

Employment (vision 2025)

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A significant change in inequality in income and wealth is possible only in a longer term perspective. Employment structure of an economy is the normal instrument that can cause a change in inequality either way, i.e. an increase or a decrease in the inequality. Other economic instruments such as target group policies and programmes have a short term impact, but the redistribution through employment is sustainable. Since the governments function within the administrative and fiscal constraints, the target group programmes normally have a marginal impact on income redistribution. Income of labour enables flow of resources across income classes of people and across the social and ethnic groups. Flows of income across locations are influenced both by assets available and by other modes of creating employment opportunities. However, income generated by employment of migrant labour, facilitates flow of resources across regions for a given regional distribution of capital assets. Employment and equity of income across classes of people and across regions are, therefore, closely related to each other in the long term.

Factors in the Long Term

The factors, which influence employment outcomes of an economy in the long term, include the following:

1. Age structure of population.
2. Characteristics of labour force.
3. Structure of economy.
4. Migration of labour.

1. **Age Structure of population**

The size of economically active population is determined by the age structure. Population growth will reduce from the current level (1991-2001) of 1.95 per cent per annum to about one per cent by 2025. Growth of population in the working age group (15 to 59) is at present around 2.4 per cent, substantially higher than growth of overall population. This will continue to be so for many years. Convergence between growth of population and that in the age group 15-59 years occurs around the year 2030.

Since labour force participation is not uniform across age groups, the size of labour force is influenced by age structure. Participation in labour force i.e. the labour force participation rate (LFPR) is influenced by need to work versus other alternative uses of one's time. A unidirectional relationship between growth of population and labour force has not been observed in the past (Table 1).

Table 1: Growth of Population & Labour Force – 1972-73 to 1999-2000

(per cent per annum)

Period	Rate of Growth of Population (UPSS)	Rate of Growth of Labour Force
1972-73 to 1977-78	2.27	2.94
1977-78 to 1983	2.19	2.04
1983 to 1987-88	2.14	1.74
1987-88 to 1993-94	2.10	2.29
(1983 to 1993-94)	(2.12)	(2.05)
1993-94 to 1999-2000	1.93	1.03

The question is whether the observed deceleration in the labour force growth would continue into the future. It could be so if it has been caused by a structural change in the economy. Some decline in labour force growth could be due to a lower growth in population, which also implies a slower growth in working age population. However, the decline in labour force growth from 2.29% per annum to 1.03% between 1983/1993-94 and 1993-94/1999-2000 is too sharp to be explained by deceleration in population growth alone.

2. Characteristics of Labour Force

The decline in participation rates observed during 1993-94 to 1999-2000 needs to be carefully examined in terms of trends in different segments of the population and by different age groups and in a longer-term perspective. Participation rates thrown up by various rounds of National Sample Surveys during 1983 to 1993-94 are given in Annexure-1. The following features are worth noting:

- i] The decline in the LFPR in the younger age group is a part of longer term trend reflecting the expected shift in the activity status of this group towards education. This trend is likely to continue in future.

¹ The views expressed here are of the author and not, necessarily, of the organisation to which he belongs.

- ii] In prime age groups, especially among males in both rural and urban areas, the declines in LFPR are within the margins of sampling error.
- iii] In the age group 60 and above the decline in the LFPR can be explained by increase in the share of more aged in the 60 and above population, where the LFPRs are expected to be low.
- iv] Finally, decline in LFPRs in certain age groups between 1993-94 and 1999-2000 appears to be large because the LFPR in 1993-94 showed a significant increase, contrary to the longer term trend. This is most evident in age groups 50-54 and 55-59 of the rural male. This raises the question whether the 1993-94 data were out of line with past trends, which exaggerates the apparent decline in 1999-2000.

In this background, the future projections of labour force in relation to working age population have to be considered. The participation rates for younger age groups have dropped much more than other age groups (Table 2). In the 10-14 years age group, the decline will be to near zero in the next 5 to 8 years as elementary education becomes compulsory.

Table 2: Labour Force Participation Rates * for Rural Male in 1999-2000 relative to 1983.

Age group	$\frac{\text{LFPR 1999-2000}}{\text{LFPR 1983}}$
10-14	0.389
15-19	0.809
20-24	0.972
25-29	0.999
All ages	0.985

* UPSS Basis

Returns to higher general education in the shape of jobs related to degrees will diminish as the labour market becomes less rigid with decline in share of Government as the principal employer of educated labour force within the organized sector. The LFPR in other age groups will stabilize in a few years. Stabilization in age specific LFPR's will bring about convergence between labour force growth and the working age population growth.

A countervailing factor to prevail in the long run is the reduction in differentials between male and female labour force participation rates. In the past 17 years, female / male LFPR differential has increased. (Table 3) However, some increase of LFPR (Female) relative to LFPR (Male) was observed in the decade 1983 to 1993-94. In the States having high per capita income, the female / male LFPR ratio is higher. In the older age groups, the

female to male LFPR differential is less than those in the younger (reproductive) age groups. During the next 25 years as the average age of female labour force increases, the female-male LFPR differential should reduce. It is also seen that as per capita income levels rise, the gap between male-female LFPRs reduces after touching a bottom level. That is when the excess supply of labour reduces and labour demand- supply gaps begin to emerge.

Recent studies done in the Planning Commission place the labour force growth in next ten years at 1.8 % p.a. In the subsequent 15 years period, the labour force growth should be around 1.5 to 1.6% p.a.

Table 3:Ratio of Female to Male Labour Force Participation Rates*

Age Group	Rural (R) / Urban (R)	1983	1993-94	1999-2000
20 - 24	R	0.540	0.521	0.478
	U	0.267	0.280	0.253
24 - 29	R	0.556	0.539	0.511
	U	0.251	0.259	0.225
30 - 34	R	0.585	0.594	0.564
	U	0.271	0.288	0.250
40 - 44	R	0.622	0.614	0.596
	U	0.311	0.325	0.291
50 - 54	R	0.550	0.560	0.540
	U	0.286	0.304	0.281
All Age Groups	R	0.606	0.590	0.559
	U	0.289	0.303	0.271

* Usual Status Basis

Labour Force skills

Income of labour i.e. its wage level is determined by productivity. Both the technology used (i.e. capital intensity) and the skill level of worker determine labour productivity.

Current State of Labour Force Skills²

It is not easy to quantify the level of skills in the labour force because data on skill levels are not readily available. What is available is information on the educational attainments of the labour force and the relevant data for 1999-2000 are summarized in Table 4. It is evident that education levels in the labour force in India are very low. About 44.0 % of all workers in 1999-2000 were illiterate and another 22.7% had schooling only up to the

²This Section draws upon the Report of Task Force on Employment Opportunities, Planning Commission

primary level. If we define the minimum level of education necessary to function in a modern economy as schooling up to the middle level, then only about 33.2% of the labour force had schooling of that level and above. The percentage was higher at 57.4% for the urban labour force, but it was correspondingly worse in rural areas, with only 25.4% for the rural labour force meeting these standards.

A positive feature of the situation is that education levels will improve over time because the younger age groups are much better educated. Table 5 presents the educational attainment of youth (15-29) in labour force for the year 1999-2000 (and 1993-94). The percentage with middle school education or above in this age group for the country as a whole is 49.3 compared with 33.2% for the total labour force. This percentage itself is increasing over time. It was 42.5% in 1993-94 and has increased to 49.3% in 1999-2000. There are of course sharp variations across gender and place of residence; for urban males it is as high as 72.1 (66.7 in 1993-94), whereas for rural females, it is as low as 29.0 (21.7 in 1993-94).

**Table 4: Composition of workers of age 15 years and above
by level of education 1999-2000**

(per cent)

	Not literate	Literate & schooling upto primary level	With schooling upto middle & higher level	Total	Share in Work Force
<u>Rural Areas</u>					
Male	39.6	27.3	33.1	100	49.74
Female	74.0	15.5	10.5	100	25.77
Person	51.3	23.3	25.4	100	75.51
<u>Urban Areas</u>					
Male	16.0	21.9	62.0	100	19.72
Female	43.9	17.6	38.5	100	4.76
Person	21.5	21.1	57.4	100	24.49
<u>All Areas</u>					
Male	32.9	25.8	41.3	100	69.46

(2001)

Female	69.3	15.8	14.9	100	30.54
Person	44.0	22.7	33.2	100	100.00

Source: National Sample Survey on Employment & Unemployment, 55th Round.

Table 5: Percentage of persons in labour force educated middle and above 1999-2000^a

<u>Sex</u>	<u>Age Groups</u>	<u>Rural</u>	<u>Urban</u>	<u>All areas</u>
Male	<u>15-29</u>	<u>50.9 (44.2)</u>	<u>72.1 (66.7)</u>	<u>56.4 (49.8)</u>
	15-19	55.1 (49.5)	71.9 (67.4)	58.7 (52.1)
	20-24	53.8 (47.4)	73.8 (69.7)	59.2 (53.1)
	25-29	45.2 (36.6)	70.7 (63.5)	52.3 (44.0)
Female	<u>15-29</u>	<u>29.0 (21.7)</u>	<u>62.5 (54.5)</u>	<u>33.5 (26.5)</u>
	15-19	40.6 (30.6)	69.7 (63.6)	44.3 (34.7)
	20-24	28.9 (21.1)	64.6 (56.0)	33.9 (26.2)
	25-29	21.3 (14.2)	55.9 (47.0)	25.9 (19.6)
Persons	<u>15-29</u>	<u>43.4 (36.6)</u>	<u>70.3 (64.1)</u>	<u>49.3 (42.5)</u>
	15-19	50.2 (43.1)	71.4 (66.5)	54.2 (47.2)
	20-24	45.3 (38.0)	72.1 (66.7)	51.5 (44.3)
	25-29	36.7 (29.4)	68.0 (60.2)	44.1 (36.9)

Source: NSSO

Note: NSS Reports on Employment/Unemployment Survey give (i) labour force participation by age groups and (ii) level of education of population by age group. However, the Reports do not give labour force participation rates by age groups cross-classified by level of education. Therefore, estimates presented in this table are based on the assumption that distribution of labour force, in an age group, by level of education, is the same as the distribution of population in that age group by level of education.

^a Figures in parenthesis are for the year 1993-94

It should be noted however that the category “middle school and above” includes all those who have had some middle school education even though they may have dropped out before completing middle school. Provisional gross enrollment rates for the year 1998-99 in the primary and the middle school levels are 92% and 58%, respectively (Table 6). However, the provisional dropout rates at primary and middle levels are quite high at 42% and 57%, respectively, in the year 1998-99. According to a rough estimate from the 52nd round (1995-96) of National Sample Survey, around 44% of the population (age group 14–16 years) was enrolled in the Class IX and X levels. However, only about 20% of the population in this age group actually completes secondary school education. These figures indicates that significant deficiencies in the general education level of the labour force are likely to remain in the next ten to 15 years though one can say from the past trends of increase in enrolment ratio and decrease in dropout ratio that the new entrants to the labour force will be significantly better educated than at present.

Table 6: Enrolment in different stages of education as percent of population in the appropriate age groups 1961, 1981, 1990, & 1999

<u>Education stage/age group</u>	<u>Enrolment as proportion of appropriate age group</u>			
	<u>1961</u>	<u>1981</u>	<u>1990</u>	<u>1999</u>
Primary classes (6-11 yrs.)	62.4	80.5	95.9	92.1
Middle classes (11-14 yrs.)	22.5	41.9	57.4	57.6
High/higher Secondary (14-17 yrs.)	10.6	17.3	24.0	N.A.

Source: Manpower profile of India, year book 2000 (IAMR); Table 2.1.2.0

The statistics discussed above relates to general education, which is not the same thing as possession of “marketable skills”. While some jobs in a modern economy, especially clerical office jobs, may not require anything more than specified levels of formal academic education, most other jobs require specific skills. The NSSO Survey on Employment and Unemployment (1993-94) sought information on the possession of 30 specific marketable skills by persons in the labour force and the results are summarized in Table 7. The skilled percentage of the work force is evidently very low. In the rural areas, only 10.1% of the male workers and 6.3% of female workers possessed specific marketable skills. The percentages were higher in urban areas, but they were still woefully low in absolute terms – only 19.6% for male workers and 11.2% for female workers.

Table 7: Percentage Distribution of persons by possession of marketable skill: 1993-94¹

<u>Possessing</u>	<u>Rural</u>		<u>Urban</u>	
	Male	Female	Male	Female
No Skill	89.9	93.7	80.4	88.8
Some Skill ²	10.1	6.3	19.6	11.2
Total	100.0	100.0	100.0	100.0
Sample persons	(183464)	(172835)	(109067)	(99283)

Source: NSSO Report No.409 on Results of 50th round (1993-94) survey on Employment and Unemployment.

Notes: ¹ Information for 1999-2000 not yet available, since the results released by NSSO for that year Employment Survey give the skill classification of Non Workers.

² Marketable skills that are reported by respondents are specified in Annexure 2.

The levels of vocational skills in the labour force in India compare poorly with the position in other countries. Annexure-3 shows the percentage of younger members of the labour force (age group 20-24), which have vocational training. Only 5% of the Indian labour force in this age category has vocational skills whereas the percentage in industrial countries is much higher, varying between 60% and 80%, except for Italy, which is 44%. The percentage for Korea, which has recently been categorised as an industrialised country, is exceptionally high at 96%. The developing countries listed have percentages which are significantly lower than the developed countries, but they are still much higher than India e.g. Mexico at 28% and Peru at 17%. Differences in definition may make inter-country comparison somewhat unreliable, but the level in India is clearly far too low.³

These figures reveal that education and skill levels of our labour force are relatively low compared with other fast growing developing countries. The system is also excessively oriented towards general academic education with little or no vocational orientation. The preference for general education is driven primarily by the perception that an academic degree is necessary to obtain a government job, which is highly valued because job security is virtually complete and pay scales are typically much above market wages. The net

³ One reason why the comparison may exaggerate the difference is because, as pointed out in the footnote to Table 6.4, it is based on those having received training in formal institution.

result is that the education system has neglected the need to provide vocational skills and to generate awareness and demand among students for acquiring, marketable skills.

In the long term, a strategy to impart vocational skills will facilitate increase in income of labour. A massive expansion of training facilities is needed. As we shall see in later section, the occupational profile of workers will change at a rapid pace because the traditional avenues for work in agriculture are poised to alter substantially, as ability of this sector to absorb labour force will diminish at a fast pace. Greater emphasis on vocational training in relation to general education is required.

3. Structure of Economy

Input of labour in production process depends upon technology used, and technology used varies across the industries. Traditional agriculture is more labour intensive than the modern manufacturing industries. With the modernization of economy, share of agriculture in workforce reduces due to two factors; food demand grows at a much slower pace at high levels of income, which moderates the demand for foodgrains. Secondly, the technology used in agriculture, at higher yield levels is much less labour absorbing than traditional agriculture.

Agriculture absorbed 65 to 70 per cent of workforce between the years 1991 and 2001 as per demographic Census (Table 8). At all India level the proportion of workers getting work in agriculture came down by 9 percentage points between 1991 and 2001. In some of the States the number of agricultural workers in 2001 is less than in 1991. These substantial shifts in ability of agriculture to absorb labour are also confirmed by the NSSO survey on Employment – 55th Round (1999-2000) (Table 9)

Table 8: Dependence on agriculture for Work

(per cent)

	Cultivators among workers	Agricultural Labour among workers	Cultivators & agricultural Labourers among workers
Proportion to main workers			
1971	42.9	26.9	69.8
1981	41.5	25.1	66.6
1991	38.4	26.4	64.8
Proportion to total workers (main + marginal)			
1991	39.7	27.4	67.1
2001	31.7	26.7	58.4

Table 9: Employment & labour force growth - 1993-94 - 1999-2000 (UPSS & CDS basis)

Sector	% Change per annum in employment growth 1999-2000/1993-94	
	UPSS #	CDS *
Agriculture	-0.34	-0.12
Mining & quarrying	-2.85	-2.55
Manufacturing	2.05	2.66
Electricity, gas & water supply	-0.88	-3.43
Construction	7.09	5.22
Trade, hotels and restaurants	5.04	5.85
Transport storage and communication	6.04	5.61
Financing, insurance, real estate and business services	6.20	5.62
Community, social and personnel services	0.55	-2.0
All India Work Force	0.98	1.07
All India Labour force	1.07	1.31
Unemployment Rate (%) (1999-2000)	2.20	7.32
# Based on Old Population Census and Technical Group.		
* Based on 2001 Population Census		
Source: Report of Special Group on Targeting 10million Employment Opportunities a Year in Tenth Plan; Planning Commission(2002)		

Work Opportunities that are lost in traditional agriculture have to be replaced by work opportunities in some other sector. In the normal course it is the secondary sectors (manufacturing, electricity and construction) that grow much faster than agriculture during transition of an economy. However, in the post reform period the growth of manufacturing industries has been constrained by competition from imports. Thus, in the medium term, the ability of manufacturing sector to replace the work opportunities lost in traditional agriculture is rather limited over the next 5 to 10 years. However, there are immense possibilities for diversification in agricultural sector towards more value added activities such as food processing. This is an area, which has by and large remained unexploited, because reforms in agriculture sector having been very slow, resources have not yet started flowing into food processing industries. Involvement of State Governments in implementing reforms in agriculture and food processing sectors is of crucial importance. Economic returns from States initiatives in transforming the rural economy from traditional agriculture to more value

added activities in horticulture, etc. has been demonstrated well in some of the States, such as Maharashtra and Himachal Pradesh.

Another constraint, from supply side, on growth of food processing etc. industries is the rural industrial infrastructure. Many steps have been taken in regard to village connectivity, e.g., Prime Minister Gram Sarak Yojana (PM GSY) and telecommunication. But power sector reforms are urgently needed to set up modern processing facilities. Another infrastructure bottleneck is the availability of business services institutions – training, banking, insurance, storage facilities etc.

Besides the diversification of agriculture into processing activities, the small and medium industries can provide work opportunities to replace those lost in agriculture. But in manufacturing sector there are two extremes in regard to size of establishments. Either there are very large establishments, highly organised, or there are very small establishments, which are in the informal sector.

Formal and Informal Sector

In the current phase of economic reforms, a sharp deceleration in growth of organised sector has been observed. This has largely occurred because employment opportunities in public sector and Government have stagnated since 1994. (Table 10)

Table 10: Organised Sector Employment

Sector	Employment (Million)				Growth rate (% per annum)	
	1983	1988	1994	1999-00	1983-94	1994-2000
Organised Sector Employment	24.01	25.71	27.18	28.11	1.13	0.56
-Public Sector	16.46	18.32	19.30	19.41	1.46	0.10
-Private Sector	7.55	7.39	7.88	8.70	0.39	1.64

Note:

1.The Organised sector employment figures are as reported in the Employment Market Information System of Ministry of Labour and pertain to 1st March of 1983, 1988, 1994 and 1999

A matter of great concern is that employment elasticity of organised sector has been very low at 0.066 during 1993-94 to 1999-2000, whereas it has been 0.213 for the unorganised sector (Annexure-4). Employment elasticity of private corporate sector at 0.133 is much less than that of the unorganised sector. On the basis of these trends, there could be hardly any replacement by the organised sector of the work opportunities that shrink in agriculture. Hence, there will be a fast growth of informal sector by influx from rural areas. These trends suggest two kinds of policy initiatives in regard to organised sector.

Firstly, we should promote use of labour intensive and capital saving technologies. And secondly, the way the “organised sector” as defined at present needs a review. One definition of organised sector is based on its capital intensity, i.e., the technology used. Other definition of organised sector is in terms of employment – the terms of contract between the employer and employee. At present the terms of employment are seen to be rigid by the organised sector, with the result that though organised sector needs and uses a lot of labour input, it does not show up in jobs created. Similar tendencies have forced the capital intensity to increase even in the small-scale sector. One of the suggestions has been that, if employment is the social purpose of a small-scale policy or small and medium enterprise policy then the policy should be designed in terms of jobs created rather than investments made.

The growth of formal sector (i.e., organised sector) has to be based on private sector in future. In some of the States, share of private sector jobs in organised sector increased. (Table 11)

Table 11: Share of Private Sector in Total Organised Jobs

Selected States	1987	1999	(Per cent)
			Organised Jobs in Pvt Sector 1999- '000 Nos.
Private Sector share rising			
Andhra Pradesh	21.47	26.70	549.9
Gujarat	43.01	46.33	819.8
Haryana	33.57	35.36	234.2
Himachal Pradesh	7.56	14.82	44.2
Karnataka	28.32	40.94	576.9
Madhya Pradesh	14.08	14.80	239.1
Maharashtra	38.23	39.49	1504.8
Punjab	26.83	29.42	251.2
Rajasthan	18.67	20.62	263.6

Tamil Nadu	31.67	35.98	916.0
Uttar Pradesh	20.28	20.44	528.9
Private sector share falling			
Assam	52.15	49.20	515.5
Bihar	16.25	15.73	254.1
Kerala	47.12	46.68	564.7
Orissa	14.02	11.59	94.8
West Bengal	36.59	34.63	810.9
All India	29.00	30.94	8698.2

These States have been able to attract investment for private corporate sector; whereas Bihar, Kerala, Orissa and West Bengal have had not been successful in this way.

4. Patterns of Labour Migration

A typology of states based on growth of labour force and changes in employment rate shows that in States of Andhra Pradesh, Gujarat, Haryana, Karnataka, Maharashtra, Tamil Nadu and West Bengal, the labour force growth will be falling and unemployment rate will also fall, given the employment – GDP elasticity in these States. However, in the States of Bihar, Rajasthan, and Uttar Pradesh, not only the unemployment rate will be rising but growth of labour force will also be accelerating. (Table 12) These patterns suggest the States of origin and destination States of migrant labour.

Table 12: Changes in Unemployment and in Labour Force in post Ninth Plan Quinquennium (2002-07)

		Labour Force Growth in post Ninth Plan Period (2002-07) compared to Ninth Plan (1997-2002)	
		<i>Accelerating</i>	<i>Decelerating</i>
Unemployment rate in post Ninth Plan period (2002-07)*	<i>Increasing</i>	Bihar, Rajasthan, Uttar Pradesh	Kerala, Punjab
	<i>Decreasing</i>	Assam, Madhya Pradesh, Orissa	Andhra Pradesh, Gujarat, Haryana, Karnataka, Maharashtra, Tamil Nadu, West Bengal
Note: * Direction of change in unemployment in States was indicated under the assumption that the growth of employment in 2002-07 is the same as in Ninth Plan			
Source: Ninth Plan, Volume I, Employment Perspective			

Migration will increase in the long terms, as the work opportunities in traditional agriculture shrink. Normally, the migrants are at the receiving end in the destination States

because they have little political voice. However, better skilled migrants have better income levels and can thereby adjust better.

Migrants' jobs are hardly ever single employer ones. They frequently change the employers and alternate between the wage employed and self employed status. In this long-term perspective, a social security system for unorganised workers that is designed for such transient employment categories will have to be developed.

Summing up

it is not appropriate to project GDP growth and employment elasticities over a long period of 25 years. The scenario of employment in 2025 will develop based on certain underlying trends in regard to factors which prevail in the longer term. Though the growth of labour force will slow down, but the elasticity of employment will also fall, which means that pressure on labour market will not ease. As agricultural work opportunities continue to shrink, the informal sector will grow rapidly. To cope up with such expected trends, strategies are needed to promote labour intensive and capital saving technologies. Employment creation in small establishments will have to be promoted by incentives linked with jobs created rather than capital invested. Migrant labour will increase social pressures. A strategy to raise the wage levels of those who migrate will have to be based on a massive programme for development of vocational skills. A simple but broad based social security system will have to be developed to improve quality of employment in a scenario where migrant workers will be rapidly growing. Such a social security system coupled with better labour incomes, based on better productivity of trained manpower, will facilitate the conversion of emerging work opportunities into meaningful jobs, where chances of extreme exploitation of labour get eliminated.

Labour Force Participation Rates by Sex and Age, 1983 to 1999-00

Age Group	Rural Male				Rural Female			
	1983	1987-88	1993-94	1999-00	1983	1987-88	1993-94	1999-00
5-9	25	23	11	7	23	24	14	7
10-14	239	193	139	93	225	183	142	96
15-19	658	630	598	532	442	415	371	314
20-24	915	918	902	889	494	484	470	425
25-29	976	981	980	975	543	539	528	498
30-34	986	990	988	987	577	588	587	557
35-39	988	991	992	986	607	608	610	579
40-44	981	984	989	984	611	620	607	586
45-49	978	982	984	980	589	590	594	566
50-54	957	962	970	953	526	530	543	515
55-59	920	929	941	930	476	463	468	450
60+	660	670	699	640	227	220	241	218
All Ages	548	549	561	540	332	331	331	302

	Urban Male				Urban Female			
	1983	1987-88	1993-94	1999-00	1983	1987-88	1993-94	1999-00
5-9	7	5	4	3	7	3	4	2
10-14	114	92	71	52	65	66	47	37
15-19	472	429	404	366	164	169	142	121
20-24	816	792	772	755	218	225	230	191
25-29	965	967	958	951	242	244	248	214
30-34	985	985	983	980	267	282	283	245
35-39	987	989	990	986	292	313	304	289
40-44	982	986	984	980	305	311	320	285
45-49	977	977	976	974	284	307	317	269
50-54	943	944	945	939	270	269	287	264
55-59	843	849	856	811	230	235	225	208
60+	509	482	443	402	124	123	114	94
All Ages	536	534	542	542	155	162	164	147

On Usual Status Basis

**Profile of Persons having some marketable skill by type of
skill possessed - 1993-94**

Skill	Code	Rural Male	Rural Female	Urban Male	Urban Female
Typist/Stenographer	01	3	2	14	10
Fishermen	02	5	-	2	-
Miner, Quarryman	03	2	-	1	-
Spinner including Charkha operator	04	1	3	2	3
Weaver	05	6	10	11	8
Tailor cutter	06	6	18	15	54
Shoemaker, cobbler	07	1	-	2	-
Carpenter	08	6	-	8	-
Mason, bricklayer	09	5	-	9	-
Moulder	10	-	-	1	-
Machine man	11	2	-	8	-
Fitter die maker	12	1	-	6	-
Welder	13	1	-	4	-
Blacksmith	14	2	-	2	-
Goldsmith	15	1	-	4	-
Silversmith	16	-	-	1	-
Electrician`	17	2	-	8	-
Repairer of electronic goods	18	1	-	5	-
Motor vehicle driver, tractor driver	19	11	-	27	1
Boatman	20	-	-	-	-
Potter	21	2	1	1	-
Nurse midwife	22	-	-	-	2
Basket maker, wicker product maker	23	3	4	1	1
Toy maker	24	-	-	-	-
Brick maker, tile maker	25	2	1	-	-
Bidi maker	26	3	7	-	7
Bookbinder	27	-	-	2	-
Barber	28	3	-	3	-
Mud house builder & thatcher	29	9	1	1	1
Others	30	24	15	57	21
Any skill possessed	Sub- total 01-30	101	63	196	112
No skill possessed		899	937	804	888
Total		1000	1000	1000	1000
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Source: NSSO Report No.409 on Results of 50th round (1993-94) survey on Employment and Unemployment.

Proportion Vocationally Trained among the youth in Labour Force- International Comparison²

Country	Age Group	Vocationally trained (percent of those in labour force)
India	20-24	5.06@
<u>Developing countries</u>		
Botswana	20-24	22.42
Colombia (1998)	20-29	28.06
Mauritius (1995)	20-24	36.08
Mexico (1998)	20-24	27.58
<u>Developed Countries</u>		
Australia (1998)	20-24	64.11
Canada (1998)	20-24	78.11
France (1997)	20-24	68.57
Germany (1998)	20-24	75.33
Israel (1998)	18-24	81.23
Italie (1997)	20-24	43.88
Japan (1997)	15-24	80.39
Korea Republic (1998)	20-24	95.86
New Zealand (1997)	20-24	63.03
ussian Federation (1998)	20-24	86.89
Singapore (1998)	20-24	66.24
United Kingdom (1998)	20-24	68.46

Note:1 Vocationally trained persons are defined here as those having education level 3 or 5 as per ISCED clarifications which classifies the population across age groups & levels of education starting with level X i.e. no education and the highest level being level 7 which post graduate level specialisation in a field. Levels 4 & 8 are not used. Level 3 of education: General education continues to be an important constituent of the programmes, but separate subject presentation and more specialisation are found at this level. Also to be classified under Level 3 are programmes consisting of subject matter mainly with a specific vocational emphasis of apprenticeship programmes, with an entrance requirement of eight full years of education, or a combination of basic education and vocational experience that demonstrates the ability to handle the subject matter of that level. Level 5 of education: Programmes of this type are usually "practical" in orientation in that they are designed to prepare students for particular vocational fields in which they can qualify as high level technicians, teachers, nurses, production supervisors etc. It may be noted however that in developing countries, economically productive skills are acquired not only in training/education institution but also through the family. Only the formal institute/school vocationally trained are shown above.

2. Only those who have received formal vocational training are shown as trained in this table. To the extent that training and skills in India are acquired through informal methods, including training in the family, the Indian figures are understated.

@ Estimates are based on (NSSO Report No.409 on Results of 50th round (1993-94) survey on Employment and Unemployment; Table 20) distribution of persons by technical education in India adjusted by labour force participation rate by sex. The corresponding percentages by sex and residence are rural female 1.7, rural male 2.3, urban male 9.4, and urban female 17.0.

Annexure -4

Output, Employment & Productivity of Organised, Unorganised and Public Sector

Employment in million
#

GDP in crores at
1993-94 prices

	Organised			Un-Organised	Grand Total	% composition		Public Sector (a)	Private Organised (b)
	Total	Public	Private			Organised (a+b)	Un-organised		
Value added (GDP) (NET)									
1993-94	256849	180843	76006	441143	697992	36.80	63.20	25.9	10.89
1999-2000	418920	266519	152401	600425	1019345	41.10	58.9	26.1	15.0
Growth in per cent	8.50	6.68	12.30	5.27	6.52				
Employment									
1993-94	27.18	19.3	7.88	288.66	315.84	8.61	91.39	6.1	2.51
1999-2000	28.11	19.42	8.69	308.64	336.75	8.34	91.66	5.8	2.54
Growth in per cent	0.56	0.10	1.64	1.12	1.074				
Employment Elasticity	0.066	0.015	0.133	0.213	0.165				
Labour Productivity growth per annum (%) (1993-94 to 1999-2000)	7.88	6.67	8.38	4.10	5.38				
Relative Labour Intensity organised/unorg. (1999-2000)	0.1305								

Person years

Source: Derived from Report of Special Group on Targetting Ten Million Employment Opportunities a year in the Tenth Five Year Plan; Planning Commission, (2002)

Notes

1. For organised employment, classified by DGE&T, reported in the Economic Survey of Government of India.
2. Organised sector GDP is as classified by CSO.
3. Unorganised sector is by residual.
4. The classifications of the economy by value added and employment are not strictly comparable. But even with reasonable margin of error, the dimensional differences in the features of the two sectors – organised and unorganised – are so significantly large as to give enough confidence about the robustness of the findings of this Table.

References:

1. Report of Special Group on “Targetting Ten Million Employment Opportunities a Year in the Tenth Plan period”, chaired by Dr. S.P. Gupta, Member; Planning Commission, Government of India (2002)
2. Ninth Five Year Plan; Planning Commission, Government of India (1999)
3. Task Force on “Employment Opportunities”, Planning Commission, Government of India (2001)
4. Approach Paper to the Tenth Five Year Plan, Planning Commission, Government of India (2001)