Chapter-I

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1.1 Introduction:

Education is at the present extensively valued not only for its inherent value in uplifting the lives of individuals but also for its practical value in the development of the human capital of a nation. Educational investments in children have been shown to have high private and social returns. The private returns are associated with augmented productivity and earnings in adulthood, and with further non-pecuniary gains arising from the greater efficiency with which educated individuals are capable to acquire and process information (Rosenzwig 1995). The social premium to education over and above the private value includes further productivity increases arising from knowledge spillovers, gains in health for one generation that flow from gains in education for the previous, and the improved functioning of civic society and democracy. These examples illustrate that widespread education not only helps growth through productivity effects, but is also vital for distribution of the gains from growth.

The present situation of primary education in India is that, despite the fact that notable progress has been made in universalisation of elementary education, as is clear from improved access, near total enrollment and higher literacy levels, the situation is still characterized by irregular attendance, dropouts and non-completion of school education among children. Research findings (Azim Premji Foundation, March 2005) reveal that the reasons for this situation lie, to a large extent, in the socio-economic conditions of Indian people marked by income, caste, class and gender inequalities.

The theoretical approach underlying most empirical studies of schooling enrollment is drawn from the inspiration of various human capital models. According to these theories, a distinction between schooling and education, the first being former and the later less rigidly defined. “It is quite clear from the empirical evidence; the picture is that schooling and advance in knowledge are both major sources of economic growth. It is obvious that they are not natural resources; they are essentially man-made, which means that they entail savings and investment. Investment in
schooling is presently, in the United States, a major source of human capital" (Schultz 1960, 1963). Education is viewed as not only a consumption activity but also as an investment good. In this lifetime optimizing framework, an individual evaluates the direct and indirect costs of education and compares such costs with his or her expected return to schooling. Investment in education ceases when the marginal cost and marginal benefit are equal. Lucas (1988) in his model he has just worked through treats the decision to accumulate human capital as equivalent to a decision to withdraw effort from production to go to school, say as many economists have observed, on the job training or learning-by-doing appear to be at least as important as schooling in the formation of human capital. It would not be difficult to incorporate such effects into the previous model, but it is easier to think about one thing at a time so he will just set out an example of a system in which all human capital accumulation is learning-by-doing. By embedding human capital within Becker’s (1981) household production model, one obtains a theoretical basis for evaluating the derived demand determinants of investments in schooling. In Becker’s (1981) model, altruistic parents maximize household utility for which quantity and quality of children, leisure, and market goods are arguments. The household is constrained by both money and time and the relevant production functions. Since education improves child quality, time spent by children in school and directs monetary outlays for education enter the production function for child quality.

One of the Millennium Development Goals (MDGs) approved in September 2000 at a UN summit of world leaders is the achievement of universal primary school attendance for boys and girls. This, of course, implies a complete closing of the gender gap. It also requires a 100% primary school completion rate, that is, that all students entering grade 1 are retained until grade 5. The MDG couched in these terms reflects recognition of the importance of basic (primary) education. This is particularly pertinent in India where primary education has historically been neglected by the state, with educational expenditures being concentrated on the tertiary sector (Dreze and Sen 1995). As a result, there are vast inequalities in educational attainment in India, a remarkable degree of illiteracy coexisting with frontier research in science and technology. India is also marked for being one of the groups of countries in South Asia and Northern Africa where outcomes tend systematically to be better for boys
than for girls, suggesting gender discrimination or at least undesirable gender differentiation.

An additional motive that Karnataka offers an interesting research issue is that it exhibits striking diversity in educational indicators across its regions (Southern Karnataka, Bombay Karnataka and Hyderabad Karnataka), districts, religion, caste (Scheduled Castes and Tribes), geographical area (urban and rural) and gender.

In this context, some of the major issues that emerge are: What are the determinants of enrollment and drop-outs? Are there significant gender, religion, caste and regional differences in the enrollment? And are there significant differences in drop out in Karnataka in general and the study area i.e., Chamarajanagara in particular? The analysis is conducted first for all children and then for boys and girls separately by employing appropriate regression model. The study also intends to test the differences in dropout rates of public and private schools across primary and elementary school level.

1.2. Theoretical Framework and Review of Literature

This section evaluates the theoretical and empirical studies related to the enrollment and drop-outs in elementary school education and also its determinants. The present study has illustrated some relevant and recent research reviews related to the issue. At present there are so many research based literature on school education in India but virtually no study has conducted on ‘The Determinants of School Enrollment and Drop-outs in Karnataka and the study area i.e., Chamarajanagara particularly. The available literature is only a general informative and some impressionistic views on the research issue.

The review of literature has mainly classified into two important categories, namely;

- **Theoretical reviews**
- **Empirical reviews**

The theoretical reviews are briefly explained below;
1.2.1 Theoretical Reviews

The theoretical reviews are given theoretical framework to the study and this review mainly concentrates on, the relationship between education and economic development and also, focuses on human capital theories.

1.2.1.1 Schultz Model (1975) suggests that, “Education enhances an individual’s ability to successfully deal with disequilibrium in changing economic conditions.” Such ability includes that of perceiving a given disequilibrium, analyzing information, and reallocating resource to act. According to Schultz, "The concepts of education, like those of freedom, bristle with difficulties in education is intimately bound to the culture of the community it serves, and for this reason what education means differs from one community to another thus, to educate means etymologically to reduce or draw out of a person something potential and latent; it means to develop a person morally and mentally so that he is sensitive to individual and social choices and able to act on them; it means to fit him for a calling by systematic instruction; and it means to train, discipline, or form abilities, as for example to educate the taste of a person.”

Schultz makes a distinction between schooling and education, the first being former and the later less rigidly defined. “From the presented evidence, the picture is that schooling and advance in knowledge are both major sources of economic growth. It is obvious that they are not natural resources; they are essentially man-made, which means that they entail savings and investment. Investment in schooling is presently, in the United States, a major source of human capital"

"Thus, a concept of capital that is restricted to structures, producer equipment, and inventories may unwittingly direct attention to issues that are not central or critical in understanding economic growth over long periods".

1.2.1.2 Lucas Model (1988), in the theory of Lucas it is the human capital formation itself that, by non-decreasing marginal returns, creates endogenous growth. In short, to achieve endogenous growth, the effort needed to produce an extra unit of human capital should be the same, independently of the level of human capital. This assumption has been much debated. A possible explanation can be that persons with higher levels of education more easily receive extra knowledge or skills. However,
there are other choices like a rising quality of human capital over time and increasing intergenerational transfers of knowledge.

According to the Lucas “the decision to accumulate human capital as equivalent to a decision to withdraw effort from production to go to school, say as many economists have observed, on the job training or learning-by-doing appear to be at least as important as schooling in the formation of human capital. It would not be difficult to incorporate such effects into the previous model, but it is easier to think about one thing at a time so he will just set out an example of a system in which all human capital accumulation is learning-by-doing.

1.2.1.3 Becker, Murphy and Tamura Model (1990), focused that, “The analysis of growth assumes endogenous fertility and a rising rate of return on human capital as the stock of human capital increases.” When human capital is abundant, rates of return on human capital investments are high relative to rates of return on children, whereas when human capital is scarce, rates of return on human capital are low relative to those of children. As a result, societies with limited human capital choose large families and invest little in each member; those with abundant human capital do the opposite. This leads to two stable steady states. one has large families and little human capital; the other has small families and perhaps growing human and physical capital" This increasing incentive to invest in human capital as the amount of human capital increases leads to two stable steady states. One has large families and little human capital, and the other has small families and large and perhaps growing human and physical capital. A country may switch from the first "Malthusian" equilibrium to the second development equilibrium if it has reasonably prolonged good fortune and policies that favor investment.

1.2.1.4 Romer Model (1990), according to him, “Endogenous Growth is caused by accumulating technology (or Knowledge), thereby establishing a relation between the level of human capital and economic growth. In this vision, human capital is seen as ‘knowledge’ and ‘ideas’ that are non-rival and partly excludable. the main conclusions are that the stock of human capital determines the rate of growth, that too little human capital is devoted to research in equilibrium, that integration into world markets will increase growth rates, and that having a large population is not sufficient to generate growth” the author puts forth three premises of the study: the first is that changes in
technology is the key stone of economic growth. In this sense, this Romer model closely mirrors Solow’s model. "Technological change provides the incentive for continued capital accumulation, and together, capital accumulation and technological change account for much of the increase in output per hour worked". The second premise is that technology improvements are brought about by people who are directly responding to market motivations. "Thus the model is one of endogenous rather than exogenous technological change. this does not mean that everyone who contributes to technological change is motivated by market incentives...the premise here is that market incentives nonetheless play an essential role in the process whereby new knowledge is translated into goods with practical value “According to Romer, the most fundamental supposition is the last this involves the creation of new "instructions” for dealing with raw materials. Once the cost of these “instructions" has been borne, the benefits continue to accumulate.

1.2.2 Empirical Reviews

The Empirical Reviews again classified into five categories on the basis of research issue of the study and they are coherently explained below;

1.2.2.1 Reviews Related to Policies and Programmes of School Education

Rohit Dhankar Brigid Smith (2002), this paper examines that, the improvement of the quality of primary education is often mentioned as one of the important goals of the District Primary Education Programme (DPEP). DPEP has worked in 18 states with this agenda to improve the quality of classroom interaction and teaching-learning materials among other things. In this paper the author attempting to understand how quality is seen within DPEP and what the nature of efforts made to improve it is. This is not a study of quality in DPEP pedagogy reform drive; the paper is more in the nature o reflections on the educational thought guiding the efforts as well as the training methods used. The paper also proposes an alternative way of looking at quality and suggests a few measures that may help in crystallizing the notion of quality, as well as contribute to the efforts made to realize that notion.

Jyotsna Jalan and Elena Glinskaya (2002), this paper investigates that, the Primary school interventions have regularly be undertaken by governments in many countries to increase enrollments and improve quality of learning. Such initiatives
included building schools, training teachers, providing school-meals at noon, revising textbooks etc. In India too, several policy initiatives have been undertaken over the years. A recent intervention is the District Primary Education Program (DPEP). Under the DPEP, efforts were made to design project components that would reduce gaps in enrollment, dropouts and learning achievements across gender and disadvantaged social groups. By December 2001, over 1.5 billion US dollars had been committed to the project and the school system under DPEP was expected to cover more than 50 million children. Question is whether the DPEP was successful in increasing enrollment rates particularly among the targeted groups and/or in improving quality of learning of the already enrolled children. Our estimates show some impacts on enrollments of the socially disadvantaged minority groups (the scheduled tribe and scheduled caste) especially in one specific state where concurrent to the DPEP, another state government-supported primary school initiative was also started. Contrary to the stated objectives of the program, however, there was no closing of the gender gap either in terms of enrollments or with respect to educational achievements.

**Nirupama Bajpai and Sangeetha Goyal (2004),** revealed the state of primary education in India. Using various data sources and secondary research and provided a description of the salient features of the public education system in India for primary schools as well as educational outcomes, both in terms of quality and quantity. Literacy rates especially in the younger age groups for both boys and girls are an upward trend. This is an extremely positive outcome as historically India has suffered from endemic illiteracy. However, rising literacy rates have been accompanied by unevenness of achievements across Indian states and across various socio – economic groups. States in the Western and Southern 3 ones of India outperform those in the East and Center. More over the densely populate states of Uttar Pradesh, Bihar and Rajasthan continue to lag behind the rest of India. Literacy rates for girls, rural residents and especially members of scheduled castes and scheduled tribes and also lag behind those for boys, urban residents and the upper casts

**Anima Rani Si, Naresh Kumar Sharma (2008),** examines that, the Mid-Day Meal (MDM) programme was initiated as a means of achieving universal primary education of satisfactory quality for all schoolchildren below the age of 14 by
increasing enrollment, improving attendance and retention, and simultaneously improving nutritional status. This paper attempts to investigate some of these aspects based on primary data collected from Khurda district of Orissa. Data was collected from schools as well as from a sample of households of schoolchildren. The investigation includes a study of the organizational structure of the programme and also examines the cooked meals and dry ration variants.

The study also reveals that, the cooked meals scheme functioned for around six years reasonably well in spite of certain inadequacies and shortcomings, mainly of infrastructure and staff. The beneficial outcomes, both on nutritional account and educational performance, were quite evident as both the survey among schools and parents clearly brings out. As an epilogue, it may be mentioned that the schools in Khurda (Orissa) have switched back to providing cooked meals as the MDM scheme is implemented presently.

**Vasantha Srinivasa Rao (2009)** finds out the Sarva Shiksha Abhiyan, among other things, seeks to promote community participation in school education. The programme has completed its first phase of five years of implementation. This study evaluates the working of the school education management committee in a tribal area of East Godavari district of Andhra Pradesh. It shows that community participation in improving education is negligible and that members of the SEMCs have limited awareness of the SSA.

The other suggestions were to introduce mid-day meal programme on a daily basis in the schools, making drinking water available in the premises, use of Teaching Learning Materials (TLM) by teachers, provision of better infrastructure schools and so on. All these suggestions reveal that the tribal community members are participating in some way or the other in school related activities. However, to organize them in a common platform, the Integrated Tribal Development Agency (ITDA) needs to focus on creating more awareness among tribals for better results from their participation.

**Priya Shankar (2009),** “Hunger in a Land of Plenty: The Benets of a Rights-Based Approach to India's Mid-Day Meal Scheme” Mid-Day Meal Scheme as a way of guaranteeing children this right. This study uses a general survey of how this
program has been promoted by government officials and discussed by Indian scholars, as well as a more specific case study in two schools in testate of Tamil Nadu, to argue that the kind of “rights based approach” advocated in international human rights discourse for the implementation of such programs has largely been lacking in India. Children are given meals at school, but for the most part, little sense of their “right to food.” Interviews with children at a school where parts of a rights based approach are used suggest that the approach does in fact engender greater understanding of rights and entitlements than occurs in schools where children do not receive such instruction.

Matthew M. Chingos (2010), this paper estimates, the impact of Florida’s statewide CSR policy by comparing the deviations from prior achievement trends in districts that were required to reduce class size to deviations from prior trends in districts that received equivalent resources but were not required to reduce class size. Author use the same comparative interrupted time series design to compare schools that were differentially affected by the policy (in terms of whether they had to reduce class size) but that did not receive equal additional resources. The results from both the district- and school-level analyses indicate that mandated CSR in Florida had little, if any, effect on cognitive and non-cognitive outcomes.

1.2.2.2 Studies Related to Enrollment in School

Ranjan Ray (2001), stated about child labour and child schooling in South Asia and ILO (1996a)’s estimation on labour force participation rates for children. This study uses Nepalese data to estimate the impact of individual household and cluster/community level variable on child labour and child schooling. The principal estimates are then compared with those from Bangladesh and Pakistan. The exercise is designed to identify effective policy instruments that could influence child labour and child schooling in South Asia. The results show that the impact of individual, household and cluster/community level variables on a child’s education/employment is, often highly sensitive to the specification in the estimation and to the country considered.

Eliana Cardoso and Andre Portela Souza (2003), estimates the impact on school attendance and child labour of conditional cash payments to poor families in Brazil. It describes Brazils transfer programs and presents statistics on school
attendance and child labour. Although conditional cash transfer programs in Brazil have been in place since 1996 studies on their ex-post impact are very few. Micro household level data from the 2000 census allows use of propensity score methods to estimate the impact of income transfer on child labour and school attendance. The paper finds that income transfer programs had no significant affect on child labour but a positive and significant impact on school attendance. These preliminary results suggest that these programs have not been effective in fighting child labour in Brazil. They increase the chance of a poor child going to school but do not reduce here labour activity perhaps because she prefers to combine school and labour, considering that the transfers are too small to provide an incentive to forgo the labour income.

**Peter F. Orazem and Victoria Gunnarsson (2003),** pointed that the issues surrounding the derivation of estimates of the impact of child labour on school outcomes and also aims that to review the current state of methodological and empirical knowledge concerning the impact of child labour on learning to review existing data sets that could be used to address the issues and to highlight areas where current research is lacking. The paper reviews issues regarding how one might design a sample survey to measure the consequences of child labour for school outcomes. The properties of existing data sets that have been used to analyze these questions are presented. The methodological issues reviewed in the first three sections of the paper are then illustrated using two multinational data sets, one from Latin America and one concentrated primarily on central and Eastern Europe.

**Anumberkhi Parikh and Elisabeth Sadoulet (2005),** investigates how child labour and schooling are responsive to opportunities to work, in particular to opportunities provided by children’s own parents. The paper demonstrates that after controlling for household parental, regional, and child characteristics, children whose parents are self employed or employers are more likely to work than children of employees, irrespective of the sector of parent activity. Furthermore, the paper also confirms a recent finding that children from areas with high average adult employment rates are more likely to work than children from areas with low average adult employment rates. Finally, since twice as many children of the self employed and employers both work and go to school as those of employees the paper suggests that
child labour does not necessarily represent a trade off with schooling as it depends on
the occupation of the parents.

Ratan Khasnabis, Tania Chattered (2007), analyses enrolling and retaining
slum children in formal schools. He address these issues with reference to field level
data collected from the slums of eastern Kolkata’s with special reference to the
attendance behaviour of the school going children of the locality. We also try to find
out the factors that explain the school attendance behaviour of the students from
disadvantaged families of urban slums of Kolkata. The idea is to check whether the
type of the school, the educational background of the family including that of the
mother was also the income level of the family, have any influence on the attendance
behavior of the child of the disadvantaged families in formal schools. Retaining the
students in formal schools is a much talked about problem with respect to the
vulnerable section of the students. In this paper we have also addressed whether the
intervention by the NGOs can help SSA in achieving this goal.

Shiva Kumar A.K. and Preet Rustagi (2010), This paper provides a
stocktaking of progress and shortcomings in India’s march towards universalisation of
elementary education (UEE), whilst addressing concerns of equity, inclusion, and
quality from the central focus which looks into the dimensions of vocational
disadvantage, social exclusion, gender disparity, and special needs for children of
other neglected groups. It focuses on gaps in enrollment, infrastructural provisioning,
equity concerns in terms of being inclusive in the context of schools functioning,
teachers (social group, training, motivation, transaction and so on), management, and
governance issues. The extent and manifestations of non-inclusion or exclusion in the
educational context is also related to the capacity of the State as reflected in the policy
fuzziness and ambiguities. Six areas for public action are suggested. Apart from
structural reforms, a much stronger public pressure backed by better and shared public
reasoning is required for overcoming the challenges for attainment of compulsory and
free education to all children.

Suo Deng, Jin Huang and Minchao Jin, Michael Sherraden (2012), this
paper provides an analysis of different effects of household assets independent of
family income on children’s school enrollment and parental aspirations for education,
examining both outcomes by child’s gender. The study first compares the
responsiveness of boys’ and girls enrollment to the improvement of household assets, measured as liquid assets and net worth, relative to family income. The multivariate regression analysis further detects the effects of household assets on both boys’ and girls school enrollment and parental aspirations for children’s future education by child’s gender. Statistical results show that, compared to family income, household assets matter more for girls schooling than for boys’. In addition, household net worth is significantly associated with parental aspirations for children’s education regardless of gender. This study, albeit exploratory, sheds light on child welfare and education policies in rural China.

1.2.2.3 Studies Focusing on Drop-Outs in School Education

Lisa A. Cameron (2000), this paper examines the role played by the scholarship programme in producing this result. The scholarships were found to have been effective in reducing dropouts at the lower secondary school level by about three percentage points but had number discernible impact at the primary and upper secondary school levels. The study also examines how well the programme adhered to its documented targeting design and how effective this design was in reaching the poor. The targeting criteria appear to have been followed quite closely and consequently the poor received a greater than proportional share of the scholarships. Nevertheless, this did not prevent some households with high reported per capita expenditures receiving the scholarship while many poor households missed out. This paper uses regression and matching techniques to evaluate Indonesia’s Social Safety Net Scholarships Programme. The scholarships programme was developed to try to prevent large numbers of children from dropping out of school as a result of the Asian crisis. The expectation was that many families would find it difficult to keep their children in school and drop-out rates would be high as they were during the 1980's recession. Drop-outs, however, have not increased markedly and enrollment rates have remained relatively steady.

Ana Rute Cardoso and Dorte verner (2006), states that the major drop-out and push-out factors that lead to school abandonment in an urban surrounding and use extensive survey addressing risk factors faced by the population which covered both in school and out of school youth of both genders. The role of early parenthood, child labour and poverty in pushing teenagers out of school is subject to particular attention.
The potential city of some of the determinants is dealt with in the empirical analysis. The major advantages of the survey are its wide coverage of both in school and out-of-school youth of both gender and the wide set of issues addressed namely: socio-economic background education: health and sexuality: social capital and violence: and employment and economic activity and it particularly interested in evaluating the role of early parenthood, child labour and poverty pushing children out of school.

Monica Grant and Kelly Hallman (2006), this paper examines the factors associated with schoolgirl pregnancy, as well as the likelihood of school dropout and subsequent re-enrollment among pregnant schoolgirls. This analysis triangulates data collected from birth histories, education histories, and data concerning pregnancy to strengthen the identification of young women who became pregnant while enrolled in school and to define discrete periods of school interruption prior to first pregnancy. We find that prior school performance defined as instances of grade repetition or non-pregnancy-related temporary withdrawals from school is strongly associated with a young woman’s likelihood of becoming pregnant while enrolled in school, dropping out of school if she becomes pregnant, and not returning to school following a pregnancy-related dropout. Young women who are the primary caregivers to their children are also significantly more likely to have left school than are women who shared or relinquished childcare responsibilities. Furthermore, young women who lived with an adult female were significantly more likely to return to school following a pregnancy related dropout. Given the increasing levels of female school participation in sub-Saharan Africa, our findings suggest that future studies will benefit from exploring the causal relationships between prior school experiences, adolescent reproductive behavior, and subsequent school attendance.

A study by Education policy and data centre (2009), the study finds that in the lower grades of primary school, older pupils generally outperform younger ones. Younger pupils are far more likely to repeat grades than older pupils. There are particularly high repetition rates of underage pupils in first grade; these suggest there is an unmet need for kindergarten facilities. In higher grades of primary school and in all grades of secondary school, older pupils are less likely to be promoted and more likely to drop out of school, resulting in lower survival rates than those of younger pupils. The two most important policy implications of this study are: 1) the unmet
need for education facilities for younger children should be met, and 2) there is need for special focus on older pupils in higher grades to ensure that they remain in school. This study uses household survey data from 35 countries to measure the extent and effects of school attendance by overage pupils.

Ashrafuzzaman Khan and Mrinmoy Samadder (2010), this study explores the reasons of dropout of students from Bangladesh Rural Advancement Committee (BRAC) primary schools. Data were collected in two phases through qualitative and quantitative methods. In the first phase, 681 schools were visited to find out the proportion of students dropped out. In the second phase, out of these 681 schools 128 were randomly selected to explore the reasons of dropout. The study was conducted on the schools located in Dhaka and Chittagong cities and in Bandarban and Rangamati districts. Overall dropout rate was 6.13% in the 681 schools visited. The reasons of dropout were grouped under five heads: familial, personal, educational, school and community-related. Their contributions to dropout were 53.3%, 34.2%, 18.1%, 14.5% and 14.1% respectively. The incidence of dropout was higher among the female students and in the urban areas. The dropout in 3rd grade was the highest as the students found their text books difficult at that grade. Thus, it was recommended that the text books might be revised to make them easier to the students.

Ricardo Sabates, Altaf Hossain and Keith M Lewin (2010), this paper examines factors associated with school drop-out using longitudinal data collected over a three year period in Bangladesh. A sample of 9,047 children, aged 4 to 15, was selected by the Consortium for Educational Access, Transitions and Equity (CREATE) Bangladesh research team across six districts for a specialized household survey developed in technical workshops. The survey was developed by CREATE through workshops in Sussex and Bangladesh and was based on a framework developed by Keith Lewin and Angela Little. The survey instruments were modified to suit the Bangladesh context and were first administered in 2007. The same cohort of children was followed up and resurveyed two years later in 2009. Children aged 6 to 15 were selected since all these children should have been in school or have completed primary education in the first round of the survey.

Haroon Sajjad, Mohd Iqbal and Masood Ahsan Siddiqui, Lubna Siddiqui (2012), this paper describes the socio-economic determinants of primary school
dropout in South-east Delhi having high concentration of vulnerable urban poor. The main objective of the study was to identify the socio-economic factors that influence dropout of the students at primary level. A total sample of 129 respondents were selected from four government primary schools of south east Delhi. Data were collected from respondents and their parents through specific interview schedules. The major findings revealed that family type, income, occupation and education of parents have direct influence over dropout rates. The rate of drop out is higher among girls which is a major cause of concern. Hence the study calls for the appropriate policies of education system and reduction in poverty of the masses.

1.2.2.4 Reviews Related to the Determinants of School Education

Pravin Visarai, Anil Gamber, Leela Vasari (1993), in their study of the progress and problems of literacy and primary education in India for the period 1980-81 with reference to Gujarat and Maharashtra state (both urban, rural areas) have reached the following meaningful conclusions: “Not all enrolled children continued in school, several of them dropped out. By age 14, the proportions of “dropouts” approximated 36 to 43 percent in rural Gujarat and 19 to 22 percent in urban Gujarat. The corresponding ranges were 40-65 percent for rural Maharashtra and 17-33 percent for urban Maharashtra (in all the four pairs of numbers, the lower figure rates to boys and the higher figure to girls). On the whole, the dropout phenomenon begins after 10 and more particularly after age 12. The phenomenon probably coincides with the completion of primary schooling but the possibilities of work or economic activities also seem to play a role, particularly in rural areas, of girls, the need to develop the capacity to handle domestic chores, become an important competing demand, and receive priority over schooling”

Daniel Suryadarma, Asep Suryahadi and Sudarno Sumarto F. Halsey Rogers, (2004), this paper investigate the determinants of student performance in mathematics and dictation tests among fourth-grade school children in Indonesia. The study has used a unique dataset of school and student information that was collected in a nationally representative survey of 110 public schools in 8 Indonesian provinces in 2003. Using an OLS regression technique that compensates for heteroscedasticity, the study has conducted separate sets of student-level regressions for three performance variables: math scores, dictation scores and combined scores. The study has found that
student performance is strongly influenced by individual variables, teacher variables and school variables. Among the significant variables is the education level of parents; student-teacher ratio; quality of school facilities and teacher absence rate. We also discuss the policy implications of the results.

Sherif Yunus Hydara (2004), stated about the determinants of households’ primary schooling decision in Gambia. Even though it is recognized and accepted worldwide that primary education is a right for all children primary education in Gambia is free but not yet compulsory. The objective of this study is to find out the various socio-economic factors, which influence the choice of parents and households to enroll their children to school. For this purpose three specific hypotheses are tested. First, the number of siblings is expected to have a negative impact on household’s schooling decision. Second parents’ education is considered an important determinant of children enrollment in school. Third child schooling opportunities is explained by the costs of education to households. The study has analyzed by using a logic binary choice method. The regression results provide evidence on the main determinants of child schooling in the Gambia. The results fail to prove any significant link between household poverty and child schooling, but provide evidence of a strong positive association between child schooling and the number of siblings in the household, education expenditures, parents' education, time spent to reach school and household size.

Nazmul Chaudhury, Luc Christiaensen and Mohammad Niaz Asadullah (2006), the unique contribution of this study stems from our examination of the effect of adverse income shocks on gender-differentiated child schooling outcomes. While there are several empirical studies that test the degree to which households are able to smooth consumption in response to a covariate shock, only few studies probe the gender-differentiated impacts of those shocks within the household. We find a strong bias against investments in female education in rural Ethiopia. Controlling for key supply and demand side factors such as household income, parental education, distance to and quality of schools, girls who reside in rural areas are almost 12 percent less likely to be enrolled in primary school compared to boys. Furthermore, while an adverse weather-induced crop shock has number discernable impact on the schooling of boys, the same adverse shock has a deleterious impact on both the
probability of enrollment and completion of schooling for girls. Besides the impact of adverse income shocks on child schooling, we find that investment in child schooling is significantly influenced by positive education externalities with the household and community, availability and distance to schools, and quality of school infrastructure.

**Harsha Aturupane and Paul Glewwe and Suzanne wisniewski (2007),** point out the determinants of learning among fourth grade students in Sri Lanka. It has already attained universal primary completion but many students display weak academic performance and it is unclear what education policies would improve their performance and it includes data on schools child characteristic and parental support for education (including health & nutrition status). This paper uses these data to study the impact of school quality, child health, and factor other on student learning in Sri Lanka. This paper uses an unusually rich data set from Srilanka to investigate the determinants of academic performances of grade and Srilanka students. At the child and household level, educated parents, better nutrition, high daily attendance, enrollment in private tutoring classes, exercise books. And electric lighting and children’s books at home all increase learning, while hearing problems have a strong negative effect. Among school variables, principals’ and teachers’ years of experience, collaborating with other schools in a “school family”, and meetings between parents and teachers all have positive impacts on students’ test scores. A final section provides recommendations for education policies in Sri Lanka.

**Manisha G. Singh (2008),** this paper examines the effect of governance on educational outcomes. Governance has assessed by the use of incentives embodied in the type of contract used for employing teachers. The indicator for educational outcome is the proportion of students passing the examination at the upper primary level that is, attaining elementary education. In the Indian context, with the current (unfinished) goal of universal elementary education and a renewed emphasis on achieving this goal since 2001, are more children completing the elementary education cycle, that is, attaining the upper primary level of schooling? What factors facilitate or hamper this attainment? What mechanisms can be developed to overcome binding constraints such as budgetary limits and teacher shortage? Our conjecture is that good governance leads to better educational attainment.
Janine Huisman, Uma Rani and Jeroen Smits (2010), this paper test the hypotheses on the role of socio-economic and cultural factors and of 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, none of the characteristics of educational facilities studied is significantly related to participation, thus indicating that in the cities schooling decisions are hardly influenced by supply-side factors. In rural areas, however, these factors do play an important role. If there are fewer schools or teachers, or if the local culture is more patriarchal, rural children – in particular girls – participate substantially less. 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.

1.2.2.5 Studies Related to Human Capital, Growth and Education

Usha Jayachandran (2002) investigates the socio-economic determinants of school attendance in India based on census data for 1981 & 1991 the determinants of inter-district variations in school attendance rates by children are explored. These are looked at separately for boys and girls in the 5-14 age groups, and possible causes for disadvantages faced by the girl child are also researched. The paper investigates the determinants of schooling at the elementary level in India by testing the relevance of alternative explanation of why children do / do not attend school in their most formative years. The results related to school accessibility and parental education and negatively related to poverty and household size. Interestingly, a positive association emerges between women’s labour-force participation and children school attendance possible explanations of this pattern are discussed.

Santhosh Meheotra (2005) compares human capital theory with the capability approach and lays out the problems with the theory. As a knowledge paradigm for education and development, it finds the theory wanting. However, it has remained the foundation for sectoral work in education and health by international financial institutions. The paper spells out the problems, historically with World Bank
lending in the education sector, some of which follow from human capital theory, while others follow from a broader neoliberal agenda. It concludes by delineating the foundational elements of an alternative knowledge paradigm for ‘education for all’ based on the capability approach and its extension.

**Khaled El-Mattrawy and Willi Semmler (2006),** the paper studies the role of education and human capital for economic growth of a medium income country. Empirical cross section studies on the sources of growth in general and in education, human capital and growth specifically, have not been able to form a consensus on the causality between human capital and growth. This paper employs a time series perspective on this issue and uses the most comprehensive data available on a middle income country. The study has used the example of Egyptian economy and refers to the time period 1959 until 2002. The analytical work of the paper starts with the study of the Solow residual by using only capital and labor as inputs. The Solow residual, measuring total factor productivity, turns out to be huge. Thus, output increase cannot be explained solely by an increase of labor force and capital accumulation. Therefore, following the endogenous growth literature the contribution of education and human capital formation is studied and its contribution to growth evaluated by using a very detailed data base on the educational system of Egypt. The approach of the study can account for a significant part of total factor productivity. Yet, there is still a residual left to be explained. Therefore, there are still other forces to be considered such for example, the role of knowledge, external shocks, international trade, and public infrastructure.

**Jandhyala B.G.Tilak (2007),** point out the inclusive growth is regarded as the new mantra of development. This paper critically looks at the approach to the development of education, outlined in the approach to the eleventh five – year plan, some of the new and not – so- new strategies proposed a few controversial proposal, the assumptions that underline them, the issues conveniently ignored and highlights the weakness and the continuation of the big policy vacuum. And also it examined the attention paid to education, the goals set for it, if any, and the strategies it proposed But for recognizing the need to expand secondary education and to improve all schools to the level of Kendriya Vidyalayas in terms of infrastructure and quality of education, there is nothing significantly new in the approach of the Planning
Commission to the Eleventh Plan, and the overall vision of the approach seems to be very much limited, skewed and faulty.

Olaniyan D.A. and Okemakinde T. (2008) addresses about Human Capital Theory, implications for educational development. The paper posits that formal education is highly instrumental and even necessary to improve the production capacity of a nation and discusses the rationality behind investment in human capital. Empirical evidences of human capital model were identified and findings reveal that investment in education has positive correlation with economic growth and development. Criteria for the applicability and implication for educational development highlighted. Conclusively the paper recommends that for education to contribute significantly to economic growth and development, it must be of high quality to meet the skill demand needs of the economy.

Sonia Bhalotra and Bermardo Zamora (2008), point out the state of primary education in India and also extent of parental education and significant effect of public investment in education. It is mainly focus on millennium Development Goals (MDGs) and its achievement and agreements regarding the universal agreements regarding the universal primary school attendance for boys and girls. This paper uses two large repeated cross – section to describe growth in school enrollment and completion sales for boys and girls in India, and to explore the extent to which enrollment and completion sales have grown over time. It decomposes this growth into components due to change in the characteristics that determine schooling, and another associated with changes in the responsiveness of schooling to given characteristics.

Adawo M. A. (2010), this paper addresses the education, generally believed, contributes to the growth of an economy through acquisition of training and skills. For over 160 years, Nigeria had embarked on implementation of education policies affecting primary school, secondary school and tertiary institutions. This study used an econometric model to examine the contributions of primary education, secondary education and tertiary education to economic growth of Nigeria. These variables were proxies by school enrollment at various levels. Other variables included physical capital formation, health measured through total expenditure on health. In all primary school input, physical capital formation and health were found to contribute to
growth. Secondary school input and tertiary institutions were found to dampen growth. Among others, this paper recommends that there should be adjustment in admission process in favour of core science and technical oriented course. The paper also recommends that schools should be adequately funded.

1.2.2.6 Studies Focusing on Gender Disparities and Equity

Stephan Klasen (1999), this paper investigates to what extent gender inequality in education and employment may reduce growth and development. The paper finds a considerable impact of gender inequality on economic growth which is robust to changes in specifications and controls for potential endogeneities. The results suggest that gender inequality in education has a direct impact on economic growth through lowering the average quality of human capital. In addition, economic growth is indirectly affected through the impact of gender inequality on investment and population growth. Point estimates suggest that between 0.4 - 0.9 % of the differences in growth rates between East Asia and Sub Saharan Africa, South Asia, and the Middle East can be accounted for by the larger gender gaps in education prevailing in the latter regions. Moreover, the analysis shows that gender inequality in education prevents progress in reducing fertility and child mortality rates, thereby compromising progress in well-being in developing countries.

Vimala Ramachandran, Aarathi Saihjee (2002), in their study, “The new segregation reflections on gender and equality in primary education”, attempts to capture the impact of the primary education programmes. This article is based on the desk review of District Primary Education Programme (DPEP) and qualitative micro studies in six DPEP states, Madhya Pradesh, Chhattisgarh, Andra Pradesh, Haryana, Karnataka, and TamilNadu. The introductory section briefly focuses on the DPEP, especially with regard to its strategy to achieve gender and social equity in primary education. Section 2\textsuperscript{nd} reviews the available statistical data on primary education and maps and the success and failures of the last decade in primary education with special emphasis on girls and other marginal groups. Section 3\textsuperscript{rd} on the basis of the statistical review as well as other documented evidence, introduces the emergent concept of child’s caste, class and gender seems to be defining the nature of school they attend government primary schools. AS/EGS or private schools and its implications for the process of teaching and learning as well as achieving the larger stated objectives of
gender and social equity. He has further unravels the hierarchies of access by shifting the focus on to the micro studies and extensively the tangible dimensions of gender and social equity that frame the implication of DPEP at the village and panchayat level. The penultimate section draws from both the desk study as well as the micro studies and suggests ways to reverse the trend of segregation in order to move ahead and make universal primary education a substantive reality and highlights the social and gender equity dimensions that frame primary education today.

**Naomi Hossain, Naila Kabeer (2004),** has analyzed the achieving Universal Primary Education Eliminating gender disparity. This study argues that underlining this success is a confluence of both demand and supply side factors involved in bringing about a profound social change. It explores the changing structure of economic opportunities and gender relation affecting parents, perception of the value of female education. The challenge now is to improve the quality of education that may prove more difficult than the expansion of access to be ensured.

**Suresh Sharma (2005),** examines the pattern of gender differences for children in the North state of Haryana in India for health outcomes. Specifically it addresses the incidence and use of preventive and curative health care services and nutrition. Does the extent of male bias if it is present, depend on the socio economic status, caste, religion education and rural / urban residence of the head of the household? The ads of female children being discriminated against with respect to each of these indicators are estimated by using logistic regression analysis. Analysis results the gender bias as prevalent in health enchasing treatment for immunization and in giving nutrition to boys specifically. In Haryana, discrimination against girls and favour of boys is inherited by each generation of parents. Studies reflect that people living in both the rural and the urban parts of Haryana prefer sons to daughters. Also, nutritionally girls have lower ratings than boys.

**Suresh Sharma and Nilabja Ghosh (2007),** this paper explores the spread of education in Uttarakhand, a state in North India, and tries to identify the areas of disparity in the achievement so far attained. It gives a brief overview of the progress of literacy and infrastructural development achieved by the state in comparison with the neighbouring states and the country as a whole. For that it uses various secondary data-sources like Census, National Family Health Survey (Round-II) and 74th All
India Education Survey conducted by NCERT. It also uses data from primary survey done by the authors in June-July 2004, in three districts of Uttarakhand, namely Dehradun, Nainital and Uttarkashi. The results show that although Uttarakhand is a leading state in India in terms of educational performances (72 percent literacy rate in 2001), there is considerable unevenness among various sections of people. The areas of disparity are schooling attainment between genders, social castes and across various age-groups. Regression analysis using data from the primary survey also supports this. Females fall behind males in schooling up to various stages. The proximity to an urban centre improves the school attainment of a village. Muslims appear as less privileged than Sikhs and Hindus. Also General and OBC caste appear more likely to be schooled than SC. District-level analysis, however, suggests for a distinction in policy focus depending on the specific need of a district.

**Madhumita Bandyopadhyay and Ramya Subrahmanian (2008),** this paper evaluates that the gender disparity has been a major issue in India’s pursuit for achieving the goal of universal elementary education. In order to overcome the problems faced by girls, several measures have been initiated across the country. What impact have these made as reflected in the available statistics? This is one of the questions that the review examines. The paper also presents a comprehensive review of research studies on participation of girls in schooling. It highlights that the participation of the girl-child is affected significantly due to social attitudes towards their education and by other forms of gender and social discrimination in Indian society.

The authors explained through their inter-linked analysis of gender and social inequality present new perspectives in understanding the continued educational deprivation that the girl-child in India faces. They also point to several successful experiences within the country, which hold lessons to take forward the agenda of making education more inclusive and gender sensitive.

**Zakir Husain (2010),** this paper examines 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. Finally, the fairly decomposition method is used to estimate the contribution of explanatory variables in explaining differences in probabilities of completing schooling across regions. The results reveal that gender disparities are greater in North India, for total and rural population, and in Eastern India, for urban population. However, the ‘residual effect’ after accounting for effect of explanatory variables - often referred to as ‘discrimination effect’, as opposed to disparity is higher in Eastern India, irrespective of the place of residence.

1.2.2.7 Reviews Related to Education in General

Rashmi Sharma (1998), point out the significance of both two topics for a workable strategy to ensure universal elementary education. Firstly the studies show that an alarmingly large number of children do not become literate even after four years of schooling. Therefore, school effectiveness and actual learning have to be central rather than the secondary concerns for universal elementary education. Secondly, how effective schools are success in learning depends not only on school level inputs but also factor outside the school for genuine universal elementary education. The argument is that school effectiveness has to be a dominant rather than secondary focus area. More over the concept of school effectiveness needs to be examined thoroughly. If is not a matter for only educationists to research, but needs holistic treatment and scrutiny of variables outside the school. More specifically, the school cannot be understood independently of its context and a probe into school – society relation is essential.

Allen Roy, B.Kamaliah, M.Govinda Rao (2000) evaluates the educational expenditure of large states. The study proceeds from the supply (cost) side and attempts to estimate the normative expenditure levels with regard to expenditure on education for 15 large, Indian states for the fiscal year 1997-98. On the basis of normative expenditures. This study proceeds further to make a comparative analysis of the normative and actual expenditure level with the objective of classifying states on the basis of the relative emphasis laid on the provision of education. In order to get reliable estimates for the expenditure functions, cross section data pertaining to 15 different states are pooled for six years from 1992-93 to 1997-98 pooled data,
which deals with both the intertemporal dynamics and the individuality of the entities being investigated on the study, provides qualitatively superior estimates. The analysis involving pooled data allows comparison between dissimilar Heterogeneous units. In this exercise they used panel data model in respect of group wise heteroscedasticity cross-group error correlation and auto – correlation. The findings of the study revel that the actual spending on educational services in low-income states is found to be lower than their 'needs'. This finding implies that the existing fiscal equalization mechanism has not been effective in offsetting the revenue and cost disabilities of the poorer states in India.

Mythili N. (2002) looked at one such instance of success in primary education in government schools in rural areas, reasons for which can be attributed to the high levels of community pressure towards the schooling process. It is a civic community where the people are aware of their rights and duties towards education. Usually such instances escape the eyes of regression analysis the emphasis the quantitative robustness of results. An attempt is made in this paper to explain this community pressure that turned out to be a decisive factor in the pursuit of higher quality of education in Tirthahalli taluk of Shimoga district in Karnataka. The result reveals that community provides not merely physical and human facilities, but also exerts pressure on the teachers to achieve higher quality of education. Therefore, it is not just sufficient for a community to have trust, networks and norms to form social capital, rather it needs an ability to visualize the importance of education and translate it into action for achieving a higher quality of education. In Shimoga this has resulted in community pressure on teachers to achieve higher quality of education. The reasons for the high levels of community pressure can be traced back to the participation of people in various spheres of activities such as intellectual, political and apolitical movements in the region, since time past.

Vimala Ramachandran, Kameshwari Jandhyala and Aarthi Sahjee (2003), in their study of the through the life cycle of children; impede successful primary school completion, it is focuses on children, their family, larger community, the available education and health services in an effort to understand the causality and social processes that effect, partially or wholly, children’s full participation in schooling. It explores the continuous and cumulative nature of social and economic
exclusion that poor children face and the impact this has on their ability to complete primary schooling. Areas that could make a difference, study suggests, are well functioning schools with basic facilities and motivated teachers; an adequate preschool educations components within the ICDS programme; Lightened public awareness of health and nutrition and equally importantly, strengthening of traditional community structures.

V.K.Ramachandran, Madhura Swaminathan and Vikas rawal (2003), attempts to identify constraints to the expansion of literacy and schooling in rural West Bengal. This exercise is to be seen as a contribution to the larger agenda, based on qualitative as well as quantitative observations, of identifying barriers to the spread of school education, other than the primary supply-side barriers created by the failure of the public authority to provide schools and educational facilities for all children’s. In the analysis of adult literacy the significant variables were sex caste and occupational states and village location. In the profit results for educational achievements of children in the same villages, however, occupational states were not statistically significant. In contemporary West Bengal class barriers to school attendance have become less significant, other features of educational depreciation persists.

Kumar Rana, Samantak Das (2004), investigated on the primary education in Jharkhand. This paper details the results of a survey conducted in selected areas of Jharkhand’s Dumka district. While inadequate infrastructure and the lack of non-enrollment , dropouts and poor attends of pupils scheduled tribe children are particularly at a disadvantage, as education is not imparted in their mother tongue. The state of primary education, as this paper suggests, needs a multi-pronged effort to ensure its greater effectiveness. The government can step in with incentives such, as mid day meal schemes, community participation in the governance of the primary schooling.

Kumar Rana with Subhrangsu Santhra, Arindam Mukharjee, Tapati Banarjee, Mounita Kundu, (2005), have pointed out the public-private interface in primary education with reference to West Bengal. In this study private schooling as the alternative to public schools since a vast majority of parents cannot bear the cost of private school education. Even if a ‘voucher system’ is introduced (where the
Government may issue education vouchers to the parents who would enable them to enroll children in schools of their choice.) the feasibility of such a system is remote mainly for two reasons firstly, private schooling would involve a far larger amount of parental expenditure than vouchers could offer, and secondly, the possibility of establishing private schools in the rural and underprivileged areas of the country is nothing more than a delusion.

Pankaj S. Jain, Ravindra H. Dholakia (2009), trace out the feasibility of implementation of right to education act. This article argues that even an allocation of 6% of the gross domestic product to the education budget would not be sufficient to fund universal school education until the very distant future if the government school system is used as the only instrument. The only way to meet the right to education obligation is to rely on low cost private schools as a significant instrument of the government education policy on the contrary; the proposed Right to Education (RTE) bill introduces provisions that would oppose low cost private schools. Therefore, the legislation for RTE needs to be modified and framed with specific provisions for private – public partnerships.

The above study has analyzed the empirical studies related to the research issues on the basis of its objectives. These reviews focusing mainly on programmes and policies of school education, school enrollment and drop-outs and its determinants, gender, caste and regional differences in school enrollment and drop-outs. And also they have shown some socio-economic aspects related to the above study. But the available literature is only a general informative and some impressionistic views on the topic. Moreover, an attempt is made to review such literature on the subject.

1.3 Research Gap

The study has reviewed the empirical research literature related to the present research issue. These reviews are mainly concentrating on some of the major issues related to the school education i.e. school education programmes, enrollment and drop-outs, gender, caste and regional differences in enrollment and drop-outs etc. lot of research work has been done at international and national level. But, virtually there is no research based literature on the determinants of enrollment and drop-outs in
Karnataka especially in Chamarajanagara district. Hence, the study intends to investigate the socio-economic and institutional determinants of enrollment and dropout in school of Karnataka in general and Chamarajanagara in particular. Because, Chamarajanagara is one of the 30 Districts of Karnataka and it has a very high population of tribal’s. Further, compared to other southern districts of Karnataka regarding the literacy rate, state of school education is very low in this district. According to Nanjundappa Committee Report (2002) Chamarajanagara district has less developed compared to all southern district of the state in terms of its development such as in health, education, income etc. Further, it has more or less of the same characteristics of Northern districts in many development indicators. Hence, this study has made a modest attempt to analyze the determinants of enrollment and drop-out and also, the study tries to investigate the issues like gender, religion, caste and regional differences in the enrollment and drop-outs of children.

1.4. Objectives of the study

The objectives of the present study are:-

- To evaluate the existing education policies and programmes in improving school education in India and Karnataka.

- To examine the growth pattern of enrollment and drop-outs in schools between girls and boys in Karnataka in general and the study area in particular.

- To examine the differences in enrollment and drop-outs in schools between public and private schools

- To study the differences in enrollment and drop-outs among the social groups especially SC’s and ST’s in the study area.

- To analyze the socio-economic determinants of enrollment and drop-outs in schools.
1.5 Hypotheses of the study

Following hypotheses have been formulated on the basis of the objectives of the present study

- There is a significant difference in enrollments between government and private as well as rural and urban elementary schools in study area.

- There is a significant difference in drop-outs between girls and boys in study area.

- The enrollment and drop-outs between boys and girls among SC and ST children are significantly differed from others.

- Socio-economic factors are responsible for differences in the level of enrollment and drop-outs.

1.6 Methodology

1.6.1 Data for the study

The present study is both descriptive and analytical approach. It is descriptive while dealing with the role of elementary education, enrollment and drop-outs at national and state level and in Chamarajanagara district. It is analytical while dealing with the growth pattern of enrollment and drop-outs as well as determinant factors of education of the state. The statistical tables, charts etc. are used to present the work clearly and systematically.

This study is based on both primary as well as secondary data sources. The primary data are collected through the survey method by using pre tested schedules. The informations are gathered from the sample of households and the elementary schools (primary and Upper primary) from the study area i.e., Chamarajanagara district. The secondary data are collected from the sources like various Government publications, Sarva Shiksha Abhiyan (SSA) reports, Department of Education Government of Karnataka as well as India and Ministry of Education Government of Karnataka, Census data and the District Information System of Education (DISE) reports published by the National University of Education Planning and Administration (NUEPA).
1.6.2 Area under Study

The study area for this research work is Chamarajanagara district. This district has a very high population of tribals therefore, the literacy rate and the state of school education is very low compared to all southern districts i.e., Mandya, Mysore and Hassan. Subsequently, among the three regions of the state, southern region of the state is more developed in terms of education, literacy and other development indicators. But, Chamarajanagara district is one of the districts in southern region which has almost the same characteristics of the Northern region districts (Nanjundappa 2002). Hence, this study selected Chamarajanagara as case study area and intends to find out the causes for the educational backwardness of the District.

Chamarajanagara district consists of four taluks i.e., Chamarajanagara, Kollegal, Gundlupet and Yelandur. All the four regions have almost similar characteristics in terms of the status of enrollment and drop-outs in elementary schools and the overall elementary education scenario. But, it was very difficult to survey the whole Chamarajanagara district as an individual level; therefore, the Chamarajanagara taluk has been selected for the survey among the four Taluk of the district. Because of its educational and economical backwardness. The study has categorized the taluk as rural and urban areas, 3 Wards are selected for its high literacy rate and 3 Wards are selected for low literacy rate totally, 6 Wards have been
selected in urban areas. Whereas in rural areas, totally 6 villages have been selected for sample collection, within that, 3 villages which have higher literacy and 3 villages of low literacy.

1.6.3 Sampling Design

The study has consists of 250 sample of households and elementary schools from the selected area i.e., Chamarajanagara taluk. In that total sample size, 210 households and 40 elementary schools from the various regions of the taluk. Again the study has categorized the whole sample as rural and urban. In rural area, it consists of 140 households again classified into two groups like general category and backward communities which are consist of 70 households each. These 70 households are divided within the backward castes, as 40 and 30 households of SC’s and ST’s. Whereas, among 70 households, 30 are general and 40 are backward communities in urban areas.
Likewise, the study also selected the 40 elementary schools which have been categorized as urban schools and rural schools which consist of 15 and 25 schools respectively. These schools again categorized as public and private schools in both area i.e., rural as well as urban areas. In urban area, private schools consisted only 5 and the public schools are 10. Whereas, in rural area, each public and private schools consisted of 18 and 7 schools respectively. Here, the study has taken more number of schools in rural areas compared to urban area, because, more number of government schools have situated in that particular area.

1.6.4 Analytical framework for the study

In this study, in order to study the determinants of enrollment in schools and drop-out in Karnataka and Chamarajanagara for the period of 2002-2011, the following models have been used. To measure the growth pattern of enrollment and drop-outs in elementary schools, the study has used exponential growth model.

1.6.4.1 Specification of Exponential Growth Model

This study has used two universally accepted yardsticks, to compare the growth pattern in enrollments, drop-outs and number of public and private elementary schools (primary and upper primary) in both rural and urban areas in India, Karnataka and Chamarajanagara. In addition to that, it is also analyzed the comparison of growth pattern in sex-wise and caste-wise enrollments and drop-outs in Karnataka and the study area. The data were collected to estimate the growth pattern of both public and private schools in terms of its enrollments and number of elementary schools in India.

Further, Exponential Growth Rates were computed for enrollments and number of elementary schools in India, Karnataka and Chamarajanagara level. Exponential Growth Rate is estimated by fitting an exponential function of the following form:

\[ Y_t = \beta_0 \beta_1 e^{\beta_1 t} \]  

where \( Y_t \) is the dependent variable, \( \beta_0 \) and \( \beta_1 \) are the unknown parameters, \( U_t \) is disturbance term. The equation (1) could be written in the logarithmic form as follows

\[ \log Y_t = \beta_0 + \beta_1 t + U_t \]  

Above equation was estimated by applying ordinary least square method and exponential growth rate of growth was obtained by taking the antilog of estimated
regression coefficient, subtracting 1 from it and multiplying the difference by 100, as under

$$\text{Gre} = (A.L. \beta_1 - 1) \times 100 \quad \text{------------------------ (4)}$$

Where the $\beta_1$ is an estimate for all the significance of growth rates was tested by applying appropriate regression analysis.

1.7. Scope of the Study

Education has an acculturating role. It refines sensitivities and perceptions that contribute to national cohesion, a scientific temper and independence of mind and spirit – thus furthering the goals of socialism, secularism and democracy enshrined in our Constitution. Education develops manpower for different levels of the economy. It is also the substrate on which research and development flourish, being the ultimate guarantee of national self – reliance. Hence, elementary education has been playing an important role in an economy.

In this context, elementary education related issues are selected as a major research problem especially, the present study has selected Chamarajanagara district as the research study area. Because, it is the district which having the very high population of tribals and also it is a drought area with a deprived economic status. At present Chamarajanagara is one of the districts of south Karnataka with low literacy rate as well as the poor economic background due to the occurrence of drought situation. There is so many empirical studies are available pertaining to education and related aspects. But, the present issue i.e., the determinants of enrollment and drop-outs in Karnataka A study on Chamarajanagara, the empirical works on this issue is very scanty. Hence, the present study has mainly concentrated on the education related issues like enrollment drop-outs and its determinants, gender, caste and regional differences in elementary education in Karnataka in general and Chamarajanagara is particular. Because, at the present situation Chamarajanagara is one of the districts of Karnataka belongs to south region but it has the same characteristics of North Karnataka (Nanjundappa Committee 2002). And also compared to the neighbor districts of Chamarajanagara i.e., Mysore, Mandya, Hassan etc the state of elementary education and the level of enrollments are very low as well as the drop-out also existed in that particular district. Now, the total literacy of the
district is 61.1 (2011) which is very low compared to the overall districts of Karnataka. Hence, it is the modest attempt to analyze the things such as the determinants of enrollment in school as well as drop-outs, gender, caste and regional differences in enrollment and drop-outs in Karnataka in general and the Chamarajanagara is particular. Further the study covered the limited period from 2002-03 to 2010-11 and it also limited to only elementary school education level.

1.8. Limitations of the study

The present study is constrained to cover only a limit area i.e. Chamarajanagara. And this study has limited to over a period of time that is 2002-03 to 2010-11. The study considered only 210 samples of respondents and 40 public and private elementary schools in selected villages of Chamarajanagara Taluk. This research concentrates only on elementary schools and not on secondary schools. This study has mainly focused on the determinants of enrollment and drop-outs, gender, religion, caste especially SC’s and ST’s as well as regional differences in enrollment and drop-outs in the study area. Hence, the inferences drawn from a limited area sample may fail to reflect the general situation.

1.9 Chapterisation

First chapter deals with the introduction, objectives and hypotheses and Methodology of the study. And also theoretical frameworks as well as review of literature are discussed in this chapter. In the second chapter, the study has evaluated the various education policies and programmes to improve the level of enrollment and to reduce the drop-outs in elementary schools. The third chapter has coherently analyzed the growth pattern of number of schools, enrollments and drop-outs as well as infrastructure related factors for the study period. In the fourth the various determinants of enrollment and drop-outs in schools of India and Karnataka are estimated. The fifth chapter discussed the profile of the study area and the primary data analysis. Finally, the sixth chapter deals with the discussion of the major findings and implication of the study.