# SDGs and Decent Work Agenda: A Path for Inclusive Growth in India

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#### Abstract

Sustainable Development Goals (SDGs) serve as guideposts for both developed and developing countries. There are as many as 17 goals along with 169 targets in its umbrella to be achieved by 2030 alongwith three dimensions of sustainable development in the world economy. In such economic, social, and environmental concerns of the world, India has the pledge to fulfil this mandate of the UN. However, the role and nature of economic growth in terms of intensity of factors of production are pivotal not only for achieving these goals, but also addressing distributional aspects of national income across socio-economic groups of the nation. Following the policy shift in early 1990s, India has achieved a brief phase of high economic growth but with rising income inequality. It has allegedly been created insecure employment and wages differential across sectors and sub-sectors of the economy. This paper attempts to delve deeper into the issue of decent work, stagnation of manufacturing sector, and failure of inclusive growth in the past seventy years of planned development and about three decades of market-led growth in India. Based on the ASI data for 2-digit industry classification, the manufacturing industry shows signs of pre-matured de-industrialisation in India since mid-1980s onwards. This does not auger well for generating decent work and inclusive growth. In the light of SDGs, we argue that unless industrial policy framework addresses manufacturing sector earnestly by providing incentives for innovation, and entrepreneurship, catalyse development of Human Capital by investing in the public education and skill development

**Keywords**: Inclusive growth, labour-flexibility, de-industrialisation

on sustainable basis, goal of inclusive growth will remain elusive as usual.

### Introduction

The decade of 1990s marked a major turning point for Indian economy with implementation of the structural transformation. After three decades now, the economy did achieve a high economic growth although it has become very vulnerable to both demand and supply shocks in the world economy. But, contrary to promises, economic challenges, particularly under-employment and low quality employment, could not be eradicated rather

\*Mr. Bir Singh Asstt. Professor, Deptt of Economics, Delhi College of Arts & Commerce, (University of Delhi) Netaji Nagar, New Delhi-110023. it has become more serious. Manufacturing sector in terms of its contribution to GDP and employment generation is still stagnating.

The ILO Declaration on Social Justice for a Fair Globalization in 2006, underlined four pillars of the decent work. Firstly, it promotes employment by creating a sustainable institutional and economic environment. Secondly, it calls for developing and enhancing measures of social protection. Thirdly, it seeks to promote social dialogue and tripartism as the most appropriate methods. Finally, it underlines respecting, promoting and realizing the fundamental principles and rights at work. Trends in India's labour market shows little progress on these pillars in the era of market economy.

Both ASI and NSSO, the large databases confirm rising labour market flexibility-contractualisation and casualisation of workers in India since 1990s. This does not provide encouraging signals for ameliorating living conditions of about 92 per cent of 470 million workforce of the country.

India has adopted Sustainable Development Goals (SDGs) in 2015 as per UN proposal. In its umbrella, there are as many as 17 goals along with 169 targets, which address three dimensions of sustainable development in the world economy till 2030 cuting across economic, social, and environmental concerns of the world. While they are likely to have positive impact on India's economic development, labour market will also undergo desirable changes. Out of all 17, the SDG No 8 seeks to 'promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all are quite relevant for India at the current juncture. It has ten targets which deal with different dimensions of Decent Work and Economic Growth.

Of them, four targets are very significant: firstly, the target (8.3) promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage formalization and growth of micro, small and medium-sized enterprises including access to financial services. Secondly, (target 8.5) by 2030 achieve full and productive employment and decent work for all women and men, including the young people and persons with disabilities, and equal pay for work of equal value. Thirdly, (target 8.6) by 2020 substantially reduce the proportion of the youth not in employment, education or training. Fourthly, (target 8.8) protect labour rights and promote safe and secure working environments for all workers, including migrant workers, particularly women migrants and those in precarious employment.

This goal has enormous relevance for materialising inclusive growth given the potential benefit of 'demographic dividend available in Indian economy till the year 2030. Inclusive growth in broader terms caters to growth and development; social inclusion; and intergenerational equity. Due to its unusually large unorganised sector, majority of workers are excluded from the safety net as enshrined in the Decent Work agenda of ILO. In fact, the question of decent work

assumes even greater significance in the context of mounting problem of unemployment, and sustainability of economic development. This agenda guarantees an umbrella of securities for workers viz. related to labour market, employment, job, work, re-skilling reproduction, income, and their representation (Standing, 2002; Unni, 2006).

In context of India, SDGs and Decent Work Agenda remind and highlight long awaited manufacturing sector led structural transformation of the economy. Despite all pertinence accorded to the Decent Work Agenda, the question remains why Indian economy failed on providing decent jobs? India has completed about seven decades of planned development since independence and experimented with both policies of 'state monopoly' and 'market mania'. Nevertheless, India has failed to accomplish her structural transformation unlike many other successful countries of Asia namely China, South Korea, Thailand, Malaysia, and Indonesia.

At the current juncture, the policy initiatives of industrial development, particularly 'labour laws amendments', 'Make in India' and 'Digital India' have given divergent signals for the manufacturing sector. It seems that the Govt. is very obsessive with raising capital intensity, automation, and giving free hand to the employers by enhancing labour market flexibility. In such a scenario, its commitment towards the SDGs on goal 8 of decent work is likely to be dichotomous. The notion of inclusive growth seeks to promote not only economic efficiency, but also social inclusion. However, this can only happen provided the industrial policy is both 'pro-labour' and 'pro-business'.

The paper is structured into five sections. The present section introduces the topic and describes data and methodology used in the paper. Sec 2 discusses a brief literature review. Sec 3 analyses dimensions of inclusive growth. Sec 4 interprets our results and carries a discussion on them. Sec 5 concludes the paper.

### **Data and Methodology**

We confine our study to the post reforms period mainly since early 1990s as due to industrial policy shift in this period, issues of labour market flexibility in Indian Economy were debated. Though sources like NSSO the surveys and Economic Census data provide socioeconomic conditions, this paper, has chosen ASI data

for highlighting the problem of unemployment from the perspective of structural transformation of the economy.

The coverage of ASI has a few exceptions of states of Arunachal Pradesh, Mizoram, Sikkim and the union territory of Lakshadweep. It covers all factories under sections 2m (i) and 2m (ii) of the Factories Act 1948. The factories employing IO or more workers and using power and those employing 20 or more workers if not using power on any day of the preceding 12 months. The survey also covers Bidi and Cigar-manufacturing establishments registered under the Bidi and Cigar Workers Act 1966. The undertakings engaged in transmission and distribution of electricity and registered with the Central Electricity Authority are covered under ASI irrespective of their employment size. Certain services and activities like cold storage, water supply and repair services are also covered under the survey. The ASI frame is revised once in three years (from 1989-90 onwards; between 1982-83 and 1988-89 the frame was revised once in four years; until 1981-82 it was revised once in two years) but updated every year by the regional offices of the FOD which maintains a close liaison with the offices of CIF in the states.

ASI data suffer from certain limitations. Firstly, there is a considerable time-lag in their availability. Secondly, since at the time data presentation, only reporting factories are considered, the aggregates based on them require adjustment. The CSO inflates the gross value added given by ASI by using the number of workers in the non-reporting units. The assumption of equating value of value added per worker in the reporting units with that in non-reporting units is flawed. There are problems with some of the items of inputs as well as output like other chemicals, other packing materials, work done by and for others, etc. Also for each industry only 10 individuals items of inputs are given, the rest are put under others which in some cases forms substantial portion of the total value of inputs. Sometimes, because of some classification problems, even important items are either not covered individually or are misclassified.

Research methodology involves cross-sectional analysis of fast growing industries and their contribution to the employment generation at two digit-level for period between 1990-91 and 2013-14. Cross-state analysis of organised manufacturing industry will be done using the variables such as output, employment, productivity;

profits and investment; and wages and the distribution of income.

### Literature review

The labour flexibility debate in the manufacturing sector centres on the decent work agenda and has been taken up globally and locally for a few decades now. There are two aspects of debate i.e. mainly Casualisation and Contractualisation of workers. This is one of the contentious issues in all policy discourse on economic growth and structural transformation in India and across world. The labour market flexibility apparently undermines and threatens economic security in many ways such as security in labour market, reskilling and income generation. Consequently, this change faces resistance in the developing countries (Standing, 2008) where there is no social security for the working class. Unfortunately, only one-fourth of global population has access to comprehensive social security system and only one-tenth of unemployed workers receive unemployment benefits (ILO,2015).

The rising labour flexibility globally has created low quality employment which has been consistently risen since 1970s. Although employment has assumed different forms and terminologies, the message is very clear that economic security of pre-globalisation era across the world has come to end. The low quality jobs under guises of Casualisation, Contractualisation, Informalisation, and Occupational Commodification of labour have been happening. USA leads the world in the incidence of casual employment (Standing, et al). The international economic institutions such as World Bank (WB), International Monetary Fund (IMF), and Organisation of Developed Countries (OECD) have propounded it. The systemic attempt by the rich corporations and nations to make society and democracy sub-ordinates to the market economy has paved the way for informalisation of work (Polanyi, 2001).

India's labour market differs from global scenario. According to Economic Survey of India (2007-8) 93 per cent of work force are either self employed or working in the unorganized sector (Ministry of Labour and Employment http://vikaspedia.in/social-welfare/unorganised-sector-1/categories-of-unorganised-labour,). The multiple labour laws, despite being very restrictive, do not apply in these sectors. So, the labour

flexibility debate is not rightly placed. However, this does not prevent the Govt. from reforming labour market through simplifications of labour laws (Sharma, 2006). The manufacturing sector has done large adjustments in the workforce in the post-reforms period (Bhandari & Heshmati, 2005). Labour market flexibility also exhibits signs of pre-mature de-industrialisation exhibiting lower contribution of industrial sector to GDP and employment (Tregenna, 2015; Chaudhary, 2015).

While economic reforms were hailed for freeing Indian economy from the trap of inefficiency and stagnation, its impact regarding low employment generation needs a holistic assessment. Given the chronic weakness of India's manufacturing sector since 1970s, unchallenged cost-competitiveness of China in manufacturing sector, and technological edge of MNCs, the revival of this sector is looked at as quite an arduous task (Nagraj, 2005).

India's manufacturing sector has consistently remained stagnated (Ahluwalia, 1987) in the pre-reformed economic policy. In the post reforms period also, its contribution to GDP and employment generation did not change. This sector contributes about 16 per cent of total GDP and employs about 13 per cent of total labour force (IHD, 2014).

The technological progress made by developed countries has empowered them to catalyse pro-capital changes in the global economy. While capital has got boost thanks to various deregulation measures, labour is under all kinds of threats not only from the employers, but also from the state (Sanyal and Bhattacharya ,2009; Ramaswamy,1999; Sood, 2014).

Unlike Malaysia, Korea, Taipei, and china, interplay of both govt. failures and market failures have withheld shifting of surplus labour from low productivity sectors to high productivity sectors in India (Sen, 2016). Despite all policy experimentation, neither Indian Economy could grow at two digit level, nor were adequate jobs generated. In a way, India is a classic example of both govt failure and market failure. The former includes the distortions in functioning of markets for labour, land, and products; the latter is known for imperfections in investment and credit markets and human capital formation.

In light of SDG for decent work, the Govt. failure has overriding implications on achieving and sustaining inclusive growth in coming years till 2030. In fact, issues of inclusive growth and four targets of goal no.8 on decent work, that have been stated in the section one, are integrated with process of structural transformation of Indian economy. In the present paper, the essence and relevance of structural transformation has been studied for finding ways and means to achieving inclusive growth.

## Inclusive Growth: A virtuous derivative of Structural Transformation

Inclusive growth calls for such a growth strategy which promotes not only economic efficiency but also adopts a 'pro-labour' and 'pro-business' policy framework. In other words, economic growth process must diffuse economic opportunities, income, security, and quality of life along with macroeconomic and financial supervision.

Unfortunately, Indian economy is now at the crossroads carrying along a mixed bag of several challenges yet a unique bounty of opportunities. While the challenges consist of primarily failure of structural transformation, low growth, inadequate quantity and quality of employment opportunities, underdeveloped and dwarf manufacturing sector; India has a huge opportunity of having about 60% of working age population. the objective of inclusive growth can be achieved provided sincere and continuous structural transformation. However, this entails a very long period of time. Most of the developed countries have handled the questions of inclusive growth and decent work by accomplishing their structural transformation. The UK and the USA had taken a very long time of roughly one and a half century each to do it. But, it rests on expansion and diversification of the manufacturing sector (UNIDO, 2015).

The structural transformation has many interpretations. Generally, it denotes changing importance of sectoral economic activity in relative terms (Syrquin, 2007). It has both positive and normative dimensions. From perspective of the positive dimension, the manufacturing sector brings out two major virtues. Firstly, it orients the economy towards higher value added sectors. Secondly, it expands employment base with higher labour productivity. In normative interpretation, it refers to the ability of an economy to raise productivity and returns to scale continuously

(Ocampo, 2005). So, it constitutes the central axis of development process, and process as well as pattern of economic growth. In fact, in deeper sense, economic development has profound integration with the structural change of economy as it leads to rising income levels. However, it may not come forth if a structural transformation bypasses the expansion of the manufacturing sector, that is, economy moves from agriculture sector to the services sector directly. This has happened precisely in India.

In principle, high economic growth is expected to generate employment in the economy. In India, there were three sets of studies that have assessed impact of the reforms on employment. One of them has asserted that since the structural changes that followed the reforms would enhance labour and product market flexibility, leading to labour-intensive production. This will lead to competition in the labour market to attract talent and hence pushing up the wages. This rise in wages would force weaker firms to reduce cost of production adopting more capital-intensive 'advance' technology and thus would replace labour. This would not only discourage employment potential, but also promote casualisation of the workforce (Mundle, 1993; Deshpande,1992; Agarwal and Goldar,1995; Kundu,1997 et al.). Yet another set of studies argues that even if employment growth remains dismal in the beginning of the transition, but would catch up in the longer run (Bhalotra, 1998; Nagraj, 1994). However, none of the predictions have proved to be true.

On the basis of various research studies that have been carried out so far, there are mixed results of linkages between economic growth and quality of employment. The employment growth accelerated during 1990s markedly in terms of both aggregate level and for majority of industries in response to changing industrial structure in favour of small and medium industries and slow-down in growth of real wages. If inter-period employment growth in the post-reforms period is analysed, it is found that India's organized manufacturing sector shows relatively higher growth rate of employment i.e.7.5%p.a. between 2003-04 and 2008-09. The real value added had grown at 12% p.a.in the corresponding period. As opposed to this, the employment growth rate ranging between 2.8 -3%.

# Manufacturing Sector Performance: Opportunities and Challenges

The vision document of the National Manufacturing Policy of 2011 emphasised the revival and expansion of manufacturing sector for accelerated development, inclusive growth, and generating gainful employment. The Conference of the State Industry ministers in the year 2009 had reiterated the need for enhancing share of manufacturing sector to the GDP to 25% from 16% which was stuck at this level since 1980s. This thrust was very timely as it has weightage of 75.53% in the Industrial sector and 60% of working age population depends on it for their livelihood. A monumental goal of creating 220 million jobs by 2025 was set for the sector.

But for all noble intention of the policy framework, rising cross-border economic integration has posed various challenges for development of indigenous manufacturing sector. Firstly, dominance of large Multinational Corporations (MNCs) and Global Value Chains (GVCs) have fostered inequalities in the world economy. Secondly, China has already established its strong edge in manufacturing sector worldwide. Thirdly, the production process has become very intensive in capital and knowledge. Fourthly, there is very less policy space left for India due to rising influence of the World Trade Organisation (WTO) and regional trade blocs. Fifthly, severe challenges are posed by environmental norms on manufacturing.

### **Results and discussion**

At current juncture, the way forward to decent work agenda in India is going to be an arduous task on many counts. Firstly, the extent of contractual workers in manufacturing sector is quite high around 62% during 2000-01 to 2011-12. It is shown by table 2 and figure 1. The use of contractual labour has got intensified even in the labour intensive sectors. Secondly, table 3 and table 4 reveal that contribution of industrial and manufacturing sectors has rotted at quite low levels, that is, 25% and 15 % respectively since 1980s. Moreover, their annual growth rates have also been quite subdued. Table 5 & 6 reveal that only three sectors-Wearing Apparel(18), Leather and tanning(19) and Furniture Manufacturing (36)- were job creating sectors over 1981-82 to 2004-05. The labour intensive sectors; Food Products (15), Textile(17), Wood(20),

and Publishing & Printing (22) had ,in fact, displaced jobs during the same period. The employment elasticity was quite low (.1) only. However, employment elasticity went up to .43 during 2000-2010. The sectors namely Furniture manufacture (36), Wearing apparel (18), Rubber and plastic products (25), other non-metal (26), Fabricated metal and products (28), Motor Vehicles (34), Electricity Machinery (31), and Publishing & Printing (22) emerged as main job creating sectors.

Thirdly, the manufacturing growth has concentrated abound high growth sectors only which are intensive in capital and knowledge. They consist of Machinery and equipment (29), Electric machinery and apparatus (31), Radio, T.V. and Communication equipment and apparatus (32), Motor vehicles, trailers (34), and Other transport equipment (35). Fourthly, although the weightage of low growth sectors is quite low in overall growth of industrial sector, but these sectors hold lot of potential for absorbing surplus labour from agriculture sector and utilize the 'demographic dividend'. They include products such Tobacco products (16), Textiles (17), Wearing apparel, dressing and dyeing of fur (18), Leather products (19), Wood products (20), Paper and paper products (21), Office, accounting & computing machinery (30), Medical, precision & optical instruments (33), and Furniture manufacturing (36). Fifthly, despite all rhetoric in Government reports on skill formation and entrepreneurial development, attraction of the targeted youth towards such issues has not manifested. So, the base of skilled manpower youth is quite narrow.

Even though employers often plead to the Govt. for more labour flexibility, labour cost in proportionate to terms has been declining consistently. In fact, symptoms of pre-mature de-industrialisation are quite visible as reflected by stagnated contribution to industrial sector to the GDP. Moreover, unequal distribution of manufacturing sector value added does not inspire any hope for its revival. The employers have largely benefitted from the policies of economic reforms. The figures 3 & 4 show that although labour cost in absolute terms has risen countrywide, but labour cost as proportion of total production cost has consistently declined since early 1990s. Further, figure 5 &6 reveal that shares of wages and total emoluments in the net value added have recorded steepest descent over 1981-82 to 2011-12 period. By contrast, share of profit in the net value added has risen moderately since 1991, but exponentially after 2001-02 onwards.

In the light of above, seemingly there is huge challenge ahead for realizing the agenda of decent work in Indian economy. It is reflected by larger size of unorganized sector among all emerging economies, very narrow base of skilled manpower, relatively small size of the manufacturing sector, the Govt. apathy towards qualitative change in the universal education provision and lack of institutional support for innovation and entrepreneurial ventures. Unless a major breakthrough is made in India's the structural transformation, all targets of this SDG on decent work may not be possible. Structural Transformation process is a long term process which principally actualizes through technology diffusion, industrial development, and business environment. They are further confounded by many external constraints related to dynamics of international trade particularly Global Value Chains (GVCs).

### Conclusion

This paper attempted to explore issues of decent work, stagnation of manufacturing sector, and failure of inclusive growth in India right since inception of economic planning. This is fairly a long period characterised by policy shift towards market economy as well. Among various challenges, India's failure to accomplish regular structural transformation is most severe for addressing all other socio-economic problems. Although the reforms boosted economic growth, yet it was short-lived and it could not produce required job opportunities. And the question of decent work remained only peripheral. The much hyped presence of private sector could not make much improvement in the structure of the economy. The rising labour flexibility may not be a good thing for industrial development and structural transformation in the long run.

On the contrary, it will discourage sustainable development. Moreover, the manufacturing industry has already starting showing signs of pre-matured deindustrialisation in India since mid-1980s onwards. This does not auger well for generating decent work and inclusive growth. In the light of SDGs, we argue that only industrial policy framework addresses manufacturing sector earnestly by providing incentives for innovation, entrepreneurship for development of Human Capital by investing in public education and skill development on sustainable basis, the goal of inclusive growth will remain elusive as usual.

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### **Appendix**

Table 1: Industrial products growth trends during 2005-06 to 2012-13(CAGR)

Industry code (NIC) and Product sectors(at two-digit level	Weight )	Growth rate
High growth sectors (above 10%)		
29 Machinery and equipment n.e.c	37.63	10.3
31 Electric machinery and apparatus	19.8	27.01
32 Radio, T.V. and Communication equipment and apparatus	9.89	89.75
34 Motor vehicles, trailers	40.64	15.29
35 Other transport equipment	18.25	13.05
Modest growth sectors (below 10% and above 5%)		
15 Food products and beverages	72.76	6.22
22 Publishing, printing & reproduction of recorded media	10.78	7.62
25.Rubber and plastic products	20.25	8.09
26 Other non metallic mineral products	43.14	6.24
27 Basic metals	113.35	8.69
28 Fabricated metal products	30.85	9.31
Low growth sectors (below 5 %)		
16 Tobacco products	15.7	1.02
17 Textiles	61.64	3.89
18 Wearing apparel, dressing and dyeing of fur	27.82	3.23
19 Leather products	5.82	4.98
20 Wood products	10.51	4.81
21 Paper and paper products	9.99	3.81
30 Office, accounting & computing machinery	3.05	1.48
33 Medical, precision & optical instruments	5.67	2.84
36 Furniture manufacturing n.e.c	29.97	1.65
Manufacturing	755.27	8.27

Source: Bhatt,2014

Table 2: Growth rate of contractual workers in two-digit manufacturing industries

SI. No.	Ind	ustry Code (NIC-98) / Description of industries		t	0-01 0 5-06	2005-06 to 2011-12
1	15	MANUFACTURE OF FOOD PRODUCTS AND BEVERAGES		31.0	7%	41.42%
2	16	MANUFACTURE OF TOBACCO PRODUCTS		5.90	%	-9.36%
3	17	MANUFACTURE OF TEXTILES		35.23	3%	34.51%
4	18	MANUFACTURE OF WEARING APPAREL; DRESSING AND DYEING OF FUR		133.	42%	44.31%
5	19	TANNING AND DRESSING OF LEATHER; MANUFACTURE OF LUGGAGE, HANDBAGS SADDLERY, HARNESS AND FOOTWEAR		30.3	1%	46.95%
6	20			108.	67%	35.26%
7	21	MANUFACTURE OF PAPER AND PAPER PRODUCTS		21.10	0%	37.20%
8	22	PUBLISHING, PRINTING AND REPRODUCTION OF RECORDED MEDIA		75.76	5%	113.72%
9	23	MANUFACTURE OF COKE, REFINED PETROLEUM PRODUCTS AND NUCLEAR FUEL		115.	39%	12.85%
10	24	MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS		47.06	5%	62.25%
11	25	MANUFACTURE OF RUBBER AND PLASTIC PRODUCTS		85.80	0%	80.91%
12	26	MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS		70.5	1%	63.70%
13	27	MANUFACTURE OF BASIC METALS		50.72	2%	79.34%
14	28	MANUFACTURE OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENTS		64.2	4%	69.58%
15	29	MANUFACTURE OF MACHINERY AND EQUIPMENT N.E.C		87.47	7%	88.87%
16	30	MANUFACTURE OF OFFICE, ACCOUNTING AND COMPUTING MACHINERY		-41.6	66%	120.58%
17	31	MANUFACTURE OF ELECTRICAL MACHINERY AND APPARATUS N.E.C.		102.		82.58%
18	32	MANUFACTURE OF RADIO, TELEVISION AND COMMUNICATION EQUIPMENT AND APPARATUS		99.67		73.37%
19	33	MANUFACTURE OF MEDICAL, PRECISION AND OPTICAL INSTRUMENTS, WATCHES AND CLOCKS		117.3	35%	42.53%
20	34	MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS		137.		118.44%
21	35	MANUFACTURE OF OTHER TRANSPORT EQUIPMENT		105.		80.95%
22	36	MANUFACTURE OF FURNITURE; MANUFACTURING N.E.C.		67.43		70.31%
23	37	RECYCLING		126.	71%	28.48%
Avera	age		72.91% 0.45382		61.6	88% 1870815

 Average
 72.91%
 61.68%

 SD
 0.45382348
 0.32870815

 Median
 75.76%
 63.70%

 Max
 137.13%
 120.58%

Source: Das, 2015

Table 3: Share of value added of sectors in GDP(%)

Years	Agriculture	Industry	Manufac turing	Services
1980	35	25	16	40
1990	29	26	16	44
1995	26	27	17	46
2000	23	26	15	51
2006	18	29	16	53
2010	18	28	15	54
2011	17	26	16.17	57
2012	17.9	27.2	16.28	54.9
2013	17.5	26.2	15.76	56.3
2014	18.2	24.8	14.94	57

Source: Economic Survey, various rounds

Table 4: Growth rate of Manufacturing and industrial sectors (%)

Period	Manufacturing	Industrial
1980 81	7.9	9.3
1985 86	9.7	8.7
1981 82 to 1990 91	7.63	7.86
1990 91	9	8.3
1995 96	14.1	13
1991 92 to 2000 01	6.22	5.97
2001 02	2.9	2.7
2005 06	8.9	11.9
2009 10	11	10.5
2011 12	3	2.9
2012-13	6.2	2.3
2013-14	5.3	4.5
2014-15	6.8	5.9

Source: RBI, Handbook of Statistics, various years

Table 5: Growth in Output and employment and employment elasticities over the larger period (in average annual %, 1981-82 to 2004-05)

Industry Code (NIC) / Industry Name		Growth in value added	Growth in Employment	Employment Elasticity(Arc)
A:	Employment Creating Growth			
16	Tobacco products	6.8	0.71(70.9)	0.1
18	Wearing apparel, dressing and dyeing of fur	15.55	9.92(399.0)	0.64
19	Leather tanning and dressing	6.93	3.54(82.5)	0.51
21	Paper and paper products	3.84	1.24(44.0)	0.32
23	Coke, refined petro products and nuclear fuel	11.58	2.31(32.5)	0.2
24	Chemicals and chemical products	8.3	2.11(299.7)	0.25
25	Rubber and plastic products	11.28	3.96(179.8)	0.35
26	Other non-metallic mineral products	8.62	1.47(149.1)	0.17
28	Fabricated metal products	3.77	1.06(68.6)	0.28
29	Machinery and equipment	7.25	1.01(90.0)	0.14
30	Office, accounting and computing machinery	19.69	5.50(18.3)	0.28
32	Radio, TV and communication equipment	15.34	2.72(47.0)	0.18
33	Medical, precision and optical instruments	6.37	0.24(3.3)	0.04
34	Motor vehicles, trailers, etc	9.9	2.91(162.7)	0.29
36	Furniture, manufacturing nec	8.06	5.37(123.3)	0.67
B:	Job Displacing Growth			
15	Food products and beverages	6.5	-0.06(-20.2)	-0.01
17	Textile	4.96	-0.53(-178.9)	-0.11
20	Wood and products of wood and cork	0.09	-1.57(-22.2)	-16.55
22	Publishing, printing, etc	0.35		-4.07
27	Basic metals	7.13	-0.09(11.8)	-0.01
31	Electrical machinery and apparatus	6.46		0
35	Other transport equipment	6.79	-2.44(-141.5)	-0.36
	All manufacturing	7.41	0.78(1348.9)	0.1

The absolute change in employment (in '000) is given in brackets.

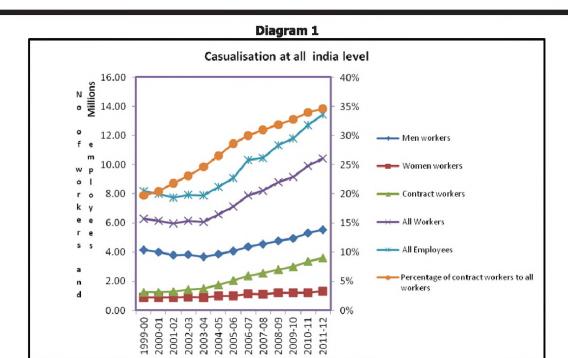
Source: Kannan & Radvindran, 2009

Table 6 : Growth in Output and employment and employment elasticities (annual average %), 2000-2010)

Industry Code (NIC) / Code Industry Name		Value added Growth	Employment Growth	Emp. Elasticity
A:	Employment Creating Growth			
18	Wearing apparel, dressing and dyeing of fur	8.59	9.67(460.43)	1.13
19	Leather tanning and dressing	9.3	6.46(103.87)	0.69
21	Paper and paper products	-0.85	2.58(41.05)	-3.01
23	Coke, refined petro products and nuclear fuel	17.23	7.06(48.19)	0.41
24	Chemicals and chemical products	6.04	2.38(146.12)	0.39
25	Rubber and plastic products	10.71	6.95(188.01)	0.65
26	Other non-metallic mineral products	11.84	6.25(301.51)	0.53
28	Fabricated metal products	12.77	6.86(215.93)	0.54
29	Machinery and equipment	10.12	3.9(132.72)	0.39
34	Motor vehicles, trailers, etc	13.86	9.43(292.98)	0.68
36	Furniture, manufacturing nec	10.77	8.15(111.39)	0.76
31	Electrical machinery and apparatus	12.36	7.33(172.14)	0.59
27	Basic metals	12.73	5.05(276.28)	0.4
20	Wood and products of wood and cork	9.95	4.27(19.95)	0.43
15	Food products and beverages	5.8	2.17(247.57)	0.38
17	Textile	2.75	.74(83.78)	0.27
22	Publishing, printing, etc	5.54	3.2(28.84)	0.59
35	Other transport equipment	12.17	2.61(40.92)	0.21
B:	Job Displacing Growth			
16	Tobacco products	1.06	-1.3	-1.22
	All manufacturing	9.32	4(2930.457)	0.43

The absolute change in employment (in '000) is given in brackets.

Source: Nath,2014



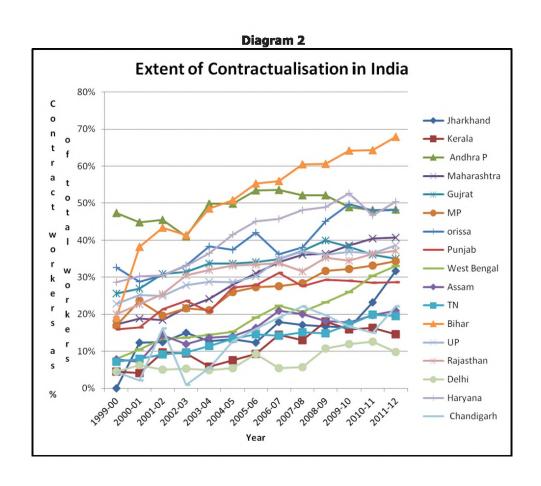


Diagram 3

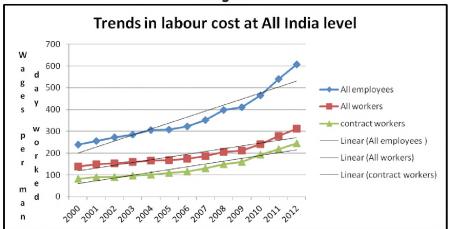


Diagram 4

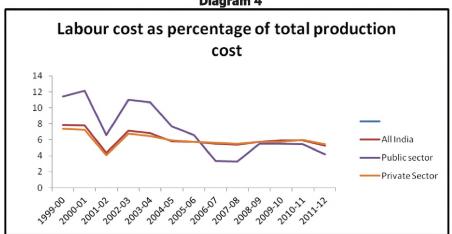
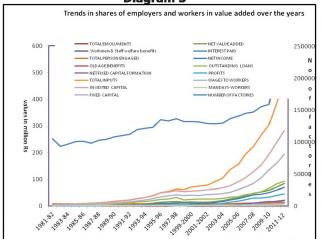


Diagram 5



### Diagram 6

