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The Problem of Inequality

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The paper examines consumption, income, regional, social and gender inequalities in India. Income inequalities are much higher that of consumption. It also looks at inequalities in opportunities like education. The paper discusses policies such as redistributive measures, agriculture, social protection, employment, education, gender disparities and eradication of corruption.

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JEL Code: D63, I14, I24, I31, I38

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# The Problem of Inequality<sup>1</sup>

# S.Mahendra Dev

#### **1. INTRODUCTION**

Inequality has been an important issue in development debates. Development can not be discussed without talking about inequality. Theories of income distribution have been in the literature of economics from before Adam Smith to the present day. Ricardo characterises income distribution as the principal problem of economics (Sandmo, 2015). Several philosophers and economists have discussed about inequality<sup>2</sup>. In recent years, rising income inequality has attracted the attention of IMF, World Bank, OECD and Davos meetings. Arab Spring and Brexit also brought this issue to the limelight. The number of billionairs is increasing throughout the world with larger share in income and wealth. With the release of the book by French economist Thomas Piketty (2014), there has been more debate on inequality in several parts of the world. European economists have written more about inequality than American economists although inequality is rising in the US<sup>3</sup>.

First time at global level, a goal on inequality is included in Sustainable Development Goals (SDGs). Goal 10 of SDGs is about reduction in inequality within and among countries. Target 1 of Goal 10 says " By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average". Target 2 tries to achieve much more ambitious one: "By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status".

There are two main arguments for reduction in inequility. One is ethical or philosophical argument that equity is important for its own sake (intrinsic value). Second one is reduction in inequality is required for sustainability of growth (instrumental value). The related one is that even if one is concerned only with poverty, inequality can't be ignored as rise in inequality would adversely affect poverty reduction<sup>4</sup>.

It is argued that some degree of inequality may not be a problem if it provides incentives for people to accumulate human capital. Tendulkar (2010) draws a distinction between inequity and inequality. He examines the path breaking work of Simon Kuznets who indicates that

<sup>&</sup>lt;sup>1</sup> This is Malcolm Adiseshaiah Memorial lecture delivered by the author at Chennai on November 21, 2016 <sup>2</sup> On justice and ethical questions, moral philosophers discussed more as compared to economists although latter also had their foot on this issue. In recent years see, see Rawls (1971) on justice. Economists from Classical School (Adam Smith, Karl Marx, J.S. Mill), Neoclassical marginalist approach, non-marginalist approach, Utilitarians have all discussed about income distribution. See Atkinson and Bourguignon (2015) for a collection of articles on inequality. Kuznets (1957) used statistical approaches for looking at long term trends in inequality. Also see Sen (1973).

<sup>&</sup>lt;sup>3</sup> Apart from Piketty, other Euopean economists like Emmanual Saez (French), Gabriel Zucman (French), Anthony Atkinson (British), Nicholas Bloom (British), Thomas Phillipon (Grench), Branco Milanovic have written on inequality. One reason why American economists are not preoccupied with wealth inequality could be the deep influence of Chicago School.

More on this see<u>http://www.theatlantic.com/business/archive/2016/09/why-so-few-american-economists-are-studying-inequality/499253</u>

<sup>&</sup>lt;sup>4</sup> See Basu (2006) on globalization, poverty and inequality

inequalities rise with economic growth upto a point and then decline. This is the so called Kuznets inverted 'U' shape curve. Tendulkar says that even if measured inequality increases, there may not be increasing feeling of inequity as people observe high mobility and can aspire to move upwards like others. In this context, he also reviews the work of economists like Tibor Scitovsky and Albert O.Hirshman who have also discussed with the general issue of inequality not leading to inequity. According to Tendulkar, social consensus with respect to social acceptability of a degree of inequality is feasible on the existence of three conditions: (a) the observation of merit based income mobility; (b) the existence of equality of opportunity; (c) improvement in the living conditions of people at the lower end of distribution. He also says that we do need to be mindful about perceived fairness, equality of opportunity, the provision of basic needs, and poverty alleviation.

However, rising inequality can have social costs and lead to reduction in economic growth apart from the normative dimension to equality. It is also useful to distinguish between inequality of outcome and inequality of opportunity. Assets, income or expenditure are generally used for outcomes. Inequality of opportunity is often measured by studying non-income dimensions such as health, education, access to basic services and human development. Individual circumstances are important for examining inequalities in opportunities. The circumstances such as gender, race, ethnicity, or place of birth are outside the control of an individual. However, the outcomes also depend on the efforts of the individual makes in education and labour market given the circumstances (Kanbur et al, 2014).

Economic inequalities co-exist and intersect with many other forms of equally striking social, political and cultural inequalities. Therefore intersectional inequalities become important (UNDP, 2015). In the case of India, caste has a peculiar role that separates it out from the rest of the world (Dreze and Sen, 2013). Therefore, inequalities among caste or social groups become important. Similarly, gender inequalities are also high in India.

Against this background, in this paper, we will address two questions:

- (c) What are the dimensions and trends in inequality at global level and India?
- (d) How do we tackle rising inequalities at policy level?

The focus of the paper will be on economic, social and gender inequalities in India with some discussion at global level.

#### 2. DIMENSIONS OF INEQUALITY AT GLOBAL LEVEL

Dabla-Norris et al (2015) study from IMF examines trends in inequality of income and opportunities at global level. The main conclusions of the study on levels and trends are the following: (1) Global inequality is high and ranges from 0.55 to 0.70 depending on the measure used; (2) Inequalities have widened within countries. They have increased substantially in most of the advanced countries. Although inequality remained stable for the group of emerging market developing countries (EMDCs), there are large disparities in levels and trends across countries. Inequality increased in Asia and Eastern Europe while it declined in Latin America although levels are higher in the latter set of countries; (3) In advanced countries, inequality is primarily driven by the growing income share of the top 10 per cent which has income close to nine times to that of the bottom 10 per cent. However, in the case of EMDCs, the rise in inequality is primarily due to shift in incomes from middle class to upper class (e.g. China and South Africa). Gini coefficient in wealth is almost double to that of income in many countries; (4) Inequality in health outcome and access to health care is

high in developing countries. On the other hand, one notices declining inequality in education in EMDCs. Disparities in access to financial services between advanced countries and EMDCs are high.

A recent World Bank study (2016) examines latest trends in inequalities in income/consumption across the world. Some of the conclusions of the study are the following: (a) Global inequality in per capita income steadily increased from the year 1820 to the 1990s<sup>5</sup>. However, Gini index in recent years fell from 66.8 in 2008 to 62.5 in 2013. This decline in global inequality was due to convergence in average incomes due to rising incomes in populous countries such as China and India. This led to reduction in between country inequality. But within country inequality rose over time; (b) Income/consumption surveys based data shows that inequality increased in 42 countries while it declined in 39 countries for the long period 1993-2008 (Table 1). The populous countries where inequality rose include Bangladesh (5 points), China (7 points) and Indonesia (5 points). In the more recent short period (2008-13), inequality declined in 41 countries while it increased in 19 countries (Table 1); (c) The report offers some lessons on the decline in inequality in Brazil (5.5 points), Cambodia (11 points), Mali (6.9 points), Peru (7.1) and Tanzania (2.7 points) in the recent period (2008-13).

	Long run trend (1993-2008)						
	No. of Cou	No. of Countries				Mean Gini	
	Increase	Less	Decline	Total	1993	2008	
		Change					
East Asia and Pacific	5	1	3	9	37.8	39.1	
Eastern Europe and Central Asia	5	2	6	13	33.9	32.5	
Latin America and the Caribbean	8	0	11	19	49.0	47.0	
Middle East and North Africa	1	1	3	5	39.8	36.4	
South Asia	3	0	1	4	31.0	34.5	
Sub-Saharan Africa	8	2	10	20	47.6	45.1	
Industrialized countries	12	4	5	21	31.4	32.6	
World	42	10	39	91	40.1	39.3	
	Short-run trend (2008-13)						
	No. of Countries Mean Gin				ni		
	Increase	Less	Decline	Total	1993	2008	
		Change					
East Asia and Pacific	1	1	5	7	39.2	37.3	
Eastern Europe and Central Asia	6	8	9	23	31.9	31.4	
Latin America and the Caribbean	3	2	12	17	49.7	48.0	
Middle East and North Africa	0	1	1	2	35.3	33.4	
South Asia	0	1	2	3	36.7	36.2	
Sub-Saharan Africa	3	2	4	9	44.1	43.8	
Industrialized countries	6	6	8	20	32.0	31.8	
World	19	21	41	81	37.9	37.1	

Table 1. Countries with an Increasing and Decreasing Gini Index and the Average Gini

World Bank (2016)

#### Inequality and Growth : Kuznets inverted U shape, U shape and Kuznets Waves

The story of inequality and growth can be started from Kuznets inverted U shape which shows that inequality increases initially and later falls with economic growth. Piketty's work on the US and Europe is well known (Piketty, 2014). The main merit of his book is the massive collection of historical data for several countries. In the 18th and 19th centuries western European society was highly unequal. But inequality declined and stabilized during 1910-70. Again income inequality has been rising since then. In contrast to Kuznets inverted

<sup>&</sup>lt;sup>5</sup> Here World Bank uses GDP per capita in combination with distributional statistics from household surveys.

U shape curve, Picketty's data indicated U shaped curve. From this history, Piketty develops a grand theory of capital and inequality.

In a recent book, Milanovich (2016) develops the concept of Kuznets wave or cycle to explain changes in inequality over long period. According to him, Kuznets's approach cannot explain the rising inequality that occurred after 1980. On the other hand, Piketty's theory does not explain if we extend the data further back, into the 18<sup>th</sup> and 19<sup>th</sup> centuries.

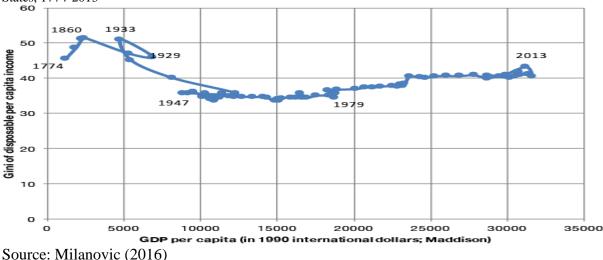


Fig 1. The relationship between income inequality and mean income (The Kuznets relationship) for the United States, 1774-2013

Milanovic explains Kuznets wave for the US in the following way. Inequality in the US rose between Independence (1774) and the Civil War (1860) and then continued to rise until the early 20<sup>th</sup> Century when it reached peak at slightly over 50 Gini points at an income level of \$5000 per capita (in 1990 prices) (Fig 1.). After the great depression, it declined steadily until the end of World War II. Inequality remained at a historically low of about 35 Gini points until the trough in 1979. After that it increased steadily, reaching over 40 Gini Points by the second decade of 21<sup>st</sup> Century. Kuznet's hypothesis of inverted 'U' shape is consistent upto 1979 but does not explain the rise in inequality in the last 40 years. The concept of Kuznets waves explains the upsurge of inequality since 1980 (Milanovic, 2016). The rise in inequality was driven by the second technological revolution,

#### Inequalities in Asian Countries

Some studies have examined income inequalities in Asian countries. As part of Asian Development Bank (ADB) study, Zhuang et al (2014) looked at recent trends in inequalities in Asia. According to this study, if we consider Asia as a single unit, its Gini coefficient rose fom 39 in the mid-1990s to 46 in the late 2000s. Gini coefficient increased in 12 of the 30 countries with comparable data. The ratio of top 20% to bottom 20% also increased in these countries. The 12 countries cover 82% of the Asia-Pacific region. Inequality increased for three large countries like China, India, Indonesia. A recent IMF study (Jain-Chandra et al, 2016) also confirms increasing inequalities in Asia. According to this study, on a population-weighted basis, the net Gini coefficient in Asia rose from 37 in 1990 to 48 in 2014, reflecting the sharp rise in inequality in the most populous countries. Of the 22 Asian economies considered in the study, Gini rose in 15 countries from 1990 to 2013. In China, Gini rose from 33 in 1990 to 53 in 2013. In the ASEAN region, the trends in inequality showed divergent trends with inequalities increasing in Indonesia and declining in Malaysia,

Philippines and Thailand. Regarding inequality of opportunity, there is a large gap in access to education and health between the wealthiest quintile of income distribution as compared to the poorest quintile (see Son, 204).

What are the drivers of Inequality? Studies at global level show that technological progress, rise in skill premium and the decline of some labour market institutions were responsible for inequality in both advanced economies and EMDCs. Skill premium is associated with rising inequalities in advanced countries while financial deepening has contributed to inequality in EMDCs (Dabla-Norris et al , 2015). The study of Jain-Chandra (2016) shows that financial deepening has been equalizing in Asia while surprisingly higher social sector spending, education spending, and capital expenditure are associated with higher inequality in Asia. This is because of weak coverage and disproportionate benefits to non-poor. However, in line with the rest of the world, greater progressive taxation reduces income inequality in Asia.

# **3. DIMENSIONS AND TRENDS IN INEQUALITY IN INDIA**

# **3.1.** Consumption Inequality

In India, consumer expenditure from NSS (National Sample Survey) is generally used to estimate inequality. Many studies have shown that inequality in consumption increased in the post-reform period<sup>6</sup>. Most of the studies show that inequality increased marginally in rural areas<sup>7</sup> while it rose significantly for urban areas. The numbers in Table 2 from Himanshu (2015) show that inequality in rural areas increased from 0.26 in 1993-94 to 0.28 in 2004-05 and rose marginally in subsequent years. On the other hand, inequality in urban areas rose from 0.32 in 1993-94 to 0.38 in 2011-12. This study also showed an increase in the consumption shares of top 10% and top 20% along with a corresponding fall in the shares of bottom 20% and bottom 40%. Similarly disparities between urban and rural also increased over time.

Table 2. Inequality in India. Only of Consumption Expenditure								
	1983	1993-94	2004-05	2009-10	2011-12			
Rural	0.271	0.258	0.281	0.284	0.287			
Urban	0.314	0.319	0.364	0.381	0.377			
All India	0.295	0.300	0.347	0.358	0.359			

Table 2: Inequality in India: Gini of Consumption Expenditure

Note: All estimates are based on Mixed Recall Period (MRP) estimates of consumption expenditure Source: Himanshu (2015)

Using Atkinson Inequality Index, Radhakrishna (2015) showed positive trend growth in inequalities in rural areas in the post-reform period while pre-reform period did not show any trend. Inequality in urban areas registered a significant positive trend in both the periods and the growth rate was higher in the post-reform period (Table 3). The trend growth increases with increase in the value of the inequality aversion parameters in second period in rural areas and both periods in urban areas indicating worsening of inequality. This study also shows worsening of rural-urban disparities over time.

Tuelle et Fillingan Ofern		01110000				
Period			e	=		
	0.5	1.5	2.0	2.5	3.0	3.5

Table 3. Annual Growth Rates Of Atkinson Inequality

<sup>6</sup> For example, see Subramanian and Jayaraj (2016), Radhakrishna (2015), Himanshu (2015), Sripad and Vakulabharanam (2013), Dev and Ravi (2008) Sen and Himanshu (2004).

<sup>&</sup>lt;sup>7</sup> May not be statistically significant.

Rural						
1983-97 (URP)	-0.17	-0.19	0.39	-0.44	-0.50	-0.51
1993/94-2009/10 (MRP)	1.39***	1.09***	0.95***	0.83***	0.74***	0.65***
Urban						
1983-97 (URP)	1.07*	0.84**	0.75**	0.67**	0.60**	0.55**
1993/94-2009/10 (MRP)	2.17***	1.86***	1.71***	1.58***	1.47***	1.57***

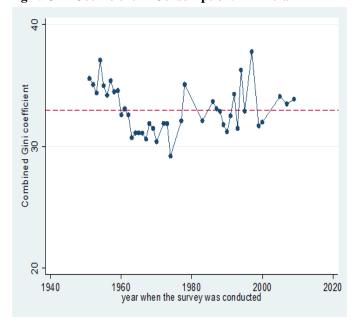
e is the inequality aversion parameter

\*\*\*significant at 1% level; \*\*significant at 5% level; \*significant at 10% level Source: Radhakrishna (2015)

Subramanian and Jayaraj (2016) examine the trends in the shares of bottom quintile population during the period 1983 to 2011-12. The study indicates that on average the share of bottom quintile in the mean per capita expenditure was around 46% in rural areas and 38% in urban areas. It did not show significant changes in rural areas while it declined from 40% in 1993-94 to 35% in 2011-12 in urban areas. The bottom quintile expenditure has grown at a compound annual rate of 2.10% per annum in rural and 1.96% per annum in urban over the period 1983 to 2011-12. They say that we should target to have 3% per annum growth in consumption of bottom quintile.

#### No trend in inequality in consumption over long term

Gini coefficients since 1951 (Fig. 2) shows that consumption GINI has been stable with few fluctuations. It showed only small increase in the early 1990s. Fig 2: Gini Coefficient in Consumption: All India



Source: Milanovich, 2016

The Gini in consumption which ranged between mid- and higher-30s, made India's inequality look about the same as in developed countries (Milanovich, 2016a)<sup>8</sup>. It is known that NSS data underestimates the consumption of the rich. This could be one reason for the relatively lower estimates of consumption inequalities in India.

<sup>&</sup>lt;sup>8</sup> Using data for 7 years for the period 2001-02 to 2009-10, Srinivasan (2013) showed that there was no trend in Gini coefficients as shown by the confidence intervals.

#### 3.2. Income inequality is higher than Consumption inequality

The inequality estimates based on consumption are lower than income based inequalities. There are estimates based on income using India Human Development Survey (IHDS). Dubey (2016) shows that Gini coefficient for income is around 0.55 in India as compared to that of consumption at 0.37 (Table 4). In other words, income inequality is much higher than expenditure based inequality in India. The income Gini is about 17 to 18 points (nearly 50%) higher than consumption Gini<sup>9</sup>.

	Income Based	l (Gini)**	Consumption	Based (Gini)*					
	2004-05	2011-12	2004-05	2011-12					
All India	0.52	0.55***	0.35	0.37					

Table 4 Gini coefficient for Income and Consumption: All India

\*NSS based

\*\*India Human Development Survey (IHDS)
\*\*\*IHDS, provisional
Source: Dubey (2016)

Milanovich (2016) says that if we compare India income Gini with other countries that use income surveys, India's Gini is higher than Brazil but lower than only South Africa (Fig 3). Even China's inequality is lower than that of India.

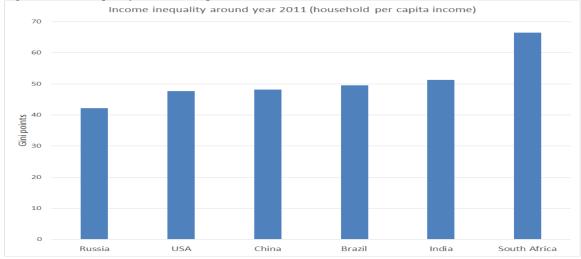


Fig 3. Income Inequality in India compared to other countries

Source: Milanovic (2016)

# Inequality in Income of Agricultural Households

One can estimate income inequality for agricultural households based on Situation Assessment Survey of NSS. At the all India level, the income Gini at 0.58 was much higher than consumption Gini at 0.28 – around 30 points higher. The estimates at state level also show similar results. The income Gini at state level varies from 0.43 in Chattisgarh and Gujarat to 0.61 in Bihar. The difference between consumption Gini and income Gini for

<sup>&</sup>lt;sup>9</sup> India has made tax data public recently by releasing it for the year 2011-12 (assessment year 2012-13). One can estimate inequality in income from tax data also. Only around 3 per cent of the population filed the returns. Thus, it is very small sample to look at overall income inequalities.

Bihar is nearly 40 points. The income inequality is higher in South Indian states such as Kerala, Andhra Pradesh and Tamil Nadu.

eholds						
Gini	Per	Gini MPCE	States	Gini	Per	Gini MPCE
capita		2011-12		capita		2011-12
income:				income:		
2013				2013		
0.60		0.27	Madhya Pradesh	0.49		0.25
0.52		0.23	Maharashtra	0.57		0.21
0.61		0.22	Odisha	0.53		0.24
0.43		0.22	Punjab	0.53		0.29
0.43		0.23	Rajasthan	0.50		0.27
0.51		0.25	Tamil Nadu	0.59		0.28
0.53		0.28	Uttar Pradesh	0.58		0.28
0.58		0.23	West Bengal	0.53		0.28
0.59		0.31	All India	0.58		0.28
	Gini capita income: 2013 0.60 0.52 0.61 0.43 0.43 0.51 0.53 0.58	Gini         Per           capita	Gini capitaPer 2011-12Gini MPCE 2011-12income: 20132011-120.600.270.520.230.610.220.430.220.430.230.510.250.530.280.580.23	Gini capitaPer 2011-12Gini MPCE 2011-12Statesincome: 20132011-12	Gini         Per         Gini MPCE         States         Gini capita           capita         2011-12         2013         capita         capita           2013         0.60         0.27         Madhya Pradesh         0.49           0.52         0.23         Maharashtra         0.57           0.61         0.22         Odisha         0.53           0.43         0.22         Punjab         0.53           0.51         0.25         Tamil Nadu         0.59           0.53         0.28         Uttar Pradesh         0.58           0.58         0.23         West Bengal         0.53	Gini         Per         Gini MPCE         States         Gini         Per           capita         2011-12         States         Gini         Per           income:         2011-12         income:         2013           0.60         0.27         Madhya Pradesh         0.49           0.52         0.23         Maharashtra         0.57           0.61         0.22         Odisha         0.53           0.43         0.22         Punjab         0.53           0.43         0.23         Rajasthan         0.50           0.51         0.25         Tamil Nadu         0.59           0.53         0.28         Uttar Pradesh         0.58           0.58         0.23         West Bengal         0.53

Table 5: Estimates of Inequality (Gini) in Per Capita Income and MPCE for Agricultural Households

Source: Chakravorty et al (2016)

Asset Inequalities: Inequalities in assets are quite high in India. Earlier studies shows that in 2002 land inequality was 0.73, per capita asset holding was 0.65 and per capita holding of financial assets was 0.99<sup>10</sup>. The inequality in ownership of land was 0.76 in 2003<sup>11</sup>. A study by Rawal (2013) shows that Gini coefficient in oprational holdings in 2011-12 was around 0.78. Credit Suisse report on India reveals that the richest 1% owned 53% of the country's wealth while the share of the top 10% was 76.3%. In other words, 90% of Indians own a less than 25% of the country's wealth.

#### 3.3. Inequality across Social Group

One of the important forms of inequality in India relates to disparities across social groups particularly disadvantaged sections like Scheduled Castes (SCs) and Scheduled Tribes (STs). One way of looking at this inequality is to examine the poverty ratios across social groups. Poverty declined much faster for all the social groups during the period 2004-05 to 2011-12 as compared to the period 1993-94 to 2004-05. The rate of decline in poverty is the highest for SCs. The decline in poverty for SCs and OBCs exceeded the national average during the period 2004-05 to 2011-12 (Panagariya and More, 2013). Poverty decline for STs was more or less similar to that of national average. It looks like SCs, STs and OBCs benefited equally or more in the high growth phase of 2004-05 to 2011-12.

However, the poverty levels are higher for STs and SCs as compared to other groups. Particularly the poverty ratio of STs was two times to that of national average in 2011-12. If we look at the type of household across social groups, the poverty in casual labour in agriculture among SCs (41.3%) and STs (59.7%) was very high compared to other groups (31%) (Table 6).

Asset distribution also shows that the share of SCs and STs is low in the total assets. Landlessness is high among SC households. Discrimination in labour market and business is also found in some of the studies<sup>12</sup>. Lack of basic necessities such as housing, sanitation,

<sup>&</sup>lt;sup>10</sup> Himanshu (2015) quoting the study of Jayadev et al (2007)

<sup>&</sup>lt;sup>11</sup> Rawal (2008)

<sup>&</sup>lt;sup>12</sup> See Deshpande (2013) on the discrimination in small business

education and health is another problem for these groups<sup>13</sup>. However, income inequality is only one aspect of disparities between upper castes and disadvantaged sections. Discrimination, humiliation and violence against dalits and adivasis are examples of inequalities in non-economic factors.

Sector	SC	ST	OBC	Others
Rural				
Self Employed in agriculture	28.9	42.2	20.3	13.4
Self Employed in non-agriculture	23.4	28.3	19.1	12.5
Regular wage/Salary earnings	12.9	20.8	10.3	7.7
Casual Labour in agriculture	41.3	59.7	34.8	31.0
Casual Labour in non-agriculture	32.7	54.5	29.7	23.0
Others	27.6	44.3	16.5	8.2
Total	31.5	45.3	22.7	15.5
Urban				
Self Employed	23.0	25.9	17.3	9.4
Regular wage/Salary earnings	12.1	9.1	7.1	4.8
Casual Labour	37.6	55.7	29.5	28.1
Others	17.9	12.9	9.3	4.5
Total	21.7	24.1	15.4	8.1

Table 6: Incidence of Poverty among Social Groups by Type of Households: 2011-12 (%)

Source: Radhakrishna (2015)

#### **3.4. Regional Inequalities**

There have been several studies on convergence and divergence of Indian states. Many studies find no evidence of convergence across states<sup>14</sup>. Inequality across states in Fig 4 shows that it was lower during 1980s – coefficient of variation being 0.28 to 0.29. It increased significantly from around 0.32 in 1990-91 to 0.44 in 2008-09 with some fluctuations. It seems to have stabilised in the last few years. As shown in Table 7, the share of per capita income in Bihar increased significantly in All India and few developed states. The share of Bihar in All India rose from 33% in 2004-05 to 42% in 20013-14. Similarly, Bihar's share in Punjab increased significantly from 24% to 34% during the same period. There seems to be some catching up by the less developed states in per capita SDP growth. However, there are significant inequalities within states. This issue is also becoming important.

Table 7: Share of per capita income of Bihar in All India and few developed states (%).
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	Share of Per Capita Income of Bihar in						
	All India Maharashtra Punjab Gujarat						
2004-05	32.8	21.9	23.8	24.7			
2013-14	41.9	26.6	33.8	29.2			

Note: Per Capita Net State Domestic Product is in current prices (2004-05 series) Source: Economic Survey 2015

<sup>&</sup>lt;sup>13</sup> The problem of exclusion in terms of access to basic services also applies to minorities like Muslims.

<sup>&</sup>lt;sup>14</sup> For example, see Ghose et al (2013). This study shows significant divergence in per capita income across states in the aggregate and sectoral levels for the period 1968/69 to 2008/09. Also see Das et al (2013) which indicates evidence of conditional convergence for Indian districts but at a rate that is only half of Barro's "Iron Law".

Fig 4: Inequalities Across States: 1980-81 to 2010-11



# **3.5.** Gender Inequalities

Inequality between men and women is an important issue in India. Gender inequality index is the highest for India among the countries listed in Table 8. The percentage of 25 plus female population with some secondary education and female participation rates are the lowest among these countries.

Gender discrimination is another form of labour segmentation. As is well known, the wages of women workers are lower than those of men across most employment categories and locations. There are distinct conventionally earmarked spheres of work for women and the entry of women into most male-dominated occupations is constrained. Conventional women's work is characterized by lower wages and earnings and limited upward mobility.

Countries	Gender Inequalit	y Index	MMR 2010 (death per 1 lakh life birth	25+female population With at least Some Secondary Education%	15+ female labour force participation rate
Argentina	0.381	74	77	57.0	47.3
Russian Fed.	0.314	52	34	89.6	57.0
Brazil	0.441	85	56	51.9	59.5
China	0.202	37	37	58.7	63.8
Indonesia	0.500	103	220	39.9	51.3
South Africa	0.461	94	300	72.7	44.2
India	0.563	127	200	26.6	28.8

Table 8. Gender Inequality Index and other components for Selected Countries: 2013

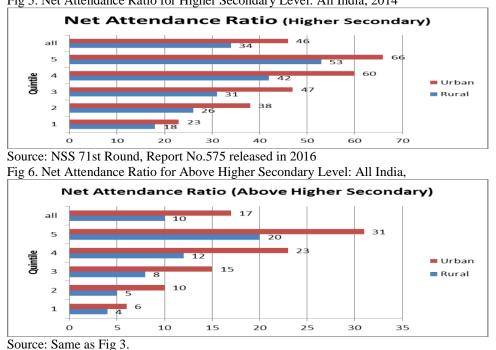
Source: HDR 2014 quoted in Economic Survey 2014-15, GOI

There are many examples of non-economic factors that discriminate women. Decline in child sex ratio (female-male ratio 0-6 years) from 927 in 2001 to 914 in 2011 is one example of 'boy preference'. Rapes and violence against women have been increasing In India. Gender inequality is a major social disparity in Indian society<sup>15</sup>.

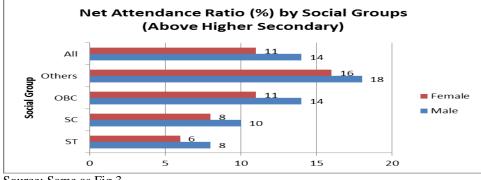
<sup>&</sup>lt;sup>15</sup> More on gender inequality, see Dreze and Sen (2013)

#### **3.6. Inequality of Opportunity**

Equality of opportunity is important for reducing many other forms of inequalities. Access to education is an important indicator of equality of opportunity. Recent NSS 71<sup>st</sup> Round conducted in 2014 provides net attendance ratios (NAR) by quintiles, social groups and religion. The inequalities in primary education are not high. But inequality increases over the education ladder: secondary, higher secondary and above higher secondary level. Fig 5. Net Attendance Ratio for Higher Secondary Level: All India, 2014



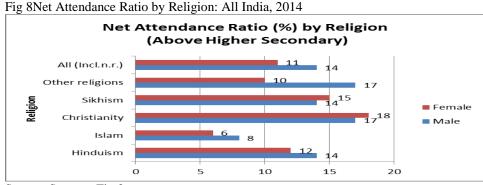
It is known that returns to education are more at higher levels. Fig. 5 shows that 66 per cent of kids of higher secondary going age of the richest quintile of the population attend school in urban areas (53% for rural) while the proportion drops to 23% for the poorest quintile for urban (18% for rural). In the case of above higher secondary level, only 6% of young people from the bottom quintile of the population attend in urban areas but the proportion is five times higher at 31% for the young people from the richest quintile of the population (Fig 6). Fig 7. Net Attendance Ratio by Social Groups: All India, 2014



Source: Same as Fig 3.

Net Attendance Ratio by social group shows that in the case of above higher secondary level, only 6 to 8% of females from ST and SC population attend but the proportion is 11% for OBCs and 16% for other castes (Fig 7). Similarly, NAR by religion indicates that only 6% of females from Muslims attend above higher secondary level as compared to 12% for Hindus and 18% for Christians (Fig 8). The data shows that inequalities in NAR among quintiles,

social groups and religious groups increases with rise in education levels from primary to secondary, higher secondary and above higher secondary.



Source: Same as Fig 3.

*Regional Disparities in Different Types of Courses*: Among the students enrolled in higher education, the propensity to be enrolled in technical education is higher for students in South India as compared to other regions (Table 9). This is true for both rural and urban areas. So it is not surprising that of all the students enrolled for technical education the southern states account for the highest share (Table 9).

Table 9: D	pistribution o	of enrolled stud	lents over differ students in e	• •		nd regional dis	stribution of en	rolled	
		Rı	ıral	ach type of		Urban			
Region	General	Technical	Vocational	Total	General	Technical	Vocational	Total	
Northern	78.28	19.31	2.4	100	62.86	36.09	1.04	100	
	15.35	14.94	37.52	15.49	16.53	14.1	24.13	15.61	
North East	88.25	11.24	0.5	100	81.21	17.8	0.99	100	
	4.23	2.13	1.92	3.79	3.18	1.03	3.4	2.32	
Eastern	84.8	14.36	0.85	100	71.14	28.32	0.54	100	
	18.7	12.48	14.92	17.42	16.54	9.78	10.94	13.8	
Central	88.02	11.28	0.7	100	67.88	31.19	0.93	100	
	34.66	17.51	21.98	31.1	24.83	16.95	29.82	21.72	
Western	79.65	19.82	0.53	100	56.82	42.72	0.46	100	
	10.27	10.07	5.43	10.18	16.83	18.8	12.1	17.59	
Southern	60.18	39.00	0.82	100	45.28	54.26	0.46	100	
	16.79	42.88	18.24	22.03	22.09	39.33	19.62	28.97	
All India	78.98	20.03	0.99	100	59.37	39.96	0.67	100	
	100	100	100	100	100	100	100	100	

Notes: For each region, the first row gives the distribution of enrolled students across different types of courses, and the second row gives the share of that region among the students who are enrolled in each type of course. Source: Chandrasekhar et al (2016)

The details about the students enrolled in general education reveal that in rural areas, students from southern states are most likely to study science (38 per cent) or commerce (35 per cent) and less likely to study humanities. This Southern pattern is in sharp contrast with all other regions of India where most of the students in rural areas opt for a course in humanities. This is all true for urban areas. Students from Western and Southern regions are more likely to prefer courses which are skill based or market oriented (Chakravorty et al, 2016). The choice of courses in these regions most likely reflects the expected earnings given their employment

prospects. Equality of opportunity in terms of returns to higher education seems to be better in these regions as compared to other regions.

*Inequality and Human Development*: Higher inequality can lead to lower human development. A study by Suryanarana (2013) estimates both Human Development Index (HDI) and inequality adjusted HDI for all India and States (Table 10).

Index (IHL	(i) and Loss				
States	HDI	IHDI	Loss (%)	Rank HDI	Rank IHDI
A.P.	0.485	0.332	31.6	19	20
Bihar	0.447	0.303	32.1	26	24
Chattisgarh	0.458	0.297	35.1	24	25
Gujarat	0.514	0.363	29.5	15	13
Jharkhand	0.470	0.312	33.7	21	21
Karnataka	0.508	0.353	30.5	18	18
Kerala	0.625	0.520	16.8	1	1
M.P.	0.451	0.290	35.7	25	27
Maharashtra	0.549	0.397	27.8	7	8
Odisha	0.442	0.296	33.1	27	26
Punjab	0.569	0.410	28.0	4	4
Rajasthan	0.468	0.308	34.0	23	22
Tamil Nadu	0.544	0.396	27.3	9	9
U.P.	0.468	0.307	34.5	22	23
West Beng.	0.509	0.360	29.3	17	14
All India	0.504	0.343	32.0		

Table 10. Human Development Index (HDI) and Inequality Adjusted Human Development Index (IHDI) and Loss

Source: Suryanarayana (2013)

The rank of Madhya Pradesh for inequality adjusted HDI is the lowest while Kerala has the highest rank. The average loss in HDI due to inequality at the All-India level is 32%. It is the highest for Madhya Pradesh (36%) and Chhattisgarh (35%) and the lowest for Kerala (17%). The loss due to inequality is the highest with respect to education dimension (43%), followed by health (34%) and income (16%). It shows that inequalities in non-income indicators like education and health are higher than that of income. The analysis also shows that with lower inequalities, HDI would have been much higher.

# **3. POLICIES FOR REDUCTION IN INEQUALITY**

# 3.1. Global level

Studies at global level have shown that measures such as fiscal policy, education policy, financial inclusion, well designed labour market and institutions can reduce inequality (Dabla-Norris et al, 2015). Macro-economic stabilization through fiscal policy can minimize any financial crisis which hurts the poor. Similarly, fiscal redistribution can improve the share of the poor and middle class. However, there is no-one size fits all policies for tackling inequality. In developed countries, more reliance on wealth and property taxes, progressive income taxation, better targeting of social benefits are needed. In emerging market countries, better access to education and health services, well targeted conditional transfers can reduce inequality (Bastagli et al, 2012).

World Bank (2016) provides some lessons from the experiences of countries such as Brazil, Cambodia, Peru and Tanzania which are best performers in reducing inequalities during 2004-14 and Mali during 2001-10. In Brazil, labour market dynamics including a rising minimum wage and expansion of social policies helped in raising incomes of the poor. In

fact, these two factors accounted for approximately 80 per cent of inequality in 2003-13. Some of the lessons for the success of these five countries are prudent macro economic policies, strong growth, functioning labour markets and coherent domestic policies focusing on safety nets, human capital, and infrastructure. The report focuses on few policy areas like early childhood development, universal health care, universal access to good-quality education, CCTs, investments in new or improved rural roads and electrification, and taxation, mainly on personal income and consumption. These interventions have both efficiency and equity benefits. The report also cautions that universal prescriptions are useful but we need country specific solutions.

It is recognized that reduction in inequality of opportunity is equally or more important than inequality in income. A web-based policy maker's survey carried out by the Asian Development Bank (ADB) shows "about 60% of the respondents agree or strongly agree with the statement that it is more important to reduce inequality of opportunity (such as access to education, health, and employment services) than to reduce inequality of income; and 84% of the respondents agree or strongly agree with the statement that income inequality is acceptable if it is due to differences in individual efforts and an outcome of fair competition" (p.4, Kanbur et al, 2014).

# 3.2. Policies for Reduction in Inequality in India

There is a need for several policies for reduction in inequality in India. We concentrate on few policies as it is difficult to cover all in one lecture.

As Dreze and Sen (2013) say the nature of Indian inequality can be distinguished from some of the other countries like China. Aggregate inequality may be similar between India and China. However, the poor in India can't afford even basic necessities. Also access and quality public services in education, health care etc. are missing for the poor. "For both these reasons, inequality in India takes the terrible form of a massive disparity between the privileged and the rest, with a huge deficiency of the basic requirements for a minimally acceptable life for the underdogs of society. The basic facilities of usable school, an accessible hospital, a toilet at home, or two square meals a day, are missing for a huge proportion of the Indian population in a way they are not in, say, China" (p.280, Dreze and Sen, 2013).

# **Redistribution Measures**

There has been a debate on India for a long time on redistribution of assets in favour of the poor to reduce poverty and inequality. Some of the earlier studies have questioned the government's strategy of helping the poor in terms of ad-hoc anti-poverty programmes. For example, after analysing some of the studies on government interventions, Kurien (1986) observes "what strategies such as target programmes attempt to do is to achieve through administrative interventions some *redistributions* in favour of those who do not have a resource power. The interventionist strategy, therefore, is an attempt to correct structural consequences without altering the structural characteristics (p.390, Kurien, 1986)<sup>16</sup>. Land reform in the sense of distribution of land in favour of the poor is largely a failure. Efforts towards redistribution of land and non-land assets have not been successful.

<sup>&</sup>lt;sup>16</sup> Also see Herring and Edwards (1983) for comments on Employment Guarantee Scheme (EGS) in Maharashtra. They say that there are vested interests in continuing EGS in the state in order to avoid redistributive measures like land reforms.

In the context of removal of poverty, in his R.S. Dubhashi Memorial lecture, V.K. R.V. Rao (1978) says the following: "Unless there is a structural change in property relations in rural India and the poor get an adequate share of productive assets, including land, implements, inputs and credit, any programme of a direct attack on rural poverty is not likely to bring about a reduction either in its magnitude or its intensity. It is not only in respect of productive assets that radical institutional reforms are required to give a better deal to the rural poor. We also need radical institutional reforms to see that the rural poor get a larger and more effective say m the operation of the rural power structure and a more significant and usable share of basic services for human resource development such as housing, education, health etc." (p.17 and 18, Rao, 1978).

Some advocate measures such as redistribution of assets and wealth in favour of the poor via higher tax rates for the rich. Increasing the income and corporate tax rates may not be the solution. In order to reduce inequalities, richer sections have to pay much more taxes. The tax/GDP ratio has to be raised with a wider tax base and removing exemptions for corporates. The share of direct taxes in total tax revenue has to be raised as indirect taxes are regressive. Fiscal instruments like public investment in physical and social infrastructure can be used to reduce inequality.

#### Agricultue: Increase the viability of small and marginal farmers

Increase in incomes of farmers particularly those with small holdings is important for reducing inequality in the economy particularly across sectors. In his Radhakrishna Memorial Lectures, Sukhamoy Chakravarty argued that viability of small and marginal farmers have to be increased for sustainability of agriculture (Chakravarty, 1987). We are still talking about viability of small farms even after three decades.

Table 11 shows that the income of the marginal and small farmers from all sources is only around 1/10 th of those of large farmers. The income from agriculture is very low for small farmers. Even if we add the other sources of income, it is not enough to take care of daily consumption and they have to borrow to survive. Small holding farmers have to get part of income from rural non-farm activities. Therefore, promotion of rural non-farm sector is essential for generating incomes for small farmers. Simultaneously, we have to improve the viability of small holdings.

ruble 11. Montally meetine and consumption of righteritation flowsenords. 2015 (RS.)									
Land size	Cultivat	Animals	Wage	Non-farm	Total Income	Total			
(ha.)	Income	Income	Income	business		Consumption			
< 0.01	31	1223	3019	469	4742	5139			
0.01-0.40	712	645	2557	482	4396	5402			
0.41-1.00	2177	645	2072	477	5371	5979			
1.01-2.00	4237	825	1744	599	7405	6430			
2.01-4.00	7433	1180	1681	556	10849	7798			
4.01-10.00	15547	1501	2067	880	19995	10115			
>10.00	35713	2616	1311	1771	41412	14445			
All Classes	3194	784	2146	528	6653	6229			

Table 11. Monthly Income and Consum	ption of Agricultural Households : 2013 (Rs.)

Source: NSS Situation Assessment Survey 2013

Small farmers face several challenges in the access to inputs and marketing. They need a level playing field with large farms in terms of accessing land, water, inputs, credit, technology and markets. Small holdings also face new challenges on integration of value chains, liberalization and globalization effects, market volatility and other risks and vulnerability, adaptation of climate change etc. (Thapa and Gaiha (2011). There are many technological and institutional innovations which can enable marginal and small farmers to

raise agricultural productivity and increase incomes through diversification and high value agriculture<sup>17</sup>. Changes in information technology will help in a big way to improve agribusiness and incomes of small farmers. A number of innovative institutional models are emerging and there are many opportunities for small and marginal farmers in India.

# **Social Protection**

The recent theory and evidence "offers a new perspective on social protection policies in poor countries, suggesting that there is a scope for using these policies to compensate for the market failures that perpetuate poverty, particularly in high-inequality settings" (Ravallion, 2003). Recent research has shown risk and vulnerability justification should be added since the poor do not have formal instruments for risk mitigation and coping. Risks and vulnerability are high as more than 90% workers are in the unorganized sector in India. Social protection thus deals with both absolute deprivation and risk and vulnerabilities. Social protection policies play a critical role in realizing (a) the human right to social security for all, (b) reducing poverty and inequality, (c)and supporting inclusive growth - by boosting human capital and productivity,(d) supporting domestic demand and facilitating structural transformation of national economies" (ILO, 2014).

India has social protection programmes at different levels: (a) (1) Universal Capability Enhancing Programmes (e.g. health and education)<sup>18</sup>; (2) Targeted programmes for the poor and vulnerable to provide socio-economic security. (3) Infrastructure (Rural Housing, Rural Drinking Water, Swatch Bharat Mission (Sanitation); 4. Social protection for the Unorganized/informal workers.

The approaches of earlier UPA government and that of present NDA government on social protection are different. UPA relied mostly on rights based framework: Right to education, right to employment, right to food, right to information. However, rights approach alone can't deliver social protection. We need appropriate institutions to implement effectively. The present government is not talking about rights approach but is focusing on some programs by using approaches like political accountability and good governance. Programmes like *Swatch Bharat Abhiyan*, focus on housing, financial inclusion (*Jan Dhan Yojana*) are part of the present strategy on social protection.

# Should we move towards Universal Basic Income?

Some argue for conditional (CCTs) and unconditional cash transfers (CTs). It is advocated that we should move towards direct benefits transfer in place of present social protection programmes. There is also a debate on Universal Basic Income (UBI). Recently, there was a proposal in Switzerland to guarantee every adult and long term citizen 2,500 Swiss Francs per month. However, in a referendum, Swiss voted against this idea of UBI. Some other countries want to experiment on this concept of UBI now. It may be feasible in India if some of the subsidies and tax exemptions are removed<sup>19</sup>. Srinivasan (2016) says that the idea of an assured minimum income was discussed in India as early as 1960s but could not be implemented then on account of certain circumstances.

<sup>&</sup>lt;sup>17</sup> See Vaidyanathan (2009) for efficiency in investments. See Vyas (2016) for changing role of government in agriculture. See Alagh (2013) for a discussion on future of Indian agriculture.

<sup>&</sup>lt;sup>18</sup> See Rangarajan and Dev (2015) for a discussion on public expenditure on health and education on the poor.

<sup>&</sup>lt;sup>19</sup> On this see Banerjee (2016), Bardhan (2016), Ray (2016)

#### Focus on Two Areas: Employment and Education

There can be several solutions to reduce inequality<sup>20</sup>. But, let's focus here on two important measures: creating productive employment and providing quality education

#### **Employment and Skills**

There is a feeling that we should have some flagship programmes like MGNREGA to reduce poverty and inequality. No doubt these programmes are important for protecting the poor. But equitable growth is much broader than this and productive inclusion in terms of generating quality employment should be the focus of any inclusive agenda. We need more diversified agriculture for raising the income of farmers. However, future employment has to be created in manufacturing and services. In this context, the Make in India initiative, focus on start-ups, Mudra, financial inclusion, etc., are steps in the right direction. Equally, service sector employment has to be promoted. Over time, the share of the organized sector has to be raised while simultaneously improving productivity in the unorganized sector. For the new generation, moving to regular wage employment is the aspiration apart from high remunerative self employment.

#### 'Make in India'

For improving quality of employment, 'Make in India' campaign is in the right direction. However, the experience of China shows that although the share of manufacturing in GDP rose significantly, the share of employment is low at 16%. Manufacturing today generates less direct employment but more indirect employment in services<sup>21</sup>.

India is an exception to the share of employment in services. The country has high share of services in GDP (58.4%) but the share of services in employment is exceptionally low (26.4%). Therefore, the share of employment in services has to be raised. India has the potential to increase the number of workers in manufacturing and the contribution to the sector to overall growth. But its future development path is unlikely to mimic that witnessed in East Asia like Japan, Taiwan or even in China. India has to forge its own path that will rely on both manufacturing and services as growth engines along with emphasis on exports which looks bleak in the short run.

*Labour Market Inequalities:* Most of the inequalities (economic and social) will have labour market dimension. Some issues on inequality exclusively deal with labour market structures, processes, mechanisms and outcomes while some others are influenced by labour institutions and labour market forces (IHD, 2014).

The evidence based current research has shown that there have been significant inequalities in labour markets in India. Inequalities can be found across sectors, wages and earnings, quality of work, labour market access and, between organized and unorganized sector. Labour market segmentation is another important issue regarding inequalities. Wage differentials can't be explained by economic factors alone inspite of increasing occupational and geographical mobility. Segmentation based on occupational skills and consequently industry and sectors is well known. Reducing labour market inequalities is important for sustainability of growth, rise in human development and reduction in overall inequalities.

<sup>&</sup>lt;sup>20</sup> See Dev (2008), Ahluwalia (2012), Rao (2009) for the policies on inclusive growth. See Bhagwati and Panagariya (2013) on track II reforms for more effective and inclusive redistribution.

<sup>&</sup>lt;sup>21</sup> Personal correspondence with Ajit Ghose. Also See Ghose (2016)

*Discrimination across Social Groups*: According to a study based on the NSSO data for 2004-05, while chances of securing a regular job were 21.5 per cent in the case of caste Hindus, they were only 6.7 per cent in the case of Scheduled Tribe and 12.4 per cent in the case of those belonging to Scheduled Castes (Bordia-Das, 2010). Another study on newspaper advertisements announcing job vacancies by private sector companies, during 2005-06, revealed that responses significantly vary among dalit and high caste Hindus and Muslim candidates. Taking high caste Hindu candidate as reference category (=1) the probability of a dalit candidate to be called for interview was 0.67 and that of a Muslim candidate 0.33. Probability for a qualified dalit candidate was less (0.85) even against an under qualified high caste Hindu candidate (Thorat et al, 2010).

*Youth Unemployment and Social Tensions:* One of the main problems for the agitations by the people like the Marathas in Maharashtra, Patidars in Gujarat, Jats in Haryana and Kapus in Andhra Pradesh relates to youth unemployment and aspirations of these castes to move to quality employment. It is known that youth unemployment in India is three times to that of general unemployment.

*Pro employment Macroeconomic policies:* Appropriate macro policies such as trade, fiscal and monetary policies should promote employment by providing appropriate policies and institutions<sup>22</sup>. Monetary stimulus in advanced countries helped preventing worse outcomes. In response to the global crisis developed countries reduced short term lending rates. These measures prevented a larger fall in employment. However, the extended period of low interest rates and unconventional monetary policy measures seem to have adverse effects on employment by encouraging capital intensive industries (ILO, 2014). In other words, monetary policies might have indirectly contributed to observed weaknesses in labour market and increased inequality.

Macro policies that enhance strong aggregate demand, raise productive investment and improve access to finance can have a positive impact of employment prospects. Bardhan (2016) advocates wage subsidies instead of capital subsidies for increasing employment.

# **Education : Equality of Opportunity**

Reduction in inequality of opportunity is important for promoting equity. "The distinction between inequality of opportunity and inequality of outcome can be particularly useful in guiding public policy. Equality of opportunity is not only intrinsically important but also a critical condition for a prosperous society. Public policy must be put in place to reduce or eliminate inequality of opportunity. Governments must work hard to promote equality of opportunity and to ensure that everybody has equal opportunity to participate in the growth process and benefit from its fruits. To the extent that inequality of parents' income leads to inequality of opportunity for children, this inequality needs to be overcome by interventions to assure equal access to public services and to markets for all in society." (Kanbur et al, 2014).

Equality of opportunity can reduce the intensity of Kuznets curve. How do you flatten kuznets curve? Endogenous growth models and capabilities approach or investing in human capital may have some answers. This can reduce the intensity of Kuznets curve. This can be shown in the contrast between East Asia and India/South Asia.

<sup>&</sup>lt;sup>22</sup> See Nayyar (2013) on macroeconomics and development

Recently, the Deputy Prime Minister of Singapore cautioned about school education in India. He says "schools are the biggest crisis in India today and have been for a long time. Schools are the biggest gap between India and East Asia. And it is a crisis that cannot be justified"<sup>23</sup>.

Equity in quality education is the key for raising human development and reduction in inequalities in labour market. A study by Cain et al (2014) on India shows that increase in returns to education account for a large part of the increase in urban inequality during 1993-94 to 2004-05. Increase in returns to education has been particularly higher in education intensive services (such as communications, finance, insurance, real estate and other business services) and education intensive occupations (professional/technical, managerial/administrative, and clerical occupations). The study, however, says that raising productivity in agriculture and expanding manufacturing sector is vital for reducing inequalities.

*Education and Affirmative Policies:* As shown above, there has been social exclusion and discrimination of some social groups in labour market. There is a need for two types of policies. First one is education and skill improvement for the disadvantaged sections. Education is the key determinant of employment prospects. There is a strong link between educational attainment and employment outcomes, and people with higher levels of education enjoy a competitive advantage in the labour market, including higher wage levels. Education for these groups would reduce the gap with other groups. Second one is affirmative action in education.

*Small Things Matter:* In their book on 'Poor Economics', Banerjee and Duflo (2011) argue that so much of anti-poverty policy has failed over the years because of an inadequate understanding of poverty. Small changes can have big effects. Several research studies on education have shown strong impact of remedial instruction programs on learning outcomes. Banerjee et al (2007) did experimental evaluation of a program run by PRATHAM targeted at the lower end of the class in public schools in cities of Mumbai and vadodara. The programme provided an informal teacher (*Balasakhi*) for teaching basic learning in reading arithmetic. For about 2 hours remedial instruction was given out of the regular classroom. The program improved student test scores. The gains were more for the lowest performing children<sup>24</sup>. Thus, small changes can make big difference in the lives of the poor.

# **Gender disparities**

One of the important disparities in gender relates toeducation. "A Dalit girl from a poor family who dreams of becoming a doctor or engineer may have to struggle not only with a lack of adequate schooling facilities in the neighbourhood and economic penury at home, but also, quite possibly, with indifferent social attitudes towards her education as well as with gender discrimination in the family and society" (p.281, Dreze and Sen, 2013).

Another issue is gender discrimination in employment. As is well known, the wages of women workers are lower than those of men across most employment categories and locations. The wages of women workers in India are lower by 20 to 50 per cent to male wages across different categories and locations. One question is whether education reduces gender gap. Wage of female worker with no education was 53 per cent of a man's wage in a regular job in rural areas. A graduate degree female received 70 per cent of male's wage in

<sup>&</sup>lt;sup>23</sup> First Lecture of Niti Ayog's 'Transforming India" initiative, August 26, 2016

<sup>&</sup>lt;sup>24</sup> See Muralidharan (2013)

rural areas. In urban areas, gender gap in wages reduces faster with education. In general, education seems to have reduced wage gap between men and women as far as regular jobs were concerned (IHD, 2014).

Participation rates of women are low and declined in India (Table 12). Work participation rate for women in India is only 22% compared to 54% for males. In fact in urban areas, only 15% of women's participation in work compared to 55% for men. Recently IMF Chief Christine Lagarde said increase in women's participation rates would increase 40% GDP in India. Mckinsey report also mentions that GDP could increase by 16% to 60% by the year 2025 with increase in women participation rates. It is true that increase in women's participation is important to reduce gender inequalities.

	Rural		Urban		Total	Total	
	Female	Male	Female	Male	Female	Male	
1983	34.0	54.7	15.1	51.2	29.6	53.9	
1993-94	32.8	55.3	15.5	52.1	28.6	54.5	
2004-05	32.7	54.6	16.6	54.9	28.7	54.7	
2011-12	24.8	54.3	14.7	54.6	21.9	54.4	

Table 12. Work Participation Rates of Female and Male

Source: IHD (2014)

But, women's 'work' and 'non-work' may be misleading. Time use surveys indicate women's unpaid work as home makers and care givers is quite high. Some estimates show that if we monetize unpaid work of women, it amounts to around 16 lakh crores per annum (Nandi and Hensman, 2015).

Discrimination against females is practiced throughout the life cycle. It starts from the womb with sex determination tests and it goes on with discrimination in education and employment. Crimes against women are much more visible and increasing now than before. Legal route is important to address the problems faced by women. However, Economic and social empowerment of women is important. Similarly, change in society attitudes and mind set of men are also essential to stop gender discrimination.

# **Corruption and Inequality**

Good governance is important for promoting equity. Corruption is one of the obstacles for good governance. There have been studies linking corruption to inequality. IMF (2016) examines the costs of corruption and mitigating strategies as corruption can seriously undermine inclusive economic growth. It can adversely affect the determinants of economic performance that include macro financial stability, investment, human capital accumulation and total factor productivity. It can also have devastating economic and social consequences due to vilolence, civil strife and conflict. According to the study, anti-corruption strategy include transparency, rule of law, reforms to eliminate excessive regulation and effective institutions. Using cross country regressions for the period 1980-97 Gupta et al (1998) show that a worsening in the corruption index of a country by one standard deviation is associated with the same increase in the Gini coefficient as a reduction in average secondary schooling of 2.3 years. The study says that corruption raises inequality and poverty through lower economic growth, biased tax system in favour of rich, poor targeting of social programmes, lobbying the government by the rich for favorable policies which perpetuate inequality in asset ownership, unequal access in education and lower social spending.

#### **India: Determinants and Root Causes of Corruption**

*Different Types of Corruption:* There are different types of corruption even within the definition of misusing public office for private gain<sup>25</sup>. Sridharan (2014) discusses three types of corruption in India. First one is petty bureaucratic corruption at the level of traffic police, judicial services, land administration, education, tax, health services. Second one is big ticket corruption involving politicians, business people, and bureaucrats the so called crony capitalism involving huge bribes on major government contracts, particularly on large infrastructure contracts, allocation of natural resources, such as minerals, telecom spectrum. These are controlled by politicians in certain key economic ministries. A third form of corruption is directly diverting government funds from development programmes, irrigation projects, roads, from social and anti-poverty programmes from publicly funded loans to the poor.

*Democracy and Corruption*: Liberal democracies with free press tend to have less corruption. It varies across countries regarding democracy and corruption (Treisman, 2007). Scandinavian Countries like Denmark, Sweden, Norway etc. have very low corruption. But some of the low income countries with democracy have high corruption. While democracy is commonly believed to reduce corruption, there are obvious endogeneity problems in measuring the impact of democracy on corruption. Of course, there are different types of democracy. For example, Indian democracy may be different from some other countries. It is important to ask and identify which features of democracy can reduce corruption and which features enhance corruption. Some democracies may have features which reduce while some have which increase corruption.

*Elections and Corruption:* One of the main root causes for corruption India is election funding. This is the main cause for big ticket corruption. Most of the party funds are from corrupt payments in return for contracts or clearances according to politicians across parties as well as bureaucrats. Real estate developers have reportedly become the single top source of funds for parties and politicians (Sridharan, 2014). Therefore, election funding is the root cause of corruption in countries like India.

*Economic reforms and Corruption*: Economic reforms are supposed to reduce corruption. However, corruption is widespread and pervasive in countries like India even after economic liberalisation. One can say that there are two key sources of corruption in India. First, that economic liberalisation has not ended the discretionary powers of the government over resource-allocation in several fields. Second one is election funding for political parties mentioned above. Despite twenty five years of economic liberalization there still remain plenty of government clearances at central and state levels which remains highly discretionary rather than transparently rule based.

The correlation between corruption and economic reforms positive or negative is however, no means clear. Think of China with its combination of institutionalized corruption and economic reforms and high growth rates. China is ranked lower (83) than India (76) in transparency international global perceptions index but much higher than India in world Bank's Ease of Doing Business Index.

Women in government and corruption: Women's participation in government is supposed to reduce corruption. For example more women in Parliament can improve things. Women's

<sup>&</sup>lt;sup>25</sup> On different types of corruption, see Bardhan (2005), Das-Gupta (2007), Basu (2011).

participation in local councils like Panchayats seems to have improved the performance compared to men.

What are the measures needed for reducing corruption in India? First, we have to find out the solution for the major source of corruption which is party finances for election funding. Otherwise, the corruption problem in India can't be solved. Other measures include transparency, rule of law and economic reforms with rule based than discretions. Addressing the corruption issue requires effective institutions. Of course administrative, legal reforms also part of the strategy. As some people argue, Jan Lokpal like the Anna Hazare movement can solve problems of corruption.

Some scholars like Avinash Dixit and Kaushik Basu also mention that without waiting actions from the government, the business community, civil society and media can take a lead on reducing corruption. Dixit (2016) discusses demand and supply sides of corruption . He shifts the focus to the supply side viz. firms. He proposes that business community itself could set a norm of 'no bribes' and enforce it through ostracism such as 'not doing business with those firms who give bribes'. Dixit suggests that largest firms could potentially take the lead as they may be better able to withstand initial losses till the norm takes roots. But to be fair to Aviash Dixit, he says that 'even within its limited domain, my proposal will not achieve anywhere close to 100% success. It is not a panacea; there are no panaceas. But the problem of corruption is sufficiently important and urgent to justify exploring all potential solutions and starting with imperfect ones. Waiting for a 100% solution to emerge only guarantees getting 0%" (p.58, Dixit 2016). Finally, use of technology can be a game changer for some forms of corruption. There are many examples in India where use of technology reduced corruption.

Thus, we need multipronged strategy to reduce corruption in India. Inequalities are expected to reduce with decline in corruption as it affectes the poor and vulnerable adversely.

# **4. CONCLUSION**

Rising inequalities is a concern in many advanced and developing countries of the world. Inclusive approach is needed for several reasons. In the context of ethics and humanism, equality is important for its own sake. Inequality reduction is also required for sustainability of growth. If we reduce personal, social, gender, rural-urban and regional disparities, both the objectives of ethics and growth of equality will be achieved. Lower inequalities would result in higher demand from bottom deciles, vulnerable and disadvantaged sections and lead to higher growth. If we define equity in terms of empowerment and increase in participation of the poor, there is no trade-off between growth and equity. Reduction in corruption can help in improvement of equality.

One issue that we have not touched explicitly in the lecture is environmental sustainability. Climate change is already having impact on the lives of the people, particularly the poor. India should be concerned about this problem. There are two types of inequalities regarding environmental sustainability. First one is the inequality in consumption patterns between advanced countries and developing countries. Second one is inequalities in consumption patterns between rich and poor in India. The consumption of the rich in India is more or less equal to the rich of the advanced countries. There is a need for reduction of unsustainable consumption pattern of the developed countries and those of rich in India.

Equality of opportunity is important. While the governments have implemented policies that unleashed the country's tremendous growth potential, it should also embark on a process of social transformation that ends discrimination on the basis of caste, class and gender. More attention has to be paid for providing clean water, sanitation, access to health care and edication. India has underinvested in human and social capital. Productive employment and quality education for everyone can reduce inequalities significantly.

Another issue in the context of India is exclusion of SCs, STs, women and minorities. Here economics alone will not help inclusion. Social and political factors are important apart from economic factors. Growth with redistribution efforts will not affect social behavior without social transformation. We need social movements to reduce social exclusion. This happened partially in South India earlier in Kerala and Tamil Nadu and happening in other parts of the country now<sup>26</sup>. It is still a long way for major social transformations.

There are limits to economic analysis regarding equity and inclusive approach. Noneconomic factors like norms, culture, and beliefs can also influence the level of inclusion /exclusion. Inequalities are much more than economic disparities. The ideas of equality and inequality also have non-economic dimension. The idea of citizenship is one such example. Democratic countries have expanded the domain of citizenship by institutionalizing universal rights and entitlements in the spheres of education, health care and housing<sup>27</sup>.

Politically, for having a stable and democratic society, one needs to have equitable approach. Large sections of the society can't be ignored. It is increasingly clear that the process of development must become more socially and economically inclusive. If we do not have tolerant and inclusive society, it can generate severe social tensions. Thus, there are strong social, political and economic reasons for reducing inequalities. The agenda of inclusiveness and equality has to be given highest priority for broad based social and economic development.

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<sup>&</sup>lt;sup>26</sup> On social movements in different parts of the country, see Baviskar (2015)

<sup>&</sup>lt;sup>27</sup> See Jodhka and Vaid (2015)

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