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Pattern of Vocational Training in India

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Abstract

It is generally believed that education and skills are the primary drivers of an economy's social development and economic growth. Economies with stronger skills and knowledge levels will respond more effectively to the opportunities of the world of work. This paper explores the pattern of Indian worker's vocational training by their gender, location, type and regions. The paper discusses that in India during 2013-14, only 6.8 percent of people earned vocational training, 6.2 percent in rural areas, while the proportion was 8.2 percent in urban areas. Compared to men, the proportion of females who earned vocational training in rural and urban areas of India was lower. During 2013-14, 76.3 percent employed, 6.1 percent unemployed and 17.6 percent not in labour force had earned vocational training in terms of broad activity. Activity-wise percentage of persons who are receiving vocational training rose from 2011-12 to 2013-14. From 2011-12 to 2013-14, the number of people employed and receiving vocational training in rural and urban areas have increased from 54.6 percent and 60.9 percent to 77.6 percent and 74 percent. It is important to note that in case of vocational training, only 2.8 percent received formal vocational training and 4 percent received informal vocational training, while in 2013-14, 93.2 percent of the population did not undergo formal or informal vocational training. The study further explores that 60.4 percent wage/salaried employees, 26.2 percent self employed, 6.8 percent contract workers and 5.4 percent casual workers are getting formal vocational training in 2013-14. In India, there is predominance of informal sector so majority of the self employed persons are getting informal vocational training. This paper suggest that if formal vocational training is offered, the likelihood of good economic returns is greater, so it is important to invest resources in vocational training.

Keywords: Formal, Informal, Education, Skill Development and Decent Employment

Introduction

In recent years, knowledge and skills are considered as an engine of social development and economic growth of an economy. It is generally believed that countries with higher and improved levels of knowledge and skills will respond more effectively and rapidly to the challenges and opportunities of globalisation (IMaCS, 2010). India is in transition to a knowledge based economy and its competitive edge will be determined by the abilities of its people to create, share and use knowledge more efficiently. This transition will need India to develop workers into knowledge workers which are more flexible, analytical and multi skilled. The requirements of skill sets in a knowledge economy are different from the ordinary one like professional, managerial, inter personal and inter functional. India therefore requires a scalable education and training system to achieve this purpose, laying the foundation for secondary and tertiary education and developing the necessary skills as a means of achieving lifelong learning (Goel, 2009).

With more than 54 percent of the total population under 25 years of age, India is one of the youngest countries in the world. The workforce of India is the second largest in the world after China. India's formally skilled workforce, however, is only 2 percent, which is very low compared to China (47 percent), Japan (80 percent) and South Korea (96 percent). For the growth and development of an economy, it is a judicious task to equip the labour force with the skills required for today's and tomorrow's employment. Because of the globalization of economies, the pace of innovation and diffusion of technology has increased. In the markets, new occupations emerge and they replace the old one. It is should be noted that the necessary skills and competencies are advanced with each profession. Therefore, India's main challenge is to promote the responsiveness of

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education and training systems so that they can change their skill sets and improve their access to training and skill development (ILO, 2010).

It is worthwhile to note that as the economic development take place in a country, the importance of primary sector has declined while that of secondary and tertiary sectors increases. In India, the share of primary sector in Gross Domestic Product (GDP) has decreased from 51 percent in 1950-51 to 13.9 percent in recent years whereas the share of the secondary sector has increased from 14 percent to 26.1 percent during the same time period. Since 1950-51, the tertiary sector has increased significantly, with its share in GDP increasing from 33 percent in 1950-51 to 59.9 percent in 2013-14. From the above, it is clear that India was dominated by the primary sector, but now tertiary sector is the dominant sector of the economy. When the sectoral transformation of the economy takes place, a significant proportion of the workforce transferred from primary sector to tertiary sector. It should be noted here that the skill sets that are required in the service sector are entirely different from those required in the agricultural sector. As demonstrated by the shrinking jobs in the agricultural sector, this implies a significant skill gap during the time of sectoral change (Labour Bureau, 2013-14).

Objectives of the Study

The study will focus on the following main

To analyse the pattern of vocational training in India. Methodology

The present study is a descriptive study. The data used in this study has been taken from the Employment and Unemployment Schedule of the National Sample Survey Organisation (NSSO), Government of India and Ministry of Labour and Employment. The other reports which are consulted FICCI survey, Economic Survey of India and Ministry of Skill Development and Entrepreneurship. Skill development has become one of India's paramount subject matter and government has launched various policies and programmes to work on this, in order to boost or build skills with in its labour force. In India. there are two main sources through which skills are acquired: formal and informal training. Now a days, vocational courses are becoming very popular among young people because they thought that taking these courses would provide more and better employment opportunities than traditional academic courses. In order to achieve faster, sustainable and inclusive and to provide decent employment opportunities to the young people, it is important to mention that skill development is crucial.

Table 1 indicates the distribution of individuals who have received vocational training in India. The table shows that the percentage of people stated to have earned vocational training increased from 2011-12 to 2013-14, i.e., 0.9 percent to 6.8 percent, at all Indian level. In the same period, the percentage of people who received vocational training in rural and urban areas also increased from 0.5 percent to 6.2 percent and from 1.6 percent to 8.2 percent. Compared to rural men and women, the proportion of urban men and women receiving vocational training is higher, i.e., 11.3 percent and 4.8 percent in urban areas and 8.5 percent and 3.4 percent in rural areas during 2013-14.

Table 1 Distribution of Persons who received Vocational Training in India (In percentage)

Area/Category of Persons		Persons who received Vocational Training						
		2011-12	2012-13	2013-14				
Rural	Male	0.8	3.3	8.5				
	Female	0.3	1.5	3.4				
	Total	0.5	2.4	6.2				
Urban	Male	1.9	5.9	11.3				
	Female	1.3	3.1	4.8				
	Total	1.6	4.5	8.2				
Rural+ Urban	Male	1.1	4.0	9.3				
	Female	0.6	1.9	3.8				
	Total	0.9	3.0	6.8				

Source: NSSO, 68th Round 2011-12 on Status of Education and Vocational Training in India,

Annual Employment & Unemployment Survey of Labour Bureau, 2012-13 and 2013-14

In table 2, the broad activity-wise percentage distribution of persons who received vocational training has been shown. It is evident from the table that 76.3 percent employed, 6.1 percent of unemployed and 17.6 percent of not in labour force workers have received vocational training during 2013-14. The percentage of people who received vocational training increased activity-wise from 2011-12 to 2013-14. From 2011-12 to 2013-14, the percentage of people employed and pursuing vocational training in rural and urban areas have increased from 54.6 percent and 60.9 percent to 77.6 percent and 74 percent. On the other hand, among males and females who are employed in rural and urban areas and receiving vocational training their percentage has also increased respectively, but urban males and females employed undergo more vocational training compared to rural males and females.

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Table 2 Percentage Distribution of persons who received/receiving Vocational Training by Broad Activity Status

Sector/Year		Employ	Employed			Unemployed			Not in labour force		
		M	F	T	M	F	T	M	F	T	
2011-12	Rural	67.7	29.3	54.6	7.2	9.2	7.9	25.1	61.5	37.5	
	Urban	76.0	36.7	60.9	4.5	4.7	4.5	19.6	58.6	34.5	
	Rural+ Urban	72.4	33.9	58.3	5.7	6.4	5.9	22.0	59.7	35.8	
2012-13	Rural	83.3	47.6	73.1	5.9	8.8	6.7	10.8	43.6	20.2	
	Urban	80.7	41.9	68.1	4.4	8.4	5.7	15.0	49.7	26.2	
	Rural+ Urban	82.3	45.0	71.0	5.3	8.6	6.3	12.5	46.3	22.7	
2013-14	Rural	85.2	53.0	77.6	4.9	10.5	6.2	9.9	36.5	16.2	
	Urban	84.2	47.8	74.0	4.5	9.5	5.9	11.3	42.7	20.1	
	Rural+ Urban	84.9	51.0	76.3	4.8	10.1	6.1	10.4	39.0	17.6	

Source: NSSO, 68th Round 2011-12 on Status of Education and Vocational Training in India,

Annual Employment & Unemployment Survey, 2011-12. 2012-13 and 2013-14

Table 3 indicates the percentage distribution of individuals by gender and status of vocational training during 2013-14. The table indicates that the majority of people undergo vocational training through the informal system and only 2.8 percent have undergone formal vocational training, while 93.2 percent of the population did not receive formal or informal vocational training in 2013-14. In rural areas, informal vocational training is reported to have been received by 4 percent, of which 5.6 percent are males

and 2 percent are females. However, only 2.8 percent have undergone formal vocational training, of which 2.8 percent are male and only 1.4 percent are females. The number of people who have acquired formal vocational training is higher in urban areas compared to informal vocational training, i.e., 4.4 percent and 3.8 percent, respectively. Gender disparities can also be seen in this case of formal as well as informal training. In the formal sector, men are trained almost twice as often as women, and in the case of the informal sector, it is three times.

Table 3 Percentage Distribution of Persons by Gender and Status of Vocational Training during 2013-14

Area	Formal	Formal**			al*		None	None		
	M	F	Т	M	F	T	M	F	T	
Rural	2.8	1.4	2.2	5.6	2.0	4.0	91.5	96.6	93.8	
Urban	5.7	3.0	4.4	5.6	1.8	3.8	88.7	95.2	91.8	
Rural+ Urban	3.6	1.9	2.8	5.6	1.9	4.0	90.7	96.2	93.2	

Source: Annual Employment & Unemployment Survey of Labour Bureau, 2013-14

*Informal training is defined as the process of acquiring the expertise in a vocation through ancestors over generations.

**Formal vocational training is a training which is acquired through institutions under structural training programme and led to recognised certificate or diploma.

Table 4 shows the percentage distribution of the labour force that received or receiving vocational training according to the type of the training, gender and activity status during 2013-14. The table indicates that 96.9 percent of the informally trained workers are employed under the usual principal status approach, while 85.5 percent of the formally trained persons who have received vocational training are reported to be employed under the same approach. The table further indicates that the rate of unemployment is also low in informally trained workers as compared to formally trained workers during 2013-14. In rural areas, among informally trained labour force, 96.7 percent are employed under the usual principal status approach from which 97.9 percent are males and 90.5 percent are females while in case of formally trained labour force, 83.5 percent are employed under the usual principal status approach from which 86.6 percent are males and 72.8 percent are females. In case of urban areas, among informally trained labour force, 97.3 percent are employed under the usual principal status approach from which 98.2 percent are males and 91.8 percent are females and in case of formally trained labour force, 88 percent are employed under the usual principal status approach from which 91.2 percent are males and 78.5 percent are females. The table gives a real picture of Indian economy, which has a dominant share in informal sector employment.

Table 4 Percentage Distribution of Labour Force who received or receiving Vocational Training by Type of Training, Gender and Activity Status during 2013-14

Area	Type of	Employed			Unemployed			
	Training	М	F	Т	M	F	Т	
Rural	Formal	86.6	72.8	83.5	13.4	27.2	16.5	
	Informal	97.9	90.5	96.7	2.1	9.5	3.3	
Urban	Formal	91.2	78.5	88.0	8.8	21.5	12.0	
	Informal	98.2	91.8	97.3	1.8	8.2	2.7	
Rural+ Urban	Formal	88.7	75.6	85.5	11.3	24.4	14.5	
	Informal	98.0	90.9	96.9	2.0	9.1	3.1	

Source: Annual Employment & Unemployment Survey of Labour Bureau, 2013-14

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Table 5 indicates the percentage distribution of labour force who received or receiving vocational training in various fields during 2013-14. The table shows that unemployment rate is lower among informally trained labour force than formally trained labour force. The percentage of unemployed persons among informally trained labour force found high in engineering trades other than civil, computer trades (12.2 percent) followed by fitter (10.7 percent), office and business related work (4.9 percent) and health and paramedical services (4.8

percent) respectively. On the other hand, in formally trained workforce the rate of unemployment is high in engineering trade other than civil, computer trades (25.2 percent) followed by beautician, hairdressing related work (18.6 percent), textile related work (16.7 percent) and office and business related work (14.1 percent), while it is lowest in leather related work and work related to tour operators or travel managers i.e., 4.1 percent and 4.7 percent respectively.

Table 5 Percentage Distribution of labour force who received/receiving vocational training in various fields during 2013-14

Activity	Field of Training	Formal		Informa	Informal		
Code		E	U	E	U		
01	Engineering trades other than civil, computer trades	74.8	25.2	87.8	12.2		
02	Civil engineering and building construction related works	89.1	10.9	98.4	1.6		
03	Leather related work	95.9	4.1	99.7	0.3		
04	Textile related work	83.3	16.7	95.5	4.5		
05	Catering, nutrition, hotels and restaurant related work	86.5	13.5	97.0	3.0		
06	Agriculture and crop production related skills and food preservation related work, non-crop based agricultural and other related activities	88.3	11.7	96.9	3.1		
07	Health and paramedical services	89.3	10.7	95.2	4.8		
08	Work related to childcare, nutrition, pre-schools and crèche	89.9	10.1	95.3	4.7		
09	Office and business related work	85.9	14.1	95.1	4.9		
10	Driving and motor mechanic work	96.6	3.4	98.3	1.7		
11	Beautician, hairdressing and related work	81.4	18.6	97.3	2.7		
12	Work related to tour operators or travel managers	95.3	4.7	98.8	1.2		
13	Plumber	95.1	4.9	95.7	4.3		
14	Fitter	87.1	12.9	89.3	10.7		
15	Mechanist	85.6	14.4	96.3	3.7		
99	Others	86.4	13.6	97.4	2.6		

Source: Annual Employment & Unemployment Survey of Labour Bureau, 2013-14

Table 6 shows the state-wise percentage distribution of persons who received vocational training pursuing various activities in rural and urban areas during 2013-14. Table shows that 48.3 percent self employed followed by 24.4 percent wage/salaried employees, 20.9 percent casual workers and 6.4 percent contract workers undergo vocational training at all India level in rural areas. Self employed workers in states such as Chhattisgarh (62 percent) followed by Jharkhand (61.8 percent), Madhya Pradesh (58.8 percent) and Mizoram (58.5 percent) undergo more vocational training than Goa (10.9 percent) followed by A & N (12.5 percent), Chandigarh (12.7 percent) and D & N Haveli (22 percent). Wage/salaried employees in states like D & N Haveli (76.2 percent) followed by Goa (66.7 percent), Sikkim (65.9 percent) and Nagaland (63.6 percent) are receiving more vocational training than Manipur (14.8 percent) followed by Jammu and Kashmir (9.8 percent) and Chhattisgarh (6.6 percent). In the case of contract workers, Arunachal Pradesh is the only state in which 90.5 percent contract workers undergo vocational training; among other states very few contract workers undergo vocational training. Nevertheless, in case of casual workers in states such as Kerala (39.7

percent) followed by A & N (38.7 percent) and West Bengal (33.7 percent) workers undergo vocational training.

However, in urban areas maximum workers are involved in wage/salaried i.e., 43 percent who undergo vocational training, followed by 39.2 percent self employed, 13.2 percent casual worker and 4.7 percent contract workers. Wage/salaried employee undergo more vocational training in states such as Nagaland (93.8 percent), followed by Arunachal Pradesh (90.8 percent), Himachal Pradesh (77.2 percent) and Pondicherry (66.8 percent) than D & N Haveli (14.3 percent) followed by Manipur (19.9 percent), Jammu & Kashmir (23 percent) and Andhra Pradesh (27.2 percent). As in urban areas, few self employed workers undergo vocational training in states such as Jharkhand (69.5 percent) followed by Manipur (68.3 percent) and Daman & Diu (66.9 percent) received more vocational training than Nagaland (3.3 percent) followed by Arunachal Pradesh (9.2 percent) and Lakshadweep (11.8 percent). In case of contract workers, less contract workers received vocational training among all the states accept D & N Haveli (52.7 percent). Among casual workers, however, only 30.2 percent of casual workers in West Bengal undergo vocational training, while the percentage is below this amount other

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Table 6 State-Wise Percentage Distribution of persons who received Vocational Training pursuing various activities in Rural and Urban Areas during 2013-14

(Usual Principal Status approach)

Name of the	Percentag	e Distribu		persons		differen	t activiti	es who	
state/UT			cational trai		1 0 1 1 1				
	Self employed		employee			Contract worker		Casual Worker	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	
Andhra Pradesh	54.8	49.9	22.1	27.2	2.1	4.0	21.0	18.8	
Arunachal Pradesh	-	9.2	9.5	90.8	90.5	-	-	-	
Assam	41.3	26.4	33.4	71.9	4.7	0.6	20.6	1.2	
Bihar	47.9	48.7	23.2	40.2	14.7	4.8	14.3	6.3	
Chhattisgarh	62.0	36.2	6.6	49.9	1.1	3.4	30.3	10.4	
Delhi	41.4	34.6	43.1	52.5	8.3	7.0	7.2	5.9	
Goa	10.9	49.5	66.7	44.6	22.4	5.9	-	-	
Gujarat	29.9	38.9	44.0	32.5	11.0	11.0	15.2	17.6	
Haryana	39.8	36.7	43.8	53.1	4.3	3.8	12.1	6.4	
Himachal Pradesh	53.3	16.1	32.8	77.2	6.5	-	7.3	6.7	
Jammu & Kashmir	53.8	41.4	9.8	23.0	16.3	14.2	20.1	21.4	
Jharkhand	61.8	69.5	14.7	26.2	16.0	2.9	7.3	1.4	
Karnataka	47.3	28.4	38.2	60.9	2.4	2.0	12.2	8.7	
Kerala	29.2	30.5	28.9	36.7	2.2	2.9	39.7	30.0	
Madhya Pradesh	58.8	38.6	22.1	52.0	4.5	0.6	14.6	8.9	
Maharashtra	54.8	39.6	31.9	48.9	6.6	7.5	6.7	4.0	
Manipur	75.5	68.3	4.8	19.9	-	3.6	19.7	8.3	
Meghalaya	22.6	37.6	61.5	56.4	-	0.1	16.0	6.0	
Mizoram	58.5	32.5	26.3	64.9	7.1	0.4	8.0	2.2	
Nagaland	34.5	3.3	63.6	93.8	1.1	2.9	0.9	-	
Orrissa	42.6	35.2	33.5	55.9	8.5	4.5	15.4	4.3	
Punjab	27.9	25.9	20.0	60.0	16.8	10.6	19.8	3.5	
Rajasthan	35.6	43.8	27.9	43.5	15.1	5.1	17.5	7.6	
Sikkim	27.9	43.5	65.9	56.3	2.5	0.2	3.8	-	
Tamil Nadu	35.7	26.1	39.7	52.7	0.9	5.2	23.7	16.0	
Telengana	53.7	46.2	25.1	44.3	2.3	2.3	18.9	7.1	
Tripura	41.2	60.4	42.7	39.6	6.4	-	9.6	-	
Uttar Pradesh	51.7	33.4	32.7	60.3	8.0	0.5	7.5	5.8	
Uttaranchal	54.3	40.5	19.6	42.2	5.6	2.5	20.5	14.7	
West Bengal	44.4	30.4	16.1	33.0	5.8	6.3	33.7	30.2	
A & N Islands	12.5	17.1	39.8	47.4	9.0	7.8	38.7	27.6	
Chandigarh	12.7	16.8	55.2	66.3	13.1	16.8	19.0	-	
D & N Haveli	22.0	33.0	76.2	14.3	1.8	52.7	-	-	
Daman & Diu	43.7	66.9	56.3	33.1	-	-	-	-	
Lakshadweep	21.8	11.8	50.6	56.0	13.4	30.2	14.1	2.0	
Pondicherry	42.5	20.2	55.0	66.8	-	-	2.5	13.0	
Total	48.3	39.2	24.4	43.0	6.4	4.7	20.9	13.2	

Source: Annual Employment & Unemployment Survey of Labour Bureau, 2013-14

Table 7 shows the percentage distribution of persons who received/receiving vocational training in various fields and pursued various economic activities during 2013-14 as per the usual principal status approach. The table indicates that 54.9 percent wage/salaried employees in rural areas undergo formal vocational training followed by self employed (28.4 percent), casual workers (8.7 percent) and contract workers (8 percent). As the informal sector predominates in India, in India, the majority of the self employed workers (56.1 percent) undergo informal vocational training, followed by casual workers (25.7 percent) and wage/salaried workers (12.4 percent). In urban areas, 66.6 percent wage/salaried workers undergo formal vocational training during 2013-14, while 53.2 percent of self employed received informal vocational training. In rural and urban areas, contract and casual workers are undergoing less formal and informal vocational training in India.

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Table 7 Percentage Distribution of persons who received/receiving vocational training and pursuing various economic activities during 2013-14

(Usual Principal Status Approach)

Area	Type of Training	Self employed	Wage/Salaried employee	Contract worker	Casual Worker	Total
Rural	Formal	28.4	54.9	8.0	8.7	100.0
	Informal	56.1	12.4	5.8	25.7	100.0
Urban	Formal	23.8	66.6	5.0	4.6	100.0
	Informal	53.2	21.3	4.5	21.0	100.0
Rural+Urban	Formal	26.2	60.4	6.6	6.8	100.0
	Informal	55.3	14.9	5.4	24.4	100.0

Source: Annual Employment & Unemployment Survey of Labour Bureau, 2013-14

Conclusion

For an economy to expand, better quality of education and skills are needed, but insufficient quality of education and skill development has become a major constraint on a country's long-term economic growth and sustainability path. It is important to note that India has seen a rise in the number of individuals estimated to have earned vocational training. In the informally trained labour force, the unemployment rate is lower than in the formally trained labour force. In addition, in the case of both formal and informal vocational training in India, there are gender differences. Males are trained in training about double that of females and it is almost three times in the case of informal training. There are relatively few informal or contract employees receiving vocational training in both rural and urban areas. It is worth noting that, there is a predominance of the informal sector in India, so most self-employed persons receive informal vocational training and rest receive formal vocational training according to the usual principal status approach in rural areas. Now, a relevant issue is, in a country like India where a large number of workers entered the workforce every year for that current annual formal skilling capacity i.e., 2.8 percent is adequate to meet this demand?

Suggestions

With a much lower number of women working in rural and urban areas receiving formal vocational training, the need for the hour is to provide women with formal training so that employability skills growth can be used as a major factor in supporting women's jobs. Generally speaking, the development of skills is believed to be the key to accessing India's competitiveness and to improving the access of individuals to decent employment; therefore, the quality of training should be aligned with global standards and appropriate to the needs of national and foreign markets. In addition to this, there is a regional imbalance in training opportunities, and special efforts will be made to create training facilities in deficient regions to provide more equal access across the country. If formal vocational training is offered, the likelihood of good economic returns is greater, so it is important to invest resources in vocational training.

References

- Agarwal, R. and T.F. Naqvi (2002). Skill Development in the Changing Global Context. The Indian Journal of Labour Economics. Vol. 45. No. 4. pp. 1105-19
- Government of India (GOI). Annual Employment and Unemployment Survey. Various Years. Ministry of Labour and Employment. Labour Bureau. Chandigarh.
- Government of India (GOI). Eleventh Five-Year Plan. 2007-12. Planning Commission. New Delhi.
- Government of India (GOI). Twelfth Five-Year Plan. 2012-17. Planning Commission, New Delhi.
- Kingdom, G. G. and J. Unni (2001). Education and Women's Labour Market Outcomes in India. Education Economics. Vol. 9. No. 2. pp-173-95
- Mathur, A. and R.P. Mamgain (2002). Technical Skills, Education and Economic Development in India. Economic and Political Weekly. Vol. 45. No. 4. pp. 1015-46
- 7. NSSO (Various rounds). Employment and Unemployment Situation in India. National Sample Survey Organisation. Ministry of Statistics and Programme Implementation (MOSPI). Government of India, New Delhi.
- 8. NSSO (2011-12). 68th Round on Status of Education and Vocational Training in India. National Sample Survey Organisation. Ministry of Statistics and Programme Implementation (MOSPI). Government of India. New Delhi.
- NSSO (2014). 71st Round on Education in India. National Sample Survey Organisation. Ministry of Statistics and Programme Implementation (MOSPI) Government of India. New Delhi.
- Singh, C.S.K. (2003). Skill, Education and Employment: A Dissenting Essay. Economic and Political Weekly. Vol. 38. No. 31. pp. 3271-3276
- Singh, S. (2002). Education, Skills and Training: Some Perceptions. The Indian Journal of Labour Economics. Vol. 45. No. 4. pp. 1079-93
- Tilak, J.B.G. (1980). Education and Labour Market Discrimination. The Indian Journal of Industrial Relations. Vol. 16. No. 1. pp. 95-114