



Munich Personal RePEc Archive

Unemployment among educated youth: implications for India's demographic dividend

Majumder, Rajarshi

Department of Economics, University of Burdwan

9 May 2013

Online at <https://mpra.ub.uni-muenchen.de/46881/>

MPRA Paper No. 46881, posted 10 May 2013 06:57 UTC

Unemployment among Educated Youth

Implications for India's Demographic Dividend

Rajarshi Majumder[@]
Department of Economics
University of Burdwan

&

Dipa Mukherjee
Department of Economics
Narasinha Dutt College

Abstract

Researchers claim that India is poised for reaping demographic dividend and leapfrog to a higher level of income-employment situation utilising the relatively larger share of youth or working age persons in total population. However, the outcome depends on the contribution of youth to national product. India at present suffers from remarkably high educated unemployment and questions are also raised about the employability of the youth because of their inadequate education, training, and market ready skill. Huge youth unemployment, especially educated unemployment is the surest way to social tension, unrest, and unlawful activities turning the demographic dividend into a demographic nightmare. In this paper we look at the issue of education, skill formation and unemployment among youth in India, focussing specially on educated unemployment. We find that current skill/training situation of youth in India is inadequate. Surplus and shortage coexists in the labour market indicating serious mismatch between supply and demand. There is an urgent need to relook at human resource development strategies in the country.

[@] Corresponding author; Department of Economics, University of Burdwan, Golapbag, Burdwan, West Bengal-713104, INDIA; Email: meriju@rediffmail.com

Unemployment among Educated Youth

Implications for India's Demographic Dividend

1. INTRODUCTION

Demographic transition creates a small window for countries to leverage their demographic dividend and leapfrog to a higher level of income-employment situation. This opportunity comes in the middle stage of demographic transition when the population pyramid shows signs of maturity and bulges in the middle, indicating a relatively larger share of youth in total population, and hence a low dependency ratio. Quantum of human and financial resources needed earlier for provisioning of children's needs – primary healthcare, primary education, and motherly duties at the household level – come down significantly while the aged population and hence financial drain for old age care is still small. Consequently, countries can engage this surplus capital – human and financial – to augment its productive capacity to raise per capita income level dramatically. The key to reaping the demographic dividend lies in using the working age population to its fullest potential and enhance production to the maximum possible. Critical ingredient would be the adolescent and youth population who would be entering the workforce in the near future and contribute to the increased production. However, the efforts will fall flat if this group of youth, on which so much depends, are either not productively engaged or are unlikely to be so in near future. Often questions are also raised about the employability of the youth because of their inadequate educations, training, and market ready skill or sometimes even because of their ill health. Huge youth unemployment, especially educated unemployment is the surest way to social tension, unrest, and unlawful activities turning the demographic dividend into a demographic nightmare. In this paper we look at the issue of education, skill formation and unemployment among youth in India, focussing specially on educated unemployment. We find that current skill/training situation of youth in India is inadequate. Surplus and shortage coexists in the labour market indicating serious mismatch between supply and demand. There is an urgent need to relook at human resource development strategies in the country if we really are to reap the promised demographic dividend.

2. DEMOGRAPHIC DIVIDEND AND INDIA'S YOUTH

India will add about one quarter of the global youth population in the next three decades. This relative '*greening*' of the population and workforce that started in the late 1970s is likely to

last another 30 years from now, adding over 300 million working-age adults to the population. This would make India the largest single contributor to the incremental global workforce over the next three decades. Whether India is able to transfer this demographic dividend to a source of income growth would depend on the readiness of India's youth to participate meaningfully in the production process. This in turn would depend critically on educational achievements of the youth and their employment situation. If the youth are not absorbed meaningfully into the workforce and are productive enough, this demographic dividend will turn into a demographic nightmare. Huge youth unemployment is the surest way to social tension, unrest, and unlawful activities. The frustration of unemployed youth as evident during the recent *Arab Spring* suggests that the lack of jobs can be a source of social unrest. Work by the Institute of Criminology at Cambridge University, which has been studying the subject for nearly 50 years, established long ago that young people are more likely to commit crime when they are out of work. That crime is often petty but it can turn into something more serious. Left untreated, youth unemployment is an issue set to destabilise fragile economies, become a breeding ground for extremism, and leave a generation permanently scarred. Hence to understand India's future growth potential we must look at the issue of education, skill formation and employment among youth in India.

Also, being a vast country with diverse social groups and spatial patterns, there may be disparity in the readiness of youth to reap this dividend. Groups/regions where youth lack proper education, vocational training, or marketable skill will be left behind when the physical capital would expand and engage persons with adequate human capital. While this will create a drag on the macroeconomic performance and lower the demographic dividend in general, a further crucial consequence would be increasing disparities among social groups and regions and associated social tensions and unrest.

3. OBJECTIVES

Against the conceptual framework discussed above, the paper aims to look at the following issues:

- a) *Education and Skill formation among youth*
- b) *Current status of employment and unemployment among educated youth*
- c) *Current status of education/technical skill of youth workers*
- d) *Regional Pattern of unemployment among educated youth*

4. DATA SOURCES

The paper mainly uses the NSSO survey data related to *Education in India: Participation and Expenditure* for 2007-08 as also the NSSO survey data on *Employment and Unemployment*

for the year 2009-10. Secondary data sources like Statistical Handbooks, reports from various ministries of the Government of India and Chambers of Commerce have also been used.

5. EDUCATION AND TRAINING AMONG YOUTH

Formal educational standard of the Indian youth is not remarkable (Table 1). Just 40 per cent have secondary or higher secondary level of education while less than 8 per cent have graduate degree or post graduate training, more than 17 per cent are illiterate. Vocational and technical education is noticeably lacking among the youth with only 2.5 per cent having any technical training (Table 2 & 3). Just about 1 in every 100 have technical degrees in medicine, engineering or agro technology. Even for those who have some short of vocational training, in most cases they were informally obtained either from family members or through on-the-job instructions. Another notable feature has been the high drop out among youth learners before completing the full-length of general education or technical training (Table 4). More than 70 per cent of the youth have left studies before completing the highest stage of study. Most remarkably there is a clear locational and gender bias also with rural youth and young woman lagging far behind the urban or male counterparts in education and training.

6. EMPLOYMENT STATUS OF YOUTH

Of the total 275 million youth population in India, 102 million youth are active in the labour market (Table 5). More than 8 million, or close to 8 per cent of these youth, are unemployed. Among those who are employed, less than 20 per cent have regular salaried jobs while close to half are self-employed – an euphemism used more often to indicate ‘*doing something rather than being openly unemployed*’. Most of these self-employments are petty trading, cultivation, running small enterprises, etc. A substantial portion – more than one fourth – is engaged as casual labourers with no certainty about job availability or earnings from one day to the next. It thus transpires that remunerative employment among youth is not satisfactory with very few engaged in regular productive jobs. This raises a question regarding the contribution of youth to the GDP and their productivity.

7. UNEMPLOYMENT AMONG EDUCATED YOUTH

We are more concerned about joblessness among educated youth – those with a substantial number of years of formal education. If we consider youth with at least high school level of education (passed secondary examination or above) as *educated* a bleak picture emerges (Table 6 & 7). Unemployment is much more pronounced among these groups. While the average unemployment rate among youth is 6.8 per cent, that among school pass outs is 12.1 per cent. More than 11 per cent of Indian graduates and post-graduates are jobless. Close to

two-third of school pass-outs are self-employed while close to half of graduates and post-graduates are casual labourers. In terms of relative size too, educated persons are formidable among the unemployed. While less than half of our working people are school pass-outs, close to two-third of all unemployed youth have secondary or higher level of education (Table 8). Thus the employment situation of educated youth in India is much worse than the others.

The situation is poorer for youth with certain level of technical training. Though such technical training/qualifications are quite sought after in the country and are supposed to provide market ready applied skills to the candidates, unemployment among technical degree holders is close to 13 per cent while that among diploma holders is about 26 per cent (Table 9). As a result, contrary to expectations, more than one-fourth of youth with technical training are without any gainful employment.

We can also classify youth according to their skill level – a combination of their general, vocational, and technical education. We may consider youth with at least secondary level of general education and some vocational/technical training as *moderately skilled* and those with at least graduate level of education and some vocational/technical training as *highly skilled*. We observe that unemployment among *moderately skilled* youth is 27 per cent while that among *highly skilled* youth is about 20 per cent (Table 10). On an aggregate about one-fourth of skilled youth are without jobs. Incidence of skilled unemployment is higher among females compared to males and in rural areas relative to urban areas. As against this, unemployment among unskilled youth – those with less than 10 years of schooling or without any vocational/technical training is just about 6 per cent.

It is thus evident that unemployment among educated youth is a serious problem in India. This has a regional setting too with states like Kerala, Orissa, Jharkhand, Assam, Bengal and Jammu & Kashmir consistently having higher levels of educated youth unemployment compared to national average. On the other hand, unemployment among educated youth is relatively less than national average in the states of Gujarat, Madhya Pradesh, Maharashtra, Chhattisgarh, and Karnataka. Whether this has any relation with regional socioeconomic scenario shall be explored in a latter section.

8. IMPACT OF HIGH EDUCATED YOUTH UNEMPLOYMENT

Such a high incidence of educated youth unemployment has much wider implications for the future of the country.

First, the missing workers will certainly bring down the actual GDP from the potential and create a drag on the rate of capital formation because of high proportion of unproductive population. These twin effects of sub-optimal production and lower savings rate and capital formation will undermine the growth performance and limit scope for future employment expansion. A vicious cycle would emerge where jobless growth will halt growth itself and hence precipitate joblessness further. It is all the more precarious when it comes from the educated/trained/skilled section of the youth workforce.

Second, long term unemployment of the youth actually means that the fresh entrants to the workforce are without any job. This is a sure way of deskilling the trained youth whereby the young men and women tend to forget whatsoever they had learnt in the preceding years due to long non-application of knowledge. As a result, when some of them do find a job after a long wait at last, they tend to be low productive workers.

Third, such a long wait at the beginning of their prospective working life creates the *discouraged worker effect* whereby many of them, especially young women, withdraw themselves from the labourforce.

Fourth, education in India is highly subsidised and making of a graduate or post-graduate entails substantial cost to the State & society. Educated youth unemployment means a loss to the national exchequer and in a capital scarce developing country where the state does not have adequate money to spend on basic needs and infrastructure, such a loss is quite unacceptable.

Fifth, huge educated youth unemployment is a major threat to social stability and internal security. Since education/training involves substantial cost to the parents and individuals (in spite of huge subsidies by the government), being unemployed is a type of financial loss to these individuals. Also, investments in education are made by parents and individuals with the expectation of getting returns *a la* the theories of human capital formation. Therefore, when these young people come out of the haloed portals of educational institutions and find themselves un-wanted in the job market, leave aside being wooed, a sense of betrayal, being cheated and exploited creeps in, which quickly turns to frustration and despair. These young adults are breeding grounds of social and political unrest and very frequently are soft targets of extremist groups for utilising as pawns in subversive activities. Educated unemployment among youth is therefore the surest way to socioeconomic disaster.

9. DISSECTING EDUCATED YOUTH UNEMPLOYMENT

What are the reasons behind such huge educated youth unemployment in India? We posit three factors as possible causes.

a) Low Demand

First, this may be a demand side problem with low demand for workers in recent times caused in turn by slowing down of the economy. Slow economic growth is generally accompanied by slackening of the modern factory sector as well as the tertiary sector, both of which are major employers of educated youth. As a result demand for educated youth would come down creating surplus in the labour market. In fact, cross-sectional analysis across Indian states support this hypothesis with relatively worse-off states (in terms of PCI) and the slow growing states (in terms of growth of PCNSDP) experiencing relatively higher unemployment rates among educated youth.

b) Excess Supply

Second, this may be a supply side problem where there is a large supply of educated youth in the job market. If such was the case, then states with relatively larger proportion of youth having post-secondary education and training would also be states with high unemployment among them. This hypothesis however throws up mixed results. Excess supply do seem to be the fact in rural areas where the association between unemployment rate and incidence of education/skill among youth is strongly positive. In urban areas however this association is insignificant, indicating that excess supply is not a influential factor in here.

c) Skill Mismatch

Third, it may be a classic case of neither excess supply nor excess demand in the aggregate quantity terms but rather a mismatch between the type of workers demanded in the labour market and the types that are supplied by our educational/training institutions. Recent evidences suggest that such a mismatch do exist in the Indian labour market. A study by Murthy and Paul (2003) indicate that more than 80 per cent of corporate entities report vacancies at managerial tend in the preceding year of which close to half are hard-to-fill vacancies because of skill-shortages. The candidates who apply do not fulfil the job requirement or skill-demanded of the employers. Problem areas include lack of job-specific skill, absence of basic abilities and unsuitable personal traits to occupy managerial positions. Surprisingly most of the applicants had a post- graduate degree/diploma in business administration or business management. Blom and Saiki (2011) present a similar story for engineering and technical graduates. It is reported that 25 per cent of the employers are not

happy with the skill level of their graduate engineers/technologists .majority lack the basic problem solving skills and mind application quality-a direct fall out of our rote education system. Communication and team working skills are also absent in one-fourth of the engineers and more than one –fifth lack such simple qualities like mathematical, science and technological knowledge- a field which they were specifically trained in. A study by FICCI (2011) points out that 90 per cent of employers/business houses under FICCI faced labour shortage in the previous years. More than two-third of them suffered revenue loss more than 10 per cent due to low production and unmet orders caused by labour shortage.

It is thus amply clear that there is a serious mismatch between the skill set possessed by Indian youth and the skill that are demanded by the employers in the labour market .while there is a serious over-supply to unskilled workers and low skilled workers, there is a serious shortage of skilled man power and most of our trained/educated youth are unemployables rather than unemployed. This calls for immediate relook at our training /education system and adjusting them to match the skilled demand of current times.

10. SUMMARY

We had initiated our discussion by pointing out the possible demographic dividend that India may reap over the next decade or so by utilizing its growing youth population productively. However the current scenario as discussed here does not project a rosy picture. Unemployment among educated youth is high, in fact highest among all groups. Skilled and trained youth also face a bleak employment scenario where even technical degree holders have higher than average unemployment rates. Unless this mismatch is corrected on a war footing, India shall end up with a vast mass of unemployed and unemployable youth and facing a demographic disaster rather than a demographic dividend. And that would surely be a powder keg of social disaster waiting to explode at the slightest spark of discontent.

References

- Blom, Andreas and Hiroshi Saeki (2011) - *Employability and Skill Set of Newly Graduated Engineers in India*, Policy Research Working Paper No. 5640, The World Bank South Asia Region Education Team, [available from <http://elibrary.worldbank.org/content/workingpaper/10.1596/1813-9450-5640> accessed on 15-03-2013]
- FICCI (2011) – *FICCI Survey on Labour Skill Shortage for Industry*, [available from www.ficci.com/SEDocument/20165/FICCI_Labour_Survey.pdf, accessed on 12-02-2013]
- Murti, Ashutosh Bishnu and Bino Paul GD (2013) - *Labour Market Flexibility and Skill Shortage: An Exploration of Key Indicators*, LMRF Discussion Paper Series, Discussion Paper No. 16, Tata Institute of Social Sciences [available from http://www.atlmri.org/index.php/downloads/doc_download/41-lmrf-discussion-paper-18, accessed on 25-03-2013]
- NSSO (2008) – *Unit level records of NSSO 64th round survey on Education in India: 2007-08: Participation and Expenditure, July 2007 – June 2008*
- NSSO (2012) – *Unit level records of NSSO 66th round survey on Employment and Unemployment in India, July 2009 – June 2010.*

Table 1
Proportion of youth in different Educational Categories – 2007-08

Category	Rural			Urban			All
	Male	Female	All	Male	Female	All	
Illiterate	12.8	29.5	21.0	6.3	11.5	8.8	17.4
Literate below Primary	7.5	8.0	7.8	4.9	4.8	4.9	6.9
Below Secondary	44.8	38.2	41.5	34.6	30.2	32.5	38.9
Secondary Passed	30.0	20.9	25.5	39.1	38.0	38.6	29.4
Post HS Diploma	1.1	0.5	0.8	2.5	1.2	1.8	1.1
Graduate & above	3.9	2.8	3.4	12.7	14.3	13.4	6.3

Source: Author's calculations based on NSSO (2008)

Table 2
Proportion of Youth having Technical Skill/Training – 2007-08

Category	Rural			Urban			All Male	All Female	All
	Male	Female	All	Male	Female	All			
Certificate/Diploma	1.1	0.5	0.8	3.5	2.0	2.8	1.8	0.9	1.4
PG Diploma	0.3	0.3	0.3	1.9	1.4	1.6	0.8	0.6	0.7
Degree	0.2	0.0	0.1	1.5	0.7	1.1	0.6	0.2	0.4
Any Tech Training	1.6	0.8	1.2	6.9	3.9	5.5	3.2	1.7	2.5
No Tech education	98.4	99.2	98.8	93.1	95.9	94.5	96.8	98.3	97.5

Source: Author's calculations based on NSSO (2008)

Table 3
Proportion of Youth having Vocational Training – 2007-08

Category	Rural			Urban			All Male	All Female	All
	Male	Female	All	Male	Female	All			
Formal Training	2.1	1.5	1.8	6.0	4.7	5.4	3.3	2.4	2.8
Non-formal training	6.0	2.8	4.4	7.7	3.4	5.7	6.5	3.0	4.8
Any Training	91.9	95.8	93.8	86.3	91.8	88.9	90.2	94.6	92.4
No Vocational Skill	8.1	4.2	6.2	13.7	8.2	11.1	9.8	5.4	7.6

Source: Author's calculations based on NSSO (2008)

Table 4
Proportion of Youth not attending Educational/Training Institutions – 2007-08

Gender	Rural	Urban	All
Male	79.9	73.5	78.0
Female	87.7	76.2	84.5
All	83.8	74.8	81.1

Source: Author's calculations based on NSSO (2008)

Table 5
Employment Status of Youth – 2009-10

<i>Category</i>	<i>Rural</i>			<i>Urban</i>			<i>All Male</i>	<i>All Female</i>	<i>All</i>
	<i>Male</i>	<i>Female</i>	<i>All</i>	<i>Male</i>	<i>Female</i>	<i>All</i>			
Regular Worker	9.0	6.5	8.4	41.1	42.2	41.3	18.0	13.9	17.1
Casual Wage Labour	41.8	41.6	41.8	20.5	15.4	19.6	35.8	36.2	35.9
Self-employed	43.7	45.3	44.1	30.5	25.1	29.5	40.0	41.2	40.3
<i>Productively Employed</i>	94.5	93.5	94.3	92.1	82.8	90.4	93.8	91.3	93.2
<i>Unemployed</i>	5.5	6.5	5.7	7.9	17.2	9.6	6.2	8.7	6.8

Source: Author's calculations based on NSSO (2012)

Table 6
Activity Status of Youth by Educational Level – 2009-10

<i>Category</i>	<i>Illiterate</i>	<i>Literate below Pr</i>	<i>Pr and Middle</i>	<i>Sec & HSec</i>	<i>Diploma</i>	<i>Graduate & above</i>	<i>All</i>
<i>Unemployed</i>	1.8	5.4	7.7	12.1	26.5	21.1	6.8
Self-employed	37.9	74.7	71.1	60.8	5.6	13.7	40.3
Casual Wage Labour	55.2	2.5	0.0	0.4	63.9	36.2	35.9
Regular Worker	5.1	17.4	21.2	26.7	13.9	29.0	17.1
	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Author's calculations based on NSSO (2012)

Table 7
Proportion of Unemployment among Youth by Educational Level – 2009-10

<i>Category</i>	<i>Rural</i>			<i>Urban</i>			<i>All</i>
	<i>Male</i>	<i>Female</i>	<i>All</i>	<i>Male</i>	<i>Female</i>	<i>All</i>	
Illiterate	2.2	0.3	1.4	3.9	3.4	3.8	1.8
Lit below Primary	3.0	1.1	2.5	3.2	2.1	3.0	2.6
Primary & Middle	4.3	4.4	4.3	5.5	7.2	5.7	4.6
Sec & HSec	7.0	17.8	8.8	8.6	24.3	10.8	9.5
Diploma/Degree	20.4	37.9	24.5	14.0	26.6	17.5	20.4
<i>Aggregate</i>	5.5	6.5	5.7	7.9	17.2	9.6	6.8

Source: Author's calculations based on NSSO (2012)

Table 8
Educational Level of Youth Workers – 2009-10

<i>Category</i>	<i>Illiterate</i>	<i>Literate below Pr</i>	<i>Below Sec</i>	<i>Sec & HSec</i>	<i>Diploma</i>	<i>Graduate & above</i>	
Regular Worker	5.0	4.3	30.2	28.1	5.1	27.4	100.0
Casual Wage Labour	43.3	0.5	0.0	0.3	21.4	34.6	100.0
Self-employed	15.9	7.7	42.9	27.1	0.9	5.5	100.0
<i>Productively Employed</i>	21.1	5.0	28.4	20.0	7.4	18.2	100.0
<i>Unemployed</i>	4.4	3.3	27.7	32.1	6.0	26.5	100.0

Source: Author's calculations based on NSSO (2012)

Table 9
Unemployment among Trained Youth – 2009-10

<i>Type of Skill/Training</i>		<i>Unemployed</i>	<i>Self-employed</i>	<i>Casual Worker</i>	<i>Regular Salaried</i>
<i>Degree</i>	Tech/Med/Agri	12.9	9.7	3.5	73.9
<i>Undergraduate Diploma</i>	Agri etc	23.1	17.4	7.9	51.6
	Engg/Tech	25.8	15.5	6.4	52.3
	Medicine	34.1	20.9	1.6	43.5
<i>Post-graduate Diploma</i>	Agri etc	14.1	5.5	4.1	76.3
	Engg/Tech	35.4	5.4	4.4	54.8
	Medicine	20.3	28.2	0.0	51.5
<i>All Trained</i>		22.4	12.8	5.4	59.5
<i>Un-trained</i>		6.2	41.3	37.0	15.5
<i>All Total</i>		7.9	47.0	25.2	19.9

Source: Author's calculations based on NSSO (2012)

Table 10
Proportion of Unemployment among Youth by Skill Level – 2009-10

<i>Skill Category</i>	<i>Rural</i>			<i>Urban</i>			<i>All</i>
	<i>Male</i>	<i>Female</i>	<i>All</i>	<i>Male</i>	<i>Female</i>	<i>All</i>	
Unskilled	5.0	5.4	5.1	7.0	15.5	8.5	5.9
Skilled	26.4	46.6	32.1	15.0	25.0	17.7	22.8
Aggregate	5.5	6.5	5.7	7.9	17.2	9.6	6.8

Source: Author's calculations based on NSSO (2012)

Notes: Unskilled & Skilled as defined in text