



# Growth of Human Capital in Himachal Pradesh: An Empirical Analysis

SANDEEP KUMAR BHARDWAJ Ph.D Research Scholar Department of Economics H.P. University Shimla, India

LOKESH<sup>1</sup> Ph.D Research Scholar Department of Economics H.P. University Shimla, India

#### Abstract:

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 and experience. The present article has examined the growth of human capital, especially with respect to growth in terms of educational institutions, number of schools, population, per capita NSDP (Rs) at constant prices, enrolment and drop-outs, number of teachers and expenditure per student and per capita for the period of 1971-72 to 2010-11. The results have revealed that an impressive achievement has been made in educational development in Himachal Pradesh during the period under study, especially in literacy rates, enrolment and number of educational institutions. Despite the impressive achievements in educational development there are some areas of concerns like as, that the number of teachers has increased rapidly, but the percentage of untrained teachers to total number of teachers is rather high in elementary level. It is evident from high teacher pupil ratio that the quality aspect of education has not given proper attention. The pattern of educational expenditure revealed that the state has given substantial support for the advancement of education sector by increasing the pace of public expenditure on

education. In nutshell it is found that the public expenditure on education as percentage of NSDP (Net State Domestic Product) in the State has achieved the goal of 6 per cent as recommended by the Education Commission (1968).

**Key words:** Human Capital, Growth, Composition, Public Expenditure, Himachal Pradesh.

## Introduction

Human Capital is by all counts the most crucial factor in the process of economic development. For an accelerated economic development it is necessary that not only the physical but also the human capital is accumulated at a high rate (Ray, 2012). In the present state of technological advancement it is absolutely essential to regard education and training as the most potential ingredients of capital. The present paper will follow a definition in which human capital consists of all forms of knowledge acquiring which is defined by the OECD, (2001) as 'the knowledge, skills and competencies embodied in individuals that facilitate the creation of personal, social and economic well being'. Thus the term human capital refers to the process of acquiring and increasing the number of persons who have skills, education and experience which are crucial for the social and economic development of a country. It is obvious that health and education are the two components in the human capital formation; however, the focus in the present paper will remain on different dynamics and aspects of education sector only. Education is a panacea for all evils in the Indian economy as is a fact that all the problems of economy are somehow related to education (Dua, 2006). Human capital development can take many forms such as formal education, on the job training, health improvements, learning by doing and so on. Formal education, however has usually been regarded as fundamental contribution to human making a capital

accumulation which can be complemented but not readily substituted by the other forms of human capital investments (Kaur; 2006, Mohanty; 2003). For this reason and perhaps because of the ready availability of data on these aspects empirical growth models have concentrated on the three main levels of education – primary, secondary and tertiary to capture the essence of human capital accumulation process.

Being a key instrument for developing human capability the state of Himachal Pradesh is committed to provide education to all. The concerted efforts of the government have put Himachal Pradesh as one of the leading state in educational literacy. According to the Census of India, 2011 Himachal Pradesh has a literacy rate of 83.84 per cent as compare to 74.04 per cent of national average (Economic Survey, 2011-12). In consonance with the national policy it has been the endeavour of the Government to make educational facilities available within the reach of students. In order to ensure universalization of primary education the Directorate of Primary Education was setup in 1984 further named as 'Directorate of Elementary Education' with effect from 1st November 2005 (Economic Survey, 2011-12). A glimpse of efforts in building its knowledge base can have from states plan expenditure on education. The plan expenditure on education escalated from barely Rs. 50 lakh during 1<sup>st</sup> five year plan to Rs. 1,70,694 lakh during 11th five year plan which shows an increase of 3,413 times. The overall better performance of Himachal Pradesh in the field of education is partly due to the level of government expenditure on education in the state. The budget expenditure on education as percentage of NSDP is 6.18 per cent in the state but at the centre it was only 3.74 per cent in 2011. The state does not have any education policy of its own and adheres to the National Policy. In 'Right to Education, 2009' provisions have been made for free and compulsory education for all children till the age of fourteen years (RTE Act, 2009). Since independence, the planning strategy in India

#### Sandeep Kumar Bhardwaj, Lokesh- **Growth of Human Capital in Himachal Pradesh: An Empirical Analysis**

was geared towards ensuring distributive justice, balanced growth and positive discrimination in favour of disadvantaged section. Sarva Shiksha Abhiyan (SSA) launched by the Government of India in 2000, for achieving the goal of Universal Elementary Education in the country has also been adopted by the state government with the objective to provide elementary education to all children up to the age of 6-14 years by 2012 and simultaneously, to bridge social, regional and gender gaps with the active participation of the community in the management of schools. The education, being a central variable for the growth and development of Indian economy. needs a comprehensive analysis and for this purpose the present study has been divided in to four sections including present one. Second section is devoted to the objectives of the study. Third section discusses the data base and methodology. In the fourth section major findings of the study has been drawn. This section presents the growth in literacy rate. enrolment. number of teachers and composition of infrastructure facilities in Himachal Pradesh. This section also analyse the public expenditure on education in the state. The final section draws some conclusions and policy implications.

## **Objectives of the Study**

- 1. To study the growth and composition of literacy rate, enrolment and number of teachers in Himachal Pradesh and,
- 2. To examine the growth and composition of public expenditure on education and educational infrastructure facilities in Himachal Pradesh.

## **Data and Methodology**

This paper is based on secondary sources of data and the required data have been collected from various published sources of Government of India, Government of Himachal Pradesh and other official agencies. The study covers the period of 39 years since 1971-72 to 2010-11 for the time series analysis of human capital development. For deriving compound annual rate of growth form the regression coefficients the following formula has been used.

$$Y_{t} = Y_{0}(1-r)^{t}$$

$$Y_{t} = \text{Value in t year}$$

$$Y_{0} = \text{Value in base year}$$

$$r = \text{Compound annual rate of growth.}$$

Where 'r' represents the rate of change from observation to observation during the period under study.

# **Empirical Analysis and Results**

### Attainment in Literacy

The state has experienced significant change in the scenario pertaining to literacy. Literacy rate as such is a weak indicator of human capital formation and in its measurement the quality of education gets ignored. However, it is to be noted that the literacy rate has a strong connection with educational progress, which comes from schooling. So schooling leads to a change in literacy level among all sections of society (Gill et. al. 2010). The state of Himachal Pradesh has made significant progress in literacy rate in the last two decades and improved its ranking from 16<sup>th</sup> in 1971 to 12<sup>th</sup> in 2011 among 35 states and union territories in India. The overall literacy rate in the state increased from 31.96 per cent in 1971 to 63.86 per cent in 1991 and ultimately to 83.80 per cent in 2011. But in 2011 about 12.6 per cent of the population in literacy eligible category (six years above) was illiterate. The overall female literacy in Himachal Pradesh and India is lower than that of male literacy. Although the male and female differential is narrowing, yet it is still high. In 1971 the state stood at 8<sup>th</sup> rank among 17 major states of Indian Union while in 2011 it has improved its rank from 8<sup>th</sup> to 3<sup>rd</sup> with 76.60 per cent female literacy rate. The gender gap has declined to 16.68 percentage points in 2011 earlier it was 20.76 in 1971.

Thus the literacy gaps would persist in the state in view of the slower pace of literacy improvements. It seems that until and unless adequate measures are taken, it would take a considerable number of years for the state to eradicate illiteracy. Increase in literacy has been higher in case of female as compare to their male counterparts. This is an encouraging trend indicating that male female differential in terms of literacy has tended to narrow down over a period of time. This has been possible due to the continuous efforts of the government not only to spread educational facilities but also to increase and retain girl enrolment through various incentive schemes for girl students including certain free ships.

# Comparative Study of Educational Institutions, Population, NSDP and Per Capita NSDP

During the last three decades or so, the economy of Himachal Pradesh had grown at growth rate of 5 per cent (Planning Commission, 2010). Increase in total number of educational institutions and total number of schools is far ahead of population growth. There was 122.89 per cent increase in educational institutions but only 56 .54 per cent increase in population during the period of 1981-82 to 2010-11. If we take up NSDP and per capita NSDP, the percentage increase in these two indicators is much higher than that of educational institutions between the two time periods.

Himachal Pradesh: 1981-82 to 2010-11								
Items	1981-82	2010-11	Percentage Increase	Compound Annual				
			between 1981-82 to	Rate of Growth				
			2010-11	between 1981-82 to				
				2010-11				
Number of	8,025	17,724	122.89	2.77				
Educational								
Institutions								
Number of	7,967	17,478	121.12	2.75				
Schools								
Population	42,80,818	68,56,590	56.54	1.64				
NSDP(Rs. Crore.)	5,257	23,411	345.33	5.29				
at constant								
Prices								
Per Capita NSDP	12,391	34,938	181.96	3.64				
(Rs.) at Constant								
Prices								

Table 1 Growth of Educational Institutions, Population and NSDP in Himachal Pradesh: 1981-82 to 2010-11

1. Government of India, *Education in India*, Vol. 1, Ministry of Education and Social Welfare.

2. Reserve Bank of India, "Handbook of Statistics on Indian Economy 2008-2009 and 2010-11" RBI Mumbai.

3. Government of Himachal Pradesh, *Statistical Outline of Himachal Pradesh*, Directorate of Economics and Statistics, Shimla.

4. Government of India, *Selected Educational Statistics*, Ministry of Human Resource Development of Education, Department of Secondary Education and Higher Education, Planning Monitoring and Statistics Division, New Delhi.

The compound annual growth rate for NSDP has been found 5.29 per cent and for per capita NSDP it was 3.64 per cent per annum. On the contrary compound annual growth rate for total number of institutions was 2.77 per cent only. The results suggest an inadequate expansion of educational institutions in relation to the growth of NSDP and Per Capita NSDP (Table 1).

### Growing Number of Educational Institutions

In Himachal Pradesh, school education is being imparted through well defined institutional framework consisting of the primary school, middle school and high/ higher secondary school established by the state government and the private sector. A steady increase in the number of educational institutions has been observed. There were total 5,074 institutions in the state in 1971-72 out of which 5,023 were schools. Their number rose to 17,724 and 17,478 respectively in 2010-11. During the period of 39 years 249.31 per cent growth has been recorded in the total number of educational institutions. The compound annual growth rate of total number of educational institutions has been registered at 3.18 per cent, while in case of school it was 3.17 per cent for 39 years time period since 1971-72 to 2010-11 (Table 2). Table also reveals the distribution of schools on the basis of ownership status. The data shows that on the whole there were 4,911 government schools in Himachal Pradesh in 1971, their number rose to 15,151in 2011.

Table 2 Number of Educational Institutions in Himachal Pradesh(1971-72 to 2010-11)

Year	Government	Private	Total	Total No. Of	Percentage	Percentage
	Schools	Schools	Schools	all	of Govt.	of private
				Educational	Schools to	schools to
				Institutions	Total	Total
					Schools	Schools
1971-	4,911	112	5,023	5,074	97.77	2.23
72						
1976 -	5,682	121	5,803	5,865	97.91	2.09
77						
1981-	7,820	147	7,967	8,025	98.15	1.85
82						
1986-	8,643	201	8,844	8,927	97.73	2.27
87						
1991-	9,512	435	9,947	10,024	95.63	4.37
92						
1996-	10,440	495	10,935	11,009	95.47	4.53
97						
2001-	13,710	889	14,599	14,705	93.91	6.09
02						
2006-	14,511	2,042	16,553	17,017	87.66	12.34
07						
2010-	15,151	2,127	17,278	17,724	87.69	12.31
11						
Courses	1	1		1	1	1

Source:

1. Government of India, *Education in India*, Vol. 1 Ministry of Education and Social Welfare.

2. Government of India *Selected Educational Statistics*, Ministry of Human Resource Development of Education, Department of Secondary Education and Higher Education, Planning Monitoring and Statistics Division New Delhi.

3. Government of Himachal Pradesh, *Statistical Outline of Himachal Pradesh*, Directorate of Economics and Statistics, Shimla.

4. Government of Himachal Pradesh, *State Statistical Abstract of Himachal Pradesh*, Directorate of Economics and Statistics, Shimla

The government owned schools, however have grown at the compound growth rate of 3.36 per cent per annum between 1971 and 1991 and, 2.48 per cent per annum between 1991 and 2011. On the other hand the number of non- government schools have increased from 112 schools (2.23 per cent) in 1971 to 435 (4.37 per cent) in 1991 and to 2,127 (12.31 per cent) in 2011. Among the non-government schools, the compound growth rate worked out to be 7.02 per cent per annum between 1971 and 1991, and 8.71 per cent per annum between 1991 and 2011. Thus the compound growth rate among the non-government schools is much higher than that of the government schools during both the time periods. It can also be noticed that in the state comparatively higher proportion (87.69 per cent) of the total number of schools are under government management than those under non-government (12.31 per cent).

The Government of India, through the Planning Commission has specified distance norms to ensure adequate physical access to elementary and secondary education facilities. This norm, at present, for hill states stands at one primary school within a distance of 1.5 kilometres from a habitation, one middle school within a distance of 3 kilometres from a habitation and a high/ higher secondary school within a distance of 5 kilometres. The Government of Himachal Pradesh is committed to open schools within the specified radius, which have raised the total number of schools at elementary and secondary level in the state. At, present, the government manages an overwhelming majority of all the recognized educational institutions. However, a growing number of nongovernment schools at all levels, with official recognition, and in many cases, with financial assistance of state government has been found. The growth of private educational institutions have partially met the gap in some -what limited facilities provided by the state. These schools have begun to attract an increasing proportion of total number of students. A closer look at some of the states where privatization is rapidly increasing shows interesting patterns. In urban Haryana and Uttar Pradesh, the migration from government to private schools is very evident since enrolment in government schools is showing an absolute decrease (D' Souza ed. al., 2002). This large growth in the number of private schools reflects the diminishing confidence of the people in government managed schools. These government schools not only lack basic infrastructure facilities. they are also bereft of motivation and commitment among the teachers they employ (Sen et. al. 2010). However households having higher income and education levels prefer to admit their children in private schools, whereas parents seem to perceive that their child would be imparted qualitatively better education.

## Growth in Enrolment and Drop-outs

There has been an all round increase in the number of educational institutions as seen in the earlier section in Himachal Pradesh in recent years. But the number of educational institutions is not in a very good indicator of utilization of educational services. It indicated only the educational facilities available in the state.

Table 3 Growth in Enrolment of Students in Himachal Pradesh: 1971	•
72 to 2010-11	

Enrolment	1971-72	2010-11	Percentage Increase from 1971-72 to 2010- 11	Compound Annual Rate of Growth
Elementary Level	3,58,466	9,90,000	176.18	2.64
Secondary Level	2,04,589	5,91,724	189.23	2.76
Total Enrolment in	5,63,055	15,81,724	180.92	2.68
Schools				

EUROPEAN ACADEMIC RESEARCH - Vol. II, Issue 8 / November 2014

Sandeep Kumar Bhardwaj, Lokesh- Growth of Human Capital in Himachal Pradesh: An Empirical Analysis

Enrolment in all	5,82,522	17,42,800	199.18	2.85
Educational				
Institutions				
Enrolment in all	16.84	25.42	50.59	1.06
Educational				
Institutions as				
percentage of Total				
Population				

1. Government of Himachal Pradesh, *Statistical Outline of Himachal Pradesh*, Directorate of Economics and Statistics, Shimla.

2. Government of India, Selected Educational Statistics(various years), Ministry of Human Resource Development of Education, Department of Secondary Education and Higher Education, Planning Monitoring and Statistics Division, New Delhi.

3. Government of India, *Education in India*, Vol. 1, Ministry of Education and Social Welfare.

Enrolment of the students is an important element of educational progress and can provide some indication of the extent to which the available facilities are being utilized. To encourage enrolment, reduce the drop-out rate and enhance the retention rate of the children in schools various scholarships and other incentives namely scholarship for students belonging to IRDP families, pre matric scholarship for S.C. students etc. have been initiated in the state. Table 3 shows the enrolment figures in elementary and secondary level.Enrolment in all educational institutions increased with annual compound growth rate of 2.85 per cent between 1971-72 and 2010-11. In 1971-72 total enrolment as percentage of total population was 16.84 only while in 2010-11 it has increased to 25.42 per cent with an annual growth of 1.06 per cent.

Drop-out is the proportion of children entering the first class of primary school, but do not successfully complete that level in due course. The Table 4 depicts the scenario of drop-out in Himachal Pradesh Since 1970-71 to 2010-11. The data reveal that drop-out rate has been reduced from 67.0 per cent in 1970-71 to mere 0.91 per cent in 2010-11 for classes 1<sup>st</sup> to 5<sup>th</sup>. The state has attained 99.10 per cent retention rate at primary level. But the drop-out rate for the classes 1<sup>st</sup> to 10<sup>th</sup> is still high (11.72 per cent). Girl drop-out has been found high as compared to boys in each point of time at all the levels of education. The most important reasons for drop-out at the high and higher secondary level are poverty, child labour, child marriage, quantum of home work and requirement of farm and domestic labour.

Table 4 Drop-Out Rate of Students in Himachal Pradesh: 1970-71 to 2010-11

	Drop-out Rates in Classes									
Year		$1^{st}$ to $5^{th}$		1 <sup>st</sup> to 8 <sup>th</sup>			1 <sup>st</sup> to 10	th		
	Boys Girls Total			Boys Girls Total			Boys Girls Total			
1970-71	64.50	70.90	67.00	74.60	83.40	77.90	NA	NA	NA	
1980-81	56.20	62.50	58.70	68.00	79.40	72.70	79.80	86.60	82.50	
1990-91	40.10	46.00	42.60	59.10	65.10	60.90	67.50	76.90	71.30	
2000-01	39.70	41.90	40.70	50.30	57.70	53.70	66.40	71.50	68.60	
2005-06	7.00	9.00	8.00	10.50	11.12	10.82	22.22	32.32	28.21	
2010-11	0.77	1.04	0.91	2.85	4.98	3.92	8.50	14.94	11.72	

Source:

1. Government of India, *Selected Educational Statistics*, Ministry of Human Resource Development of Education, Department of Secondary Education and Higher Education, Planning, Monitoring and Statistics Division, New Delhi.

2. Government of India, *Education in India*, Vol. 1, Ministry of Education and Social Welfare.

3. Government of Himachal Pradesh, Directorate of Education, Himachal Pradesh, Shimla.

It is worth noting that in many of the elite schools in the cities for the sake of keeping the standards and prestige of the school high, children who do not make the stipulated benchmark are asked to discontinue studies in the schools. The ephemeral glory is more important to them than the future of a child (Chittattukalam, 2011). Another striking feature has been estimated, that from negligible figures till the early 1990s, almost 12 per cent of elementary schools enrolment in Himachal Pradesh is now in private schools (India Today, 2006). Latest government estimates shows that 7 million children are out of school in India. There is a need to further investigate the phenomenon of drop-out in its entire ramification especially since it entails resource waste. This leads to related aspect of the role of the key player i. e. government since education is listed as a concurrent subject.

### Growth in Number of Teachers

The constrained supply of public resources and unregulated entry has serious implications in terms of educational participation and outcomes. Despite limited resources, efforts have been made to make the best out of the existing situation. Over the years, as the number of schools gradually increased, it became difficult to provide trained, regular teachers. At times untrained teachers were recruited and in service training was imparted. Table 5 depicts the numeric strength of teachers for the period of 1971-72 to 2010-11. The total number of teachers increased with annual compound growth rate of 2.67 per cent at elementary level and 3.75 per cent at secondary level. The percentage of untrained teachers to total number of teachers as an indicator of low quality of education has increased from 386 (2.60 per cent) in 1971-72 to 2,699 (6.15 per cent) in 2005-06 at elementary level of education. At secondary level it has been observed 735 (11.98 per cent) and 343 (1.24 per cent) respectively. The percentage of untrained teachers to total number of teachers has sharply declined at secondary level. The table also shows that the absolute number of untrained teachers have increased more rapidly in case of elementary education which affect the quality of education.

Year	Elementary Level			Percentage	Secondary Level			Percentage
	Trained	Untrain-	Total	of	Trained	Untrai-	Total	of
		ed		Untrained		ned		Untrained
				to Total				to Total
				T eachers				T eachers
1971-	14,451	386	14,837	2.60	5,398	735	6,133	11.98
72								
1975-	16,591	77	16,668	0.46	10,001	70	10,071	0.70
76								
1981-	20,506	66	20,572	0.32	8,786	210	8,996	2.33

#### Table 5 Growth of Teachers in Himachal Pradesh

EUROPEAN ACADEMIC RESEARCH - Vol. II, Issue 8 / November 2014

82								
1985-	20,897	482	21,379	2.25	10,556	229	10,715	1.48
86 1991-	22,871	1788	24,659	7.25	14,535	244	14,799	1.78
92	22,071	1700	24,000	1.20	14,000	211	14,100	1.70
1995-	34,938	2070	37,008	5.59	16,210	313	16,523	1.89
96 2001-	34,580	2435	37,015	6.58	24,230	437	24,667	1.77
02	54,560	2455	57,015	0.00	24,230	437	24,007	1.77
2005-	41,204	2699	43,903	6.15	27,332	343	27,675	1.24
06								
2010-	NA	NA	41,408	-	NA	NA	25,950	-
11								

Sandeep Kumar Bhardwaj, Lokesh- Growth of Human Capital in Himachal Pradesh: An Empirical Analysis

1. Government of Himachal Pradesh, *Statistical Outline of Himachal Pradesh*, Directorate of Economics and Statistics, Shimla.

2. Government of Himachal Pradesh, *Handbook of Educational and Allied Statistics*, 1993-94, Department of Higher Education Himachal Pradesh, Shimla.

3. Government of Himachal Pradesh, *State Statistical Abstract of Himachal Pradesh*, Directorate of Economics and Statistics, Shimla.

Several measures have been taken from time to time, to provide the required number of teachers in all educational institutions. In addition to the regular permanent teachers, several other teachers have been engaged on the basis of tenure, para teachers, primary assistant teachers, vidya upasak, adhock teachers, contract teachers and school management committee teachers.

#### Growth of Higher Education in Himachal Pradesh

In Himachal Pradesh at present majority of colleges of general education are under government management. Total number of colleges increased from 17 in 1971-72 to 97 in 2010-11. Bulk of the education imparted is in the arts faculty. The number of teachers increased from 488 in 1971-72 to 1,791 in 2010-11. The growth in number of teachers was slow as compare to the growth of students. Because of the less recruitment of teachers at college and university level and rapidly increasing number of students, the teacher-pupil ratio has reached to 1.46 in 2010-11

in relation to 1.25 in 1971-72. Along with 97 colleges of general education at present there are 13 universities, 71 colleges of education, one IIT, one NIT, 56 ITIs, 3 medical colleges and 12 DIETs which are imparting professional and vocational degrees and diplomas (Economic Survey 2011-12). Among these institutions majority of institutions are run by the government bodies. It is obvious that there has been growth in higher education too but still confined to the smallest group of population. In 1981-82, 0.43 per cent of total population was enrolled in the institutions of higher education which has increased to 1.24 per cent to total population in 2010-11. Priority must be given to the backward areas in opening new institutions of higher and technical education.

# Public Expenditure on Education

The Education Commission of 1964-66 (Kothari Commission) had suggested way back in 1968, that the public expenditure on education should be about 6 per cent of the country's Gross Domestic Product. Even since independence, educational expenditure in India has been increasing, but however during the entire post independence period, this ratio has been well below the recommended figures. In Himachal Pradesh the presence of the private sector in the field of education is largely confined to the urban areas. This is because of the high cost and low affordability of rural population in providing expensive education through private institutions. The very fact that the availability of private services in education sector in rural area are low, leads to an increasing responsibility of the state government in providing education to the door steps of the people living in the remote areas. In Himachal Pradesh the expenditure of education had gone up from mere Rs. 45.14 lakh in First Five Year Plan to Rs. 2,74,920.03 lakh by the 10<sup>th</sup> Five Year Plan.

Relatively higher per capita income level of Himachal Pradesh is not in tune with its moderate education indicators.

The share of education sector in the state budgetary expenditure as the percentage of NSDP has increased only by 5.82 per cent in 1981-82 to 7.01 per cent in 2010-11 is depicted in table 6. Expenditure on education increased after mid 1980s at a reasonably high rate of growth as Human Capital Development became a favourite slogan during that time. So we can say that Himachal Pradesh has achieved that norm of 6 per cent budget expenditure on education as recommended by Kothari Commission in 1968 in India.

The spending priorities could be very aptly captured by examining the expenditure on per capita and per student basis. Public expenditure on education may also be influenced by the population growth of the state. Educationally advanced states like Tamil Nadu, Kerala and Himachal Pradesh has higher per capita spending on education compared with educationally poor performing ones (Mehrotra, 2005). In Himachal Pradesh educational expenditure on per capita basis increased overall from Rs. 141.71 in 1980-81 to Rs. 3,410.56 in 2010-11. Per student expenditure at current prices witnessed a rise consistently. It rose from Rs. 647.99 in 1980-81 to Rs. 2,062.50 during 1991-92 and ultimately to Rs. 13,385.49 in 2010-11. Per student expenditure has grown by 12. 27 per cent compound annual rate of growth during first period and by 10.66 per cent during the second sub period.

Year	Per Student	Per Capita	Educational Expenditure
	Expenditure	Expenditure	as percentage of NSDP
1981-82	647.99	141.71	5.82
1985-86	840.56	220.73	6.33
1990-91	1,904.96	509.68	7.69
1995-96	3,521.16	891.69	7.47
2000-01	8,225.53	2,031.67	8.75
2005-06	8,221.71	2,380.22	6.47
2010-11	13,385.49	3,410.56	7.01

Table 6 Per Student and Per Capita Expenditure and PercentageShare of Educational Expenditure in NSDP

- 1. Government of Himachal Pradesh, *Finance Accounts (Relevant Years)*, Controller and Auditor General, Shimla.
- 2. Government of Himachal Pradesh, Net State Domestic Product, New Series, 1994-95 to 2006-07, Directorate of Economics and Statistics.
- 3. Government of India, *Education in India, Vol. 1*, Ministry of Education and Social Welfare.
- 4. Reserve Bank of India, Handbook of Statistics on Indian Economy, Mumbai.

Public expenditure on education at a more disaggregated level is depicted in Table 7. One of the most special features of the educational budget of the state is that more than half of this is consumed by elementary education alone. The share of elementary secondary and university level has remained approximately constant with some fluctuations in some years. The share of university and technical education to total expenditure is much lower than that of elementary and secondary levels. At all India level the share of educational expenditure allocated to higher education, over last 40 years continued to be 12-13 per cent but in Himachal Pradesh it stands at 7-8 per cent only. Thus the public spending on education in the state is not in harmony with its educational requirements particularly in context of weak educational outcomes and emerging challenges of human capital formation.

Year	Elementary	Secondary	University	Adult	Languages	General	Technical	Other
1980- 81	55.03	32.37	7.95	0.15	0.37	1.04	0.61	2.99
1985- 86	36.14	49.17	8.23	0.31	0.15	1.44	0.82	4.19
1990- 91	55.84	30.67	7.94	0.74	0.35	1.95	1.06	1.45
1995- 96	53.67	33.42	7.52	0.29	0.34	1.79	1.31	1.66
2000- 01	57.57	31.29	7.34	0.13	0.23	1.45	0.83	1.18
2005- 06	53.20	31.80	6.20	0.09	0.32	0.44	0.81	1.12

Table 7 Percentage Distribution of Public Expenditure on Education (By Level) in Himachal Pradesh

EUROPEAN ACADEMIC RESEARCH - Vol. II, Issue 8 / November 2014

Sandeep Kumar Bhardwaj, Lokesh- Growth of Human Capital in Himachal Pradesh: An Empirical Analysis

Source:

- 1. Government of Himachal Pradesh, *Finance Accounts (Relevant Years)*, Controller and Auditor General, Shimla.
- 2. Government of Himachal Pradesh, *Draft Annual Plan 2011-12*, Planning Department Himachal Pradesh Shimla.

In Himachal Pradesh the system of education witnessed a shift towards private players at all stages and type of education being higher in technical and vocational education.

### Conclusion

It is clear from the present analysis that an impressive achievement has been made in educational development in the state of Himachal Pradesh during the period under study, especially in literacy rates, enrolment, number of educational institutions. From the point of view of literacy rate, Himachal Pradesh is far ahead of India as a whole and many other states of India. Among the number of institutions, schools form a large number. A close look of schools by type of management reveals that majority of schools are under government control. The vacuum created by the weakening of public sector institutions in education began to be filled by the private sector schools. The private sector institutions being run with sole motive of profit has been charging very high tuition fees. This has led to exclusion of a large section of population from accessing educational services provided in the private institutions. The number of teachers has increased rapidly, but the percentage of untrained teachers to total number of teachers is rather high in elementary level. It is evident from high teacher-pupil ratio that quality aspect of education has not given proper attention. The pattern of educational expenditure has been similar to those followed in many states and at all India level. It has been noticed that the government of Himachal Pradesh has given substantial support for the advancement of education sector by

increasing the pace of public expenditure on education. However, public expenditure on education as percentage of NSDP in the state has achieved the goal of 6 per cent as recommended by the Education Commission (1968).

The State Development Report justifiably claims that 'Himachal Pradesh scores high on indices of human development' (Human Development Report, 2002). Fourty years or so down the lane, living conditions in Himachal Pradesh seems to have been radically transformed for the better. The experience of Himachal Pradesh illustrates an important feature of contemporary development pattern in India, namely, that examples of positive achievements are not confined to the well known case of Kerala and Tamil Nadu.

### REFERENCES

- Amir, Muhammad; Mehmod, Bilal and Shahid Muhammad (2012), "Impact of Human Capital on Economic Growth with Emphasis on Intermediary Role of Technology: Time Series Evidences form Pakistan", African Journal of Business Management, Vol. 6, No. 1, pp. 280-285.
- Chittattukalam, Kuriala (2011), "New Education Policy and Social Inclusion", Social Action, A Quarterly Review of Social Trends, Vol. 61, No. 3, pp. 233-245.
- D'Souza, Errol (2004), "Contractual Arrangements in Academia: Implications for Performance", Economic and Political Weekly, Vol. 39, No, 22, pp. 2156-2168.
- Dreze, Jean and Sen, Amartya (2002), India Development and Participation, Oxford University Press, New Delhi.
- Gill, Sucha Singh, Singh, Sukhvinder and Brar, Jasvinder Singh (2010), 'Globalization and Indian State: Education Health and Agricultural Extension Services in Punjab,Aakash Books, MayurVihar Phase 1, Delhi 110091.

- Government of India, Census of India, (1971), Himachal Pradesh, Series-7, Part -2, General Population Tables, Ministry of Home Affairs, New Delhi.
- Government of Himachal Pradesh, Census of India-2011-Himachal Pradesh: Literacy in the State, Directorate of Census Operations, Himachal Pradesh, Shimla.
- Government of Himachal Pradesh, Economic Survey of Himachal Pradesh, (Various Years), Directorate of Economics and Statistics, Shimla.
- Government of Himachal Pradesh, State Domestic Product, New Series, 1985-86 to 2006-07, Directorate of Economics and Statistics, Shimla.
- Government of Himachal Pradesh, State Statistical Abstract of Himachal Pradesh, (Various Years), Department of Economics and Statistics, Shimla.
- Government of Himachal Pradesh, Statistical Outline of Himachal Pradesh, (Various Years), Department of Economics and Statistics, Shimla.
- Government of India, (1979), Educational Statistics, District-Wise, 1976-77, Vol.3, Himachal Pradesh; Planning, Monitoring and Statistical Division, Ministry of Education and Social Welfare, Department of Education, New Delhi.
- Government of India, (2005), Himachal Pradesh Development Report (2005), Planning Commission, New Delhi.
- Government of India, Education Commission, (1966), Report of the Education Commission, Education and National Development, Ministry of Education New Delhi.
- Government of India, Education in India, Vol. 1, (Various Years), Ministry of Education and Social Welfare, New Delhi.
- Government of India, Education in India, Vol. 2, (Various Years), Ministry of Human Resource Development, Department of Education, New Delhi.

Government of India, Selected Educational Statistics, (Various Years), Ministry of Human Resource Development, Department of Secondary Education and Higher Education, Planning Monitoring and Statistics Division, New Delhi.

India Today, (2006), New Delhi, September 11, 2006.

- Kaur, Kuldip (2006), "Human Capital, Economic Growth and Wages in India: An Interrelationship", ArthaVijnana, Vol. 48, No. 1&2, pp. 105-118.
- Mehrotra, Santosh (2005), "Human Capital or Human Development? Search for a Knowledge Paradigm for Education and Development", Economic and Political Weekly, Vol. 40, No. 4, pp. 300-306.
- Mohanty, Alekha C. (2003), "Human Capital, Poverty and Income Distribution: A Brief Review", Labour and Development, Vol. 9, No. 1, pp. 122-138.
- PROBE (1999), Public Report on Basic Education in India, New Delhi: Oxford University Press.
- Ray, Debraj (2012), Development Economics, Oxford University Press, pp. 47-125.
- Reserve Bank of India, Handbook of Statistics on Indian Economy, (various years)
- Sanan, Deepak (2004), "Delivering Basic Public Services in Himachal Pradesh, Is the Success Sustainable", Economic and Political Weekly, Vol. 39, No. 9, pp 975-978.
- Sanan, Deepak (2008), "Development Lessons from the Himachal Pradesh Experience", ASCI Journal of Management, Vol. 37, No.2, pp. 109-121.
- The Tribune (2012), School Education: Punjab Ranks 3<sup>rd</sup> in India, July 25.