Inequality, Employment and Public Policy

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Abstract

This paper examines dimensions of inequality including labour market inequalities and discusses public policies needed for reduction in inequalities. It discusses both inequality of outcomes and inequality of opportunities. In terms of income, India is the second highest inequality country in the world next to South Africa. Wealth inequalities are also high in India. Most of the inequalities will have labour market dimension. Labour market inequalities can be found across sectors, wages and earnings, quality of work, labour market access and, between organised and unorganised sectors. On public policies and inequalities, the paper discusses redistribution measures, macro policies, sectoral policies and impact on employment, social policies such as education, health, hunger and malnutrition, social protection, corruption, gender disparities and climate change. The paper argues for fundamentals change to human capital and universal basic services. Investments in social infrastructure, health, education, affirmative action and provision of public services can lead to the creation of egalitarian society.

Keywords: Inequality of outcomes, inequality of opportunities, consumption, income, wealth, labour market, wage inequality, fiscal policy, monetary policy, trade policy, human capital, health, education, informal sector, inclusive growth, corruption, gender, climate change

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"Inequality is in the forefront of public debate. Much is written about the 1 per cent and the 99 per cent, and people are more aware of inequality than even before. ..But if we are serious about reducing income inequality, what can be done? How can heightened public awareness be translated into policies and actions that actually reduce inequality? .. In this book I set out concrete policy proposals that could, I believe, bring about a genuine shift in the distribution of income towards less inequality...The future is very much in our hands" (p.1)

Anthony B. Atkinson (2015), "Inequality: What can be done?", Harvard University Press.

1. INTRODUCTION

Development can't 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 inequality². 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 world³. Atkinson (2015) and Milanovic (2016) discuss global inequality at length⁴. Recent edited volume by Boushey et al (2017) on 'After Piketty' provides essays that interrogate Piketty's arguments.

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

¹ Presidential Address delivered at the 59th Conference of the Indian Society of Labour Economics, Thiruvananthapuram, 16-18 December. Some parts of this address were borrowed from my Malcolm Adisesaiah Lecture.

² 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 Atkinson (1975) and Sen (1973).

³ 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.

⁴ Also see Stiglitz (2013) on inequality in the USA. See Basu (2006) and Basu and Stiglitz (2016)

political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status"⁵

There are two main arguments for reduction in inequality. 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)⁶. 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.

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 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.

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. (Kanbur et al, 2014).

Labour market inequalities are high all over the world. 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). Employment should be the focus in addressing inequalities.

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.

One has to successfully address issues of growing economic and social concerns, such as the availability of quality jobs and persistent inequality. The problem of inequality has to be

⁵ See http://www.un.org/sustainabledevelopment/sustainable-development-goals/

⁶ For a discussion on this see Atkinson (2015).

effectively addressed by public policy. The policies to reduce inequalities will be effective if historical process through which particular pattern of inequality arise is taken into consideration (Barbosa et al, 2017). There are both 'State failures' and 'market failures' in addressing inequality.

Against this background, in this lecture⁷, we will address two questions:

- (a) What are the dimensions and trends in inequality including labour market inequalities in India and at global level?
- (b) How do we tackle rising inequalities through public policy?

Although we focus more on economic inequality, social and political factors are equally important for framing public policies. Among other policies, we also focus on the issues relating to two challenges. The "structural change challenge" is focused on moving resources from traditional low- productivity activities into modern, more productive industries or activities. The "fundamentals challenge" relates to development of broad capabilities such as human capital and infrastructure (Rodrik et al, 2017). In this address, we argue that, among other things, the 'fundamentals challenge' is equally or more important for India's development and reduction in inequality.

2. DIMENSIONS OF INEQUALITY AT GLOBAL LEVEL

There are a number of studies by IMF and World Bank on inequality at global level in the lat few years.

Recent Fiscal Monitor of IMF focuses on tackling inequality (IMF 2017a). The conclusions of this study are the following⁸.

- (a) Global inequality in per capita GDP in terms of gini coefficient declined from 0.68 in 1988 to 0.62 in 2013. Rise in per capita GDP of some of the emerging economies like China and India is responsible for this convergence⁹.
- (b) The global picture hides heterogeneities across countries and regions. Inequalities within countries increased significantly. In the last three decades, 53% of the countries have seen an increase inequality with some countries showing an increase in gini coefficient exceeding two points.
- (c) Developed countries (e.g. USA, Europe) experienced sizable rise in inequality driven mainly by the growing income of the top 1 per cent.
- (d) Emerging market and developing economies show diverse trends in inequality. For example, Eastern Europe and Central Asia recorded rise in inequality during the postcommunist transition years and decline later. Similarly inequality in Latin America rose

⁷ Some parts of this address are borrowed from Dev (2016)

⁸ A study by Dabla-Norris et al (2015) from IMF also examines trends in inequality of income and opportunities at global level. Also see a World Bank study (2016) which examines latest trends in inequalities in income/consumption across the world. On inequalities in Asia and Pacific countries see Kanbur et al (2014).

⁹ Grigoli and Robles (2017) show that the relationship between inequality and economic development is non-linear. In particular, similar to the debt overhang literature, they identify an inequality overhang level at which the slope of the relationship between income inequality and economic development switches from positive to negative at a net Gini of about 27 per cent.

during 1980s and 1990s before declining sharply afterwards. In Africa and Asia the gini coefficient increased in some countries while declined in some other countries.

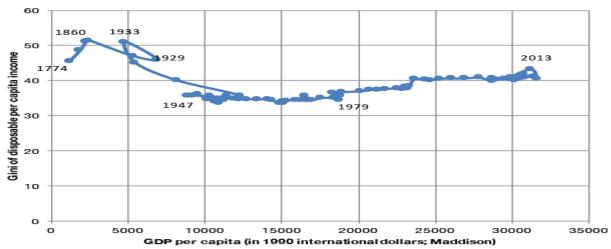
- (e)The key source of inequality at global level has been technological change favouring higher skills. Globalization and commodity cycles also play an important role. In Western Europe and the USA, technological progress has also translated into reduction of middle class jobs, a phenomenon known as polarisation.
- (f)Country specific factors relate to economic development, stability and domestic policies including financial integration, redistributive fiscal policies, and liberalisation and deregulation of labour and product markets also play important determinants of inequality trends within countries.
- (g)Changes in income inequality are reflected in other dimensions like wealth inequality. The rise of top incomes along with high saving rates led to growing wealth inequality. In the United States and many other countries, rising concentration of wealth held by 1 per cent of the population is responsible for increase in wealth inequality.

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). In contrast to Kuznets inverted 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 18th and 19th centuries.

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



Source: Milanovic (2016)

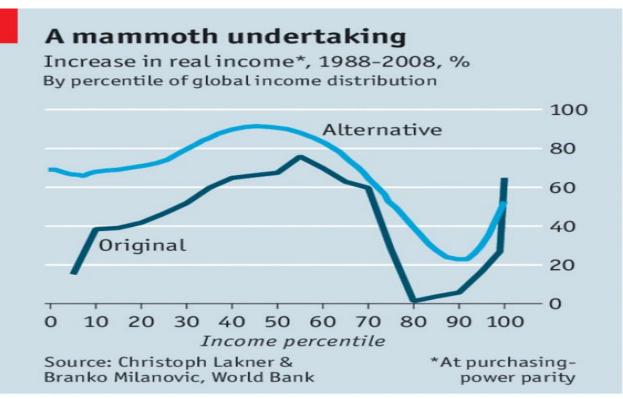
Milanovic explains Kuznets wave for the US in the following way. Inequality in the US rose between Independence (1774) and the Civil War (1860) and then continued to rise until the early 20th Century when it reached peak at slightly over 50 Gini points at an income level of \$5000 per capita (in 1990 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 21st 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.

Global Inequality 1988-2008: Elephant Curve

A study by Lakner and Milanovic (2013) presents a newly compiled and improved database of national household surveys between 1988 and 2008. The study ranks the world population from the poorest 10% to the richest 1% in 1988 and again in 2008. It documents the growth in income between these two years, a period of 'high globalisation' from the fall of Berlin Wall to the fall of Lehman Brothers.

The Elephant Curve in Fig 2 shows that China's population in 40th to 50th percentile benefited the most during this period. On the other hand, US middle class from 80th to 90th percentile lost during 1988-2008. This middle class probably represent the Trump's constituency. Richest 1% gained a lot in the 20 year period. Both curves in Fig 2 thus show that China's middle classes and the world's rich have gained more in the era of globalisation.

Fig 2. Elephant Curve: Global Income Distribution, 1988 to 2008.



Economist.com

Source: Economist, September 17, 2016

Wage Inequalities at Global Level

Wage inequalities have significant correlation with household inequalities in many countries. The Global Wage Report 2016/17 (ILO, 2016) examines wage inequalities in both developed and developing economies. This report provides the following trends

- (1) The real wage growth declined in emerging and developing G20 countries from 6.6% in 2012 to 2.5% in 2015. On the other hand, wage growth rose in developed G20 countries from 0.2% in 2012 to 1.7% in 2015.
- (2) Labour income share declined in majority of the countries as wage growth lagged behind growth of labour productivity¹⁰ during 2010-15. Some exceptional countries are China, Germany and the United States. However, the labour share is below peak levels even in these countries.
- (3) Wage inequality rose in many countries of the world in recent decades. Wages climb gradually across wage distribution but jump sharply for the top 10% and particularly for the top 1% of the employees. In Europe, the top 10% receive on an average 25.5% of the total wages paid while it is higher in emerging economies like Brazil (35%), India (43%) and

¹⁰ A recent study by IMF (2017) also indicates that labour share in national income has been declining in both developed and developing countries. According to this study, the labor share declined in 29 of the largest 50 economies between 1991 and 2014. These 29 economies accounted for about two-thirds of world GDP in 2014.

South Africa (49%). In India and South Africa, the lowest paid 50% receive respectively 17% and 12% of all wages paid.

- (4) According to the Global Wage Report, wages and wage inequality are not determined only by the skills-related characteristics like level of education, age or tenure. Several other factors such as gender, enterprise size, type of contract and the sectors in which workers work.
- (5) The report also says that increasing wage inequality *between* enterprises has played an important role in increase in wage inequality the US between 1981 and 2013. On the other hand, in Brazil, higher minimum wage could be responsible for decline in inequality between enterprises. Inequality *within* enterprises also play major role in total inequality. In the US larger share of total wage inequality could be attributed to inequality within enterprises than to inequality between enterprises. Wage inequality within enterprises in Europe in 2010 accounted for nearly half of the total wage inequality. Extremely high wages paid to a few individuals in some enterprises leads to a 'pyramid' of highly unequally distributed wages.
- (6) The gender pay gap declined from 2002 to 2010 but remains positive. The gap is higher at the top than at the middle or bottom. Overall hourly gender gap for Europe is about 20%, it reaches to 45% in the top 1% of wage earners.

3. DIMENSIONS AND TRENDS IN INEQUALITY IN INDIA

The biggest inequality in India has been the slow progress in social indicators and human development inspite of high economic growth. One example is that nearly 40% of our children suffer from malnutrition in 2015-16. Quality of employment, health and education is a major concern.

The approach of growth with equity has been followed since independence¹¹. However, focus has been more on absolute poverty than inequality. Poverty numbers show that it declined faster in the post-reform period as compared to preform period. Within the post-reform period, poverty declined faster during 2004-05 to 2011-12 as compared to the period 1993-94 to 2004-05. However, inequality increased during the post-reform period.

3.1. India is the second highest income inequality country in the world, lower than only South Africa

In India, consumer expenditure from NSS (National Sample Survey) is generally used to estimate inequality. As shown in Table 1, consumption gini coefficient is 0.36 in 2011-12 (Fig 3). On the other hand, inequality in income is high with a gini coefficient of 0.55 while wealth gini coefficient is 0.74 in 2011-12 (Table 1). Income gini is 20 points higher than consumption gini while wealth gini is nearly 40 points higher than consumption gini. Thus, inequality in income and wealth is much higher than that of consumption 12.

¹¹ On poverty and income distribution in India, see Srinivasan and Bardhan (1974), Banerjee et al (2017a)

¹² India has made tax data public recently by releasing it for the year 2011-12 (assessment year 2012-13). But, it is very small sample to look at overall income inequalities.

Inequality in consumption and wealth is lower in rural areas as compared to urban areas. However, inequality in income is higher in rural than urban areas.

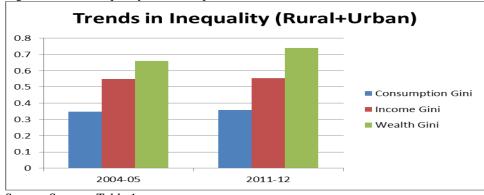
Table 1. Consumption, Income and Wealth Inequality in India: Rural, Urban and Total, 2011-12

Sector	Total	Rural	Urban
Consumption Gini	0.359	0.287	0.377
Income Gini	0.553	0.541	0.506
Wealth Gini *	0.740	0.670	0.770

^{*}Refers to 2012

Sources: Himanshu (2015) for Consumption Gini; Income gini coefficients are Estimated from the data of Indian Human Development Survey (IHDS); Anand and Thanpi (2016) for wealth gini coefficients

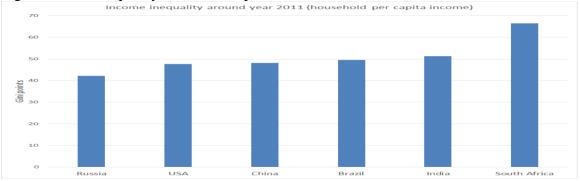
Fig3. Trends in Inequality in consumption, income and wealth



Source: Same as Table 1

Milanovich (2016a) shows that India has the second highest inequality next to South Africa if we take income instead of consumption (Fig 4)

Fig 4. Income Inequality in India compared to other countries



Source: Milanovic (2016a)

Many studies have shown that inequality in consumption increased in the post-reform period¹³. Most of the studies show that it increased marginally in rural areas while it rose significantly for urban areas. Table 2 provides trends in inequality in consumption, income and wealth. It shows consumption and income gini increased marginally between 2004-05

¹³ For example, see Subramanian and Jayaraj (2016), Radhakrishna (2015), Himanshu (2015), Sripad and Vakulabharanam (2013), Dev and Ravi (2008) Sen and Himanshu (2004), Srinivasan (2013). On consumption and income inequality see Dubey (2016).

and 2011-12. However, wealth inequality increased significantly from 0.66 to 0.74 - by 8 points during the same period.

Table 2: Trends in Inequality (Rural+Urban)

Sector	1993-94	2004-05	2011-12
Consumption Gini	0.300	0.347	0.359
Income Gini		0.548	0.553
Wealth Gini *	0.650	0.660	0.740

*Wealth Gini refers to 1991, 2002, 2012

Source: Same as Table 1

3.2. Regional Inequalities in Income and Wealth

Income and wealth inequalities are high in all the major states of India with significant regional disparities in levels and trends (Tables 3 and Fig. 5). Income inequality is the highest in Gujarat (0.61) followed by Chattisgarh (0.60), West Bengal (0.57), Haryana (0.57) and Madhya Pradesh (0.56) in 2011-12 (Table 3, Fig 5). It is the lowest in Jammu&Kashmir (0.46) followed by Tamil Nadu (0.47), Kerala (0.47). Income inequality increased significantly between 2004-05 and 2011-12 in Chattisgarh, West Bengal, Himachal Pradesh and Punjab. On the other hand, it declined in Southern states (Kerala, Tamil Nadu, Karnataka) and Jammu& Kashmir.

Inequality in wealth is very high across all the major states ranging from gini coefficient of 0.80 in Maharashtra to 0.55 in Jammu&Kashmir in 2012 (Table 4, Fig 6). Apart from Maharashtra, wealth inequality is high in Punjab, West Bengal, Madhya Pradesh and Tamil Nadu. In contrast to income inequality, Southern states (Tamil Nadu, Andhra Pradesh, Karnataka and Kerala) showed high wealth inequality. Again, unlike income inequality, wealth inequality increased significantly in almost all the states between 2002 and 2012.

Table 3: Income Inequality (Rural+Urban) based on India Human Development Survey: 2004-05 and 2011-12

States	Gini	Gini	Rank	States	Gini	Gini	Rank
	2004-05	2011-12			2004-05	2011-12	
Gujarat	0.606	0.606	1	Orissa	0.535	0.520	12
Chattisgarh	0.469	0.604	2	Jharkhand	0.532	0.513	13
West Bengal	0.522	0.567	3	Andhra Pradesh	0.517	0.512	14
Haryana	0.511	0.565	4	Assam	0.521	0.508	15
Madhya Pradesh	0.549	0.556	5	Uttarakhand	0.473	0.493	16
Karnataka	0.591	0.541	6	Maharashtra	0.504	0.476	17
Himachal	0.371	0.533	7	Kerala	0.568	0.473	18
Pradesh							
Punjab	0.483	0.530	8	Tamil Nadu	0.501	0.472	19
Uttar Pradesh	0.546	0.526	9	Jammu&Kashmir	0.511	0.462	20
Bihar	0.509	0.521	10	All India	0.548	0.553	
Rajasthan	0.499	0.521	11				

Source: Estimated from the data of India Human Development Surveys 2004-05 and 2011-12¹⁴.

¹⁴ Estimates sent to me by Kartikeya Naraparaju, Faculty, IIM, Indore

Income Inequality (Rural+Urban) based on **India Human Development Survey: 2004-05** and 2011-12 0.8 0.6 0.4 Gini 2004-05 Punjab Jharkhand Uttarakhan Haryana Madhya Karnataka Bihar Rajasthan Jammu&Kas Himachal Maharashtr Tamil Nadu Chattisgarh Gini 2011-12

Fig 5. Income Inequality Across States

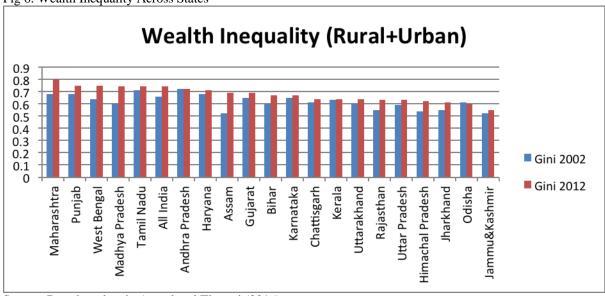
Source: IHDS

Table 4: Wealth Inequality (Rural+Urban)

States	Gini	Gini	Rank	States	Gini	Gini	Rank
	2002	2012			2002	2012	
Maharashtra	0.68	0.80	1	Kerala	0.63	0.64	12
Punjab	0.68	0.75	2	Uttarakhand	0.60	0.64	13
West Bengal	0.64	0.75	3	Chattisgarh	0.61	0.64	14
Madhya Pr	0.60	0.74	4	Uttar Pradesh	0.59	0.63	15
Tamil Nadu	0.71	0.74	5	Rajasthan	0.55	0.63	16
Andhra Pradesh	0.72	0.72	6	Himachal Pradesh	0.54	0.62	17
Haryana	0.68	0.71	7	Jharkhand	0.55	0.61	18
Assam	0.52	0.69	8	Odisha	0.61	0.60	19
Gujarat	0.65	0.69	9	Jammu&Kashmir	0.52	0.55	20
Bihar	0.60	0.67	10	All India	0.66	0.74	
Karnataka	0.65	0.67	11				

Source: Anand and Thanpi (2016

Fig 6. Wealth Inequality Across States



Source: Based on data in Anand and Thampi (2016)

Table 5 provides gini coefficients for income, wealth and consumption in high and low income states. It shows that inequality is high or low in both the category of states. The inequality differs with regard to the measure viz., income, wealth and consumption used. Gujarat has high inequality in income and wealth but has relatively lower consumption inequality. Here income inequality is 30 points high than for consumption. In the case of Kerala and Maharashtra, wealth inequality is much higher than income and consumption inequality. In Bihar, consumption inequality is much lower than income and wealth inequality.

Table 5 Inequaity for High and Low Income States: Rural+Urban, 2011-12

States	Income	Wealth	Consumption
Gujarat	O.61	0.65	0.31
Kerala	0.47	0.64	0.38
Mahashtra	0.48	0.80	0.37
Bihar	0.51	0.67	0.23
Chattisgarh	0.60	0.64	0.33
Jharkhand	0.51	0.61	0.30

The annual growth rate of per capita assets show that rich and middle income states (like Maharashtra, Haryana and Kerala) have high growth while low income states such as Bihar and Odisha have not improved their per capita assets as rapidly. The growth rates of assets across social groups indicate that the general category accumulated wealth faster than SCs, STs and OBCs. The levels of average wealth reveal that historically disadvantaged sections continue to be behind the other castes (Anand and Thampi, 2016).

A recent study by Chancel and Piketty (2017) entitled "From British Raj to Billionaire Raj' shows that inequalities in income increased in India. According to this study, the top 1% of earners in India captured less than 21% of total income in the late 1930s, before dropping to 6% in the early 1980s and rising to 22% in 2014. Credit Suisse report shows that the share of richest 1% of Indians in total wealth increased from 40.3% in 2010 to 58.4% in 2016. Comparisons with other countries reveal that India is one of the most unequal countries in the world. The share of top 10% in total wealth rose from 68.8% to 80.7% during the same period (Chakravarty, 2016)¹⁵.

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¹⁵ There have been several studies on convergence and divergence of Indian states in per capita income. Many studies find no evidence of convergence across states. 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". Inequality in per capita income across states 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 (GOI, 2012).

3.2. Inequality in Agriculture

Although the share of agriculture in GDP has declined, it is still the most important sector for livelihoods. Therefore, inequalities in this sector will have implications of supply and demand for the non-agricultural sector also.

Table 6: Estimates of Inequality (Gini) in Per Capita Income and MPCE for Agricultural Households

States	Gini Per	Gini MPCE	States	Gini Per	Gini MPCE
	capita	2011-12		capita	2011-12
	income:			income:	
	2013			2013	
Andhra Pradesh	0.60	0.27	Madhya Pradesh	0.49	0.25
Assam	0.52	0.23	Maharashtra	0.57	0.21
Bihar	0.61	0.22	Odisha	0.53	0.24
Chattisgarh	0.43	0.22	Punjab	0.53	0.29
Gujarat	0.43	0.23	Rajasthan	0.50	0.27
Haryana	0.51	0.25	Tamil Nadu	0.59	0.28
Jharkhand	0.53	0.28	Uttar Pradesh	0.58	0.28
Karnataka	0.58	0.23	West Bengal	0.53	0.28
Kerala	0.59	0.31	All India	0.58	0.28

Source: Chakravorty et al (2016)

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 (Table 6). 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 Bihar is nearly 40 points. The income inequality is higher in South Indian states such as Kerala, Andhra Pradesh and Tamil Nadu (Table 6). The consumption inequality is the highest in Kerala.

Village Studies

In-depth village surveys can give a better idea on inequality in income in agriculture. The project on Agrarian Relations in India (PARI), a project to study village economies in different agro-ecological regions of India provides estimates of income inequality in 17 villages covering 9 states: Andhra Pradesh, Telangana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Uttar Pradesh, Punjab and West Bengal¹⁶.

The 17 villages were surveyed between 2005 and 2011¹⁷. These surveys provide two conclusions. One is that the inequality in income is very high in study villages. It is much higher than consumption inequality. Second conclusion is that there are significant villagewise variations in income inequality. The gini coefficients of household income and per capita income for the 17 villages are given in Table 7. The gini coefficient rages from 0.781 in Gharsondi village of Madhya Pradesh to 0.372 in Amarsinghi village of West Bengal.

¹⁶ Himanshu et al (2016) also provide estimates of income inequality in villages using longitudinal research.

¹⁷ For details of the project and design of surveys, see www.agrarianstudies.org

Table 7. Gini coefficients of household income and per capita income, by study villages

Villaga	State	Survey year	Gini coeff	Gini coefficient		
Village	State	Survey year -	Households	Persons		
Ananthavaram	Andhra Pradesh	2005-06	0.656	0.602		
Bukkacherla	Andhra Pradesh	2005-06	0.607	0.539		
Kothapalle	Telangana	2005-06	0.577	0.565		
Harevli	Uttar Pradesh	2005-06	0.667	0.598		
Mahatwar	Uttar Pradesh	2005-06	0.527	0.516		
Nimshirgaon	Maharashtra	2006-07	0.549	0.491		
Warwat Khanderao	Maharashtra	2006-07	0.586	0.531		
25 F Gulabewala	Rajasthan	2006-07	0.740	0.686		
Rewasi	Rajasthan	2009-10	0.541	0.465		
Gharsondi	Madhya Pradesh	2007-08	0.781	0.721		
Alabujanahalli	Karnataka	2008-09	0.536	0.467		
Siresandra	Karnataka	2008-09	0.511	0.453		
Zhapur	Karnataka	2008-09	0.516	0.485		
Amarsinghi	West Bengal	2009-10	0.372	0.370		
Panahar	West Bengal	2009-10	0.664	0.547		
Kalmandasguri	West Bengal	2009-10	0.387	0.334		
Tehang	Punjab	2010-11	0.622	0.608		

Source: Based on PARI survey data. Estimates for first eight villages are from Swaminathan and Rawal (2011) using PARI survey data. Table prepared by Tapas Modak.

In an earlier study, Swaminathan and Rawal (2011) show that the Gini coefficient of income was 0.645 across households for the 8 villages studied. The combined data for these 8 villages also reveal that the top decile received 54% of household incomes and the top quintile received 68% of household incomes. On the other hand, the lowest decile accounted for 1% of incomes and the lowest quintile accounted for less than 2% of total incomes.

Agriculture Wages: Agricultural labourers are one of the poorest segments of the society. In this context, trends in agricultural ages are important. The annual average growth in agricultural wages was nearly zero or marginally negative growth during 1999-00 to 2007-08 (Table 8)¹⁸. The growth rate rose significantly to 7% per annum during the period 2008-09 to 2012-13. However, the period 2013-14 to 2016-17 witnessed a growth rate of around 1% per annum only. Monthly growth rates of agricultural wages increased in pre-demonitasation period as well as post-demonetisation period due to revival of monsoon and deflation in agricultural prices. But, if we take average annual growth rates, it is around 1% in the last three years.

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¹⁸ On rural wages, see Jose (2013) and Usami (2012)

Table 8. Yearly Growth Rates of Agricultural Real Wages

Year	Growth Rates (%)	Year	Growth Rates(%)
1999-00	0.48	2008-09	4.17
2000-01	-7.33	2009-10	4.09
2001-02	5.37	2010-11	7.66
2002-03	0.01	2011-12	9.39
2003-04	-0.12	2012-13	9.18
2004-05	-1.23		
2005-06	1.73		
2006-07	-0.52		
2007-08	-0.83	Average annual growth	6.90
		During 2008-09 to 2012-13	
Average annual growth	<u>-0.27</u>	Average annual growth	<u>1.00</u>
during 1999-00 to 2007-		rate during 2013-14 to	
08		2016-17	

Note: Agricultural wage rate refers to the average of wage rates in ploghing, sowing, weeding, transplanting and harvesting.

Source: Estimated from Labour Bureau monthly data upto 2012-13; Himanshu (2016) for the period 2013-14 to 2016-17.

A study by Himanshu (2016) provides real wages for agricultural and non-agricultural workers for the period 1998 to 2017. Fig 6 gives real wages of unskilled workers for the period 1998 to 2016. The trends in unskilled labour in Fig 6 are similar to that of trends for agricultural wages in Table 8.

Fig 6. Real wages of Unskilled workers: 1998 to 2016.



Source: Himanshu (2016)

Das and Usami (2017) examine trends in rural wages for the period 1998-99 to 2016-17. Their study also shows that the first sub-period 1998-99 to 2006-07 was a period of stagnation while the second sub-period from 2007-08 to 2014-15 was a period of high growth in real wage rates. The study also shows that the steady growth in wage rates of major occupations in rural areas ended in 2015-16 but recovered marginally in 2016-17.

3.3. Labour Market Inequalities¹⁹

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, 2014a).

Similar to some of the developing countries, Indian labour market has the characteristics of high dependence on agriculture, domination of informal sector, virtual absence of unemployment insurance or social wage, the problem of 'working poor', large share of self employed, gender bias and seasonal migration. Another peculiar characteristic is that caste, tribe, kinship etc. remain important determinant of access to quality employment.

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.

Employment growth: Employment growth declined from about 1.84% per annum during 1993-94 to 2004-05 to 0.45% per annum during 2004-05 to 2011-12 (IHD, 2014). We do not have recent numbers on employment from NSS. Using Employment-unemployment surveys of Labour Bureau, Abraham (2017) examines employment trends during the period 2012-2016. This study shows that employment growth stagnated across all sectors and unemployment increased. There seems to be absolute decline in employment between 2013-14 and 2015-16. Sectors such as construction, manufacturing and information technology/business process outsourcing sectors fared the worst over this period. Estimates by CMIE show that employment declined by 1.5 million after demonetisation in November 2016.

Functional Distribution of Income: Shares of wages and profits in national income provide some idea of inequality. In the organised sector, the share of wages was 30% in the early 1980s, declined to 20% by the end of the 1990s and further declined to only around 10% by the end of last decade (2009-10). There was only slight increase in recent years due to rise in real wages. In contrast, the share of profits in net value added increased from less than 20% in the 1980s to more than 50% in the last decade. It may be noted that while the share of profits was lower than that of wages until the early 1990s, it is now almost six times that of wages (Himanshu, 2015)²⁰.

Sectoral Inequality: If we look at the shares of GDP and employment, there are significant inequalities across sectors Viz., agriculture, industry and services²¹. While 49 per cent of the workers are engaged in agriculture and the allied sectors, agriculture contributes to only 17

¹⁹ Some parts of this sub-section are borrowed from Dev (2015)

²⁰ Also see Barbosa et al (2017) on the decline in share of wages in India's organised sector

²¹ On rural livelihoods see Unni (2014)

per cent of the GDP; on the other hand, the services sector contributes to 57 per cent of the GDP but employs only 27 per cent of the workers. Such a high share of employment in agriculture is not observed in most developing countries, except few poorest developing countries in Africa. Labour productivity differences between agriculture and non-agriculture are substantial (Table 9). Labour productivity between agriculture and non-agriculture increased over time. Tertiary sector productivity over agricultural productivity rose from 4.08 in 1993-94 to 7.1 in 2011-12. A study by Mazumdar and Sarkar (2017) shows that inequality is the highest in service sector and it has the high contribution to the overall inequality. The high inequality in services is due to coexistence of financial and public services coexisting with low earning domestic services²².

Table 9 Relative Labour Productivity by Sectors.

Sectors	1993-94	1999-00	2004-05	2011-12
Agriculture	1.00	1.00	1.00	1.00
Manufacturing	3.09	3.61	3.68	4.02
Construction	4.68	3.83	4.00	2.51
Secondary	4.02	4.33	4.39	3.75
Tertiary	4.78	5.57	6.31	7.09
Non-agriculture	4.46	5.07	5.49	5.52
Total	2.25	2.61	2.96	3.37

Source: Estimated from the data in IHD (2014

Inequalities in Employment Status: There are different categories of employment in both organised and unorganised sectors. The income differences among these workers are enormous. Poverty ratios for these categories of workers provide some idea about inequalities among workers. As shown in Table 10, regular formal in organised sector has the highest rank with lowest poverty. This is followed by regular informal in organised sector, regular informal in unorganised sector and self employed in unorganised sector. Poverty in casual labour in organised sector is higher than all the above categories of employees. Casual labour in unorganised sector has the highest poverty with lowest rank.

Table 10: Incidence of poverty (%) in Employed Persons Households

	2011-12	Rank
Regular formal (organised sector)	3.2	1
Regular informal (organised sector)	8.7	2
Regular informal (unorganised sector)	16.2	3
Self employed (unorganised sector)	23.6	4
Casual (organised sector)	29.9	5
Casual (unorganised sector)	37.6	6
All Employed	24.6	

Source: Rearranged from Ghose (2016)

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²² On labour market inequalities, see Ghosh (2015), Sharma and Endow (2017), Ramaswamy (2015)

Table 11. Income Diversification Dynamics in Rural Areas

Sources of income	2004-05	2011-12	Changes
	(%)	(%)	(%)
Agriculture	32.9	29.6	-3.2
Agri.Labour	22.1	16.0	-6.1
Casual Labourer	17.0	20.1	3.1
Salary	11.6	11.3	-0.3
Business	9.8	8.0	-1.8
Remittance	2.8	7.7	4.9
Other	3.9	7.2	3.3
Total	100.0	100.0	

Source: Ranganathan et al (2016) using data from India Human Development Survey

Table 11 shows that agriculture is the dominant source of income in both periods. However, there seems to be diversification from agriculture, agricultural labour and business to casual labour and remittances. In fact, income from casual labourers became the second highest source in rural areas. Rural income by quintiles shows that inequality (the ratio of Qunitile5/Quintile1) increased from 19.3% in 2004-05 to 25.1% in 2011-12 (Ranganathan et al, 2016).

High share of Informal Sector: The shares of informal sector and informal employment in total employment respectively were 85% and 93% in 2011-12 (Ghose, 2016a). Similarly, the share of informal employment in the formal sector employment was 56% in the same year. There have been significant inequalities between formal and informal sectors. There are two views on changes in informal and formal sectors. One view is that rapid growth in the informal sector has been accompanied by very significant structural change and this sector has witnessed increasing productivity over time (Ghose, 2016, 2016a). Another view is that informal employment is increasing in both informal and formal sector. There is a need to provide decent work for the informal sector workers. The need of appropriate policies to improve incomes and conditions of work for informal sector is articulated in NCEUS (2009) and Kannan (2014).

Small size of establishments and 'Missing Middle': The structure of non-agricultural establishments shows that 98.6% of establishments have less than 10 workers. Own account workers constitute 66.4% of the total establishments (GOI, 2016). India's non-householdsubsector of manufacturing has bi-model structure with 40% of the workers in the directory manufacturing establishments (DME) size class of 6-9 while 25% of the workers were in the 499+ employment size class. Mazumdar and Sarkar (2017) say that the 'missing middle' is reponsible for slow growth of manufacturing and unequal growth of service sector.

Wage Inequalities: Inequality in wages in India shows that the ratio of regular workers wages over casual workers was 2.1 and 2.6 times respectively in rural and urban areas in 2011-12. The trends in earnings inequality of total wage workers show that inequality increased significantly over the period 1983 to 2011-12 although it slightly declined between 2004-05 to 2011-12 (Table 12). The inequality among regular workers is consistently much higher than casual workers.

Table 12. Trends in Earning Inequality of Wage Workers in India: Gini Coefficient

Period	Total Wage	Regular wage	Casual wage
	workers	workers	workers
1983	0.483	0.419	0.329
1993-94	0.506	0.400	0.288
2004-05	0.542	0.484	0.282
2011-12	0.510	0.501	0.303

Source: IHD (2014)

Higher inequality among regular wage workers is due to greater variation in skills and qualifications while casual labourers are mostly unskilled workers. Inequalities in regular workers rose as skilled workers wages have increased compared to less skilled workers.

If one looks at wages by education in India, the importance of skill premium come out significantly. As compared to non-literates, workers with primary, middle, secondary and tertiary get respectively 1.1, 1.3, 2.1 and 4.1 times higher wages in 2011-12²³.

The gap in the wage salary of government employees and other regular and rural casual workers has been widened over 1983 to 2011-12. The disparity between income from wages and salaries and income from other sources increased sharply during the same period. However, there seems to be some convergence in the wages between males and females, rural and urban and, regular and casula workers (Himanshu, 2016).

Contribution of different factors for wage inequality: Using Fields decomposition of wages, Barbosa et al (2017) examine the contribution of each of various worker chateristics to the overall observed wage inequality in India and Brazil. Education is the largest contribution to wage inequality in both the countries (Table 13). In India, Education contributes 36% to wage inequality. Second largest factor is occupation (24% in both countries). Industry differences are less important than occupation in both the countries. Rural/urban disparities are more important in India than Brazil. Regional and work type contributions are lower in India than in Brazil. Gender is much more important (9.5%) in India than Brazil (3.1%). It shows more disadvantage for women in India than Brazil. Barbosa et al (2017) study says that the larger surprise relates to the contribution of social group particularly for India. This is contrary to expectations. The study says that the 'discrimination against social groups in India operates more at the point of entry to employment than in wage differences among those in work...It suggests that the influence of social group on wage inequality comes not directly as wage discrimination but through discriminationin access to education and occupation" (p.295, Barbosa et al, 2017).

²³ On wage inequalities in India, see Rodgers and Soundararajan (2016), Majumdar and Sarkar (2017a) and Barbosa et al (2017)

Table 13. Contribution of Worker Characteristics to Wage inequality in India 2011-12 and Brazil 2011: Field

decomposition, 2011-12

•	India	Brazil
Education	35.8	30.3
Occupation	23.9	24.3
Work type	9.8	15.6
Gender	9.5	3.1
Rural/urban	7.8	1.4
Region	6.8	10.1
Age	3.5	10.0
Industry	1.6	2.6
Social Group	1.3	2.5

Source: Arranged from Barbosa et al (2017)

Labour market inequalities among social groups: Inequalities among social groups in the labour market are increasing in India. Caste and community is another basis for segmentation²⁴.

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. 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 14).

Table 14: Incidence of Poverty among Social Groups by Type of Households: 2011-12 (%)

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

Source: Radhakrishna (2015)

Using the India Human Development Survey data for the years 2004-05 and 2011-12, Ranaganathan et al (2017) examine income mobility across social groups. The income mobility is higher for SCs and OBCs. STs did not show much mobility in income.

Papola (2012) summarizes the evidence on discrimination in labour market. According to a study based on the NSSO data for 2004- 05, while chances of securing a regular job were

²⁴ On social inequalities, see Shah et al (2017)

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 Castes²⁵.

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 studies²⁶. Lack of basic necessities such as housing, sanitation, education and health is another problem for these groups²⁷. 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.

Migrant Labour: Internal migrants and international migrants are discriminated in the labour market. The short term internal migration is generally distressed one. India ans other South Asian countries to gulf region contributed bulk of the South-South migration. As ILO (2014) says that the increase in South-South migration has coincided with the increased incidence of abuse and exploitation of low skilled workers particularly in the gulf countries. Asian migrant workers in the gulf are vulnerable to exploitation and face significant abuse of workers' rights, including forced overtime, delayed wages, poor working and living conditions, and limited access to health care.

Gender inequalities in Employment: There seems to be substantial decline in gender inequality in employment over the period 1999-00 to 2011-12 (Ghose, 2016). Gender inequalities declined in structure of employment, quality of most types of employment, underemployment, real wages per day of work and real wage per earnings employed. Inspite of these improvements gender inequality in employment is high (Ghose, 2016). Women's share in organised sector is still much lower than men. The quality of employment in unorganised sector for women is lower than men. Underemployment is high for women. Gender Wage gap is still higher in wages.

3.4. Inequality of Opportunity

Equality of opportunity is important for reducing many other forms of inequalities. The two primary factors adversely affect India's human development are its poor health attainments and education. They are worse than many other developing countries including neighbouring South Asian countries. They are critical for reduction in inequalities. Poor education can block the mobility to quality employment while poor health can give significant shocks to households which can lead to long term instability.

Access to education is an important indicator of equality of opportunity. Recent NSS 71st 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.

²⁵ See Bordia-Das, 2010. Also see Thorat and Attwell (2010) and Madheswaran (2010)

²⁶ See Deshpande (2013) on the discrimination in small business

²⁷ The problem of exclusion in terms of access to basic services also applies to minorities like Muslims.

It is known that returns to education are more at higher levels. Around 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.

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. 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. 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.

Similar to education, there is significant regional, gender, social and religious disparities in access to health. The inequality of opportunity is higher for disadvantaged sections like SCs, STs, minorities, females and less developed states. Even some of the states like Gujarat, the social development is lower than economic growth.

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 15).

Table 15. Human Development Index (HDI) and Inequality Adjusted Human Development Index (IHDI) 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		

Source: Suryanarayana (2013)

The rank of Madhya Pradesh for inequality adjusted HDI is the lowest while Kerala has the highest rank (Table 15). 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.

4. PUBLIC POLICY AND INEQUALITY: 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). 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. 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 also cautions that universal prescriptions are useful but we need country specific solutions.

Atkinson (2015) recommends ambitious new policies in five areas: technology, employment, social security, the sharing of capital and taxation. He defends the five areas against common arguments for inaction such as intervention will shrink the economy, that globalisation makes action not possible and countries cannot afford distribution policies. He gives importance to public policy including distributional issues, minimum wages, progressive tax rate structure etc. Although the recommendations refer to United Kingdom, they are widely applicable²⁸. The recent Fiscal Monitor of IMF (2017a), discusses how fiscal policies can help redistributive objectives. It focuses on three important policies: (a) tax rates at the top of the income distribution; (b) introduction of a universal basic income; (c) public spending on education and health. Progressive taxation and transfers are considered as instruments for efficient redistribution.

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²⁸ On taxation and reduction in wealth disparities, see Piketty (2014). See Nayyar (2013, 2013a) on macroeconomics and human development and catch up of countries.

5. PUBLIC POLICY AND INEQUALITY: INDIA

There is a need for several policies for reduction in inequality in India. We concentrate on few policies in this address.

5.1. 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 programmes²⁹. 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. Land is only one source of inequalities. Corporate capital in non-agriculture is an equally or more important source in recent years. There can be several public policies like public spending, taxation on the rich etc which are discussed below.

5.2. Macro Policies, Employment and Inequality

Appropriate macro policies such as trade, fiscal and monetary policies should promote employment by providing appropriate policies and institutions³⁰. 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.

Fiscal Policy: Redistribution in favour of poor can be made through fiscal policies. Taxes, expenditures and subsidies are the major instruments of fiscal policy. Some advocate measures such as redistribution of assets and wealth in favour of the poor via higher tax rates for the rich. 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. One of the distortions in India is that the share of direct taxes is much lower than that of indirect taxes. It is known that indirect taxation is regressive in nature. Fiscal instruments like public investment in physical and social infrastructure can be used to reduce inequality. Generally developed countries use counter-cyclical and developing countries follow procyclical. Using the data for the period 1950-51 to 2007-08 Krishnan and Vaidya (2013) examined whether Indian fiscal policy is pro-cyclical or counter-cyclical. The results show that fiscal policy has been generally a-cyclical over the period of study. Graduating from an

²⁹ See Kurien, 1986. 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.

³⁰ On macro policies and employment, see Chandrasekhar (2017), Islam (2017), on economic reforms and working poor see Patnaik (2016). See Nayyar (2017) on the crucial role of employment for reducing inequalities.

a-cyclical fiscal stance to a counter-cyclical stance is an important challenge that the Indian economy will have to face in the coming decades.

Are we too conservative in monetary and fiscal policies in India? Goyal (2017) divides macroeconomic policy into two types. Type 1 takes supply side approach where all available factors of production determine potential growth, while demand affects only inflation, not output. This is the usual monetarist view. Type II takes demand side approach where output and aggregate demand. The demand need not be inflationary. This is closer to Keynesian theories or the labour view that values the creation of employment. But, this approach differs in bringing in structural emerging market features which are not normally included in Keynesian theories. India's recent macroeconomic policy has tended towards that of Type 1. According to Goyal (2017), a comparison of Type I and Type II policies show that the latter would lead to better growth and inflation outcomes in the Indian context.

Wage subsidies vs. capital subsidies: Are the policies encouraging capital subsidies in Indian economy? Bardhan (2017) says that capital subsidies are high in the economy. He advocates wage subsidies instead of capital subsidies for increasing employment. Wage subsidies can be given as incentives to corporate sector and others to increase employment than capital.

Macro policies, in general, should enhance strong aggregate demand, raise productive investment and improve access to finance in order to raise employment and reduce inequalities.

5.3. Sectoral Policies, Employment and Inequality: Productive Job Creation is the Biggest Challenge

Agriculture

There are three goals of agricultural development. These are: (1) achieving 4% growth; (2) equity or sharing growth; (3) sustainability and environment. On sharing growth and equity, focus has to be on small and marginal farmers, lagging regions, women etc. On lagging regions, concentration should be on Eastern India and other rainfed areas.

Increase the viability of small and marginal farmers

Sharing growth and equity in agriculture is important to improve purchasing power in rural areas. Increasing the viability of small and marginal farmers, reducing social, gender and regional inequalities, improving rainfed areas are some of the goals of equity in agriculture.

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 16 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.

Table 16. Monthly Income and Consumption of Agricultural Households: 2013 (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

Source: NSS Situation Assessment Survey 2013

Small farmers face several challenges in the access to inputs and marketing³¹. 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 agriculture³². A number of innovative institutional models are emerging and there are many opportunities for small and marginal farmers in India.

A study by Thorat and Sabharwal (2013) indicates that there is discrimination of Scheduled Caste farmers in both input and output markets. As a result, they affect the access of the low-caste farmers to various rural markets in purchase of agricultural land, leasing land, buying various inputs and services necessary in production process and also in sale of goods. For example, the access with differential treatment involves condition under which SC farmers are required to pay higher prices for inputs and lower price for their farm outputs.

Aggreage demand for other sectors will increase if inequalities in agriculture are reduced. Linkages between agriculture and non-agriculture have to be strengthened for raising incomes of farmers. The government is planning to double the income of farmers by 2022. Estimates on changes in farmers' income (farm and non-farm) for 2003 to 2013 show that it tripled in nominal terms. But, in real terms, the total income increased only 32% in 10 years.

³¹ On small farmers, see Swaminathan and Bakshi (2017), Himanshu et al (2015) on small farmers based on village surveys. On agrarian crisis, see Reddy and Mishra (2010)

³² 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.

Doubling the income is a difficult task. Apart from farmers' income, the wages of the agricultural labourers have to be increased. It is known that agricultural labouers have the highest poverty among all types of workers in the country. Studies have shown that there is a positive impact of wages on agricultural growth (Rao, 2016).

Another issue is increasing role of women in agriculture. Nearly 75% of rural women work in agriculture as compared to 59% of rural men in agriculture in 2011-12. Agricultural policies should correct the gender bias in the functioning of institutions and support systems including property rights for women³³.

Rural non-farm Sector

At the all India level, the share of non-farm sector in rural areas increased from around 19% in 1983 to 36% in 2011-12. What is the quality of employment in rural non-farm sector? Construction, transport and communication have low productivity. The share of casual workers increased while those of self employed declined. It is understandable because most of the construction workers are casual labourers. Scheduled castes have benefited from rise in rural non-farm employment. However, inequalities increased in rural sector.

Village studies also have shown rise in rural non-farm sector (Himanshu et al, 2015). It is true that pattern of non-farm varies across village studies. However, some generalizations can be made (Himanshu, 2014). First, share of non-farm employment and income in villages has increased. Second, most of the rural non-employment created was in self employment and casual. Most of the jobs are in small trade, services and construction with poor working conditions and low productivity. Third, disadvantaged sections like SCs have benefited from the growth in the non-farm sector. Lastly, most of the village studies also showed declining role of agriculture in both income and employment. The growth of non-farm opportunities in nearby towns and cities has been one of the drivers of non-farm activities. Increasing communication and connectivity also led to access of non-farm employment outside village. There is a need for more productive jobs in rural non-farm sector to reduce inequalities.

Manufacturing and Services

Quality of employment improves with changes in structure of employment from low productive to high productive occupations and sectors. Quality increases with shift from casual workers in informal sector to formal sector regular workers. Productive employment rises if workers in agriculture are shifted to manufacturing sector.

In this context, 'Make in India' campaign is in the right direction. The aim is to create 100 million jobs by 2022. As shown by Ghosh, (2016) labour intensive manufacturing is important for quality job creation particularly increase in organized sector³⁴. However, there

³³ On gender and land rights, see Agarwal (1994)

³⁴ On manufacturing in South Asia, see Verick (2015)

are two related issues: (a) Can employment rise with manufacturing GDP growth? (b) What about services with 60% share in GDP?

It is important to examine the prospects of manufacturing particularly in job creation in the light of East Asian experience and in the present context of global stagnation. It is argued here that one has to include services also in 'Make in India' program for creation of employment.

Historical experience shows that countries follow agriculture-industry-service sequence in order to obtain higher growth and productive employment. Many East Asian countries including China could increase their manufacturing share in GDP (Table 17).

Table 17: Manufacturing in GDP and Employment

Countries	Period	Peak Share % in	n manufacturing
		GDP	Employment
Japan	1970	36.0	27.0
South Korea	2000	29.0	23.3
Taiwan	1990	33.3	32.0
China	2005	32.5	15.9
Indonesia	2004	28.1	11.8
Thailand	2007	35.6	15.1
India	2011-12	15.7	12.8

Source: NSS for India; Ghose (2015), for rest of the countries

Japan peaked share in manufacturing in GDP (36%) and employment (27%) by 1970. In the case of China, the share of manufacturing in GDP is around 33% now but its share in employment is only 16%.

What are the reasons for low manufacturing share in employment in China? Early industrializing countries like Japan, Korea, Taiwan could improve the share in employment. But late industrialization in China, Indonesia and Thailand resulted rise in share of manufacturing in GDP but not employment. Employment in manufacturing today is not quite comparable to employment in manufacturing in earlier times. The reason is that manufacturing enterprises used to directly employ staff for a variety of services required but now they outsource them from service enterprises (Ghose, 2015).

Table 18 provides the share of services in East Asia and India. Countries like Japan, Korea and Taiwan have 60 to 80% share of services in both GDP and employment. On the other hand, China, Indonesia and Thailand have around 35 to 45% share of services in both GDP and employment. In all these East Asian countries, the share of services in both GDP and employment are more or less similar. India is an exception to this trend (Table). India's share of services in employment is only 26.4% compared to 58.4% share of services in GDP. At the same time, manufacturing sector has low share in GDP (17%) and employment (12.8%).

Therefore, the challenges are to raise both GDP and employment growth for manufacturing and employment growth in services.

Table 18: Services in GDP and Employment, 2013

Countries	% Share in GDP	% Share in Employment
USA	78.6	81.2
Germany	68.4	70.2
France	78.5	74.9
U.K.	79.2	78.9
Brazil	69.4	62.7
China	46.1	35.7
Japan	72.4	69.7
South Korea	59.1	76.4
India	58.4	26.7

Source: Economic Survey 2014-15, Government of India

In its three year action plan (Niti Ayog, 2017) also indicates that India has the advantage of walking on two legs: manufacturing and services. It offers specific proposals for jumpstarting some of the key manufacturing and services sectors, including apparel, electronics, gems and jewellery, financial services, tourism and cultural industries and real estate. Among other things, it recommends the creation of a handful of Coastal Employment Zones, which may attract multinational firms in labour-intensive sectors from China to India.

Exports and Employment.

IGIDR has done a study on exports and employment (Veeramani and Dhir, 2017a). The official input output tables (IOT) are available for selected years – the latest official IOT is available only for the year 2007-08. Using supply use tables of Central Statistical Organisation (CSO), the study estimates for 112 sectors covering agriculture, manufacturing and services during the period 1999-2000 to 2012-13. Estimates which are based on year specific I-0 tables are given in Table 18.

Table 19 shows that total employment created by exports increased from 34 million in 1999-00 to 63 million. The direct employment stagnated since 2004-05. Indirect employment increased significantly over time and equalled the direct employment by 2012-13 (fig 7).

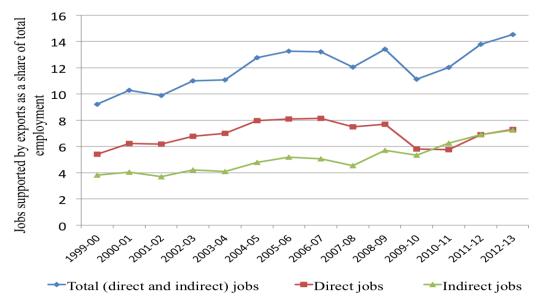
Table 19. Jobs Supported by India's Merchandise plus Service Exports (in millions)

Year		Export Supported Jobs		
				in India
	Total	Direct	Indirect	
1999-00	34.0	19.9	14.1	368.2
2000-01	37.9	23.0	14.9	369.1
2001-02	41.2	25.7	15.4	417.1
2002-03	43.5	26.8	16.7	396.1
2003-04	43.6	27.5	16.1	393.5
2004-05	52.1	32.6	19.6	408.3
2005-06	53.5	32.6	20.8	402.9
2006-07	53.5	33.0	20.5	405.2

2007-08	49.0	30.6	18.5	407.5
2008-09	54.1	31.1	23.0	403.8
2009-10	44.5	23.2	21.3	400.0
2010-11	49.3	23.6	25.7	410.2
2011-12	58.0	29.0	28.9	420.5
2011-13	62.6	31.4	31.2	430.7

Source: Veeramani and Dhir (2017a)

Fig7. Number of Jobs supported by exports as a share of total employment in the country (%)



Source: Same as Table 19

The growth rates of jobs due to exports is much higher than that of total employment (Table 20). Indirect employment growth is much higher than direct employment growth. The share of indirect employment in total export jobs increased from 40% in 1999-00 to around 50% in 2012-13.

There are interesting conclusions on direct and indirect employment across sectors (Table 21). The manufacturing sector accounts for 73% to 85% of total direct export linked jobs. In contrast, the share of indirect employment is high for both agriculture and services. Agriculture total export jobs have 20% direct employment and 80% indirect employment which is due to manufacturing linkages. Services total export jobs have 48% direct employment and 52% indirect employment which has linkages with manufacturing

Table 20. Growth Rates of Export Jobs and Total Employment (%)

Period		Jobs supported by exports (growth rates%)			Total	Dollar value of
					Employment in	
					the country	
		Total	Direct	Indirect		
1999-00	to	3.4	1.6	5.8	0.8	20.1
2012-13						
1999-00	to	7.6	8.4	6.5	1.5	20.5
2005-06						

2006-07	to	2.6	-1.9	8.4	0.9	14.5
2012-13						

Source: Same as Table

Table 21. Jobs Supported by Indian Exports (million)

Year	Agri &	Allied and	Mining	N	I anufacturii	ng		Services	
	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
1999-00	8.0	7.9	16.0	7.0	1.9	8.9	4.8	4.3	9.1
2000-01	8.8	8.1	16.9	9.0	2.2	11.2	5.3	4.6	9.8
2001-02	10.4	8.6	19.0	10.1	2.0	12.1	5.2	4.8	10.0
2002-03	10.6	9.0	19.6	10.4	2.3	12.7	5.8	5.4	11.3
2003-04	11.6	7.7	19.3	10.2	2.9	13.0	5.8	5.5	11.2
2004-05	13.3	10.2	23.6	11.3	2.7	14.0	7.9	6.7	14.6
2005-06	14.0	10.4	24.5	8.3	2.7	11.0	10.3	7.7	18.0
2006-07	13.2	9.9	23.0	7.4	2.7	10.1	12.5	8.0	20.4
2007-08	11.3	8.4	19.6	5.9	2.6	8.6	13.4	7.5	20.9
2008-09	10.9	11.8	22.7	7.8	2.7	10.6	12.4	8.5	20.9
2009-10	7.2	11.9	19.1	7.9	2.4	10.3	8.2	7.0	15.1
2010-11	5.8	16.4	22.2	11.2	2.7	13.9	6.5	6.6	13.2
2011-12	4.2	19.9	24.1	19.2	3.4	22.6	5.6	5.7	11.4
2012-13	5.4	21.2	26.6	20.3	3.9	24.1	5.7	6.1	11.9

Source: Veeramani and Dhir (2017a)

India Development Report (2017) examines issues in manufacturing and trade and addresses some pertinent questions: (i) what are the industries which hold the greatest potential for growth and employment generation? (ii) where in India will things be made under the new policy direction? (iii) what type of linkages exist between manufacturing and services sectors? (iv) what type of institutions and policies should be created as preconditions for manufacturing growth?

Veeramani and Dhir (2017) argue that there are two groups of industries that hold the greatest potential for exports and employment. These are: (i) traditional unskilled labor-intensive industries (textiles, clothing, footwear, toys etc); (ii) Assembly activities in industries (particularly, electronics and electrical machinery) where manufacturing process is internationally fragmented and global production networks are strong³⁵. This study identifies a number of specific product categories for which India can emerge as a major hub for final assembly-related activities. A study by Chanda (2017) deals with the interdependence between services and manufacturing and argues that a vibrant service sector should be seen as an enabler for the manufacturing sector and not as a competitor to manufacturing. Value-added contribution of the service sector to India's gross exports was close to 50% in 2011, significantly greater than the share of services exports in total exports based on balance of payments data. Contribution of the service sector to manufacturing exports is dominated by traditional services. Modern services such as IT, R&D and business services are not significantly contributing to manufacturing exports.

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³⁵ on labour in global value chains see Nathan et al (2016)

5.4. Other Employment Issues and Policies

Skill Development

It is known that with demographic dividend, there will be large numbers joining labour force. India will be the world's youngest country by 2020 with an average age of 29 years. This "demographic dividend" comes at a time when the rest of the world is ageing. Some estimates show that only 2.3% of India's workforce has undergone formal skill training compared to United Kingdom's (UK) 68%, Germany's 75%, USA's 52%, Japan's 80% and South Korea's 96% (Niti Ayog, 2017). In order to have structural change from agriculture to non-agriculture and from unorganised to organised, education and skill improvement are needed. Government initiatives on skill development has so far yielded in slow progress. More innovative methods may be required to improve skills faster. It may be noted that general education is equally important (Ghose, 2016).

Micro, Small and Medium Enterprises (MSMEs) and Informal Sector

MSMEs as a whole form a major chunk of manufacturing in India and plays an important role in providing large employment and can reduce income, social and reduce regional disparities. Despite this recognition, many aspects of government policy are at best scale neutral and do not really favour the MSMEs. This sector does not get adequate, timely and affordable availability of institutional credit. Economic Survey (2017) shows that the growth rate of credit has declined for MSME sector during 2013-14 to 2016-17. It is partcularly negative for Small enterprises in 2016-17. The policies have to give a positive bias towards MSMEs so that they can be a driver for employment generation. Short and long-term initiatives are required specifically for the development of MSMEs.

Informal Sector

In order to reduce inequalities in income and wage gaps, policies have to focus on improving productivity of informal sector and providing decent jobs. Policies generally favour the organised sector. Labour market policies have to cover informal sector also. The informal workers suffers from with both absolute <u>capability</u> deprivation (food insecurity, inadequate employment, low earnings, low health, educational status and <u>contingency</u> type risk and vulnerabilities such old age, health, accident, death (NCEUS, 2009)³⁶.

Labour institutions

These include issues such as labour policies, minimum wage, worker rights/safety, access to rule of law/justice, migrant worker policies, human rights issues, urban/informal sector workers, and other aspects that characterize the wage-worker's benefits, working conditions, rights and collective bargaining. These are important for the overall well being and human development of workers. Labour institutions and labour legislations like minimum wages,

³⁶ On informal sector, see Breman (2013)

working hours and collective bargaining would influence the workplace by shaping the behaviour of firms and conditions of work and employment³⁷.

While most labour laws apply only to the formal sector but they also cover specific groups within the informal sector. The most important of these is the Minimum Wages Act, providing the widest eligibility coverage. Minimum wage, which establishes a floor to wages protects the workers particularly at the bottom of wage distribution. But, effective implementation is important. Labour flexibility is another issue regarding inequalities. This does not seem to be a constraint for the formal sector³⁸.

In general, there has been weakening of the traditional trade unions and collective bargaining for the formal sector. Although there are organisations for informal sector workers but their presence is limited except few like SEWA (Self Employed Women's Association).

Youth Unemployment and Social Tensions: It is known that youth unemployment in India is three times to that of general unemployment. 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. Central and State governments have to be sensitive to youth employment problem.

Technology, Employment and Inequality

We have to be ready to approach a fourth industrial revolution which includes advanced manufacturing, quantum engineering, 3D printing and robotics. It may lead to some disruption in the established sectors and may lead to some inequalities. This challenging question has taken a much more serious dimension with likelihood of automation' and 'digitization' and other new technologies based on Artificial Intelligence (AI) taking away the routine jobs outsourced to labor abundant economies like India³⁹. World robotics are growing at the rate 15% per annum since 2008. Five markets (China, South Korea, Japan, USA and Germany) have 74% of the supply. China has the number with 87000 robotics. Accroding to the assessment of World Bank President, 69% of jobs in India and 77% of China's jobs are under threat due to automation⁴⁰.

Although presently robotics and other technological problems are more in developed countries, India should be ready for facing the impact of robotics and AI on employment. Optimists say that net employment may rise with fourth industrial revolution including

³⁷ More on labour institutions in India, see IHD (2014), Babosa et al (2017), Srivastava (2015)

³⁸ On labour market flexibility see Srivastava (2015)

³⁹ "Moreover, not only agricultural and manufacturing employment appears at risk, but employees in services – including cognitive skills - are no longer protected: see for instance how IBM Watson may displace the majority of legal advices, how Uber (just a software tool) is fully crowding out taxi companies and how Airbnb is becoming the biggest "hotel company" in the world" (Piva and Vivarelli, 2017, p.2)

⁴⁰ https://timesofindia.indiatimes.com/business/india-business/Automation-a-threat-to-69-jobs-in-India-World-Bank/articleshow/54705307.cms

robotics. For example, Satya Nadella says that artificial intelligence can be made more inclusive and inequalities can be reduced.

5.5. Social Policy: Fundamentals Change to Human capital and Universal Basic Services We have discussed earlier structural changes from low productive sector to high productive sectors. But, this is not enough. Fundamentals change in terms of growth in human capital is eqally or more important for reduction in inequalities. We should also ensure universal basic services. In social policy, we discuss (a) Education and health (b) malnutrition (c) social protection⁴¹.

Education, health: Equity in quality

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).

There are six issues in India's social sector in general and health and education in particular. These are: (a) low levels of human development indicators; (b) slow progress in these indicators; (c) significant regional, social and gender disparities; (d) slow growth in public expenditures in social sector (only 1.2% of GDP spent on health) (e) poor quality delivery systems in both health and education; (f) issues in privatization of health and education services.

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).

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.

 $^{^{41}}$ On social policy see Ghosh (2002), Dreze (2017), Barbosa et al (2017). Also see Mundle (2016) on employment and education

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"⁴².

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). A lack of focus on quality of education and health will create further exclusion of disadvantaged sections like SCs, STs, minorities and women.

Is Government bad in running schools and hospitals?

One major issue relates to roles of public and private sectors in education and health. It is true that the quality of public institutions have to be improved. However, the World Development Report 2018 shows that their research on education across 40 countries does not find any difference in the learning outcomes of children with similar family backgrounds in both private and public schools. This, the World Bank challenges the perception in India that private schools deliver better outcomes than public schools. Several research studies on education have shown strong impact of remedial instruction programs on learning outcomes⁴³. A lack of focus on the quality of education and health will create further exclusion for hitherto excluded groups.

Kerala's experience shows that public schools and hospitals are not inferior to those of private sector. The State is trying to strengthen the public health and education further. In fact, good quality public schools and healthcare can also raise the quality of private sector. Niti Ayog is thinking of advocating universal health insurance. But, this will not solve the problem in health as we need universal health care.

5.6. Hunger and Malnutrition

Hunger has three major dimensions. These are: calorie deprivation, protein deprivation and micro-nutrients deprivation. Achieving zero hunger by 2030 is a challenge. Globally, one in nine people in the world today (794 million) are undernourished. Around 2 billion people experience micronutrient malnutrition. 1.9 billion adults are overweight or obese. India has many people with the above deficiencies. IFPRI (International Food Policy Research Institute) brings out Global hunger Index report every year. The recent report (IFPRI, 2017)

⁴² First Lecture of Niti Ayog's 'Transforming India" initiative, August 26, 2016

⁴³ See Baneriee et al (2017)

provides ranks of Global Hunger Index for each country although some people question the indicators used to represent hunger. India has improved in all the indicators but the rank has declined from 97 in 2016 to 100 in 2017.

Undernutrition among children would have long term impact on children's health, and their psychosocial well-being, educational and skill achievements (Dercon, 2008). Thus, India's demographic dividend also partly depends on reduction in malnutrition. The productivity of these children tend to be lower when they participate in labour market. One of the disappointments in the post-reform period in India has been the slow progress in the reduction of malnutrition. The reduction in malnutrition among children has been very slow when compared to rapid economic growth. International studies have shown that the rate of decline of child undernutrition tends to be around half the rate of growth of per capita GDP (Haddad et al 2003).

Stunting rate among children under three declined from 53% in 1992-93 to 45% in 2006, average rate of decline of 1.2% per year. Recent data shows that stunting among children under 5 years declined from 48% in 2005-06 to 38.% in 2015-16 at the average rate of 1% per year (Table 22). Underweight has declined only 0.7% per year during this period. On the other hand, wasting has slightly increased. Malnutrition and anaemia for children and women is higher in rural areas than urban areas. Although there is some improvement in anaemia for children and women and BMI for women, the levels are still high. Around 58% of children and 53% of women are having anaemia in 2015-16.

Table 22. Nutritional Status of Children under 5 years and Women (15-49): All India

	Total (Rural+Urban)		2015-16 (NFHS 4)	
Children under 5 years	2005-06	2015-16	Rural	Urban
	(NFHS 3)	(NFHS 4)		
Stunting (height for age)	48.0	38.4	41.2	31.0
Underweight (weight for	42.5	35.7	38.3	29.1
age)				
Wasting (weight for height)	19.8	21.0	21.5	20.0
Anaemia among children	69.4	58.4	59.4	55.9
Women (15-49 years				
Anaemia among women	55.3	53.0	54.2	50.8
BMI below normal (women)	35.5	22.9	26.7	15.5

Sources: NFHS 3 and NFHS 4

Wealth quintiles show that in the lowest quintile, malnutrition is very high at 51% in 2015-16. It has nearly two and half times malnutrition levels than the highest quintile (Table 23). Scheduled castes and Scheduled tribes have 10% points higher malnutrition than other castes. No education category has 20% points higher malnutrition as compared to the category with education of secondary or more.

At state level, stunting among children declined in all the states during the period 2005-06 to 2015-16 (Table 24). Kerala state has the lowest malnutrion level at 19.7% followed by Punjab, Himachal Pradesh, Tamil Nadu and Jammu and Kashmir. On the other hand,

Bihar, Jharkhand, Utar Pradesh and Madhya Pradesh have high levels of malnutrition (above 40%). Gujarat has malnutrition levels closer to that of all India.

Table 23. Nutrition Status of Children under 5 years, Stunting (height for age): All India, 2015-16

Wealth Quintile	Stunting (%)	Social Groups	Stunting(%)	Education	Stuntin
					g (%)
Lowest	51	Scheduled	43	No education	51
		Caste			
Second	44	Scheduled Tribe	44	Primary complete	44
Middle	36	OBCs	39	Secondary or more	31
				complete	
Fourth	29	None of them	31	-	
Highest	22				

Source: NFHS 4

Table 24. Stunting Among Children under 5 years Across States: 2005-06 (NFHS 3) and 2015-06 (NFHS 4)

States	Stunting (%)			Stunting (%)	
	2005-06	2015-16		2005-06	2015-16
Andhra Pradesh	38.1*	31.4	Madhya Pradesh	50.0	<u>42.0</u>
Assam	46.5	36.4	Maharashtra	46.3	34.4
Bihar	55.6	48.3	Odisha	45.1	34.1
Chattisgarh	52.9	37.6	Punjab	36.7	25.7
Gujarat	51.7	38.5	Rajasthan	43.7	39.1
Haryana	45.7	34.0	Tamil Nadu	30.9	27.1
Himachal Pradesh	38.6	26.3	Telangana	38.1*	28.1
Jammu&Kashmir	35.0	27.4	Uttar Pradesh	56.8	45.3
Jharkhand	49.8	45.3	West Bengal	44.6	32.5
Karnataka	43.7	36.2	All India	48.0	38.4
Kerala	24.5	19.7			

*Combined Andhra Pradesh Source: NFHS 3 and NFHS 4

Table 25 provides a breakup of the bottom 100 districts with high stunting levels among children under 5 years. It shows that states like Uttar Pradesh, Bihar and Madhya Pradesh have large number of districts among the bottom 100 districts. Even a state like Gujarat is having 5 of its districts in this list. Stunting levels are high in these five districts viz., Sabarkanta (50.6%), Bhavnagar (48.4%), Anand (48.2%), The Dangs (48.1%) and Narmada (47.4%).

Table 25. Bottom 100 districts with High Malnutrition (Stunting) Levels

States	No. of districts	States	No. of districts
Uttar Pradesh	29	Meghalaya	4
Bihar	25	Chattisgarh	3
Madhya Pradesh	13	Maharashtra	2
Jharkhand	6	Haryana	1
Gujarat	5	Odisha	1
Rajasthan	5	Assam	1
Karnataka	5	Total	100

Source: NIN (2017)

There has been some improvement in nutrition indicators. This decline could be due to expansion and improvement of several programmes like Integrated Child Development

Services (ICDS), National Rural Health Mission (NRHM), MGNREGA, reforms in several states in PDS, targeted efforts like Maharashtra Nutrition mission. It is known that a reduction in malnutrition needs the application of a multi-pronged strategy. The determinants of malnutrition are agriculture, health, women's empowerment including maternal and child care practices, ensuring sanitation, enabling safe drinking water, and activating social protection programmes and nutrition education apart from economic growth, as mentioned earlier. The importance of sanitation and safe drinking water in reducing malnutrition is well known. Therefore, ensuring improvements in sanitation is urgently needed as it is a big predictor of malnutrition.

The evidence so far shows that malnutrition can be reduced by enhancing women's health, promoting gender equality and ensuring the empowerment of women including female education. Gender equality and the well-being of children go hand in hand. The rights of women and children are mutually reinforcing. In recent years, there has been emphasis on linkages between agriculture and malnutrition.

In conclusion, it has to be recognised that ignoring hunger and malnutrition will have significant costs to any country's development. Nutrition improvement has both intrinsic and instrumental value. Some estimates indicate that there is a 2 to 3 per cent GDP loss due to low productivity. The returns to investments in food and nutrition are quite high. Every dollar spent on interventions to reduce stunting is estimated to generate about \$20-\$30 in economic returns.

5.7. 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 informal workers in India. Social protection thus deals with both absolute deprivation and risk and vulnerabilities. The policies on social protection 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)⁴⁴; (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*.

⁴⁴ See Rangarajan and Dev (2016) for a discussion on public expenditure on health and education on the poor.

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*) and direct benefit transfers are part of the present strategy on social protection.

Social protection for the unorganised sector is important for reduction in inequalities. Suggestions are made to have the following as minimum social security or social protection floor particularly for informal workers.

- (a) Extending the non-contributory old age pension schemes at a reasonable level to the old age population, including the physically disadvantaged and windows.
- (b) Providing access to health services to the poor, either through public provision or through a social health insurance scheme such Rashtriya Swastya Bima Yojana (RSBY) in which all workers in the unorganized sector belonging to the BPL (Below poverty line) category and their families are covered and
- (c) Expanding within a specified period of time the Unorganized Sectors workers Social Security Act, 2008, in order to ensure that it guarantees statutory and universal provision of national minimum social security (IHD, 2014)⁴⁵.

Food vs. Cash transfers: There has been a debate whether we should continue with food transfers like the PDS or shift towards cash transfers. A recent book by Alderman et al (2018) shows that 1.5 billion are covered globally by food or voucher programmes which provide an important life line for the poor and vulnerable population. The analysis in the book highlights how food and voucher programmes remain relevant, and in most circumstances, have improved over time. It also examines the improvements made in India's PDS with different policies.

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 has been a lot of discussion on universal basic income (UBI) in both developed and developing countries⁴⁶. One view is that the idea of basic income seems to have originated in developed countries where opportunities for job creation are limited. In a country like India we have plenty of opportunities for employment creation. If the country has that kind of money to provide UBI, it could as well spend them on creating employment by paying decent wages. This would add to productive capacity of the economy while giving jobs to unskilled labour⁴⁷. Rangarajan

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⁴⁵ Also see NCEUS (2009) and Kannan (2014), Kannan and Breman (2013), for a comprehensive view on socio-economic security, see Saith (2008), Dev (2008). on Kerala experience, see Ramachandran (1997).

⁴⁶ On this see Banerjee (2016), Bardhan (2016), Ray (2016), Srinivasan (2016)

⁴⁷ Atul Sarma, Institute for Human Development, personal correspondence

and Dev (2017) say introducing Universal Basic Income is unrealistic. In fact, the concept of basic income must be turned essentially into a supplemental income.

Our view is that supplement income can be started with old age population. The number of elderly population in 2017 is around 11.6 crore. If we provide Rs. 1500 per person, the annual amount comes to Rs. 18,000. The expenditure needed would be around 1.3% of GDP. It is true that we already have a scheme on old age pensions (National Social Assistance Program). But, this can be made near universal and the amount can be enhanced to Rs. 1500 or more.

5.8. Gender Disparities

One of the main drivers of growth and equality is the increased role of women. 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 26. The percentage of 25 plus female population with some secondary education and female participation rates are the lowest among these countries.

Table 26. Gender Inequality Index and other components for Selected Countries: 2015

Countries	Gender Inequality Index		MMR 2010	25+female	15+ female
			(death per 1	population	labour force
			lakh life	With at least	participation
			birth	Some	rate
				Secondary	
				Education%	
	Index	Rank			
Argentina	0.362	77	52	63.5	48.4
Russian Fed.	0.271	52	25	94.6	56.6
Brazil	0.414	92	44	59.1	56.3
China	0.164	37	27	69.8	63.6
Indonesia	0.467	105	126	42.9	50.9
South Africa	0.394	90	138	73.7	46.2
India	0.530	125	174	35.3	26.8

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 society⁴⁸.

One of the important disparities in gender relates to education. "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).

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⁴⁸ More on gender inequality, see Dreze and Sen (2013)

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 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).

Ghani et al (2016) examine the patterns of female activity and gender segmentation in Indian manufacturing and services. According to this study, Women entrepreneurs in India are mostly concentrated in low-paying industries. This gender concentration in low-wage industries has increased over time. Despite competitive reforms gender based segmentation has increased over time. The gender balance in India in labour force participation, entrepreneurship, and growth remains among the lowest in the world. This study says that improving this balance is an important first step for India's development and its achievement of greater economic growth and gender equality.

As mentioned above, participation rates of women are low and declined in India (Table 27). 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. IMF Chief Christine Lagarde said increase in women's participation rates would increase 40% GDP in India. It is true that increase in women's participation is important to reduce gender inequalities.

Table 27. Work Participation Rates of Female and Male

	Rural		Urban		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

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)⁴⁹.

Discrimination against females is practiced throughout the life cycle. 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.

⁴⁹ On unpaid work, see Hirway (2017), Swaminathan (2012)0. Also see Rustagi et al (2013)

5.9. 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 gain⁵⁰. 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

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⁵⁰ On different types of corruption, see Bardhan (2005), Basu (2011).

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.

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 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'. 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.

5.10. 'Power' and Inequality

Unequal distribution of economic and social development is rooted in inequalities of political, social and economic power. For example, Hossain (2017) examines power in inequality of hunger and malnutrition. The value chains are increasingly mediated by few large commodity distributers, retailers, processing and packaging firms. In the case of seed transactions, there firms - Monsanto, DuPont and Syngenta - dominate at global level. Another three firms - ADM, Bunge and Cargill - are involved for most of the international grain trade (Hossain, 2017). The consumption patterns in India also partly dictated by the

power of some firms. Similarly, power plays an important role in inequalities other aspects of social and economic development. Therefore, policies and strategies in reducing inequalities have to find opportunities and spaces where the power can be challenged and redistributed.

5.11. Climate Change, Jobs and Inequality

Climate change and its impact on jobs and inequality is another important issue. Climate change is a major challenge for agriculture, food security and rural livelihoods for billions of people including the poor in India. Agriculture is the sector most vulnerable to climate change due to its high dependence on climate and weather. Indian agriculture sector is already facing many problems relating to sustainability. To those already daunting challenges, climate change adds further pressure on agriculture adversely affecting the poor.

There is a need for effective climate resilient agriculture (CRA) in India. Similarly urban areas and non-agriculture could also be adversely affected with climate change. Public policy and other stake holders have to be prepared to face the adverse impact particularly in coastal areas. Similarly high pollution levels and environmental damage to resources would affect the poor most. We have look at issues relating to energy, environment and natural resources. Building resilience can address the livelihood and inequality issues. There is some improvement in resilience cross countries.

There are two types of inequalities regarding consumption patterns and impact on climate change. It has implications for overall inequality. First one is the inequality in consumption patterns between advanced countries and developing countries. The developed countries have historical responsibilities. 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. The rich in India have to contribute for sustainable development and climate related issues.

6. Conclusions

Inequalities in income and wages have widened in many developed and developing countries Technological change and globalisation are the main sources. Wage gap is not only due to skills but many other factors. Atkinson (2015) advocates five areas: technology, employment, social security, sharing of capital and, taxation for reduction in income inequality. At the global level, IMF deals with three measures: (a) tax rates at the top; (2) introduction of universal basic income and (c) public spending in health and education for raising equality.

India is the second highest inequality country among the large countries in the world if we take income and wealth instead of consunption. Gujarat and Maharashtra respectively in income and wealth are the highest inequality states in the country. Inequality in agricultural income is quite high as shown by macro data as well as village studies. After showing high growth during 2008 to 2013, agricultural and rural wage growth has been stagnant during 2013-14 to 2016-17.

Labour market inequalities can be found across sectors, wages and earnings, quality of work, access between formal and informal sectors. The share of wages declined while that of profits rose in orgasied sector. Inequalities are much higher in non-income indicators like health and education than income indicators.

Regarding policies, inequality can not be left to markets. Public policy intervention is important. Employment creation with quality should be at the heart of the strategies for reducing inequalities and continued social exclusion experienced by large sections of society. In India, redistribution measures such land reforms or asset distribution have not been successful. Macro policies like fiscal policies for raising tax/GDP ratio and raising expenditures on social sector and infrastructure can be used. Wage subsidies instead of capital subsidies can help raising employment.

On agriculture, **small and marginal farmers**, **rainfed areas**, less developed states, **women** and disadvantaged social groups should be kept in mind while framing agricultural policies. As the India Employment Report (2016) mentions manufacturing should be the focus for raising quality employment. However, **services also have to be promoted as both are complementary**. Exports growth is equally important as they generate more employment if they relate to labour intensive sectors. Some estimates show that employment growth has been stagnant in the post-2012 period. Some other issues in employment are: education and skills, labour institutions (e.g. minimum wages), youth unemployment and preparing to face technological consequences on employment.

Another important strategy refers to social policy. As Rodrik et al (2017) mention there are two challenges. One is 'structural change challenge' which focuses on shifting resources from traditional sector to high productive sectors. Second one is 'fundantals chanllenge' faced by policy makers in developing countries to develop broad capabilities such as human capital and infrastructure. Both the challenges are important. But 'funadamentals challenge' is crucial for achieving the first challenge also. Investments in social infrastructure, health, education, affirmative action and provision of public services can lead to the creation of egalitarian society. Public sector has to play an important role in providing human development along with private sector. Universal basic services in health and education should be the agenda for action. 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.

Malnutrition levels among children and women are quite high in India despite progress. There are significant regional, social and gender disparities in nutrition level. Multi-sector policies covering agriculture, women, health, drinking water and sanitation have to be put in

place to reduce malnutrition. Returns in investing nutrition are high as it would affect education and productivity in employment later.

Corruption and inequality are interlinked. Corruption hurts the poor most. Election reforms are crucial to reduce corruption. One area where more research is needed relates to climate change and its impact on employment and inequality.

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.

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. It is still a long way for major social transformations.

There are limits to economic analysis regarding equity and inclusive approach. Non-economic factors like norms, culture, and beliefs can also influence the level of inclusion /exclusion. Inequalities are much more than economic disparities. 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 housing⁵¹. It is true that public policy has a major role but other stake holders like private sector and civil society and other citizens have equal role in helping to achieve less equal economy and society.

Politically, for having a stable and democratic society, one needs to have equitable approach. Large sections of the society can't be ignored. We have both 'State failure and 'market failure' in the case of equality and justice. Both these failures have to be corrected. 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 cost of neglect of inequalities is quite high. Employment and education should be the major focus areas in policies for reduction in inequalities. The agenda of inclusiveness and equality has to be given highest priority for broad based social and economic development. As Lenin says that "there are decades when nothing happens but then there are weeks when decades happen" has been proposed in decades. Hopefully things will be faster and we will have years if not weeks

⁵¹ See Jodhka and Vaid (2015)

⁵² https://www.goodreads.com/quotes/342783-there-are-decades-where-nothing-happens-and-there-are-weeks

when decades happen in having high quality of employment, health and education for the bottom half of the population and reduction in inequality.

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