

EDUCATION AS AN INTEGRAL PART OF HUMAN CAPITAL FORMATION IN INDIA

Dr .Surya Prakash Tripathi, Asst. Professor IBMR, IPS Academy ,Indore (M.P),India
Dr.Mansi Kukreja, Asst. Professor IBMR, IPS Academy ,Indore (M.P),India
Mr.Kali Charan Modak, Asst. Professor IBMR, IPS Academy ,Indore (M.P),India

Abstract:

This paper assess the contribution of education to increasing individual and aggregate income, as well as the possible feedback of increasing income on the demand for human resources. Individuals differ in both inherited and acquired abilities, but only the latter differ among countries and time periods. Human capital analysis deals with acquired capabilities which are developed through formal and informal education at school and at home, and through training, experience, and mobility in the labor market. The belief that education is an engine of growth rests on the quality and quantity of education in any country. The paper posits that formal education is highly instrumental and even necessary to improve the production capacity of a nation and discusses the rationality behind investment in human capital. Empirical evidences of human capital model were identified and findings reveal that investment in education has positive correlation with economic growth and development. Criteria for the applicability and problems associated with the theory were identified and implications for educational development highlighted. Conclusively, the paper recommends that for education to contribute significantly to economic growth and development, it must be of high quality to meet the skill-demand needs of the economy. It may provide a good guideline for research and a strong base for future manpower planning and human capital formation in India.

INTRODUCTION

Education is an economic good because it is not easily obtainable and thus needs to be apportioned. Economists regard education as both consumer and capital good because it offers utility to a consumer and also serves as an input into the production of other goods and services. As a capital good, education can be used to develop the human resources necessary for economic and social transformation. The focus on education as a capital good relates to the concept of human capital, which emphasizes that the development of skills is an important factor in production activities. It is widely accepted that education creates improved citizens and helps to upgrade the general standard of living in a society. Therefore, positive social change is likely to be associated with the production of qualitative citizenry. This increasing faith in education as an agent of change in many developing countries, including India, has led to a heavy investment in it. The pressure for higher education in many developing countries has undoubtedly been helped by public perception of financial reward from pursuing such education. Generally, this goes with the belief that expanding education promotes economic growth. However, the paradox accompanying this belief is that, despite the huge investment on education, there is little evidence of growth-promoting externalities of education in Nigeria. Human Capital Theory: Implications for Educational Development

Education system of any country is influenced by economic, political and social imperatives. Investment in education is wasted unless people have the will to prepare for and engaged in those activities, which

are needed for accelerated economic growth. The education sector absorbs more public resources than any other human development activity in developing countries. Same is true for India. The stock of capital can be divided into three components- natural, human and man made physical capital. It is now increasingly recognized that education enriched attitudes, motivation and other personal characteristics, as well as providing knowledge and skills. Human capital development is a continuous, lifelong and lifetime process. Building of incentives is crucial for both the accumulation and the investment in human capital. One of the distinguishing features of policies that promote human development is that they tend to reinforce one another because of complementarities and positive externalities. Some policies deserve priority because they facilitate the successful implementation of other policies. Previous education leads to day-to-day work experience, which results in human capital formation. In all human societies, ways to develop humans are limited (in economic terms) so choices have to be made. Some priorities have to be set so that, we can allocate resources to high priority.

Two independent reports on the Indian economy, in recent times, have identified that India would grow faster due to its strength in human capital formation. Deutsche Bank, a German bank, in its report on 'Global Growth Centers' (published on 1.7.05) identified that India will emerge as one among four major growth centers in the world by the year 2020. It further states, "Our empirical investigation supports the view that human capital is the most important factor of production in today's economies. Increases in human capital are crucial to achieving increases in GDP." With reference to India it states, "Between 2005 and 2020 we expect a 40 per cent rise in the average years of education in India, to just above 7 years. World Bank, in its recent report, 'India and the Knowledge Economy Leveraging Strengths and Opportunities', states that India should make a transition to the knowledge economy and if it uses its knowledge as much as Ireland does (it is judged that Ireland uses its knowledge economy very effectively), then the per capita income of India will increase from a little over US \$1000 in 2002 to US \$ 3000 in 2020. It further states that the Indian economy has all the key ingredients for making this transition, such as, a critical mass of skilled workers, a well-functioning democracy and a diversified science and technology infrastructure. Thus the two reports point out the fact that further human capital formation in India will move its economy to a higher growth trajectory.

The Indian software industry has been showing an impressive record over the past decade. Entrepreneurs, bureaucrats and politicians are now advancing views about how India can transform itself into a knowledge-based economy by using information technology (IT). There have been some instances of villagers using e-mail which are cited as examples of such transformation. Likewise, e-governance is being projected as the way of the future. The value of IT depends greatly on the existing level of economic development.

STATE OF HUMAN CAPITAL FORMATION THROUGH EDUCATION IN INDIA

Human capital formation is the outcome of investments in education, health, on-the-job training, migration and information. Of these education and health are very important sources of human capital formation. We know that ours is a federal country with a union government, state governments and local governments (Municipal Corporations, Municipalities and Village Panchayat). The Constitution of India mentions the functions to be carried out by each level of government. Accordingly, expenditures on both education and health are to be carried out simultaneously by all the three tiers of the government. Analysis of health sector is taken up in Chapter 6; hence, we will analyze only the education sector here. We look into the need for government intervention in education and health sectors. We do understand that education and health care services create both private and social benefits and this is the reason for

the existence of both private and public institutions in the education and health service markets.

Expenditures on education and health make substantial long-term impact and they cannot be easily reversed; hence, government intervention is essential. For instance, once a child is admitted to a school or health care centre where the required services are not provided, before the decision is taken to shift the child to another institution, substantial amount of damage would have been done. Moreover, individual consumers of these services do not have complete information about the quality of services and their costs. In this situation, the providers of education and health services acquire monopoly power and are involved in exploitation. The role of government in this situation is to ensure that the private providers of these services adhere to the standards stipulated by the government and charge the correct price.

In India, the ministries of education at the union and state level, departments of education and various organizations like National Council of Educational Research and Training (NCERT), University Grants Commission (UGC) and All India Council of Technical Education (AICTE) facilitate institutions which come under the education sector. Similarly, the ministries of health at the union and state level, departments of health and various organizations like Indian Council for Medical Research (ICMR) facilitate institutions which come under the health sector.

In a developing country like ours, with a large section of the population living below the poverty line, many of us cannot afford to access basic education and health care facilities. Moreover, a substantial section of our people cannot afford to reach super specialty health care and higher education. Furthermore, when basic education and health care is considered as a right of the citizens, then it is essential that the government should provide education and health services free of cost for the deserving citizens and those from the socially oppressed classes. Both, the union and state governments, have been stepping up expenditures in the education sector over the years in order to fulfill the objective of attaining cent per cent literacy and considerably increase the average educational attainment of Indians.

Literacy Rates by sex in India

Almost three-fourth of India's population aged 7 years of age and above now literate, India has made very significant progress in this direction. An important finding of the 2011 census count is that near about two third of the females are now literate and male-female differential has narrowed down to 16.6 percent from 21.6 percent in 2001. The literacy rates have increased from 18% in 1951 to 74.0% in 2011. Literacy is not only a right, it is also needed if the citizen are to perform their duties and enjoy their right properly. However, a vast difference is noticed across different sections of population. Literacy among males is nearly 16.6% higher than females and it is about 50% higher in urban areas as compared to the rural areas. Literacy rates vary from 99% in some district of Kerala to a below 37% in Alirajpur District of Madhya Pradesh. The other important finding of the 2011 census is that, in the country, the absolute number of illiterates in population aged 7 + has declined.

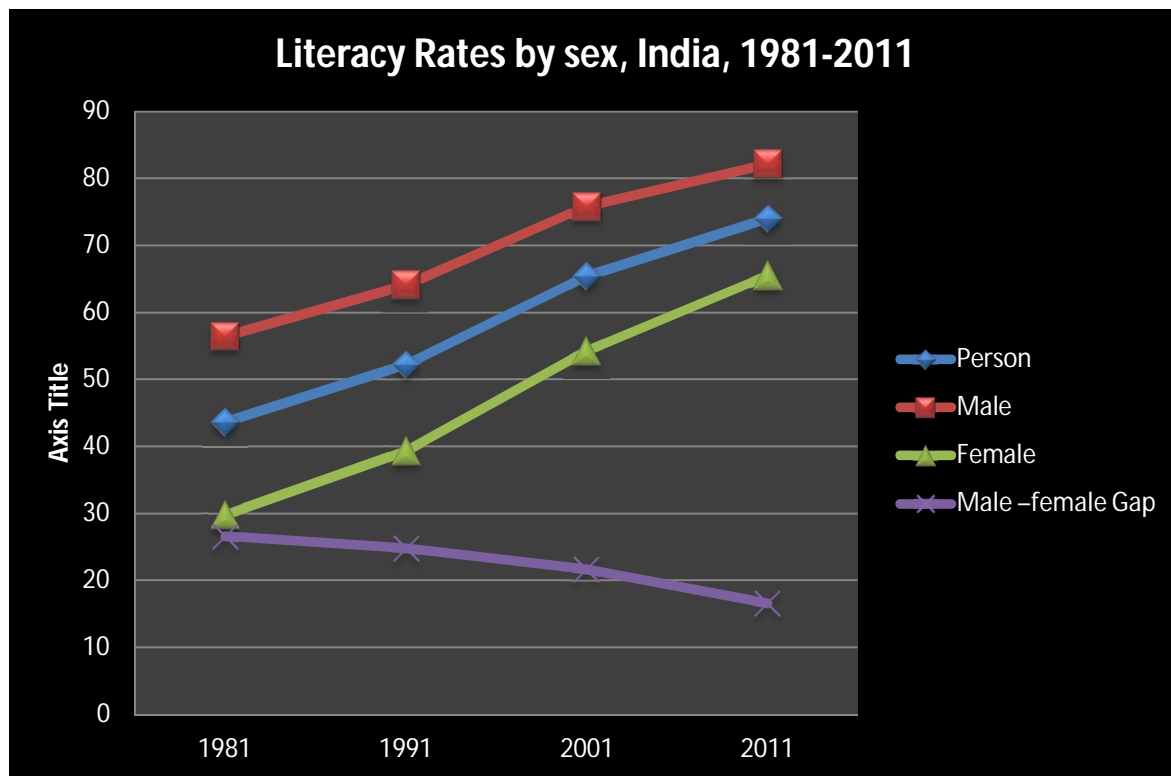
Literacy Rates by sex, India, 1981-2011

Table 1.1

Year	Literacy rate			Male –female Gap
	Person	Male	Female	
1981	43.6	56.4	29.8	26.6
1991	52.2	64.1	39.3	24.8
2001	65.4	75.8	54.2	21.6
2011	74.0	82.1	65.5	16.6

Source : (1) RGCCI 2001 (2001a: 115)
(2) Census 2011.

Chart1.1



Literacy rates for the population aged 7 years and above presented in Table1.1 and chart 1.1 indicate a very significant increase for both males and females particularly during the 1990s and 2001. As of 2011 census, almost three-fourth of India's population is now literate, the male literacy rate has risen to 82.1% while female literacy rate at 65.5% percent indicates that two-third of the female population in the country is now literate. It is noteworthy that, in recent years, the increase in female literacy rate has been

higher than in male literacy rate narrowing the male-female gap particularly during the 1980s and 1990s. This can be explained partly by the general expansion of education, partly by the present policies of positive intervention followed in favor of girls and by implementation of programs like DPEP, literacy promotion programs through NLM and Adult Literacy Programme etc. An important finding of Table 5.1 is the reduction of gap in male and female literacy rates from 26.6 percent in 1981 to 21.7 percent in 2001. According to census 2011 this gap is narrowed and presently it is 16.6.

ILLITERATE POPULATION IN INDIA

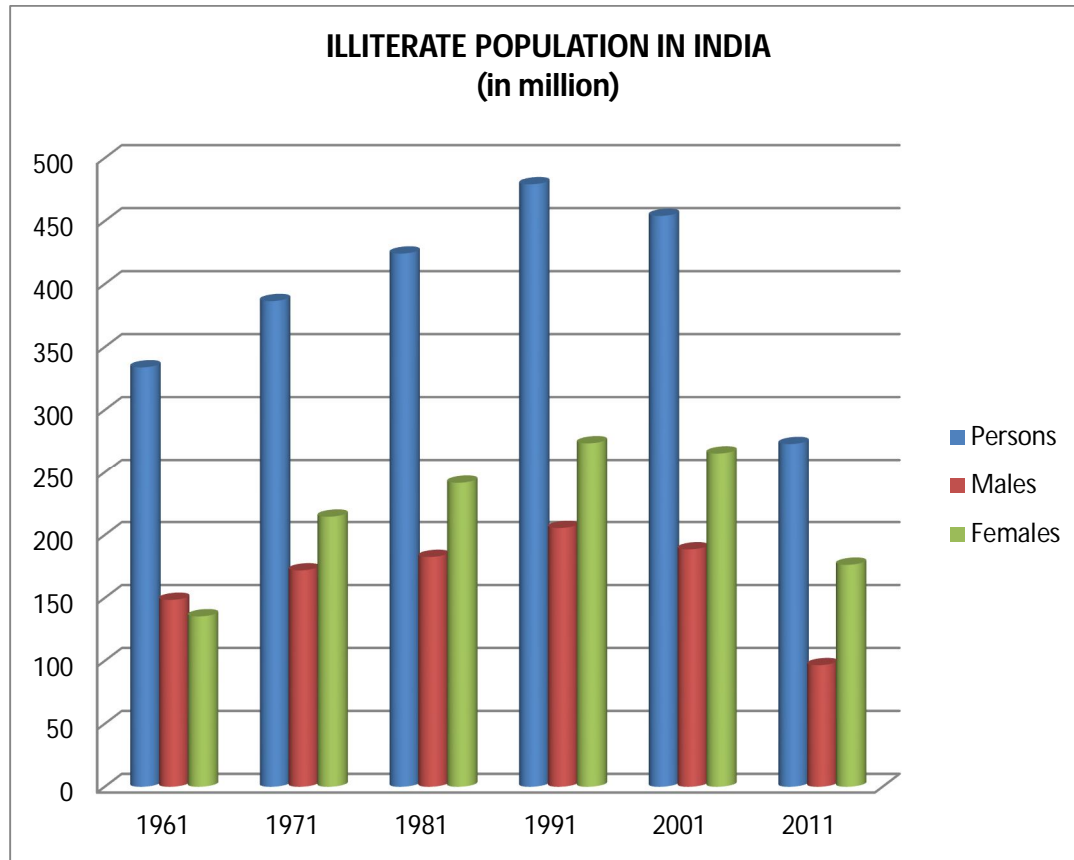
Number of illiterates in India by sex in different censuses

Table 1.2 (Figures in millions)

Year	Persons	Males	Females
1961	333.9	148.5	135.4
1971	386.5	171.9	214.6
1981	424.2	182.6	241.6
1991	479.2	205.6	273.6
2001	454.1	188.6	265.5
2011	273.0	96.6	176.4

Source: Premi (1991: 68), census of India 1961, 1971, 1981, 1991, 2001 and 2011.

Chart 1.2



Despite the rise in literacy both among males and females, there has been an increase in absolute number of illiterates (in the total population) in the country in each of the censuses up to till 1991 (Table 1.2 and chart 1.2). The number of illiterates increased from 334 million in 1961 to 479 million in 1991. The 2001 census has, however, indicated a decline in their numbers, more so among males, even though the 1991-2001 growth in literacy rate has been higher among females. Census 2011 indicates the improvement in literacy and number of illiterates has declined from 454.1 millions in 2001 to 273.0 millions in 2011. Male illiterate numbers go down from 188.6 millions in 2001 to 96.6 millions in 2011. Similarly female illiterate numbers also declined from 265.5 millions in 2001 to 176.4 millions in 2011.

Total number of recognized educational institutions in India:

Table 1. 3

Year	Primary	Upper primary	High/Hr. sec/enter/Pre. Jr. colleges	Colleges general education	Colleges for professional education	Univ./deemed universities/inst. of national importance
1955-56	278135	21730	10838	466	218	31
1960-61	330399	49663	17329	967	852	45
1965-66	391064	75798	27614	1536	770	64
1970-71	408378	90621	37051	2285	992	82
1975-76	454270	106571	43054	3667	3276	101
1980-81	494503	118555	51573	3421	3542	110
1985-86	528872	134846	65837	4067	1533	126
1990-91	560935	151456	79796	4862	886	184
1991-92	566744	155926	82576	5058	950	196
1992-93	571248	158498	84608	5334	989	207
1993-94	570455	162804	89226	5639	1125	213
1994-95	586810	168772	94946	6089	1230	219
1995-96	593410	174145	99274	6569	1354	226
1996-97	603646	180293	103241	6759	1770	228
1997-98	619222	185961	107140	7199	2075	229
1998-99	628994	193093	112050	7494	2113	237
1999-00	641695	198004	116820	7782	2124	244
2000-01	638738	206269	126047	7929	2223	254
2001-02	664041	219626	133492	8737	2409	272
2002-03	651382	245274	137207	9166	2610	304
2003-04	712239	262286	145962	9427	2751	304
2004-05	767520	274731	152049	10377	3201	407
2005-06	771082	288199	154032	11549	4991	350
2006-07	756950	300008	165087	11458	7024	371
2007-08	785950	320354	171862	11458	7024	504
2008-09	787827	325174	172990	13381	11136	524

Source: 1. Statistics of school education 2007- 08
2. Statistics of higher and technical education- 2007 – 08.
3. Ministry of Human Resource Development, Govt. of India.

Note:(a)Professional educational includes engineering, technology an architecture, medical allopathic /Ayurvedic /homeopathy/ Unani/nursing /Pharmacy, etc.) and teacher training colleges.

Table 1.3 reveals that the educational institutional infrastructure growth in the country has had a very significant progress which contributes in the literacy of the population knowledge, skill formation of the population. The primary educational institutes has increased three folds in 1955 - 56 the number of primary schools were 278135. Presently it becomes 787827. In the Upper Primary or Middle Institutions has shown tremendous growth in the country. In 1955-56 the numbers of middle schools were 21730. Presently it increased by 325174. The increase is fifteen folds. Secondary & Higher secondary educational institutes there are also a satisfactory growth in the institute in the country. In 1955 -56 there were only 10838 which increased and became 172990. The increase is sixteen folds. In 1955 -56 in the country there were only 466 colleges for general education presently the number has increased and became 13381. The increase in number of colleges is 29 times in comparison with the 1955 -56. Similarly the colleges for professional education in 1955 - 56 were 218 now it became 11136. The increase in the professional education is 51 times this reflect that there is a tremendous increase in professional education in the country which is imparting education for making the skills and creating the knowledge in the economy in the country. In the same manner there were only 31 universities/deemed universities/ institutes of national importance in 1955 - 56 in the country presently this number increased and became 524 which shows the 17 fold increase in the universities.

Growth in Government Expenditure on Education

Expenditure by the government is expressed in two ways (i) as a percentage of 'total government expenditure' (ii) as a percentage of Gross Domestic Product (GDP). The percentage of education expenditure of total government expenditure' indicates the importance of education in the scheme of things before the government. The percentage of 'education expenditure of GDP' expresses how much of our income is being committed to the development of education in the country. During 1952- 2011, education expenditure as percentage of total government expenditure increased from 7.92% to 8.02% and as percentage of GDP increased from 0.64 to 4.02. Throughout this period the increase in education expenditure has not been uniform and there has been irregular rise and fall. To this if we include the private expenditure incurred by individuals and by philanthropic institutions, the total education expenditure should be much higher. Elementary education takes a major share of total education expenditure and the share of the higher/tertiary education (institutions of higher learning like colleges, polytechnics and universities) is the least.

Education empowers the poor to participate in the growth process. Despite various efforts made by the government to give a boost to education, every third illiterate person in the world is an Indian. Rising budgetary allocations have increased the number of schools but the quality of education offered is still sub-standard mainly because of supply side constraints. The introduction of schemes, such as MDMS and SSA has helped in increasing enrolment but drop-out rates before completion of primary education are still high, implying wastage of public money which often runs into crores. India lags behind China and Sri Lanka in terms of the adult literacy rate and education index but is doing far better than its other neighbors such as Pakistan, Bangladesh, Nepal and Bhutan. India has an adult literacy rate of 74.0 percent while for China and Sri Lanka literacy rates are 90.8 and 93 percent respectively. According to the Human Development Report, 2009 of the United Nations Development Programme (UNDP), India has an overall education index of 0.620 while in China and Sri Lanka the corresponding figures are

0.837 and 0.814 respectively. However, in terms of the combined gross enrolment ratio for primary, secondary and tertiary education in India is doing better than all its neighbors except China.

Since Independence, Indian education scene has improved for the better. As against 0.1 Million enrollment in 1947, India experienced over 17 Million enrollments in 2010-11. At present, the educational sector has become more attractive with its growing enrollment rates and the credit for this can be given to the whole fresh team of education providers, consisting of distance learning course providers, private institutes, foreign education providers and public institutions.

Though the Foreign Direct Investment (FDI) in educational sector, comprising higher education, has been allowed by the Indian government, there are still many shortfalls that need to be overcome. An increase in the enrollment figures is being constantly witnessed. But, when it comes to cumulative states expenditure, the scene is quite gloomy. For the period 2007-08, a fall of about 18% has been seen in the total expenditure. Further, a clear gap in the per capita education expenditure among the states can also be seen. Per capita fund inflow to educational sector in Uttar Pradesh stood at Rs 483 whereas in Bihar it was Rs 487 in 2010-11 and in M.P. it stood Rs 386. Himachal Pradesh has Rs 1777 and Maharashtra and Kerala show Rs 1034 per capita fund flow. Despite good financial performance of many of the states, their spending scenario in educational sector has been found in poor condition.

In line with the commitment of augmenting resources for education, the allocation for education has, over the years, increased significantly. Table 1.4 reveals the Plan outlay on education has increased from Rs 151.20 crore in the First Five-Year Plan to Rs. 43,825 crore in the Tenth Five-Year Plan (2002-2007) and Rs. 238608.39 crore proposed for Eleventh five year plan (2007-12) which is 21.25 % of total Eleventh five year plan outlay. The expenditure on Education as a percentage of GDP also rose from 0.64 per cent in 1951-52 to 3.74 per cent in 2008-2009(BE). The outlay for Education in the Eleventh Five-Year Plan of Rs. 2, 38,608.39 crore is higher than the Tenth Plan outlay of Rs. 43,825 crore by 5.44 times. Rs 1,10,854.81 crore has been provided for the Department of Elementary Education and Literacy and Rs 47,346.25 crore for the Department of Secondary Education and Rs 75,102.41 crore for Higher, Technical and Vocational Education. The expenditure during the plan periods on the different sectors of education is given in the table. The plan outlay for higher education including technical and professional education in eleventh plan has increased Rs 95000 million to Rs751024.1 million for skill development in the country. The Government has allocated Rs 13,100 crore towards flagship schemes in education. Outlay on higher education has been increased by 900 per cent in the Eleventh Five-Year Plan. The education sector as a whole received Rs 41,978.21 crore against Rs 37,366.57 crore in the revised estimate of 2008-09 budgets, showing a jump of Rs 4,611.64 crore. While school education has received a total of Rs 28,799.21 crore, higher education has been allocated Rs 13,179 crore in the Budget. "The Sarva Shiksha Abhiyan has made significant contribution in providing access to and infrastructure for elementary education. Between 2003-04 and 2008-09, the allocation for this programme has been increased by 571 per cent," On the higher education side, the University Grants Commission has been given an additional Rs 1062.75 crore in the interim budget. A total of Rs 6,545.11 crore has been earmarked for UGC against Rs 5,482.36 crore in the revised estimate for 2008-09. An Ordinance was promulgated for establishing 15 central universities and in addition to this, six new Indian Institutes of

Technology (IITs) in Bihar, Andhra Pradesh, Rajasthan, Orissa, Punjab and Gujarat have started functioning in 2008-09, while two more IITs in Madhya Pradesh and Himachal Pradesh commenced their academic session in 2009-10.

Plan expenditure on Different sectors of education

(In percentage)

Table 1.4

Sectors	First plan expenditure 1951 - 56	Fifth plan expenditure 1956 – 61	Eight plan outlay (1997 – 2002) (central sector)	Ninth plan outlay (1997 – 2002) (central sector)	Tenth plan outlay (2002 – 2007) (central sector)	Eleventh plan outlay (2007 – 2012)
Elementary education	58 (870)	52 (5913)	48 (103940)	66 (163696)	65.6 (287500)	46.5 (1108548.1)
Secondary education	5 (83)	∞	24 (52311)	10 (26035)	9.9 (43250)	19.8 (473462.7)
Adult education	∞	2 (248)	5 (11421)	3 (6304)	2.9 (12500)	2.2 (53049.0)
Higher education	8 (117)	28 (3188)	10 (20944)	10 (25000)	9.5 (41765)	31.5 (751024.1)
Others	15 (227)	9 (1071)	3 (7348)	2 (4314)	1.4 (6235)	*
Technical education	14 (215)	9 (1015)	10 (21987)	9 (23735)	10.7 (47000)	*
Total	100 (1512)	100 (11435)	100 (218001)	100 (249084)	100 (438250)	100 (2386083.9)

Source: (1) Five year plan documents, planning commission & analysis of budget expenditure ministry of HRD.

(2) Eleventh Five year plan (2007 – 12), volume III, 54th NDC meeting, 2007

Note: Figures in parenthesis in millions of rupees.

∞ Included under elementary education.

* Included under higher education

Education for All - Still a Distant Dream

Though literacy rates for both adults as well as youth - have increased, still the absolute number of illiterates in India is as much as India's population was at the time of independence. In 1950, when the Constitution of India was passed by the Constituent Assembly, it was noted in the Directive Principles of the Constitution that the government should provide free and compulsory education for all children up to the age of 14 years within 10 years from the commencement of the Constitution. Had we achieved this, we would have cent per cent literacy by now.

Gender Equity - Better than Before

The differences in literacy rates between males and females are narrowing signifying a positive development in gender equity; still the need to promote education for women in India is imminent for various reasons such as improving economic independence and social status of women and also because women education makes a favourable impact on fertility rate and health care of women and children. Therefore, we cannot be complacent about the upward movement in the literacy rates and we have miles to go in achieving cent per cent adult literacy.

Higher Education

A Few Takers: The Indian education pyramid is steep, indicating lesser and lesser number of people reaching the higher education level. Moreover, the level of unemployment among educated youth is the highest. As per NSSO data, in the year 2010, the rate of unemployment among youth with education up to secondary level and above was 9.1 per cent whereas the rate of unemployment for youth with education up to primary level was only 1.6 per cent. Therefore, the government should increase allocation for higher education and also improve the standard of higher education institutions, so that students are imparted employable skills in such institutions. When compared to less educated, a large proportion of educated persons are unemployed. Why?

CONCLUSION

We can conclude that educated men's power is one of the most crucial inputs in the economy of any country, and in case of developing countries like India, where there is frequently a shortage of physical capital, the availability of skilled men's power is most crucial. Human development is participatory development and the more people can become directly involved as agents of change, the more successful the overall strategy is likely to be. Campaign to promote literacy and call for education is an ideal vehicle for active community participation. Local financial, material and labor resources can be mobilized in support of clearly defined goals and local communities can be organized on a permanent basis to monitor progress and ensure that the volume and quality of services are maintained once the campaigns are over.

- 80% of new entrants to workforce have no opportunity for skill training. Against 12.8 million per annum new entrants to the workforce the existing training capacity is 3.1 million per annum.
- About 2% of existing workforce has skill training against 96% in Korea, 75% in Germany, 80% in Japan, and 68% in the United Kingdom.
- The NSS 62nd Round Survey on Employment and Unemployment indicates that educational institutions attendance rates (5– 14 years) drop by nearly half in the age group 15–19 years and by 86% after the age 15 years. Labour force participation rates rise sharply after the age of 14 years and reach close to 100% at the age of 25–29 years. The said results also reflect that 26.4% of the Indian labour force is illiterate, 29.9% of the labour force has had schooling up to the primary level and the balance 43.7% has had schooling up to the middle and higher level. They also reveal that about 78% of the workforce in rural and urban areas does not possess any identifiable marketable skills.
- A basic problem with the skill development system is that the system is non-responsive to labour market, due to a demand—supply mismatch on several counts: numbers, quality and skill types. It is also seen that the inflexibilities in the course/curriculum set-up, lead to over supply in some trades and

shortages in others. Of the trained candidates, the labour market outcomes as seen from placement/absorption rates are reportedly very low. The institutional spread in the VET system shows acute regional disparity with over half of the ITIs/ITCs located in the southern States, both in terms of number of institutions as well as the number of seats. The quality of the training system is also a matter of concern, as the infrastructural facilities, tool/kits, faculty, curriculum are reportedly substandard. The existing institutions also lack financial and administrative autonomy. The testing, certification and accreditation system is reportedly weak, and since the deliverables are not precisely defined, there is no effort at evaluating outcomes and tracking placements. The problem is further complicated with lack of industry–faculty interaction on course curricula and other factors.

- The training system for capital-intensive sectors and hi-tech areas has always received a highly preferential treatment in contrast to those working in the informal sector. Further there is no certification system for a large chunk of workers, who do not have any formal education but have acquired proficiency on their own or through family tradition/long experience. In the absence of a proper certificate, these classes of workers in the informal sector are subjected to exploitation and they do not get any avenues for better employment in the market and their mobility is very restricted.
- The private sector-run Industrial Training Centers (ITCs) do not seem to be any better than the ITIs, and the low-paying capacity of learners and consequently low fee structure and absence of quality consciousness are said to be major reasons for the current state of affairs.
- The Planning Commission held extensive consultations with the industry, various Central ministries running training programmes, State Governments. The discussions have revealed that the present system of skill formation has certain critical gaps in that the curricula are inflexible and outmoded. There is an inadequate fitness-testing mechanism of the institutions with a mismatched fee structure and admission criteria. The capacities of the trainers are also not in consonance with the current requirement of various sectors due to various restrictions of the affiliating agencies.
- There are 1344 polytechnics under the aegis of the Ministry of Human Resource Development with a capacity of over 2.95 lakh offering three-year diploma courses in various branches of engineering with an entry qualification of 10th pass. Besides, there are 415 institutions for diploma in pharmacy, 63 for hotel management, and 25 for architecture. There are about 5988 Industrial Training Institutes (ITIs) imparting training in 57 engineering and 50 non-engineering trades. Of these, 1996 are State Government-run ITIs while 3992 are private. The total seating capacity in these ITIs is 7.42 lakh (4 lakh seats in government ITIs and the remaining 3.42 lakh in private ITIs). These courses are open to those who have passed either Class 8 or 10 depending on the trade and are of 1 or 2 years duration, which varies from course to course. In addition to ITIs, there are six Advanced Training Institutes (ATI) run by the Central Government which provide training for instructors in ATIs for electronics and process instrumentation, offering long and short courses for training of skilled personnel at technician level in the fields of industrial, medical, and consumer electronics and process instrumentation.

The private sector does undertake in-house training programmes and to a very limited extent, trains ‘outsiders’. However, such programmes are limited to catering to their own felt needs, in the nature of captive skill development. Low-paying capacity of learners and reluctance of industries to train workers for fear of losing them to competition has resulted in chronic deficiency in private investment in this area.

All these deficiencies mentioned in the above will need to be rectified during the Eleventh Plan.

NSSO 62nd Round data also reveals that the proportion of persons (15–29 years) who received formal vocational training was around 3% for the employed, 11% for the unemployed and 2% for persons not in the labour force. In order to link skills developed into actual productive use there of including self-employment, steps will be taken in the Eleventh Five Year Plan by providing adequate incentives, not necessarily monetary but in terms of skill and entrepreneurship development and forward and backward linkages to finance, marketing and human resource management, to those who are or seek to be self-employed.

It is this mismatch in large amount of unskilled and unemployable labor that needs to be corrected. The correction is not impossible though. This is because India has the youngest population in the world which means that it has the chance to complement the labor and skills demands for a more productive workforce in India and proudly become one of the world's mature economies. To optimally use this opportunity, we have to re-orient the labor structure & skill development initiatives. In this Endeavour, the role of the government being paramount, representation from the parliament was invited along with various institutions to create a dialogue amongst key stakeholders and thought leaders on what will enable a more inclusive growth for the economy and society. Currently however, there is an employable youth force of 30 to 40 crore available to bridge the lacuna of skills needed to achieve the 9% growth that India is expected to reach. The question is how to capitalize on it?

This is because India had the youngest population in the world with more than 50% of its population below the age of 25 and more than 65% below the age of 35, it is excepted that, in 2020, the average age of an Indian will be 29 years, compared to 37 for China and 48 for Japan, which means that it has the chance to complement the labor and skills demands for a more productive workforce in India and boast one of the world's mature economies. To optimally use this opportunity, we have to re-orient the labor structure & skill development initiatives.

References:

1. Bhargava, P (2006): 'Knowledge and National Development', paper presented in the National Seminar on the Education Commission organized by NUEPA, New Delhi from December 26-28, 2006.
2. Becker, Gary (1964) Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education, National Bureau of Economic Research
3. Becker G (1964). Human Capital, 2nd edition, Columbia University Press, New York, 1975.
4. BECKER GARY, S.. 1966. Human Capital: A theoretical and Empirical Analysis, with Special Reference to Education, General Series. Number 80. New York, National Bureau of Economic Research.
5. Becker G S (1975) "Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education", 2nd edition. Princeton University Press, Princeton, New Jersey.
6. Dutta, Puja Vasudeva (2006), "Returns to Education: New Evidence for India, 1983–1999", Education Economics, Vol. 14, No. 4, pp. 431-51, December.

7. Gupta, Asha (2005): 'International Trends in Higher Education and the Indian Scenario', Centre for Studies in Higher Education, CSHE-11-05, available at <http://repositories.cdlib.org/cshe/CSHE-11-05>.
8. Harbison, Frederick and Myers. Charles. A. "Education, Manpower & Economic Growth". (1964). McGraw Hill Book Company London
9. John Sheehan, The economics of education, published by George Allen & Unwin Ltd, 1973.
10. Kishore, sunita and Kamla Gupta (2009): Gender Equality and Women Empowerment in India, National Family Health Survey (NFHS-3), India, 2005-06, Mumbai, International Institute for population Sciences, Calverton, Maryland, USA: ICF Macro.
11. Mehrotra, S (1998): 'Education For All: Policy Lessons from High Achieving Countries', International Review of Education, Vol 44, 5/6, pp 461 – 484.
12. Mehrotra, S and Buckland, P (2001): 'Managing Teacher Costs for Access and Quality', Economic and Political Weekly, December 4.
13. Mehrotra, S, P R Panchamukhi, Ranjana Srivasatava and Ravi Srivasatava (2005): Financing Elementary Education in India: Uncaring the "Tiger" Economy, Oxford
14. Psacharopoulos, G., 1994. Return to Investment in Education, a Global Update, World Development 22:9 Schultz, Theodore W. (1961) "Investment in Human Capital." American Economic Review, 51(1): 1-17.
15. Schultz, Theodore W. (1962) "Reflections on Investment in Man." Journal of Political Economy, 70: S1-S8.
16. Schultz, Theodore W. (1963) The Economic Value of Education. New York: Columbia University Press.
17. Schultz T W (1971) "Investment in Human Capital: The Role of Education and of Research". Free Press, New York.
18. Schultz, T. Paul. 1988. "Education investments and returns," Handbook of Development Economics, Vol. 1:544-621.
19. Ved Prakash, Trends in Growth and Financing of Higher Education in India, Published in Economic and Political Weekly August 4, 2007.
20. Economic Survey 2010–2011s. Ministry of Finance, Government of India, New Delhi.
21. Economic Survey 2004–2005. Ministry of Finance, Government of India, New Delhi.
22. India Vision 2020, the Report of Planning Commission, Government of India, New Delhi.
23. Mid-Term Appraisal of the Tenth Five Year Plan (2002–2007), Planning Commission, Part II. New Delhi.