that particular state. In the urban areas, out of 63 regions, gini has decreased only in 7 regions (see appendix table 3A.32). In remaining 56 regions, gini has increased. If we look at compound annual growth rate there is an increase in inequality ranging from 0.12% per annum Karnataka Inland Northern to as high as 3.95% per annum in Karnataka Coastal & Ghats. Comparing the NSS regions with their mother states gives an interesting picture. There is a decline in inequality only in Himachal Pradesh and Jammu & Kashmir. In Kashmir out of two regions, inequality has increased only in one region while in other it has declined and that decline was more enough to balance the increase in inequality so that in the mother state there is an overall decrease in inequality. In contrast, Gujarat Dry Areas, Haryana Western, Madhya Pradesh Central, Tamil Nadu Southern and West Bengal Western Plains are showing decrease in inequality but mother states are experiencing increase in inequality because of increased inequality in other regions.

Table 3.6: Quartile Classes according to Changes in Inequality across Regions

Sector		Rural	Urban	Total
Quartile Classes	I	MPH (South), J & K (Outer Hills), RJN (Southern), ASM (Hills), MPH (South Western), HRA (Western), RJN (South Eastern), ANP (South Western), MHR (Inland Central), KNT (Inland Northern), TNU (Coastal Northern), WBL (Eastern Plains), BHR (Central), MPH (Northern), RJN (North Eastern), BHR (Northern)	HPR (Himachal Pradesh), J & K (Outer Hills), MPH (Central),GJT (Dry Areas), WBL (Western Plains), HRA (Western), TNU (Southern), KNT (Inland Northern), DEL (Delhi), RJN (Southern), MPH (South Western), MHR (Inland Central), J & K (Mountainous), ASM (Hills), ASM (Plains Eastern), TNU (Coastal)	J & K (Outer Hills), ASM (Hills), MPH (South), HRA (Western), RJN (Southern), MPH (South Western), MHR (Inland Central), GJT (Dry Areas), KNT (Inland Northern), BHR (Northern),WBL (Eastern Plains), MPH (Northern), DEL (Delhi), BHR (Central), UPH (Eastern), UPH (Southern)
	II	JHR (Jharkhand), UPH (Southern), KNT (Inland Eastern), UPH (Western), TNU (Coastal), UPH (Central), UPH (Eastern), UTR (Uttaranchal), GJT (Dry Areas), GJT (Saurashtra), KNT (Inland Southern), ANP (Inland Northern), WBL (Central Plains), MPH (Vindhya), ANP (Coastal), TNU (Inland)	GJT (Saurashtra), JHR (Jharkhand), MHR (Inland Eastern), MPH (Northern), MHR (Inland Western), TNU (Coastal Northern), UPH (Western), GJT (Plains Southern), MPH (South), ASM (Plains Western), BHR (Northern), KNT (Inland Eastern), WBL (Eastern Plains), MPH (Vindhya), RJN (North Eastern), UPH (Eastern)	ANP (South Western), MPH (Central), TNU (Southern), UPH (Western), UTR (Uttaranchal), JHR (Jharkhand), RJN (North Eastern), RJN (South Eastern), KNT (Inland Eastern), MHR (Inland Western), ASM (Plains Eastern), GJT (Saurashtra), J & K (Mountainous), HPR (Himachal Pradesh), ORS (Coastal), MHR (Inland Eastern)
	III	TNU (Southern), GOA (Goa), ORS (Coastal), RJN (Western), ASM (Plains Western), MHR (Inland Northern), J & K (Mountainous), MHR (Inland Western), GJT (Plains Southern), ASM (Plains Eastern), MHR (Inland Eastern), HPR (Himachal Pradesh), MPH (Central), ORS (Northern), PNB (Southern), DEL (Delhi)	GJT (Eastern), KER (Southern), MHR (Coastal), ORS (Coastal), TNU (Inland), WBL (Central Plains), ORS (Southern), KNT (Inland Southern), ANP (Coastal), BHR (Central), ANP (Inland Southern), ANP (South Western), MHR (Eastern), ORS (Northern), UPH (Southern), UTR (Uttaranchal)	ASM (Plains Western), TNU (Coastal), TNU (Coastal Northern), ORS (Southern), WBL (Central Plains), ORS (Northern), GJT (Plains Southern), ANP (Inland Northern), ANP (Coastal), RJN (Western), TNU (Inland), MPH (Vindhya), UPH (Central), GOA (Goa), MHR (Coastal), MHR (Inland Northern)
	IV	GJT (Eastern), PNB (Northern), KER (Southern), MHR (Coastal), KER (Northern), WBL (Western Plains), ANP (Inland Southern), ORS (Southern), MPH (Malwa), CTH (Chhattisgarh), GJT (Plains Northern), KNT (Coastal & Ghats), WBL (Himalayan), MHR (Eastern), HRA (Eastern)	ANP (Inland Northern), GJT (Plains Northern), PNB (Northern), WBL (Himalayan), KER (Northern), MHR (Inland Northern), UPH (Central), RJN (Western), GOA (Goa), RJN (South Eastern), MPH (Malwa), PNB (Southern), CTH (Chhattisgarh), HRA (Eastern), KNT (Coastal & Ghats)	KER (Southern), WBL (Western Plains), KER (Northern), KNT (Inland Southern), PNB (Northern), PNB (Southern), ANP (Inland Southern), GJT (Plains Northern), GJT (Eastern), WBL (Himalayan), KNT (Coastal & Ghats), CTH (Chhattisgarh), MHR (Eastern), HRA (Eastern), MPH (Malwa)

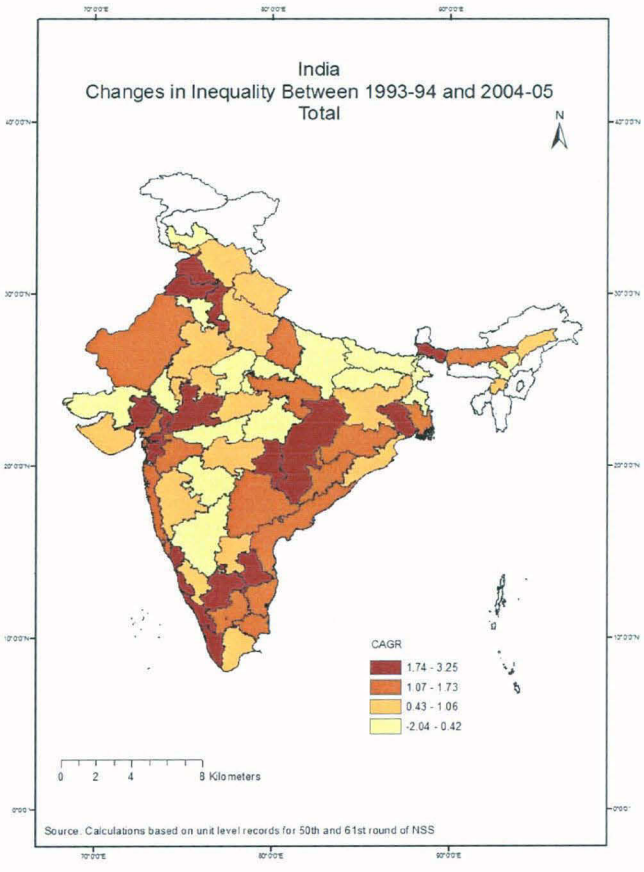
Source: Evaluated and tabulated by author from table 3A.30, 3A.31 and 3A.32.

Regional level maps are clearly reflecting high regional disparities in India at both aggregate level as well as sectorally. In case of Gujarat neighbourhood effect can be clearly seen. As such Gujarat is a bad performing state in terms of decline in inequality and out of its five regions four regions are also lowest performing region. Only Dry Areas region is performing relatively well which can be due to positive effects of the neighbouring state of Rajasthan and its southern region which is doing well. Similarly, Karnataka is a bad performing state but its Inland Northern region is doing well showing the spill over effects of good performing neighbouring state Maharashtra and its Inland Central region.

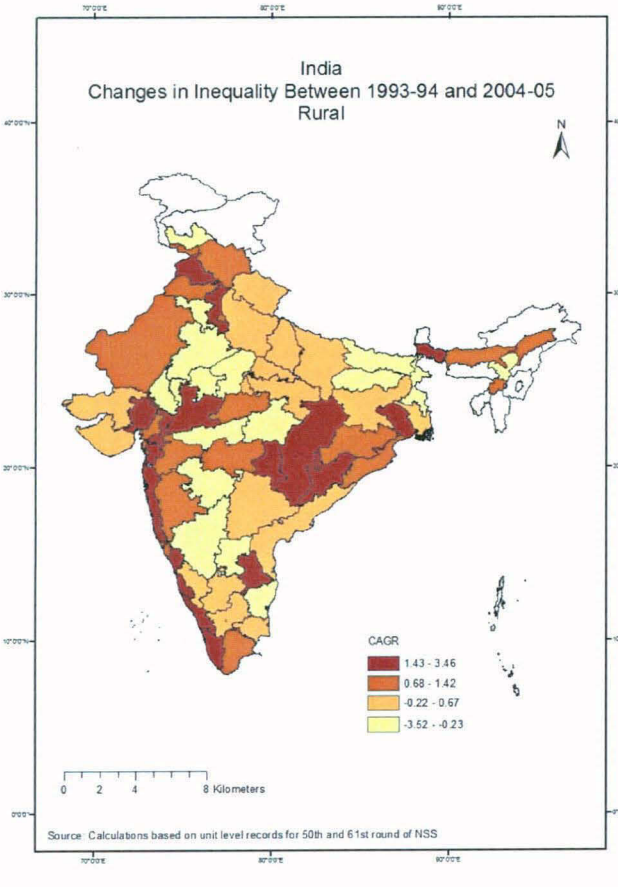
If we look for the contiguity, map does not depict any clear pattern. However, comparing regions with the states shows that the range of disparity at the sub-state level is more intense than the disparity between the states. The different regions within a state have different experience with respect to inequality growth. For example, Madhya Pradesh is experiencing lowest growth in inequality and is in the lowest quartile however out of its six regions and three are in lowest quartile and other three are in the remaining three different quartile class showing high intra-state disparities.

Maps: Changes in Inequality across Regions of India between 1993-94 & 2004-05

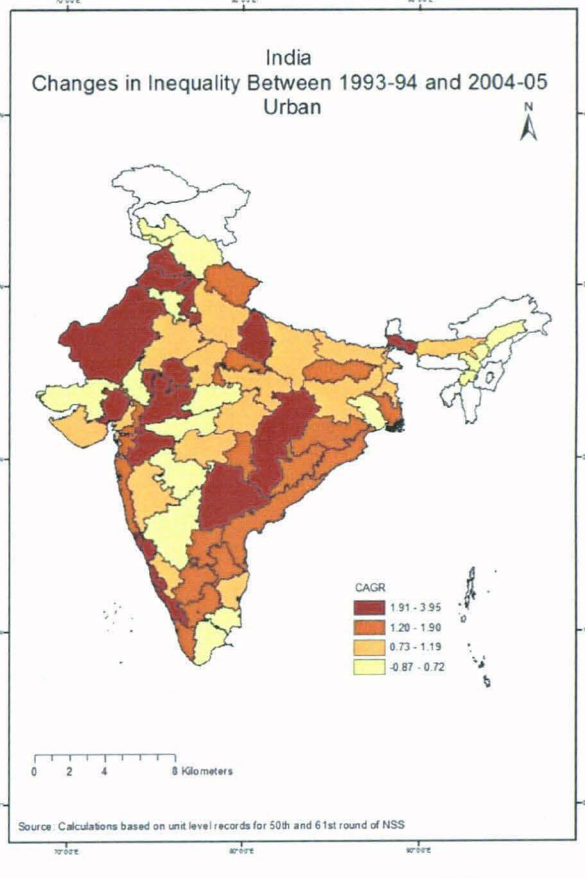
Map 3.16: Total



Map 3.17: Rural



Map 3.18: Urban



Summary

In the post-reform period there has been an overall increase in the growth rates of net state domestic product and average per capita expenditure but this growth has not been uniform across the states of India as well as across the regions of India and is varying over a wide range of values. The rates of growth of per capita net state domestic product turns out to be lower than the corresponding growth rates of per capita expenditure on household consumption. If we see sector wise, the urban India has been performing much better as compared to its rural counterpart. Extent of economic growth is also varying considerably for the agriculture and tertiary sector, with tertiary sector performing far better than the agriculture sector. The results at the regional level are also mirroring the state level results but region level disparities are more intense than the disparity between the states. Within a state, different regions are experiencing different outcomes. Coefficients of variation also show that during the period, the spatial variability in growth rates across the states and different agro-climatic regions of India has increased and in general these diversities have no tendency to fall in either of the sectors. In some regions, the neighbourhood effect is clearly visible. A region within a bad performing state is doing well as compared to other regions within that state because of proximity to a high growth region in a well performing state.

Poverty levels in India have fallen substantially during 1993-94 and 2004-05. Poverty rate dropped in both rural and urban areas; however, the urban India seems to perform better than the rural counterpart. Across the states of India, the poverty has fallen in almost all states although at varying rates. In case of other two indicators of poverty, i.e., poverty gap ratio and squared poverty gap ratio, there is a mixed trend. In some states, these indicators depict a similar trend as observed in the case of head count ratio while in other states there is a different picture. However, overall impression is that of improvement in the poverty situation. Also, if we see the state wise ranking of the states then in the second period; the states like Bihar, Orissa, Uttar Pradesh, Madhya Pradesh and Chhattisgarh are constantly at the bottom positions. Region wise analysis shows that within a state, there are wide interregional differences in terms of poverty reduction. But the overall picture is same. Although the number of regions in which poverty has declined is more in the rural areas but the rate of decline seems more to be in the urban areas. Institutions play a very important role in shaping the

poverty outcomes. The positive spill over effects of the neighbouring state or region can also be seen.

The gini coefficient had increased during 1993-94 and 2004-05 for all India, in almost all the states as well as in most of the regions. It has increased for total, rural and urban India but the gini figures for all urban areas are larger than their rural counterpart for the years 1993-94 and 2004-05. It shows that inequality is more pronounced in the urban areas. Also, as shown by the compound annual growth rate between 1993-94 and 2004-05, the inequality rose sharply in the urban economy in almost all the states.

To sum up, the state and region-level estimates of growth, poverty and inequality shows that the range of disparity at the sub-state level within a state is more intense than the disparity between the states. Moreover, there has been an intense rural-urban divide. The question here is what explains the existence of spatially-correlated differential trajectories of growth, poverty and inequality in rural and urban areas? Is there something beyond individual and household characteristics, access to public infrastructure and geographic attributes etc. that can explain these outcomes?

CHAPTER IV

Relationship between Growth, Poverty and Inequality at the Regional Level in India

4.1 Introduction

Most of the economic literature opines that after the economic reforms of 1991, there is a sharp rise in the rate of economic growth. But the important question is that how this economic growth is affecting the levels of poverty and inequality in the Indian economy. This impact of economic growth on poverty and inequality has been a matter of great interest. The existing literature is of the view that economic growth is beneficial for poverty reduction (Ravallion and Datt, 1996; Deaton and Dreze, 2002; Bhanumurthy and Mitra, 2004; Dev and Ravi, 2007). With respect to inequality, the view is that growth widens income disparities (Jha, 2000; Bhanumurthy and Mitra, 2004; Sen and Himanshu, 2004; Bhaduri, 2008). The most famous study (Kuznets, 1955) found that in the early stages of growth the inequality widens. However, if we try to explore the inter linkages between these variables then the view is that if economic growth is benefitting the rich more than inequality gets widened and there will be less poverty reduction in spite of the fact that the average incomes are increasing and if it's benefitting the poor more than inequality decreases and poverty also declines. It also clarifies that rising inequality acts as an impediment in poverty reduction. Kakwani and Pernia (2000) have termed the situation where growth is benefitting the poor more as pro-poor growth.

In view of these outcomes this chapter makes an attempt to examine the causal relations of growth with poverty and distribution based on the recent data. Here, poverty has been measured as head count ratio. As already pointed out, drawing conclusion from the relationship between growth, poverty and inequality at an aggregate level can sometimes be misleading. In this chapter the relationship is discovered at the state as well as NSS region level.

4.2 Relationship between Economic Growth and Changes in Poverty in India

The most important question explored in this section is whether rapid growth between 1993-94 and 2004-05 lead to decline in the level of poverty also. In this section we

will analyse the impact of sectoral growth[1] on the incidence of poverty[2], both rural versus urban and agriculture versus modern. Coefficient of correlation between growth and poverty in India are also estimated, both total and sectoral.

4.2.1 State Level Analysis

Table 4A.1 (appendix) tries to link poverty reduction with the annual growth in NSDP. The coefficient of correlation between these variables is positive but the relationship is not linear. For example, West Bengal growing at the rate of 4.84% per annum is able to reduce poverty only by 1.25% per annum while Kerala with almost same growth rate of 4.85% had a poverty reduction at a rate of 4.19% per annum. Goa and Madhya Pradesh in spite of having positive growth in per capita net state domestic product are not able to reduce poverty at all. In fact the poverty is increasing in these states. Interestingly, if we look at the slowest growing states i.e. states having growth rate of 3% or below, like Assam, Bihar, Chhattisgarh, Jammu & Kashmir, Jharkhand, Punjab and Uttar Pradesh, then there is a huge variation in the rate of poverty reduction ranging from as high as 6.23% per annum in Jammu & Kashmir to as low as 0.06% per annum in Chhattisgarh. Even if we look at the fast growing states i.e. having growth rate of 4% and above, like Andhra Pradesh, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Tamil Nadu and West Bengal then one can notice that the poverty reduction is in the range of 1.25% per annum in West Bengal to 4.19% per annum in Kerala.

If we see across sectors then agricultural growth is said to be an important factor for reducing rural poverty. Estimates of agricultural growth and rural poverty in India are given in table 4A.2 (appendix). The overall coefficient of correlation is showing a positive relationship between agricultural growth and rural poverty reduction. However, unlike growth in aggregate per capita net state domestic product, growth in agricultural per capita net state domestic product is negative in some states. These states include Assam, Chhattisgarh, Delhi, Karnataka, Madhya Pradesh and Orissa. But still some of these states are able to achieve poverty reduction. For example, in Assam poverty reduced by 3.74% per annum, followed by Karnataka having a

[1] For calculating economic growth we use (i) per capita net state domestic product (in constant 2004-05 prices) and (ii) average per capita expenditure, both expressed as the compound annual growth between the periods.

[2] Poverty is expressed as compound annual percentage decline in poverty calculated by compound annual growth rate formula.

poverty reduction of 3.70% per annum while in Chhattisgarh, Delhi and Orissa poverty reduced by 0.17%, 0.36% and 0.35% per annum. It is only in case of Madhya Pradesh that negative growth is followed by increase in poverty. Haryana has performed very well as it is able to reduce poverty by 4.30% per annum with a growth rate of only 0.40% per annum. It is clear that agriculture growth, although slow, have contributed positively to poverty reduction in the rural areas. Himanshu (2007) found it surprising that despite very slow agricultural growth poverty has reduced significantly after the late 1990s.

In tertiary sector, coefficient of correlation between annual growth of per capita net state domestic product and the urban poverty reduction comes out to be 0.29 showing a positive relationship between tertiary sector growth and urban poverty reduction (see appendix table 4A.3). But again there are some exceptions. The growth rate is positive in all the states of India but incidence of poverty has increased in states like Chhattisgarh, Goa, Jammu & Kashmir, Madhya Pradesh, Orissa and Uttaranchal showing a negative relation between tertiary sector growth and the urban poverty reduction. Interestingly, high growing states like Andhra Pradesh, Haryana, Karnataka, Kerala and West Bengal growing at an annual rate of 6% and above are able to reduce poverty only in the range of 0.69% to 3.69% in Haryana and Andhra Pradesh. Himachal Pradesh growing at the rate of 5.14% per annum is able to reduce poverty at the rate of 9.48% per annum. Here it seems that the states with high economic growth are able to reduce poverty at a slower rate than the states with low level of economic growth. West Bengal and to some extent Jharkhand, provide examples for both cases.

Table 4A.4 (appendix) provides the rate of growth in average per capita expenditure and rate of poverty reduction during 1993-94 and 2004-05. The overall coefficient of correlation between these two variables is 0.57 showing a positive relationship between economic growth and poverty reduction. If we look state-wise, there is a positive relationship between economic growth and poverty reduction among all the states with a few exceptions. The exceptional states are Goa and Madhya Pradesh which in spite of having positive growth in average per capita expenditure are not able to reduce poverty; in fact the poverty is increasing in these states. Kerala growing at the highest rate of 9.33% per annum is able to reduce poverty by 4.19% per annum which is the highest decrease in poverty. In other states the relationship is not linear.

Some states are able to reduce poverty at a faster rate than other states for almost same level of growth. For example, Andhra Pradesh and Karnataka growing at the rate of 7.87 % and 7.56 % per annum had a poverty reduction at a rate of 3.59% and 3.52% per annum, while Gujarat and Maharashtra with almost same growth rate of 7.75% and 7.74% per annum is able to reduce poverty only by 1.49% and 2% per annum.

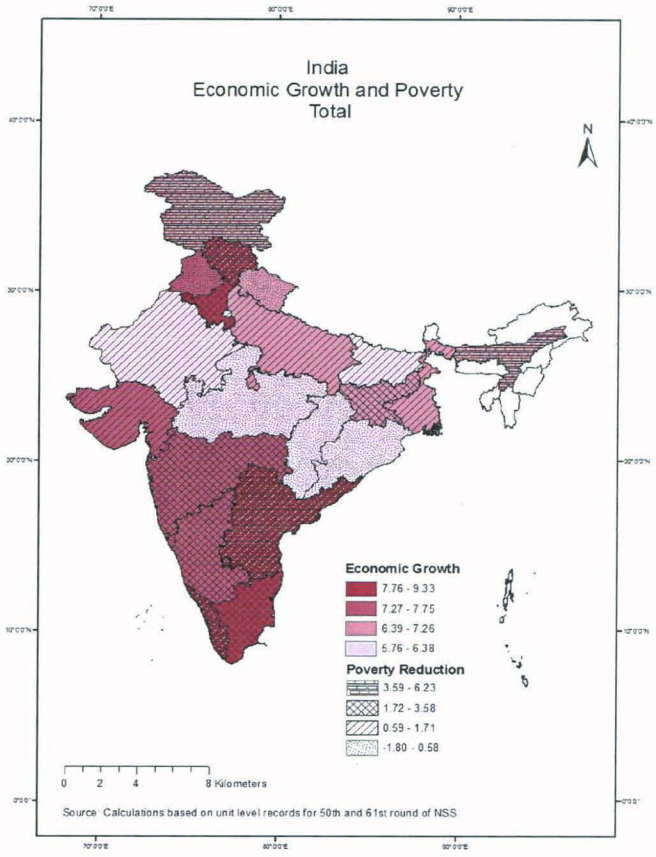
In rural sector, coefficient of correlation between growth in average per capita expenditure and rural poverty reduction is 0.62 showing positive relationship between them (see appendix table 4A.5). However, with increase in growth rate poverty is not reducing in all the states. In Goa, Madhya Pradesh and Punjab the poverty is increasing in spite of an increase in rate of economic growth. In other states the evidence is mixed.

In urban India, value of the coefficient of correlation is 0.48 showing a positive relationship between growth in urban average per capita expenditure and the urban poverty reduction (see appendix table 4A.6). If we look state-wise, the growth rate is positive in all the states of India but rate of poverty has increased in Chhattisgarh, Goa, Jammu & Kashmir, Madhya Pradesh, Orissa and Uttaranchal showing a negative relation between growth and poverty reduction in these states. Himachal Pradesh has performed exceptionally well reducing poverty at the rate of 9.48% per annum growing at the rate of 7.73% per annum. In other states, the economic growth is leading to poverty reduction although at different rates.

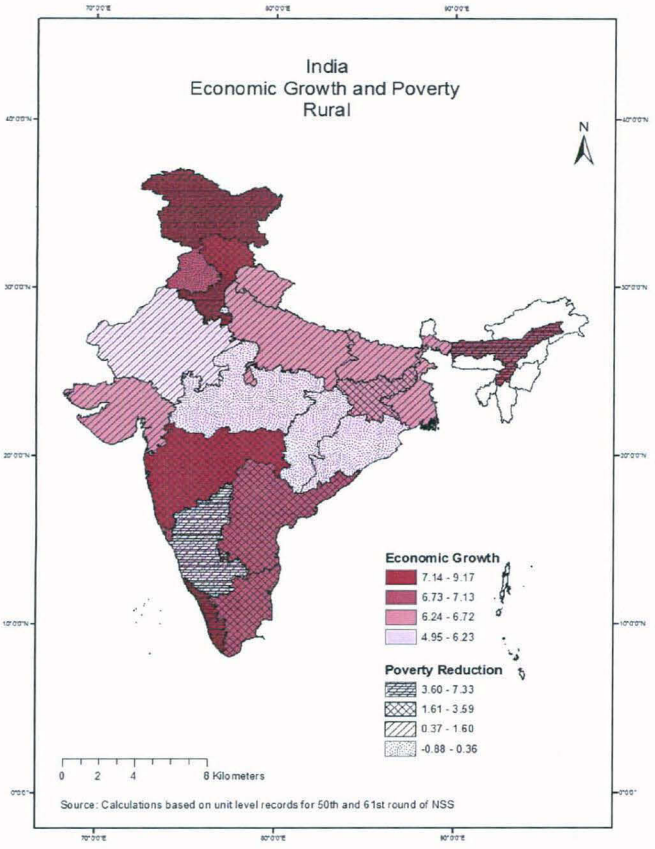
To identify the patterns of contiguity all the outcomes are mapped according to the quartile classes. The rate of economic growth as well as growth in poverty across states between 1993-94 and 2004-05 is presented in Map 4.1, 4.2 and 4.3, for overall and for the rural and urban areas separately. All the maps are self explanatory showing that in states where rate of economic growth is high, the rate of poverty reduction is also high. In the coastal states, high economic growth has trickled down to benefit the poor leading to high poverty reduction in these states. In the contiguous belt stretching from Rajasthan to Orissa and Uttaranchal to West Bengal, the states are experiencing relatively less economic growth which in turn is leading to less rate of poverty reduction during the period. It shows that across the states, there is a positive relationship between these variables.

Maps: Relationship between Economic Growth and Changes in Poverty at State Level between 1993-94 and 2004-05

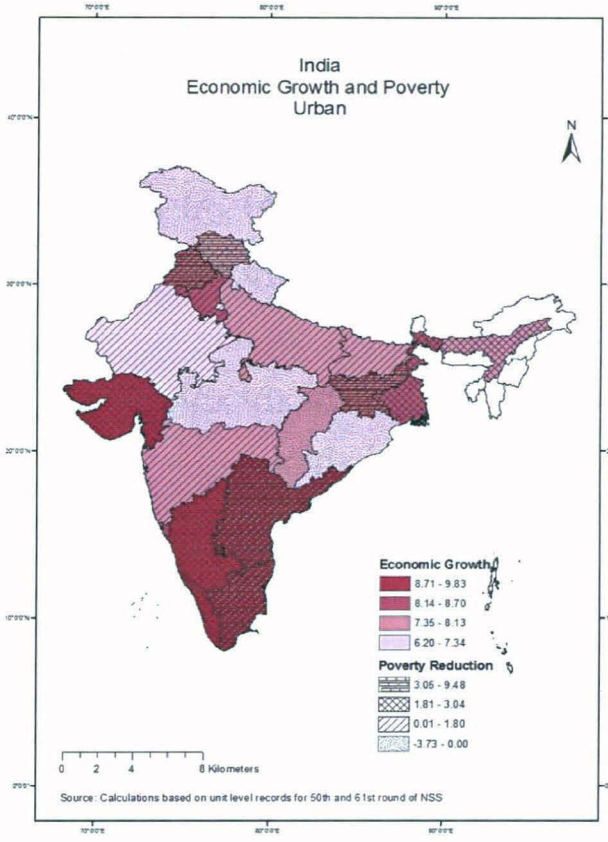
Map 4.1: Total



Map 4.2: Rural



Map 4.3: Urban



4.2.2 Region Level Analysis

The above results can be buttressed by analysing regional pattern of poverty reduction and relating them to patterns in economic growth which improved sharply between 1993-94 and 2004-05.

The value of coefficient of correlation between aggregate growth and aggregate poverty reduction comes out to be 0.74 showing a positive association between these variables across the regions of India (see appendix table 4A.7). Although, growth rate is increasing in all 63 regions, poverty is decreasing in only 47 regions while in remaining 16 regions poverty is increasing.

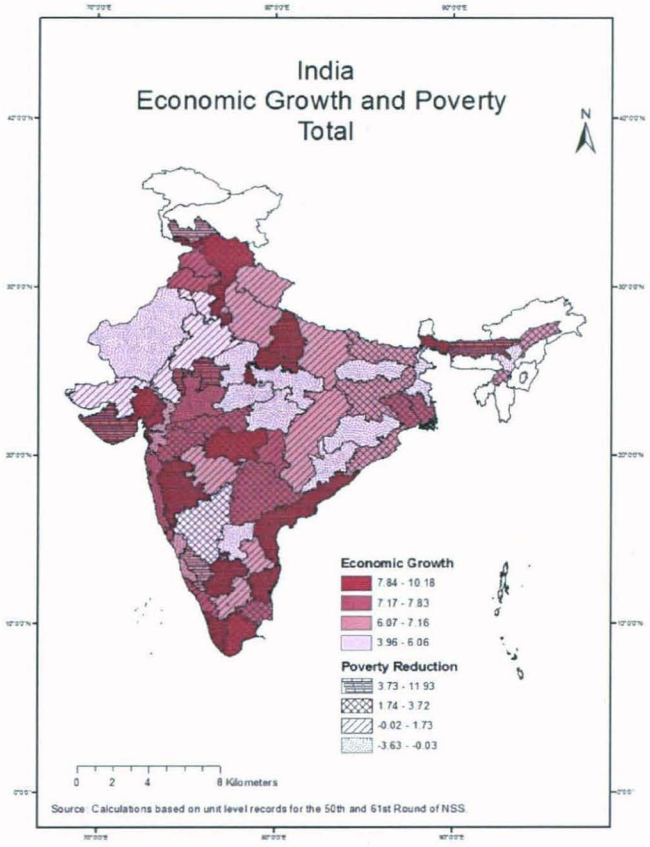
In the rural sector, coefficient of correlation is 0.73 showing a positive association between growth and poverty reduction across the rural regions of India (see appendix table 4A.8). Growth rate of average per capita expenditure is increasing in all the NSS regions but poverty is decreasing in 47 regions while in remaining 16 regions poverty is increasing.

Across the urban regions, the value of coefficient of correlation comes out to be 0.68 showing a positive association between growth and poverty reduction in rural regions of India (see appendix table 4A.9). Average per capita expenditure is growing in all the NSS regions but poverty is decreasing in 42 regions while in remaining 21 regions poverty is increasing.

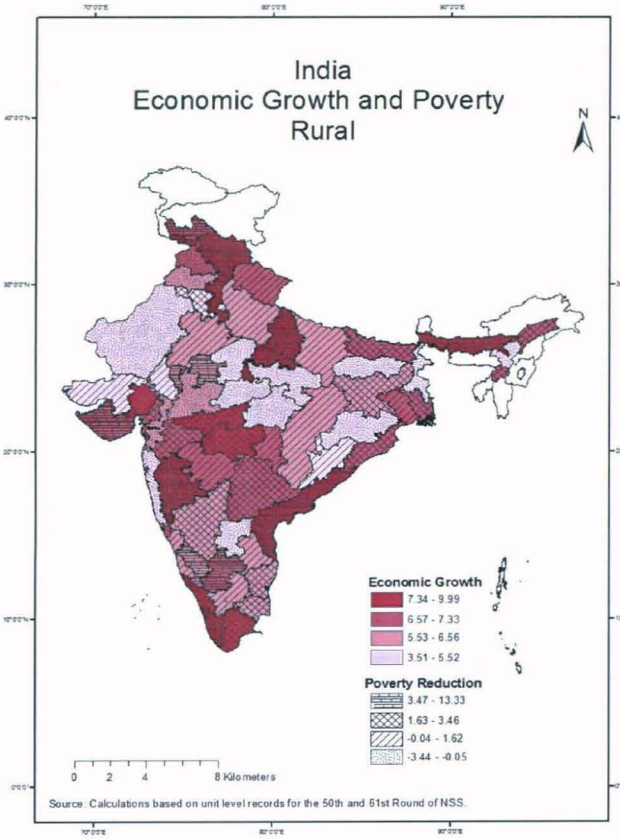
Map 4.4, 4.5 and 4.6 below are presenting rate of economic growth as well as growth in poverty at the regional level. The continuous regions stretching from Western region of Rajasthan to the Coastal region of Orissa is experiencing relatively low rate of economic growth but the rate of poverty reduction is different in different regions. It shows that the relationship between the two variables is not linear. For same rate of economic growth, two regions are experiencing different rates of poverty reductions. In the remaining India there is no clear pattern of contiguity but it is clear that the range of disparity at the regional level is more intensive than the disparity between the states. Two regions within a state are experiencing different outcomes.

Maps: Relationship between Economic Growth and Changes in Poverty at Region Level between 1993-94 and 2004-05

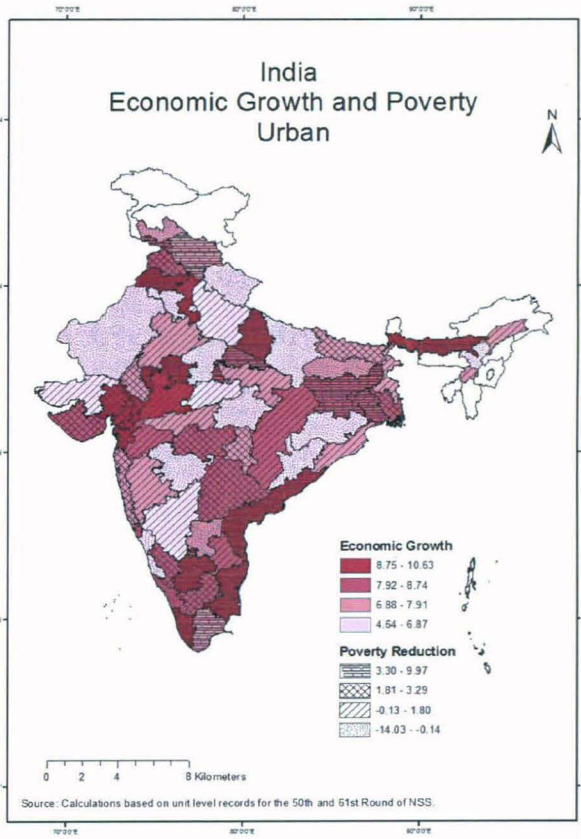
Map 4.4: Total



Map 4.5: Rural



Map 4.6: Urban



4.3 Relationship between Economic Growth and Changes in Inequality

The economic literature argues that economic growth is followed by an increase in inequality. It would be interesting to examine whether states and regions with a higher growth between 1993-94 and 2004-05 also had higher increase in inequality. This section provides a detailed discussion on the relationship between growth and inequality and discusses the results obtained based from the all-India, state as well as region-wise analysis.

4.3.1 State Level Analysis

Coefficient of correlation between growth rate in per capita net state domestic product and increase in inequality comes out to be 0.29 showing positive association between them (see appendix 4A.10). Economic growth is leading to increase in inequality in all states except Jammu and Kashmir where inequality is decreasing. Some states like Andhra Pradesh, Goa, Haryana, Himachal Pradesh, Karnataka, Tamil Nadu and West Bengal although growing at the rate of 4% and above are able to keep growth of inequality below 2% per annum While in fastest growing state Kerala, the inequality is increasing at the rate of 2.18% per annum.

In agriculture sector, value of coefficient of correlation between growth in per capita net state domestic product and rural inequality comes out to be *-0.29* showing negative relationship between these variables (see appendix 4A.11). It shows that agriculture growth in India is leading to a decrease in inequality. In Assam, Chhattisgarh, Delhi, Karnataka and Orissa, growth rate in per capita net state domestic product is negative but still the inequality is increasing in all these states while in some states like Bihar, Jharkhand, Rajasthan and Tamil Nadu inequality is decreasing despite positive growth rates in all these states. It is only in Madhya Pradesh that negative growth is accompanied by a decrease in inequality.

In tertiary sector, coefficient of correlation between growth per capita net state domestic product and urban inequality comes out to be 0.03 showing very little but positive relationship between these variables (see appendix 4A.12). Except Himachal Pradesh and Jammu and Kashmir, inequality is increasing in all states.

Comparing growth in average per capita expenditure with the growth in Gini coefficients shows that coefficient of correlation between rate of growth in average

per capita expenditure and rate of increase in inequality comes out to be 0.42 which shows a positive relationship between economic growth and increase in inequality (see appendix 4A.13). With an exception of Jammu and Kashmir where inequality is decreasing, there is a positive relationship between economic growth and increase in inequality among all the states. Although, average per capita expenditure is increasing in all the states, inequality is increasing at varying rates. Kerala growing at the highest rate is facing growth in inequality at the rate of 2.18 % per annum while some other states with high economic growth are able to keep inequality at low level.

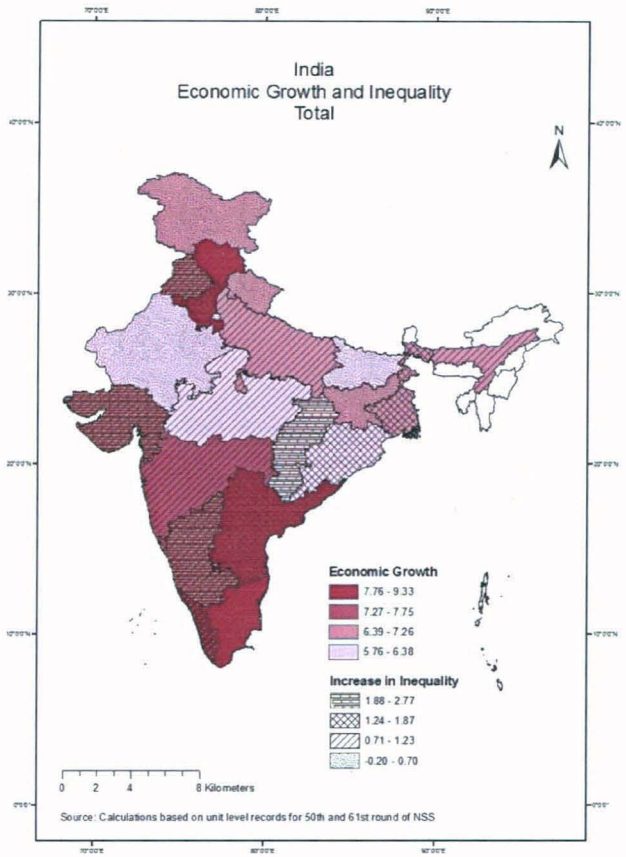
The overall coefficient of correlation between growth rate of rural average per capita expenditure and increase in rural inequality is 0.37 showing positive relationship between them (see appendix 4A.14). Average per capita expenditure is growing in all the states and inequality is also increasing in almost all the states except Bihar, Jharkhand, Madhya Pradesh, Rajasthan and Tamil Nadu. All these states growing at the rate of 5% and above show that it is not necessary that growth is always accompanied by an increase inequality and in some cases there can be an improvement in the inequality condition.

In urban sector, coefficient of correlation between growth rate of average per capita expenditure and increase in urban inequality is 0.32 showing little and positive relationship between them (see appendix 4A.15). Urban average per capita expenditure is increasing in all the states and is accompanied by an increase in inequality in most of the states with the exception of Himachal Pradesh and Jammu and Kashmir where inequality is decreasing.

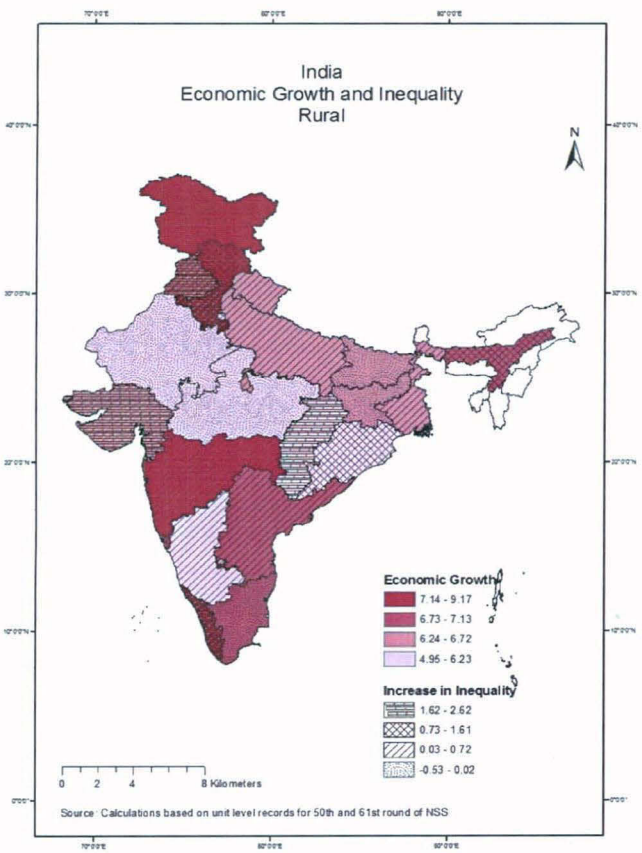
Map 4.7, 4.8 and 4.9 below is presenting the rate of economic growth as well as growth in inequality across states between 1993-94 and 2004-05. In states where rate of economic growth is high, rate of increase in inequality is also high showing the positive relationship between economic growth and increase in inequality. In the coastal states, rate of economic growth is high leading to high increase in inequality during the period. The belt stretching from Rajasthan to Orissa and Uttaranchal to West Bengal is experiencing relatively less economic growth but the rate of increase in inequality is different in different states. It shows that the relationship between these variables is not linear and for same rate of economic growth, different states are experiencing different rate of increase in inequality.

Maps : Relationship between Economic Growth and Changes in Inequality at State Level between 1993-94 and 2004-05

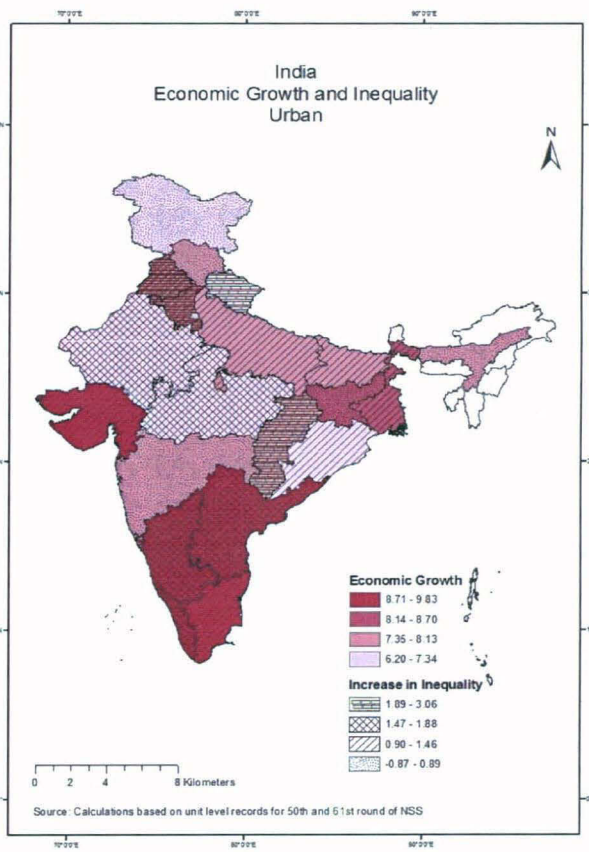
Map 4.7: Total



Map 4.8: Rural



Map 4.9: Urban



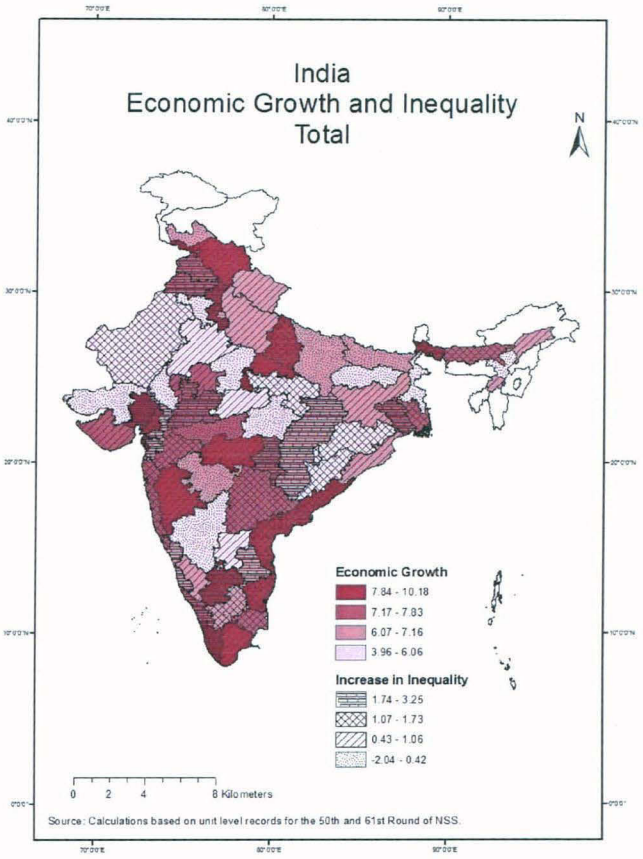
4.3.2 Region Level Analysis

The value of coefficient of correlation between growth and increase in inequality comes out to be 0.51, 0.43 and 0.37 in total, rural and urban areas respectively showing a positive association between these variables across the regions of India (see appendix table 4A.16, 4A.17 and 4A.18). Although, for India as a whole, average per capita expenditure is growing in all the 63 NSS regions but inequality is increasing in 51 regions while in remaining 12 regions inequality is decreasing. In rural and urban India also, growth rate of average per capita expenditure is increasing in all the NSS regions but inequality is increasing in 44 rural and 56 urban regions while in remaining 19 rural and 7 urban regions inequality is decreasing. However, the overall impression is of increasing inequality with an increase in growth rate of economy. The view that growth widens income disparities has been supported by many scholars (Jha, 2000; Bhanumurthy and Mitra, 2004; Sen and Himanshu, 2004; Bhaduri, 2008).

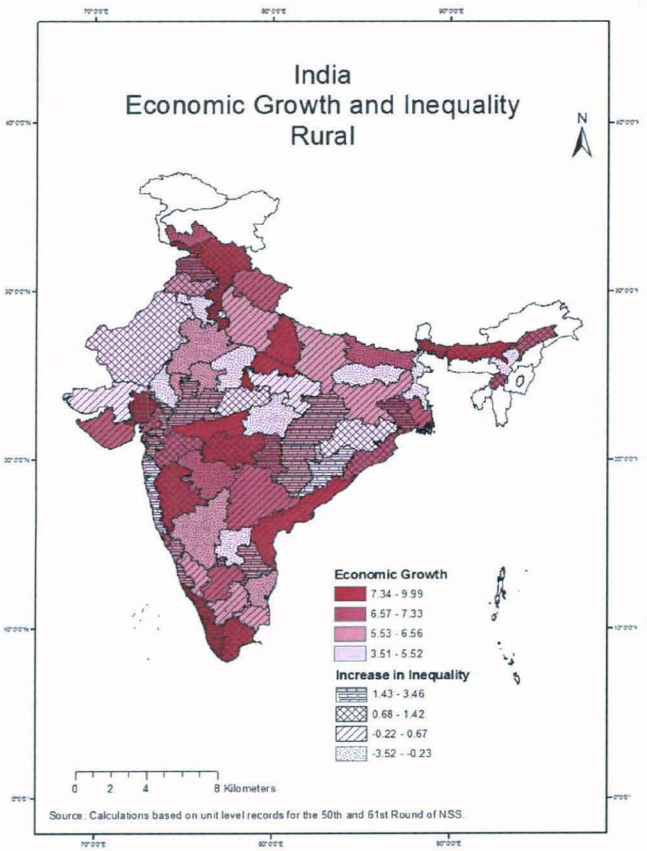
To analyze spatial patterns in explaining the relationship between economic growth and inequality we have created maps where growth and inequality outcomes are mapped on the basis of quartile classes. Map 4.10, 4.11 and 4.12 below are presenting the rate of economic growth as well as growth in rate of inequality at the regional level. It can be seen that the belt stretching from Western region of Rajasthan to the Coastal region of Orissa is experiencing low rate of economic growth, however, rate of increase in inequality is different in different regions. It shows that the relationship between these two variables is not linear. For same rate of economic growth, two regions are experiencing different rates of increase in inequality. In remaining regions there is no clear pattern of contiguity but it can be seen that at the regional level there is a wide range of disparity.

Maps: Relationship between Economic Growth and Changes in Inequality at Region Level between 1993-94 and 2004-05

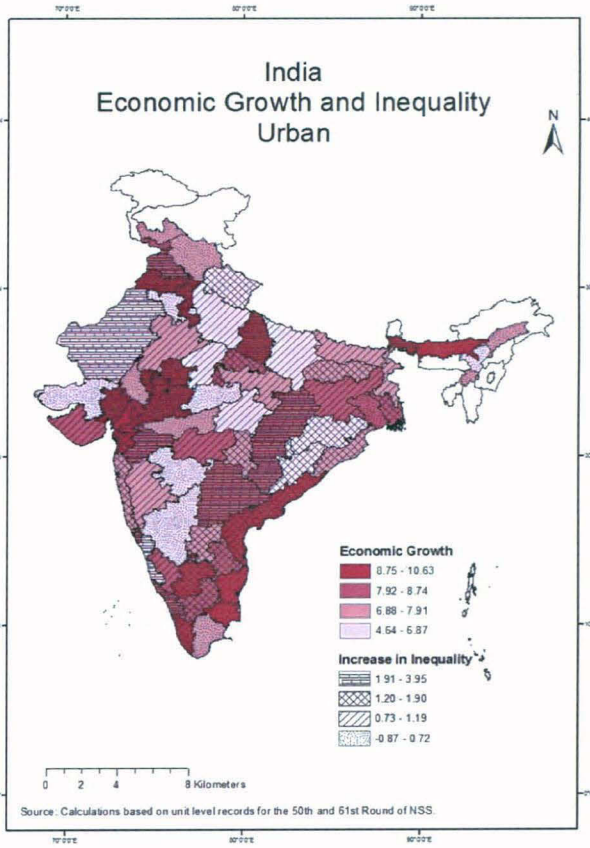
Map 4.10: Total



Map 4.11: Rural



Map 4.12: Urban



4.4 Spatial Pattern of Economic Growth, Poverty and Inequality

The issues of impact of growth on poverty and inequality separately have been already discussed at length. Sen and Himanshu (2004) revealed that poverty reduction has been held back during the growth period after 1991 due to increased inequalities. Here it will be interesting to analyze growth, poverty and inequality together.

4.4.1 State Level Analysis

For analyzing growth, poverty and inequality together, we have prepared a score table in which we have given a score 'win' to growth if rate of economic growth is increasing and 'lose' if rate of economic growth is decreasing during 1993-94 and 2004-05. Similarly, we have given a score 'win' to poverty if rate of poverty is reducing and 'lose' if the rate of poverty is increasing. Finally, we have given a score 'win' to inequality if there is a decrease in the rate of inequality and 'lose' if rate of inequality is decreasing. In this way we got outcomes like 'WWW' (economic growth, poverty reduction and decrease in inequality), WWL, WLW, WLL etc.(see appendix table 4A.19).

The outcomes of the score table are mapped to get a clear picture. There are a variety of experiences faced by the states of the Indian economy. For India as a whole, the picture is quite clear. In most of the states the outcome is WWL which means that both growth and inequality are increasing and the poverty is decreasing (see appendix table 4A.19 and Map 4.13). It means that the positive effect of growth has overtaken the negative effect of inequality on poverty. The most preferred outcome is shown by Jammu and Kashmir where there is increase in economic growth and decrease in both poverty and inequality. In Madhya Pradesh, rate of economic growth as well as rate of poverty and inequality is increasing. It means that the adverse effects of rising inequality are offsetting the positive effects of growth on the poor.

For rural India again, in most instances the score is WWL showing that the increasing rate of economic growth is leading to increase in inequality as well as a decrease in inequality (see appendix table 4A.19 and Map 4.14). In Bihar, Jharkhand, Rajasthan and Tamil Nadu, all the outcomes are positive showing that economic growth can lead to decrease in poverty and inequality simultaneously. In Madhya Pradesh, economic growth is positive leading to a decrease in inequality but still the poverty is

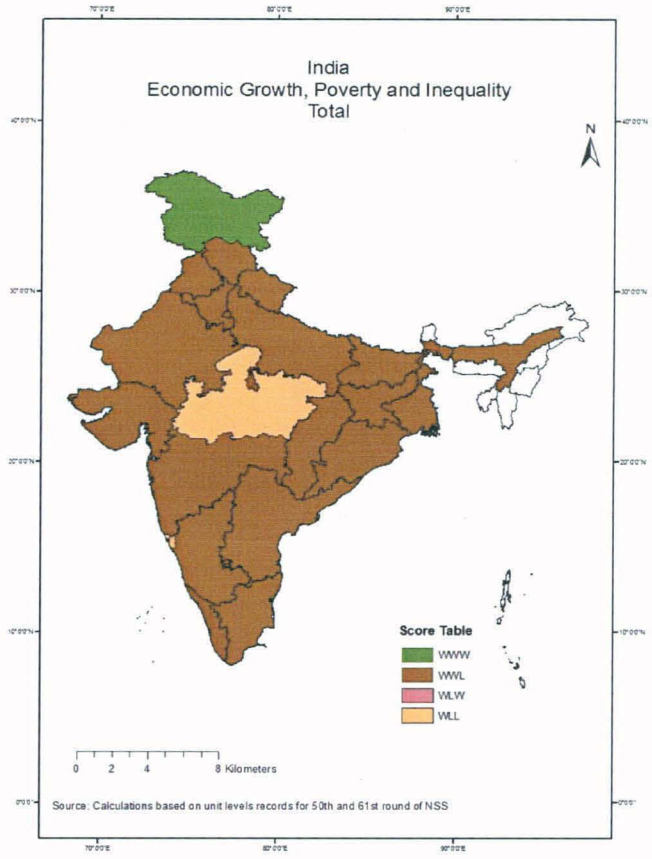
increasing. It seems that there are some certain factors other than growth and inequality which are affecting growth of poverty. In Punjab rate of inequality have risen in the process of economic growth and poverty is also increasing indicating that the adverse effects of rising inequality are offsetting the positive effects of growth on the poor

In the urban counterpart, in most states economic growth is accompanied by an increase in inequality but still poverty is decreasing showing that economic growth is benefitting the poor more (see appendix table 4A.19 and Map 4.15). In Uttaranchal, Madhya Pradesh Chhattisgarh and Orissa economic growth is leading to increase in both poverty and inequality indicating that the adverse effects of rising inequality are offsetting the positive effects of growth on the poor. Himachal Pradesh is showing positive outcomes in all three variables. In Jammu and Kashmir, economic growth is accompanied by a decline in inequality but poverty is still increasing reflecting the role of other factors in affecting poverty rate.

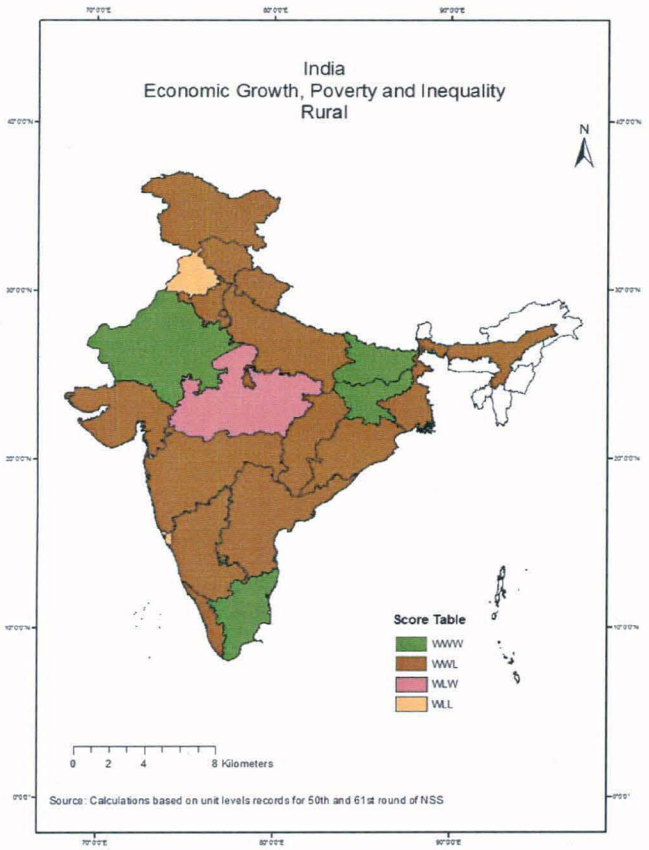
If we compare the outcome 'WLL' in rural and urban areas then it seems that the adverse impact of distribution on reduction in poverty is much more in urban areas. In rural sector it is only Punjab where the adverse effects of rising inequality are offsetting the positive effects of growth on the poor while in urban areas there are four states; Uttaranchal, Madhya Pradesh Chhattisgarh and Orissa.

Maps: Relationship between Economic Growth, Poverty and Inequality at State Level between 1993-94 and 2004-05

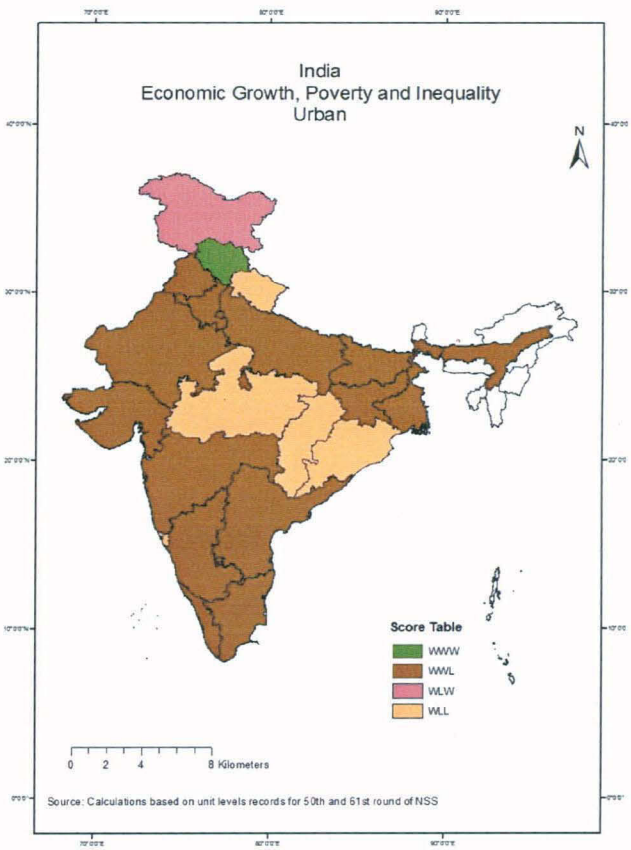
Map 4.13: Total



Map 4.14: Rural



Map 4.15: Urban



4.4.2 Region Level Analysis

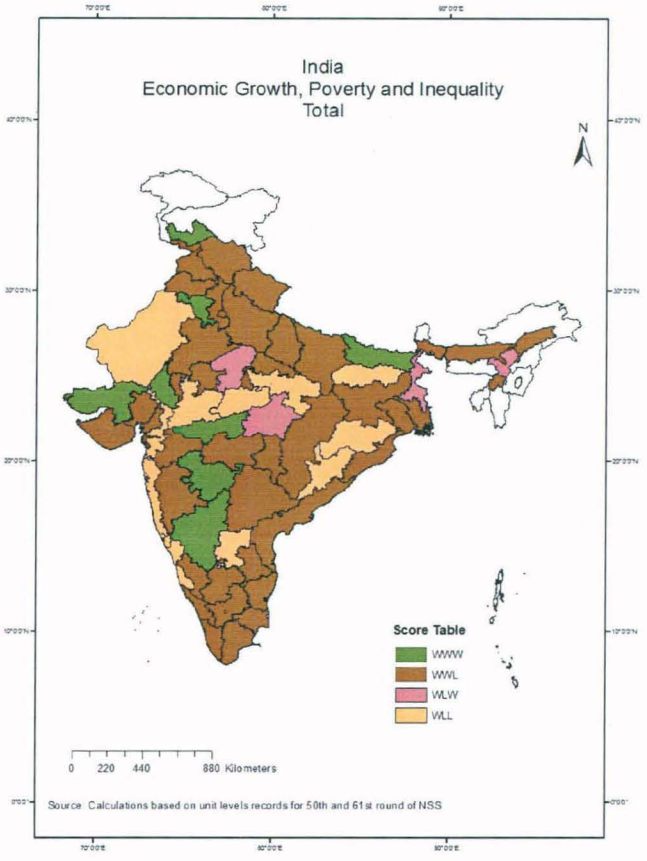
The outcomes of the score table with respect to changes in economic growth, poverty and inequality across regions is presented in Map 4.4, 4.5 and 4.6. Although, all the maps are self explanatory we will discuss the broad outcomes in brief. It can be seen that the outcomes of the states are not being followed by the regions. Different regions within a state are showing different outcomes.

For India as a whole, the region-wise results are quite different from the state-wise results (see appendix table 4A.20 and Map 4.16). In Madhya Pradesh the adverse effects of rising inequality are offsetting the positive effects of growth on the poor leading to increase in both poverty and inequality despite increasing rate of economic growth but if we see regions then 3 regions are showing the same outcome as state, in one region increasing growth is leading to a decrease in both poverty and inequality while in 2 regions despite economic growth and decrease in inequality, poverty rate is increasing. Similarly, in some other states, different regions within the states are exhibiting different outcomes. In rural India also, the regions presents mixed outcomes (see appendix table 4A.20 and Map 4.17). For, instance, in Karnataka, the overall state is showing increase in rate of both economic growth and inequality and a decrease in poverty but out of four regions, two are showing positive outcomes for all three variables. For urban India also regions are showing different pattern as compared to state.

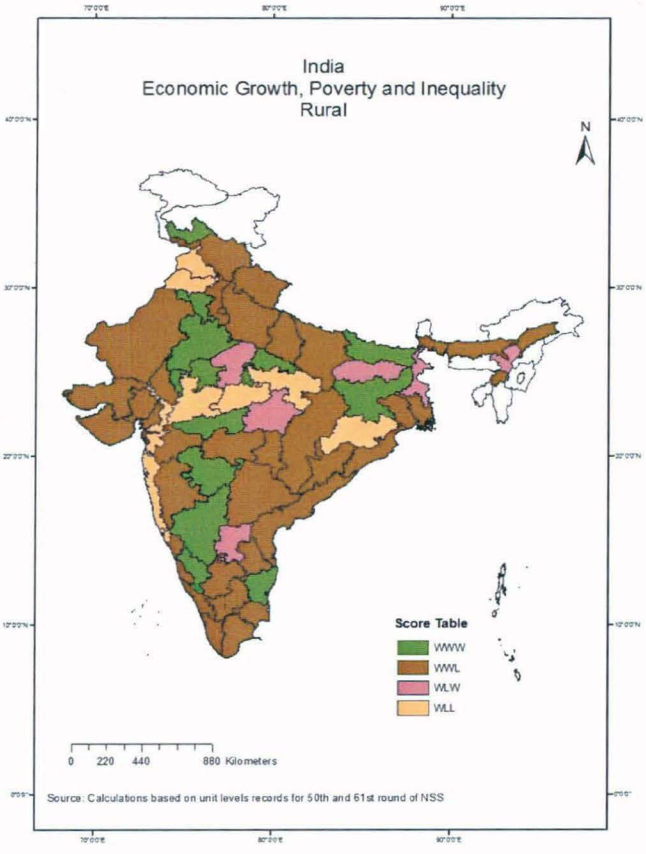
In case of Madhya Pradesh South Western region the neighbourhood effect seems to have worked. In Madhya Pradesh the score is WLL but in South Western region the score is WWW showing positive rate of economic growth as well as decrease in both poverty and inequality. It might be due to the positive neighbourhood effect of the Inland Central region of Maharashtra while is performing well with respect to all these variables.

Maps: Relationship between Economic Growth, Poverty and Inequality at Region Level between 1993-94 and 2004-05

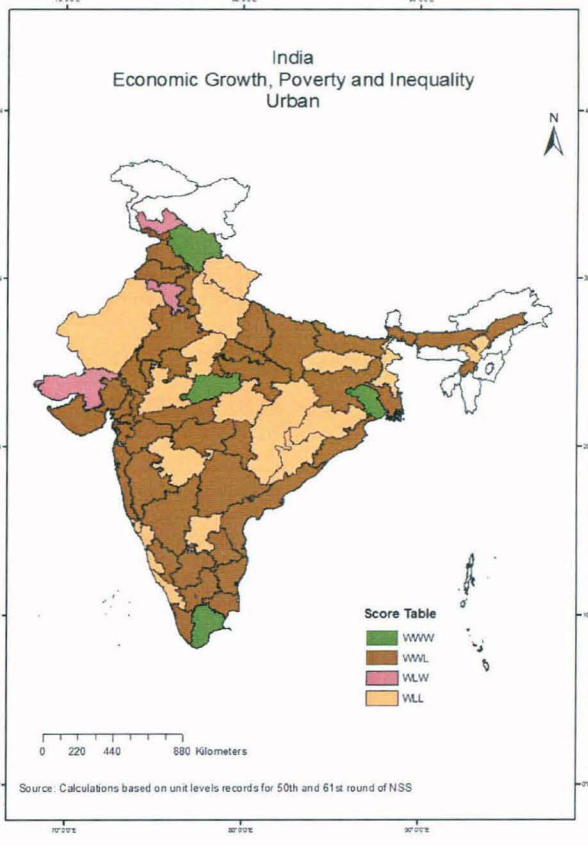
Map 4.16: Total



Map 4.17: Rural



Map 4.18: Urban



Summary

In most instances, the states and regions that have been successful in terms of economic growth are also very likely to be successful in terms of poverty reduction. It shows that there is a positive relationship between these variables. The sign of coefficient of correlation between economic growth and poverty reduction is also positive showing a direct relationship between these variables. However, it seems that the fruits of high rate of growth are not well distributed. In spite of overall increase in the growth rates certain pockets of the states are not able to make any improvement in poverty condition. In certain cases states with low level of economic growth are able reduce poverty at a faster rate than the states with high economic growth. Moreover, the relationship is not linear. Some states and regions having same rate of economic growth are experiencing different rate of poverty reductions.

Comparing the rate of economic growth with the growth in gini coefficients shows that in most of the instances, the inequality has increased among the growing states and regions. In most instances there is a positive correlation between rates of economic growth and increase in inequality but again relationship between the two variables is not linear.

Looking at the combined picture of all these variables gives mixed set of results. In most states, economic growth in the post-reform period (1993-2005), is accompanied by an increase in inequality but still poverty is decreasing showing that economic growth is benefitting the poor more while in some other cases in spite of higher growth there is no decline in poverty because increased inequality in the post-reform period seems to have offset the impact of increasing growth on which in turn slowed down the rate of poverty reduction. In few cases, there is increase in economic growth and decrease in both poverty and inequality showing the most preferred outcome. In certain cases faster rate of economic growth is leading to no decline in poverty despite more equitable distribution. It shows that there are certain factors other than growth and inequality which are also playing some role in affecting poverty levels. Institutions play a very important role in shaping the dynamics of growth and its outcomes. In some regions, the neighbourhood effect seems to have worked. Within a state having bad performance in any one or more variable, there is a region which is experiencing positive outcomes for all three variables.

However, the maps are clearly reflecting the dominance of score 'WWL' for all India as well as for the rural and urban areas separately. Therefore, it can be said that if there is sufficient economic growth, the poverty can be reduced.

When we use NSS regions rather than the states, as the unit of observation we find that the same kind of association holds between the interrelationships. However, it is seen that the range of disparity at the regional level is more intensive than the disparity between the states. Two regions within a state are experiencing different outcomes. Moreover, some regions having same rate of economic growth are experiencing different rate of poverty reductions and increase in inequality showing that the relationship between these variables is not linear. The important question here is 'Why similar rates of economic growth are associated with different rates of poverty reduction and increase in inequality?'

CHAPTER V

Summary and Conclusion

This study contributes to the ongoing debate on how the growth experienced by the Indian economy in the recent years is impacting poverty and income distribution? It also explores the spatial differences in growth, poverty and inequality in India. The spatial unit for this study is not only the 35 states of India but also regions within these states. The study attempts to analyze and understand the dynamics of growth process in India beyond the national averages. In this thesis the relationships between economic growth, poverty and income distribution is analysed for 22 states, and 63 NSS regions for the period 1993-94 and 2004-05 using NSSO consumption expenditure surveys.

Specifically, the study investigates whether the higher economic growth in the post reform period trickled down to favour the poor or is biased against the poor? Secondly, the study tries to find out whether the higher economic growth is accompanied by increased income inequality? Thirdly, the study looks into the relationship between economic growth, poverty reduction and increase in inequality. All these questions are examined at the national, state and sub national level.

The study finds that there has been an increase in the growth rates of net state domestic product and average per capita expenditure in the post-reform period. Both per capita net state domestic product and average per capita expenditure has almost double between 1993-94 and 2004-05. However, this growth has not been uniform across the states of India as well as across the regions of India and the variation in these values is over a wide range. Our results show that the rates of growth of per capita net state domestic product is lower than the corresponding growth rates of per capita expenditure on household consumption. This is consistent with findings of other studies and also suggests that the aggregate income numbers perhaps do not completely capture the consumption gains made at the household level. Sectoral analysis reveals that urban India has been performing much better as compared to its rural counterpart. The source of greater gains in consumption expenditure in urban India comes from far superior performance of the tertiary sector in recent years compared to the agriculture sector. It is well documented in the literature on economic

growth in India that in the post reform period agriculture sector has not performed too well. The findings of this study are no different on this score. Chapter III shows the temporal variability in growth in India over the last decade and also its spatial variability across different agro-climatic regions. The results indicate that regional level disparities are more intense than disparities at state level. Within a state, different regions are experiencing different outcomes. Temporal analysis shows that in the last eleven years the spatial variability in growth rates across the states and different agro-climatic regions of India has increased. This increased variability and differences in growth experience could be the reflection of the very characteristics of growth that has been initiated in India since the 1990s. All spatial units, perhaps, do not stand an equal chance to become beneficiary of this growth. Rather, regions or areas, having relatively more conducive characteristics for tertiary sector growth, or areas in the neighbourhood of 'successful' areas have greater chances to gain from this growth. We find that, in many instances, regions that are in proximity to a high growth region, within a bad performing state, are doing well as compared to other regions within that state. This suggests that proximity to a high growth region in a well performing state matters. This growth characteristic is quite similar to the one suggested by theories of Myrdal and Hirschman.[1] They found that there are certain regions having competitive advantage in terms of geographical area, natural ports, roads, good soil, environment, availability of raw materials etc. which help them to grow faster and sometimes at the cost of other regions which lead to increase in inequalities between the competing regions. However these theories also predicted a kind of convergence between the regions, in the long term, due to certain diseconomies. But the time period in which the current study has been done no such converging trend has been observed.

The analysis of change of poverty ratios shows that for the country as a whole, as well as in most of the states, the poverty rates has declined significantly between 1993-94 and 2004-05. Incidence of poverty is decreasing in rural areas but is decreasing more significantly in the urban areas showing that poverty is more of a rural problem than the urban one. These results are robust to different indices like Poverty Gap Index and Squared Poverty Gap Index. Ranking the states in ascending order of the growth of incidence of poverty shows that in Bihar, Orissa, Uttar Pradesh, Madhya Pradesh and

[1] Class Notes.

Chhattisgarh poverty has constantly increased. An inter-regional evaluation of poverty suggests that the interregional differences are far worse than inter-state differences. This result is similar to other studies which find high and increasing divergence in poverty below state-level (Dubey and Gangopaghyay, 1998; Jha and Sharma, 2003; Chaudhuri and Gupta, 2009). Mapping of changing poverty levels in this study helps us to identify pockets of poverty concentration across states and regions on which poverty alleviation policies must concentrate.

Analysis of change of inequality in India in this study shows that the gini coefficient had increased between 1993-94 and 2004-05 for India as a whole, in almost all the states as well as in most of the regions of the country. In general, urban inequality is found to be higher than the rural inequality in India as the gini figures for all urban areas are larger than their rural counterpart for the years 1993-94 and 2004-05, although there are a few exceptions. Also, as shown by the compound annual growth rate between 1993-94 and 2004-05, the inequality rose sharply in the urban economy in almost all the states during this period. The result also indicates that the inequality in household consumption had increased within as well as between the rural and urban areas during the whole period of analysis. This finding is quite significant since the literature on gini-coefficient suggests that gini coefficient is a robust measure of inequality which takes time to increase. The finding that inequality has sharply increased within the last decade suggests that the forces that increase inequality in the current growth processes are quite strong and need to be addressed specifically in policy if we wish to achieve more equitious and balanced growth outcomes.

The results of Chapter III clearly suggest increasing inter-state and intra-state disparities in economic growth, poverty and inequality during 1993-94 and 2004-05. Moreover, there has been an intense rural-urban divide at the state and even at the region-level.

The important question to ask, therefore, is what explains the existence of spatially-correlated differential trajectories of growth, poverty and inequality in different regions? Is there something beyond individual and household characteristics (caste, literacy, family size); access to public infrastructure and geographic attributes (like irrigation, neighborhood), etc? The significance of institutions (property rights, role of governance, minimising rent-seeking and corruption) cannot be minimised to

explain these outcomes. These are some questions which this study opens up for future research.

The study also analyzed the relationship between the three variables - growth, poverty and inequality. Mainly the analysis is concerned with whether the growth process in a country has been pro-poor or anti-poor. Results show that in most instances, the states and regions that have been successful in terms of economic growth are also very likely to be successful in terms of poverty reduction showing a positive relationship between these variables. However, it seems that the fruits of high rate of growth are not well distributed. In spite of overall increase in the growth rates certain pockets of the states are not able to make any improvement regarding incidence of poverty. In certain cases, states with low level of economic growth are able reduce poverty at a faster rate than the states with high economic growth. Moreover, the relationship is not linear. Some states and regions having same rate of economic growth are experiencing different rate of poverty reductions. These differential outcomes of growth on poverty further reinforce the need to analyse the significance and role of spatial, household and institutional factors in explaining growth outcomes.

An analysis of whether growth experienced by the economy is leading to worsening of distribution suggests that inequality has increased among the growing states and regions. The study suggests that there is a positive correlation between rates of economic growth and increase in inequality but perhaps the relationship between these two variables is not linear.

Looking at the inter-relationship between the three variables we get mixed set of results. In most states, economic growth during 1993-94 and 2004-05 is accompanied by an increase in inequality but still poverty is decreasing showing that economic growth is benefitting the poor more. We have shown these results in some of our maps where the dominant score of 'WWL' is evident (First W reflects growth, second W reflects poverty reduction and L reflects increase in inequality; Win Win Lose). The study has captured these outcomes for all India as well as for the rural and urban areas separately. Since this is the score for most of the states it can be said that with sufficient economic growth, poverty can be reduced. However in some other cases the score is WLL showing that in spite of higher growth there is no decline in poverty. This could be the result of increased inequality in the post-reform period that may

have offset the impact of increasing growth on poverty reduction. In certain cases the score is WLW which means faster rate of economic growth is not leading to decline in poverty despite an equitable distribution. This means that there are factors other than growth and inequality which are also playing some role in affecting incidence of poverty. In some regions, the neighbourhood effect seems to have worked. In some cases a region is experiencing positive outcomes for all three variables (WWW) even when the state that it belongs to is performing badly. In few cases, there is increase in economic growth and decrease in both poverty and inequality showing that there are some sufficient conditions under which most optimal outcome is achievable. It is interesting to note that some of the states having score WWW are the ones which are high on the overall devolution index (NCAER, 2008). This does suggest that some institutions work in favour of the poor and which help in keeping the level of inequality at bay and at the same time are transforming the economic growth directly into the reducting of poverty.

Overall scenario is that the range of disparity at the regional level is more intensive than the disparity between the states. Two regions within a state are experiencing different outcomes. Moreover, some regions having same rate of economic growth are experiencing different rate of poverty reductions and increase in inequality showing that the relationship between these variables is not linear. The important question that comes out from the analysis of Chapter IV is 'Why similar rates of economic growth are associated with different rates of poverty reduction and increase in inequality?' And can we depend completely on the market led trickle down mechanism for helping the poor?

There are a number of lessons that can be derived from the current study on interrelationship between inequality, growth, and poverty in India. These are all relevant for analytical as well as policy perspectives.

The exception to general trend i.e. regions and states with high growth and increasing poverty proves that growth alone would not be sufficient for reduction in poverty. Moreover, change in distribution in the process of economic growth, impacts the strength of economic growth to bring changes in poverty but study finds that having a more equal income distribution is not always favourable for poverty reduction. This straight ward implies that the cause of slower poverty reduction should not only be

sought in the causes of inequality or growth and signifies existence of other factors in explaining poverty outcomes.

Other than this if we look at the level of NSS regions, the disparities in the rate of economic growth, incidence of poverty and rate of inequality is much higher. The outcomes in some cases may depend on the performance of the neighbouring state or region as well. This does suggest that there is a spatial angle to the problem of poverty and inequality. It signifies that we need to focus on 'inclusive growth'. It should be ensured that the process of economic growth spreads to backward states as well as regions. This strategy of inclusive growth should be combined with other to have major poverty reduction and decline in inequality in the economy.

The mapping of poverty across the regions enables easy identification of the pockets of critical poverty which requires urgent and more focused attention. Moreover, in view of intense disparity at the regional level, it can be misleading to design strategies on the basis of policy recommendations emerging from state level analysis. The scenario can be entirely different once the analysis is done at micro-level. This demands that policies should be designed and implemented at regional level rather than at the state level.

These results of the study are very interesting and at the same time they are suggestive of some further extensions. It is necessary to investigate the relative contribution of growth and redistribution in the reduction of poverty. Further, to explain the existence of spatially-correlated differential trajectories of growth, poverty and inequality in different regions we can regress the welfare outcome (poverty or inequality) on geography, infrastructure, economic environment, human capital and household characteristics, and private assets and the residual? If we find that the 'residual' is an important factor explaining the differential outcome, then it can be attributed to other institutional factors.

To sum up it can be said that in India the nature of growth is paradoxical leading to decline in poverty and at the same time is leading to increase in inequality. Amit Bhaduri (2008) argued that the so called high rate of growth is "predatory" in the sense it that it covers behind itself the high rate of inequality and is biased against the poor. He also argued that the nature of growth is contradictory which increases output and population anger at the same time. It is being said that high growth will trickle

down to the poor but major question here is whether it is justified to allow the gap between the rich and the poor to increase during the period of high growth. To properly understand the dynamics of growth and its outcomes, it is necessary to focus on the role of the institutions in that particular state or region.

BIBLIOGRAPHY

Acemoglu, D., Johnson, S. and Robinson, J., 2002. Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution. *The Quarterly Journal of Economics*, 117(4), pp.1231-1294.

Adams Jr., R. H., 2004. Economic Growth, Inequality and Poverty: Estimating the Growth Elasticity of Poverty. *World Development*, 32(12), pp.1989-2014.

Ahluwalia, M. S., 2000. Economic Performance of States in Post-Reforms Period. *Economic and Political Weekly*, 35(19), pp.1637-1648.

Babu, S. M., 2005. India's Recent Economic Growth: Some Limits and Limitations. *Economic and Political Weekly*, 40(30), pp.3249-3252.

Bhaduri, A., 2008. Predatory Growth. *Economic and Political Weekly,* 43(16), pp.10-14.

Bhanumurthy, N. R. and Mitra, A., 2004. Economic Growth, Poverty and Inequality in Indian States in the Pre-Reform and Reform Periods. *Asian Development Review*, 21(2), pp.79-99.

Bhattacharya, B. B. and Mitra, A., 1990. Excess Growth of Tertiary Sector in Indian Economy: Issues and Implications. *Economic and Political Weekly*, 25(44), pp.2445-2450.

Bhattacharya, B. B. and Sakthivel, S., 2004. Regional Growth and Disparity in India: Comparison of Pre- and Post-Reform Decades. *Economic and Political Weekly*, 39(10), pp.1071-1077.

Bourguignon, F., 2004. The Poverty-Growth-Inequality Triangle. *Indian Council for Research on International Economic Relations*, Working Paper No. 125, New Delhi.

Census Of India 2001, Population Projections For India And States 2001-2026, Report Of The Technical Group On Population Projections Constituted By The National Commission On Population May 2006, Office Of The Registrar General & Census Commissioner, India, New Delhi.

Chaudhuri, S. and Gupta, N., 2009. Levels of Living and Poverty Patterns: A District-Wise Analysis for India. *Economic and Political Weekly*, 44(09), pp.94-110.

Creedy, J. 1998. *The Dynamics of Inequality and Poverty: Comparing Income Distributions*, Edward Elgar Publishing Limited.

Dandekar, V. M. and Rath, N., 1971. Poverty in India-I: Dimensions and Trends. *Economic and Political Weekly*, 6(1), pp.25-48.

Datt, G., & Ravallion, M., 2002. Is India's Economic Growth Leaving the Poor Behind? *The Journal of Economic Perspectives*, 16(3), pp.89-108.

Deaton, A., and Dreze J., 2002. Poverty and Inequality in India: A Re-Examination. *Economic & Political Weekly*, 37(36). pp.3729-3748.

Dev, S. M., and Ravi, C., 2007. Poverty and Inequality: All-India and States, 1983-2005. *Economic and Political Weekly*, 42(06), pp.509-521.

Dhamija, N. and Bhide, S., 2010. Dynamics of Poverty in India: A Panel Data Analysis. *Economic and Political Weekly*, 45(13), pp.91-96.

Dollar, D. and Kraay, A., 2002. Growth Is Good for the Poor. *Journal of Economic Growth*, 7(3), pp.195-225.

Dubey, A., and Gangopadhyay , S, 1998. Counting the Poor: Where are the Poor in India?. *Sarvekshana Analytical Report*, No. 1, February.

Glaeser, E. L., Porta, R. L., Lopez-De-Silanes F., 2004. Do Institutions Cause Growth?. *Journal of Economic Growth*, 9(3), pp.271-303.

Haughton, J. and Khandker, S. R., 2010. *Handbook of Poverty + Inequality*. The World Bank, Washington DC, Rawat Publications.

Himanshu, 2007. Recent Trends in Poverty and Inequality: Some Preliminary Results. *Economic and Political Weekly*, 42(5), pp.497-508.

Jain, L. R., Sundaram, K. and Tendulkar S. D., 1988. Dimensions of Rural Poverty: An Inter-Regional Profile. *Economic and Political Weekly*, 23(45/47), pp.2395-2399+2402-2408.

Jha, R., 2000. Growth, Inequality and Poverty in India: Spatial and Temporal Characteristics. *Economic and Political Weekly*, 35(11), pp.921-928.

Jha, R., and Sharma, A., 2003. Spatial Distribution of Rural Poverty: Last Three Quinquennial Rounds of NSS. *Economic and Political Weekly*, 38(47), pp.4985-4993.

Kinan, K. N., 1994. Poverty and Income Distribution in India. *Economic and Political Weekly*, 29(25), pp.1544-1551.

Kohli, A., 2006. Politics of Economic Growth in India, 1980-2005, Part II: The 1990s and Beyond. *Economic and Political Weekly*, 41(14), pp.1361- 1370.

Krishna, K. L., 2004. Patterns and Determinants of Economic Growth in Indian States. *Indian Council for Research on International Economic Relations*, Working Paper No. 144, September, New Delhi.

Kuznets, S., 1955. Economic Growth and Income Inequality. *The American Economic Review*, 45 (1), pp.1-28.

Ministry of Planning and Programme Implementation, Central Statistical Organisation,. Estimates of State Domestic Product Net Domestic Product, State Series, Government of India.

Mitra, A., 1992. Growth and Poverty: The Urban Legend. *Economic and Political Weekly*, 27(13), pp.659-65.

Mohan, R., 2008. Growth Record of the Indian Economy, 1950-2008: A Story of Sustained Savings and Investment. *Economic and Political Weekly*, 43(19), pp. 61-71.

National Council of Applied Economic Research (NCAER), 2008. An Index of Devolution for Assessing Environment for Panchayati Raj Institutions in the States. Report Prepared for Ministry of Panchayati Raj, Government of India, New Delhi.

Nayyar, G., 2008. Economic Growth and Regional Inequality in India. *Economic & Political Weekly*, 43(06), pp.58-67.

Pal, P., and Ghosh, J., 2007. Inequality in India: A survey of recent trends. *Economic & Social Affairs*, Working Paper No. 45, July, Department of Economics and Social Affairs, United Nations .

Papola, T. S., 2005. Emerging Structure of Indian Economy: Implications of Growing Inter-sectoral Imbalances. *The Indian Economic Association*, 88th Conference, December 27-29.

Patnaik, U., 2007. Neoliberalism and Rural Poverty in India. *Economic & Political Weekly*, 42(30), pp.3132-3150.

Patnaik, U., 2010. Trends in Urban Poverty under Economic Reforms: 1993-94 to 2004-05. *Economic and Political Weekly*, 45(04), pp.42-53.

Planning Commission, 1979. Report of the Task Force on Projection of Minimum Needs and Effective Consumption Demand, Perspective Planning Division, Government of India.

Planning Commission, 1993. Report of the Expert Group on Estimation of Proportion and Number of Poor. Perspective Planning Division, Government of India.

Planning Commission, 2006. Report of the XI plan Working Group on Poverty Elimination Programmes, Perspective Planning Division, Government of India.

Planning Commission, 2007-2011. Eleventh Five Year Plan Document, Government of India.

Planning Commission, 2009. Report of the Expert Group to Review the Methodology for Estimation of Poverty, Perspective Planning Division, Government of India.

Ravallion, M., and Datt, G., 1996. How Important to India is Poor is the Sectoral Composition of Economic Growth?. *The World Bank Economic Review* 10(1), pp.1-25.

Rodrik, D., Subramanian, A. and Trebbi, F., 2004. Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development. Journal of Economic Growth, 9 (2), pp.131-165.

Sarkar, S., Mehta, B. S., 2010. Income Inequality in India: Pre- and Post-Reform Periods. *Economic & Political Weekly*, 45(37), pp.45-55.

Sastry, D V S, et al, 2003. Sectoral Linkages and Growth Prospects: Reflections on the Indian Economy. *Economic and Political Weekly*, 38(24), pp.2390-2397.

Sen, A. and Himanshu 2004a. Poverty and Inequality in India: I, *Economic and Political Weekly*, 39(38), pp.4247-4263.

Sen, A. and Himanshu, 2004b. Poverty and Inequality in India: II: Widening Disparities during the 1990s. *Economic & Political Weekly*, 39(39), pp.4361-4375.

Shetty, S. L., 2003. Growth of SDP and Structural Changes in State Economies: Interstate Comparisons. *Economic and Political Weekly*, 38(49), pp.5189-5200.

Sundaram, K. and Tendulkar, S. D., 2003a. Poverty in India in the 1990s: An Analysis of changes in 15 Major States, *Economic and Political Weekly*, 38(14), pp.1385-1393.

Sundaram, K., and Tendulkar, S. D., 2003b. Poverty in India in the 1990s: Revised Results for All-India and 15 Major States for 1993-94. *Economic and Political Weekly*, 38(46), pp.4865-4872.

Thamarajakshi, R., 2003. Growth and Poverty in India in the 1990s. *Economic and Political Weekly*, 38(17), pp.1721-1724.

APPENDIX - A

Table 2A.1 : List of NSS Regions and their Composition (50th Round)

Srl. No.	State/U.T. (code)	SR	Detailed Composition Of Region				
			Description	Name Of District	Code	Name Of District	Code
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Andaman & Nicobar Islands (27)	271	Andaman & Nicobar Islands	Andaman	(01)	Nicobar	(02)
2.	Andhra Pradesh (02)	021	Coastal	Srikakulam	(01)	Krishna	(06)
				Vizianagaram	(02)	Guntur	(07)
				Vishakhapatnam	(03)	Prakasam	(08)
				East Godavari	(04)	Nellore	(09)
				West Godavari	(05)		
3.		022	Inland Northern	Mahbubnagar	(14)	Adilabad	(19)
				Rangareddy	(15)	Karimnagar	(20)
				Hyderabad	(16)	Warangal	(21)
				Medak	(17)	Khammam	(22)
				Nizamabad	(18)	Nalgonda	(23)
4.		023	South - Western	Anantapur	(12)	Kurnool	(13)
5.		024	Inland Southern	Chittoor	(10)	Cuddapah	(11)
6.	Arunachal Pradesh (03)	031	Arunachal Pradesh	Tawang	(01)	West Siang	(06)
				West Kameng	(02)	East Siang	(07)
				East Kameng	(03)	Dibang	(08)
				Lower Subansiri	(04)	Tirap	(09)
				Upper Subansiri	(05)	Lohit	(10)
						Changlong	(11)
7.	Assam (04)	041	Plains Eastern	Bongaigaon	(10)	Sibsagar	(16)
				Barpeta	(05)	Dibrugarh	(17)
				Nalbari	(06)	Tinsukia	(18)
				Sonitpur	(09)	Cachar	(23)
				Lakhimpur	(10)		
				Morigaon	(12)		
8.		042	Plains Western	Dhubri	(01)	Golaghat	(14)
				Goalpara	(04)	Jorhat	(15)
				Kamrup	(07)	Karimganj	(21)
				Darrang	(08)	Hailakandi	(22)
				Dhemaji	(11)		
				Nowgong	(13)		
9.		043	Hills	Kokrajhar	(02)	North Cachar Hills	(20)
				Karbianglong	(19)		
10.	Bihar (05)	051	Southern	Godda	(28)	Ranchi	(38)
				Sahibaganj	(29)	Purbi Singhbhum	(39)
				Dumka	(30)	Paschim Singhbhum	(40)
				Deoghar	(31)		
				Dhanbad	(32)		
				Giridih	(33)		

				Hazaribagh	(34)		
				Palamau	(35)		
				Lohardaga	(36)		
				Gumla	(37)		
11.		052	Northern	Saran	(09)	Darbhanga	(19)
				Siwan	(10)	Madhubani	(20)
				Gopalganj	(11)	Saharsa	(21)
				West Champaran	(12)	Madhepura	(22)
				East Champaran	(13)	Purnea	(23)
				Sitamarhi	(14)	Katihar	(24)
				Muzaffarpur	(15)	Araria	(41)
				Vaishali	(16)	Kishanganj	(42)
				Samastipur	(18)		
12.		053	Central	Patna	(01)	Begusarai	(17)
				Nalanda	(02)	Khagaria	(25)
				Bhojpur	(03)	Munger	(26)
				Rohtas	(04)	Bhagalpur	(27)
				Aurangabad	(05)		
				Jehanabad	(06)		
				Gaya	(07)		
				Nawada	(08)		
13.	Chandigarh (28)	281	Chandigarh	Chandigarh	(01)		
14.	Dadra & Nagar Haveli (29)	291	Dadra & Nagar Haveli	Dadra & Nagar Haveli	(01)		
15.	Daman & Diu (30)	301	Daman & Diu	Daman	(01)	Diu	(02)
16.	Delhi (31)	311	Delhi	Delhi	(01)		
17.	Goa (06)	061	Goa	Goa North	(01)	Goa South	(02)
18.	Gujarat (07)	071	Eastern	Sabar Kantha (09) [Khedbarhma, Vijaynagar, Bhiloda, Meghraj] Panch Mahals (14) [Limkheda,Dohad Jhalod, Santrampur] Vadodara (15) [Nasvadi, Tilakwada,Chhota, Udaipur Jetpur, Pavi,] Bharuch (16) [Anklesvar,Valia, Dediapada, Sagbara,Nandod] Surat (17) [Vyara, Mahuva, Valod, Nizar, Songadh, Mandvi, Uchchhal, Mangrol, Bardoli, Palsana] Valsad (18) [Chikhli Dharampur, Bansda,Umbergaon, Pardi,Valsad] The Dangs (19) Whole district			
19.		072	Plains Northern	Sabar Kantha (09) [Prantij,Modasa, Malpur,Himatnagar, Bayad,Idar] Mahesana (10)			

				[Mahesana,Kadi, Patan,Sidhpur, Kheralu,Kalol, Visnagar,Vijapur]			
				Gandhinagar [Whole district]	(11)		
				Ahmedabad [Whole district]	(12)		
				Kheda [Whole district]	(13)		
20.		073	Plains Southern	Panch Mahals [Halol, Kalol, Godhra, Shehera, Lunawada, Devgadbaria, Jambughoda]	(14)		
				Vadodara [Vadodara, Savli, Dabhoi, Karjan, Padra, Sinor,Vaghodia, Sankheda]	(15)		
				Bharuch [Hansot,Vagra, Amod,Jambusar, Bharuch,Jhagadia]	(16)		
				Surat [Chorasi, Kamrej,Olpad]	(17)		
				Valsad [Navsari, Gandevi]	(18)		
21.		074	Dry areas	Surendranagar [Whole district]	(03)		
				Kachchh Patan [Whole district]	(07)		
				Bans Kantha [Whole district]	(08)		
				Mahesana [Chanasma,Sami, Harij]	(10)		
22.		075	Saurashtra	Jamnagar	(01)	Amreli	(05)
				Rajkot	(02)	Junagadh	(06)
				Bhavnagar	(04)		
23.	Haryana (08)	081	Eastern	Ambala	(01)	Panipat	(06)
				Yamunanagar	(02)	Sonipat	(07)
				Kurukshetra	(03)	Rohtak	(08)
				Kaithal	(04)	Faridabad	(09)
				Karnal	(05)	Gurgaon	(10)
24.		082	Western	Rewari	(11)	Jind	(14)
				Mahendragarh	(12)	Hisar	(15)
				Bhilwani	(13)	Sirsa	(16)
25.	Himachal Pradesh (09)	091	Himachal Pradesh	Chamba	(01)	Kulu	(07)
				Kangra	(02)	Lahaul & Spiti	(08)
				Hamirpur	(03)	Shimla	(09)
				Una	(04)	Solan	(10)
				Bilaspur	(05)	Sirmapur	(11)
				Mandi	(06)	Kinnaur	(12)
26.	Jammu & Kashmir (10)	101	Mountain-ous	Kathus	(11)	Jammu	(12)
27.		102	Outer Hills	Doda	(09)	Rajouri	(13)
				Udhampur	(10)	Poonch	(14)
28.		103	Jhelam Valley	Anantnag	(01)	Barmula	(05)
				Pulwama	(02)	Kupwar	(06)

				Srinagar	(03)	Kargil*	(07)
				Badgam	(04)	Ladakh*	(08)

* not yet covered by NSS

29.	Karnataka (11)	111	Coastal & Ghats	Dakshin Kannad	(09)	Uttar Kannad	(20)
30.		112	Island Eastern	Chikmagalur	(07)	Kodagu	(13)
				Hassan	(12)	Shimoga	(18)
31.		113	Island Southern	Bangalore (Urban)	(01)	Mysore	(16)
				Bangalore (Rural)	(02)	Tumkur	(19)
						Kolar	(14)
						Mandya	(15)
32.		114	Island Northern	Belgaum	(03)	Chitradurga	(08)
				Bellary	(04)	Dharwad	(10)
				Bidar	(05)	Gulbarga	(11)
				Bijapur	(06)	Raichur	(17)
33.	Kerala (12)	121	Northern	Kasargod	(01)	Kozhikode	(04)
				Kannur	(02)	Malappuram	(05)
				Wayanad	(03)	Palakkad	(06)
34.		122	Southern	Trichur	(07)	Alappuzm	(11)
				Ernakulam	(08)	Pathanamthitta	(12)
				Idukki	(09)	Kollam	(13)
				Kottayam	(10)	Thiruvananthapuram	(14)
35.	Lakshadweep (32)	321	Laksha-dweep	Lakshadweep	(01)		
36.	Madhya Pradesh (13)	131	Chhattis-garh	Surguja	(39)	Durg	(43)
				Bilaspur	(40)	Raipur	(44)
				Raigarh	(41)	Bastar	(45)
				Raj Nandgaon	(42)		
37.		132	Vindhya	Tikamgarh	(07)	Rewa	(13)
				Chhatarpur	(08)	Shahdol	(14)
				Panna	(09)	Sidhi	(15)
				Satna	(12)		
38.		133	Central	Sagar	(10)	Bhopal	(28)
				Damoh	(11)	Sehore	(29)
				Vidisha	(27)	Raisen	(30)
39.		134	Malwa	Mandsaur	(16)	Jhabua	(21)
				Ratlam	(17)	Dhar	(22)
				Ujjain	(18)	Indore	(23)
				Shajapur	(19)	Rajgarh	(26)
				Dewas	(20)		
40.		135	South	Jabalpur	(33)	Chhindwara	(36)
				Narsimhapur	(34)	Seoni	(37)
				Mandla	(35)	Balaghat	(38)
41.		136	South Western	Khargoan (W. Nimar)	(24)	Betul	(31)
						Hoshangabad	(32)

				Khandwa (E. Nimar)	(25)		
42.		137	Northern	Morena	(01)	Datia	(04)
				Bhind	(02)	Shivpuri	(05)
				Gwalior	(03)	Guna	(06)
43.	Maharashtra (14)	141	Coastal	Greater Bombay	(01)	Ratnagiri	(04)
				Thane	(02)	Sindhudurg	(05)
				Raigarh (Kulaba)	(03)		
44.		142	Inland Western	Ahmadnagar	(09)	Sangli	(12)
				Pune	(10)	Solapur	(13)
				Satara	(11)	Kolhapur	(14)
45.		143	Inland Northern	Nashik	(06)	Jalgaon	(08)
				Dhule	(07)		
46.		144	Inland Central	Aurangabad	(15)	Nanded	(19)
				Parbhani Hingoli	(17)	Osmanabad	(20)
				Bid	(18)	Jalna	(16)
				Latur	(21)		
47.		145	Inland Eastern	Buldana	(22)	Yavatmal	(25)
				Akola	(23)	Wardha	(26)
				Amravati	(24)	Nagpur	(27)
48.		146	Eastern	Bhandara	(28)	Chandrapur	(29)
				Gadchiroli	(30)		
49.	Manipur (15)	151	Plains	Imphal	(07)	Bishnupur	(06)
				Thoubal	(05)		
50.		152	Hills	Senapati	(01)	Chandel	(04)
				Tamenglong	(02)	Ukhrul	(08)
				Churachandpur	(03)		
51.	Meghalaya (16)	161	Meghalaya	Jaintia Hills	(01)	East Garo Hills	(04)
				East Khasi Hills	(02)	West Garo Hills	(05)
				West Khasi Hills	(03)		
52.	Mizoram (17)	151	Mizoram	Aizawl	(01)	Chhimtuipui	(03)
				Lunglei	(02)		
53.	Nagaland (18)	181	Nagaland	Kohima	(01)	Mukokchung	(05)
				Phek	(02)	Tuensang	(06)
				Wokha	(04)	Mon	(07)
				Zunheboto	(03)		
54.	Orissa (19)	191	Coastal	Baleshwar	(05)	Ganjam	(12)
				Cuttack	(06)	Puri	(13)
55.		192	Southern	Phulbani	(08)	Kalahandi	(10)
				Koraput	(11)		
56.		193	Northern	Sambalpur	(01)	Mayurbhanj	(04)
				Sundargarh	(02)	Dhenkanal	(07)
				Keonjhar	(03)	Bolangir	(09)
57.	Pondicherry	331	Pondi-	Pondicherry	(01)	Mahe	(03)

	(33)		cherry	Karaikal	(02)	Yanam	(04)
58.	Punjab (20)	201	Northern	Gurdaspur	(01)	Kapurthala	(06)
				Amritsar	(02)	Hoshiarpur	(07)
				Ludhiana	(04)	Rupnagar (Ropar)	(08)
				Jalandhar	(05)		
59.		202	Southern	Firozpur	(03)	Bhatinda	(11)
				Patiala	(09)	Faridkot	(12)
				Sangrur	(10)		
60.	Rajasthan (21)	211	Western	Ganganagar	(01)	Nagaur	(15)
				Bikaner	(02)	Pali	(16)
				Churu	(03)	Barmer	(17)
				Jaisalmer	(13)	Jalor	(18)
				Jodhpur	(14)	Sirohi	(19)
61.		212	North-Eastern	Jhunjhuna	(04)	Sikar	(10)
				Alwar	(05)	Ajmer	(11)
				Bharatpur	(06)	Tonk	(12)
				Sawai Madhopur	(08)	Bhilwara	(20)
				Jaipur	(09)	Dholpur	(07)
62.		213	Southern	Udaipur	(21)	Banswara	(24)
				Dungarpur	(23)		
63.		214	South-Eastern	Chittaurgarh	(22)	Kota	(26)
				Bundi	(25)	Jhalawar	(27)
64.	Sikkim (22)	221	Sikkim	North (Mangam)	(01)	South (Nimachi)	(03)
				East (Gangtok)	(02)	West (Gyalshing)	(04)
65.	Tamil Nadu (23)	231	Coastal Northern	Madras	(01)	North Arcot Ambedhkar	(03)
				Chennai Anna (Chengalpattu)	(02)	South Arcot	(06)
				Thiruvannamalai Sambuvarayar	(05)		
66.		232	Coastal	Tiruchirpalli	(12)	Pudukkottai	(14)
				Thanjavur	(13)		
67.		233	Southern	Madurai	(16)	Tirunelveli	
				Ramanathapuram	(17)	Kottabomman	(20)
				Kamarajar	(18)	Kanniya kumari	(21)
				Dindigul-quaide Milleth(Anna) Pasupomthevar Thirumaganar (Pasumpon Ma-thuamlingam)	(11) (15)	V.O.Chidambaram	(19)
68.		234	Inland	Dharmapuri	(04)	Coimbatore	(10)
				Salem	(07)	Nilgiri	(09)
				Periyar	(08)		
69.	Tripura (24)	241	Tripura	West Tripura	(01)	South Tripura	(03)
				North Tripura	(02)		
70.	Uttar Pradesh (25)	251	Himalayan	Uttar kashi	(01)	Garhwal	(05)
				Chamoli	(02)	Pithoragarh	(06)
				Tehri Garhwal	(03)	Almora	(07)

				Dehra Dun	(04)	Nainital	(08)
						Bareilly	(25)
71.		252	Western	Saharanpur	(12)	Pilibhit	(26)
				Muzaffarnagar	(14)	Shahjahanpur	(27)
				Bijnor	(09)	Aligarh	(18)
				Meerut	(15)	Mathura	(19)
				Ghaziabad	(16)	Agra	(20)
				Bulandshahr	(17)	Etah	(22)
				Moradabad	(10)	Mainpuri	(23)
				Rampur	(11)	Farrukhabad	(34)
				Budaun	(24)	Etawah	(35)
				Hardwar	(13)	Firozabad	(21)
						Sonbadra	(63)
72.		253	Central	Kanpur Dehat	(36)	Unnao	(31)
				Kanpur Nagar	(37)	Lucknow	(32)
				Fatehpur	(43)	Rai Bareli	(33)
				Kheri	(28)	Bara Banki	(48)
				Sitapur	(29)		
				Hardoi	(30)		
73.		254	Eastern	Allahabad	(45)	Deeria	(55)
				Bahraich	(46)	Azamgarh	(57)
				Gonda	(47)	Jaunpur	(58)
				Faizabad	(49)	Ballia	(59)
				Sultanpur	(50)	Ghazipur	(60)
				Pratapgarh	(44)	Varanasi	(61)
				Basti	(53)	Mirzapur	(62)
				Gorakhpur	(54)	Maharajganj	(52)
				Maunath Bhanjan	(56)	Sidhartha Nagar	(51)
74.		255	Southern	Jalaun	(38)	Hamirpur	(41)
				Jhansi	(39)	Banda	(42)
				Lalitpur	(40)		
75.	West Bengal (26)	261	Himalayan	Kochbihar	(01)	Darjiling	(03)
				Jalpaiguri	(02)		
76.		262	Eastern Plains	West Dinajpur	(04)	Nadia	(07)
				Maldah	(05)	Birbhum	(17)
				Murshidabad	(06)		
77.		263	Central Plains	24-Parganas (North)	(08)	Hooghly	(12)
				Calcutta	(10)	Burdwan	(16)
				Howrah	(11)	24-Parganas (South)	(09)
78.		264	Western Plains	Midnapur	(13)	Puruliya	(15)
				Bankura	(14)		

Source: NSS 50th Round

Table 2A.2: List of NSS Regions and their Composition (61st Round)

Srl. No.	State/U.T. (code)	SR	Detailed Composition Of Region				
			Description	Name Of District	Code	Name Of District	Code
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Andaman & Nicobar Islands (35)	351	Andaman & Nicobar Islands	Andamans	(01)	Nicobars	(02)
2.	Andhra Pradesh (28)	281	Coastal	Srikakulam	(11)	Krishna	(16)
				Vizianagaram	(12)	Guntur	(17)
				Visakhapatnam	(13)	Prakasam	(18)
				East Godavari	(14)	Nellore	(19)
				West Godavari	(15)		
3.		282	Inland Northern	Adilabad	(01)	Rangareddi	(06)
				Nizamabad	(02)	Mahbubnagar	(07)
				Karimnagar	(03)	Nalgonda	(08)
				Medak	(04)	Warangal	(09)
				Hyderabad	(05)	Khammam	(10)
4.		283	South - Western	Kurnool	(21)	Anantapur	(22)
5.		284	Inland Southern	Cuddapah	(20)	Chittoor	(23)
6.	Arunachal Pradesh (12)	121	Arunachal Pradesh	Tawang	(01)	East Siang	(08)
				West Kameng	(02)	Upper Siang	(09)
				East Kameng	(03)	Dibang Valley	(10)
				Papum Pare	(04)	Lohit	(11)
				Lower Subansiri	(05)	Changlang	(12)
				Upper Subansiri	(06)	Tirap	(13)
				West Siang	(07)		
7.	Assam (18)	181	Plains Eastern	Lakhimpur	(12)	Jorhat	(17)
				Dhemaji	(13)	Golaghat	(18)
				Tinsukia	(14)	Cachar	(21)
				Dibrugarh	(15)	Karimganj	(22)
				Sibsagar	(16)	Hailakandi	(23)
8.		182	Plains Western	Kokrajhar	(01)	Nalbari	(07)
				Dhubri	(02)	Darrang	(08)
				Goalpara	(03)	Marigaon	(09)
				Bongaigaon	(04)	Nagaon	(10)
				Barpeta	(05)	Sonitpur	(11)
				Kamrup	(06)		
9.		183	Hills	Karbi Anglong	(19)	North Cachar Hills	(20)
10.	Bihar (10)	101	Northern	Champaran(W)	(01)	Madhepura	(11)
				Champaran(E)	(02)	Saharsa	(12)
				Sheohar	(03)	Darbhanga	(13)
				Sitamarhi	(04)	Muzaffarpur	(14)
				Madhubani	(05)	Gopalganj	(15)
				Supaul	(06)	Siwan	(16)
				Araria	(07)	Saran	(17)
				Kishanganj	(08)	Vaishali	(18)
				Purnia	(09)	Samastipur	(19)
				Katihar	(10)		

11.		102	Central	Begusarai	(20)	Bhojpur	(29)
				Khagaria	(21)	Buxar	(30)
				Bhagalpur	(22)	Kaimur (Bhabua)	(31)
				Banka	(23)	Rohtas	(32)
				Munger	(24)	Jehanabad	(33)
				Lakhisarai	(25)	Aurangabad	(34)
				Sheikhpura	(26)	Gaya	(35)
				Nalanda	(27)	Nawada	(36)
				Patna	(28)	Jamui	(37)
12.	Chandigarh (04)	041	Chandigarh	Chandigarh	(01)		
13.	Chhattisgarh (22)	221	Chhattis-garh	Koriya	(01)	Rajnandgaon	(09)
				Surguja	(02)	Durg	(10)
				Jashpur	(03)	Raipur	(11)
				Raigarh	(04)	Mahasamund	(12)
				Korba	(05)	Dhamtari	(13)
				Janjgir-Champa	(06)	Kanker	(14)
				Bilaspur	(07)	Bastar	(15)
				Kawardha	(08)	Dantewada	(16)
14.	Dadra & Nagar Haveli (26)	261	Dadra & Nagar Haveli	Dadra & Nagar Haveli	(01)		
15.	Daman & Diu (25)	251	Daman & Diu	Diu	(01)	Daman	(02)
16.	Delhi (07)	071	Delhi	North West	(01)	Central	(06)
				North	(02)	West	(07)
				North East	(03)	South West	(08)
				East	(04)	South	(09)
				New Delhi	(05)		
17.	Goa (30)	301	Goa	North Goa	(01)	South Goa	(02)
18.	Gujarat (24)	241	Eastern	Sabar Kantha (05) [Khedbarhma, Vijaynagar, Bhiloda, Meghraj]			
				Panch Mahals (17) [Kadana, Santrampur]			
				Dohad (18)			
				Vadodara (19) [Jetpur Pavi, Chhota Udaipur, Kavant, Nasvadi]			
				Narmada (20)			
				Bharuch (21) [Jhagadia , Anklesvar, Valia]			
				Surat (22) [Mangrol, Umarpada, Nizar, Uchchhal, Songadh, Mandvi, Palsana, Bardoli, Vyara, Valod, Mahuva]			
				The Dangs (23)			
				Navsari (24) [Chikhli, Bansda]			
				Valsad (25)			

19.		242	Plains Northern	Patan (03) [Vagdod, Siddhpur, Patan] Mahesana (04) Sabar Kantha (05) [Vadali, Idar, Himatnagar, Prantij, Talod, Modasa, Dhansura, Malpur, Bayad] Gandhinagar (06) Ahmedabad (07) Anand (15) Kheda (16)			
20.		243	Plains Southern	Panch Mahals (17) [Khanpur, Lunawada, Sehera, Morwa(hadaf), Godhra, Kalol, Ghoghamba, Halol, Jambughoda] Vadodara (19) [Savli, Vadodara, Vaghodia, Sankheda, Dabhoi, Padra, Karjan, Sinor] Bharuch (21) [Jambusar, Amod, Vagra, Bharuch, Hansot] Surat (22) [Olpad, Kamrej, Surat City, Chorasi] Navsari (24) [Navsari, Jalalpur, Gandevi]			
21.		244	Dry areas	Kachchh (01) Bans Kantha (02) Patan (03) [Santalpur, Radhanpur, Harij, Sami, Chanasma] Surendranagar (08)			
22.		245	Saurashtra	Rajkot (09) Jamnagar (10) Porbandar (11)		Junagadh (12) Amreli (13) Bhavnagar (14)	
23.	Haryana (06)	061	Eastern	Panchkula (01) Ambala (02) Yamunanagar (03) Kurukshetra (04) Kaithal (05) Karnal (06)		Panipat (07) Sonipat (08) Rohtak (14) Jhajjar (15) Gurgaon (18) Faridabad (19)	
24.		062	Western	Jind (09) Fatehabad (10) Sirsa (11) Hisar (12)		Bhiwani (13) Mahendragarh (16) Rewari (17)	
25.	Himachal Pradesh (02)	021	Himachal Pradesh	Chamba (01) Kangra (02) Lahul & Spiti (03) Kullu (04) Mandi (05) Hamirpur (06)		Una (07) Bilaspur (08) Solan (09) Sirmaur (10) Shimla (11) Kinnaur (12)	
26.	Jammu & Kashmir (01)	011	Mountain-ous	Jammu (13)		Kathua (14)	

27.		012	Outer Hills	Doda	(09)	Punch	(11)
				Udhampur	(10)	Rajauri	(12)
28.		013	Jhelam Valley	Kupwara	(01)	Pulwama	(05)
				Baramula	(02)	Anantnag	(06)
				Srinagar	(03)	Leh* (Ladakh)	(07)
				Badgam	(04)	Kargil*	(08)
29.	Jharkhand (20)	201	Jharkhand	Garhwa	(01)	Pakaur	(10)
				Palamu	(02)	Dumka	(11)
				Chatra	(03)	Dhanbad	(12)
				Hazaribag	(04)	Bokaro	(13)
				Kodarma	(05)	Ranchi	(14)
				Giridih	(06)	Lohardaga	(15)
				Deoghar	(07)	Gumla	(16)
				Godda	(08)	Singhbhum(W)	(17)
				Sahibganj	(09)	Singhbhum (E)	(18)
30.	Karnataka (29)	291	Coastal & Ghats	Uttara Kannada	(10)	Dakshina Kannada	(24)
				Udupi	(16)		
31.		292	Inland Eastern	Shimoga	(15)	Hassan	(23)
				Chikmagalur	(17)	Kodagu	(25)
32.		293	Inland Southern	Tumkur	(18)	Mandya	(22)
				Kolar	(19)	Mysore	(26)
				Bangalore	(20)	Chamarajanagar	(27)
				Bangalore (Rural)	(21)		

* not yet covered by NSS

33.	Karnataka (29)	294	Inland Northern	Belgaum	(01)	Gadag	(08)
				Bagalkot	(02)	Dharwad	(09)
				Bijapur	(03)	Haveri	(11)
				Gulbarga	(04)	Bellary	(12)
				Bidar	(05)	Chitradurga	(13)
				Raichur	(06)	Davanagere	(14)
				Koppal	(07)		
34.	Kerala (32)	321	Northern	Kasaragod	(01)	Kozhikode	(04)
				Kannur	(02)	Malappuram	(05)
				Wayanad	(03)	Palakkad	(06)
35.		322	Southern	Thrissur	(07)	Alappuzha	(11)
				Ernakulam	(08)	Pathanamthitta	(12)
				Idukki	(09)	Kollam	(13)
				Kottayam	(10)	Thiruvananthapuram	(14)
36.	Lakshadweep (31)	311	Laksha-dweep	Lakshadweep	(01)		
37.	Madhya Pradesh (23)	231	Vindhya	Tikamgarh	(08)	Rewa	(14)
				Chhatarpur	(09)	Umaria	(15)
				Panna	(10)	Shahdol	(16)
				Satna	(13)	Sidhi	(17)
38.		232	Central	Sagar	(11)	Bhopal	(32)

				Damoh	(12)	Sehore	(33)
				Vidisha	(31)	Raisen	(34)
39.		233	Malwa	Neemuch	(18)	Dewas	(23)
				Mandsaur	(19)	Jhabua	(24)
				Ratlam	(20)	Dhar	(25)
				Ujjain	(21)	Indore	(26)
				Shajapur	(22)	Rajgarh	(30)
40.		234	South	Katni	(38)	Mandla	(42)
				Jabalpur	(39)	Chhindwara	(43)
				Narsimhapur	(40)	Seoni	(44)
				Dindori	(41)	Balaghat	(45)
41.		235	South Western	W. Nimar (Khargoan)	(27)	Betul	(35)
						Harda	(36)
				Barwani	(28)	Hoshangabad	(37)
				E. Nimar (Khandwa)	(29)		
42.		236	Northern	Sheopur	(01)	Datia	(05)
				Morena	(02)	Shivpuri	(06)
				Bhind	(03)	Guna	(07)
				Gwalior	(04)		
43.	Maharashtra (27)	271	Coastal	Thane	(21)	Raigarh	(24)
				Mumbai	(22)	Ratnagiri	(32)
				Suburban		Sindhudurg	(33)
				Mumbai	(23)		
44.	Maharashtra (27)	272	Inland Western	Pune	(25)	Satara	(31)
				Ahmadnagar	(26)	Kolhapur	(34)
				Solapur	(30)	Sangli	(35)
45.		273	Inland Northern	Nandurbar	(01)	Jalgaon	(03)
				Dhule	(02)	Nashik	(20)
46.		274	Inland Central	Nanded	(15)	Aurangabad	(19)
				Hingoli	(16)	Bid	(27)
				Parbhani	(17)	Latur	(28)
				Jalna	(18)	Osmanabad	(29)
47.		275	Inland Eastern	Buldana	(04)	Wardha	(08)
				Akola	(05)	Nagpur	(09)
				Washim	(06)	Yavatmal	(14)
				Amravati	(07)		
48.		276	Eastern	Bhandara	(10)	Gadchiroli	(12)
				Gondiya	(11)	Chandrapur	(13)
49.	Manipur (14)	141	Plains	Bishnupur	(04)	Imphal West	(06)
				Thoubal	(05)	Imphal East	(07)
50.		142	Hills	Senapati	(01)	Ukhrul	(08)
				Tamenglong	(02)	Chandel	(09)
				Churachandpur	(03)		
51.	Meghalaya (17)	171	Meghalaya	West Garo Hills	(01)	Ri Bhoi	(05)
				East Garo Hills	(02)	East Khasi Hills	(06)
				South Garo Hills	(03)	Jaintia Hills	(07)
				West Khasi Hills	(04)		

52.	Mizoram (15)	151	Mizoram	Mamit	(01)	Serchip	(05)
				Kolasib	(02)	Lunglei	(06)
				Aizwal	(03)	Lawngtlai	(07)
				Champhai	(04)	Saiha	(08)
53.	Nagaland (13)	131	Nagaland	Mon	(01)	Wokha	(05)
				Tuensang	(02)	Dimapur	(06)
				Mokokchung	(03)	Kohima	(07)
				Zunheboto	(04)	Phek	(08)
54.	Orissa (21)	211	Coastal	Baleshwar	(08)	Nayagarh	(16)
				Bhadrak	(09)	Khordha	(17)
				Kendrapara	(10)	Puri	(18)
				Jagatsinghapur	(11)	Ganjam	(19)
				Cuttack	(12)	Gajapati	(20)
				Jajapur	(13)		
55.		212	Southern	Kandhamal (Phoolbani)	(21)	Rayagada	(27)
						Nabarangapur	(28)
				Baudh	(22)	Koraput	(29)
				Nuapada	(25)	Malkangiri	(30)
				Kalahandi	(26)		
56.	Orissa (21)	213	Northern	Bargarh	(01)	Mayurbhanj	(07)
				Jharsuguda	(02)	Dhenkanal	(14)
				Sambalpur	(03)	Anugul	(15)
				Debagarh	(04)	Sonapur	(23)
				Sundargarh	(05)	Balangir	(24)
				Kendujhar	(06)		
57.	Pondicherry (34)	341	Pondi-cherry	Yanam	(01)	Mahe	(03)
				Pondicherry	(02)	Karaikal	(04)
58.	Punjab (03)	031	Northern	Gurdaspur	(01)	Hoshiarpur	(05)
				Amritsar	(02)	Nawanshahr	(06)
				Kapurthala	(03)	Rupnagar	(07)
				Jalandhar	(04)	Ludhiana	(09)
59.		032	Southern	Fatehgarh Sahib	(08)	Bathinda	(14)
				Moga	(10)	Mansa	(15)
				Firozpur	(11)	Sangrur	(16)
				Muktsar	(12)	Patiala	(17)
				Faridkot	(13)		
60.	Rajasthan (08)	081	Western	Ganganagar	(01)	Jaisalmer	(16)
				Hanumangarh	(02)	Barmer	(17)
				Bikaner	(03)	Jalor	(18)
				Churu	(04)	Sirohi	(19)
				Nagaur	(14)	Pali	(20)
				Jodhpur	(15)		
61.		082	North-Eastern	Jhunjhunun	(05)	Dausa	(11)
				Alwar	(06)	Jaipur	(12)
				Bharatpur	(07)	Sikar	(13)
				Dhaulpur	(08)	Ajmer	(21)
				Karauli	(09)	Tonk	(22)
				Sawai Madhopur	(10)	Bhilwara	(24)
62.		083	Southern	Rajsamand	(25)	Dungarpur	(27)

				Udaipur	(26)	Banswara	(28)
63.		084	South-Eastern	Bundi	(23)	Baran	(31)
				Chittaurgarh	(29)	Jhalawar	(32)
				Kota	(30)		
64.	Sikkim (11)	111	Sikkim	North (Mongam)	(01)	South (Nimachai)	(03)
				West (Gyalshing)	(02)	East (Gangtok)	(04)
65.	Tamil Nadu (33)	331	Coastal Northern	Thiruvallur	(01)	Tiruvanamalai	(06)
				Chennai	(02)	Viluppuram	(07)
				Kancheepuram	(03)	Cuddalore	(18)
				Vellore	(04)		
66.		332	Coastal	Karur	(14)	Nagapattinam	(19)
				Tiruchirappalli	(15)	Thiruvarur	(20)
				Perambalur	(16)	Thanjavur	(21)
				Ariyalur	(17)	Pudukkottai	(22)
67.	Tamil Nadu (33)	333	Southern	Dindigul	(13)	Ramanathapuram	(27)
				Sivaganga	(23)	Toothukudi	(28)
				Madurai	(24)	Tirunelveli	(29)
				Theni	(25)	Kanniyakumari	(30)
				Virudhunagar	(26)		
68.		334	Inland	Dharmapuri	(05)	Erode	(10)
				Salem	(08)	The Nilgiris	(11)
				Namakkal	(09)	Coimbatore	(12)
69.	Tripura (16)	161	Tripura	West Tripura	(01)	Dhalai	(03)
				South Tripura	(02)	North Tripura	(04)
70.	Uttaranchal (05)	051	Uttaranchal	Uttarkashi	(01)	Champawat	(08)
				Chamoli	(02)	Almora	(09)
				Rudraprayag	(03)	Bageshwar	(10)
				Tehri Garhwal	(04)	Nainital	(11)
				Dehradun	(05)	Udham Singh Nagar	(12)
				Garhwal	(06)		
				Pithoragarh	(07)	Hardwar	(13)
71.	Uttar Pradesh (09)	091	Western	Saharanpur	(01)	Mathura	(14)
				Muzaffarnagar	(02)	Agra	(15)
				Bijnor	(03)	Firozabad	(16)
				Moradabad	(04)	Etah	(17)
				Rampur	(05)	Mainpuri	(18)
				J Phule Nagar	(06)	Budaun	(19)
				Meerut	(07)	Bareilly	(20)
				Baghpat	(08)	Pilibhit	(21)
				Ghaziabad	(09)	Shahjahanpur	(22)
				G. Buddha Nagar	(10)	Farrukhabad	(29)
				Bulandshahr	(11)	Kannauj	(30)
				Aligarh	(12)	Etawah	(31)
				Hathras	(13)	Auraiya	(32)
72.		092	Central	Kheri	(23)	Rae Bareli	(28)
				Sitapur	(24)	Kanpur Dehat	(33)
				Hardoi	(25)	Kanpur Nagar	(34)
				Unnao	(26)	Fatehpur	(42)
				Lucknow	(27)	Barabanki	(46)

73.		093	Eastern	Pratapgarh	(43)	Gorakhpur	(58)
				Kaushambi	(44)	Kushinagar	(59)
				Allahabad	(45)	Deoria	(60)
				Faizabad	(47)	Azamgarh	(61)
				Ambedkar Nag.	(48)	Mau	(62)
				Sultanpur	(49)	Ballia	(63)
				Bahraich	(50)	Jaunpur	(64)
				Shrawasti	(51)	Ghazipur	(65)
				Balrampur	(52)	Chandauli	(66)
				Gonda	(53)	Varanasi	(67)
				Siddharthnagar	(54)	S.R.Nagar(Bhadohi)	(68)
				Basti	(55)	Mirzapur	(69)
				S. Kabir Nagar	(56)	Sonbhadra	(70)
				Maharajganj	(57)		
74.	Uttar Pradesh (09)	094	Southern	Jalaun	(35)	Mahoba	(39)
				Jhansi	(36)	Banda	(40)
				Lalitpur	(37)	Chitrakoot	(41)
				Hamirpur	(38)		
75.	West Bengal (19)	191	Himalayan	Darjiling	(01)	Koch Bihar	(03)
				Jalpaiguri	(02)		
76.		192	Eastern Plains	Uttar Dinajpur	(04)	Murshidabad	(07)
				Dakshin Dinajpur	(05)	Birbhum	(08)
				Maldah	(06)	Nadia	(10)
77.		193	Central Plains	Barddhaman	(09)	Howrah	(16)
				North 24-Parganas	(11)	Kolkata	(17)
				Hugli	(12)	South 24-Parganas	(18)
78.		194	Western Plains	Bankura	(13)	Medinipur	(15)
				Puruliya	(14)		

Source: NSS 61st Round

Table 2A.3: State-Specific Poverty Lines for 1993-94 and 2004-05

(Rs. per capita per month)

State	Poverty Line 1993-94		Poverty Line 2004-05	
	Rural	Urban	Rural	Urban
Andhra Pradesh	244.1	282.0	433.43	563.16
Arunachal Pradesh	285.1	297.1	547.14	618.45
Assam	266.3	306.8	478.00	600.03
Bihar	236.1	266.9	433.43	526.18
Chhattisgarh	229.1	283.5	398.92	513.70
Delhi	315.4	320.3	541.39	642.47
Goa	316.2	306.0	608.76	671.15
Gujarat	279.4	320.7	501.58	659.18
Haryana	294.1	312.1	529.42	626.41
Himachal Pradesh	272.7	316.0	520.40	605.74
Jammu & Kashmir	289.1	281.1	522.30	602.89
Jharkhand	227.7	304.1	404.79	531.35
Karnataka	266.9	294.8	417.84	588.06
Kerala	286.5	289.2	537.31	584.70
Madhya Pradesh	232.5	274.5	408.41	532.26
Maharashtra	268.6	329.0	484.89	631.85
Manipur	322.3	366.3	578.11	641.13
Meghalaya	284.1	393.4	503.32	745.73
Mizoram	316.5	355.7	639.27	699.75
Nagaland	381.7	409.6	687.30	782.93
Orissa	224.2	279.3	407.78	497.31
Pondicherry	220.3	264.3	385.45	506.17
Punjab	286.9	342.3	543.51	642.51
Rajasthan	271.9	300.5	478.00	568.15
Sikkim	266.6	362.2	531.50	741.68
Tamil Nadu	252.6	288.2	441.69	559.77
Tripura	275.8	316.6	450.49	555.79
Uttar Pradesh	244.3	281.3	435.14	532.12
Uttaranchal	249.5	306.7	486.24	602.39
West Bengal	235.5	295.2	445.38	572.51
All India	-	-	446.68	578.80

Source: Report of the Expert Group to Review the Methodology for Estimation of Poverty (2009), Planning Commission, Government of India

Table 2A.4: State-Codes for 50th and 61st Round of NSS

S. No.	States/UT's	50th Round	61st Round
1.	Andhra Pradesh	02	28
2.	Arunachal Pradesh	03	12
3.	Assam	04	18
4.	Bihar	05	10
5.	Goa	06	30
6.	Gujarat	07	24
7.	Haryana	08	06
8.	Himachal Pradesh	09	02
9.	Jammu & Kashmir	10	01
10.	Karnataka	11	29
11.	Kerala	12	32
12.	Madhya Pradesh	13	23
13.	Maharashtra	14	27
14.	Manipur	15	14
15.	Meghalaya	16	17
16.	Mizoram	17	15
17.	Nagaland	18	13
18.	Orissa	19	21
19.	Punjab	20	03
20.	Rajasthan	21	08
21.	Sikkim	22	11
22.	Tamil Nadu	23	33
23.	Tripura	24	16
24.	Uttar Pradesh	25	09
25.	West Bengal	26	19
26.	Andaman & Nicobar	27	35
27.	Chandigarh	28	04
28.	Dadra & Nagar Haveli	29	26
29.	Daman & Diu	30	25
30.	Delhi	31	07
31.	Lakshadweep	32	31
32.	Pondicherry	33	34
33.	Chhattisgarh	50	22
34.	Jharkhand	40	20
35.	Uttaranchal	60	05

Note: State codes for Jharkhand, Chhattisgarh and Uttaranchal for the 50th round has been created by the author
Source: NSSO 50th and 61st round

Table 2A.5: Region-Codes for 50th and 61st Round of NSS

STATE / STATE CODES	S.No.	REGION	REGION CODE	
			1993-94	2004-05
Andhra Pradesh(02)(28)	1	Coastal	21	281
	2	Inland Northern	22	282
	3	South -Western	23	283
	4	Inland Southern	24	284
Assam (04)(18)	5	Plains Eastern	41	181
	6	Plains Western	42	182
	7	Hills	43	183
Bihar (05)(10)	8	Northern	52	101
	9	Central	53	102
Jharkhand (40)(20)	10	Southern	51	201
Gujarat (07)(24)	11	Eastern	71	241
	12	Plains Northern	72	242
	13	Plains Southern	73	243
	14	Dry areas	74	244
	15	Saurashtra	75	245
Haryana (08)(06)	16	Eastern	81	61
	17	Western	82	62
Himachal Pradesh (09)(02)	18	Himachal Pradesh	91	21
Jammu & Kashmir (10)(01)	19	Mountainous	101	11
	20	Outer Hills	102	12
	21	Jhelam Valley	103	13
Karnataka (11)(29)	22	Coastal & Ghats	111	291
	23	Inland Eastern	112	292
	24	Inland Southern	113	293
	25	Inland Northern	114	294
Kerala (12)(32)	26	Northern	121	321
	27	Southern	122	322
Madhya Pradesh (13)(23)	28	Vindhya	132	231
	29	Central	133	232
	30	Malwa	134	233
	31	South	135	234
	32	South Western	136	235
	33	Northern	137	236
Chhattisgarh(50)(22)	34	Chhattisgarh	131	221
Maharashtra (14)(27)	35	Coastal	141	271
	36	Inland Western	142	272
	37	Inland Northern	143	273
	38	Inland Central	144	274
	39	Inland Eastern	145	275

	40	Eastern	146	276
Orissa (19)(21)	41	Coastal	191	211
	42	Southern	192	212
	43	Northern	193	213
Punjab (20)(03)	44	Northern	201	31
	45	Southern	202	32
Rajasthan (21)(08)	46	Western	211	81
	47	North- Eastern	212	82
	48	Southern	213	83
	49	South- Eastern	214	84
Tamil Nadu (23)(33)	50	Coastal Northern	231	331
	51	Coastal	232	332
	52	Southern	233	333
	53	Inland	234	334
Uttar Pradesh (25)(09)	54	Western	252	91
	55	Central	253	92
	56	Eastern	254	93
	57	Southern	255	94
Uttaranchal (60)(05)	58	Himalayan	251	51
West Bengal (26)(19)	59	Himalayan	261	191
	60	Eastern Plains	262	192
	61	Central Plains	263	193
	62	Western Plains	264	194

Source: NSSO 50th and 61st round

Table 2A.6: New Districts in the 61st Round Carved Out of Districts in the 50th Round

State / Region	50th Round	61st Round
BHR (Northern)	Sitamarhi	Sitamarhi
		Sheohar
	Saharsa	Saharsa
		Sapaul
BHR (Central)	Bhagalpur	Bhagalpur
		Banka
	Munger	Munger
		Lakhisarai
		Sheikhpura
		Jamui
	Bhojpur	Bhojpur
		Buxar
	Rohtas	Rohtas
		Kaimur (Bhabua)
BHR (Southern)[Jharkhand]	Palamou	Palamou
		Garhwa
	Hazaribagh	Hazaribagh
		Chatra
		Kodarma
	Sahibganj	Sahibganj
		Pakaur
	Dhanbad and Giridih (Parts)	Bokaro
GJT (Eastern)	Panchmahal	Panchmahal
		Dohad
	Bharuch	Bharuch
		Narmada
GJT (Eastern)(Plains Southern)	Valsad (Eastern/Plains Southern)	Valsad(Eastern)
		Navsari1(Eastern)
		Navsari2(Plains Southern)
GJT (Plains Northern)(Dry Areas)	Mahesana	Patan 1(Plains Northern)
		Patan2(Dry Areas)
GJT (Plains Northern)	Kheda	Kheda
		Anand
GJT (Saurashtra)	Junagadh	Junagadh
		Porbandar
HRA (Eastern)	Ambala	Ambala
		Panchkula
	Rohtak	Rohtak
		Jhajjar
HRA (Western)	Hisar	Hisar
		Fatehabad
KNT (Coastal & Ghats)	Dakshin Kannada	Dakshin Kannada
		Udupi
KNT (Inland Southern)	Mysore	Mysore
		Chamarajanagar
KNT (Inland Northern)	Bijapur	Bijapur
		Bagalkot
	Raichur	Raichur
		Koppal
	Dharwad	Dharwad
		Gadag
		Haveri
	Chitradurga	Chitradurga
		Davanagere

MPH (Vindhya)	Shahdol	Shahdol
		Umaria
MPH (Malwa)	Mandsaur	Mandsaur
		Neemuch
MPH (South)	Jabalpur	Jabalpur
		Katni
	Mandla	Mandla
		Dindori
MPH (South Western)	West-Nimar	West-Nimar
		Barwani
	Hoshangabad	Hoshangabad
		Harda
MPH (Northern)	Morena	Morena
		Sheopur
MPH (Chattisgarh)	Surguja	Surguja
		Koriya
	Raigarh	Raigarh
		Jashpur
	Bilaspur	Bilaspur
		Korba
		Janjgir-Champa
	Bilaspur and Rajnandgaon(Parts)	Kawardha
	Raipur	Raipur
		Mahasamund
		Dhamtari
	Bastar	Bastar
		Kanker
		Dantewada
MHR (Coastal)	Greater bombay	Mumbai Suburban
		Mumbai
MHR (Inland Northern)	Dhule	Dhule
		Nandurbar
MHR (Inland Central)	Parbhani	Parbhani
		Hingoli
MHR (Inland Eastern)	Akola	Akola
		Washim
MHR (Eastern)	Bhandara	Bhandara
		Gondiya
ORS (Coastal)	Balasore/ Baleshwar	Balasore/ Baleshwar
		Bhadrak
	Cuttack	Cuttack
		Kendrapara
		Jagatsinghapur
		Jajapur
	Puri	Puri
		Nayagarh
		Khordha
	Ganjam	Ganjam
		Gajapati
ORS (Southern)	Phulbani	Kandhamal (Phoolbani)
		Baudh
	Kalahandi	Kalahandi
		Nuapada
	Koraput	Koraput
		Rayagada
		Nabarangapur
		Malkangiri
ORS (Northern)	Sambalpur	Sambalpur

		Bargarh
		Jharsuguda
		Debagarh
	Dhenkanal	Dhenkanal
		Anugul
	Balangir	Balangir
		Sonapur
PNB (Northern)	Hoshiarpur	Hoshiarpur
		Nawanshahr
PNB (Southern)	Patiala & Rupnagar(Parts)	Fatehgarh Sahib
	Faridkot	Faridkot
		Moga
		Muktsar
	Bathinda	Bathinda
		Mansa
RJN (Western)	Ganganagar	Ganganagar
		Hanumangarh
RJN (North Eastern)	Sawai Madhopur	Sawai Madhopur
		Karauli
	Jaipur	Jaipur
		Dausa
RJN (Southern)	Udaipur	Udaipur
		Rajsamand
RJN (South Eastern)	Kota	Kota
		Baran
TNU (Coastal Northern)	Chengai Anna	Kancheepuram
		Thiruvallur
	North Arcot Ambedhkar	Vellore
	South Arcot	Viluppuram
		Cuddalore
	Chengalpattu	Thiruvallur
		Kancheepuram
TNU (Coastal)	Tiruchirappalli	Tiruchirappalli
		Karur
		Perambalur
	Perambalur	Perambalur
		Ariyalur
	Thanjavur	Thanjavur
		Nagapattinam
		Thiruvarur
TNU (Southern)	Kamarajar	Virudhunagar
	Pasupomthevar	Sivaganga
	V.O.Chiudambaram	Toothukudi
	Madurai	Madurai
		Theni
TNU (Inland)	Periyar	Erode
	Salem	Salem
		Namakkal
UPH (Western)	Moradabad	Moradabad
		J Phule Nagar
	Meerut and Muzaffarnagar(Parts)	Baghpat
	Bulandshahr	Bulandshahr
		G.Buddha Nagar
	Aligarh and Mathura(Parts)	Hathras
	Farrukhabad	Farrukhabad
		Kannauj
	Etawah	Etawah
		Auraiya

UPH (Eastern)	Allahabad	Allahabad
		Kaushambi
	Faizabad	Faizabad
		Ambedkar Nag.
	Bahraich	Bahraich
		Shrawasti
	Gonda	Gonda
		Balrampur
	Basti	Basti
		S. Kabir Nagar
	Deoria	Deoria
		Kushinagar
	Mau Nath Bhanjan	Mau
	Varanasi	Varanasi
		Chandauli
		S.R. Nagar(Bhadohi)
UPH (Southern)	Hamirpur	Hamirpur
		Mahoba
	Banda	Banda
		Chitrakoot
UPH (Uttaranchal)	Chamoli, Pauri Garhwal and Tehri Garhwal	Rudraprayag
	Pithoragarh	Pithoragarh
		Champawat
	Almora	Almora
		Bageshwar
	Nainital	Nainital
		Udham Singh
WBL (Eastern Plains)	West Dinajpur	Uttar Dinajpur
		Dakshin Dinajpur

Source: Analysed and tabulated by author from table 2A.1 and 2A.2

Table 2A.7: Variations in Name of Districts between 50th and 61st Round

S.No.	States	50th Round	61st Round
1	Andhra Pradesh	Rangareddy	Rangareddi
		Vishakhapatnam	Visakhapatnam
2	Assam	Karbianglong	Karbi Anglong
		Nowgong	Nagaon
3	Bihar	West Champaran	Champaran(W)
		East Champaran	Champaran(E)
		Purnea	Purnia
4	Chhattisgarh	Raj Nandgaon	Rajnandgaon
5	Delhi	-	-
6	Goa	-	-
7	Gujarat	-	-
8	Haryana	-	-
9	Himachal Pradesh	Kulu	Kullu
		Lahaul & Spiti	Lahul & Spiti
		Sirmapur	Sirmaur
10	Jammu & Kashmir	Barmula	Baramula
		Ladakh	Leh
		Poonch	Punch
		Rajouri	Rajauri
11	Jharkhand	Hazaribagh	Hazaribag
		Palamau	Palamu
		Pashchim Singhbhum	Singhbhum(W)
		Purbi Singhbhum	Singhbhum(E)
		Sahibaganj	Sahibganj
12	Karnataka	Bangalore Urban	Bangalore
		Dakshin Kannad	Dakshina Kannada
		Uttar Kannad	Uttara Kannada
In Karnataka there is a change in the names of region also.			
		Island Eastern	Inland Eastern
		Island Southern	Inland Southern
		Island Northern	Inland Northern
13	Kerala	Alappuzm	Alappuzha
		Kasargod	Kasaragod
		Trichur	Thrissur
14	Madhya Pradesh	-	-
15	Maharashtra	-	-
16	Orissa	Bolangir	Balangir
		Phulbani	Kandhamal (Phoolbani)
		Keonjhar	Kendujhar
17	Punjab	Bhatinda	Bathinda
		Rupnagar(Ropar)	Rupnagar
18	Rajasthan	Dholpur	Dhaulpur
		Jhunjhuna	Jhunjhunun
19	Tamil Nadu	Madras	Chennai
		Dindigul-quaide-Milleth (Anna)	Dindigul
		Periyar	Erode
		Kannyia kumari	Kanniyakumari
		Pasupomthevar Thirumaganar (Pasumpon Mathuamlingam)	Sivaganga
		Nilgiri	The Nilgiris

		V.O.Chidambaram	Toothukudi
		Tiruchirpalli	Tiruchirappalli
		Tirunelveli Kottabomman	Tirunelveli
		Thiruvannamalai Sambuvarayar	Tiruvanamalai
		North Arcot Ambedhkar	Vellore
		Kamarajar	Virudhunagar
20	Uttar Pradesh	Bara Banki	Barabanki
		Rai Bareli	Rae Bareli
		Sidhartha Nagar	Siddharthnagar
		Sonbadra	Sonbhadra
		Maunath Bhanjan	Mau
21	Uttaranchal	Uttar Kashi	Uttarkashi
		Dehra Dun	Dehradun
22	West Bengal	Burdwan	Barddhaman
		Hooghly	Hugli
		Kochbihar	Koch Bihar
		Calcutta	Kolkata
		Midnapur	Medinipur

Source: Analysed and tabulated by author from table 2A.1 and 2A.2

Table 2A.8: Possible Reorganisation of Districts between 50th and 61st Round

State / Region (61st round)	District	Possible Reorganisation
ASM (Plains Eastern)	Dhemaji	Imported from Plains Western
	Jorhat	
	Golaghat	
	Karimganz	
	Hailakandi	
ASM (Plains Western)	Bongaigaon	Imported from Plains Eastern
	Barpeta	
	Nalbari	
	Marigaon	
	Sonitpur	
	Kokrajhar	Imported from Hills
UPH (Western)	Bareily	Imported from Himalayan
UPH (Eastern)	Sonbadra	Imported from Western
UPH (Himalayan)/Uttaranchal	Hardwar	

Source: Analysed and tabulated by author from table 2A.1 and 2A.2

APPENDIX - B

Table 3A.1: Trends in Per Capita Net State Domestic Product: All India

(percent per annum)

Economic Growth	1993-94	2004-05	Growth in PCNSDP (%)
Agriculture Sector	6292	6734	0.62
Tertiary sector	26040	47535	5.62
Aggregate	15558	24713	4.30

Source: Computed by author from CSO, NSDP data.

Table 3A.2: State-wise Trends in Per Capita Net State Domestic Product: Total

(percent per annum)

States	1993-94	2004-05	Growth in PCNSDP (%)
Andhra Pradesh	15425	25321	4.61
Assam	14593	16782	1.28
Bihar	6131	7759	2.16
Chhattisgarh	14998	18718	2.03
Delhi	40275	61560	3.93
Goa	43804	76418	5.19
Gujarat	19110	32021	4.80
Haryana	23883	37842	4.27
Himachal Pradesh	18364	33350	5.57
Jammu & Kashmir	16867	21314	2.15
Jharkhand	13854	18512	2.67
Karnataka	16981	26745	4.22
Kerala	18929	31871	4.85
Madhya Pradesh	12681	15442	1.81
Maharashtra	24828	35915	3.41
Orissa	11846	17380	3.55
Punjab	26016	33496	2.32
Rajasthan	12260	18565	3.84
Tamil Nadu	18797	30105	4.37
Uttar Pradesh	10725	12840	1.65
Uttaranchal	16289	24742	3.87
West Bengal	13468	22654	4.84
All-India	15558	24713	4.30
Coefficient of Variation (%)	47.76	55.45	

Source: Computed by author from CSO, NSDP data.

Table 3A.3: State-wise Trends in Per Capita Net State Domestic Product: Agriculture

(percent per annum)

States	1993-94	2004-05	Growth in PCNSDP (%)
Andhra Pradesh	7740	9160	1.54
Assam	5932	5199	-1.19
Bihar	2585	2680	0.33
Chhattisgarh	7628	5391	-3.11
Delhi	17523	11888	-3.47
Goa	11387	12613	0.93
Gujarat	6672	9210	2.98
Haryana	11893	12427	0.40
Himachal Pradesh	8156	9916	1.79
Jammu & Kashmir	6848	8681	2.18
Jharkhand	2967	3752	2.16
Karnataka	8599	7890	-0.78

Kerala	6563	7074	0.68
Madhya Pradesh	6938	6139	-1.10
Maharashtra	6428	6954	0.72
Orissa	5547	5258	-0.48
Punjab	16091	17959	1.00
Rajasthan	5181	6573	2.19
Tamil Nadu	6034	6645	0.88
Uttar Pradesh	4985	5040	0.10
Uttaranchal	6695	7581	1.14
West Bengal	6542	7846	1.67
All-India	6292	6734	0.62
Coefficient of Variation (%)	47.51	43.06	

Source: Computed by author from CSO, NSDP data.

Table 3A.4: State-wise Trends in Per Capita Net State Domestic Product: Tertiary

(percent per annum)

States	1993-94	2004-05	Growth in PCNSDP (%)
Andhra Pradesh	24857	48276	6.22
Assam	50355	59057	1.46
Bihar	27512	41473	3.80
Chhattisgarh	25105	32557	2.39
Delhi	32424	53357	4.63
Goa	44962	67293	3.73
Gujarat	22050	38938	5.31
Haryana	30102	57603	6.08
Himachal Pradesh	68917	119607	5.14
Jammu & Kashmir	28249	36195	2.28
Jharkhand	20867	27602	2.58
Karnataka	20729	40712	6.33
Kerala	35089	75608	7.23
Madhya Pradesh	20036	26483	2.57
Maharashtra	31939	51077	4.36
Orissa	31082	51348	4.67
Punjab	29855	40192	2.74
Rajasthan	22999	35037	3.90
Tamil Nadu	24514	37599	3.97
Uttar Pradesh	23310	28577	1.87
Uttaranchal	31697	46979	3.64
West Bengal	22658	44975	6.43
All-India	26040	47535	5.62
Coefficient of Variation (%)	37.67	42.18	

Source: Computed by author from CSO, NSDP data.

Table 3A.5: Rank of the States in Per Capita Net State Domestic Product Growth

Ranks	Total	Agriculture	Tertiary
1	Himachal Pradesh	Gujarat	Kerala
2	Goa	Rajasthan	West Bengal
3	Kerala	Jammu & Kashmir	Karnataka
4	West Bengal	Jharkhand	Andhra Pradesh
5	Gujarat	Himachal Pradesh	Haryana
6	Andhra Pradesh	West Bengal	All-India
7	Tamil Nadu	Andhra Pradesh	Gujarat
8	All-India	Uttaranchal	Himachal Pradesh
9	Haryana	Punjab	Orissa

10	Karnataka	Goa	Delhi
11	Delhi	Tamil Nadu	Maharashtra
12	Uttaranchal	Maharashtra	Tamil Nadu
13	Rajasthan	Kerala	Rajasthan
14	Orissa	All-India	Bihar
15	Maharashtra	Haryana	Goa
16	Jharkhand	Bihar	Uttaranchal
17	Punjab	Uttar Pradesh	Punjab
18	Bihar	Orissa	Jharkhand
19	Jammu & Kashmir	Karnataka	Madhya Pradesh
20	Chhattisgarh	Madhya Pradesh	Chhattisgarh
21	Madhya Pradesh	Assam	Jammu & Kashmir
22	Uttar Pradesh	Chhattisgarh	Uttar Pradesh
23	Assam	Delhi	Assam

Note: The states are arranged in descending order of the growth rate of PCNSDP.

Source: Evaluated and tabulated by author from table 3A.2, 3A.3and 3A.4.

Table 3A.6: Trends in Average Per Capita Expenditure: All India

Growth	1993-94	2004-05	Growth in APCE (%)
Rural	286.07	579.18	6.62
Urban	463.83	1104.60	8.21
Total	330.13	712.20	7.24

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3.A.7: State-wise Trends in Average Per Capita Expenditure: Total

(percent per annum)

States	1993-94	2004-05	Growth in APCE (%)
Andhra Pradesh	316.69	728.65	7.87
Assam	293.25	627.87	7.17
Bihar	238.72	471.33	6.38
Chhattisgarh	267.34	524.24	6.31
Delhi	719.96	1394.93	6.20
Goa	516.95	1127.31	7.34
Gujarat	368.92	838.31	7.75
Haryana	407.50	979.30	8.30
Himachal Pradesh	381.12	891.06	8.03
Jammu & Kashmir	411.07	883.33	7.20
Jharkhand	258.17	532.47	6.80
Karnataka	325.60	726.09	7.56
Kerala	414.84	1106.76	9.33
Madhya Pradesh	303.70	562.27	5.76
Maharashtra	375.03	851.30	7.74
Orissa	245.68	472.32	6.12
Punjab	459.95	1034.20	7.64
Rajasthan	353.49	675.36	6.06
Tamil Nadu	346.51	818.80	8.13
Uttar Pradesh	297.39	606.18	6.69
Uttaranchal	353.20	737.44	6.92
West Bengal	332.19	718.42	7.26
All-India	330.13	712.20	7.24
Coefficient of Variation (%)	29.14	30.15	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.8: State-wise Trends in Average Per Capita Expenditure: Rural

(percent per annum)

States	1993-94	2004-05	Growth in APCE (%)
Andhra Pradesh	282.98	603.94	7.13
Assam	272.27	576.71	7.06
Bihar	228.70	444.98	6.24
Chhattisgarh	237.12	444.88	5.89
Delhi	620.61	1056.41	4.95
Goa	493.10	1020.73	6.84
Gujarat	318.50	644.87	6.62
Haryana	378.36	905.19	8.25
Himachal Pradesh	358.43	835.57	8.00
Jammu & Kashmir	370.42	805.20	7.31
Jharkhand	219.30	439.28	6.52
Karnataka	279.18	542.91	6.23
Kerala	392.84	1030.96	9.17
Madhya Pradesh	266.86	461.07	5.10
Maharashtra	276.84	596.66	7.23
Orissa	222.09	422.06	6.01
Punjab	434.94	905.25	6.89
Rajasthan	329.73	598.20	5.56
Tamil Nadu	294.18	601.63	6.72
Uttar Pradesh	274.66	539.29	6.33
Uttaranchal	317.36	648.94	6.72
West Bengal	285.46	575.65	6.58
All-India	286.07	579.18	6.62
Coefficient of Variation (%)	29.61	30.81	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.9: State-wise Trends in Average Per Capita Expenditure: Urban

(percent per annum)

States	1993-94	2004-05	Growth in APCE (%)
Andhra Pradesh	412.20	1091.40	9.26
Assam	478.15	1129.56	8.13
Bihar	333.00	729.54	7.39
Chhattisgarh	411.30	962.93	8.04
Delhi	732.05	1419.47	6.20
Goa	549.59	1304.77	8.18
Gujarat	473.73	1205.80	8.86
Haryana	491.40	1183.49	8.32
Himachal Pradesh	627.27	1422.14	7.73
Jammu & Kashmir	547.87	1115.37	6.68
Jharkhand	420.99	1017.29	8.35
Karnataka	441.15	1138.08	9.00
Kerala	482.77	1353.83	9.83
Madhya Pradesh	410.76	893.29	7.32
Maharashtra	540.48	1228.43	7.75
Orissa	407.22	789.79	6.21
Punjab	521.50	1306.07	8.70
Rajasthan	433.37	944.57	7.34
Tamil Nadu	442.70	1166.33	9.21
Uttar Pradesh	392.05	879.67	7.62
Uttaranchal	507.09	1027.58	6.63
West Bengal	486.44	1158.97	8.21
All-India	463.83	1104.60	8.21
Coefficient of Variation (%)	18.12	17.29	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.10: Rank of the States in Average Per Capita Expenditure Growth

Ranks	Total	Rural	Urban
1	Kerala	Kerala	Kerala
2	Haryana	Haryana	Andhra Pradesh
3	Tamil Nadu	Himachal Pradesh	Tamil Nadu
4	Himachal Pradesh	Jammu & Kashmir	Karnataka
5	Andhra Pradesh	Maharashtra	Gujarat
6	Gujarat	Andhra Pradesh	Punjab
7	Maharashtra	Assam	Jharkhand
8	Punjab	Punjab	Haryana
9	Karnataka	Goa	West Bengal
10	Goa	Tamil Nadu	All-India
11	West Bengal	Uttaranchal	Goa
12	All-India	Gujarat	Assam
13	Jammu & Kashmir	All-India	Chhattisgarh
14	Assam	West Bengal	Maharashtra
15	Uttaranchal	Jharkhand	Himachal Pradesh
16	Jharkhand	Uttar Pradesh	Uttar Pradesh
17	Uttar Pradesh	Bihar	Bihar
18	Bihar	Karnataka	Rajasthan
19	Chhattisgarh	Orissa	Madhya Pradesh
20	Delhi	Chhattisgarh	Jammu & Kashmir
21	Orissa	Rajasthan	Uttaranchal
22	Rajasthan	Madhya Pradesh	Orissa
23	Madhya Pradesh	Delhi	Delhi

Note: The states are arranged in descending order of the growth rate of APCE.
Source: Evaluated and tabulated by author from table 3A.7, 3A.8 and 3A.9.

Table 3A.11: Region-wise Trends in Average Per Capita Expenditure: Total

(percent per annum)

Regions	1993-94	2004-05	Growth in APCE (%)
ANP (Coastal)	301.87	772.02	8.91
ANP (Inland Northern)	335.57	738.03	7.43
ANP (South Western)	320.29	577.62	5.51
ANP (Inland Southern)	308.81	645.64	6.93
ASM (Plains Eastern)	313.15	645.58	6.80
ASM (Plains Western)	280.95	624.08	7.53
ASM (Hills)	294.76	514.45	5.19
BHR (Northern)	226.97	464.05	6.72
BHR (Central)	254.76	481.18	5.95
CTH (Chhattisgarh)	267.34	524.24	6.31
DEL (Delhi)	719.96	1394.93	6.20
GOA (Goa)	516.95	1127.31	7.34
GJT (Eastern)	321.39	662.58	6.80
GJT (Plains Northern)	385.42	940.49	8.45
GJT (Plains Southern)	407.91	1019.97	8.69
GJT (Dry Areas)	342.92	593.12	5.11
GJT (Saurashtra)	364.88	832.46	7.79
HRA (Eastern)	385.97	1086.87	9.87
HRA (Western)	443.28	783.18	5.31
HPR (Himachal Pradesh)	381.12	891.06	8.03
J & K (Mountainous)	435.10	1076.13	8.58
J & K (Outer Hills)	328.64	661.76	6.57

JHR (Jharkhand)	258.17	532.47	6.80
KNT (Coastal & Ghats)	408.51	801.79	6.32
KNT (Inland Eastern)	346.67	694.56	6.52
KNT (Inland Southern)	358.35	960.27	9.37
KNT (Inland Northern)	282.17	536.19	6.01
KER (Northern)	380.92	868.65	7.78
KER (Southern)	436.69	1267.94	10.18
MPH (Vindhya)	285.46	496.68	5.16
MPH (Central)	288.87	526.06	5.60
MPH (Malwa)	327.69	721.55	7.44
MPH (South)	307.06	470.68	3.96
MPH (South Western)	230.90	515.52	7.57
MPH (Northern)	352.14	558.12	4.28
MHR (Coastal)	594.31	1306.77	7.43
MHR (Inland Western)	358.45	855.37	8.23
MHR (Inland Northern)	286.11	647.17	7.70
MHR (Inland Central)	270.70	558.59	6.81
MHR (Inland Eastern)	294.38	693.89	8.11
MHR (Eastern)	267.57	611.29	7.80
ORS (Coastal)	247.49	528.52	7.14
ORS (Southern)	208.07	355.88	5.00
ORS (Northern)	262.31	455.49	5.14
PNB (Northern)	486.27	1114.47	7.83
PNB (Southern)	422.14	919.80	7.34
RJN (Western)	356.80	653.91	5.66
RJN (North Eastern)	368.40	703.75	6.06
RJN (Southern)	327.40	608.51	5.80
RJN (South Eastern)	323.60	705.73	7.35
TNU (Coastal Northern)	358.16	942.26	9.19
TNU (Coastal)	350.53	763.66	7.34
TNU (Southern)	307.64	711.69	7.92
TNU (Inland)	368.47	788.76	7.16
UPH (Western)	344.80	671.78	6.25
UPH (Central)	276.62	681.11	8.54
UPH (Eastern)	268.88	513.95	6.07
UPH (Southern)	234.29	550.02	8.07
UTR (Uttaranchal)	353.20	737.44	6.92
WBL (Himalayan)	246.18	620.71	8.77
WBL (Eastern Plains)	297.09	536.95	5.53
WBL (Central Plains)	389.58	884.48	7.74
WBL (Western Plains)	287.67	630.27	7.39
All-India	330.13	712.20	7.24
Coefficient of Variation (%)	21.02	28.68	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.12 : Region-wise Trends in Average Per Capita Expenditure: Rural

(percent per annum)

Regions	1993-94	2004-05	Growth in APCE (%)
ANP (Coastal)	273.70	649.28	8.17
ANP (Inland Northern)	289.80	591.78	6.71
ANP (South Western)	293.20	477.58	4.54
ANP (Inland Southern)	290.52	576.97	6.44
ASM (Plains Eastern)	287.43	593.40	6.81
ASM (Plains Western)	262.45	572.12	7.34
ASM (Hills)	280.58	486.70	5.13
BHR (Northern)	221.82	453.75	6.72
BHR (Central)	238.91	431.53	5.52
CTH (Chhattisgarh)	237.12	444.88	5.89
DEL (Delhi)	620.61	1056.41	4.95
GOA (Goa)	493.10	1020.73	6.84
GJT (Eastern)	308.98	578.68	5.87
GJT (Plains Northern)	317.00	691.54	7.35
GJT (Plains Southern)	315.48	670.87	7.10
GJT (Dry Areas)	306.62	547.35	5.41
GJT (Saurashtra)	339.17	738.48	7.33
HRA (Eastern)	351.78	1003.15	9.99
HRA (Western)	417.20	748.68	5.46
HPR (Himachal Pradesh)	358.43	835.57	8.00
J & K (Mountainous)	394.79	947.99	8.29
J & K (Outer Hills)	295.66	607.58	6.77
JHR (Jharkhand)	219.30	439.28	6.52
KNT (Coastal & Ghats)	354.97	686.09	6.17
KNT (Inland Eastern)	323.97	621.77	6.11
KNT (Inland Southern)	274.82	594.80	7.27
KNT (Inland Northern)	257.47	468.53	5.59
KER (Northern)	361.30	825.74	7.80
KER (Southern)	413.82	1178.53	9.98
MPH (Vindhya)	266.02	432.46	4.52
MPH (Central)	226.70	406.08	5.44
MPH (Malwa)	282.20	548.62	6.23
MPH (South)	275.79	403.20	3.51
MPH (South Western)	201.38	441.66	7.40
MPH (Northern)	323.18	499.45	4.04
MHR (Coastal)	366.05	634.84	5.13
MHR (Inland Western)	305.15	729.46	8.25
MHR (Inland Northern)	250.13	528.47	7.04
MHR (Inland Central)	244.69	510.59	6.92
MHR (Inland Eastern)	241.97	552.49	7.79
MHR (Eastern)	243.53	522.30	7.18
ORS (Coastal)	228.83	481.99	7.01
ORS (Southern)	184.09	322.21	5.22
ORS (Northern)	232.99	395.77	4.93
PNB (Northern)	455.10	974.80	7.17
PNB (Southern)	408.55	821.98	6.56
RJN (Western)	327.91	582.35	5.36
RJN (North Eastern)	347.97	630.41	5.55
RJN (Southern)	307.01	535.58	5.19
RJN (South Eastern)	304.84	604.40	6.42
TNU (Coastal Northern)	284.87	564.79	6.42
TNU (Coastal)	327.26	647.83	6.40
TNU (Southern)	263.65	599.07	7.75
TNU (Inland)	315.24	605.57	6.11
UPH (Western)	317.77	597.22	5.90

UPH (Central)	249.79	559.57	7.61
UPH (Eastern)	254.37	485.87	6.06
UPH (Southern)	229.10	529.19	7.91
UTR (Uttaranchal)	317.36	648.94	6.72
WBL (Himalayan)	232.44	578.07	8.63
WBL (Eastern Plains)	282.16	487.23	5.09
WBL (Central Plains)	305.78	634.31	6.86
WBL (Western Plains)	280.62	605.56	7.24
All-India	286.07	579.18	6.62
Coefficient of Variation (%)	19.09	26.16	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.13: Region-wise Trends in Average Per Capita Expenditure: Urban

(percent per annum)

Regions	1993-94	2004-05	Growth in APCE (%)
ANP (Coastal)	380.40	1116.67	10.29
ANP (Inland Northern)	467.59	1164.16	8.65
ANP (South Western)	392.55	871.81	7.52
ANP (Inland Southern)	364.97	882.57	8.36
ASM (Plains Eastern)	528.94	1136.06	7.20
ASM (Plains Western)	446.69	1146.83	8.95
ASM (Hills)	451.81	794.52	5.27
BHR (Northern)	302.26	681.54	7.67
BHR (Central)	352.16	748.29	7.09
CTH (Chhattisgarh)	411.30	962.93	8.04
DEL (Delhi)	732.05	1419.47	6.20
GOA (Goa)	549.59	1304.77	8.18
GJT (Eastern)	442.79	1187.93	9.39
GJT (Plains Northern)	478.47	1241.20	9.05
GJT (Plains Southern)	543.97	1374.71	8.79
GJT (Dry Areas)	516.40	931.50	5.51
GJT (Saurashtra)	409.44	985.23	8.31
HRA (Eastern)	468.03	1281.05	9.59
HRA (Western)	549.18	918.99	4.79
HPR (Himachal Pradesh)	627.27	1422.14	7.73
J & K (Mountainous)	556.54	1399.57	8.74
J & K (Outer Hills)	501.58	1071.85	7.15
JHR (Jharkhand)	420.99	1017.29	8.35
KNT (Coastal & Ghats)	585.76	1216.95	6.87
KNT (Inland Eastern)	427.12	1015.85	8.20
KNT (Inland Southern)	492.61	1430.08	10.17
KNT (Inland Northern)	359.79	741.74	6.80
KER (Northern)	446.70	1033.00	7.92
KER (Southern)	503.77	1531.15	10.63
MPH (Vindhya)	404.82	853.75	7.02
MPH (Central)	421.78	798.34	5.97
MPH (Malwa)	423.80	1153.61	9.53
MPH (South)	386.34	769.19	6.46
MPH (South Western)	366.11	779.51	7.11
MPH (Northern)	438.52	722.32	4.64
MHR (Coastal)	695.26	1559.04	7.62
MHR (Inland Western)	491.06	1108.73	7.68
MHR (Inland Northern)	383.87	919.17	8.26
MHR (Inland Central)	360.12	725.00	6.57

MHR (Inland Eastern)	390.79	955.13	8.46
MHR (Eastern)	409.34	945.58	7.91
ORS (Coastal)	378.35	802.30	7.07
ORS (Southern)	417.25	750.92	5.49
ORS (Northern)	437.32	783.99	5.45
PNB (Northern)	553.59	1351.23	8.45
PNB (Southern)	463.01	1211.08	9.13
RJN (Western)	452.67	923.80	6.70
RJN (North Eastern)	425.30	904.73	7.10
RJN (Southern)	490.62	1071.26	7.36
RJN (South Eastern)	391.00	1175.19	10.52
TNU (Coastal Northern)	460.25	1349.22	10.27
TNU (Coastal)	425.69	1122.68	9.22
TNU (Southern)	393.85	908.48	7.89
TNU (Inland)	470.09	1096.77	8.01
UPH (Western)	425.25	877.03	6.80
UPH (Central)	376.66	1081.90	10.07
UPH (Eastern)	371.22	744.07	6.53
UPH (Southern)	253.04	625.40	8.57
UTR (Uttaranchal)	507.09	1027.58	6.63
WBL (Himalayan)	354.23	919.58	9.06
WBL (Eastern Plains)	402.72	869.02	7.24
WBL (Central Plains)	521.49	1252.25	8.29
WBL (Western Plains)	365.42	900.52	8.54
All-India	463.83	1104.60	8.21
Coefficient of Variation (%)	16.76	21.83	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.14: Trends in Incidence of Poverty: All India

	1993-94	2004-05	Net Change	% Change in Poverty Ratio
Rural	50.24	41.78	-8.47	-1.66
Urban	31.85	25.64	-6.21	-1.95
All	45.68	37.69	-7.99	-1.73

Source: Calculations based on unit level records for the 50th and 61st Round of NSS.

Table 3A.15: State-wise Trends in Incidence of Poverty: Total

States	1993-94	2004-05	Net Change	% Change in Poverty Ratio
Andhra Pradesh	44.88	30.01	-14.87	-3.59
Assam	52.52	35.03	-17.50	-3.62
Bihar	60.83	54.60	-6.24	-0.98
Chhattisgarh	51.29	50.97	-0.32	-0.06
Delhi	15.77	13.05	-2.72	-1.71
Goa	21.28	25.89	4.61	1.80
Gujarat	38.37	32.53	-5.85	-1.49
Haryana	36.12	24.18	-11.94	-3.58
Himachal Pradesh	34.96	23.04	-11.93	-3.72
Jammu & Kashmir	26.70	13.16	-13.54	-6.23
Jharkhand	61.22	47.15	-14.07	-2.35
Karnataka	50.33	33.92	-16.41	-3.52
Kerala	31.64	19.77	-11.87	-4.19
Madhya Pradesh	44.77	49.25	4.47	0.87

Maharashtra	48.60	38.91	-9.69	-2.00
Orissa	59.55	57.61	-1.94	-0.30
Punjab	22.40	21.02	-1.38	-0.58
Rajasthan	38.43	34.47	-3.97	-0.99
Tamil Nadu	45.04	30.69	-14.35	-3.43
Uttar Pradesh	48.59	41.02	-7.57	-1.53
Uttaranchal	33.57	33.04	-0.53	-0.14
West Bengal	40.03	34.85	-5.18	-1.25
All India	45.68	37.69	-7.99	-1.73

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.16: State-wise Trends in Incidence of Poverty: Rural

States	1993-94	2004-05	Net Change	% Change in Poverty Ratio
Andhra Pradesh	48.25	32.29	-15.96	-3.59
Assam	55.32	36.38	-18.95	-3.74
Bihar	62.54	55.71	-6.83	-1.05
Chhattisgarh	56.10	55.06	-1.04	-0.17
Delhi	16.20	15.57	-0.63	-0.36
Goa	25.51	28.09	2.58	0.88
Gujarat	43.29	39.09	-4.20	-0.92
Haryana	40.27	24.82	-15.44	-4.30
Himachal Pradesh	36.93	24.97	-11.96	-3.50
Jammu & Kashmir	32.57	14.10	-18.48	-7.33
Jharkhand	65.86	51.64	-14.22	-2.19
Karnataka	56.76	37.49	-19.27	-3.70
Kerala	34.02	20.19	-13.83	-4.63
Madhya Pradesh	49.10	53.59	4.48	0.80
Maharashtra	59.36	47.88	-11.47	-1.93
Orissa	63.16	60.78	-2.38	-0.35
Punjab	20.36	22.12	1.76	0.76
Rajasthan	40.94	35.84	-5.10	-1.20
Tamil Nadu	51.18	37.54	-13.64	-2.78
Uttar Pradesh	51.04	42.72	-8.32	-1.60
Uttaranchal	36.73	35.13	-1.60	-0.40
West Bengal	42.67	38.23	-4.43	-0.99
All India	50.24	41.78	-8.47	-1.66

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.17: State-wise Trends in Incidence of Poverty: Urban

States	1993-94	2004-05	Net Change	% Change in Poverty Ratio
Andhra Pradesh	35.32	23.37	-11.95	-3.69
Assam	27.84	21.77	-6.06	-2.21
Bihar	44.83	43.73	-1.11	-0.23
Chhattisgarh	28.38	28.39	0.01	0.004
Delhi	15.72	12.87	-2.85	-1.80
Goa	15.49	22.21	6.72	3.33
Gujarat	28.15	20.05	-8.10	-3.04
Haryana	24.17	22.39	-1.78	-0.69
Himachal Pradesh	13.62	4.55	-9.07	-9.48
Jammu & Kashmir	6.93	10.36	3.44	3.73
Jharkhand	41.82	23.82	-18.00	-4.99
Karnataka	34.32	25.88	-8.44	-2.53
Kerala	24.31	18.39	-5.92	-2.50
Madhya Pradesh	32.18	35.05	2.87	0.78

Maharashtra	30.49	25.62	-4.87	-1.57
Orissa	34.77	37.59	2.82	0.71
Punjab	27.43	18.71	-8.72	-3.42
Rajasthan	30.02	29.69	-0.33	-0.10
Tamil Nadu	33.76	19.74	-14.02	-4.76
Uttar Pradesh	38.38	34.06	-4.33	-1.08
Uttaranchal	20.02	26.20	6.19	2.48
West Bengal	31.33	24.42	-6.90	-2.24
All India	31.85	25.64	-6.21	-1.95

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.18: Rank of States in Descending order of Incidence of Poverty

Ranks	Total		Rural		Urban	
	1993-94	2004-05	1993-94	2004-05	1993-94	2004-05
1	DEL	DEL	DEL	J & K	J & K	HPR
2	GOA	J& K	PNB	DEL	HPR	J & K
3	PNB	KER	GOA	KER	GOA	DEL
4	J & K	PNB	J & K	PNB	DEL	KER
5	KER	HPR	KER	HRA	UTR	PNB
6	UTR	HRA	UTR	HPR	HRA	TNU
7	HPR	GOA	HPR	GOA	KER	GJT
8	HRA	ANP	HRA	ANP	PNB	ASM
9	GJT	TNU	RJN	UTR	ASM	GOA
10	RJN	GJT	WBL	RJN	GJT	HRA
11	WBL	UTR	GJT	ASM	CTH	ANP
12	MPH	KNT	ANP	KNT	RJN	JHR
13	ANP	RJN	MPH	TNU	MHR	WBL
14	TNU	WBL	All-India	WBL	WBL	MHR
15	All-India	ASM	UPH	GJT	All-India	All-India
16	UPH	All-India	TNU	All-India	MPH	KNT
17	MHR	MHR	ASM	UPH	TNU	UTR
18	KNT	UPH	CTH	MHR	KNT	CTH
19	CTH	JHR	KNT	JHR	ORS	RJN
20	ASM	MPH	MHR	MPH	ANP	UPH
21	ORS	CTH	BHR	CTH	UPH	MPH
22	BHR	BHR	ORS	BHR	JHR	ORS
23	JHR	ORS	JHR	ORS	BHR	BHR

Source: Evaluated and tabulated by author from table 3A.15, 3A.16 and 3A.17.

Table 3A.19 : Region-wise Trends in Incidence of Poverty: Total

Regions	1993-94	2004-05	Net Change	% Change in Poverty Ratio
ANP (Coastal)	47.74	22.52	-25.22	-6.60
ANP (Inland Northern)	41.75	30.98	-10.77	-2.68
ANP (South Western)	46.37	50.90	4.52	0.85
ANP (Inland Southern)	41.81	39.45	-2.36	-0.53
ASM (Plains Eastern)	44.73	34.08	-10.65	-2.44
ASM (Plains Western)	57.33	34.25	-23.08	-4.57
ASM (Hills)	52.01	56.19	4.18	0.70
BHR (Northern)	65.34	53.36	-11.98	-1.82
BHR (Central)	54.69	56.27	1.59	0.26
CTH (Chhattisgarh)	51.29	50.97	-0.32	-0.06
DEL (Delhi)	15.77	13.05	-2.72	-1.71
GOA (Goa)	21.28	25.89	4.61	1.80

GJT (Eastern)	43.29	47.57	4.27	0.86
GJT (Plains Northern)	37.84	30.74	-7.10	-1.87
GJT (Plains Southern)	37.20	27.03	-10.16	-2.86
GJT (Dry Areas)	46.55	45.85	-0.69	-0.14
GJT (Saurashtra)	32.46	18.91	-13.55	-4.79
HRA (Eastern)	39.03	21.51	-17.53	-5.27
HRA (Western)	31.27	29.04	-2.24	-0.67
HPR (Himachal Pradesh)	34.96	23.04	-11.93	-3.72
J & K (Mountainous)	19.74	4.88	-14.86	-11.93
J & K (Outer Hills)	50.56	29.98	-20.58	-4.64
JHR (Jharkhand)	61.22	47.15	-14.07	-2.35
KNT (Coastal & Ghats)	25.06	29.42	4.35	1.47
KNT (Inland Eastern)	35.86	18.30	-17.56	-5.93
KNT (Inland Southern)	46.05	18.91	-27.14	-7.77
KNT (Inland Northern)	61.25	49.57	-11.68	-1.90
KER (Northern)	35.32	30.43	-4.89	-1.35
KER (Southern)	29.27	12.55	-16.72	-7.41
MPH (Vindhya)	44.02	54.93	10.91	2.03
MPH (Central)	55.80	55.99	0.20	0.03
MPH (Malwa)	33.84	38.23	4.39	1.12
MPH (South)	49.80	59.88	10.08	1.69
MPH (South Western)	68.40	50.11	-18.29	-2.79
MPH (Northern)	27.87	41.26	13.39	3.63
MHR (Coastal)	17.29	17.73	0.44	0.23
MHR (Inland Western)	42.95	27.47	-15.47	-3.98
MHR (Inland Northern)	63.41	51.85	-11.56	-1.81
MHR (Inland Central)	68.34	61.34	-6.99	-0.98
MHR (Inland Eastern)	65.72	49.71	-16.02	-2.51
MHR (Eastern)	66.55	56.52	-10.03	-1.47
ORS (Coastal)	58.04	43.53	-14.51	-2.58
ORS (Southern)	76.64	78.01	1.37	0.16
ORS (Northern)	52.91	66.13	13.22	2.05
PNB (Northern)	17.39	15.84	-1.55	-0.84
PNB (Southern)	29.60	28.41	-1.20	-0.37
RJN (Western)	35.97	37.69	1.72	0.43
RJN (North Eastern)	31.74	28.90	-2.85	-0.85
RJN (Southern)	58.73	50.32	-8.41	-1.40
RJN (South Eastern)	47.20	28.60	-18.59	-4.45
TNU (Coastal Northern)	48.98	31.24	-17.74	-4.00
TNU (Coastal)	35.83	23.70	-12.13	-3.69
TNU (Southern)	50.92	34.07	-16.85	-3.59
TNU (Inland)	38.62	31.87	-6.75	-1.73
UPH (Western)	35.89	33.64	-2.26	-0.59
UPH (Central)	54.04	34.37	-19.67	-4.03
UPH (Eastern)	55.64	50.78	-4.86	-0.83
UPH (Southern)	70.14	45.46	-24.68	-3.87
UTR (Uttaranchal)	33.57	33.04	-0.53	-0.14
WBL (Himalayan)	57.71	28.36	-29.34	-6.25
WBL (Eastern Plains)	48.07	54.38	6.31	1.13
WBL (Central Plains)	29.84	23.75	-6.09	-2.05
WBL (Western Plains)	44.57	35.93	-8.63	-1.94
All India	45.68	37.69	-7.99	-1.73

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.20: Region-wise Trends in Incidence of Poverty: Rural

Regions	1993-94	2004-05	Net Change	% Change in Poverty Ratio
ANP (Coastal)	50.22	23.58	-26.63	-6.64
ANP (Inland Northern)	46.62	34.38	-12.24	-2.73
ANP (South Western)	51.43	54.45	3.02	0.52
ANP (Inland Southern)	41.85	40.87	-0.97	-0.21
ASM (Plains Eastern)	47.49	35.45	-12.04	-2.62
ASM (Plains Western)	60.08	35.55	-24.53	-4.66
ASM (Hills)	55.46	58.12	2.65	0.43
BHR (Northern)	66.01	53.74	-12.27	-1.85
BHR (Central)	57.38	58.72	1.34	0.21
CTH (Chhattisgarh)	56.10	55.06	-1.04	-0.17
DEL (Delhi)	16.20	15.57	-0.63	-0.36
GOA (Goa)	25.51	28.09	2.58	0.88
GJT (Eastern)	44.21	51.18	6.98	1.34
GJT (Plains Northern)	43.66	38.03	-5.63	-1.25
GJT (Plains Southern)	49.98	39.79	-10.19	-2.05
GJT (Dry Areas)	50.58	48.34	-2.24	-0.41
GJT (Saurashtra)	32.90	16.69	-16.21	-5.98
HRA (Eastern)	44.95	22.95	-21.99	-5.93
HRA (Western)	33.43	27.81	-5.62	-1.66
HPR (Himachal Pradesh)	36.93	24.97	-11.96	-3.50
J & K (Mountainous)	23.99	4.97	-19.01	-13.33
J & K (Outer Hills)	58.91	32.72	-26.19	-5.20
JHR (Jharkhand)	65.86	51.64	-14.22	-2.19
KNT (Coastal & Ghats)	29.91	26.98	-2.93	-0.93
KNT (Inland Eastern)	37.94	17.81	-20.13	-6.64
KNT (Inland Southern)	59.07	27.47	-31.60	-6.72
KNT (Inland Northern)	64.68	49.60	-15.08	-2.38
KER (Northern)	37.70	30.31	-7.39	-1.96
KER (Southern)	31.57	12.91	-18.66	-7.81
MPH (Vindhya)	46.14	59.72	13.59	2.37
MPH (Central)	63.78	64.53	0.75	0.11
MPH (Malwa)	36.35	42.10	5.76	1.35
MPH (South)	57.13	64.46	7.33	1.10
MPH (South Western)	73.96	53.22	-20.73	-2.95
MPH (Northern)	27.65	40.10	12.45	3.44
MHR (Coastal)	33.92	44.03	10.11	2.40
MHR (Inland Western)	46.41	27.10	-19.31	-4.77
MHR (Inland Northern)	68.76	54.91	-13.86	-2.02
MHR (Inland Central)	70.94	61.65	-9.29	-1.27
MHR (Inland Eastern)	72.85	54.30	-18.55	-2.64
MHR (Eastern)	70.37	63.20	-7.17	-0.97
ORS (Coastal)	60.21	44.64	-15.58	-2.68
ORS (Southern)	80.75	80.70	-0.05	-0.01
ORS (Northern)	57.88	71.58	13.70	1.95
PNB (Northern)	14.64	15.66	1.02	0.61
PNB (Southern)	27.85	29.87	2.02	0.64
RJN (Western)	40.15	40.38	0.23	0.05
RJN (North Eastern)	31.05	27.33	-3.72	-1.15
RJN (Southern)	62.76	55.02	-7.74	-1.19
RJN (South Eastern)	49.75	29.64	-20.11	-4.60
TNU (Coastal Northern)	60.70	45.41	-15.30	-2.60
TNU (Coastal)	36.70	26.32	-10.38	-2.98
TNU (Southern)	55.30	37.56	-17.74	-3.46
TNU (Inland)	44.73	38.40	-6.33	-1.38
UPH (Western)	36.59	33.56	-3.04	-0.78
UPH (Central)	58.68	37.53	-21.14	-3.98
UPH (Eastern)	57.88	51.94	-5.94	-0.98

UPH (Southern)	68.40	44.69	-23.70	-3.79
UTR (Uttaranchal)	36.73	35.13	-1.60	-0.40
WBL (Himalayan)	59.39	27.77	-31.62	-6.68
WBL (Eastern Plains)	48.58	55.85	7.27	1.28
WBL (Central Plains)	32.16	26.45	-5.71	-1.76
WBL (Western Plains)	43.99	36.76	-7.23	-1.62
All India	50.24	41.78	-8.47	-1.66

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.21: Region-wise Trends in Incidence of Poverty: Urban

Regions	1993-94	2004-05	Net Change	% Change in Poverty Ratio
ANP (Coastal)	40.83	19.53	-21.30	-6.48
ANP (Inland Northern)	27.69	21.07	-6.62	-2.45
ANP (South Western)	32.90	40.45	7.55	1.90
ANP (Inland Southern)	41.69	34.52	-7.17	-1.70
ASM (Plains Eastern)	21.52	21.15	-0.37	-0.16
ASM (Plains Western)	32.75	21.23	-11.52	-3.86
ASM (Hills)	13.71	36.69	22.98	9.36
BHR (Northern)	55.56	45.32	-10.24	-1.84
BHR (Central)	38.14	43.10	4.96	1.12
CTH (Chhattisgarh)	28.38	28.39	0.01	0.00
DEL (Delhi)	15.72	12.87	-2.85	-1.80
GOA (Goa)	15.49	22.21	6.72	3.33
GJT (Eastern)	34.39	24.94	-9.45	-2.88
GJT (Plains Northern)	29.92	21.93	-7.99	-2.79
GJT (Plains Southern)	18.39	14.08	-4.31	-2.40
GJT (Dry Areas)	27.24	27.47	0.22	0.07
GJT (Saurashtra)	31.69	22.50	-9.19	-3.06
HRA (Eastern)	24.84	18.16	-6.68	-2.81
HRA (Western)	22.51	33.86	11.35	3.78
HPR (Himachal Pradesh)	13.62	4.55	-9.07	-9.48
J & K (Mountainous)	6.95	4.65	-2.31	-3.60
J & K (Outer Hills)	6.78	9.26	2.48	2.87
JHR (Jharkhand)	41.82	23.82	-18.00	-4.99
KNT (Coastal & Ghats)	9.00	38.16	29.15	14.03
KNT (Inland Eastern)	28.52	20.49	-8.04	-2.96
KNT (Inland Southern)	25.13	7.91	-17.22	-9.97
KNT (Inland Northern)	50.46	49.47	-0.99	-0.18
KER (Northern)	27.35	30.88	3.53	1.11
KER (Southern)	22.54	11.49	-11.05	-5.94
MPH (Vindhya)	31.02	28.29	-2.73	-0.83
MPH (Central)	38.73	36.63	-2.10	-0.51
MPH (Malwa)	28.54	28.55	0.01	0.00
MPH (South)	31.22	39.62	8.40	2.19
MPH (South Western)	42.98	38.99	-3.99	-0.88
MPH (Northern)	28.52	44.50	15.98	4.13
MHR (Coastal)	9.94	7.86	-2.08	-2.11
MHR (Inland Western)	34.33	28.22	-6.11	-1.77
MHR (Inland Northern)	48.86	44.84	-4.02	-0.78
MHR (Inland Central)	59.38	60.29	0.91	0.14
MHR (Inland Eastern)	52.61	41.22	-11.39	-2.19
MHR (Eastern)	44.00	31.43	-12.57	-3.01
ORS (Coastal)	42.79	36.99	-5.80	-1.31
ORS (Southern)	40.79	46.39	5.60	1.18
ORS (Northern)	23.20	36.12	12.92	4.11
PNB (Northern)	23.33	16.16	-7.18	-3.29
PNB (Southern)	34.89	24.07	-10.83	-3.32
RJN (Western)	22.07	27.52	5.45	2.03

RJN (North Eastern)	33.69	33.20	-0.49	-0.13
RJN (Southern)	26.51	20.52	-5.99	-2.30
RJN (South Eastern)	38.01	23.79	-14.22	-4.17
TNU (Coastal Northern)	32.66	15.98	-16.68	-6.29
TNU (Coastal)	33.01	15.57	-17.44	-6.60
TNU (Southern)	42.33	27.98	-14.35	-3.69
TNU (Inland)	26.94	20.88	-6.06	-2.29
UPH (Western)	33.81	33.86	0.06	0.01
UPH (Central)	36.75	23.92	-12.83	-3.83
UPH (Eastern)	39.79	41.27	1.48	0.33
UPH (Southern)	76.42	48.22	-28.21	-4.10
UTR (Uttaranchal)	20.02	26.20	6.19	2.48
WBL (Himalayan)	44.45	32.50	-11.95	-2.81
WBL (Eastern Plains)	44.46	44.59	0.13	0.03
WBL (Central Plains)	26.18	19.79	-6.39	-2.51
WBL (Western Plains)	50.89	26.86	-24.03	-5.64
All India	31.85	25.64	-6.21	-1.95

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.22: State-wise Indices of Poverty: Rural

States	1993-94			2004-05			% Change in Poverty Ratio		
	HCR	PGI	SPG	HCR	PGI	SPG	HCR	PGI	SPG
Andhra Pradesh	48.25	0.113	0.039	32.29	0.070	0.023	-3.59	-4.33	-4.73
Assam	55.32	0.114	0.034	36.38	0.070	0.020	-3.74	-4.29	-4.55
Bihar	62.54	0.160	0.056	55.71	0.127	0.039	-1.05	-2.09	-3.28
Chhattisgarh	56.10	0.125	0.039	55.06	0.137	0.049	-0.17	0.86	2.16
Delhi	16.20	0.017	0.003	15.57	0.019	0.003	-0.36	1.13	2.99
Goa	25.51	0.065	0.022	28.09	0.056	0.017	0.88	-1.42	-2.35
Gujarat	43.29	0.106	0.036	39.09	0.093	0.032	-0.92	-1.13	-1.18
Haryana	40.27	0.096	0.032	24.82	0.047	0.013	-4.30	-6.19	-7.73
Himachal Pradesh	36.93	0.073	0.023	24.97	0.042	0.011	-3.50	-4.88	-6.24
Jammu & Kashmir	32.57	0.059	0.016	14.10	0.021	0.005	-7.33	-8.97	-9.82
Jharkhand	65.86	0.168	0.058	51.64	0.111	0.034	-2.19	-3.71	-4.82
Karnataka	56.76	0.150	0.055	37.49	0.065	0.017	-3.70	-7.34	-10.31
Kerala	34.02	0.079	0.027	20.19	0.044	0.015	-4.63	-5.22	-5.36
Madhya Pradesh	49.10	0.131	0.049	53.59	0.126	0.042	0.80	-0.34	-1.44
Maharashtra	59.36	0.174	0.069	47.88	0.119	0.043	-1.93	-3.37	-4.32
Orissa	63.16	0.160	0.057	60.78	0.174	0.066	-0.35	0.73	1.42
Punjab	20.36	0.037	0.010	22.12	0.038	0.010	0.76	0.16	-0.20
Rajasthan	40.94	0.089	0.028	35.84	0.070	0.020	-1.20	-2.15	-3.06
Tamil Nadu	51.18	0.135	0.050	37.54	0.074	0.021	-2.78	-5.25	-7.51
Uttar Pradesh	51.04	0.130	0.046	42.72	0.092	0.028	-1.60	-3.16	-4.41
Uttaranchal	36.73	0.066	0.017	35.13	0.058	0.014	-0.40	-1.12	-1.80
West Bengal	42.67	0.087	0.026	38.23	0.079	0.024	-0.99	-0.89	-0.91

Source: Computed by author from NSS CES 50th and 61st Round unit level data..

Table 3A.23: State-wise Indices of Poverty: Urban

States	1993-94			2004-05			% Change in Poverty Ratio)		
	HCR	PGI	SPG	HCR	PGI	SPG	HCR	PGI	SPG
Andhra Pradesh	35.32	0.083	0.028	23.37	0.048	0.015	-3.69	-4.82	-5.61
Assam	27.84	0.050	0.014	21.77	0.042	0.011	-2.21	-1.58	-2.05
Bihar	44.83	0.113	0.040	43.73	0.114	0.039	-0.23	0.14	-0.41
Chhattisgarh	28.38	0.060	0.018	28.39	0.072	0.026	0.004	1.70	3.23
Delhi	15.72	0.038	0.013	12.87	0.020	0.005	-1.80	-5.71	-8.01

Goa	15.49	0.024	0.008	22.21	0.043	0.015	3.33	5.48	6.21
Gujarat	28.15	0.064	0.020	20.05	0.039	0.011	-3.04	-4.30	-5.10
Haryana	24.17	0.046	0.014	22.39	0.049	0.016	-0.69	0.58	1.31
Himachal Pradesh	13.62	0.021	0.005	4.55	0.011	0.004	-9.48	-6.14	-2.46
Jammu & Kashmir	6.93	0.012	0.003	10.36	0.021	0.006	3.73	5.42	6.00
Jharkhand	41.82	0.100	0.034	23.82	0.058	0.019	-4.99	-4.89	-5.10
Karnataka	34.32	0.085	0.030	25.88	0.062	0.021	-2.53	-2.84	-3.00
Kerala	24.31	0.055	0.019	18.39	0.040	0.013	-2.50	-2.81	-3.12
Madhya Pradesh	32.18	0.071	0.023	35.05	0.086	0.029	0.78	1.69	2.13
Maharashtra	30.49	0.081	0.031	25.62	0.065	0.023	-1.57	-2.04	-2.76
Orissa	34.77	0.084	0.029	37.59	0.096	0.035	0.71	1.27	1.83
Punjab	27.43	0.052	0.015	18.71	0.032	0.008	-3.42	-4.41	-6.17
Rajasthan	30.02	0.066	0.021	29.69	0.057	0.017	-0.10	-1.32	-1.88
Tamil Nadu	33.76	0.079	0.029	19.74	0.041	0.013	-4.76	-5.79	-7.33
Uttar Pradesh	38.38	0.097	0.035	34.06	0.078	0.025	-1.08	-1.95	-2.87
Uttaranchal	20.02	0.041	0.013	26.20	0.051	0.014	2.48	2.04	0.82
West Bengal	31.33	0.070	0.023	24.42	0.053	0.016	-2.24	-2.47	-3.04

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.24: Region-wise Indices of Poverty: Rural

Regions	1993-94			2004-05			% Change in Poverty Ratio		
	HCR	PGI	SPG	HCR	PGI	SPG	HCR	PGI	SPG
ANP (Coastal)	50.22	0.123	0.044	23.58	0.053	0.018	-6.64	-7.45	-7.52
ANP (Inland Northern)	46.62	0.104	0.034	34.38	0.067	0.020	-2.73	-3.85	-4.71
ANP (South Western)	51.43	0.127	0.045	54.45	0.128	0.043	0.52	0.04	-0.58
ANP (Inland Southern)	41.85	0.091	0.028	40.87	0.097	0.033	-0.21	0.55	1.36
ASM (Plains Eastern)	47.49	0.093	0.028	35.45	0.066	0.017	-2.62	-3.13	-4.22
ASM (Plains Western)	60.08	0.129	0.038	35.55	0.073	0.022	-4.66	-4.99	-4.76
ASM (Hills)	55.46	0.087	0.019	58.12	0.072	0.014	0.43	-1.66	-2.82
BHR (Northern)	66.01	0.173	0.062	53.74	0.122	0.038	-1.85	-3.12	-4.43
BHR (Central)	57.38	0.140	0.048	58.72	0.134	0.041	0.21	-0.43	-1.40
CTH (Chhattisgarh)	56.10	0.125	0.039	55.06	0.137	0.049	-0.17	0.86	2.16
DEL (Delhi)	16.20	0.017	0.003	15.57	0.019	0.003	-0.36	1.13	2.99
GOA (Goa)	25.51	0.065	0.022	28.09	0.056	0.017	0.88	-1.42	-2.35
GJT (Eastern)	44.21	0.123	0.046	51.18	0.132	0.046	1.34	0.65	-0.004
GJT (Plains Northern)	43.66	0.105	0.034	38.03	0.095	0.031	-1.25	-0.90	-0.98
GJT (Plains Southern)	49.98	0.133	0.046	39.79	0.093	0.030	-2.05	-3.18	-3.83
GJT (Dry Areas)	50.58	0.120	0.038	48.34	0.116	0.043	-0.41	-0.31	1.04
GJT (Saurashtra)	32.90	0.065	0.020	16.69	0.024	0.006	-5.98	-8.49	-10.93
HRA (Eastern)	44.95	0.106	0.036	22.95	0.044	0.012	-5.93	-7.74	-9.39
HRA (Western)	33.43	0.081	0.027	27.81	0.053	0.015	-1.66	-3.71	-5.11
HPR (Himachal Pradesh)	36.93	0.073	0.023	24.97	0.042	0.011	-3.50	-4.88	-6.24
J & K (Mountainous)	23.99	0.034	0.007	4.97	0.009	0.002	-13.33	-10.97	-9.40
J & K (Outer Hills)	58.91	0.137	0.043	32.72	0.044	0.010	-5.20	-9.82	-12.18
JHR (Jharkhand)	65.86	0.168	0.058	51.64	0.111	0.034	-2.19	-3.71	-4.82
KNT (Coastal & Ghats)	29.91	0.058	0.017	26.98	0.064	0.020	-0.93	0.95	1.85
KNT (Inland Eastern)	37.94	0.077	0.025	17.81	0.020	0.004	-6.64	-11.50	-15.76
KNT (Inland Southern)	59.07	0.157	0.057	27.47	0.040	0.009	-6.72	-11.74	-15.46
KNT (Inland Northern)	64.68	0.180	0.068	49.60	0.090	0.023	-2.38	-6.15	-9.30
KER (Northern)	37.70	0.090	0.032	30.31	0.068	0.023	-1.96	-2.52	-3.04
KER (Southern)	31.57	0.072	0.023	12.91	0.026	0.009	-7.81	-8.66	-8.56
MPH (Vindhya)	46.14	0.104	0.034	59.72	0.142	0.045	2.37	2.84	2.71
MPH (Central)	63.78	0.162	0.057	64.53	0.177	0.066	0.11	0.78	1.34
MPH (Malwa)	36.35	0.089	0.031	42.10	0.094	0.031	1.35	0.50	0.14
MPH (South)	57.13	0.161	0.061	64.46	0.169	0.060	1.10	0.45	-0.08

MPH (South Western)	73.96	0.252	0.113	53.22	0.105	0.029	-2.95	-7.69	-11.51
MPH (Northern)	27.65	0.053	0.017	40.10	0.073	0.021	3.44	2.99	1.73
MHR (Coastal)	33.92	0.068	0.020	44.03	0.116	0.044	2.40	4.93	7.28
MHR (Inland Western)	46.41	0.111	0.039	27.10	0.040	0.010	-4.77	-8.85	-11.96
MHR (Inland Northern)	68.76	0.205	0.080	54.91	0.154	0.060	-2.02	-2.60	-2.49
MHR (Inland Central)	70.94	0.257	0.119	61.65	0.165	0.059	-1.27	-3.95	-6.16
MHR (Inland Eastern)	72.85	0.214	0.082	54.30	0.130	0.042	-2.64	-4.43	-5.80
MHR (Eastern)	70.37	0.214	0.081	63.20	0.200	0.083	-0.97	-0.61	0.20
ORS (Coastal)	60.21	0.138	0.045	44.64	0.095	0.030	-2.68	-3.32	-3.72
ORS (Southern)	80.75	0.242	0.095	80.70	0.303	0.137	-0.01	2.06	3.32
ORS (Northern)	57.88	0.148	0.052	71.58	0.209	0.077	1.95	3.21	3.64
PNB (Northern)	14.64	0.025	0.006	15.66	0.021	0.004	0.61	-1.36	-3.35
PNB (Southern)	27.85	0.053	0.015	29.87	0.057	0.016	0.64	0.69	0.90
RJN (Western)	40.15	0.075	0.021	40.38	0.082	0.024	0.05	0.85	1.19
RJN (North Eastern)	31.05	0.063	0.019	27.33	0.047	0.012	-1.15	-2.53	-4.30
RJN (Southern)	62.76	0.160	0.053	55.02	0.121	0.037	-1.19	-2.54	-3.39
RJN (South Eastern)	49.75	0.127	0.044	29.64	0.054	0.016	-4.60	-7.45	-8.92
TNU (Coastal Northern)	60.70	0.180	0.071	45.41	0.099	0.030	-2.60	-5.30	-7.68
TNU (Coastal)	36.70	0.081	0.027	26.32	0.039	0.009	-2.98	-6.42	-9.42
TNU (Southern)	55.30	0.153	0.059	37.56	0.067	0.018	-3.46	-7.17	-9.97
TNU (Inland)	44.73	0.094	0.030	38.40	0.084	0.025	-1.38	-1.00	-1.51
UPH (Western)	36.59	0.078	0.024	33.56	0.059	0.015	-0.78	-2.50	-4.09
UPH (Central)	58.68	0.170	0.064	37.53	0.085	0.026	-3.98	-6.07	-7.84
UPH (Eastern)	57.88	0.147	0.050	51.94	0.118	0.038	-0.98	-1.95	-2.60
UPH (Southern)	68.40	0.216	0.088	44.69	0.106	0.033	-3.79	-6.23	-8.49
UTR (Uttaranchal)	36.73	0.066	0.017	35.13	0.058	0.014	-0.40	-1.12	-1.80
WBL (Himalayan)	59.39	0.111	0.029	27.77	0.051	0.015	-6.68	-6.82	-6.06
WBL (Eastern Plains)	48.58	0.106	0.033	55.85	0.126	0.038	1.28	1.59	1.19
WBL (Central Plains)	32.16	0.070	0.022	26.45	0.043	0.011	-1.76	-4.24	-6.10
WBL (Western Plains)	43.99	0.081	0.022	36.76	0.083	0.027	-1.62	0.24	2.09

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.25: Region-wise Indices of Poverty: Urban

Regions	1993-94			2004-05			% Change in Poverty Ratio		
	HCR	PGI	SPG	HCR	PGI	SPG	HCR	PGI	SPG
ANP (Coastal)	40.83	0.099	0.034	19.53	0.040	0.013	-6.48	-7.81	-8.54
ANP (Inland Northern)	27.69	0.059	0.018	21.07	0.040	0.011	-2.45	-3.52	-4.66
ANP (South Western)	32.90	0.087	0.033	40.45	0.092	0.031	1.90	0.49	-0.46
ANP (Inland Southern)	41.69	0.098	0.033	34.52	0.077	0.026	-1.70	-2.09	-2.09
ASM (Plains Eastern)	21.52	0.030	0.007	21.15	0.045	0.013	-0.16	3.74	6.13
ASM (Plains Western)	32.75	0.064	0.020	21.23	0.040	0.011	-3.86	-4.34	-5.31
ASM (Hills)	13.71	0.034	0.011	36.69	0.054	0.010	9.36	4.16	-1.16
BHR (Northern)	55.56	0.141	0.051	45.32	0.130	0.047	-1.84	-0.78	-0.73
BHR (Central)	38.14	0.095	0.034	43.10	0.108	0.035	1.12	1.23	0.42
CTH (Chhattisgarh)	28.38	0.060	0.018	28.39	0.072	0.026	0.004	1.70	3.23
DEL (Delhi)	15.72	0.038	0.013	12.87	0.020	0.005	-1.80	-5.71	-8.01
GOA (Goa)	15.49	0.024	0.008	22.21	0.043	0.015	3.33	5.48	6.21
GJT (Eastern)	34.39	0.066	0.016	24.94	0.051	0.016	-2.88	-2.32	-0.21
GJT (Plains Northern)	29.92	0.069	0.022	21.93	0.048	0.014	-2.79	-3.35	-3.98
GJT (Plains Southern)	18.39	0.049	0.019	14.08	0.026	0.007	-2.40	-5.81	-8.33
GJT (Dry Areas)	27.24	0.067	0.021	27.47	0.066	0.022	0.07	-0.08	0.20
GJT (Saurashtra)	31.69	0.064	0.020	22.50	0.037	0.010	-3.06	-4.79	-5.71
HRA (Eastern)	24.84	0.048	0.015	18.16	0.039	0.014	-2.81	-1.80	-0.66
HRA (Western)	22.51	0.042	0.012	33.86	0.076	0.022	3.78	5.61	6.10
HPR (Himachal Pradesh)	13.62	0.021	0.005	4.55	0.011	0.004	-9.48	-6.14	-2.46

J & K (Mountainous)	6.95	0.012	0.003	4.65	0.009	0.003	-3.60	-2.83	-1.68
J & K (Outer Hills)	6.78	0.009	0.002	9.26	0.010	0.002	2.87	0.83	-0.89
JHR (Jharkhand)	41.82	0.100	0.034	23.82	0.058	0.019	-4.99	-4.89	-5.10
KNT (Coastal & Ghats)	9.00	0.013	0.003	38.16	0.086	0.026	14.03	18.44	20.87
KNT (Inland Eastern)	28.52	0.062	0.019	20.49	0.032	0.008	-2.96	-6.00	-8.04
KNT (Inland Southern)	25.13	0.053	0.016	7.91	0.015	0.004	-9.97	-10.79	-10.68
KNT (Inland Northern)	50.46	0.139	0.053	49.47	0.127	0.046	-0.18	-0.82	-1.30
KER (Northern)	27.35	0.058	0.019	30.88	0.081	0.029	1.11	2.98	4.07
KER (Southern)	22.54	0.054	0.019	11.49	0.018	0.004	-5.94	-9.38	-12.40
MPH (Vindhya)	31.02	0.053	0.013	28.29	0.072	0.024	-0.83	2.80	5.75
MPH (Central)	38.73	0.102	0.038	36.63	0.104	0.041	-0.51	0.20	0.64
MPH (Malwa)	28.54	0.053	0.014	28.55	0.068	0.022	0.004	2.37	4.01
MPH (South)	31.22	0.075	0.024	39.62	0.090	0.031	2.19	1.70	2.22
MPH (South Western)	42.98	0.121	0.047	38.99	0.085	0.025	-0.88	-3.09	-5.63
MPH (Northern)	28.52	0.055	0.016	44.50	0.108	0.037	4.13	6.37	7.64
MHR (Coastal)	9.94	0.018	0.005	7.86	0.014	0.004	-2.11	-2.58	-3.40
MHR (Inland Western)	34.33	0.077	0.027	28.22	0.058	0.017	-1.77	-2.56	-4.13
MHR (Inland Northern)	48.86	0.125	0.046	44.84	0.128	0.052	-0.78	0.20	1.01
MHR (Inland Central)	59.38	0.194	0.084	60.29	0.184	0.071	0.14	-0.47	-1.49
MHR (Inland Eastern)	52.61	0.167	0.068	41.22	0.113	0.041	-2.19	-3.45	-4.54
MHR (Eastern)	44.00	0.094	0.032	31.43	0.083	0.032	-3.01	-1.12	0.13
ORS (Coastal)	42.79	0.094	0.030	36.99	0.089	0.031	-1.31	-0.45	0.27
ORS (Southern)	40.79	0.126	0.047	46.39	0.151	0.065	1.18	1.65	2.92
ORS (Northern)	23.20	0.056	0.020	36.12	0.091	0.033	4.11	4.45	4.36
PNB (Northern)	23.33	0.041	0.012	16.16	0.024	0.005	-3.29	-4.80	-6.76
PNB (Southern)	34.89	0.072	0.022	24.07	0.048	0.012	-3.32	-3.62	-5.20
RJN (Western)	22.07	0.038	0.010	27.52	0.056	0.017	2.03	3.60	5.36
RJN (North Eastern)	33.69	0.078	0.025	33.20	0.063	0.018	-0.13	-1.85	-2.98
RJN (Southern)	26.51	0.054	0.018	20.52	0.032	0.008	-2.30	-4.56	-7.39
RJN (South Eastern)	38.01	0.102	0.034	23.79	0.048	0.017	-4.17	-6.59	-6.33
TNU (Coastal Northern)	32.66	0.082	0.034	15.98	0.031	0.009	-6.29	-8.47	-11.56
TNU (Coastal)	33.01	0.075	0.025	15.57	0.027	0.007	-6.60	-8.97	-10.55
TNU (Southern)	42.33	0.101	0.035	27.98	0.063	0.020	-3.69	-4.13	-5.14
TNU (Inland)	26.94	0.051	0.014	20.88	0.045	0.015	-2.29	-1.16	0.50
UPH (Western)	33.81	0.083	0.030	33.86	0.072	0.022	0.01	-1.27	-3.00
UPH (Central)	36.75	0.101	0.039	23.92	0.061	0.023	-3.83	-4.45	-4.59
UPH (Eastern)	39.79	0.095	0.031	41.27	0.096	0.030	0.33	0.08	-0.11
UPH (Southern)	76.42	0.204	0.076	48.22	0.127	0.047	-4.10	-4.22	-4.21
UTR (Uttaranchal)	20.02	0.041	0.013	26.20	0.051	0.014	2.48	2.04	0.82
WBL (Himalayan)	44.45	0.102	0.034	32.50	0.071	0.019	-2.81	-3.28	-4.99
WBL (Eastern Plains)	44.46	0.104	0.035	44.59	0.111	0.037	0.03	0.60	0.53
WBL (Central Plains)	26.18	0.055	0.018	19.79	0.040	0.012	-2.51	-2.90	-3.70
WBL (Western Plains)	50.89	0.137	0.047	26.86	0.063	0.022	-5.64	-6.73	-6.84

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.26: Trends in Inequality: All India

	1993-94	2004-05	Net Change	% Change In Inequality
Rural	0.258	0.281	0.023	0.76
Urban	0.319	0.364	0.046	1.22
All India	0.300	0.346	0.046	1.31

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.27: State-wise Trends in Inequality: Total

States	1993-94	2004-05	Net Change	% Change In Inequality
Andhra Pradesh	0.281	0.330	0.049	1.47
Assam	0.211	0.235	0.024	0.97
Bihar	0.223	0.223	0.000	0.01
Chhattisgarh	0.245	0.330	0.086	2.77
Delhi	0.324	0.335	0.011	0.29
Goa	0.274	0.328	0.054	1.66
Gujarat	0.261	0.330	0.069	2.17
Haryana	0.276	0.339	0.063	1.87
Himachal Pradesh	0.275	0.305	0.030	0.94
Jammu & Kashmir	0.247	0.241	-0.005	-0.20
Jharkhand	0.277	0.299	0.022	0.70
Karnataka	0.287	0.354	0.066	1.91
Kerala	0.288	0.365	0.077	2.18
Madhya Pradesh	0.297	0.326	0.029	0.86
Maharashtra	0.348	0.381	0.033	0.83
Orissa	0.263	0.306	0.043	1.39
Punjab	0.251	0.318	0.068	2.20
Rajasthan	0.252	0.269	0.017	0.60
Tamil Nadu	0.318	0.364	0.046	1.23
Uttar Pradesh	0.275	0.297	0.022	0.70
Uttaranchal	0.265	0.283	0.018	0.60
West Bengal	0.294	0.339	0.045	1.29
All India	0.300	0.346	0.046	1.31

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.28: State-wise Trends in Inequality: Rural

States	1993-94	2004-05	Net Change	% Change In Inequality
Andhra Pradesh	0.249	0.268	0.019	0.68
Assam	0.175	0.192	0.017	0.86
Bihar	0.206	0.194	-0.012	-0.53
Chhattisgarh	0.199	0.265	0.066	2.62
Delhi	0.258	0.301	0.043	1.42
Goa	0.275	0.299	0.024	0.75
Gujarat	0.222	0.266	0.044	1.66
Haryana	0.269	0.325	0.057	1.76
Himachal Pradesh	0.253	0.289	0.036	1.21
Jammu & Kashmir	0.216	0.217	0.001	0.02
Jharkhand	0.212	0.209	-0.003	-0.13
Karnataka	0.241	0.246	0.005	0.18
Kerala	0.271	0.347	0.076	2.27
Madhya Pradesh	0.266	0.252	-0.014	-0.50
Maharashtra	0.266	0.288	0.022	0.72
Orissa	0.223	0.266	0.043	1.61
Punjab	0.238	0.285	0.048	1.67
Rajasthan	0.235	0.221	-0.013	-0.52
Tamil Nadu	0.281	0.276	-0.005	-0.18
Uttar Pradesh	0.252	0.252	0.001	0.03
Uttaranchal	0.233	0.239	0.006	0.23
West Bengal	0.238	0.256	0.017	0.65
All India	0.258	0.281	0.023	0.76

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.29: State-wise Trends in Inequality: Urban

States	1993-94	2004-05	Net Change	% Change In Inequality
Andhra Pradesh	0.303	0.363	0.059	1.64
Assam	0.283	0.309	0.027	0.82
Bihar	0.277	0.320	0.043	1.32
Chhattisgarh	0.267	0.372	0.105	3.06
Delhi	0.329	0.334	0.005	0.14
Goa	0.267	0.357	0.089	2.65
Gujarat	0.269	0.313	0.044	1.39
Haryana	0.266	0.341	0.075	2.28
Himachal Pradesh	0.312	0.283	-0.029	-0.87
Jammu & Kashmir	0.259	0.254	-0.005	-0.18
Jharkhand	0.308	0.336	0.028	0.81
Karnataka	0.304	0.369	0.065	1.77
Kerala	0.322	0.396	0.073	1.88
Madhya Pradesh	0.305	0.368	0.063	1.72
Maharashtra	0.335	0.369	0.034	0.89
Orissa	0.294	0.340	0.046	1.32
Punjab	0.264	0.338	0.074	2.26
Rajasthan	0.268	0.322	0.054	1.70
Tamil Nadu	0.327	0.364	0.037	0.98
Uttar Pradesh	0.302	0.354	0.052	1.46
Uttaranchal	0.257	0.317	0.059	1.90
West Bengal	0.327	0.372	0.046	1.20
All India	0.319	0.364	0.046	1.22

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.30: Region-wise Trends in Inequality: Total

Regions	1993-94	2004-05	Net Change	% Change In Inequality
ANP (Coastal)	0.272	0.319	0.047	1.45
ANP (Inland Northern)	0.292	0.341	0.049	1.42
ANP (South Western)	0.296	0.311	0.015	0.45
ANP (Inland Southern)	0.243	0.313	0.07	2.33
ASM (Plains Eastern)	0.219	0.241	0.022	0.87
ASM (Plains Western)	0.205	0.233	0.028	1.17
ASM (Hills)	0.178	0.15	-0.028	-1.56
BHR (Northern)	0.213	0.21	-0.003	-0.12
BHR (Central)	0.231	0.24	0.009	0.34
CTH (Chhattisgarh)	0.245	0.33	0.086	2.77
DEL (Delhi)	0.324	0.335	0.011	0.29
GOA (Goa)	0.274	0.328	0.054	1.66
GJT (Eastern)	0.236	0.313	0.077	2.60
GJT (Plains Northern)	0.273	0.358	0.085	2.50
GJT (Plains Southern)	0.306	0.357	0.051	1.41
GJT (Dry Areas)	0.259	0.252	-0.007	-0.26
GJT (Saurashtra)	0.209	0.23	0.021	0.87
HRA (Eastern)	0.259	0.364	0.105	3.15
HRA (Western)	0.298	0.255	-0.043	-1.40
HPR (Himachal Pradesh)	0.275	0.305	0.03	0.94
J & K (Mountainous)	0.238	0.264	0.025	0.93
J & K (Outer Hills)	0.242	0.193	-0.049	-2.04
JHR (Jharkhand)	0.277	0.299	0.022	0.70
KNT (Coastal & Ghats)	0.277	0.373	0.097	2.76
KNT (Inland Eastern)	0.239	0.261	0.021	0.78
KNT (Inland Southern)	0.305	0.386	0.08	2.14
KNT (Inland Northern)	0.264	0.26	-0.004	-0.14

KER (Northern)	0.265	0.333	0.068	2.09
KER (Southern)	0.298	0.362	0.064	1.78
MPH (Vindhya)	0.243	0.29	0.046	1.60
MPH (Central)	0.315	0.333	0.018	0.51
MPH (Malwa)	0.268	0.381	0.113	3.25
MPH (South)	0.342	0.289	-0.053	-1.52
MPH (South Western)	0.304	0.269	-0.035	-1.10
MPH (Northern)	0.264	0.261	-0.002	-0.08
MHR (Coastal)	0.322	0.386	0.064	1.66
MHR (Inland Western)	0.285	0.311	0.027	0.81
MHR (Inland Northern)	0.274	0.331	0.057	1.73
MHR (Inland Central)	0.323	0.294	-0.029	-0.85
MHR (Inland Eastern)	0.299	0.336	0.037	1.06
MHR (Eastern)	0.262	0.355	0.093	2.79
ORS (Coastal)	0.243	0.271	0.027	0.97
ORS (Southern)	0.266	0.307	0.041	1.33
ORS (Northern)	0.274	0.32	0.045	1.40
PNB (Northern)	0.248	0.313	0.065	2.14
PNB (Southern)	0.248	0.316	0.068	2.23
RJN (Western)	0.231	0.271	0.04	1.46
RJN (North Eastern)	0.236	0.255	0.02	0.73
RJN (Southern)	0.33	0.287	-0.043	-1.26
RJN (South Eastern)	0.261	0.284	0.023	0.77
TNU (Coastal Northern)	0.359	0.414	0.055	1.30
TNU (Coastal)	0.271	0.309	0.038	1.19
TNU (Southern)	0.29	0.308	0.018	0.54
TNU (Inland)	0.299	0.352	0.053	1.50
UPH (Western)	0.276	0.295	0.019	0.60
UPH (Central)	0.28	0.334	0.055	1.63
UPH (Eastern)	0.248	0.257	0.009	0.34
UPH (Southern)	0.254	0.266	0.012	0.42
UTR (Uttaranchal)	0.265	0.283	0.018	0.60
WBL (Himalayan)	0.176	0.236	0.06	2.69
WBL (Eastern Plains)	0.283	0.28	-0.004	-0.12
WBL (Central Plains)	0.31	0.36	0.05	1.37
WBL (Western Plains)	0.232	0.289	0.058	2.04
All India	0.3	0.346	0.046	1.31

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.31: Region-wise Trends in Inequality: Rural

Regions	1993-94	2004-05	Net Change	% Change In Inequality
ANP (Coastal)	0.244	0.262	0.018	0.66
ANP (Inland Northern)	0.248	0.261	0.013	0.47
ANP (South Western)	0.287	0.245	-0.042	-1.44
ANP (Inland Southern)	0.223	0.287	0.063	2.30
ASM (Plains Eastern)	0.177	0.2	0.023	1.10
ASM (Plains Western)	0.172	0.189	0.017	0.87
ASM (Hills)	0.156	0.119	-0.037	-2.42
BHR (Northern)	0.204	0.199	-0.005	-0.23
BHR (Central)	0.207	0.186	-0.021	-0.97
CTH (Chhattisgarh)	0.199	0.265	0.066	2.62
DEL (Delhi)	0.258	0.301	0.043	1.42
GOA (Goa)	0.275	0.299	0.024	0.75
GJT (Eastern)	0.225	0.268	0.043	1.60
GJT (Plains Northern)	0.221	0.297	0.076	2.73
GJT (Plains Southern)	0.256	0.287	0.031	1.05
GJT (Dry Areas)	0.218	0.224	0.006	0.27

GJT (Saurashtra)	0.196	0.204	0.008	0.39
HRA (Eastern)	0.247	0.359	0.112	3.46
HRA (Western)	0.288	0.24	-0.049	-1.68
HPR (Himachal Pradesh)	0.253	0.289	0.036	1.21
J & K (Mountainous)	0.205	0.228	0.023	0.95
J & K (Outer Hills)	0.208	0.152	-0.057	-2.84
JHR (Jharkhand)	0.212	0.209	-0.003	-0.13
KNT (Coastal & Ghats)	0.234	0.316	0.082	2.78
KNT (Inland Eastern)	0.222	0.222	0	0.00
KNT (Inland Southern)	0.238	0.249	0.011	0.40
KNT (Inland Northern)	0.233	0.204	-0.03	-1.23
KER (Northern)	0.25	0.314	0.064	2.10
KER (Southern)	0.28	0.346	0.066	1.93
MPH (Vindhya)	0.222	0.236	0.015	0.58
MPH (Central)	0.214	0.246	0.032	1.28
MPH (Malwa)	0.224	0.289	0.065	2.33
MPH (South)	0.343	0.231	-0.112	-3.52
MPH (South Western)	0.263	0.204	-0.059	-2.29
MPH (Northern)	0.236	0.213	-0.023	-0.93
MHR (Coastal)	0.253	0.316	0.063	2.04
MHR (Inland Western)	0.233	0.261	0.028	1.03
MHR (Inland Northern)	0.243	0.268	0.025	0.90
MHR (Inland Central)	0.306	0.267	-0.039	-1.24
MHR (Inland Eastern)	0.231	0.262	0.031	1.17
MHR (Eastern)	0.234	0.327	0.093	3.09
ORS (Coastal)	0.212	0.231	0.019	0.77
ORS (Southern)	0.203	0.261	0.058	2.32
ORS (Northern)	0.233	0.27	0.037	1.37
PNB (Northern)	0.231	0.28	0.049	1.77
PNB (Southern)	0.243	0.284	0.04	1.41
RJN (Western)	0.21	0.229	0.019	0.79
RJN (North Eastern)	0.212	0.206	-0.006	-0.25
RJN (Southern)	0.314	0.239	-0.075	-2.44
RJN (South Eastern)	0.247	0.206	-0.041	-1.62
TNU (Coastal Northern)	0.325	0.286	-0.039	-1.14
TNU (Coastal)	0.253	0.258	0.005	0.17
TNU (Southern)	0.244	0.264	0.02	0.73
TNU (Inland)	0.263	0.283	0.02	0.67
UPH (Western)	0.249	0.251	0.002	0.09
UPH (Central)	0.252	0.257	0.005	0.17
UPH (Eastern)	0.231	0.237	0.005	0.21
UPH (Southern)	0.262	0.261	-0.001	-0.03
UTR (Uttaranchal)	0.233	0.239	0.006	0.23
WBL (Himalayan)	0.147	0.203	0.056	2.96
WBL (Eastern Plains)	0.267	0.237	-0.031	-1.10
WBL (Central Plains)	0.232	0.245	0.013	0.49
WBL (Western Plains)	0.22	0.28	0.06	2.21
All-India	0.258	0.281	0.023	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 3A.32: Region-wise Trends in Inequality: Urban

Regions	1993-94	2004-05	Net Change	% Change In Inequality
ANP (Coastal)	0.298	0.352	0.054	1.51
ANP (Inland Northern)	0.307	0.381	0.074	1.99
ANP (South Western)	0.278	0.334	0.055	1.66
ANP (Inland Southern)	0.273	0.323	0.051	1.57
ASM (Plains Eastern)	0.292	0.314	0.022	0.66
ASM (Plains Western)	0.274	0.306	0.032	1.01

ASM (Hills)	0.205	0.215	0.01	0.46
BHR (Northern)	0.273	0.306	0.033	1.04
BHR (Central)	0.273	0.324	0.051	1.56
CTH (Chhattisgarh)	0.267	0.372	0.105	3.06
DEL (Delhi)	0.329	0.334	0.005	0.14
GOA (Goa)	0.267	0.357	0.089	2.65
GJT (Eastern)	0.27	0.308	0.038	1.20
GJT (Plains Northern)	0.276	0.344	0.068	2.02
GJT (Plains Southern)	0.277	0.308	0.032	0.99
JT (Dry Areas)	0.284	0.268	-0.015	-0.51
GJT (Saurashtra)	0.213	0.232	0.018	0.75
HRA (Eastern)	0.248	0.346	0.098	3.07
HRA (Western)	0.296	0.289	-0.007	-0.20
HPR (Himachal Pradesh)	0.312	0.283	-0.029	-0.87
J & K (Mountainous)	0.262	0.274	0.011	0.38
J & K (Outer Hills)	0.233	0.213	-0.021	-0.83
JHR (Jharkhand)	0.308	0.336	0.028	0.81
KNT (Coastal & Ghats)	0.287	0.439	0.152	3.95
KNT (Inland Eastern)	0.25	0.281	0.031	1.05
KNT (Inland Southern)	0.288	0.339	0.051	1.50
KNT (Inland Northern)	0.301	0.305	0.004	0.12
KER (Northern)	0.296	0.381	0.085	2.33
KER (Southern)	0.334	0.384	0.05	1.27
MPH (Vindhya)	0.272	0.305	0.034	1.07
MPH (Central)	0.366	0.345	-0.021	-0.53
MPH (Malwa)	0.295	0.402	0.106	2.84
MPH (South)	0.275	0.307	0.031	0.99
MPH (South Western)	0.309	0.319	0.01	0.29
MPH (Northern)	0.301	0.331	0.03	0.88
MHR (Coastal)	0.294	0.34	0.045	1.31
MHR (Inland Western)	0.309	0.342	0.033	0.92
MHR (Inland Northern)	0.267	0.349	0.081	2.45
MHR (Inland Central)	0.317	0.33	0.013	0.36
MHR (Inland Eastern)	0.328	0.361	0.032	0.86
MHR (Eastern)	0.253	0.303	0.051	1.67
ORS (Coastal)	0.292	0.337	0.046	1.33
ORS (Southern)	0.335	0.392	0.057	1.45
ORS (Northern)	0.271	0.328	0.057	1.74
PNB (Northern)	0.264	0.331	0.067	2.08
PNB (Southern)	0.252	0.348	0.095	2.96
RJN (Western)	0.24	0.315	0.075	2.52
RJN (North Eastern)	0.277	0.315	0.038	1.16
RJN (Southern)	0.287	0.294	0.007	0.22
RJN (South Eastern)	0.28	0.377	0.097	2.76
TNU (Coastal Northern)	0.341	0.377	0.037	0.93
TNU (Coastal)	0.293	0.317	0.024	0.72
TNU (Southern)	0.322	0.319	-0.003	-0.09
TNU (Inland)	0.307	0.357	0.05	1.37
UPH (Western)	0.313	0.348	0.035	0.97
UPH (Central)	0.295	0.386	0.091	2.49
UPH (Eastern)	0.271	0.309	0.038	1.19
UPH (Southern)	0.218	0.265	0.047	1.79
UTR (Uttaranchal)	0.257	0.317	0.059	1.90
WBL (Himalayan)	0.244	0.308	0.064	2.12
WBL (Eastern Plains)	0.31	0.348	0.038	1.06
WBL (Central Plains)	0.323	0.375	0.052	1.37
WBL (Western Plains)	0.308	0.297	-0.011	-0.34
All-India	0.319	0.364	0.046	1.22

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

APPENDIX – C

Table 4A.1: Rate of Economic Growth (PCNSDP) and Changes in Poverty across States between 1993-94 and 2004-05 : Total

States	Growth in PCNSDP (%)	Poverty reduction (%)
Andhra Pradesh	4.61	3.59
Assam	1.28	3.62
Bihar	2.16	0.98
Chhattisgarh	2.03	0.06
Delhi	3.93	1.71
Goa	5.19	-1.80
Gujarat	4.80	1.49
Haryana	4.27	3.58
Himachal Pradesh	5.57	3.72
Jammu & Kashmir	2.15	6.23
Jharkhand	2.67	2.35
Karnataka	4.22	3.52
Kerala	4.85	4.19
Madhya Pradesh	1.81	-0.87
Maharashtra	3.41	2.00
Orissa	3.55	0.30
Punjab	2.32	0.58
Rajasthan	3.84	0.99
Tamil Nadu	4.37	3.43
Uttar Pradesh	1.65	1.53
Uttaranchal	3.87	0.14
West Bengal	4.84	1.25
All-India	4.30	1.73
Coefficient of Correlation	0.09	

Source: Computed by author from NSS CES 50th and 61st Round unit level data and CSO, NSDP data.

Table 4A.2: Rate of Economic Growth (Agriculture PCNSDP) and Changes in Poverty across States between 1993-94 and 2004-05: Rural

States	Growth in PCNSDP (%)	Poverty reduction (%)
Andhra Pradesh	1.54	3.59
Assam	-1.19	3.74
Bihar	0.33	1.05
Chhattisgarh	-3.11	0.17
Delhi	-3.47	0.36
Goa	0.93	-0.88
Gujarat	2.98	0.92
Haryana	0.40	4.30
Himachal Pradesh	1.79	3.50
Jammu & Kashmir	2.18	7.33
Jharkhand	2.16	2.19
Karnataka	-0.78	3.70
Kerala	0.68	4.63
Madhya Pradesh	-1.10	-0.80
Maharashtra	0.72	1.93
Orissa	-0.48	0.35
Punjab	1.00	-0.76
Rajasthan	2.19	1.20
Tamil Nadu	0.88	2.78
Uttar Pradesh	0.10	1.60

Uttaranchal	1.14	0.40
West Bengal	1.67	0.99
All-India	0.62	1.66
Coefficient of Correlation	0.26	

Source: Computed by author from NSS CES 50th and 61st Round unit level data and CSO, NSDP data.

Table 4A.3: Rate of Economic Growth (Tertiary PCNSDP) and Changes in Poverty across States between 1993-94 and 2004-05: Urban

States	Growth in PCNSDP (%)	Poverty reduction (%)
Andhra Pradesh	6.22	3.69
Assam	1.46	2.21
Bihar	3.80	0.23
Chhattisgarh	2.39	-0.004
Delhi	4.63	1.80
Goa	3.73	-3.33
Gujarat	5.31	3.04
Haryana	6.08	0.69
Himachal Pradesh	5.14	9.48
Jammu & Kashmir	2.28	-3.73
Jharkhand	2.58	4.99
Karnataka	6.33	2.53
Kerala	7.23	2.50
Madhya Pradesh	2.57	-0.78
Maharashtra	4.36	1.57
Orissa	4.67	-0.71
Punjab	2.74	3.42
Rajasthan	3.90	0.10
Tamil Nadu	3.97	4.76
Uttar Pradesh	1.87	1.08
Uttaranchal	3.64	-2.48
West Bengal	6.43	2.24
All-India	5.62	1.95
Coefficient of Correlation	0.29	

Source: Computed by author from NSS CES 50th and 61st Round unit level data and CSO, NSDP data.

Table 4A.4: Rate of Economic Growth (APCE) and Changes in Poverty across States between 1993-94 and 2004-05: Total

States	Growth in APCE (%)	Poverty reduction (%)
Andhra Pradesh	7.87	3.59
Assam	7.17	3.62
Bihar	6.38	0.98
Chhattisgarh	6.31	0.06
Delhi	6.20	1.71
Goa	7.34	-1.80
Gujarat	7.75	1.49
Haryana	8.30	3.58
Himachal Pradesh	8.03	3.72
Jammu & Kashmir	7.20	6.23
Jharkhand	6.80	2.35
Karnataka	7.56	3.52
Kerala	9.33	4.19
Madhya Pradesh	5.76	-0.87
Maharashtra	7.74	2.00
Orissa	6.12	0.30

Punjab	7.64	0.58
Rajasthan	6.06	0.99
Tamil Nadu	8.13	3.43
Uttar Pradesh	6.69	1.53
Uttaranchal	6.92	0.14
West Bengal	7.26	1.25
All-India	7.24	1.73
Coefficient of Correlation	0.57	

Source: *Computed by author from NSS CES 50th and 61st Round unit level data.*

Table 4A.5: Rate of Economic Growth (APCE) and Changes in Poverty across States between 1993-94 and 2004-05: Rural

States	Growth in APCE (%)	Poverty reduction (%)
Andhra Pradesh	7.13	3.59
Assam	7.06	3.74
Bihar	6.24	1.05
Chhattisgarh	5.89	0.17
Delhi	4.95	0.36
Goa	6.84	-0.88
Gujarat	6.62	0.92
Haryana	8.25	4.30
Himachal Pradesh	8.00	3.50
Jammu & Kashmir	7.31	7.33
Jharkhand	6.52	2.19
Karnataka	6.23	3.70
Kerala	9.17	4.63
Madhya Pradesh	5.10	-0.80
Maharashtra	7.23	1.93
Orissa	6.01	0.35
Punjab	6.89	-0.76
Rajasthan	5.56	1.20
Tamil Nadu	6.72	2.78
Uttar Pradesh	6.33	1.60
Uttaranchal	6.72	0.40
West Bengal	6.58	0.99
All-India	6.62	1.66
Coefficient of Correlation	0.62	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 4A.6: Rate of Economic Growth (APCE) and Changes in Poverty across States between 1993-94 and 2004-05: Urban

States	Growth in APCE (%)	Poverty reduction (%)
Andhra Pradesh	9.26	3.69
Assam	8.13	2.21
Bihar	7.39	0.23
Chhattisgarh	8.04	-0.004
Delhi	6.20	1.80
Goa	8.18	-3.33
Gujarat	8.86	3.04
Haryana	8.32	0.69
Himachal Pradesh	7.73	9.48
Jammu & Kashmir	6.68	-3.73
Jharkhand	8.35	4.99
Karnataka	9.00	2.53
Kerala	9.83	2.50

Madhya Pradesh	7.32	-0.78
Maharashtra	7.75	1.57
Orissa	6.21	-0.71
Punjab	8.70	3.42
Rajasthan	7.34	0.10
Tamil Nadu	9.21	4.76
Uttar Pradesh	7.62	1.08
Uttaranchal	6.63	-2.48
West Bengal	8.21	2.24
All-India	8.21	1.95
Coefficient of Correlation	0.48	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 4A.7: Rate of Economic Growth (APCE) and Changes in Poverty across Regions between 1993-94 and 2004-05: Total

Regions	Growth in APCE (%)	Poverty reduction (%)
ANP (Coastal)	8.91	6.60
ANP (Inland Northern)	7.43	2.68
ANP (South Western)	5.51	-0.85
ANP (Inland Southern)	6.93	0.53
ASM (Plains Eastern)	6.80	2.44
ASM (Plains Western)	7.53	4.57
ASM (Hills)	5.19	-0.70
BHR (Northern)	6.72	1.82
BHR (Central)	5.95	-0.26
CTH (Chhattisgarh)	6.31	0.06
DEL (Delhi)	6.20	1.71
GOA (Goa)	7.34	-1.80
GJT (Eastern)	6.80	-0.86
GJT (Plains Northern)	8.45	1.87
GJT (Plains Southern)	8.69	2.86
GJT (Dry Areas)	5.11	0.14
GJT (Saurashtra)	7.79	4.79
HRA (Eastern)	9.87	5.27
HRA (Western)	5.31	0.67
HPR (Himachal Pradesh)	8.03	3.72
J & K (Mountainous)	8.58	11.93
J & K (Outer Hills)	6.57	4.64
JHR (Jharkhand)	6.80	2.35
KNT (Coastal & Ghats)	6.32	-1.47
KNT (Inland Eastern)	6.52	5.93
KNT (Inland Southern)	9.37	7.77
KNT (Inland Northern)	6.01	1.90
KER (Northern)	7.78	1.35
KER (Southern)	10.18	7.41
MPH (Vindhya)	5.16	-2.03
MPH (Central)	5.60	-0.03
MPH (Malwa)	7.44	-1.12
MPH (South)	3.96	-1.69
MPH (South Western)	7.57	2.79
MPH (Northern)	4.28	-3.63
MHR (Coastal)	7.43	-0.23
MHR (Inland Western)	8.23	3.98
MHR (Inland Northern)	7.70	1.81
MHR (Inland Central)	6.81	0.98
MHR (Inland Eastern)	8.11	2.51
MHR (Eastern)	7.80	1.47
ORS (Coastal)	7.14	2.58

ORS (Southern)	5.00	-0.16
ORS (Northern)	5.14	-2.05
PNB (Northern)	7.83	0.84
PNB (Southern)	7.34	0.37
RJN (Western)	5.66	-0.43
RJN (North Eastern)	6.06	0.85
RJN (Southern)	5.80	1.40
RJN (South Eastern)	7.35	4.45
TNU (Coastal Northern)	9.19	4.00
TNU (Coastal)	7.34	3.69
TNU (Southern)	7.92	3.59
TNU (Inland)	7.16	1.73
UPH (Western)	6.25	0.59
UPH (Central)	8.54	4.03
UPH (Eastern)	6.07	0.83
UPH (Southern)	8.07	3.87
UTR (Uttaranchal)	6.92	0.14
WBL (Himalayan)	8.77	6.25
WBL (Eastern Plains)	5.53	-1.13
WBL (Central Plains)	7.74	2.05
WBL (Western Plains)	7.39	1.94
All-India	7.24	1.73
Coefficient of Correlation	0.74	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 4A.8: Rate of Economic Growth (APCE) and Changes in Poverty across Regions between 1993-94 and 2004-05: Rural

Regions	Growth in APCE (%)	Poverty reduction (%)
ANP (Coastal)	8.17	6.64
ANP (Inland Northern)	6.71	2.73
ANP (South Western)	4.54	-0.52
ANP (Inland Southern)	6.44	0.21
ASM (Plains Eastern)	6.81	2.62
ASM (Plains Western)	7.34	4.66
ASM (Hills)	5.13	-0.43
BHR (Northern)	6.72	1.85
BHR (Central)	5.52	-0.21
CTH (Chhattisgarh)	5.89	0.17
DEL (Delhi)	4.95	0.36
GOA (Goa)	6.84	-0.88
GJT (Eastern)	5.87	-1.34
GJT (Plains Northern)	7.35	1.25
GJT (Plains Southern)	7.10	2.05
GJT (Dry Areas)	5.41	0.41
GJT (Saurashtra)	7.33	5.98
HRA (Eastern)	9.99	5.93
HRA (Western)	5.46	1.66
HPR (Himachal Pradesh)	8.00	3.50
J & K (Mountainous)	8.29	13.33
J & K (Outer Hills)	6.77	5.2
JHR (Jharkhand)	6.52	2.19
KNT (Coastal & Ghats)	6.17	0.93
KNT (Inland Eastern)	6.11	6.64
KNT (Inland Southern)	7.27	6.72
KNT (Inland Northern)	5.59	2.38
KER (Northern)	7.80	1.96
KER (Southern)	9.98	7.81
MPH (Vindhya)	4.52	-2.37

MPH (Central)	5.44	-0.11
MPH (Malwa)	6.23	-1.35
MPH (South)	3.51	-1.1
MPH (South Western)	7.40	2.95
MPH (Northern)	4.04	-3.44
MHR (Coastal)	5.13	-2.4
MHR (Inland Western)	8.25	4.77
MHR (Inland Northern)	7.04	2.02
MHR (Inland Central)	6.92	1.27
MHR (Inland Eastern)	7.79	2.64
MHR (Eastern)	7.18	0.97
ORS (Coastal)	7.01	2.68
ORS (Southern)	5.22	0.01
ORS (Northern)	4.93	-1.95
PNB (Northern)	7.17	-0.61
PNB (Southern)	6.56	-0.64
RJN (Western)	5.36	-0.05
RJN (North Eastern)	5.55	1.15
RJN (Southern)	5.19	1.19
RJN (South Eastern)	6.42	4.6
TNU (Coastal Northern)	6.42	2.6
TNU (Coastal)	6.40	2.98
TNU (Southern)	7.75	3.46
TNU (Inland)	6.11	1.38
UPH (Western)	5.90	0.78
UPH (Central)	7.61	3.98
UPH (Eastern)	6.06	0.98
UPH (Southern)	7.91	3.79
UTR (Uttaranchal)	6.72	0.4
WBL (Himalayan)	8.63	6.68
WBL (Eastern Plains)	5.09	-1.28
WBL (Central Plains)	6.86	1.76
WBL (Western Plains)	7.24	1.62
All-India	6.62	1.66
Coefficient of Correlation	0.73	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 4A.9: Rate of Economic Growth (APCE) and Changes in Poverty across Regions between 1993-94 and 2004-05: Urban

Regions	Growth in APCE (%)	Poverty reduction (%)
ANP (Coastal)	10.29	6.48
ANP (Inland Northern)	8.65	2.45
ANP (South Western)	7.52	-1.9
ANP (Inland Southern)	8.36	1.7
ASM (Plains Eastern)	7.20	0.16
ASM (Plains Western)	8.95	3.86
ASM (Hills)	5.27	-9.36
BHR (Northern)	7.67	1.84
BHR (Central)	7.09	-1.12
CTH (Chhattisgarh)	8.04	-0.004
DEL (Delhi)	6.20	1.80
GOA (Goa)	8.18	-3.33
GJT (Eastern)	9.39	2.88
GJT (Plains Northern)	9.05	2.79
GJT (Plains Southern)	8.79	2.4
GJT (Dry Areas)	5.51	-0.07
GJT (Saurashtra)	8.31	3.06
HRA (Eastern)	9.59	2.81

HRA (Western)	4.79	-3.78
HPR (Himachal Pradesh)	7.73	9.48
J & K (Mountainous)	8.74	3.6
J & K (Outer Hills)	7.15	-2.87
JHR (Jharkhand)	8.35	4.99
KNT (Coastal & Ghats)	6.87	-14.03
KNT (Inland Eastern)	8.20	2.96
KNT (Inland Southern)	10.17	9.97
KNT (Inland Northern)	6.80	0.18
KER (Northern)	7.92	-1.11
KER (Southern)	10.63	5.94
MPH (Vindhya)	7.02	0.83
MPH (Central)	5.97	0.51
MPH (Malwa)	9.53	-0.004
MPH (South)	6.46	-2.19
MPH (South Western)	7.11	0.88
MPH (Northern)	4.64	-4.13
MHR (Coastal)	7.62	2.11
MHR (Inland Western)	7.68	1.77
MHR (Inland Northern)	8.26	0.78
MHR (Inland Central)	6.57	-0.14
MHR (Inland Eastern)	8.46	2.19
MHR (Eastern)	7.91	3.01
ORS (Coastal)	7.07	1.31
ORS (Southern)	5.49	-1.18
ORS (Northern)	5.45	-4.11
PNB (Northern)	8.45	3.29
PNB (Southern)	9.13	3.32
RJN (Western)	6.70	-2.03
RJN (North Eastern)	7.10	0.13
RJN (Southern)	7.36	2.3
RJN (South Eastern)	10.52	4.17
TNU (Coastal Northern)	10.27	6.29
TNU (Coastal)	9.22	6.6
TNU (Southern)	7.89	3.69
TNU (Inland)	8.01	2.29
UPH (Western)	6.80	-0.01
UPH (Central)	10.07	3.83
UPH (Eastern)	6.53	-0.33
UPH (Southern)	8.57	4.1
UTR (Uttaranchal)	6.63	-2.48
WBL (Himalayan)	9.06	2.81
WBL (Eastern Plains)	7.24	-0.03
WBL (Central Plains)	8.29	2.51
WBL (Western Plains)	8.54	5.64
All-India	8.21	1.95
Coefficient of Correlation	0.68	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 4A.10: Rate of Economic Growth (PCNSDP) and Changes in Inequality across States between 1993-94 and 2004-05: Total

States	Growth in PCNSDP (%)	Increase in Inequality (%)
Andhra Pradesh	4.61	1.47
Assam	1.28	0.97
Bihar	2.16	0.01
Chhattisgarh	2.03	2.77
Delhi	3.93	0.29
Goa	5.19	1.66
Gujarat	4.80	2.17
Haryana	4.27	1.87
Himachal Pradesh	5.57	0.94
Jammu & Kashmir	2.15	-0.20
Jharkhand	2.67	0.70
Karnataka	4.22	1.91
Kerala	4.85	2.18
Madhya Pradesh	1.81	0.86
Maharashtra	3.41	0.83
Orissa	3.55	1.39
Punjab	2.32	2.20
Rajasthan	3.84	0.60
Tamil Nadu	4.37	1.23
Uttar Pradesh	1.65	0.70
Uttaranchal	3.87	0.60
West Bengal	4.84	1.29
All-India	4.30	1.31
Coefficient of Correlation	0.29	

Source: Computed by author from NSS CES 50th and 61st Round unit level data and CSO, NSDP data.

Table 4A.11: Rate of Economic Growth (Agriculture PCNSDP) and Changes in Inequality across States between 1993-94 and 2004-05: Rural

States	Growth in PCNSDP (%)	Increase in Inequality (%)
Andhra Pradesh	1.54	0.68
Assam	-1.19	0.86
Bihar	0.33	-0.53
Chhattisgarh	-3.11	2.62
Delhi	-3.47	1.42
Goa	0.93	0.75
Gujarat	2.98	1.66
Haryana	0.40	1.76
Himachal Pradesh	1.79	1.21
Jammu & Kashmir	2.18	0.02
Jharkhand	2.16	-0.13
Karnataka	-0.78	0.18
Kerala	0.68	2.27
Madhya Pradesh	-1.10	-0.50
Maharashtra	0.72	0.72
Orissa	-0.48	1.61
Punjab	1.00	1.67
Rajasthan	2.19	-0.52
Tamil Nadu	0.88	-0.18
Uttar Pradesh	0.10	0.03
Uttaranchal	1.14	0.23
West Bengal	1.67	0.65
All-India	0.62	0.76
Coefficient of Correlation	-0.29	

Source: Computed by author from NSS CES 50th and 61st Round unit level data and CSO, NSDP data.

Table 4A.12: Rate of Economic Growth (Tertiary PCNSDP) and Changes in Inequality across States between 1993-94 and 2004-05: Urban

States	Growth in PCNSDP (%)	Increase in Inequality (%)
Andhra Pradesh	6.22	1.64
Assam	1.46	0.82
Bihar	3.80	1.32
Chhattisgarh	2.39	3.06
Delhi	4.63	0.14
Goa	3.73	2.65
Gujarat	5.31	1.39
Haryana	6.08	2.28
Himachal Pradesh	5.14	-0.87
Jammu & Kashmir	2.28	-0.18
Jharkhand	2.58	0.81
Karnataka	6.33	1.77
Kerala	7.23	1.88
Madhya Pradesh	2.57	1.72
Maharashtra	4.36	0.89
Orissa	4.67	1.32
Punjab	2.74	2.26
Rajasthan	3.90	1.70
Tamil Nadu	3.97	0.98
Uttar Pradesh	1.87	1.46
Uttaranchal	3.64	1.90
West Bengal	6.43	1.20
All-India	5.62	1.22
Coefficient of Correlation	0.03	

Source: Computed by author from NSS CES 50th and 61st Round unit level data and CSO, NSDP data.

Table 4A.13: Rate of Economic Growth (APCE) and Changes in Inequality across States between 1993-94 and 2004-05: Total

States	Growth in APCE (%)	Increase in Inequality (%)
Andhra Pradesh	7.87	1.47
Assam	7.17	0.97
Bihar	6.38	0.01
Chhattisgarh	6.31	2.77
Delhi	6.20	0.29
Goa	7.34	1.66
Gujarat	7.75	2.17
Haryana	8.30	1.87
Himachal Pradesh	8.03	0.94
Jammu & Kashmir	7.20	-0.20
Jharkhand	6.80	0.70
Karnataka	7.56	1.91
Kerala	9.33	2.18
Madhya Pradesh	5.76	0.86
Maharashtra	7.74	0.83
Orissa	6.12	1.39
Punjab	7.64	2.20
Rajasthan	6.06	0.60
Tamil Nadu	8.13	1.23
Uttar Pradesh	6.69	0.70
Uttaranchal	6.92	0.60
West Bengal	7.26	1.29
All-India	7.24	1.31
Coefficient of Correlation	0.42	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 4A.14: Rate of Economic Growth (APCE) and Changes in Inequality across States between 1993-94 and 2004-05: Rural

States	Growth in APCE (%)	Increase in Inequality (%)
Andhra Pradesh	7.13	0.68
Assam	7.06	0.86
Bihar	6.24	-0.53
Chhattisgarh	5.89	2.62
Delhi	4.95	1.42
Goa	6.84	0.75
Gujarat	6.62	1.66
Haryana	8.25	1.76
Himachal Pradesh	8.00	1.21
Jammu & Kashmir	7.31	0.02
Jharkhand	6.52	-0.13
Karnataka	6.23	0.18
Kerala	9.17	2.27
Madhya Pradesh	5.10	-0.50
Maharashtra	7.23	0.72
Orissa	6.01	1.61
Punjab	6.89	1.67
Rajasthan	5.56	-0.52
Tamil Nadu	6.72	-0.18
Uttar Pradesh	6.33	0.03
Uttaranchal	6.72	0.23
West Bengal	6.58	0.65
All-India	6.62	0.76
Coefficient of Correlation	0.37	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 4A.15: Rate of Economic Growth (APCE) and Changes in Inequality across States between 1993-94 and 2004-05:Urban

States	Growth in APCE (%)	Increase in Inequality (%)
Andhra Pradesh	9.26	1.64
Assam	8.13	0.82
Bihar	7.39	1.32
Chhattisgarh	8.04	3.06
Delhi	6.20	0.14
Goa	8.18	2.65
Gujarat	8.86	1.39
Haryana	8.32	2.28
Himachal Pradesh	7.73	-0.87
Jammu & Kashmir	6.68	-0.18
Jharkhand	8.35	0.81
Karnataka	9.00	1.77
Kerala	9.83	1.88
Madhya Pradesh	7.32	1.72
Maharashtra	7.75	0.89
Orissa	6.21	1.32
Punjab	8.70	2.26
Rajasthan	7.34	1.70
Tamil Nadu	9.21	0.98
Uttar Pradesh	7.62	1.46
Uttaranchal	6.63	1.90
West Bengal	8.21	1.20
All-India	8.21	1.22
Coefficient of Correlation	0.32	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 4A.16: Rate of Economic Growth (APCE) and Changes in Inequality across between 1993-94 and 2004-05: Total

Regions	Growth in APCE (%)	Increase in Inequality (%)
ANP (Coastal)	8.91	1.45
ANP (Inland Northern)	7.43	1.42
ANP (South Western)	5.51	0.45
ANP (Inland Southern)	6.93	2.33
ASM (Plains Eastern)	6.80	0.87
ASM (Plains Western)	7.53	1.17
ASM (Hills)	5.19	-1.56
BHR (Northern)	6.72	-0.12
BHR (Central)	5.95	0.34
CTH (Chhattisgarh)	6.31	2.77
DEL (Delhi)	6.20	0.29
GOA (Goa)	7.34	1.66
GJT (Eastern)	6.80	2.6
GJT (Plains Northern)	8.45	2.5
GJT (Plains Southern)	8.69	1.41
GJT (Dry Areas)	5.11	-0.26
GJT (Saurashtra)	7.79	0.87
HRA (Eastern)	9.87	3.15
HRA (Western)	5.31	-1.4
HPR (Himachal Pradesh)	8.03	0.94
J & K (Mountainous)	8.58	0.93
J & K (Outer Hills)	6.57	-2.04
JHR (Jharkhand)	6.80	0.7
KNT (Coastal & Ghats)	6.32	2.76
KNT (Inland Eastern)	6.52	0.78
KNT (Inland Southern)	9.37	2.14
KNT (Inland Northern)	6.01	-0.14
KER (Northern)	7.78	2.09
KER (Southern)	10.18	1.78
MPH (Vindhya)	5.16	1.6
MPH (Central)	5.60	0.51
MPH (Malwa)	7.44	3.25
MPH (South)	3.96	-1.52
MPH (South Western)	7.57	-1.1
MPH (Northern)	4.28	-0.08
MHR (Coastal)	7.43	1.66
MHR (Inland Western)	8.23	0.81
MHR (Inland Northern)	7.70	1.73
MHR (Inland Central)	6.81	-0.85
MHR (Inland Eastern)	8.11	1.06
MHR (Eastern)	7.80	2.79
ORS (Coastal)	7.14	0.97
ORS (Southern)	5.00	1.33
ORS (Northern)	5.14	1.4
PNB (Northern)	7.83	2.14
PNB (Southern)	7.34	2.23
RJN (Western)	5.66	1.46
RJN (North Eastern)	6.06	0.73
RJN (Southern)	5.80	-1.26
RJN (South Eastern)	7.35	0.77
TNU (Coastal Northern)	9.19	1.3
TNU (Coastal)	7.34	1.19
TNU (Southern)	7.92	0.54
TNU (Inland)	7.16	1.5
UPH (Western)	6.25	0.6
UPH (Central)	8.54	1.63

UPH (Eastern)	6.07	0.34
UPH (Southern)	8.07	0.42
UTR (Uttaranchal)	6.92	0.6
WBL (Himalayan)	8.77	2.69
WBL (Eastern Plains)	5.53	-0.12
WBL (Central Plains)	7.74	1.37
WBL (Western Plains)	7.39	2.04
All-India	7.24	1.31
Coefficient of Correlation	0.51	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 4A.17: Rate of Economic Growth (APCE) and Changes in Inequality across Regions of India between 1993-94 and 2004-05: Rural

Regions	Growth in APCE (%)	Increase in Inequality (%)
ANP (Coastal)	8.17	0.66
ANP (Inland Northern)	6.71	0.47
ANP (South Western)	4.54	-1.44
ANP (Inland Southern)	6.44	2.3
ASM (Plains Eastern)	6.81	1.1
ASM (Plains Western)	7.34	0.87
ASM (Hills)	5.13	-2.42
BHR (Northern)	6.72	-0.23
BHR (Central)	5.52	-0.97
CTH (Chhattisgarh)	5.89	2.62
DEL (Delhi)	4.95	1.42
GOA (Goa)	6.84	0.75
GJT (Eastern)	5.87	1.6
GJT (Plains Northern)	7.35	2.73
GJT (Plains Southern)	7.10	1.05
GJT (Dry Areas)	5.41	0.27
GJT (Saurashtra)	7.33	0.39
HRA (Eastern)	9.99	3.46
HRA (Western)	5.46	-1.68
HPR (Himachal Pradesh)	8.00	1.21
J & K (Mountainous)	8.29	0.95
J & K (Outer Hills)	6.77	-2.84
JHR (Jharkhand)	6.52	-0.13
KNT (Coastal & Ghats)	6.17	2.78
KNT (Inland Eastern)	6.11	-0.002
KNT (Inland Southern)	7.27	0.4
KNT (Inland Northern)	5.59	-1.23
KER (Northern)	7.80	2.1
KER (Southern)	9.98	1.93
MPH (Vindhya)	4.52	0.58
MPH (Central)	5.44	1.28
MPH (Malwa)	6.23	2.33
MPH (South)	3.51	-3.52
MPH (South Western)	7.40	-2.29
MPH (Northern)	4.04	-0.93
MHR (Coastal)	5.13	2.04
MHR (Inland Western)	8.25	1.03
MHR (Inland Northern)	7.04	0.9
MHR (Inland Central)	6.92	-1.24
MHR (Inland Eastern)	7.79	1.17
MHR (Eastern)	7.18	3.09
ORS (Coastal)	7.01	0.77
ORS (Southern)	5.22	2.32
ORS (Northern)	4.93	1.37
PNB (Northern)	7.17	1.77

PNB (Southern)	6.56	1.41
RJN (Western)	5.36	0.79
RJN (North Eastern)	5.55	-0.25
RJN (Southern)	5.19	-2.44
RJN (South Eastern)	6.42	-1.62
TNU (Coastal Northern)	6.42	-1.14
TNU (Coastal)	6.40	0.17
TNU (Southern)	7.75	0.73
TNU (Inland)	6.11	0.67
UPH (Western)	5.90	0.09
UPH (Central)	7.61	0.17
UPH (Eastern)	6.06	0.21
UPH (Southern)	7.91	-0.03
UTR (Uttaranchal)	6.72	0.23
WBL (Himalayan)	8.63	2.96
WBL (Eastern Plains)	5.09	-1.1
WBL (Central Plains)	6.86	0.49
WBL (Western Plains)	7.24	2.21
All-India	6.62	0.76
Coefficient of Correlation	0.43	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 4A.18: Rate of Economic Growth (APCE) and Changes in Inequality across Regions of India between 1993-94 and 2004-05: Urban

Regions	Growth in APCE (%)	Increase in Inequality (%)
ANP (Coastal)	10.29	1.51
ANP (Inland Northern)	8.65	1.99
ANP (South Western)	7.52	1.66
ANP (Inland Southern)	8.36	1.57
ASM (Plains Eastern)	7.20	0.66
ASM (Plains Western)	8.95	1.01
ASM (Hills)	5.27	0.46
BHR (Northern)	7.67	1.04
BHR (Central)	7.09	1.56
CTH (Chhattisgarh)	8.04	3.06
DEL (Delhi)	6.20	0.14
GOA (Goa)	8.18	2.65
GJT (Eastern)	9.39	1.2
GJT (Plains Northern)	9.05	2.02
GJT (Plains Southern)	8.79	0.99
GJT (Dry Areas)	5.51	-0.51
GJT (Saurashtra)	8.31	0.75
HRA (Eastern)	9.59	3.07
HRA (Western)	4.79	-0.2
HPR (Himachal Pradesh)	7.73	-0.87
J & K (Mountainous)	8.74	0.38
J & K (Outer Hills)	7.15	-0.83
JHR (Jharkhand)	8.35	0.81
KNT (Coastal & Ghats)	6.87	3.95
KNT (Inland Eastern)	8.20	1.05
KNT (Inland Southern)	10.17	1.5
KNT (Inland Northern)	6.80	0.12
KER (Northern)	7.92	2.33
KER (Southern)	10.63	1.27
MPH (Vindhya)	7.02	1.07
MPH (Central)	5.97	-0.53
MPH (Malwa)	9.53	2.84
MPH (South)	6.46	0.99
MPH (South Western)	7.11	0.29

MPH (Northern)	4.64	0.88
MHR (Coastal)	7.62	1.31
MHR (Inland Western)	7.68	0.92
MHR (Inland Northern)	8.26	2.45
MHR (Inland Central)	6.57	0.36
MHR (Inland Eastern)	8.46	0.86
MHR (Eastern)	7.91	1.67
ORS (Coastal)	7.07	1.33
ORS (Southern)	5.49	1.45
ORS (Northern)	5.45	1.74
PNB (Northern)	8.45	2.08
PNB (Southern)	9.13	2.96
RJN (Western)	6.70	2.52
RJN (North Eastern)	7.10	1.16
RJN (Southern)	7.36	0.22
RJN (South Eastern)	10.52	2.76
TNU (Coastal Northern)	10.27	0.93
TNU (Coastal)	9.22	0.72
TNU (Southern)	7.89	-0.09
TNU (Inland)	8.01	1.37
UPH (Western)	6.80	0.97
UPH (Central)	10.07	2.49
UPH (Eastern)	6.53	1.19
UPH (Southern)	8.57	1.79
UTR (Uttaranchal)	6.63	1.9
WBL (Himalayan)	9.06	2.12
WBL (Eastern Plains)	7.24	1.06
WBL (Central Plains)	8.29	1.37
WBL (Western Plains)	8.54	-0.34
All-India	8.21	1.22
Coefficient of Correlation	0.37	

Source: Computed by author from NSS CES 50th and 61st Round unit level data.

Table 4A.19: Scores in Economic Growth, Poverty and Inequality across States of India between 1993-94 and 2004-05

States	Scores		
	Total	Rural	Urban
Andhra Pradesh	WWL	WWL	WWL
Assam	WWL	WWL	WWL
Bihar	WWL	WWW	WWL
Chhattisgarh	WWL	WWL	WLL
Delhi	WWL	WWL	WWL
Goa	WLL	WLL	WLL
Gujarat	WWL	WWL	WWL
Haryana	WWL	WWL	WWL
Himachal Pradesh	WWL	WWL	WWW
Jammu & Kashmir	WWW	WWL	WLW
Jharkhand	WWL	WWW	WWL
Karnataka	WWL	WWL	WWL
Kerala	WWL	WWL	WWL
Madhya Pradesh	WLL	WLW	WLL
Maharashtra	WWL	WWL	WWL
Orissa	WWL	WWL	WLL
Punjab	WWL	WLL	WWL
Rajasthan	WWL	WWW	WWL
Tamil Nadu	WWL	WWW	WWL
Uttar Pradesh	WWL	WWL	WWL
Uttaranchal	WWL	WWL	WLL
West Bengal	WWL	WWL	WWL
All-India	WWL	WWL	WWL

Note: First letter shows growth score, second shows poverty score and third shows inequality score.

Source: Evaluated and tabulated by author from table 4A.4, 4A.5, 4A.6, 4A.13, 4A.14, and 4A.15.

Table 4A.20: Scores in Economic Growth, Poverty and Inequality across Regions of India between 1993-94 and 2004-05

Regions	Scores		
	Total	Rural	Urban
ANP (Coastal)	WWL	WWL	WWL
ANP (Inland Northern)	WWL	WWL	WWL
ANP (South Western)	WLL	WLW	WLL
ANP (Inland Southern)	WWL	WWL	WWL
ASM (Plains Eastern)	WWL	WWL	WWL
ASM (Plains Western)	WWL	WWL	WWL
ASM (Hills)	WLW	WLW	WLL
BHR (Northern)	WWW	WWW	WWL
BHR (Central)	WLL	WLW	WLL
CTH (Chhattisgarh)	WWL	WWL	WLL
DEL (Delhi)	WWL	WWL	WWL
GOA (Goa)	WLL	WLL	WLL
GJT (Eastern)	WLL	WLL	WWL
GJT (Plains Northern)	WWL	WWL	WWL
GJT (Plains Southern)	WWL	WWL	WWL
GJT (Dry Areas)	WWW	WWL	WLW
GJT (Saurashtra)	WWL	WWL	WWL
HRA (Eastern)	WWL	WWL	WWL
HRA (Western)	WWW	WWW	WLW
HPR (Himachal Pradesh)	WWL	WWL	WWW
J & K (Mountainous)	WWL	WWL	WWL
J & K (Outer Hills)	WWW	WWW	WLW
JHR (Jharkhand)	WWL	WWW	WWL

KNT (Coastal & Ghats)	WLL	WWL	WLL
KNT (Inland Eastern)	WWL	WWW	WWL
KNT (Inland Southern)	WWL	WWL	WWL
KNT (Inland Northern)	WWW	WWW	WWL
KER (Northern)	WWL	WWL	WLL
KER (Southern)	WWL	WWL	WWL
MPH (Vindhya)	WLL	WLL	WWL
MPH (Central)	WLL	WLL	WWW
MPH (Malwa)	WLL	WLL	WLL
MPH (South)	WLW	WLW	WLL
MPH (South Western)	WWW	WWW	WWL
MPH (Northern)	WLW	WLW	WLL
MHR (Coastal)	WLL	WLL	WWL
MHR (Inland Western)	WWL	WWL	WWL
MHR (Inland Northern)	WWL	WWL	WWL
MHR (Inland Central)	WWW	WWW	WLL
MHR (Inland Eastern)	WWL	WWL	WWL
MHR (Eastern)	WWL	WWL	WWL
ORS (Coastal)	WWL	WWL	WWL
ORS (Southern)	WLL	WWL	WLL
ORS (Northern)	WLL	WLL	WLL
PNB (Northern)	WWL	WLL	WWL
PNB (Southern)	WWL	WLL	WWL
RJN (Western)	WLL	WWL	WLL
RJN (North Eastern)	WWL	WWW	WWL
RJN (Southern)	WWW	WWL	WWL
RJN (South Eastern)	WWL	WWW	WWL
TNU (Coastal Northern)	WWL	WWW	WWL
TNU (Coastal)	WWL	WWL	WWL
TNU (Southern)	WWL	WWL	WWW
TNU (Inland)	WWL	WWL	WWL
UPH (Western)	WWL	WWL	WLL
UPH (Central)	WWL	WWL	WWL
UPH (Eastern)	WWL	WWL	WWL
UPH (Southern)	WWL	WWW	WWL
UTR (Uttaranchal)	WWL	WWL	WLL
WBL (Himalayan)	WWL	WWL	WWL
WBL (Eastern Plains)	WLW	WLW	WLL
WBL (Central Plains)	WWL	WWL	WWL
WBL (Western Plains)	WWL	WWL	WWW
All-India	WWL	WWL	WWL

Note: First letter shows growth score, second shows poverty score and third shows inequality score.
Source: Evaluated and tabulated by author from table 4A.7, 4A.8, 4A.9, 4A.16, 4A.17, and 4A.18.

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