Findings and Policy Recommendations

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8.1. Introduction

The present study analyzed the recent trends of school education in India and Kerala. The expenditure on education has increased rapidly and many initiatives have been undertaken from time to time to improve access to quality schooling particularly for the economically and socially disadvantaged sections of the society. There happened a lot of improvements in the school education system but still there needs more structural transformations and changes to be brought about looking into the future of Indian education system. When compared to major states in India, Kerala is far ahead in terms of literacy rate but its quality of education is poor. In this context, the present study attempted to examine the school education in Kerala by keeping in mind the following objectives. They are:-

- 1. To examine the trends of expenditure on school education in India and Kerala.
- 2. To compare the level of disparity on expenditure on school education in India and Kerala.
- 3. To identify the determinants of household expenditure on school education in Kerala.
- 4. To examine the student satisfaction of school education in Kerala.
- 5. To analyze the problems related to school education in Kerala.

8.2. Expenditure on School Education in India and Kerala

The trends in the share of expenditure on education in total GDP are an important indicator of public expenditure on education. It is measured by various indicators such as GDP at current prices at various years, expenditure on education, spending on elementary education and education as a total percentage of GDP. There was a considerable improvement in GDP at current prices, expenditure on education and expenditure on elementary education. But compared to these positive trends, the expenditure on education as a % of GDP in the case of school education and that of elementary education do not show an increase and in some years it shows a stable position and in some cases it shows a negative trend in the case of elementary education. Thus there is a need to increase the percentage share of education expenditure to total GDP, only then there will be an improvement in this sector.

Household expenditure on education is an important component of economic growth and thus sustainable development. In the case of school education at all levels there was an increase in the growth rate of household expenditure on education than higher education. The expenditure on education by the urban households is entirely different from that of rural households. The expenditure on school education in the urban areas is more than double at the rural areas. In the case of higher education, this difference is not much wider compared to that of school education. The differences in male and female are also high at all levels. At the school level, expenditure is more at the higher secondary and secondary levels. Households in urban areas spent more on different items of expenditure than the rural households. Both in rural and urban areas households spent more on male than female population. Uniform, books, private coaching & stationery occupies major share by households both in rural and urban areas. Among the items of expenditure stationery, books, exam fee and other fees are the major items of expenditure. There exist rural urban differences, gender differences and item wise differences in terms of student expenditure on education in India.

The government of Kerala spends a high percentage of expenditure for the development of the education sector. Among the Indian states Kerala ranks first and in case of female literacy also the state is ahead and has made a tremendous progress. The male-female gap also narrowed and the state holds first place in female literacy with 92 per cent. There was not much increase in every year in the enrollment rate. There are no much differences in the enrollment of boys and girls also. There are

differences in enrollment rate at different levels of school education. The dropout rate is comparatively low at high school level. The lower dropout rate in the school education in Kerala is definitely an indicator of educational attainment and the students out of schools in the state reach at zero levels.

The per-capita expenditure per student by the government is also increasing. The effect of the rise in expenditure by the government can be well revealed or reflected through the indicators like number of schools, enrollment, dropout rates, examination results and so on. But spending on education as a percentage of total expenditure in Kerala shows a declining trend over the years. The nominal and real per capita expenditure on school education showed a positive trend. Compared to other states in India, Kerala's household expenditure on education on different items of expenditure is remarkable. The amount of expenditure Kerala devoted to the expenditure of their child also improved considerably during the years. Kerala's household expenditure on education is more than that of all-India and expenditure on females is higher than that of males. This is a tremendous and remarkable achievement that Kerala had achieved in the education sector, by bringing about more educational opportunities, access and reducing gender differences than any state in India.

8.3. Disparity of Expenditure on School Education in India

In spite of all these tremendous achievement over years, the education system in India is pestered with a lot of problems. One of the serious problems of Indian education system is increasing inequality of education. The primary problem of Indian education centers on qualitative and quantitative aspects of education and there is no uniformity in the education system. Every state has different education system imparting education in regional language and English. The present education system is exam- oriented or rote learning. Inequality of education is found not only in the state level and in between rural and urban areas. The urban population is more literate than rural population. It is also clear that literacy rate of male is greater than that of females and the differences between male and female population narrowed during the same period.

The differences in male and female enrollment rates are different at different levels of education and the male-female differences at all levels narrowed from 1950-51 to 2015-16. Thus it is clear that enrollment of school students as a good indicator

of school access considerably falls at higher levels of school education. This is due to so many other factors which are personal or home related factors of the student. There are rural-urban differences, in terms of gross attendance ratio and it has not shown any positive increase during these years. There are rural-urban differences, malefemale differences in terms of net attendance ratio.

There is improvement in terms of age specific attendance ratio and there are rural-urban differences and male-female differences and different age groups in various years' shows difference in terms of attendance ratio. Educational inputs of elementary schools in India also improved considerably in recent years showing the betterment of school educational infrastructure in the different states of India. There are rural urban differences, state wise differences in terms of household expenditure on education. The states differ in terms of expenditure on education and among them there are also wide rural and urban differences.

8.4. Determinants of Expenditure on School Education in Kerala

Kerala greatly succeeded in promoting learning and ample atmosphere for infrastructure development to provide better education outcome and to reduce drop out and it is the first ever state in India to achieve universal literacy. Both central and local governments played an important role in promoting the school education system. The government of Kerala spends a high percentage of expenditure for the development of the education sector. Schools in Kerala are run by the government or private trusts and individuals. The state has shown a tremendous growth in the number of educational facilities at all levels during the last 50 years.

The capacity of a large number of households to pay for education was increasing due to a number of reasons such as growth in per capita state domestic product (SDP), expansion of job markets both within the country and abroad, inflow of remittances, decrease in the number of children, reduction in household size etc. The household cost of education in Kerala was largely met by the increased external remittances also. But at the same time the data brought out by the 61st round of National Sample Survey shows that on an average, the per capita expenditure on education by the rural households in Kerala was more than double the national average (Rs.41 for Kerala against Rs.18 for India). Regarding the per capita educational expenditure in rural areas Kerala ranked third after Haryana and Punjab. But urban Indian people spend more than urban Keralites (Rs.74 for India and Rs.66

for Kerala). The rural-urban differences in educational spending by households were much less was also high in Kerala compared to other Indian states. The proportion of households spending on private tuition was also high in the state.

Among all determinants of household expenditure on education, income is the most important factor. The qualities of human and physical infrastructure available in schools are regarded as the school related factors determining the household's decision to invest on their child's education. Social, economic and cultural reasons, gender differences and political factors also determine government's decision to invest on education. The macro-economic variables that determine the household expenditure on education in India are Gross Domestic Product of India (GDPI), Per Capita Income of India (PCII), Total Number of Schools in India (TNSI) and Government Expenditure on Education in India (GEEI). In Kerala they are GSDPK, PGDSPK, PCIK, TNSK and TRK. All these determinants increased during the same period tend to increase the dependent variable, i.e. household expenditure on education. There is a statistically significant relationship among the selected independent variables and household expenditure on education in India. Household expenditure on education can explain the productive capacity of the country in terms of Gross Domestic Product of India (GDPI), and per capita Income of India (PCII).

A large set of state level macro-economic variables such as gross state domestic product of Kerala, per capita government expenditure on education, per capita income of Kerala, total number of schools in Kerala and the amount of total remittances to Kerala are the determinants of government expenditure on education in Kerala. There is a positive relationship between government expenditure on education and the determinants or independent variables. In Kerala it is seen that household expenditure on education positively affects productivity in terms of per capita income and state domestic product. There is a positive and statistically significant relationship between household expenditure on education and the determinants or independent variables. The results of linear logarithmic regression equations confirm the positive influence of independent variables on the household expenditure on education in India. The values also reveal the importance of government expenditure on education. The government expenditure on education in Kerala is positively related to gross state

domestic product, per capita gross state domestic product, per capita income, total number of schools and total remittances to Kerala.

The regression coefficients show that there is a positive relationship between dependent and independent variables. If the gross state domestic product increases government expenditure on education also increases. The increase in per capita gross state domestic product, total number of schools, per capita income and total remittances to Kerala also influence government decision to spend more on education. The positive relationship and complementarity are also reflected through the highest values for R² and adjusted R². The F ratio is also high reflecting the high association and relationship between variables.

8.5. Household Expenditure on School Education in Kerala

Parental income is one of the important determinants of child's education. The major source of income in families is father's work followed by mother's work in families. The major reason for selecting school is for getting good quality of education and the least preference is given by parents to good infrastructure in the selection of school. The majority of the respondents save for the purpose of education of their child, showing the importance of education they give to their child and the least purpose is for retirement life and old age. The major source of financing for school education is household income and the least is children's own contribution.

The study found out that a significant and strong relationship exists between income and types of household expenditure from socio-economic perspectives. The household budgets of parents were studied to understand how they are spending or giving importance to various items of expenditure. Parents' budget can be generally classified into food items and non-food items. It also includes expenditure on housing, health, transport and entertainment, education, clothing and footwear. Parents on an average spent most of their income on housing maintenance or housing related activities. The second highest annual average expenditure of parents comes under the category of food items. Followed by food items, non-food items occupy the third position. Spending on education also occupies an important position as today's parents are more interested in spending for their child's education. Transport and entertainment occupy the fifth position followed by health and medical needs and expenses for clothing and footwear. Thus the average annual household expenditure of parents gives an account of the spending pattern of families and the top order

priorities in which they spend. It also throws light into the trend and pattern of household budget. The expenditure pattern of parents of CBSE schools is comparatively higher followed by aided and state level schools. But regarding all types of schools, parents incur more expenditure on housing followed by food items, non-food items, education, transport and entertainment, health and medical needs and clothing and footwear respectively.

From the school related factors, teacher's encouragement is the most influencing factor followed by need of individual attention, challenge of competition in studies, overload of homework and studies, challenge of present examination system and problem of balancing school and home. It shows that most of students getting encouragement from their teachers followed by the individual attention from school and the students are part of the challenges of healthy competition in studies. Taking into consideration the factors of students' perception on school environment, male students are more influenced by the factor teacher's encouragement (4.39) followed by need of individual attention (4.03), challenge of competition in studies (3.25), overload of homework and studies (3.12), challenge of present examination system (3.11) and problem of balancing school and home (2.97). In the case of female, teacher's encouragement (4.57) is the most influenced factor followed by need of individual attention (4.22), challenge of competition in studies (3.08), overload of homework and studies (2.98), challenge of present examination system (2.90) and problem of balancing school and home (2.88). Students of 14 to 15 age groups are happier with the school related factors like teacher's encouragement, need of individual attention and challenge of competition in studies. The 16 to 18 age group students are happier with the factors like overload of homework and studies, problem of balancing school and challenge of present examination system.

All the factors of student engagement in learning like understanding the concepts, listening classes properly, enjoy learning new things, attention in class and interested in school work are below the average level (>3, 3 is the test value) which indicates the importance of improving student engagement in learning. There are differences in the case of male and female students regarding all the factors of student engagement in learning. It is clear that female students are more engaged in learning regarding all aspects than male students. Students of 14 to 15 age groups are more engaged in listening classes properly and attention in class than the 16 to 18 age

group. The 16 to 18 age group students are more engaged in understanding the concepts, listening classes properly, enjoy learning new things and are interested in school work than 14 to 15 age groups. Students' engagement in learning is more for 14-15 age group compared to 16-18 age groups of students.

All the factors of student satisfaction need to be improved in schools. Based on mean rank, it is inferred that the area in which students are more satisfied are approach of teachers followed by quality of teaching, subject competency of teachers, classroom and school environment, teaching style of teachers, academic achievement, present syllabus and curriculum and the least satisfied are the school infrastructure. The satisfaction level of both students is below the average value indicating the importance of improvement in the school and teacher related factors. Students of 14 to 15 age groups are more satisfied in listening classes properly and attention in class than the 16 to 18 age group. High level of student satisfaction is among girl students compared to boy students.

It is clear that majority of parents send their children to aided schools, i.e. 38.7% and next to government schools, i.e. 36% and followed by CBSE, i.e.20.3% and insignificant proportion to other schools. Majority of the students are studying in 9th standard, i.e.35% and 10th standard, i.e. 34.3% and 28% of the students fall under the category of plus two students. Only 2.7% are studying in plus one.57.3% of the parents, majority of the respondents live in rural areas and 42.7% lives in urban areas. The occupation pattern of the father shows a mixed picture and the majority doing business, 21.3%, followed by government employees, i.e. 19.7%, 18.3% other occupations, 13.7% private employees and the least proportion, i.e. only 7% are professionals.

Parents are not providing good parental care and support to their children at home. All the mean values of parental care and support show that more parental involvement is needed at home. Based on mean rank, it is inferred that the most preferred factor is support child's learning at home followed by spending a lot of time with the child, motivate child's learning at home, providing facilities for better learning at home and good relationship with the child respectively. There is no significant difference among various age group of parents regarding their perception towards the parental care and support factors such as spending time with the child,

support child's learning at home, good relationship with the child and motivate child's learning at home.

Parents are average in utilizing the free and compulsory education provided by the government. Parents of different age groups are not giving much importance to the free and compulsory education policy of the government. There are significant differences among parents on the basis of school types in which their child is studying, regarding free and compulsory education. Parents of CBSE School going children are more favouring free and compulsory education followed by government and aided schools' parents respectively.

Parents living in urban areas are more in favour of free and compulsory education than parents living in rural areas. Thus, there exist rural urban differences regarding free and compulsory education. Based on school type of children there are differences among parents related to free and compulsory education in Kerala. Based on standard in which their child is studying there are no significant differences among parents related to free and compulsory education in Kerala.

Parents are not satisfactory about the all-promotion policy of government that is practiced and followed in the schools of Kerala. There are no statistically proven differences between different age group of parents regarding all the dimensions of all promotion policy, there are significant differences among various caste groups of parents regarding all promotion policy in Kerala. Hindu parents are much in favour of the different dimensions of all promotion policy followed by Muslims and Christian parents. Parents of government school going children are more favouring all promotion policy comparatively followed by aided and CBSE parents respectively. Parents living in rural areas are comparatively much in support of all promotion policy than parents in urban areas. Income of parents is not a criterion to measure the attitude of parents towards All Promotion Policy in Kerala. Religion wise, caste wise, school wise, standard wise, area wise and income wise there are differences and age wise there are no differences among parents regarding all promotion policy in Kerala

It can be inferred that the most preferred factor of quality of education according to parents are better feedback system followed by good IT infrastructure, parents involvement in school activities, strong student teacher relationship, regular updating of syllabus and curriculum and PTA meeting respectively. Quality of education provided by schools is not satisfactory according to parents indicating the

importance of more changes in all these aspects. There is significant difference among various caste groups of parents regarding these factors of quality of education. Christian parents are more satisfied by the quality of education provided by schools followed by Muslim and Hindu parents. Except OEC category of parents, other categories do not show a positive approach towards the quality of education provided in the schools of Kerala. All the parents, on the basis of class do not have a favourable attitude towards all the dimensions of quality of education in the schools of Kerala. There are significant differences among various category groups of parents regarding quality of education in Kerala.

Regarding almost all the features of quality of school education, there are much differences seen between CBSE and government schools on the one hand, and CBSE and aided schools on the other. Both government and aided schools reflect same picture that focus on the importance of improvement in quality of education provided by these schools. Parents living in urban areas are more satisfied by the quality of education provided by schools than parents living in rural areas by taking into account all the dimensions.

Thus it is statistically proved that based on school type of children there are differences among parents related to quality of education provided by schools. It is also clear that most of the parents are not satisfied by the quality of education provided by schools except in CBSE schools. Parents living in urban areas are more satisfied by the quality of education in schools than parents living in rural areas.

8.6. Student Satisfaction and Problems in School Education

The most relevant problem is poor household atmosphere followed by time constraint of parents, lack of government support in the form of scholarship, problems related to school environment, financial problems, low educational level of the parents, financial problems, and poor academic performance of child and lack of motivation, love and affection from family respectively. These problems are statistically significant and demands urgent attention.

According to OEC parents the most important problem of school education in Kerala is the time constraints of parents, to OBC category of parents it is lack of government support in the form of scholarship, to SC/ST parents it is low educational level of the parents and for other categories it is poor household atmosphere. It is also

statistically proved that all the other categories of parents including OBC, SC/ST and others are not facing much problem related to school education in Kerala.

According to government school children's parents, the most important problem is lack of government support in the form of scholarship, to aided school children's parents it is time constraints of parents and in the opinion of CBSE school children's parents it is poor household atmosphere of parents indicating the importance they have given to their child irrespective of the financial background. This clearly throws light into the fact that majority of the students studying in CBSE schools are not financially well to do, but parents are willing to send their children to CBSE schools irrespective of their financial background. There are so many problems related to school education among parents but comparatively, the problems are more in the case of parents living in urban areas.

There is no significant direct effect between students school environment and students engagement in learning. Whereas, there is significant indirect effect between students school environment and students engagement in learning via students satisfaction. Home environment of school students do not have positive effect on students' satisfaction. School environment of school students has a positive effect on students' satisfaction. Home environment of school students do not have positive effect on students engagement in learning. School environment of school students do not have positive effect on student's engagement in learning. Student's satisfaction has a positive effect on student's engagement in learning. Student's satisfaction mediates in the relationship between school environment and students engagement in learning

8.7. Policy Implications and Recommendations

- (1) The government expenditure on school education is sub-optimum in India as well as in Kerala. Therefore, it should be enhanced with respect to the recommendations of the Kothari commission. The present research asserts the recommendations of the Kothari commission and recommends that government should spend at least 6 percent of the GDP towards education.
- (2) The government expenditure on education should be properly balanced between school education and higher education. The present study proposes that government should spend at least 3 percent of the GDP on school education in India.

- (3) The inter-state disparity on expenditure on school education is very high. Therefore government should give more attention to the weak states and allocate more expenditure into their school education.
- (4) The gross enrollment ratio (GER) is the highest in urban areas. Therefore the establishment of quality schools in remote rural areas is very essential.
- (5) The expenditure of households in rural areas is low when compared to urban areas. Therefore, the government should compensate the expenditure of poor households through more expenditure on schemes and programmes in school education on poor children in rural schools.
- (6) The household expenditure on school education is fluctuating but it has been increasing among the majority of states in India. The privatization is one of the major factors that accelerated the household expenditure on school education in India as well as in Kerala.
- (7) Expenditure on education of parents of children in households of CBSE and ICSE schools are very high. It should be monitored and regulated by the government to optimize the resources and effectiveness of school education in a qualitative and equitable manner.
- (8) The government should take more care on school education by constituting specialized research institutions on research in school education.
- (9) Based on the findings, present research argues that there is a positive relationship between government expenditure on education and household expenditure on education. It will reflect in the quality of school education. Therefore, government should enhance the expenditure on school education as at least 3 percent of the GSDP.
- (10) The expenditure on school education must be based on the principles such as equity and effectiveness. It may be attained through the systems such as incentive mechanisms, efficiency in allocation of resources and monitoring systems.
- (11) There is a positive relationship between household expenditure and school education expenditure of the government in Kerala. They will complement each other. Therefore government should increase expenditure on school education in Kerala.

- (12) The government expenditure should be more allocated on the rural poor children. Furthermore, it should be on female children and children in schools from bottom-most strata of the society.
- (13) The remittances into Kerala have a crucial role in the expenditure of parents' on school education and vice versa. Their income has a pivotal role in the human capital formation of Kerala and vice versa. Therefore the government should take more care on the problems of migrants from Kerala.
- (14) All the age groups of parents give parental care and support to their children but it is not above average level or satisfactory. It clearly indicates that more parental involvement, care and attention are needed from the part of parents for the educational attainment of their child as home is the first school of every child.
- (15) The quality of education provided by schools in Kerala is not satisfactory. It points out the government should create regulatory mechanisms to improve and monitor the quality of school education in Kerala.
- (16) It is the responsibility of the government to make it more feasible or accessible to the parents by making free and compulsory education more effective
- (17) It seems that all-promotion policy would not be helpful. This research argues that gradual introduction of examination system in schools will improve the equality of school education in Kerala.
- (18) There are rural and urban disparities among parents regarding all the aspects of school education in Kerala indicating the importance of providing more educational access and equity in rural areas in the establishment of schools and its quality maintenance.
- (19) Government should enhance expenditure on school education to alleviate the problems of school education
- (20) Government should constitute a board to control and evaluate the problems of school education in the CBSE and ICSE schools in the state.
- (21) Apart from government, school authorities and households have crucial role in determining the quantity and quality of school education in Kerala. Therefore they should be innovative to survive and surmount in school education in the state.

8.8. Concluding Observations

The present study analyzed the trends in expenditure on education in the world and found out that India's expenditure on education is low compared to the rest of the world. The households are ready to spend for their children irrespective of their financial background. In India, the consumer expenditure increases from year to year and education is one among the important items for which people spend. It is clear from the state wise analysis of household expenditure on education in India that states differ in terms of expenditure on education and among them there are also wide rural and urban differences.

Spending on education as a percentage of total expenditure in Kerala shows a declining trend over the years. In spite of high improvement in the social sector Kerala's investment in overall education sector shows a slow downfall which shows that the state is unable to invest more on education in the coming future. In Kerala there are vast differences in terms of primary, upper primary, secondary, higher secondary education in rural and urban areas. On the basis of all-India level this is the same. But compared to all- India level the expenditure at all levels of education and at all areas are higher in Kerala except in urban areas. In urban areas, the expenditure on school education at all broad levels is higher at all-India level than in Kerala. The comparison of the determinants of expenditure on education also implies the fact that there are some forces or factors which increase the expenditure on education. Investing in education both at the public and private level can enhance productive capacity of India as indicated by the increase in the independent variables or determinants of household expenditure on education in India. In the case of Kerala's education sector, it is seen that household expenditure on education positively affects productivity in terms of per capita income and state domestic product. The studies on household expenditure on education clearly reflect the idea that it is not only the government but also the individual households that contribute to national income.

The study also analyzed the school education in Kerala by analyzing the views and perspectives of various stakeholders of school education and reached out important conclusions. All these findings point out the importance of improving the school education system in Kerala by looking into more policy changes in the future. The quality of education in the schools of Kerala is yet to be improved despite the tremendous achievement Kerala attained in the school education sector. The parents

are looking for more improvement or changes in the educational standards of their children and students are not actively engaged in learning and they lack proper parental care and support from their home environment. All these different aspects of school education throw light into the need of importance of structural changes or transformation in the system itself to bring about more qualitative changes in the future.

8.9. Areas for Further Research

The present study studied important economic aspects of school education like quality of education, determinants of expenditure education, problems of school education and expenditure on education from the different perspectives of different stakeholders. But the study can be extended to other areas of school education. There are further scope for more studies in the area of school education in other states and comparing it with the Kerala state and inter-district comparisons of different aspects of school education are yet to be explored. As the economics of school education in Kerala is a wide and general area, further research can be limited and focused on certain areas or certain aspects of school education. The study of school education is very important as this is the most significant turning point of every child. It is to be properly planned and executed for the knowledge economy to bring about more intellectuals or the so called human capital for the economic development of the nation.