

Efficient Education Sector in Kerala: Lesson to be learnt by other Indian States

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ABSTRACT:- Growth of Indian economy is positively correlated with the growth of its education sector. In India promotion of quality education has been at the heart of growth policies. Vivid education structures can be spotted across India. On one hand where state like Kerala holds a strong education base, other states like Orissa and Andhra Pradesh show poor performance in their education sector. This paper highlights the key factors that makes Kerala's education sectors a success story and puts forward various lessons that other states across India may learn to induce growth in their educational structures thereby aiding Indian growth.

Keywords: *Education, Kerala, Efficient system, Orissa, Andhra Pradesh.*

I. SECTION 1:INTRODUCTION

Kerala's education system has emerged as the single largest economic activity of the state with nearly one fifth of the population as students. Social, religious and political groups acted as pressure groups and prime drivers for starting new institutions. Kerala's educational system has expanded substantially over the years in response to societal demand (Raza *et al*, 1984). The importance of a vibrant, modern educational system to its economy is more in Kerala than elsewhere. Education sector is also one of the biggest employers in Kerala as absence of minerals, metals, coal and petroleum resources place severe constraints on development of material and fuel intensive industries. Therefore, the number of teachers forms more than 50 per cent of the total number of workers in registered factories in Kerala (Kerala Education Commission, 1999). Kerala is different from the rest of the India in many ways. It has the highest literacy rate in the country, lowest infant mortality rate and the highest female to male population ratio. These facts speak volume of the state which is often compared to the society of the developed western countries. With its 29 million people, Kerala is India's most advanced society in terms of education, literacy and health. In fact, Kerala has the highest physical Quality of Life Index too. Growth of Indian economy is positively correlated with the growth of its education sector. In India, promotion of quality education has been at the heart of growth policies. Vivid education structures can be spotted across India. On one hand where state like Kerala holds a strong education base, other states like Orissa and Andhra Pradesh show poor performance in their education sector. This study dwells deeper into the educational system in Kerala and tries to identify the key factors that make Kerala's education sector a success story and puts forward various lessons that other states across India may learn to induce growth in their educational structures thereby aiding Indian growth. Section 2 highlights some of the key features like standard of living, infrastructural developments and role of state etc. that acted as catalyst in the development of Kerala's education system. Section 3 then compares some of these key features with other Indian states like Orissa, Andhra Pradesh etc. This section clearly establishes that the education system in Kerala is far better equipped than any other Indian state. Finally section 4 concludes that raising the standard of living, infrastructural development, vocational training as well as active and effective role of state is crucial for the progress and success of education systems across India.

II. SECTION 2: KEY FEATURES OF KERALA'S EDUCATION SYSTEM

Kerala's performance should be credited as it has already achieved all the millennium goals set for education, much ahead of time as compared to any other Indian state (K.K. George *et al*, 1999). Among the Indian states, it is well known that Kerala was the first State to have achieved universal literacy. Kerala's education system holds nearly universal enrolment in the schools with very low drops out rates. Another key feature of Kerala's educational system is that it developed mainly through institutions that are owned or aided by the government as shown in table 1. Major portion of the total schools are either Private Aided schools or Government schools. Government schools are managed and financed by the State and the Central government. Local Body schools which are ran by Panchayati Raj and local body institution such as Zila Parishad, Municipal Corporation. Private Aided schools which are managed by the private organization or individuals and receives grants from the State governments. Unaided schools which are completely financed and managed by the individuals or private organizations. This means that the State and the Centre plays a vital role in building all

categories of schools in Kerala. There were no fees at any level in schools. The fees were very low in the higher education and technical education institutions that are owned or aided by the government. As a result anyone who wanted to learn had an opportunity to do so without having to worry about the cost of education either (Centre for Socio-Economic and Environmental Studies, 2002).

TABLE 1: Role of State-Total Number of Schools According to Management in Kerala

Category Of Schools	Management			
	Government Schools	Local Body Schools	Private Aided	Unaided
Primary	2549	92	3920	139
Upper Primary	971	41	1850	123
Secondary	423	25	744	222
Higher Secondary	620	21	637	322
Total	4563	179	7151	806

Source: 7th All Indian School Education Survey by NCERT, September 2002

To provide good education facilities to any society, infrastructure is very important. Good infrastructure involves some factors like schooling facilities in both rural and urban area, number of girls schools, boys schools and co-ed schools, types of school buildings, schools with sufficient amount of classrooms, schools with library and laboratory facilities, qualified teaching staffs, etc. The availability of sound infrastructure in terms of number of schools, teachers available etc. was another key feature that strengthened the growth of education in Kerala. More than 94 percent of the rural population is served by primary schools/sections within a distance of one kilometre while 98 per cent of population has got one school within a distance of two kilometres. More than 96 percent of the population is served by an upper primary school/section within a distance of 3 kilometres (K.K. George *et al.*, 1999). Nearly one-fourth of the rural population is served by a secondary school within a distance of 2 kilometres. Nearly 98 percent of the rural population has the facility for secondary education within 6 to 8 km. Facilities for higher education and technical education too are available to rural students in reasonable distance as shown in table 2. The widespread transport system and the highly subsidized transport rates for students further facilitate easy access for rural students to higher educational institutions.

TABLE 2: Total Number of Schools According To Area in Kerala

Category of Schools	Area		Total
	Rural	Urban	
Primary	5257	1443	6700
Upper Primary	2332	653	2985
Secondary	1049	365	1414
Higher Secondary	1045	555	1600

Source: 7th All Indian School Education Survey by NCERT, September 2002

Another peculiar feature of Kerala's education system is that overtime it has witnessed bridging up of regional disparities in education to a very large extent. It has been able to remove the wide disparities in literacy and enrolment at all levels between the Malabar region of the erstwhile Madras Presidency and the regions covered by the erstwhile states of Travancore and Cochin (Centre for Socio-Economic and Environmental Studies, 2002). Kerala is one of the states in India which has highest number of schools for both girls and boys. Therefore education for both boys and girls have been evenly emphasised by the society in

Kerala. Kerala has been able to achieve gender equity in education to a large extent. Nearly half of the students in lower primary classes are girls. There are not much gender disparities in the nursery schools either (Centre for Socio-Economic and Environmental Studies, 2002). The proportion of girls is higher in higher classes in schools. This proportion is much higher in Arts and Science colleges both at the graduate and postgraduate levels. The representation of girls in professional courses is, however, comparatively low. Among the teachers in schools, the presence of female teachers is around 70 per cent in Kerala as against 50 per cent in the country. In Arts and Science colleges, female teachers constitute around 50 percent of the teachers.

TABLE 3: Total Number of Schools According To Gender in Kerala

Category of Schools	Total Number of Boys Schools	Total Number of Girls Schools	Total Number of Co-Ed Schools
Primary	39	51	6610
Upper Primary	15	16	2954
Secondary	38	140	1236
Higher Secondary	70	128	1402
Total	162	335	12202

Source: 7th All Indian School Education Survey by NCERT, September 2002

The literacy rates for Scheduled Caste (SC) and Scheduled Tribe (ST) population, though lower than those of the general population, are higher than even the literacy rates for the general population in India (shown in table 4). SC students constitute 10.7 percent and ST students 1.2 percent of the total enrolment in schools. If we see in Table 1, then we find that major proportion of the total schools in Kerala (both in rural and urban areas) there are co-ed schools. There are 2.64% of girls schools which is higher than the total number of boys schools, i.e., 1.27%.

TABLE 4: Enrolment of Schedule Caste and Schedule Tribes in Kerala

	Class	Boys	Girls	Total
Schedule Caste	I-V	131593	124586	256179
	VI-VIII	84978	77644	162622
	IX-X	48096	47351	95447
	XI-XII	24306	32611	56917
	I-XII	288973	282192	571165
Schedule Tribes	I-V	21703	20391	42094
	VI-VIII	10442	9967	20409
	IX-X	4782	4776	9558
	XI-XII	2938	3486	6424
	I-XII	39865	38620	78485

Source: 7th All Indian School Education Survey by NCERT, September 2002

Another deep rooted and rather crucial factor that aided education system of Kerala is that it holds a very high standard of living in general as compared to any other Indian state. Kerala's per capita income in 2009 at Rs 63,000 was the highest among all states in the country. It is way ahead of Delhi (Rs 55,000). Punjab is a distant third with Rs 42,000. The high per capita income of families in Kerala assures that the education is extended to each family who wishes that their children have access to education. Having developed a fair understanding of the education system in Kerala, the next section now looks deeper into other operational systems around India. It compares the key features like developed infrastructure, availability of staff, high enrolment ratio, high per capita income (all the factors which aided the growth of sound education system in Kerala) etc to the conditions of educational setup among other Indian States.

III. SECTION 3: COMPARATIVE ANALYSIS OF EDUCATION SYSTEM ACROSS INDIA

Kerala as a state has been enriched with some of the key basic features like high per capita income, good infrastructure, high enrolment ratio etc. (as detailed in the previous section) which are crucial to set up a sound educational base. Most of these basic pre requisites have been absent in most of the Indian states like Sikkim, Assam, Andhra Pradesh and many more and therefore has curtailed the development of a sound educational system thereby retarding the overall growth of the state. The tables that follow give a clear picture of the difference that is seen in the education system across Kerala and other Indian states.

3a) INFRASTRUCTURE

3ai) In Kerala, there are schools both in rural area and urban areas. In terms of infrastructure there are different types of school buildings. In Table 5, we see that Kerala's school buildings are better than the most of the other Indian states like Orissa. In Kerala, 90.37% of the total primary school buildings are pucca whereas in Orissa there are only 80.2%. In Kerala, there are only 0.02% of total primary school buildings which are open space (almost negligible) and 0% in other category of schools whereas in Orissa these figures are high at 1.58%.

This clearly shows that lack of availability of proper schools has been one of the basic reasons as to why illiteracy is high in Orissa.

TABLE 5: Total Number of Schools In Kerala and Orissa According to the Types of Buildings

States	Category of Schools	Types of Buildings					Total
		Pucca	Partly Pucca	Kuchcha	Tents	Open Space	
Kerala	Primary	6055	589	49	5	2	6700
	Upper Primary	2650	318	15	2	0	2985
	Secondary	1314	84	16	0	0	1414
	Higher Secondary	1510	85	3	2	0	1600
Orissa	Primary	29304	5459	1158	32	580	36533
	Upper Primary	8192	2562	803	14	95	11666
	Secondary	5087	1033	266	1	11	6398
	Higher Secondary	376	40	0	0	0	416

Source: 7th All Indian School Education Survey by NCERT, September 2002

3a) Schools with Libraries, Computer Education and Science Laboratories-

Most of the schools in India just focus on the course books as part of their academic structure. There are only limited schools that hold well equipped libraries and science laboratories to induce a learning environment for their students. The availability of schools with well-equipped libraries, computer labs and science labs are much higher in Kerala as compared to any other Indian State. Lack of such basic infrastructural requirements for human capital formation degrades the education system in various Indian states like Sikkim and Mizoram as shown in table 6 and table 7. We find that in Table 6 and Table 7 that most of the secondary and higher secondary schools in Kerala are provided with all the three facilities which the other states like Sikkim and Mizoram are not. Though Mizoram has the second highest literacy level in India after Kerala, the percentage of schools having science laboratories and computer education is much lower than Kerala. Only 50% of the total secondary schools in Mizoram has science laboratories whereas in Kerala 92.57% of the total secondary schools have the facilities of science laboratories.

TABLE 6: Number of Schools having Libraries, Trained Librarians and Number of Books Available

States	Category of Schools	Number of Schools having Libraries	Number of Schools having Librarians				Total Number of Books in Libraries				
			Full-Time		Part-Time		Up to 500	501-1000	1001-2000	2001-5000	More than 5000
			Trained	Untrained	Trained	Untrained					
Kerala	Secondary	1375	139	66	23	169	68	171	359	550	227
	Higher Secondary	1582	226	58	25	172	72	129	305	584	492
Sikkim	Secondary	67	3	9	3	4	46	11	5	5	0
	Higher Secondary	39	16	12	0	0	16	5	4	10	4

Source: 7th All Indian School Education Survey by NCERT, September 2002

TABLE 7: Number of Schools having Facilities of Science Laboratories and Computer Education

States	Category of Schools	Total Number of Schools	Science Laboratories	Adequate Science Laboratories	Computer Education	Adequate Computer Education
Kerala	Secondary	1414	1309	535	1129	360

	Higher Secondary	1597	1526	811	1402	618
Sikkim	Secondary	88	75	21	19	13
	Higher Secondary	43	39	23	39	24
Mizoram	Secondary	340	170	14	64	13
	Higher Secondary	43	30	7	23	2

Source: 7th All Indian School Education Survey by NCERT, September 2002

3a) Availability of Blackboards and Furniture for Students and Teachers-

Kerala's education system not only provides the native students with good availability of schools both in rural and urban areas but these schools are well equipped with blackboards and furniture for both students and teachers. These basic amenities ensure that the teachers have all the required tools to impart education among the students and the students are comfortable too. Table 8 clearly shows that total sections in the primary schools having furniture for teachers in Kerala is as high as 88.48% as compared to Bihar where there is only 56.79%. Kerala is not only ahead of Bihar in case of furniture for teachers, but also in the case of furniture for students. Furthermore, total sections in upper primary schools having furniture for students in Kerala are more than double of Bihar.

TABLE 8: Total Number of Sections having Blackboards and Furniture for Students and Teachers

States	Category of Schools	Total Number of Sections	Number of Usable Blackboards	Number of Sections having Furniture for Teachers	Number of Sections having Furniture for Students		
					Adequate	Inadequate	Not Having
Kerala	Primary	66666	65774	58990	59130	6599	937
	Upper Primary	44905	42741	38549	40238	4090	577
	Secondary	39929	37594	33272	36736	2725	468
	Higher Secondary	10548	9892	8524	9717	754	77
Bihar	Primary	269667	132368	153150	50001	37398	182268
	Upper Primary	28546	23018	22497	12226	2995	13325
	Secondary	9453	10028	8709	6506	1601	1346
	Higher Secondary	1053	1146	991	870	98	85

Source: 7th All Indian School Education Survey by NCERT, September 2002

3b) Gross Enrolment Ratio and dropout rate

For any state to register high literacy rate, it is crucial that the state holds a high Gross Enrolment Ratio (GER) and a very low dropout rate. From Table 9 and Table 10 we can see that Kerala is the only state which has high GER and low dropout rate. Haryana's GER is lower as compared to rest of the two states, and its dropout rate is also the highest amongst the all. In case of Orissa, we see that its GER is higher than Kerala in grade I-V but as the level of grades increases, Kerala's GER becomes higher than Orissa's. The GER and dropout rate both are high in Orissa, but if we see in Kerala its GER is high and its dropout is almost zero in all the grades. This is another pivotal factor that ensures an efficient educational base with high literacy rates in Kerala.

TABLE 9: Gross Enrolment Ratio (GER) of Kerala, Haryana and Orissa

States	Class	Boys	Girls	Total
Kerala	I-V	91.64	93.00	92.30
	VI-VIII	101.64	98.45	100.08

	IX-X	91.98	93.11	92.54
	XI-XII	43.01	53.14	47.99
	I-XII	85.83	87.48	86.64
Haryana	I-V	87.61	93.78	90.40
	VI-VIII	75.36	76.08	75.69
	IX-X	60.27	59.72	60.02
	XI-XII	44.44	39.34	42.11
	I-XII	72.42	73.99	73.14
Orissa	I-V	116.94	117.11	117.02
	VI-VIII	82.83	77.34	80.15
	IX-X	56.85	50.56	53.77
	XI-XII	25.43	20.02	22.77
	I-XII	82.40	78.82	80.65

Source: Statistics of School Education (2007-08) by MHRD

TABLE 10: Dropout Rates of Kerala, Haryana and Orissa

States	Class	Boys	Girls	Total
Kerala	I-V	0	0	0
	I-VIII	0	0	0
	I-X	-1.54	-2.59	-0.50
Haryana	I-V	0	0	0
	I-VIII	4.53	8.75	6.50
	I-X	33.99	39.15	36.43
Orissa	I-V	24.35	21.92	23.19
	I-VIII	62.62	59.71	61.34
	I-X	65.07	64.27	64.70

Source: Statistics of School Education (2007-08) by MHRD

3c) Qualified Teaching Staffs

Ensuring that an economy is well endowed with proper educational infrastructure, holds a high GER and low dropout rate are necessary but not sufficient condition to ensure high literacy rate in the economy. Availability of qualified teachers plays a vital role in shaping the education system of any economy. It is not necessary that all the teachers in a school are qualified. There are some states in our country like Assam and Andhra Pradesh where total number of teachers is very high but number of qualified and trained teachers is very few. The ratio of primary and middle schools in Assam and Andhra Pradesh is more than twice the ratio in Kerala but still the percentage of trained teachers is more in Kerala than in Assam and Andhra Pradesh as shown by table 11.

TABLE11: Number of Teachers, Enrolment and Pupil Teacher Ratio

State	Category of Schools	Number of Teachers			Percentage of Trained Teachers	Number of Female Teachers per 100 Male	Enrolment			Pupil Teacher Ratio
		Men	Women	Total			Boys	Girls	Total	
Kerala	Primary	10278	30699	40977	98	299	571939	560878	1132817	28
	Middle	13920	32108	45938	97	230	595787	553625	1149112	25
	High	29645	76542	106187	99	258	1275752	1241685	2517437	24

	Higher Secondary	8100	22902	31002	100	283	414070	433030	847100	27
Assam	Primary	57837	31265	89102	64	54	1701522	1679417	3380939	38
	Middle	74000	26129	100129	90	35	892520	894749	1787269	18
	High	42315	14940	57255	29	35	615650	503414	1119364	20
	Higher Secondary	11761	5477	17238	29	47	268784	213162	481946	28
Andhra Pradesh	Primary	87704	79355	167059	94	90	2719721	2647228	5366949	32
	Middle	62735	48214	110949	90	77	1615903	1494783	3110686	28
	High	93500	63387	156887	96	68	2646112	2468330	5114442	33
	Higher Secondary	33484	12316	45800	97	37	862321	661095	1523416	33

Source: Statistics of Selected Education (2007-08) by MHRD

All the tables and data provided above clearly highlight that for ensuring a sound education system in any economy key features like basic infrastructure, GER, per capita income, availability of qualified staff etc are of prime importance. The education system in Kerala has been a model for other Indian states as its educational base is enriched with all the essentials which in turn ensure a universal literacy rate.

IV. SECTION 4: CONCLUSION-LESSON TO BE LEARNED

Kerala is an astonishing success story. In contrast to the rest of India and most other low-income countries, people in Kerala enjoy education and health at levels close to those in the West. Women in Kerala are generally far better off than women in the rest of India, and people at all levels of society have greater access to education – as well as a greater say in their governance – than can be found in any other Indian state. Public provisioning of education facilities has long been the basis of Kerala's acclaimed development achievements. As it is well documented, historically, all the social reform and political movements in Kerala have encouraged school education as an effective tool against caste, gender and class discrimination. Kerala accepted early enough that “mass literacy required mass schooling” and today holds the stature of universal literacy rate. Kerala, therefore, surged ahead of many other States in human development indicators such as literacy levels, including female literacy levels, enrolment in schools, percentage of girl students and Scheduled Castes/Scheduled Tribes students in schools, low drop-out rates and the number of schools (and colleges) even in rural areas. By the early 1980s, enrolment at the primary level was near universal, with virtually no gender gap. Also, significantly, even as early as 1957, 41 per cent of the school teachers in Kerala were women, a factor that must have encouraged many parents to send their girls to school, according to scholars (Frontline, 2011). The trend has continued, and at present 71.28 per cent of school teachers are women. By 2002-03, Kerala had one lower primary school for every square kilometre and one high school for every 4 sq km (Frontline, 2011). According to a 2009 survey, there were only 15,776 out-of-school children in the 6-14 age groups. Almost all government schools, except a handful, had pucca buildings, access to drinking water, and toilet facilities for

boys and girls. Public spending on education in Kerala was the highest in the country and more than 80 per cent of it was on school education (Frontline, 2011). All these factors clearly show that the development of Kerala's education system has been a success story due to the availability of sound infrastructure, social value of the society and effective role of state. If any other Indian states like Orissa, Andhra Pradesh, Sikkim and many more wish to set up a sound education system like Kerala (which form the basis of the state's growth) they will firstly have to ensure significant infrastructural development accompanied by strong role played by the state governments to ensure that education is accessible to all.

REFERENCES

- [1] 7th All Indian School Education Survey by NCERT, September 2002
- [2] Centre for Socio-economic & Environmental Studies, "Entry Barriers to Professional Education in Kerala", Kochi, 1997.
- [3] Centre for Socio-Economic and Environmental Studies (CSES, 2002): Status Report on Pre-School Education in Kerala (Kochi: CSES)
- [4] Frontline, Volume 28 Issue: 14 Jul. 02-15, 2011, India's National Magazine from the publishers of THE HINDU.
- [5] George K.K., "Historical Roots of Kerala Model and Its present Crisis", Bulletin of Concerned Asian Scholars, Oakland, California, 1999.
- [6] George K K (1998): "Historical Roots of Kerala Model and its Present Crisis", Bulletin of Concerned Asian Scholars, 30(4), 35-52.
- [7] George K K, George Zachariah and N Ajith Kumar (2003): "Grants-in-aid Policies and Practices towards Secondary Education in Kerala", Journal of Educational Planning and Administration, 17(2): 199-226.
- [8] George, K K and K Krishnakumar (2003): Fiscal Management in Kerala: Constraints and Policy Options, Working Paper No. 9 (Kochi: CSES).
- [9] George K K and Tharakan P K M (2005): "Sustainable Human Development in Kerala: Some Issues", Advances in Arts and Ideas, Vol.1: 125-128.
- [10] K.K. George and N. Ajith Kumar, 'What Is Wrong With Kerala's Education System?', CSES Working Paper No.3, December 1999.
- [11] Moonis Raza and Yash Aggarwal, "Higher Education in India: The Regional Dimension", NIEPA, New Delhi, 1984.
- [12] Manabi Majumdar and Vaidyanathan A., "The Role of Private Sector in Education in India", Discussion Paper Series No. 19, UNDP Project, Centre for Development Studies, Trivandrum, 1998.
- [13] Report of the Kerala Education Commission, Kerala Sasthra Sahitya Parishad, Kochi, 1999.
- [14] Ramakrishnan, C., "An Action Research Project to Improve the Teaching Learning Environment and Number of Working Days in Schools in Kerala through a Participatory Intervention Strategy", Kerala Sasthra Sahitya Parishad, Thiruvananthapuram, 1998.
- [15] Report of the Committee on Sanctioning of New Higher Secondary Schools, Directorate of Higher Secondary Education, Government of Kerala, 1995. Statistics of School Education (2007-08) by MHRD
- [16] Vijaya Kumar B, Examination Reforms at School Level, Paper Presented at the National Workshop on Education, Thiruvananthapuram, 1998.