

The Uno Newsletter: Rejuvenating Marxian Economics through Uno  
Theory

(Vol. II, No. 13)

Working Paper Series 2-13-3

25 December 2013

## **Income Inequality in an Era of High Growth: the Indian Experience**

**Madhura Swaminathan (Indian Statistical Institute, Bangalore)**

([madhura@isical.ac.in](mailto:madhura@isical.ac.in), [madhuraswaminathan@gmail.com](mailto:madhuraswaminathan@gmail.com))

[http://www.unotheory.org/news\\_II\\_13](http://www.unotheory.org/news_II_13)

The Uno Newsletter: Rejuvenating Marxian Economics through Uno Theory

Office: Uno Newsletter, Musashi University, Toyotama Kami 1-26-1 Nerima-ku, Tokyo

1768534 Japan

Email: [contact@unotheory.org](mailto:contact@unotheory.org)

Homepage : <http://www.unotheory.org>

## ABSTRACT

In recent years, the discussion on India, particularly among economists, has concentrated on the high rate of economic growth. During the Tenth Plan period, 2002-2007, per capita income (net national product) grew at 10.7 per cent per annum at current prices and 6 per cent per annum at constant prices, as compared to 3 per cent during the Ninth Plan period (the previous five years).

I would like to raise two concerns in this paper. First, per capita income of India still remains very low, and much lower than countries with whom a comparison is made, including China. The euphoria with the rise of the South and the BRICS (Brazil, Russia, India, China, South Africa) countries, in particular, has to be tempered in the case of India by the fact that India has the lowest average income among the BRICS countries.

Secondly, the nature of economic growth will be very important in determining the standard of living of India's people, particularly the several hundred million residing in rural areas. In particular, it will depend on the extent to which the benefits of growth reach all sections of the population. The pitfalls of focussing on high growth alone (or what Amartya Sen had termed unaimed opulence) have now been recognized widely, including in policy circles, and in the last few years, the discussion on development has turned towards strategies for "inclusive growth."

However, to understand whether growth is equalizing or unequalising, one needs to start with empirical facts on the levels of inequality. It is here that research on the Indian economy is seriously lacking. There is an impression – both within India and outside – that India is a country of relatively low income inequality. In this paper, I shall argue that the idea of India – particularly rural India – as that of a region of relatively low inequality in incomes is very likely wrong. The picture of low inequality is based on data on consumer expenditure and not income, as in the rest of the world. From the limited data available on household incomes, surveys conducted by the National Council of Applied Economic Research, and detailed village surveys reported in this paper, it appears that levels of income inequality in rural areas are high.

I briefly discuss levels of income inequality in China. While most studies agree that income inequality has risen over the last two to three decades, levels of income inequality in rural China are not higher than in rural India.

In conclusion, I argue that given the low average income, high incidence of poverty, and the prevalence of high inequality in rural areas, the present path of economic growth has serious implications not only for welfare of the population but also for generating domestic demand to sustain future economic growth.

### *1 High rate of growth but low absolute income*

In recent years, the India story has appeared worldwide as one of a high rate of economic growth. From an average growth of around 3 per cent a year in the first three decades after Independence, the growth rate went up to over 5 per cent in the 1980s and 1990s, and finally to over 7 per cent in the 2000s (Table 1).

Table 1 Annual rate of growth of GDP from 1950s to the present, India (% per annum)

Period	GDP
1950s	3.6
1960s	4.0
1970s	2.9
1980s	5.6
1990s	5.8
2000s	7.2
2002-07	7.6
2007-12	7.9

Source: India Development Report 2012-13

The period of high growth occurred from around 2003 to 2008 (Table 2), when GDP grew at around 9 per cent per annum. However, this growth rate has not been sustained. The forecast for 2013-14 is of a growth rate between 5.5 and 6 per cent, at best.

Table 2: Annual rate of growth of GDP in 2000s, India (% per annum)

Year	Total GDP
2003-04	8.5
2004-05	7.5
2005-06	9.5
2006-07	9.6
2007-08	9.3
2008-09	6.7
2009-10	8.4
2010-11	8.4
2011-12	6.5
2012-13	6.7

Source: India Development Report 2012-13

During the last one decade, 2002 to 2012, per capita income at constant prices has grown at a decent 6 per cent per annum (Table 3).

Table 3: Annual Rate of Growth of Per Capita Income, India, at current and constant prices

Period	Plan period	At current prices	At constant prices
1980-85	Sixth	12.8	3.1
1985-90	Seventh	11.4	3.3
1990-92	Annual	13	0.8
1992-97	Eighth	14.2	4.6
1997-2002	Ninth	8.6	3.5
2002-2007	Tenth	11.1	5.9
2007-2012	Eleventh	14.6	6.3

Source: India Development Report 2012-13

Nevertheless, in absolute terms, India remains a low-income country. Average income in India is much lower than in other BRICS countries, a set of countries with which it is often compared.

To illustrate, the gross national income per capita, in PPP dollars, was 3,285 in India as compared to 7,945 in China in 2012 (Table 4).

Table 4: Gross National Income (GNI) Per Capita in BRICS countries, 2012 (in 2005 PPP dollars)

Country	Level of GNI per capita
India	3,285
China	7,945
Brazil	10,152
South Africa	9,594
Russia	14,461

Source: Human Development Report 2013

Not surprisingly, the incidence of absolute poverty remains unconscionably high. There is a big debate about the measurement of absolute poverty in India, and there is serious criticism of the current official poverty line as being too low, and being a destitution line (Swaminathan 2010). Nevertheless, even with the official poverty line, 42 proportion of the rural population was counted as poor in 2004-05 and the proportion was 34 per cent in 2009-10.

The first important point to note about the Indian growth experience is that the average income still remains relatively low, and lower than all the other BRICS countries. Per capita income of India is less than one-half the per capita income of China.

## *2 India as a country of low inequality*

The standard of living of all persons will depend not just on the average but on the distribution of incomes across households. The pitfalls of focussing on high growth alone (or what Amartya Sen had termed unaimed opulence) have now been recognized widely, including in policy circles, and in the last few years, the discussion on development has turned towards strategies for “inclusive growth.” To understand whether growth is equalizing or unequalising, one needs to start with empirical facts on the levels of inequality. It is here that research on the Indian economy is seriously lacking.

Source: Motiram and Vamsi (2013)

Based on official statistics, an impression has been created – both within India and outside – that India is a country of relatively low income inequality.

In the latest Economic Survey of the Government of India, it is stated, “according to HDR 2010, inequality in India for the period 2000-2010 in terms of the income Gini coefficient was 36.8 (on a scale of 0 to 100). India’s Gini index was more favourable than those of comparable countries like South Africa (57.8), Brazil (55), ...,China (41.5)...and even the USA (40.8)...which are otherwise ranked very high in human development.”

The latest estimates of inequality based on per capita expenditure, from large scale surveys on consumer expenditure carried out by the National Sample Survey Organization at regular intervals are shown in Table 5. We can see that both rural and urban inequality increased in the decade of 1993 to 2004. Rural inequality remained the same thereafter whereas urban inequality continued to rise. Taking the country as a whole, inequality in household expenditure worsened between 1993 and 2009.

Region	1993-94	2004-05	2009-10
Rural	0.286	0.305	0.300
Urban	0.344	0.376	0.393
Total	0.326	0.363	0.370

Expenditure is likely to be less unequally distributed than incomes. This is so for several

reasons. First, for rich households, savings are expected to be large and so the gap between expenditure and incomes is going to be relatively large as compared to households in other income groups. Secondly, for the poor, even when incomes are low, zero or even negative, household expenditures will have to be positive for survival (see Anand and Harris 1994). The aggregate expenditure Gini of 0.37 in 2009-10 for India was, as expected, below the income Gini coefficient for several other countries.

My second point is that this picture of relatively low inequality in India is based on data on consumer expenditure and not incomes, as in the rest of the world. In the World Income Inequality Database, the data for India are on household expenditures (UNU-WIDER). It is therefore misleading to compare, as done in the Economic Survey above, as well as in various global estimates of income inequality, data on household expenditure in India with data on household incomes in other countries.

### *3 Income Inequality: Data availability*

The major national data collection bureau, the National Sample Survey Organisation or NSSO, does not conduct regular household income surveys. There have been some pilot surveys, but on account of problems encountered, the project of income surveys has been abandoned (Bakshi 2010).

The National Council of Applied Economic Research (NCAER), an independent think tank, has conducted household surveys and collected data on incomes. In 1993-94, NCAER conducted a survey, with a sample size of 35,130 households from 1765 villages in 16 States of India (this is a large survey but smaller than the official consumption expenditure surveys). The data were collected for the “Human Development Profile of India” (Shariff 2001). In 2004-05 the NCAER conducted another survey titled “India Human Development Survey 2005”, in collaboration with the University of Maryland (Desai, Dubey, Joshi, Sen, Shariff and Vanneman 2010). Data on household incomes, consumption and other human development indicators were collected in this survey too.

The main purpose of these surveys was not to collect data on household incomes but to gauge human development. Accordingly, the questionnaires indicate that detailed data were not collected on all major components of income, making estimates of household income from these surveys not very reliable.<sup>1</sup> To illustrate, in 1993, no information on income from different crops was collected. Data were collected from each household only on the extent of land holdings and crops grown (by season and variety). Incomes from crop cultivation were simply imputed for each household using some standard values. The 2005 survey conducted by the NCAER used a different and more detailed questionnaire, but some serious problems remain. For example, in calculating incomes from crop production, households were asked to report total annual expenses in rupee terms for major items of cost (hired labour, seeds, fertilizers, pesticides, irrigation, machinery, loans and maintenance). The lack of accuracy arises from asking cultivators

<sup>1</sup> For the exact problems with the questionnaire, see Bakshi, Rawal, Ramachandran and Swaminathan (2012).

to value all inputs, irrespective of crop, crop-mix or season, recall costs for a whole year and aggregate them in a consistent manner.<sup>2</sup>

In short, survey data on household incomes in rural and urban India are scarce.

#### *4 Income inequality in village India*

In this paper, I use data from a set of village studies to estimate income inequality. These studies comprised detailed village-level household surveys conducted by the Foundation for Agrarian Studies between 2005 and 2012 in villages selected from different States and agro-climatic regions of India.<sup>3</sup> The questionnaire used in these census type household surveys has several modules that enable us to estimate household incomes (Bakshi et. al. 2012). The estimates of income here include all cash and kind incomes; they account for all cash and kind receipts other than from borrowing and from sale of assets (including cash transfers).<sup>4</sup> All incomes are net of costs incurred by the households in the process of production and income generation. The surveys used detailed modules on incomes from each of the sources: crop production; animal resources (including rental income from animals); wage labour; salaried jobs; business and trade; money-lending; income from savings in financial institutions and equity; pensions and scholarships; remittances and gifts; rental income; and any other source.

I now illustrate the degree of income inequality in rural India using data on household incomes from eight village surveys conducted between 2005 and 2007 (Table 6). In 2005–06, we conducted in-depth census and sample surveys in three villages of Andhra Pradesh: Ananthavaram, a village in the paddy-growing region of Guntur district; Bukkacherla, a village in the dry and drought-prone district of Anantapur; and Kothapalle, a village in a groundwater-irrigated region of north Telengana (Karimnagar district). This was followed in June 2006 by census-type surveys in two villages of Uttar Pradesh: Harevli, located in the canal-irrigated, sugarcane-growing district of Bijnor; and Mahatwar, selected from eastern Uttar Pradesh. Mahatwar is in Ballia district and is located in a groundwater-irrigated wheat–paddy-growing belt. In 2007, surveys were conducted in two villages of Maharashtra. Nimshirgaon, located in Kolhapur district, has a relatively prosperous agriculture based on irrigated sugarcane and a variety of vegetable and fruit crops. Warwat Khanderao is a village in the unirrigated, cotton-growing tracts of Buldhana district. 25 F Gulabewala village, in the Gang Canal region of western Rajasthan, was also surveyed in 2007. While eight villages can hardly give us a picture of rural India, these villages are located across diverse agro-economic regions, and this study can be a first step towards understanding patterns of income distribution in Indian villages.

---

<sup>2</sup> In India, there is an established methodology for the estimation of crop incomes. Standard cost concepts have been specified in the Comprehensive Cost of Cultivation of Principal Crops (CCPC) surveys, that currently collect data on crop incomes for 24 crops across 20 States (CACP 2010). Neither the methodology used in the NCAER survey, nor the net incomes from crop cultivation reported in the NCAER survey, correspond to those in the CACP surveys; the reliability of the NCAER data thus cannot be validated by cross-checking with CCPC data.

<sup>3</sup> For details of the Project and villages and States covered, see <http://www.fas.org.in/pages.asp?menuid=16>

<sup>4</sup> See Bakshi, Rawal, Ramachandran and Swaminathan (2012) for an elaboration of the accounting framework used for estimation of incomes.

Table 6 *Location and agro-ecology of survey villages, 2005 to 2007*

Village	Block	District	State	Agro-ecological type
Ananthavaram	Kollur	Guntur	Andhra Pradesh	Canal-irrigated paddy cultivation
Bukkacherla	Raptadu	Anantapur	Andhra Pradesh	Dry and drought-prone, groundnut area
Kothapalle	Thimmapur	Karimnagar	Andhra Pradesh	Groundwater-irrigated, multi-crop system
Harevli	Najibabad	Bijnor	Uttar Pradesh	100% canal-irrigated with supplementary groundwater, wheat–sugarcane
Mahatwar	Rasra	Ballia	Uttar Pradesh	Groundwater-irrigated, wheat–paddy rotation
Warwat Khanderao	Sangrampur	Buldhana	Maharashtra	Rainfed cotton–growing region
Nimshirgaon	Shirol	Kolhapur	Maharashtra	Irrigated sugarcane and multi-crop system
25 F Gulabewala	Karanpur	Sri Ganganagar	Rajasthan	Canal and groundwater irrigation, with cotton, wheat, and mustard cultivation

#### 4.1 Estimated household and per capita incomes

I begin with estimates of annual mean household and per capita incomes (Table 7).<sup>5</sup> The village with the highest annual household income, of USD 3,328, was 25 F Gulabewala in Rajasthan, and the village with the lowest was the village of Mahatwar in eastern Uttar Pradesh. In Mahatwar village, where the majority of the population belongs to the Scheduled Castes, the annual household income averaged less than USD 700. So, there was wide variation across these eight villages in respect of average household income. Not surprisingly, median incomes were much lower than mean incomes in every village.

The highest per capita income of USD 600 was observed in 25 F Gulabewala, a village in the Gang canal region, followed by Ananthavaram in coastal Andhra Pradesh (USD 370) and Nimshirgaon in western Maharashtra (USD 307). All three villages are characterized by access to canal irrigation and relatively advanced agriculture.

To put these numbers in perspective, the per capita national income at current prices was USD 602 or Rs 27,123 in 2005-06. Thus, of the eight survey villages, in only one village – Gulabewala in Rajasthan – was the average per capita income of households close to the per capita national income in the corresponding year.

<sup>5</sup> For four villages, a complete census implies that the figure reported is a population estimate. In Nimshirgaon and the three villages of Andhra Pradesh, where samples were used for income estimates, appropriate weights have been assigned to arrive at population estimates.

Further, the median per capita income was less than one dollar a day in all eight villages, and the mean per capita income was less than one dollar a day in six out of eight villages.<sup>6</sup>

Table 7 *Mean and median household income and per capita income, study villages in USD per annum at 2005-06 prices (1 USD= Rs 45)*

Village (State)	Year of survey	Mean		Median	
		Household income	Per capita income	Household income	Per capita income
Ananthavaram (AP)	2005-06	1322	370	570	190
Bukkacherla (AP)	2005-06	813	212	434	140
Kothapalle (AP)	2005-06	755	209	496	131
Harevli (UP)	2005-06	1566	259	590	122
Mahatwar (UP)	2005-06	694	100	442	66
Warwat Khandearo (MAH)	2006-07	1291	247	654	143
Nimshirgaon (MAH)	2006-07	1535	307	837	183
25F Gulabewala (RAJ)	2006-07	3328	600	781	177

Notes: Numbers in USD have been rounded off. AP stands for Andhra Pradesh, UP for Uttar Pradesh, MAH for Maharashtra and RAJ for Rajasthan. Figures for 2006-07 were deflated to 2005-06 prices.

Source: PARI Survey data.

<sup>6</sup> This is, of course, using the normal exchange rate and not the PPP conversion factor.



Table 8 *Distribution of per capita income by decile, persons ranked in ascending order of per capita income, study villages and combined data in per cent*

Decile	Ananthavaram	Bukkacherla	Kothapalle	Harevli	Mahatwar	Warwat Khanderao	Nimshirgaon	25 Gulabewala	F	For all villages
1	0.43	-0.37	-0.13	0.73	0.97	1.12	1.80	0.64		0.63
2	1.64	2.03	2.21	1.86	2.61	2.41	2.65	1.06		1.84
3	2.60	2.95	3.11	2.56	3.58	3.25	3.47	1.41		2.66
4	3.42	4.15	4.41	3.36	4.56	3.99	4.41	1.88		3.45
5	4.39	5.91	5.71	4.12	5.87	5.11	5.36	2.49		4.45
6	5.94	6.89	6.91	5.41	7.39	6.65	6.77	3.66		5.62
7	7.68	9.16	8.66	7.17	8.40	8.58	8.95	6.06		7.42
8	9.92	11.93	10.24	10.03	10.39	11.61	12.55	10.52		10.21
9	14.28	17.56	12.33	16.85	13.69	16.29	16.54	18.36		15.66
10	49.70	39.78	46.55	47.92	42.53	40.99	37.50	53.92		48.06
All	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00		100.00
D10/D9	3.48	2.27	3.77	2.84	3.11	2.52	2.27	2.94		3.07

*Source:* Survey data.