

Education Expenditure in Punjab and Haryana : An Empirical Analysis

** Reeta Tomar*

Abstract

Education is the backbone of a country. Against this background, this paper analyzed the pattern of education expenditure by the state governments of Punjab and Haryana from 1990-2013. Also, the pattern of intra-sectoral allocation of education expenditure on elementary education, secondary education, university and higher education, and technical education was analyzed. Next, the pattern of expenditure on elementary education, secondary education, university and higher education, and technical education was analyzed with respect to education budget, state budget, and state income (NSDP) in both the states. The main findings showed that in both the states, total education expenditure and expenditure on major heads of education had increased in absolute terms during the study period, but as a percent of state education budget, state budget, and state income declined. Education budget of both these states was around 2% of the state income, which was much lower than the recommended 6% of state income. The Central Advisory Board of Education (CABE) Committee in 2005 suggested that at least 3% of state income be allocated to elementary education, 1.5% to secondary education, 1% to higher education, and 0.5% to technical education, but none of these states were found to be near to these recommendations.

Keywords: education, state expenditure, welfare

JEL Classification : H75, I21, I22

Paper Submission Date : August 20, 2017 ; **Paper sent back for Revision :** August 25, 2017 ; **Paper Acceptance Date :** August 28, 2017

Education is the backbone of economic and socio-culture development of a country. It has emerged as an important means for promoting human resource development as well as in achieving rapid economic development and technological progress. A good education system cultivates knowledge, productive skills, positive values, and attitudes among the people.

The states of Punjab and Haryana located in North-Western India are the prosperous states of India with second and third highest per capita income, respectively. Punjab, an agricultural state, has 2.48 crore population that lives in an area of 50,362 sq.km. Thus, Punjab accounts for 1.5% of country's total area and 2.4% of India's total population. Haryana, also an agricultural state, has a population of 2.1 crores and area of 44,212 sq. km., which accounts for 2.05% of the Indian population and 1.44% of the area of India. Both are major contributors of food grains in India.

Both the states, though rich in economic terms, do not show the same picture in human development. For example, in 2001, Kerala had much lower per capita income than that of Punjab and Haryana, but had higher literacy rate of 90.92% as compared to the literacy rate of 70% of Punjab and 68% of Haryana. Also, there are wider inter-district, rural-urban, and male-female disparities with respect to literacy rate within the states.

Against this background, this paper analyzes the pattern of education expenditure in Punjab and Haryana states after economic reforms, that is, from 1990-91 to 2012-13. Also, it sums up the main findings and raises certain issues.

The specific objectives of this study are :

* Assistant Professor, Maharishi Law School, University of Information Technology, Sector : 110, Noida, Uttar Pradesh.
E-mail : reetatomar05@gmail.com

- (1) To analyze the trends and growth in aggregate total expenditure on education, that is, revenue and capital expenditure in absolute terms.
- (2) To analyze the intra-sectoral allocation of expenditure on education in absolute terms.
- (3) To examine the relationship of education expenditure with total expenditure of the state (state budget) and net state domestic product (state income) as percentages.

The data for this study were obtained from various sources, such as : *Finance Accounts* of Punjab and Haryana, *Statistical Abstract of Punjab and Haryana* (various issues from various years).

Education Expenditure in Punjab and Haryana : Patterns and Trends

In India, states are mainly responsible for the education expenditure. The public expenditure on education in the

Table 1. Aggregate Total Expenditure (Revenue + Capital) on Education

(At Constant Prices of 1990-91)

(₹ Crore)

Year	Punjab			Haryana		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total
1990-91	28.16	489.81	517.97	31.64	300.33	331.97
1991-92	54.67	471.97	526.64	44.11	286.72	330.84
1992-93	46.93	454.62	501.55	59.54	295.21	354.75
1993-94	66.12	456.79	522.92	56.99	292.13	349.12
1994-95	73.73	437.34	511.08	66.07	294.69	360.77
1995-96	76.64	475.53	552.17	87.51	314.24	401.75
1996-97	74.78	533.32	608.11	79.25	360.19	439.44
1997-98	86.8	639.75	726.56	65.16	416.52	481.68
1998-99	139.01	765.84	904.85	95.04	556.62	651.67
1999-2000	149.41	770.37	919.78	102.86	538.83	641.69
2000-01	102.43	777.88	880.32	87.16	544.68	631.85
2001-02	115.7	722.01	837.71	97.91	578.35	676.26
2002-03	61.22	863.54	924.77	46.25	596.7	642.95
2003-04	27.26	844.82	872.08	64.09	581.61	645.71
2004-05	43.71	794.29	838	84.07	577.52	661.6
2005-06	51.19	818.99	870.19	133.72	617.69	751.41
2006-07	40.08	795.38	835.46	179.11	654.23	833.35
2007-08	43.29	888	931.29	282.41	686.54	968.95
2008-09	93.7	949.2	1043.0	359.3	820.1	1179.4
2009-10	87.8	1110.8	1198.7	559.8	1323.4	1883.3
2010-11	140.8	1101.7	1242.6	607.5	1275.3	1882.8
2011-12	258.0	1425.4	1683.5	859.0	1275.6	2134.7
2012-13	277.4	1381.5	1658.9	946.8	1366.3	2313.2

Source: Calculated from Finance Accounts of Haryana and Punjab for various years.

states of Punjab and Haryana is examined from various aspects over the period of 23 years, that is, from 1990-91 to 2012-13.

(1) Education Expenditure Levels : The Table 1 presents the aggregate total expenditure on education including revenue and capital account with plan and non-plan break up at constant prices of 1990-91 for Punjab and Haryana. For Punjab, the total amount of expenditure increased from ₹ 517.97 crores in 1990-91 to ₹ 1658.9 crores in 2012-13, showing an increase of 3.20 times (220%). The plan expenditure increased from ₹ 28.16 crores to ₹ 277.4 crores and non-plan expenditure increased from ₹ 489.81 crores to ₹ 1381.5 crores during 1990-91 to 2012-13, showing an increase of 9.85 times (885%) and 2.82 times (182%), respectively.

For Haryana, the total amount of public expenditure on education increased from ₹ 331.97 crores in 1990-91 to ₹ 2313.2 crores in 2012-13, showing an increase of 6.98 times (598%). The plan expenditure increased from ₹ 31.64 crores to ₹ 946.8 crores ; whereas, the non-plan expenditure increased from ₹ 300.33 crores to ₹ 1366.3 crores from 1990-91 to 2012-13, thus showing an increase of 29.9 times (2892%) and 4.54 times (354%), respectively.

Table 2. Aggregate Total Expenditure on Major Heads in Education of Punjab State

Year	(At Constant Prices of 1990-91)									(₹ Crore)		
	Elementary Education			Secondary Education			University & Higher Education			Technical Education		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
1990-91	0.72	161.95	162.67	12.14	235.69	247.83	2.09	70.81	72.90	6.96	6.06	13.02
1991-92	0.36	147.84	148.20	13.75	236.23	249.97	1.16	68.57	69.73	31.80	6.53	38.33
1992-93	2.92	148.54	151.45	10.33	219.97	230.30	1.22	68.24	69.46	24.48	6.50	30.98
1993-94	2.33	158.09	160.42	26.59	218.40	244.99	6.11	62.46	68.57	20.86	6.00	26.86
1994-95	1.81	146.21	148.02	28.64	211.57	240.21	5.25	63.88	69.14	26.08	5.00	31.09
1995-96	1.79	159.37	161.16	34.69	230.49	265.17	4.55	69.05	73.60	27.22	4.41	31.64
1996-97	1.02	179.47	180.49	45.66	269.95	315.62	4.42	67.44	71.86	17.26	4.09	21.35
1997-98	0.79	201.73	202.52	61.58	341.07	402.65	0.61	74.75	75.36	18.53	7.36	25.89
1998-99	0.83	264.67	265.50	108.00	384.85	492.85	0.97	85.60	86.57	15.20	13.76	28.96
1999-2000	0.54	263.00	263.54	99.43	375.22	474.65	0.25	107.38	107.63	22.49	9.33	31.82
2000-01	1.95	235.14	237.08	80.08	417.50	497.58	0.70	102.17	102.87	6.94	8.04	14.98
2001-02	0.37	209.37	209.74	97.17	414.23	511.40	0.01	78.37	78.38	4.98	5.73	10.70
2002-03	28.68	227.47	256.15	19.50	492.94	512.44	0.45	114.49	114.94	2.05	12.26	14.30
2003-04	0.03	212.67	212.71	17.46	500.55	518.01	-	102.17	102.17	0.85	14.53	15.38
2004-05	11.84	190.01	201.85	25.08	502.63	527.72	1.50	74.52	76.01	0.85	9.62	10.47
2005-06	18.86	189.08	207.94	21.87	514.54	536.40	0.20	84.86	85.05	1.03	11.81	12.85
2006-07	12.16	172.81	184.97	15.83	523.12	538.95	5.90	69.53	75.43	0.85	12.60	13.45
2007-08	8.36	184.94	193.30	14.16	584.81	598.97	14.93	85.51	100.44	-	14.17	14.17
2008-09	42.4	174.6	217.2	20.3	590.9	611.2	1.65	72.8	74.4	-	12.9	12.9
2009-10	62.3	165.9	228.2	124.0	652.4	664.9	-	143.7	143.7	-	17.7	17.7
2010-11	83.2	169.0	252.3	10.9	710.9	721.8	1.4	93.1	94.5	0.52	17.4	18.0
2011-12	135.0	272.2	407.2	66.2	811.3	877.5	1.0	121.9	123.0	1.10	19.0	20.1
2012-13	131.2	278.6	409.9	156.0	1068.8	1224.8	2.4	118.4	120.8	3.0	18.3	21.4

Source: Calculated from Finance Accounts of Punjab State for various years.

Table 3. Aggregate Total Expenditure on Major Heads in Education of Haryana State**(At Constant Prices of 1990-91)****(₹ Crore)**

Year	Elementary Education			Secondary Education			University and Higher Education			Technical Education		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
1990-91	12.3	133.6	145.9	6.4	104.9	111.3	3.5	44.1	47.6	5.8	5.6	11.4
1991-92	14.0	125.2	139.3	11.3	103.9	115.2	4.2	44.4	48.7	10.4	5.3	15.8
1992-93	19.3	132.3	151.7	15.6	105.6	121.2	3.7	43.4	47.1	12.7	5.5	18.2
1993-94	17.8	133.6	151.5	18.7	100.0	118.8	4.8	44.8	49.7	11.2	5.6	16.8
1994-95	21.1	135.3	156.4	21.4	100.8	122.2	5.0	44.5	49.5	13.0	5.5	18.5
1995-96	32.8	149.0	181.8	29.2	105.9	135.1	9.4	45.0	54.5	9.4	6.0	15.4
1996-97	28.2	178.1	206.3	31.2	115.8	147.0	7.6	49.9	57.6	6.5	6.5	13.7
1997-98	17.9	192.1	210.1	22.8	146.8	169.6	5.7	59.3	65.1	8.99	6.4	15.4
1998-99	30.6	253.6	284.3	35.8	224.8	260.7	4.8	55.7	60.5	19.5	7.8	27.3
1999-2000	29.6	254.6	284.2	30.4	192.3	222.8	4.5	70.1	74.6	34.7	9.7	44.5
2000-01	30.4	245.1	275.5	38.1	180.1	218.2	7.6	98.2	105.8	10.1	9.8	19.9
2001-02	36.8	267.7	304.6	36.3	203.0	239.4	5.1	86.9	92.3	10.3	8.6	18.9
2002-03	17.9	285.6	303.5	10.7	211.6	222.4	5.4	77.1	82.5	8.0	9.9	18.0
2003-04	23.9	274.5	298.5	14.5	207.1	221.7	10.2	78.9	89.2	9.9	8.5	18.4
2004-05	45.4	278.3	323.7	13.8	207.9	221.8	9.9	68.8	78.7	11.5	8.8	20.3
2005-06	56.2	296.5	352.7	38.5	225.4	263.9	15.0	71.7	86.7	18.6	9.2	27.9
2006-07	82.8	308.8	391.6	35.2	246.9	282.1	22.7	73.7	132.2	31.5	9.9	41.4
2007-08	88.0	318.1	405.9	50.9	261.9	312.9	92.7	76.3	169.0	41.2	13.9	55.1
2008-09	131.1	335.4	466.5	64.8	273.1	338.1	38.5	82.3	120.9	35.0	13.8	48.8
2009-10	252.1	552.3	804.4	76.9	391.9	468.9	53.0	137.2	190.2	42.0	106.3	148.4
2010-11	270.8	567.9	838.7	83.5	417.5	501.1	40.6	153.1	193.7	33.8	19.9	53.7
2011-12	332.9	577.2	910.1	130.0	396.2	526.2	41.8	165.7	207.6	80.0	19.8	99.9
2012-13	481.7	671.0	1152.8	156.5	391.5	548.1	39.8	163.5	203.4	50.8	20.8	71.7

Source: Calculated from Finance Accounts of Haryana State for various years.

For Punjab, plan and non-plan analysis shows that the share of plan expenditure in total expenditure increased from 5.43% in 1990-91 to a maximum of 16.6% in 2012-13 ; whereas, non-plan expenditure in total expenditure decreased from 94.5% in 1990-91 to 83.2% in 2012-13. For Haryana, plan expenditure in total expenditure increased from 9.5% in 1990-91 to 40.9 % in 2012-13, while non-plan expenditure decreased from 90.43% to 59.06% during the study period.

(2) Intra-Sectoral Allocation in Education Expenditure in Punjab and Haryana : The relative importance given to different levels in education is reflected by the intra-sectoral allocation of resources by the state governments. There is abundant research to support the proposition that investment in lower levels of education contributes more to income redistribution and reduction in poverty besides contributing to economic growth than investment in higher levels. This section examines total expenditure on major heads in education by the sample states of Punjab and Haryana in aggregate terms, that is, combined revenue and capital expenditure with plan and non-plan breakups. Elementary education (EE), secondary education (SE), university and higher education (UHE), and technical education (TE) have been considered as major heads in the education sector.

The Table 2 gives an overview of aggregate total expenditure (ATE) at 1990 - 91 constant prices on major heads in education by the Punjab government. This table shows that non-plan expenditure exceeds plan expenditure on EE, SE, and UHE over the study period of 1990-91 to 2012-13, while plan expenditure exceeds non-plan expenditure on TE in the 1990s but again in the 2000s, a reverse trend is observed. ATE on EE increased from ₹ 162.67 crores to ₹ 409.9 crores ; ATE on SE increased from ₹ 247.8 crores to ₹ 1224.8 crores ; ATE on UHE increased from ₹ 72.9 crores to ₹ 120.8 crores ; and ATE on TE increased from ₹ 13.02 crores to ₹ 21.4 crores, showing an increase of 2.52 times (152%), 4.94 times (394%), 1.65 times (65%), and 1.64 times (64%), respectively over the study period of 23 years.

The Table 3 presents the ATE at 1990-91 constant prices on major heads in education by the Haryana government. This table shows an increasing pattern in ATE on all major heads in education and also the bulk of ATE under all heads is from non-plan account except for TE. ATE on EE increased from ₹ 145.93 crores to ₹ 1152.8 crores ; ATE on SE increased from ₹ 111.38 crores to ₹ 548.1 crores ; ATE on UHE increased from ₹ 47.6 crores to ₹ 203.4 crores ; and ATE on TE increased from ₹ 11.44 crores to ₹ 71.7 crores, showing an increase of 7.90 times (890%), 4.92 times (392%), 4.27 times (327%), and 6.28 times (528%), respectively over the study period from 1990-91 to 2012-13.

Table 4. Aggregate Total Expenditure on Major Heads in Education as Percent of Aggregate Total Expenditure on Education (in %)

Year	Punjab				Haryana			
	EE	SE	UHE	TE	EE	SE	UHE	TE
1990-91	31.4	47.8	14.1	2.5	43.9	33.5	14.3	3.4
1991-92	28.1	47.5	13.2	7.3	42.1	34.5	14.7	4.7
1992-93	30.2	45.9	13.8	6.2	42.7	34.1	13.3	5.1
1993-94	30.7	46.8	13.1	5.1	43.4	34.0	14.2	4.8
1994-95	29.0	47.0	13.5	6.1	43.3	33.8	13.7	5.1
1995-96	29.2	48.0	13.3	5.7	45.2	33.6	13.5	3.8
1996-97	29.7	51.9	11.8	3.5	46.9	33.4	13.1	3.0
1997-98	27.9	55.4	10.4	3.6	43.6	35.2	13.5	3.2
1998-99	29.3	54.5	9.6	3.2	43.6	40.0	9.3	4.2
1999-2000	28.7	51.6	11.7	3.5	44.3	34.7	11.6	6.9
2000-01	26.9	56.5	11.7	1.7	43.6	34.5	16.7	3.1
2001-02	25.0	61.0	9.4	1.3	45.0	35.4	13.6	2.8
2002-03	27.7	55.4	12.4	1.5	47.2	34.6	12.8	2.8
2003-04	24.4	59.4	11.7	1.8	46.2	34.3	13.8	2.8
2004-05	24.1	63.0	9.1	1.2	48.9	33.5	11.9	3.0
2005-06	23.9	61.6	9.8	1.5	46.9	35.1	11.5	3.7
2006-07	22.1	64.5	9.0	1.6	47.0	33.8	15.8	4.9
2007-08	20.8	64.3	10.8	1.5	41.9	32.2	17.4	5.6
2008-09	20.8	58.6	7.1	1.2	39.5	28.6	10.2	4.1
2009-10	19.0	55.4	11.9	1.4	42.7	24.8	10.0	7.8
2010-11	20.3	58.0	7.6	1.4	44.5	26.6	10.2	2.8
2011-12	24.1	52.1	7.3	1.2	42.6	24.6	9.7	4.6
2012-13	24.7	73.8	7.2	1.3	49.8	23.6	8.8	3.0

Source: Calculated from Finance Accounts of Government of Punjab and Haryana (Various Years)

(3) Education Expenditure and Education Budget of the States : It has been noted by many economists that for a balanced growth of education, an economy should start by investing a large part of its educational budget on elementary education and a small part in tertiary level education. When development takes place, the focus can be shifted to the tertiary level. The Education Commission (1966) suggested that at least two-thirds of the total education budget should be invested on school education and about one-third on higher education.

The distribution of expenditure on major heads in education out of the education budget for Punjab and Haryana is depicted in the Table 4. It is clear from the Table 4 that the share of elementary education in education budget of Punjab declined persistently from 31.4% in 1990-91 to the lowest of 19% in 2009-10. Similarly, the share of university & higher education and technical education also declined from 14.1% to 7.2% and from 2.5% to 1.3%, respectively during the study period ; whereas, the secondary education expenditure witnessed a rise in its share in the education budget from 47.8% in 1990-91 to 73.8% in 2012-13. Thus, more than half of the educational expenditure was incurred on secondary education alone from 1996-97. Thus, Punjab is diverting from the right path of a balanced growth of education.

From the Table 4, it is clear that in the state of Haryana, the share of elementary education in public educational

Table 5. Aggregate Total Expenditure on Major Heads in Education as Percent of Aggregate Total Expenditure (%)

Year	Punjab				Haryana			
	EE	SE	UHE	TE	EE	SE	UHE	TE
1990-91	4.8	7.3	2.1	0.6	6.0	4.6	1.9	0.4
1991-92	3.5	5.7	1.6	2.9	5.8	4.8	2.0	0.6
1992-93	4.5	6.8	2.1	2.6	6.4	5.1	2.0	0.7
1993-94	4.2	6.4	1.8	2.2	5.0	3.9	1.6	0.5
1994-95	3.0	4.9	1.4	2.7	3.4	2.7	1.1	0.4
1995-96	3.8	6.2	1.7	3.2	4.8	3.6	1.4	0.4
1996-97	4.1	7.2	1.6	2.5	4.5	3.2	1.2	0.2
1997-98	3.9	7.7	1.4	2.2	4.8	3.9	1.5	0.3
1998-99	4.6	8.6	1.5	1.9	6.3	5.8	1.3	0.6
1999-2000	4.3	7.8	1.8	3.1	6.7	5.2	1.7	1.0
2000-01	3.5	7.4	1.5	0.9	6.3	5.0	2.4	0.4
2001-02	2.9	7.0	1.1	0.4	6.2	4.8	1.8	6.3
2002-03	3.3	6.7	1.5	0.3	6.4	4.7	1.7	0.3
2003-04	2.1	5.0	1.0	0.1	4.2	3.1	1.2	0.2
2004-05	2.4	6.4	0.9	0.2	5.7	3.9	1.3	0.3
2005-06	2.7	7.0	1.1	0.1	6.3	4.7	1.5	0.5
2006-07	2.0	5.7	0.8	0.1	5.5	4.0	1.8	0.5
2007-08	2.0	6.3	1.1	-	5.4	4.2	2.2	0.7
2008-09	2.4	6.7	0.8	0.1	5.6	4.1	1.4	0.6
2009-10	2.4	7.0	1.5	0.1	8.2	4.7	1.9	1.5
2010-11	2.4	7.0	0.9	0.1	8.8	5.2	2.0	0.5
2011-12	4.3	9.4	1.3	0.2	9.0	5.2	2.0	0.1
2012-13	3.9	11.7	1.1	0.2	10.5	5.0	1.8	0.6

Source: Calculated from Finance Accounts of Government of Punjab and Haryana (various years)

expenditure witnessed a steady increase from 43.96% in 1990-91 to 49.8 % in 2012-13 with slight-ups and downs. Thus, overall, around 46% expenditure was incurred on elementary education. Secondary education captured around 33% to 35% expenditure and the university and higher education incurred around 13% to 15% of the expenditure during most of the years, but declined to 23.6% and 8.8% , respectively in 2012-13. The share of expenditure on technical education increased from 3.45% in 1990-91 to 7.8% in 2009-10 and then declined to 3% in 2012-13. Thus, as compared to Punjab, Haryana is moving towards the right path of a balanced growth of education.

(4) Education Expenditure and Aggregate Total Expenditure of the State (State Budget) : The priority accorded by the state to the development of education could be ascertained by examining the proportion of budget allocated to the education sector. The Table 5 depicts the percentage allocation to the various heads in education in the state budget of Punjab and Haryana.

In the state of Punjab, the share of elementary education in state budget declined from 4.8% to 2% in 2006-07 and then again rose to 3.9% in 2012-13. The share of secondary education in the state budget increased from 7.3%

Table 6. Aggregate Total Expenditure on Major Heads in Education as Percent of NSDP (State Income) (in %)

Year	Punjab					Haryana				
	EE	SE	UHE	TE	Edu Exp	EE	SE	UHE	TE	Edu Exp
1990-91	0.69	1.05	0.31	0.05	2.19	0.80	0.61	0.26	0.06	1.82
1991-92	0.60	1.01	0.28	0.15	2.13	0.75	0.62	0.26	0.09	1.78
1992-93	0.58	0.89	0.27	0.12	1.93	0.82	0.65	0.25	0.10	1.91
1993-94	0.59	0.91	0.25	0.10	1.93	0.78	0.61	0.26	0.09	1.80
1994-95	0.53	0.87	0.25	0.11	1.84	0.75	0.59	0.24	0.09	1.73
1995-96	0.56	0.92	0.26	0.11	1.92	0.86	0.64	0.26	0.07	1.89
1996-97	0.58	1.02	0.23	0.07	1.97	0.87	0.62	0.24	0.06	1.85
1997-98	0.64	1.27	0.24	0.08	2.29	0.88	0.71	0.27	0.06	2.01
1998-99	0.79	1.47	0.26	0.09	2.70	1.13	1.03	0.24	0.11	2.58
1999-2000	0.75	1.34	0.30	0.09	2.60	1.05	0.82	0.28	0.16	2.37
2000-01	0.65	1.36	0.28	0.04	2.41	0.94	0.75	0.36	0.07	2.16
2001-02	0.57	1.38	0.21	0.03	2.27	0.97	0.76	0.26	0.06	2.15
2002-03	0.68	1.36	0.31	0.04	2.46	0.91	0.67	0.25	0.05	1.93
2003-04	0.53	1.30	0.26	0.04	2.18	0.81	0.60	0.24	0.05	1.76
2004-05	0.48	1.26	0.18	0.02	2.00	0.81	0.55	0.20	0.05	1.65
2005-06	0.48	1.23	0.20	0.03	2.00	0.81	0.61	0.20	0.06	1.72
2006-07	0.39	1.15	0.16	0.03	1.78	0.78	0.56	0.26	0.08	1.66
2007-08	0.39	1.20	0.20	0.03	1.87	0.74	0.57	0.31	0.10	1.77
2008-09	0.44	1.26	0.15	0.02	2.15	0.90	0.65	0.23	0.09	2.28
2009-10	0.43	1.25	0.27	0.03	2.26	1.31	0.76	0.31	0.24	3.06
2010-11	0.45	1.29	0.16	0.03	2.23	1.28	0.76	0.29	0.08	2.80
2011-12	0.71	1.53	0.21	0.03	2.93	1.32	0.76	0.30	0.14	3.10
2012-13	0.69	2.07	0.20	0.03	2.80	1.57	0.75	0.27	0.09	3.10

Source: Calculated from Finance Accounts of Government of Punjab and Haryana (Various Years)

to 11.7%, the share of university and higher education declined from 2.1% to 1.1%, and that of technical education from 2.9% to 0.2% in the state budget from 1990-91 to 2012-13, respectively.

In the state of Haryana, the share of elementary education in the state budget increased from 6.01% to 10.5%, while that of secondary education remained around 4% to 5% from 1990-91 to 2012-13. The share of university and higher education remained around 1% to 2% and the share of technical education was less than 1% in the state budget during the study period.

(5) Education Expenditure and Net State Domestic Product (State Income) : From the Table 6, it is clear that the share of educational budget for Punjab in the state income remained 1.78% to 2.93% during the study period. Thus, for all the study years, the share of educational expenditure in the state income was less than 3%. The share of elementary education ranged between 0.79% to 0.39 % ; share of secondary education remained between 2.07% to 0.87% ; the share of university and higher education declined from 0.31% to 0.20%, and share of TE was very marginal, that is, 0.11% to 0.02% during the study period.

The share of educational expenditure in the state income for Haryana remained less than 2 % except for 1997 to 2002 where it exceeded slightly of 2%, but from 2008-09 to 2012-13, it crossed the mark of 3%. The share of EE ranged between 1.57% to 0.74% ; of SE between 1.03% to 0.55% ; of UHE between 0.36% to 0.20% ; and share of TE was very less between 0.24% to 0.05% during the study period.

Discussion and Conclusion

The foregoing analysis shows the multiple features of educational spending in the states of Punjab and Haryana. Aggregate total expenditure on education at 1990 - 91 constant prices in absolute terms shows an increasing pattern for both Punjab and Haryana from 1990 -91 to 2012-13. For Punjab, it went up from ₹ 517.97 crores in 1990-91 to ₹ 1658.9 crores in 2012-13 and for Haryana, it went up from ₹ 331.97 crores to ₹ 2313.2 crores during the same period.

An intra-sectoral allocation in education observes similar trends in Punjab and Haryana. Aggregate total expenditure on EE, SE, UHE, and TE increased both for Punjab and Haryana. Another feature that needs attention in Punjab and Haryana is the allocation of expenditure on major heads in education. Out of the total expenditure on education, for Punjab, the share of EE declined from 31.4% to 24.7% and that of SE increased from 47.8% to 73.8% during the study period. But for achieving the objective of universal elementary education, at least two-thirds of the total education budget should be invested on school education as suggested by Education Commission (1966). Punjab did not follow this path of educational development. Also, Haryana has diverted from this recommendation with around 46% share of EE in the education budget.

Another worrying feature for Punjab and Haryana is the declining share of all major heads of education in their respective state budgets during the study period. The share of EE declined from 4.8% to 3.9% ; of SE increased from 7.3% to 11.7% ; UHE declined from 2.1% to 1.1% in Punjab. In case of Haryana, the share of EE increased from 6.09% to 10.5% ; the share of SE slightly increased from 4.6% to 5.0 % ; and share of UHE remained around 2% during the study period.

Another dominant feature for Punjab and Haryana is the small share of education expenditure out of their state income. In Punjab, the share of educational expenditure in state income remained between 1.7% to 2.9% during the study period. The share of EE ranged between 0.7% to 0.4% ; share of SE remained between 2.0% to 0.8% ; share of UHE remained around 0.3% ; and share of TE ranged between 0.1% to 0.03% during the study period. Similarly, for Haryana, the share of education budget in the state income was less than 2% for most of the years, but reached the level of 3.1% in 2012-13. The share of EE ranged between 1.57% to 0.7% ; share of SE remained between 1.0% to 0.5% ; share of UHE remained between 0.3% to 0.2% ; and share of TE remained between 0.2% to 0.05% during the study period.

Research and Policy Implications

The Central Advisory Board of Education (CABE), MHRD, Government of India, New Delhi is a committee on financing higher and technical education which suggested that at least 6% of NSDP (state income) should be invested in education and of it, 3% should be allocated to EE, 1.5% to SE, 1% to UHE, and 0.5% to TE (National Institute of Educational Planning and Administration, 2005). Thus, for the balanced growth of education, both the states should follow the CABE Committee recommendations and increase their education budget both in absolute terms and as percentage share in state income and state budget.

Limitations of the Study and Scope of Further Research

This study has its limitations and it will be in order to point some of the drawbacks. The major limitations revolve around the choice of variables and data. The major limitation is that this study does not include private education expenditure data because reliable data on this is not available. Also, this study does not include impact of education expenditure on education attainment in the states of Punjab and Haryana. Hence, once reliable data becomes available, future research should examine the pattern of education expenditure (both government and private or combined) and its impact on educational attainments.

References

- Economic and Statistical Organisation. (Various Years). *Statistical abstract of Punjab (Various Issues)*. Chandigarh : Government of Punjab.
- Economic and Statistical Organisation. (Various Years). *Statistical abstract of Haryana (Various Issues)*. Chandigarh : Government of Haryana.
- Government of Haryana. (Various Years). *Finance accounts*. Haryana : Government of Haryana.
- Government of India. (1966). *National Education Commission*. New Delhi.
- Government of Punjab. (Various Years). *Finance accounts*. Punjab : Government of Punjab.
- National Institute of Educational Planning and Administration. (2005). *Report of the CABE Committee on financing higher and technical education*. Retrieved from http://mhrd.gov.in/sites/upload_files/mhrd/files/document-reports/Report%20CABE%20Committee%20on%20Financing%20Higher%20and%20Technical%20EducationL.pdf