

Chapter 1

Design of the Study

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1.1. Introduction

The aims and habits of a group of people are passed from one generation to the other through the process of education. It is a fact that illiteracy and percentage of people without schooling have decreased. Education is increasingly becoming international and mass schooling is the recent trend which means that everyone has the right to be educated irrespective of their social and cultural background. Indigenous education also is the recent trend which is the inclusion of indigenous knowledge, models and methods and content within the formal and informal education systems (UNESCO, 2011).

Education is the major determinant of economic growth, employment and earnings and ignoring of it leads to poverty, social exclusion and sustainability

problems within the country (Woessman, 2015). Technology in the field of education is also regarded as an inevitable tool to improve student learning and it provides easy access of course materials, increases student motivation, makes the class interesting and simple and differentiated instruction in the class room. Education can be defined as “the stock of skills, competencies and other productivity enhancing characteristics” (World Economic Forum, 2016). The knowledge learned in school plays a major role in people’s daily lives. Education is a dynamic and comprehensive concept which relates to human life and it is very difficult to interpret in one angle. In a wider sense of the term, education starts from the womb and ends in the tomb. It is the sum total of all life experiences a person acquires throughout his/her life.

The main concern all over the world is not only on quantity of schooling, i.e. the percentage of people who completed primary, secondary and tertiary education but also the quality of schooling which has a significant relationship with economic growth (Hanushek & Kimko, 2000). It is also noted by Hanushek et.al, (2010) that education promotes economic growth with a particular focus on educational quality. The cognitive skills of the population can be positively attributed to long run economic growth than mere school attainment. Education is regarded as a human right since the adoption of the Universal Declaration of Human Rights in 1948. The Right to Education is not only the access to educational provision but also the obligation to eliminate discrimination at all levels of the educational system and to ensure and improve quality of education. Apart from all these efforts, the situation is alarming that there are 258 million youth out of school according to the UIS data for the school year ending 2018. Among this 155 countries guarantee 9 years of schooling and only 99 countries in the world ensures 12 years of schooling. This surely indicates that there are challenges in the right to education like: providing free and compulsory education to all, eliminating inequalities and disparities in education, migration and displacement, privatization and its impact on education, financing of education and quality imperatives and valuing the teaching profession (UNESCO, 2020).

A country’s economy and society is developed through education and it is the milestone of a nation’s economic development. It provides knowledge and skills to the population and is regarded as the best investment for people. Education is defined as the ‘adjustment ability to a changing situation and environment’ (Fazilah et.al,

2012). Education is very important to everyone in the sense that it makes a person a better citizen, it tries to develop confidence, it ensures a bright future, helps in character formation, helps in time management and most importantly gives importance to human values in a person's life (Bharadwaj, 2016). Global literacy rates have been increased, enrollment in primary education gone up, secondary and tertiary education shown drastic growth and global average years of schooling being much higher than hundred years ago. Despite all these achievements, some countries are still lagging behind mainly some Sub-Saharan African countries have literacy rates below 50 per cent among the youth. In Burkina Faso, Niger and South Sudan, literacy rates are below 30 per cent which are at the bottom rank across globe (Roser et.al, 2016).

School enrollment and attendance are the two important measures of educational attainment. Even though, primary school enrollment around the world increased drastically, primary school attendance remains a challenge in many developing countries. The highest level of education that individuals complete is a common measure of educational attainment. It is an educational input and is a mechanism to compare education at various levels. Education at higher levels mainly at the secondary and tertiary levels is becoming increasingly important around the world. The quality measure of education is mainly measured through learning outcome and seems to be higher in richer countries and the differences across countries are very large even among countries with similar income per capita (Dostie et.al, 2006).

The world is expanding its funding for education today and it is clear that over the last two decades, there has been a general increase in the share of income that countries devoted to education. The total amount of global resources spent on education is also increasing in absolute terms. It is clear that, in high income countries households spent a larger share of education expenditures at higher education levels than at lower levels but in low-income countries, this is not the case (Roser et.al, 2016). A school is an educational institution designed to provide learning to the students under the direction of teachers. It moulds their mind, character, behavior and future life. A school is regarded as the first socialization stage and process of a human being which helps them in their decision-making process and enables them to solve the complexities of life. It is the most important foundation pillars on which the

child's personality develops. The school education is the bedrock of every individual's education. All around the world, there are some critical issues relating to school education. They are lack of standards, problems in student learning, problems related to technology, influence of media and politics on students, high stake testing to students, lack of proper school leadership, problems of improper pre service programs to teachers, absence of healthy school climate and the severe problem of poverty among school going students (Bryk et.al, 2010).

India is an emerging country in terms of agricultural and industrial production, service sectors and development in science and technology. Emerging Indian society is closely related with development of education and research. India has shown a tremendous growth in the number of educational institutions. The school education system in India is the largest one meeting the needs of over 260 million young people each year. India, with over 1.5 million schools, over 8.7 million primary and secondary schools, over 8.7 million primary and secondary teachers and more than 260 enrollments, is the largest and most complex education system in the world (Anderson et.al, 2019). Immediately after Independence, the Department of Education was set up under the Ministry of Human Resource and Development (MHRD) with the goal of increasing access and quality leading to the first National Policy on Education in 1968. As per the Millennium Development Goal in 2000, India has made great progress towards achieving universal primary education. Two prominent initiatives of the Indian Government, Sarva Shiksha Abhiyan (SSA) in 2001 and the Right of Children to Free and Compulsory Education (RTE) Act, 2009 have promoted greater importance to access, inclusiveness and quality of education. Many initiatives are undertaken by the government to improve access to quality schooling particularly to the economically and socially disadvantaged sections of the society and government schools are facing thriving competition from private schools (Geeta, 2007).

The Indian school education is also not free from problems. They are the dissatisfaction of students, acute problem of indiscipline among students, caste and gender issues and privatization of education (Zakir, 2010). Unawareness of teachers about teaching methods and their attitude and character also deteriorates day by day. The condition of primary schooling in India is also faced with so many severe issues. They are lack of physical infrastructure, inadequate enrollment, poor retention rate,

high drop-out rate, exclusion of minorities, existence of inequalities, lack of quality and low learning achievements. The mean years of schooling has improved, but India lags behind China and Brazil. Pupil retention rates improved, but the dropout rates in Government schools are comparatively high and enrolment gaps from primary to secondary are matters of concern. Disadvantaged groups also face greater challenges with achievement levels lower and dropout rates high and large urban- rural achievement gap. These challenges are compounded by the structure of the system itself. This involves both centralized and devolved elements, government; private and partly private initiatives interact in complex ways, making it more organic and evolving ecosystem than a single, centrally managed operation. 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 (Desai et.al, 2008).

Kerala is well known for the investment in its own people. The prime focus on the welfare of its citizens was the landmark of Kerala's development history. Kerala's achievement in human development is the basis of its earmarked international fame. Kerala's educational index can be even compared to the developed countries of the world. The Kerala Government has initiated four dedicated missions that focus on education, health, housing for all and a clean environment. The welfare measures of the government always tried to attain a better living standard to its people. The state has attained a very high rate of literacy and schooling. The well-developed education system in the state meets the requirements and demands of all children up to 18 years. Education is in fact the very backbone of Kerala's educational development experience. Kerala has achieved a near zero dropout rate with few exceptions of the population (Economic Review, 2017). Since Independence Kerala has adopted so many welfare oriented policies and continue to invest substantially on education and health. The state adopted so many school educational programs like Samagra Shiksha by merging Sarva Shiksha Abhiyan (SSA) and Rashtriya Madhyamik Shiksha Abhiyan (RMSA). The recent development was the Khader Committee Report by integrating primary and secondary education with a regulatory authority to regulate it. The recommendations of the committee were yet to be implemented. At present,

school education in Kerala comes under General education. The main noted change that Khader committee gave importance is the pre-primary education which comes under the purview of school education with major changes.

Even though the status of education is remarkable and there are many landmark achievements in this sector, there are some issues that need to be given much care and attention. The state still requires more improvements to enhance academic quality at school and higher education levels and to make education more inclusive at all levels. The higher education sector in Kerala needs much attention and improvement. The main task of the Kerala government is to focus on the aspect of school education both at the school and higher education levels. There are some keen areas which need immediate interventions like imparting skills for employability through education, improving academic achievement, updating syllabi by paying heed to emerging demands both at the local levels, and designing new training programs for teachers to improve the standard of teaching and learning in educational institutions. Extracurricular activities in the areas of arts and sports, specifically designed programs with professional expertise and assistance are needed to meet the needs of the disabled children. More focus should be centered on the areas like skill education, incorporating technology in the curriculum, programs and support activities that benefits the differently abled and on gender sensitivity (George et.al, 2005).

The flow of students from unaided to government schools during the last two years shows that government initiatives in the school education sector have been widely accepted. The quality enhancement in the public schools of Kerala improved as per the National Achievement Survey. The spread of literacy also played a significant role in the social and economic development of the state. Kerala ranks first in the country in literacy rate shows the economic and social advancement of the state. The infrastructural facilities also improved and enrollment also increased. Kerala's achievements in the field of social development and quality of life are inspiring and encouraging. These achievements are the result of Kerala's high literacy rates among all Indian states and education for a long time. The Kerala society gives more importance to education that schools in Kerala are the nucleus of social microcosm. It is a fact that better education opportunities in Kerala kindles the

aspirations of the people and the main concern is on how to improve the quality of education (George et.al, 2007).

Kerala has achieved a near zero dropout rate with few exceptions of the population. The quality enhancement in the public schools of Kerala improved as per the National Achievement Survey. In improving quality of education and of increasing enrollment, Pothuvidyabhyasa Samrakshana Yajnam played an important role. As per the latest National Achievement Survey Report, the quality of learning in the schools of Kerala has improved significantly and is far ahead of the national average. Kerala State Literacy Mission Authority (KSLMA) has been implementing literacy and equivalency programs which are more relevant in the present context of Kerala. SSA and RMSA were the two major flagship programs to provide physical infrastructure in the schools of Kerala and improving quality of education. Both these programs were given importance to community participation in the management of schools without social, regional, economic and gender barriers. The schemes envisaged universal access, equity and quality, vocationalisation of education and improving and strengthening of teacher education institutions. Samagra Shiksha Abhiyan is also an integrated scheme for school education extending from pre-primary to higher secondary education (Kerala Economic Review, 2018).

The proliferation of unaided schools and the growth of self-financing institutions, inadequate school facilities and pedagogy problems also threaten Kerala's school education. There is an urgent need to study these problems of school children in Kerala. Infrastructural problems like lack of school incentives, low attendance, low teaching activity and low learning achievements also create threats to school education (Anjana et.al, 2005). All these problems throw light on the importance of studying school education scenario in Kerala. The identification of determinants of enrollment and learning outcomes are necessary to formulate policies. The Education Development Index (EDI) of National Council of Educational Research and Training (NCERT) composed of four parameters like access, infrastructure, teachers and outcome is also highest in Kerala, but the state is not perfect in the case of all the four sets of indicators. Education quality is deteriorating in Kerala despite all these tremendous achievements. Learning outcome is also quite disappointing. The present study intends to examine these aspects of education in the state.

The parameters like near total literacy, free and universal primary education, low drop-out rate at the school level, easy access to educational institutions, and gender equality in access are positive in the state. In these respects, Kerala is often compared not only with the other Indian states or developing countries but also with some of the developed countries. It is no doubt that, Kerala is rich in terms of quantity of education but lacks quality due to structural inefficiencies (Nair, 2003). So, these aspects of quality and quantity should be studied by using more recent data and scientific methodology. This is a major concern of the present study. Besides this the inputs and outcomes of school education also will be analyzed. In a nutshell, the present study examines the educational problems of school children in Kerala. It will provide valuable insights into the educational scenario of Kerala.

The remarkable success that Kerala has achieved in social development is reflected in the high physical quality index, high literacy rate and high life expectancy education is regarded as a catalyst agent of the growth and development of the state. The quality of education in Kerala and has been showing a decline due to financial constraints resulting from quantitative expansion of sector. Secondary education which serves as a bridge between primary and higher education and higher education as the weakest segment of school education where a good deal of wastage in the form of drop outs and failure take place. Government of Kerala is increasing its outlay on education over the past five years.

The primary school teachers of Kerala have shown a favourable attitude towards activity-based teaching strategy (Ambily, 1999). There is a strong urge from the part of primary school teachers of Kerala towards the usage of computers in classroom. The study also gave importance to the teaching strategy adopted by school teachers and the pupil's achievement and the lack of familiarisation among the teachers about the use of effective and new instructional strategies. The quality, equality and inclusion are the central focus of school education (Shivakumar et. al, 2010).

In Kerala, where the quality of public schools and teaching was found to be fairly good, the preference of private schools by the parents is also predominant. Public schools in Kerala have more racially and ethnically diverse student populations. How successful students in schools does not depend on whether they attend public or private schools, but their abilities, attitudes, skills and expertise of

teachers, quality of learning environment which is the joint responsibility of students, teachers, school administrators, parents, larger communities in which schools are located and policy making at the local, state and federal. There has been a steady increase in the private school enrollment and learning levels are not improving. Parents shift their children from government to private schools because the latter provide better training outcomes (Anjini, 2001; Willhma, 2005). The state of Kerala stands out as the least unequal in terms of educational opportunities. Education inequality perpetuates social and economic inequality (George et.al, 1999). More education has not meant more equality and general upgrading of skills has coincided with growing within country income inequality.

1.2. Review of Literature

The economic aspects of education have acquired greater importance in recent times. Economists have realized the importance of education to develop a workforce that is capable of generating knowledge driven economic growth. Economics of education focuses on the determinants of education and its impact on individuals, societies and economies in which they live. Education helps in the creation of human capital and also gives opportunities for improved efficiency, equity and quality of education. The study of economics of education also relates education with labour market outcome, education as investment, inequality in education, demand for education, expenditure on education, education production function, educational programs, policies, gender in education and the problems related to education.

1.2.1. Education and Economic Development

Greaney et.al (1996) studied the learning outcomes of education development. Information on student achievement in key curriculum areas are collected on a regular basis that has helped to monitor changes in achievement over time in such countries as Chile, France, Ireland, Thailand, the United Kingdom, and the United States. By presenting objective findings on achievement, a national assessment can provide evidence relevant to assertions made frequently by employers, industrialists, and others that educational standards are falling.

Ozturk (2001) examined the role of education in economic development. Effect of education on labor productivity, trade, technology, health, income distribution and even family structure is examined. The study used empirical evidence

both at micro and macro levels. At micro level increase in earnings is associated with additional years of education, rate of return and high level of education. From macro perspective, new growth theories endogenize technical progress by incorporating some of the same effects emphasizing education as well as learning. It is found out that education provides a foundation for economic development. Education increases nation's productivity, technological changes, increases trade and per capita income. Thus, investment in human capital is needed for economic development.

Mukherjee (2007) in his study gave importance to the role of education in economic development. Divergence between the private and social rate of return from education is the rationale for intervention by the state in ensuring equity in opportunity across the population. Based on the insights from 'New Growth Theories' the study advocated the case for public expenditure on education. Utilization of resources, its efficiency and its outcome in the form of quality of service delivery is crucial for achieving higher levels of human development both in India, and other countries of the developing world.

Gouda et.al (2014) analyzed education as the basic requirement for human development. The differentials and factors associated with school dropouts in India are studied. Based on the data from National Family Health Survey-3, it was found that only 75 percent of the children in the age group of 6 to 16 years were attending school. Parental characteristics also play a significant role in determining school education. The dropouts among the children belonging to illiterate parents were four times higher than that of the literate parents. It was also observed that if parents were not working, the possibility of dropout among their children was relatively high. The study suggests for the considerable improvement in the economic status of households and change in the social attitudes of parents to achieve the goal of universalisation of school education.

Mitra et.al (2018) studied the impact of education on economic development. The study analysed contribution to economic development in three ways: rate of return analysis, human resource approach and education and economic growth analysis. Education has got a major multiplier role in economic analysis growth. The study also found out that there is lack of research on the contribution or impact of education on the economic development of the country. There is need for further

research in education and policy makers should increase public expenditure on education at all levels, elementary, secondary and higher education levels.

1.2.2. Education Production Function

Greenwald et.al (1996) made an analysis of universe of education production function studies to utilize meta-analytic methods to assess the direction and magnitude of the relations between a variety of school inputs and student achievement. The 60 primary research studies aggregated data at the level of school districts were used for the study. The analysis found that resources were positively related to student outcomes, with effect sizes large enough to suggest that moderate increases in spending may be associated with significant increases in achievement. The study relates with trends in student achievement from the National Assessment of Educational Progress and changes in social capital over the last two decades.

Nahar (2010) studied the effects of school resources on students' academic achievement. The relationship between educational inputs and outputs is analyzed. For this individual level panel data of students in Tasmania is calculated. Data is collected from Department of Education, Tasmania. The study exposed the fact that school resources affect student's achievement and there is strong correlation between educational inputs and outputs.

Jagero (2013) analyzed the extent to which school inputs affect quality of education in day secondary schools in Kenya. Proportional sampling is used to select schools and simple random sampling to select teachers and students. Linear multiple correlation and Software Packages on Social Sciences is used. The study came to the conclusion that school inputs affect quality of education and among this most important educational input affecting educational quality is involvement of Parent Teacher's Association.

Jagero (2014) studied the extent to which educational inputs affect educational quality. The study used input-output relationship and multiple and step wise regression analysis as the method of study. It also used SPSS to determine regression coefficients. The results of the study show that there is negative relationship between teacher-pupil ratio and student achievement. There is highest correlation between PTA's performance in determining student's performance.

1.2.3. Educational Programmes and Policies

Leclercq (2003) analyzed the impact of Education Guarantee Scheme (EGS) on primary schooling in Madhya Pradesh. It presents the results of a field study report of public schools in Betul and Dewas districts of Madhya Pradesh. The study aims to link between education and rural society and on the development of primary schools. While the results may not be representative of all of rural Madhya Pradesh, the study provide an accurate picture of the situation in two areas viz adivasi villages and Dalit hamlets.

Dreze et.al (2003) studied of Mid-Day Meals Scheme (MDMS) as an initiative that could have a major impact on child nutrition, school attendance and social equity. The study gave importance to quality issues which need urgent attention for the proper functioning of mid day meal programmes. Universal and nutritious mid-day meals would be a significant step towards the realisation of the right to food. Mid-day meals have much to contribute to the well-being and future of Indian children. With adequate resources and quality safeguards, mid-day meals can play a major role in improving school attendance, eliminating classroom hunger and fostering social equity.

Gandhi (2007) studied an overview of school education in India. India's educational system is being placed in international perspective and compares it with BRIC countries and especially with China. India performs well with Pakistan & Bangladesh but lags behind China and BRICS (Brazil, Russia, India, China and South Africa) countries, especially in secondary school participation and youth literacy rates. The study examines schooling access and schooling quality. In India, secondary school enrollment is low, learning achievement level is low, teacher absenteeism is high and quality is low. The study also points out the role of private schooling and finds out that it is cost efficient and effective in imparting learning. The study also discusses on some of the public initiative programmes like Sarva Shiksha Abhiyan, Mid day Meals Programme & Para teacher Programme. The impact of these programmes is also analyzed on children's learning and its cost effectiveness is also measured. It also suggests more public commitment to school education to make it more effective.

Shekhar(2014) studied the problems in the achievement and the implementation of the MDMS scheme. A major drawback found in this scheme is spending teaching time; insufficient basic infrastructure of school. Parents,

Panchayaths and local authorities are negligible in this scheme. Such place, access to MDMs for Dalit children is hampered by the fact that the meals are served primarily in dominant caste hamlets. There are also instance of discrimination. Recently the death of 23 children due to poisonous food served to them under MDMs has put a question mark on this scheme. Hence, to better implementation of this scheme it would be necessary to take measures.

Singh et.al (2015) studied the impact of Mid-Day Meal Scheme on attendance, enrollment rate and dropout rate of primary school children in Uttar Pradesh. MDM and Non-MDM schools are selected by cluster random sampling method. Mid-day-meal is one important policy and the main intention of it is to lower the cost of schooling and also to improve child nutrition to foster learning, thereby increasing returns to education. In the study it is seen that MDM would continue in the state for better results and has a positive impact on enrollment and attendance and retention rate to be improved. This scheme will help to change the attitude of people towards government schools and helps to uplift educational status.

1.2.4. Determinants of Educational Attainment

Levy (1971) studied the variations in the dropout rate among primary schools by using data from 42 less developed countries to explore the relationship between various social, political, economic and educational variables. Regression analysis of the data was also used. The study reveals that school systems with high rates of repetition also have high rates of repetition among primary cycle. This suggests that automatic promotion may reduce educational wastage. High fertility rates and a high degree of social tension in a society also deter the attainment of universal literacy, while increased urbanization and development of communications systems increase school continuation. The economic returns to education are important determinants of school continuation.

Haveman et.al (1995) studied the factors that determine and influence the choices made by male and female students with regard to their studies and future occupations. The study gave importance to human capital factors in education. In the present study they consider the role played by gender, individual career aspirations and school characteristics in young people's subject choice in the education system of the Canary Islands (Spain). Specifically, the results indicate that, as a rule,

Humanities are chosen by female students and Science & Technology are chosen by men who study in urban private schools in which the careers teacher is part of the management team, and their main occupational aspiration is a managerial position.

Filmer et.al (1998) studied the determinants of school enrolment and educational attainment in India by using household wealth, gender, and village and state effects. The study uses the National Family Health Survey (NFHS) data collected in 1992-93 to estimate the determinants of child (aged 6 to 14) enrollment and educational attainment of a recent cohort (aged 15 to 19) in India. The analysis produces five major results. First, using an index of assets as a proxy for household wealth shows enormous gaps between the enrolment and attainment of children from rich and poor households. The study concludes with an examination of the state specific policies that could account for such differences.

Dreze et.al (1999) studied the determinants of school participation in rural north India, based on a recent household survey based on school characteristics. School participation, especially among girls, responds to a wide range of variables, including parental education and motivation, social background, dependency ratios, work opportunities, village development, teacher postings, teacher regularity and midday meals. The PROBE survey collected household data in 122 randomly-selected villages of Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh and Himachal Pradesh. These five north Indian states account for about 40 per cent of India's population, and a little over half of all out-of-school children. The main finding is that the causes of educational deprivation in rural India, is mainly due to several key determinants of school participation such as household resources, parental motivation, the returns to child labour, and school quality.

Filmer et.al (2001) analyzed the determinants of child enrollment and educational attainment of children in India. NFHS data collected in 1992-93 is used as the source of the study. Identical questionnaires for each state are used. Sample size for each state is 1000. There are 88000 households and 500000 individuals as sample for collecting data. The study dug out a wide gap between enrollment and educational attainment of children in India. Wealth gap, gender and physical characteristics affect enrollment and educational attainment in India.

Tansel (2002) estimated the return to education among Turkish professionals residing abroad. Economic instability in Turkey, prior intentions to stay abroad and

work experience in Turkey also increase non-return to education. Female respondents showed a lesser return to education. The study investigates the determinants of school attainments of boys and girls in Turkey. Although high levels of enrollments have been achieved at the primary school level for both boys and girls in much of Turkey, substantial regional differences remain. The study examines the determinants of educational attainments at the primary, middle and high school levels.

Rowe (2003) analyzed the ‘factors’ affecting students’ experiences and outcomes of schooling throughout their primary and secondary years-especially socio-cultural and socioeconomic factors. The study gives importance to ‘real’ effects from recent and emerging local and international research on educational effectiveness. The quality of teaching and learning provision is by far the most salient influences on students’ cognitive, affective, and behavioral outcomes of schooling regardless of their gender or backgrounds.

Ogawa (2004) analyzed the importance of public resources for education. In many developing countries, one of the major challenges facing public institutions is the efficient and equitable reallocation of public resources. This study addresses the issue of how public resources are employed efficiently and equitably in Zambia as a case study. Educational outcomes are measured by school life expectancy, the expected number of years of formal education. Specifically, school life expectancy is calculated as the sum of age specific enrollment rates for primary, secondary and tertiary education.

Chakrabarti et.al (2006) analyzed the determinants of expenditure on education using empirical analysis. Using a panel of 15 major states from India, the study examines patterns and changes in the allocation of government funds for education, particularly higher education, over a span of two decades, before and after the introduction of the new economic policies. State real per capita income, is found to significantly enhance educational expenditure at the aggregate, elementary, secondary and higher levels. It is evident that privatisation exerts a negative significant impact on expenditure on higher education.

Dostie et.al (2006) studied the importance to attainment of universal basic education as the elusive goal in many developing countries. It examines the determinants of school enrollment among children in Uttar Pradesh and Bihar, two large north Indian states. In addition to individual-and household-level influences,

they consider the role of village-level contextual effects on the school enrolment decision. The results suggest that enrollment is increasing in parental education as well as wealth and that village caste composition and aggregate deprivation also influence individual enrolment decisions.

Kotwal et.al (2007) studied the drop out in Kathua District of Jammu and Kashmir State. Dropping out of school is a well-documented social problem and often present daunting circumstances for adolescents. Dropping out is also associated with delinquency, and low school achievements. The sample was selected from four villages of Kathua Tehsil namely; Kharote, Janglote, Barwal and Govindsar. The sample consisted of 50 dropout girls and one of their parents. A snowball sampling technique was used for the selection of sample. To get information for the present study an interview schedule was framed. The data obtained was compiled and analyzed using simple numbers and percentages. The main causes of dropping out of girls from school in rural areas were reluctance of parents and participation in domestic activities, parent's poor educational status and problem of financial constraints.

Desai et.al (2008) analyzed private schooling in India and its effects of private school enrolment on educational quality. It is analyzed that Private schooling in India has expanded rapidly in the past decade. The study is based on data from the recently collected India Human Development Survey. The results suggest that children in private schools have higher reading and arithmetic skills than those in government schools and students from lower economic strata are more likely to be physically punished in government schools. The impact of private school enrollment on children's verbal and mathematical skills was analyzed by using ordinary least squares regression.

Mukherjee et.al (2008) studied the importance of parental education in schooling and decision of child labor. The study used household level data from National Sample Survey Organization (NSSO) of India, the 55th (1999-2000) and the 61st (2004-05) rounds and shown that even with a significant wage incentive for schooling of urban children, the school dropout rate and child labour incidence are not small over this period. The parents' level of education plays an important role in reducing this tendency; thus establishing the linkage between social and human

capital outcomes in the family. Using a pooled data they also analyzed the changes in the impact of parental education on these decisions between 1999-2000 and 2004-05.

Okumu et.al (2008) analyzed the socioeconomic determinants of primary school dropout in Uganda with the aid of a logistic model analysis using the 2004 National Service Delivery Survey data. The Objectives were to establish the household socio-economic factors that influence dropout of pupils. Various logistic regressions of primary school dropout and model estimation were used. The analysis of the various coefficients was done across all models. The results showed the insignificance of distance to school, gender of pupil, gender of household head and total average amount of school dues paid by students in influencing dropout of pupils. The importance of parental education and household size and proportion of economically active household members in influencing the chances of pupil dropout and the importance of government in many areas are studied.

Nambissan et.al (2010) studied the importance to choice and private schooling, and the role that transnational advocacy networks play in managing and driving these flows. They explore a set of network relations between advocacy groups in the UK and the USA and local 'choice' advocates in India. Individual policy entrepreneurs are active in making these connections and circulating ideas. A complex of funding, exchange, cross-referencing, dissemination and mutual sponsorship links the Indian choice and privatization advocacy network, and connects it to other countries in a global network for neoliberalism.

Huisman et.al (2010) analyzed the role of socio-economic and cultural factors and characteristics of the educational infrastructure on primary school enrolment using data for 70,000 children living in 439 districts of 26 states of India. Most of the variation in educational enrolment (around 70%) is explained by factors at the household level, of which socio-economic factors are most important. In urban areas schooling decisions are hardly influenced by supply-side factors. In rural areas, however, these factors do play an important role. A major finding is that in rural areas inequalities between socio-economic status groups are lower if more schools and teachers are available.

Reddy et.al (2010) examined the high dropout rates as one of the biggest challenges to fulfill the right to education in India. The magnitude of the problem of dropout is studied and critically reviews the evidence on some of the commonly cited

reasons for dropout, including poverty, limited access to credit, child labor, and children's and parents' lack of interest in education. It is also studied that persistently high dropout rate should be located in the absence of a social norm in terms of children's right to education; and that this is reflected in the lack of systemic support available for children at risk of dropping out.

Sabates et.al (2010) examined the policies to improve school progression and the measures to reduce the numbers of children dropping out of school as critical factor to Universal Primary Education (UPE). The study clearly throws light on the fact that the number of children enrolled in school has increased over time. Dropout rates differ significantly among countries. Using data from Demographic Health Surveys on the population of 16 and 17 year olds, assuming that by this age children should have completed a cycle of primary school, dropout rates differ significantly among countries.

Basumatary (2012) studied the importance of various factors responsible for School dropout such as poverty level, distance of school from home, transport facilities, quality of teachers, social environment and many other factors. The study is a quantitative analysis of school dropout rate. The data for school dropout rates and many other variables across Indian states and UTs are considered for the session 2009-10. The study found statistically significant impact of state poverty level and the rural populations. More generally, reasons of school dropouts can be classified into some broad categories like school-centric, student -centric and parent-centric.

Kumar, et.al (2014) examined the variation in young people's educational and occupational attainment by parental characteristics. It also examines the relationship between parental education and household wealth on schooling. The study uses population survey data. Ordinary Least Squares (OLS) is used to understand the effect of independent variables on dependent variables. Bivariate analyses are the method used in the study. Educational level of children varies directly with the educational level of parents. Thus economic status of the household plays an important role and predicts child schooling.

Nongkynrih (2015) analyzed the determinants of schooling in India. The nature of school attendance for children in the age group of 5-14 years and the gender disparities prevalent are being explored. It also examines the household and religious characteristics that affect schooling. Econometric estimates by Maximum Likelihood

Probit Analysis are also used. The findings are: Education of the household mainly affects children's school attendance. Expansion in education level and economic wellbeing can reduce existing differences of children sending to school. Cultural, social and religious beliefs also affects school attendance especially that of girls.

Nidup (2016) studied about the determinants of School enrollment in Bhutan. It examines how household income determines school enrollment. Bhutan Living Standard Survey (BLSS) 2012 is used as the method of study. Data is collected from the school aged population of 6-12 age groups. The study came to the conclusion that household income matters for school enrollment. It is suggested that income redistribution from poor to rich is needed to increase student enrollment.

1.2.5. Investment in Education

George (1993) analyzed the comprehensive update of the profitability of investment in education at a global scale. The study gave importance to primary education, as it continues to be the number one investment priority in developing countries. The main findings of the study highlight the importance of investment in education as a very attractive investment opportunity in the world today - both from the private and the social point of view.

Barbara et.al (2002) studied the positive externalities of education on a macro-economic view point. The study is an extensive summary and a critical discussion of the empirical literature on the impact of human capital on macro-economic performance, with a particular focus on UK policy. The main finding is that human capital increases productivity. The most pressing methodological problems are the measurement of human capital; systematic differences in the coefficient of education across countries (in particular between developing and developed countries) and reverse causality.

Palanigounder (2002) studied the estimates of returns to education in wage employment in India by gender, age cohort and location (rural-urban) in 1993-94, using data from a large national level household survey. The estimates show that the returns to education increase up to the secondary level and decline thereafter. There are substantial gender and rural-urban differences in the returns to schooling. Investment in women's education, particularly at the middle, lower secondary and higher secondary levels, is more profitable than that for men in the study period.

Psacharopoulos et.al (2004) analyzed the returns to investment in education based on human capital theory. The study estimated returns to education from a wide variety of countries, including over time evidence, and estimates based on new econometric techniques, reaffirm the importance of human capital theory. Comparisons were also made based on the latest estimates of different countries.

Agarwal (2011) estimated the returns to education in India using a nationally representative survey. The study estimated the standard Mincerian wage equation separately for rural and urban sectors. To account for the possibility of sample selection bias, Heckman two-step procedure is used. The findings indicate that returns to education increase with the level of education and differ for rural and urban residents. Family background is an important determinant affecting the earnings of individuals. Returns differ considerably within education groups across different points of the wage distribution.

Fulford (2012) studied high returns to education exists in India at an individual level by building aggregates from micro-data. Better educated female cohorts do not live in households with higher consumption. The study also uses econometric models to estimate returns to education. Comparing state returns to a measure of school quality, it does not seem that poor quality is responsible for the low returns.

Draxler (2014) studied the international importance of investment in education and pointed out the importance of sound education system to achieve social cohesion, equity of opportunity and equality of access in a society. The study focused on the importance of education as a right by playing an important role in development process and also gave importance to the increasing role of private sector and education as the next international development agenda. The study also listed out some milestone reports in the education sector and emphasized the concept of Education for All (EFA).

Ojala (2016) examined the relationships between the amount of investment in education and economic growth. It examines the impact of physical capital formation in economic growth and investigates the contribution of labor input on economic growth. The study used so many methodological aspects to analyze data like Time series technique to investigate the relationship between government education expenditure per worker. Data is collected from Kenya National Bureau of Statistics &

World Bank. Multiplicative Cobb-Douglas Production function, Unit Root and Granger Causality Tests were also used. The study is based on descriptive statistics. Correlation perspectives of growth theories were also used as the method of study. It is found out that education expenditure per worker has a positive and significant impact on economic growth both in the long run and short run. There is positive relationship between investment in education and economic growth.

1.2.6. Expenditure on Education

Roy et.al (2000) attempts to estimate the normal expenditure levels with regard to expenditure on education of fifteen large Indian states for the year 1997-98. Cross section data of 6 years were taken and a comparative analysis of normative and actual expenditure levels had been made. The study attempts to analyze education expenditure at three levels: primary, secondary and higher education. The main finding of the study is that richer states spend more on social sector education than the poor states.

Tilak (2002) examined the extent of household expenditure on education, the elasticity of household expenditure on education and the determinants of family expenditures on education by using the NCAER survey data on Human Development in rural India (HDI) (1994), supplemented by other sources. It has been found that there is nothing like 'free' education in India. Household expenditures on education are sizeable; households from even lower socio-economic background-Scheduled Castes/Tribes, low income groups-all spend considerable amounts on acquiring education. It is also found that households do not discriminate much against spending on girls' education. Among the determinants of household expenditures, household characteristics particularly household income and the educational level of the head of the household are found to be important. Other important determinants include demographic burden of the household (size of the household), caste and religion and gender.

Al-Sammari (2003) analyzed the relationship between public education spending and education outcomes at the primary school level in developing countries. The study explores this relationship from a cross-country perspective before concentrating on three African case studies-Botswana, Malawi and Uganda.

The research finds that the link between resources and education outcomes are

weak and that the achievement of the MDGs and EFA targets will require more than just increases in expenditure on primary education. The composition of resources and institutions that govern the use of these resources plays a central role in translating resources into better schooling outcomes. Improving the public expenditure management system is also important in strengthening the link between public spending and education outcomes.

Alex (2005) studied Kerala's social development and its high literacy level and achievements in the sphere of education. Female education and universal enrolment in schools is commendable in Kerala. A substantial chunk of the state government's expenditure is earmarked for the educational sector. The data regarding expenditure on education can be obtained from the Demand for Grants and Detailed Budget Estimates of the Government of Kerala. The Demand for Grants and Detailed Budget Estimates of a particular year contains the budget estimates for that year, the revised estimates for the previous year and the actual expenditures for the year prior to that.

George et.al (2005) studied the dynamics of change in educational sector of Kerala. The impact of political and social forces on Kerala's educational system is analyzed. It also examines the trend in educational finances of the state. The trends in expenditure of education and analysis of budgetary expenditure of education are calculated. The study came to the conclusion that Kerala's education system requires updating and modernization and requires mass restructuring. State's education is shifted from inclusive to exclusive.

Tilak (2006) studied a comparative study of the two educationally backward states and low performing states like Andhra Pradesh and Rajasthan along with Bihar, Uttar Pradesh and Madhya Pradesh. The study discusses some of the important aspects relating to public expenditure on education, comparing and contrasting the situation in Andhra Pradesh and Rajasthan. It reviews the trends in public expenditure on education in general and elementary education in particular, during the last two decades. It also analyses inter functional allocation of resources, sources of funds for elementary education, changing centre-state responsibilities in financing education, the contribution of external aid to education and the magnitude of household expenditure. The study finds out that sustained levels of expenditure on education are important for educational development.

Bhattacharya (2012) analyzed the extent to which free education reduces household's burden of private expenditure on education. The analysis was done with the objective of finding out whether free education has any importance in reducing household expenditure on education. The analysis has been done for different levels of education, different MPCE quartiles and at state levels by taking data from NSSO level of education wise distribution & expenditure. The study found out that education is paid for by all households irrespective of receiving free education or not. Cost of education is also comparatively low to those who receive free education.

Bhakta (2014) examined the impact of public expenditure on health and education. The linkages between health status of children and their educational achievements in India are studied by developing a simultaneous equation model between health and education of children, and public expenditure on these sectors. Three stage least squares technique is applied. The results show that bad health status among children, captured by high Infant Mortality Rate, is responsible to have lower enrolment rates and high dropout rates in primary level. Moreover, public expenditure on elementary education has greater impact on enrolment as compared to dropout rates. Dropout rate declines with a decrease in IMR. Thus, public spending has to be increased in the nutritional program and education sector at primary level to have a better future in terms of health status and educational attainments and essentially to reduce dropout rates as compared to enrolment rates.

1.2.7. Demand for Education

Hunt (2008) analyzed an in-depth review and analysis of literature on dropping out from school. The study is about why and how children drop out from school. Here drop out is regarded as a process where a range of supply-demand factors interact to influence schooling access. It looks at literature in relation to household, community and social contexts of dropping out, as well as school supply and practices. It also explores what research is saying precursors to dropping out and factors which may influence retention. The study also looks at the financial circumstances of households and how this might be linked to dropping out.

Nernman et.al (2010) studied the determinants of demand for education during Tanzanian Governments and its importance to Universal Primary Education (UPE) in 2000s. He analyzed whether demand for education is driven by direct and

opportunity costs for education. The study used existing empirical and theoretical literature and standard Mincerian wage regression to estimate returns to education. The findings of the study are: abolition of school fees led to an increase in enrollment within agricultural households. Returns to education no way affect demand for education. Educational choices are affected by the views held by others within the community.

Motiram et.al (2011) analyzed the demand or supply aspects of schooling in rural India. The study is an attempt to analyze the poor human capital investment by rural Indian families as a demand or supply factor of schooling. It is being examined by school attendance and total human capital investment time using the Indian Time Use Survey 1998-99 and 7th All India School Education Survey (AISES). The supply side factors are school quality and availability and demand side factors are household characteristics that affect poor human capital investment in India. The study gave importance to the role of high-quality schooling in India to bring about public policy in human capital formation which is essential for sustainable development.

1.2.8. Cost and Financing of Education

Tilak (1993) studied the analytical and descriptive review of major issues in the financing of higher education in India. The various aspects of financing of education are critically examined. The study is based on data collected from various education departments and the returns to investment in education are estimated. The study stressed the importance of government spending in education and experimentation in higher education serves as the policy changes to revamp the education sector.

Bray (2002) attempts to study the cost and financing aspects of education in the developing member countries of the Asian development Bank (ADB). The study looks into the aspects of public and private expenditures on education and stressed the importance of investment in education. The cost sharing in education is also explained and analyzed. Privatization of education and international aid for education is also analysed.

Bray (2002) studied and analysed with particular focus on groups of countries, and on the Asian and Pacific region as a whole. It studies about scale of education and the volume of expenditures, noting the balance between government and non-

government inputs, and commenting on changes over time. The study turns to matters of unit costs and their determinants. It presents information on differences between and within levels of education, and discusses the policy implications of these differences.

Nair (2004) studied the cost of school education in Kerala, assigned by KRPLLD to the Kerala Statistical Institute along with another study on morbidity. Both these studies involved collection of primary data from households spread over the whole state. A common approach in designing the survey and covered the one-year period February 2000 to January 2001. The survey covered the whole of Kerala. A stratified two-stage sampling design was adopted for the survey. In the rural areas, Panchayath wards formed the first stage sampling units. Households in the selected wards formed the second stage units. In the urban areas, the first stage units were the Municipal/Corporation wards and households within the selected wards were the second stage units.

Nampoothiri (2004) studied the cost, efficiency, and managerial aspects of schooling. Certain operational definitions and concepts are used in the study. An attempt is made to evaluate performance by levels and management. The educational performance is conceived of as internal efficiency. The internal performance of the educational system refers to the capacity of the system to turn out students in the most effective way. For the general evaluation of the performance, the physical facilities, the quantity and quality of teaching, the services rendered, and the conveniences provided are taken into consideration.

Lewin (2008) analyzed the strategies for sustainable financing of secondary education in Sub-Saharan African countries. Secondary schools in Sub-Saharan Africa (SSA) enroll just 25 million of the region's 93 million children of secondary-school age-and many of them attend irregularly and fail to complete lower-secondary schools. For the region as a whole, less than one-third of the cohort enrolls in upper-secondary grades. In 35 countries the secondary gross enrolment rate (GER) is less than 40 percent; in 15 countries it is less than 20 percent. Educational reforms are needed to expand enrolment in secondary schooling in affordable ways.

Efanga et.al (2014) studied the relationship between the component of educational costs and the demand for private secondary education in Akwa Ibom State. Three null hypotheses were formulated to direct the study. Six hundred students

and thirty principals were drawn, through proportionate stratified random sampling technique. Data collection was through structured questionnaire. Data were analyzed by using Pearson Product Moment Correlation Statistics and population t-test. The findings show that there was a statistically significant relationship between educational costs and the demand for private secondary education in Akwa Ibom. Based on the findings, recommendations were made including that government should award scholarship to students in private secondary schools as this would reduce the effect of high cost of private schools on the youths of low socio-economic status.

Ziderman (2016) studied the innovative financing mechanisms adopted in many national training systems. The study aims at correcting shortcomings of conventional training finance systems in order to better meet labor market needs, improve both the quality and relevance of training provision and to contain training costs and also suggesting measures to improve the training systems for better standards.

Rani (2016) analyzed the financing of higher education in India in the context of recent trends by examining the influence of various factors like enrollment growth, growing private sector and youth population. The Education Policy of the Government of India initiates so many programmes for cost of education. But in India, government funding for higher education is neglected. The number of scholarships and the amount devoted to scholarships also declined. The study analyses the importance of state involvement in covering the cost of education. The study gave importance to fees, grants, scholarships and student loans in the context of increasing cost of higher education by including family characteristics based on secondary data sources.

Psacharopoulos et.al (2018) estimated the return to education by reviewing the latest trends and patterns based on 1120 estimates in 139 countries from 1950 to 2014. The study found out that private returns to higher education increased and social returns to schooling remain high. Investment in education increase future productivity.

1.2.9. Quality of Education

Hanushek et.al (2007) analyzed the impact of quality of education on economic growth. It is also an attempt to understand the implications of educational policies for improved educational outcomes. International Audit Literacy Surveys (IALS), data on economic growth and student cognitive skills (1960-2000) were used. The measure of quality of education by simple average of Mathematics and Science Scores are used. The study came to the following findings: quality of education lead to economic growth. By simply increasing educational spending does not ensure improved student outcomes. There is low educational attainment in developing countries and teacher quality strongly influences student outcomes

Rao et.al (2008) analyzed the relationship between educational quality, economic growth and educational inequality. The study explore the relationship between school quality, namely at primary education and secondary education, and economic growth. Educational inequality at primary and secondary education would be measured with using the concept of education Gini-coefficient. Using GDP as the dependent variable and regressing it with Gini-coefficient of primary education and secondary education would be able to show which level of education inequality is significant in explaining the economic growth of a country. Using Malaysian data, for the last 20 years, the relationship between education inequality of different level of education and the economic growth would be postulated.

Owings et.al (2012) analyzed Turkey's human capital needs through expanded educational access and equality and teacher quality issue undermining its goals. It uses Economic Modeling to relate cognitive skills assessed by Programme for International Student Assessment (PISA) and other international measures. The major findings are: Turkey made improvement in educational access, but more to be done and there is challenge of creating high quality educational system. Teaching quality and better training policies lead to the development of functional and cognitive skills and better educational outcome.

Mcloughlin (2013) studied the effectiveness of private schools in providing quality education, reaching disadvantaged groups, supporting or undermining equality (including between girls and boys), affordable for the poor and financially

sustainable. The study synthesizes the best available evidence on these questions and reach into the idea that private schools operate at low cost by keeping teacher salaries low, but their financial situation may be precarious where they are reliant on fees from low-income households. While there are isolated cases of successful voucher and subsidy programs, evaluations of international support to the sector are not widespread. Addressing regulatory ineffectiveness is a key challenge. Emerging approaches stress the importance of government and private providers to produce better education outcomes for the poor.

Vyas (2014) studied the low learning outcomes in primary schools across India, specifically in reading and mathematics based on All India surveys such as ASER and the Planning Commission Evaluation Report. Significant dropout rates exist at the higher level of education, with only a fraction making it to the tertiary level. The low quality of education at a primary level threatens to leave a large part of India's future workforce uneducated and unproductive. Too many students are not learning basic skills such as reading and numeracy in primary school and then dropping out before completing secondary education.

Hill et.al (2014) studied the Review of education achievements since 1990s and the current state of educational quality. The importance of private education and the opportunities and challenges for access and quality were also being studied. It also discusses the areas where reforms are needed to improve quality of schooling. Domestic Learning Surveys and Review of Education Reforms are used as the method of study. The study came to conclude that public and private spending has increased, enrollment increased and at the same time gender disparities reduced. Academic workforce issues need attention. Stronger quality assurance, better incentives and more effective regulation are needed. There is an urgent need to increase resources to improve instructional quality.

Panigrahi et.al (2014) studied the state wise status of elementary schools in rural India based on different subjects. It also focuses on assessing the level of quality education by students based on their achievement test on different subjects. The secondary source is based on ASER data. Random sampling is used for selection of villages and rural households. Principal Component Analysis (PCA) is used to test the state wise educational achievement. It is found out that status of elementary education

is not the same for all states. Suitable educational policy is required for the development of high educational achievement in rural areas.

Ardiente et.al (2015) made a comparative analysis on the quality of education between Least Developed Countries (LDC) such as South Africa and Newly Industrialized Countries (NIC) such as Taiwan. The factors that will stand in the way of development of South Africa and the success of education in Taiwan were also being examined. Review of National Policies of Education and data collected from 1960 to 2000 of Taiwan's population were the methods of study. It is found out that there is lack of government support in South Africa along with its unequal economic conditions. Thus government contribution in the form of big push is needed in South Africa to have a good educational system. On the other hand, government's contribution is high in Taiwan and its education sector is good.

Pritchett (2015) analyzed the indirect relationship between learning outcome, school enrollment and schooling completed. The study stressed on the role of existing systems of education which have some elements promoting learning as an objective. The study builds an accountability framework of actors and the four design elements of accountability (delegation, financing, information and motivation) to emphasize that effectiveness in promoting learning requires systems of education that are coherent, in two ways. The study also advocates for the importance of reforms in educational system to improve learning outcomes.

Bhattacharji et.al (2015) analyzed the relationship between school ranking and school quality. The study shows that when school rankings are published, the quality of schools increases and it is in no way affected by the home background of their students. The school rankings based on subject performance will help the school principals to evaluate the working of their school and can make corrections regarding it. The study uses correlation coefficient as the method of the study and demonstrates two types of school ranking, subjective and objective rankings and concludes by advocating the policy of school rankings for improving the school accountability and raising standards.

Varghese (2015) made an attempt to analyze the initial phase of massification of higher education in India, with around 30 million students, 0.70 million teachers and 36 thousand institutions in 2012-13. The country has the second largest higher

education sector in the world. The study analyzes the trends and the challenges posed by massification. These challenges of massification include concerns for ensuring equity, improving quality, mobilizing funding, managing and regulating the system. It seems the role of the state will be changing from financing and managing institutions to developing a framework for regulating the system to ensure equity in access and quality in outcomes.

Vijayakumari et.al (2015) analyzed the performance of Quality Education Pupils Right (QEPR) of schools in Thrissur district. It also tries to assess the satisfaction of stakeholders on QEPR programme. Collective case study method is used. Data is collected from teachers, parents and students using structured questionnaire. Interview with the head of the institution, SSLC results from 2006-2012 were assessed to find out the quality of education imparted by schools. As a result of implementation of QPER Programme, there is an increase in pass percentage. Infrastructure in schools also improved. Students and parents are supportive of the QEPR programme.

Thangeda et.al (2016) made a study to find out what degree students are satisfied by educational system and resources in terms of quality. It also provides recommendations on how to solve the challenges faced based on students perspective about educational quality provided by the institution. It also tries to find out if quality education and employability are interrelated. Well-structured questionnaire is used to collect data from students. The study found out that quality of education has an impact on employment and students are satisfied by the quality of education provided by the institution.

Vijayakumari et.al (2018) studied on the area of uneconomic schools. The study intended to find out physical conditions of uneconomic lower primary schools, to identify the factors causing the schools uneconomic and to provide suggestions for improving the conditions. In the descriptive study, two questionnaires and one interview schedule were used for collecting information. One questionnaire is used for collecting information from parents and another one is used for teachers and the interview schedule is used for interviewing Head Masters. It uses normative survey method and random sampling method. The investigator tried to analyze the conditions of thirty schools by taking a sample of thirty Headmasters, fifty teachers and 100

parents of sixteen Educational Sub Districts of Malappuram District. The physical conditions of the uneconomic schools were satisfactory in most of the schools.

Madani (2019) analyzed the education quality based on the goal of Education for All policy. The impact of educational policy contributed to educational development is being studied. Literature reviews to find out the studies associated with educational quality between the time period 1990-2000 is used and came to the conclusion that good educational policies lead to quality of education. The policies of Education for All should be suited to each country's political, economic, social and cultural situations.

Garira (2020) studied a proposed unified conceptual framework for quality of education in schools. System theory was used to help in understanding quality of education. Inputs, outputs and processes are framed on the basis of conceptual framework which helps the various education stakeholders to understand their role in improving the quality of education in schools. The study also gives importance to the interconnectedness of various levels of education system to realize educational goals. The study thus provides a scientific explanation of the study of education quality in schools.

1.2.10. Educational Inequality

Blanden et.al (2003) studied and explored changes over time in higher education (HE) participation and attainment between people from richer and poorer family backgrounds in UK. They used longitudinal data from three time periods to study temporal shifts in HE participation and attainment across parental income groups for children who attended university in the 1970s, 1980s and 1990s. The key finding is a highly policy relevant one, namely that HE expansion has not been equally distributed across people from richer and poorer backgrounds. Rather, it has disproportionately benefited children from relatively rich families. The expansion in HE acted to widen participation gaps between rich and poor children. It also used non- parametric estimations and econometric model allowing for studying the sequential nature of education choices.

Magnuson et.al (2004) analyzed the effect of participation in child care and early education on children's school readiness as measured by early reading and math skills in kindergarten and first grade. Using data from the Early Childhood

Longitudinal Study, Kindergarten Class of 1998-1999, they analyzed the effect of participation in child care and early education on children's school readiness as measured by early reading and math skills in kindergarten and first grade. It is found out that the effects are largest for disadvantaged groups, raising the possibility that policies promoting preschool enrolment of children from disadvantaged families might help to narrow the school readiness gap.

Kochar (2007) studied of schooling policies and schooling inequality. The Government of India has long made access to primary schools a priority. The empirical analysis of this study shows that habitation size determines the number of teachers and the availability of schools in scheduled caste and tribe (SC/ST) habitations, and that these in turn determine schooling attainment. Thus, school location policies, through their effect on school quality, imply that the benefits of school access differ across regions, but also across castes within any given region.

Desai et.al (2008) examined the changes and relationship between educational attainment and educational inequalities. The data from a large national sample survey of over 100,000 households for each of the four survey years such as 1983-84, 1987-1988, 1993-1994, and 1999-2000 and focus on the educational attainment of children and young adults aged 6-29. The results showed that there is a declining gap among dalits, adivasis, and others in the odds of completing primary school. Such improvement is not seen for Muslims, a minority group that does not benefit from affirmative action. There is little improvement in inequality at the college level.

Jacob et.al (2008) studied the relationship between school size and schooling inequalities. Combining panel data with an instrumental variable strategy which enables to control for cohort and school specific determinants of quality which may otherwise bias estimates of the effect of classroom attributes, they find that multi-grade teaching significantly reduces schooling achievement and contributes to caste based schooling inequalities. The methodology also allows obtaining estimates of the effect of classroom size and caste composition.

1.2.11. Gender and Education

Filmer et.al (1998) studied indicators of gender disparity by using data assembled from the Demographic Health Surveys from a large number of countries and the National Family Health Surveys from the individual states of India. The study

suggests a simple model for the relationships between poverty, schooling and gender inequality. It argues that poverty-at both national and household levels – is associated with an under-enrollment of school-age children. Using detailed case study materials from two African countries, evidence is presented to show the variety and extent of adverse cultural practice which impede the attendance and performance of girls at school, relative to boys. Gender inequalities in schooling outcomes, measured in both qualitative and quantitative terms. The study argues that, as incomes (national and household) rise, so enrollments will tend to follow.

Balatchandriane (2007) analyzed gender discrimination and economic development in Asia. The study analyses that denial of access to education of women in Asian countries lead to lack of modernization among Asian countries. The primary, secondary and tertiary sectors of education were studied. Gender inequality in education was studied by a number of methods like Gender Parity Index (GPI) and indices in the Annual Human Development Report and World Development Report of the World Bank. A cross country wise analysis of Asian countries was also made and focus was made on South Asia, South East Asia and East Asia. Countries with same level of economic development may also vary in terms of gender inequality.

Gandhi (2002) analyzed the correlation between gender gap and educational attainment in India. Differential treatment of sons and daughters by parents is a potential explanation of the gender gap in education in developing countries. This study empirically tests this explanation for India using household survey data collected in urban Uttar Pradesh in 1995. Educational enrolment functions are estimated and selectivity-corrected educational attainment functions, conditional on enrollment. The analysis suggests that girls face significantly different treatment in the intra household allocation of education.

Huisman et.al (2010) studied the role of socio-economic and cultural factors and characteristics of the educational infrastructure on primary school enrollment using data for 70,000 children living in 439 districts of 26 states of India. Most of the variation in educational enrollment (around 70%) is explained by factors at the household level, of which socio-economic factors are most important. In urban areas schooling decisions are hardly influenced by supply-side factors. In rural areas, however, these factors do play an important role. Interaction analyses show that effects of factors at the household level depend on characteristics of the context in

which the household lives. A major finding in this respect is that in rural areas inequalities between socio-economic status groups are lower if more schools and teachers are available.

Lang (2010) examined a study of planning and design of educational facilities from a gender perspective. The study explores how to adopt a gender perspective in the analysis of educational facilities. It argues that social relations are influenced by the physical environment, and that social and physical aspects are often interlinked. The study reflects on how men and women use educational spaces, drawing on examples of completed school projects. It then explores gender-related issues and related research, and considers how to incorporate a gender perspective on educational facilities.

Hussain (2010) studied the gender differences in probability of completing school education across regions in India. A Gender Disparity Index is calculated using National Sample Survey Organization unit level data from the 61st Round and regional variations in this index analyzed to examine the hypothesis that gender disparity is greater in the North, comparative to the rest of India. This is followed by an econometric exercise using a logit model to confirm the results of the descriptive analysis after controlling for socioeconomic correlates of completing school education. The Fairlie decomposition method is used. The results reveal that gender disparities are greater in North India, for total and rural population, and in Eastern India, for urban population. The 'residual effect' often referred to as disparity-is higher in Eastern India, irrespective of the place of residence.

Pahalke et.al (2014) analyzed a study which gave importance to single sex education rather than co schooling in determining students' performance and attitudes. The study used meta-analyzed data from 184 studies, representing the testing of 1.6 million students in Grades K-12 from 21 nations, for multiple outcomes (e.g., mathematics performance, mathematics attitudes, science performance, educational aspirations, self-concept, gender stereotyping). Based on mixed-effects analyses, uncontrolled studies showed some modest advantages for single-sex schooling, for both girls and boys, for outcomes such as mathematics performance but not for science performance. Controlled studies, however, showed only trivial differences between students in SS versus CE. Results from the highest quality

studies, then, do not support the view that SS schooling provides benefits compared with CE schooling.

Fousia et.al (2016) studied the perception of students on gender bias in the existing curriculum. The study used both quantitative and qualitative design like survey and case study approach. Data were collected through questionnaire, classroom observation and Focus Group Discussion Sessions (FGDS) with teachers and students. The results of the study showed that gender bias existed in school curriculum and it led to the curbing of girls' future career aspirations.

Sivasankar et.al (2016) studied the psychological differences between boys and girls. The major purpose of this study is to find out anxiety, adjustment, emotional intelligence, study habits and attitude difference between adolescent boys and girls (14-16 years). For this purpose data was collected from 60 high school students; 30 boys and 30 girls. The tools used were State and Trait Anxiety Test (STAT), Academic Anxiety Scale, Global Adjustment Scale, Emotional Intelligence Scale, and Test of Study Habits and Attitudes (TSHA). The results indicate that there is no significant mean difference in general anxiety and academic anxiety between boys and girls.

1.3. Research Gap and Research Problem

The school education in Kerala is a study of importance as it helps in the economic development of the state. The studies in school education seldom address the problems and key areas like determinants of education, quality of education, expenditure on education and the problems related to school education. There are some studies to deal about these aspects of school education. However, the present study has identified some of the research gaps. The studies in the area of school education are very limited. There are not much studies relating to the economics of school education. The determinants of expenditure on school education and the outcome of school education are the areas which are of keen interest and importance yet to be explored. The demand for education, the quality of education, cost and financing aspects of education, educational programmes and policies of the government are the key areas the study deals with.

The studies in the area of expenditure on education are extremely scanty. The present study is a mere attempt to analyze the school education scenario of Kerala in

a different perspective. It tried to find out important aspects of school education like expenditure on education both public and household and its determinants, quality of education and the problems related to school education and tried to find out an overall picture of school education in Kerala.

There are barriers or deterrents that affect school educational attainment. The deterrents or constraints of school educational attainment are a multi-dimensional concept encompassing a number of variables like individual, family or home related problems, cost concerns, worth, relevance or quality of available educational opportunities, lack of motivation and self-confidence in the learner. There are not much studies relating to the school educational attainment, determinants and deterrents and the ways to find out the learning outcome of students. These impediments in fact affect the quality of school education in Kerala. The proper link between school education and college education is very important as it determines the future of every student.

1.4. Research Questions

Based on the problem of the study and the research gap found, the present study attempts to find answers to the following research questions:-

1. What is the trend of expenditure on school education in India and Kerala?
2. What is the level of disparity with respect to expenditure on school education in India and Kerala?
3. What are the determinants of household expenditure on school education in Kerala?
4. What is the level of student satisfaction on school education in Kerala?
5. What are the problems related to school education in Kerala?

1.5. Objectives of the Study

Following are the specific objectives of the study:-

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 analyse the student satisfaction of school education in Kerala.
5. To examine the problems related to school education in Kerala.

1.6. Methodology of the Study

The rationale for the various aspects and indicators considered and analyzed with respect to the present title “Economics of school education in Kerala” is given in the conceptual framework in section 1.6.1. The general methodology of the study is given in section 1.6.2. Analytical framework of the secondary data is given in chapter 5 in section 5.7. Sampling framework and analytical framework of the primary data is given in chapter 6 in sections 6.2 and 6.3 respectively.

1.6.1. Conceptual Framework

Economics of School Education: The present study in the title “Economics of school education in Kerala” mainly examines the following concepts and data: They are: (1) public expenditure on school education in India; (2) government expenditure on school education in India and in Kerala; (3) household expenditure on school education in India and in Kerala; (4) disparity on household and government expenditure on education in India and in Kerala; (5) student satisfaction on school education in Kerala; (6) parental satisfaction on school education in Kerala and (7) problems of school education in Kerala. Through these selected parameters the present study examines the various aspects of ‘Economics of school education in Kerala’.

Expenditure on School Education: The present study accounts and examines government expenditure on education and household expenditure on education by using both secondary and primary data.

Student Satisfaction: The present study examines the level of satisfaction of students on school education with respect to various selected indicators. It is treated as a proxy of quality of education.

1.6.2. General Methodology

In the field of education, researcher often uses action research, an interactive method of collecting information that is used to explore the present school system. This

method is very popular in the field of education as it is very much suited to the teaching and learning aspects of school education. The study is based on both primary and secondary data. The researcher uses both descriptive and analytical approach as the methods of study. Secondary data have been collected from various sources like Annual Survey on Educational Reports (ASER) data, Government publications, SSA reports, Department of Education, Government of Kerala, Census data, Economic Review, Directorate of Public Instruction (DPI), District Information System Of Education (DISE) reports published by the University of Education Planning and Administration (NUEPA), journals, magazines, articles and internet.

Primary data were collected through two sets of structured questionnaires to parents and students. The study also relies upon interview and field survey. Brief informal conversations were also held with parents, students, teachers and officials in the field. The data collected by survey were analyzed by using structural and appropriate statistical tools. Random sampling is being used for the study. Schools were randomly selected for the purpose of data collection. The schools were studied with the approval of concerned school authorities. A structured questionnaire is being used to collect information from students, households, teachers, authorities and other educational experts to analyze the data. The information is gathered from the sample of households and schools from the study area. List of good practices that is popular in school education system has been prepared on the basis of questions asked during the field study. With the help of household survey data it is possible to find the effects of education on individual earnings. Household surveys are used to examine the impact and quality of education on the future of their children. The time taken for the study and analysis of data may be two to three years. The study also make use of so many statistical tools and techniques like Mean, standard deviation, one sample t test, independent t test, ANOVA, post hoc Test, quartile deviation, cross tabulation and chi-square tests. Co-variance Based Confirmatory Factor Analysis (CB-CFA) and Structural Equation Modelling (SEM) techniques are also used in the study.

1.7. Major Terms Used

- (1) **Cost of Education:** The total amount of money a student needed to attend an educational institution including fees, other expenses, housing and food for the period of enrolment, books, stationery, transportation and all other expenses related to education.

- (2) **Determinants:** A determining factor or an element that determines the nature of something. It is a factor or cause that makes something happen or leads directly to a decision. It refers to determining or deciding something.
- (3) **Disparity:** It is the condition of being unequal and is regarded as a noticeable difference. It usually refers to a difference that is unfair. Economic disparities exist among ethnic groups, there is disparity between what men and women earn.
- (4) **Drop out:** To leave something without completing it. In education it means leaving school or college before you have finished the study or what you intended to do.
- (5) **Early Childhood Education:** Provision of learning and educational activities with a holistic approach to support children's early cognitive, physical, social and emotional development and introduce young children to organized instruction outside the family context to develop some of the skills needed for academic readiness and to prepare them for entry into primary education.
- (6) **Educational Attainment:** The highest level of education an individual has successfully completed. This is usually measured by the highest educational programme successfully completed which is certified by a recognized qualification.
- (7) **Education Development Index:** It is a component of human Development Index published every year by the United Nations. This is used to measure the educational attainment by using GDP index, life expectancy index, GDP per capita and life expectancy.
- (8) **Education Programme:** A coherent set or sequence of educational activities designed to achieve pre-determined learning objectives or accomplish a specific set of educational tasks over a sustained period. Within it, educational activities may also be grouped into sub-components variously described in national contexts as 'courses', 'modules', 'units' and/or subjects.
- (9) **Enrollment:** The total number of students on roll in a programme as on reference date, regardless of age.
- (10) **Expenditure on Education:** Amount of money spent for education. It included public and household expenditure. Public spending on education includes direct

expenditure on educational institutions as well as educational related public subsidies given to households and administered by educational institutions. Household expenditure is the expenditure made by parents for their children.

- (11) Financing of Education: The governmental and organizational processes by which revenues are generated, distributed and expanded for the operational and capital support of formal schooling.
- (12) Household Expenditure on Education: It is the total amount of money that a household spends on different educational activities.
- (13) Human capital: The collective skills, knowledge, or other intangible assets of individuals that can be used to create economic value for the individuals, their employers or their community. Education is an investment in human capital that pays off in terms of higher productivity.
- (14) Investment: An investment is an asset or item acquired with the goal of generating income or appreciation. It also means allocating money in the expectation of some benefit or return in the future. Education is regarded as an investment which creates future benefits for the individual and the society.
- (15) Literacy: It is the ability to read and write by a person in simple sense. Literacy is also mentioned as a competence or knowledge in a specified area. In a wider sense, it means the ability to read, write, speak and in a way to communicate effectively with others.
- (16) Parents: A person's father or mother or the caretaker of a child. A parent is a mother or father who is responsible for the care provision and in the growth and development of a child.
- (17) Primary Education: It is the education from the first class to fifth class typically designed to provide students with fundamental skills in reading, writing and mathematics and to prepare them for upper primary education from fifth to eighth class.
- (18) Public Expenditure on Education: This refers to the component of education expenditure that comes from national, regional and local government units to finance and/or produce educational service.

- (19) School: An educational institution where learning spaces and learning environment are provided to the students under the direction of teachers. In simple terms, it is an institution for instruction in a particular skill or field.
- (20) Secondary Education: Education beyond the elementary grades provided by high schools and higher secondary schools. It is a school level which intermediates between elementary school and college level.
- (21) Students: A person who is formally engaged in learning in a formal institution, say a school or college. A student is a person one who studies or observes and an attentive and systematic observer of learning through educational institutions.

1.8. Significance of the Study

School education is the basic foundation of a student's learning process. If it is not properly moulded it will seriously affect the future of every child. It is unfortunate and a matter of serious concern to all stakeholders that school education in India is not properly organized and planned. Ideally speaking, up to 10+2 level, education should be compulsory and free for the economically weaker sections of the society. But regrettably, this is not done. Academic achievement is the vital concern of educators, psychologists, learners as well as parents. Right from the time when a child starts his or her academics, the dilemma of choosing the good quality education becomes the primary concern of parents.

The present study of school education expected to touch each and every aspects of society. The study directly and indirectly benefits the society, students, policy makers, higher education sector, employment sector, household sector and teaching community. The study attempts to find out that quality of education leads to sustainable development. It can also contribute to the formation of a new theory. It also benefits the policy makers in the formulation of new policies which will benefit the society in achieving high economic growth and formation of good citizenship. The study benefits the students to improve their standards. The quality of higher education is also met if the problems in the school education are solved. The teachers will also benefit if there are structural changes in school education. The study also expected to make an improvement in academic literature by contributing to the world of academic literature. It is no doubt that lack of quality that school children acquired during school life add to the severe problem of drop out and failure at their higher education.

Thus the present study is a simple and sincere attempt to touch the important aspects of school education by correlating the input and outcome of school children in Kerala.

1.9. Limitations of the Study

The study of school education is a very broad area and it covers so many important aspects and for the convenience and simplicity of the study, if any important aspects is avoided it will be meaningless. The study involves data collection from the major stakeholders of education like parents, students, teachers and school authorities. Two questionnaires were used for data collection and its preparation and data collection was a difficult task. The data analysis involves so many tools and techniques and its interpretation and analysis also seem to be difficult. The overall overview of school education in Kerala can be realized only from the viewpoints of all these four stakeholders of school education. The study is mainly based on qualitative research and the analysis of the data sometimes involves descriptive research which is not an easy task.

1.10. Organization of the Study

The present study is divided into eight chapters. Chapter 1 contains the design of the study. It contains introduction, review, research gap, research problem, research questions, objectives of the study, methodology of the study, significance, limitations and organization of the study. Chapter 2 provides a theoretical overview of the study. It includes various theories such as education as an economic good, human capital formation, investment in education, financing of education, household production function, education production function etc.

Chapter 3 structures the household expenditure on school education in India. It analyses the trends in household and public expenditure on education, Chapter 4 elaborates a description of disparity of household expenditure on school education in India. It deals the interstate differences in terms of various indicators such as Gross Enrollment Ratio (GER), Age Specific Attendance Ratio and Net Enrollment Ratio etc. Chapter 5 attempts to identify the determinants of household expenditure on school education in Kerala. It deals with school educational scenario in Kerala and the determinants of school education in India and Kerala. Chapter 6 analyses the school

educational scenario in Kerala by analysis in Thrissur district. It is a survey based on analysis of parents and students in Thrissur district. It includes school environment, student engagement in learning, home environment, parental care and support, free and compulsory education and all promotion policy. Chapter 7 examines student satisfaction and problems related to school education in Kerala: challenges and prospects. It deals with student satisfaction and parent satisfaction about school quality and problems from the part of parents related to school education. It also deals with school environment and home environment effects in student learning and student satisfaction by developing confirmatory factor analysis and structural equation modeling techniques. Chapter 8 concludes with the findings, policy recommendations and conclusion of the study.