CHAPTER - III

REVIEW OF RELATED LITERATURE
3.1 Introduction

The present chapter deals with review of the studies conducted on and the opinion expressed about the present topic of investigation. The focus of literature review as per the needs of the study is mainly on research in the area of ‘primary education’ with emphasis on various aspects of primary education relating to children’s school participation and non-participation and levels trends, determinants and differentials of learning in important school subjects. The volumes of surveys of research and innovations in India by Buch M.B., 1974, 1978, 1983 and 1988 and fifth and sixth survey and from different sources such as documents, journals, reports, agencies, institutions, etc., have been referred for the collection of related literature. In addition to these sources, a research volume published by NUEPA entitled “Educational Research in North-East India: A Source Material” is also found to be very useful for gathering related literature in respect of studies conducted with special reference to the states in the north-eastern region. Many studies have been conducted on primary education of which majority of them are project based studies and few are at Ph.D level studies and others. Most of these studies fall in the discipline of education while few in the discipline of sociology, economics and rest in other discipline.

The first section of review of related literature deals with the various aspects of schooling at primary stage covering pertinent issues like enrolment,
retention, factors associated with school participation like poverty, child labour, gender etc. The second section gives the literature pertaining to learning levels of children with emphasis on patterns and trends, differentials by few background variables etc.

3.2 Studies related to general aspects of Primary education

Most recent international empirical studies of the determinants of schooling have identified factors like presence of a primary school (Alderman et al, 1995; Sawada & Lokshin, 2001 for Pakistan), the number of years a school has been present in the community (Beutel & Axinn, 2001 for Nepal), the distance to the nearest school (Sathar & Lloyd, 1994; Durrant, 1999; Bommier & Lambert, 2000 for Tanzania), or the presence of school within some fixed distance or travel time (Handa & Simler, 2000 for Mozambique). Studies of retention and dropout of children have found that various dimensions of school quality appear to matter depending on the context (Lloyd et al, 2001 for Egypt; Glewwe and Jacoby 1994 for Ghana; Glewwe et al, 1995 for Jamaica; Behrman et al, 1997 for Pakistan; Mete 2000 for Tunisia; Behrman and Knowles 1999 for Vietnam in Lloyd et al 2002). Most international studies identify economy and nature of polity as a major factor on a society-wide basis as factors behind the amount of education generally received. Inside societies, group affiliations appeared to be important. Stephens while examining the choices for improving primary education especially in
developing countries identified historical, economic, political and social contexts within which the decision for school quality matters (Stephens, 1991). While macro level factors are important, however, the kind of family, the household child lives in may also be important. The initial impression of the international review of literature on determinants of schooling suggests that while many research evidences are there to show the macro level influence, however, the effects of community level factors on schooling is explored very less.

Studies pertaining to participation or non-participation of children in schooling using the data from the large scale surveys such as the national sample survey (NSSO), NFHS, the census, the national council for applied economic research (NCAER) have also provided useful information in this regard. For instance, based on the NFHS I data, Filmer and Pritchett showed that there is a strong wealth effect on the probability of enrolment. All else being equal, a child from a household from the highest quintile is 31 percentage points more likely to be in school than a child from a poor quintile (Filmer & Pritchett 1999). Analyzing the NFHS II data, Ramachandran, V, gave prominent reasons for non-attendance by children as i) high schooling costs like books, stationary and cloths ii) lack of interest in studies iii) children being used to contribute to the household income (Ramachandran, V, 2002). A study by Durdhawale and Chatterjee, A, et al, analysed NFHS II data to find out the scenario of primary school attendance among the less developed states in India.
The study identified socio-economic factors as important determinants of schooling. Results of a study using NFHS I, II and III data, Madhusudan et al, indicate that a distinct variation in school attendance across all the sample states. Situation of schooling has seen positive trend between NFHS I and NFHS II, however a declining trend is observed between NFHS II and NFHS III. Similar trend is observed with regards to gender differentials in schooling. In case of drop-out rates a declining trend is observed between NFHS I and NFHS II, however an increasing trend is observed between NFHS II and NFHS III. According to NFHS II and NFHS III, sex of the household head, sex of the children, religion, caste, type of house, availability of electricity and SLI remain as important determinants of schooling (Madhusudan JV, et al, 2010).

The World Bank report on primary education, quoting NCAER household data of 1992-93, states that the drop-out rate for poorer children, from families with low per capita income was higher than for the children of richer households with higher per capita income (World Bank Report, 1997). Tilak has analyzed the NSSO data of 1986-87 and 1995-96. According to him, the important reasons of never enrolment of children in rural areas are i) non-availability of schools in 1986-87, which was however not the case in 1995-96 ii) economic factors such as opportunity costs, participation in household economic activity, domestic chores and other economic reasons were the most important factors in 1986-87, however, the data in 1995-96 showed only 23.6%
accounted for economic factors iii) another important reason being the lack of interest on the part of both child and parent in education (Tilak, 2000).

One important study by Jayachandran, using panel data based on census data for 1981 and 1991 investigated the socio-economic determinants of school attendance in the age group 5-14 years for boys and girls. Some important results are adult female work-force participation, adult (parental) education, school accessibility, poverty, household size, gender bias etc (Jaychandran, U, 2001). The role of economic factors and their influence on educational decisions of families is widely acknowledged. According to the Probe Report, education is treated as an investment (Probe Report 1999). Especially in the rural context, under conditions of socio-economic deprivation, costs and benefits of this investment are rationally analyzed in terms of two aspects, expectations of benefits, which may be economic and non-economic in nature and the ability of families to sustain both the direct and indirect costs involved in schooling. The absence of any of these could lead to a situation of educational deprivation characterized by non-enrolment, irregular attendance and discontinuance. Conversely, it has also been found that economic well being facilitates this process of schooling. Available evidence from studies and statistics reveals that the large majority of in-school children come from economically better off households. The income group a family belongs to correlates with enrolment. Enrolment and participation rates are lower for low-
income families, while greater household wealth enhances school participation of both boys and girls.

Dreze and Kingdon (2001) as well as Sipahimalani (1996) point out that household wealth significantly enhances school enrolment and participation of girls in particular. They also suggest that poorer households allocate limited finances for the education of boys. Land owning status, which is the main determinant of economic position in rural areas, exerts a great influence on enrolment as can be seen by higher enrolments among families with larger land holdings. Children of families with small and marginal land holdings face a problem, as their children are often withdrawn to work on land (Reddy Shiva et al 1992). Jeemol Unni points out that as the size of cultivated land increases, the proportion of girls attending school increases (Unni 1996). Similar findings are reported in other studies like Visaria and Visaria 1993; Jha and Jhingran 2002; Dreze and Saran 1993; Kanbargi and Kulkarni 1984; Bashir quoted in Bhattay 1998. The main occupation of households in rural India also affects school participation of children. Studies show that non-agricultural households have a greater chance of children attending school compared to agricultural families. Within agricultural groups, the children of labourers are least likely to get enrolled and studies have found a high degree of illiteracy amongst them. Shiva Reddy's study of Andhra Pradesh finds that, a village where the majority of population depends on non-agriculture for their livelihood was one of the best enrolled villages at all levels of education (Reddy, Shiva et al 1992). The
study conducted by Pandey and Talwar on educational attainment of children in Uttar Pradesh, shows that the occupation of the father is closely associated with child’s literacy status. It was found that fathers working as agricultural labourers have the largest percentage of illiterate children while fathers in service had the lowest. Also, children of agricultural labourers often had to discontinue schooling to engage in some job for improving the economic status of the family (Pandey and Talwar 1980). Similar findings are reported from Nayan Tara (1985), Seetharamu and Usha Devi (1985), Ramachandran Vimala (2002), Jha and Jhingran (2002) and Vaidyanathan and Nair (2001).

Studies have found a positive association between adult female work force participation and school attendance of both male and female children, showing the crucial role played by women in educating their children. While traditionally it had been assumed that poverty hindered enrolment and completion of primary schooling by children, recent research, based on surveys and studies shows a positive trend of high enrolments even among the poorer sections in rural India. Regular attendance and completion of primary schooling, however, still remain as issues. The fact that poverty is a hindrance to schooling should not be looked at in absolute terms. Inter-regional variations in educational achievements between UP and Kerala, for instance, show that while both the states had an average of 45% people below the poverty line, Kerala had a literacy rate of 90%, while UP’s literacy rate was only 40.5% (Bhatty 1998). Other empirical studies also show that among the very poor
landless labourers, in poor economic conditions, parents send their children to school more easily, as they are not needed for productive work on the farm. Narayan (1984) found that a Harijan village in Tamil Nadu, with abject poverty, had a literacy rate of above 99% for males and females (quoted in Bhatt 1998). The fact that poverty leads to educational deprivation is supported by large-scale survey-based statistics as well. In a study of 15 states conducted by NCAER in 1994, it was found that the children of poor families are less likely to be enrolled in schools than children of better-off families. It showed that the ever enrolment rates in the lowest annual income households was, on an average, 25 percentage points lower than the rates for the highest income households. The disadvantage of being poor is more pronounced in the higher age group, with discontinuation rates being higher for children in the 11-14 age groups in low-income households, compared to those in high income households.

The survey also shows that states or regions, which are poorer, have larger number of out-of-school children, such as Bihar, Orissa, Madhya Pradesh, Assam, West Bengal and Uttar Pradesh. Moreover, the disparity in enrolment rates between high and low-income groups is wider in states with poor enrolment rates and with greater number of poor. States like Rajasthan, Bihar and Uttar Pradesh, have lower enrolment in the last two income categories, while states like Kerala, Tamil Nadu and Maharashtra show the difference in enrolment rates across different income groups. Discontinuation
rates for the poorest children are also two times higher than for children from the higher income households. The World Bank report on primary education, quoting NCAER household survey data of 1992-93, states that, the drop out rate for poorer children, from families with below Rs. 3000 per capita income, was on an average four times higher than for the children of richer households with above Rs. 10,000 per capita income (World Bank Report, 1997).

Apart from class distinctions, it has also been found that, caste, tribe and gender gaps in school participation of children are also exacerbated by poverty. In the highly stratified rural Indian context, the poorer sections are also those which form the bulk of the lower castes, such as the SCs and STs. Social exclusion and discrimination, together with landlessness and poverty, combine to keep them out of the sphere of education. The World Bank Report on Primary Education also finds that the effect of income on schooling of girls was more pronounced in the lowest income quintile (World Bank Report 1997). Few studies like Jha and Jhingran 2002, Subramanian 1999 and Vasavi and Mehendale 2003 focus on important aspects of out of school children and linked the phenomenon to factor of poverty and eventually to the child labour. In the rural context, these out-of-school children comprise those who are never enrolled, the nominally enrolled with irregular attendance and those who joined but discontinued or dropped out. In rural India, poverty is essentially linked to the nature of agriculture, which is the main source of livelihood for people and is often subsistence based. Being rain dependent it is characterized by low
productivity and uncertainty of returns. Land distribution is unequal, with concentration in the hands of a few. Majority of the people possess small and marginal land holdings, while others are the landless labourers. There is also absence or inadequate livestock holdings and a high dependence on wage work. Studies show how the context of poverty and deprivation in poor households is characterized by, amongst other things, instability, uncertainty, indebtedness, food insecurity, short term survival strategies, engagement of children in work and illiteracy in the family (Jha and Jhingran 2002; Subramanian 1999). Such a set of economic conditions significantly affects the lives of children in rural India. Jha and Jhingran point out that since hiring labour for agricultural activities proves uneconomical for families with small land holdings, family labour is utilized. Children in poor families are thus engaged in a variety of economic activities for their family—domestic chores, sibling care, cattle grazing, farm work etc (Jha and Jhingran 2002). The implication of this is that they are unable to attend full time school regularly. While child work may be an important cause, it may not be the only reason why children remain out of school. It would hence be useful at this juncture, to understand the reasons why children have remained and continue to remain out of school in rural India.

A number of empirical studies show that the multitude of tasks out of school children are engaged in, is governed by the division of labour. Engagement in working for their own household is more common for children, than working for wages. Studies reveal that, in the Indian context, girl children
begin to work in the household from a very early age. Girl children are mainly engaged in domestic and household activities such as cooking, cleaning, fetching water and fuel wood, looking after old and sick family members and more importantly taking care of younger siblings. Almost all the studies recognize the role of the girl child as invisible child labour at home. Ananda Lakshmy observes that irrespective of economic status, the female child’s role in household work and cooking is constant (Ananda Lakshmy in Karlekar 2000). Studies show that girls spend twice or even sometimes thrice as much time working than boys, mostly on domestic duties. Some studies reveal that the birth order determines the educational chances of the girl child. The eldest daughter is often the biggest loser, as she has to take over the responsibility of household work. By doing so, young girls release their mothers for work and hence this activity is an economic contribution to the household, also enables her brothers to attend school (Chanana 1990; Jejebhoy 1996; Ramachandran et al 2003; Nayar 1993; Burra 2001; Nayar and Nayar 1995).

These rigid household duties are performed by girls all the year around and may not be easily reconciled with schooling. Hence, opportunity costs of the girl child’s time are high and she is educationally disadvantaged compared to the boys. Boys on the other hand are engaged in activities outside the home, such as cattle grazing, care of goats and cattle, agricultural activities on their own family farm, forest produce collection and occasionally, agricultural or other wage work, to supplement to the family income (Jha and Jhingran 2002,
Vasavi and Mehandale 2003; Ramachandran et al 2003; Probe Report 1999; World Bank 1997; Jejeebhoy 1996; Nayar 1993; Kaul 2001; Seetharamu and Usha Devi 1985; Unni 1996; Kanbargi and Kulkarni 1991; Sumi Krishna 1996; and Shariff 1991; Burra 2001). Studies also show that the nature of work done by children differs according to age. The pattern of children’s work, across the study villages in Jha and Jhingran’s study was as follows: While, the younger boys (6-9 years) are utilized for cattle grazing and collecting forest produce, the older boys (9-13 years) are utilized for seasonal work on their own farm, or for agricultural wage work. Younger girls (6-9 years) were involved in sibling care and household work and in forest produce collection and older girls (9-13 years) also worked on the family farm and were involved in agricultural farm work with their mothers (Jha and Jhingran 2002). Findings from Kanbargi’s study demonstrate that children performed a variety of activities useful to the family from a very young age.

However, the demand on their time becomes stronger as children grow older and are capable of more productive work. While younger boys tended livestock, the older boys between 12-14 years, working for wages was more common (Kanbargi and Kulkarni 1991). Vimala Ramachandran’s study of the three states of U.P, A.P, and Karnataka finds that socio-economic participation of children in household activities seemed to be far ahead of age expectations. She found even very young children in the age group of 3-6 years taking on the responsibility for a range of sibling care and household and farm activities
(Ramachandran et al 2003). Studies have found that certain changes in the composition of the family labour causes children to be withdrawn from school and they are discontinued till the supply of family labour force becomes adequate. Caldwell et al’s study of rural Karnataka shows how young girls may be withdrawn as elder sisters are married, grandparents are disabled or mothers become pregnant. Young boys may end schooling as an elder brother goes to town to see work (Caldwell et al 1985). Studies have highlighted that though families may have a high interest in education, they may not be able to translate the same into action because of the context these poor families find themselves in (Dreze 2003; Subramanian (1999), Jha and Jhingran 2002). Ramya Subramanian’s study of primary education in Raichur district of Karnataka finds that, the area, being rain fed and under developed, is characterized by economic uncertainty and instability. This often forces families to opt for short-term survival strategies to supplement to family income, and creates ambivalence in their minds in committing children to full time schooling. This economic participation by children led to highly irregular school attendance. Their economic situation has thus prevented their high interest in education from being translated into an education investment strategy.

Moreover, since parents are unsure about the long-term returns to education, divorcing the children from work appears a risky proposition. More importantly, children are in fact often encouraged by parents to work, as they feel that full time education may prevent them from forming networks with
employers, which are necessary for gaining employment in the future. The author states it was clear from my research that there is a persistent exclusion of children from particular livelihood, caste groups for whom forcing a choice between work and formal schooling often led to a default choice in favor of work. (Subramanian 1999).

Other studies by Arup Maharatna (West Bengal), Srivatsava (U.P.) and Jemol Unni (Gujarat), all show that children’s involvement in work becomes more significant for older children (10-14 age group) and for girls who are generally involved in domestic work (quoted in Bhaty 1998). A number of studies go to show that there is a positive link between child labour and land ownership. Studies by Kanbargi and Kulkarni (1991) and Sajitha Bashir (1994) highlight the relation between agriculture and its demand for child labour, which varies between land owning and landless families. Children are more likely to be employed as family help and in productive work in households that own land, cattle or other productive assets. Among the landless, on the other hand, not having cattle or land greatly reduces demand for children in productive work. Hence, children of landless labourers are freed from labour on the farm, and thus can attend school (Bhaty 1998; Reddy and Reddy 1992; Kanbargi and Kulkarni 1991) (S. Bashir 1994; Majumdar 1997; Sinha and Sinha 1995 as quoted in Bhaty 1998). Recent research on time utilization of children reveals that not only is the time spent by them on household activities small, in fact their contribution to the family income is not so substantial, thus
implying that working may not be a financial imperative and that the drop out children may be put to work by parents as a default option. The reasons for dropping out of school may be totally unconnected to the opportunity for work, as the studies show. Nidhi Mehrotra’s (1995) study of Kerala, Uttar Pradesh and Himachal Pradesh finds the phenomenon of parents using labour of children dropping out of school (quoted in Bhatt 1998).

Pandey and Talwar’s (1990) study of UP, found that out of the children not going to school, 80% were non workers (quoted in Kiran Bhatt 1998). Kiran Kapadia (1997) observed that in rural Tamil Nadu, children, were are put to work by parents to keep them out of trouble once they had dropped out of the school (quoted in Dreze 2003). Dissatisfaction with the school may cause children to drop out after which they may enter the labour force (Lieten 2000, Tilak 2002; quoted in Vasavi and Mehendale 2003). Choudhri highlights the role of nowhere children who do nothing or perform household work, as forming a potential pool from which child labor is drawn.

3.3 Studies Related to Learning:

Most of the recent studies assessing learner achievement in India have shown that achievement levels at the terminal grades of primary school are disappointingly low. The national level study by Shukla and others exhibited an average of 46.6% in language and 41.20% in maths. Aikaras study of learning achievement in the states of Bihar, Maharashtra, Rajasthan and Karnataka found
mean achievement scores to be 41.2% for language, 34.7% for maths and 42.2% for environmental studies. Specific state-wise studies in different states exhibited the same trend. In Tamil Nadu, Bashir found the scores of grade IV pupils to be 33.1% for maths, 45.2% for word knowledge and 31.97% for reading. In Bihar, Hasan’s study assessed grade V children at 48% for language, 35% for reading comprehension and 32% in maths. Aggarwal’s study of 169 schools of Delhi came up with similar findings that grade IV children scored 40.46% in maths and 56.5% in language. Varghese’s study of the educationally forward state of Kerala also showed the same trend. Similar low achievement scores of grade IV students were also found in M.P. by Govinda and Varghese and in Bengal by Roy, Mitra and Ray. Thus the average levels of performance are unacceptably low in all areas where they have been studied (Shukla et.al 1994; Aikara 1997; Bashir 1994; Hasan 1995; Govinda and Varghese 1993; Roy, Mitra and Ray 1995; Aggarwal 2000; Aggarwal and Chugh 2003; Varghese 1999; Jayalakshmi 2001).

Aikara’s study found that only 10.8% percent of the students achieved mastery in language, 5.6% in maths and 10.1% in environmental studies. In Aggarwal’s Delhi sample, the results of the test revealed that only 3% of learners were able to attain more than 80% in maths while 10.9% learners obtained 80% or more in language. Hasan’s study in Bihar found the percentage of students achieving mastery to be very negligible in both areas. In Govinda and Varghese’s study of Madhya Pradesh, the level-wise analysis
of performance shows that even after the completion of 5 years of schooling, only 10% of children in Hindi and 5% in maths acquired mastery over basic knowledge and skills. Thus, the percentage of students attaining mastery levels depicted in different studies is negligible and is no where near the 80% target specified in the MLLs. These results also lead one to question whether it is realistic to expect an average student of primary school to achieve mastery at 80% level in different competencies tested by the MLL.

Mean achievement scores represented in various studies highlight the wide variations that exist between states. Moreover, certain studies have found that states such as Bihar and Rajasthan have higher achievement scores compared to the educationally developed states such as Kerala, Maharashtra and Karnataka (Aikara 1997; Shukla et.al 1994; Varghese 1999). Aikara’s study shows the mean score for language to be 53.8% in Bihar and 53.3% in Rajasthan while in Karnataka it was 35.7% and 32.6% in Maharashtra. Similarly, the mean score in maths was 48.2% in Rajasthan and 44.5% in Bihar, while it was 29.2% in Karnataka and 26.5% in Maharashtra. Similar findings regarding variations between states have also emerged from Shukla’s study. Varghese finds that in Kerala, achievement levels were lower compared to other states (Aikara 1997; Varghese 1999; Shukla et.al 1994).

Though this may at first appear difficult to explain, one plausible explanation given by research scholars is that in less developed states such as Bihar and Rajasthan, enrolment rates are low and drop out rates high. Therefore
students who were academically better off were tested here. In contrast, in states such as Kerala and Karnataka, almost all children are enrolled and dropout rates are lower. Since most children reach grade IV, the mean achievement levels represent the average achievement of the population, while in other states, the mean scores are of the academically better off children (Aikara 1997; Varghese 1999).

The focus of certain studies has been to determine achievement levels of learners at the entry stage as well as the terminal stage of primary schooling. The results of such studies indicate that the achievement levels of grade I children are reasonably high in both the subject areas i.e., language and maths. However, the performance tends to decline sharply as students progress to higher classes. Aggarwal’s study of Delhi schools finds that while the mean percentage score of grade I was 80.16% for language and 78.18% for maths, the achievements scores for grade IV were 40.46% for maths and 56.5% for language. Varghese found that, in Kerala, the mean score for grade II children was 59.3% in maths and 67% for Malayalam. However in grade IV, these slipped to only 37.2% for maths and 47% for Malayalam. Hasan’s study of Bihar arrived at similar conclusions. In language, grade I children scored an average of 50% on word recognition. In maths, the scores were 63% for number recognition and 52% for numerical operations. In grade IV, language competencies, students scored 48% for word meaning and 35% for reading comprehension. In maths, the mean percentage score was 32%. In Karnataka,
the baseline survey of the Sarva Shiksha Abhiyan revealed a similar trend. The performance of grade I students was relatively better than grade III students in all districts. While the average score for grade I competencies was 70% in language and 69% in maths, the achievements of standard III students showed a slump with 43.48% in language and 38.82% in maths (Aggarwal 2000; Aggarwal and Chugh 2003; Hasan A. 1995; Varghese 1999; Jayalakshmi 2001).

A number of explanations for this phenomenon have been offered by different scholars. The drop in achievement levels at the terminal stage (class IV) was true for both language and maths. Aggarwal highlights that while grade I tests were oral, grade IV tests are written. It appears that while children can express themselves orally and understand, they have difficulties in making the transition to written communication, and this affects their achievement levels. Moreover, poor learning levels at the later stage are also a result of the quality of teaching-learning in classrooms. He feels that the thrust of teaching has to shift from memorization to understanding of concepts in higher classes. In another study, Aggarwal and Chugh explain that the level of teaching deteriorates as children move to higher grades. Jayalakshmi explains the trend in Karnataka by stating that tests of literacy and numeracy at grade I are oral tests, hence the achievement levels assessed may not be reliable while the tests at grade IV are objective and competency based (Aggarwal 2000; Aggarwal and Chugh 2003; Jayalakshmi 2001). Shukla’s national level study shows that the overall scores of children were 41.2% in maths and 46.66% in
language. Varghese found in Kerala that the mean score was 37.2% in maths and 47% in language. Govinda and Varghese found in Madhya Pradesh that grade IV children scored 38.26% in maths and 47.06% in language. In Hasan’s study of Bihar, the mean score for class V was 32% for maths while it was 48% for language (word meaning). Aikara’s study of learner achievement in 4 states shows the overall mean score to be 34.7% in maths compared to 41.2% in language and 42.2% in environmental studies. In his study of Delhi schools, Aggarwal found the average score in maths to be lower compared to the mean score in language. This was true of both the Hindi and English medium schools. Jayalakshmi’s baseline survey of Sarva Shiksha Abhiyan in Karnataka found the overall mean score of grade III children in maths to be less than 38%. Even the better performing districts like Mangalore and Bangalore North did not achieve a score of more than 50%. Similar findings have been reported in the 3 DPEP districts of Kerala studied by Varghese (Shukla et.al 1994; Govinda and Varghese 1993; Hasan 1995; Aikara 1994; Varghese 1999; Jayalakshmi 2001; Aggarwal 2000; Aggarwal and Chugh 2003).

Irrespective of the state or medium of instruction, these studies reflect the low achievement of primary children in the subject area of mathematics. Aggarwal puts down the low scores in maths in grade IV to the low educational qualifications and low motivation of teachers. This phenomenon could also be a result of teaching styles, with emphasis being placed on rote learning instead of the knowledge component (Aggarwal 2000).
Coming to the difference in the performance of students of schools located in rural and urban areas, Shukla’s nation-wide survey study found no difference in the achievement of children from urban/rural areas. While no difference was recorded in Arunachal, Orissa, Punjab, Sikkim and UP, the urban group had a higher average in AP, Haryana, J & K, Karnataka, Kerala, Maharashtra, West Bengal and Delhi. The study showed that in some states, like MP, rural children performed better than urban children, possibly because all rural children studied in government schools while in cities better off parents did not send children to government schools. There was a general tendency for achievement in capital cities to be higher than in other parts of the state. Roy, Mitra and Ray, in their study of West Bengal, found hardly any difference between rural and urban children. In Aikara’s study, the mean scores for rural children were 40.7%, 34.9% and 42.0% in language, maths and EVS respectively, while the students of urban schools fared in almost the same manner with mean scores of 42.3%, 33.3% and 42.6% (Shukla et.al 1994; Aikara 1997; Roy, Mitra and Ray 1995).

Some research studies have also shown how achievement levels vary in schools of different localities. Govinda and Varghese’s study of 5 districts of Madhya Pradesh shows how mean achievement scores show a systematic improvement as one moves up from a very under developed, to a less developed, to a developed rural area and again from semi urban to privileged urban areas. While the mean scores in Mandla which is an under-privileged
rural area were 23.58% in Hindi and 13.88% in maths, in Indore which is highly urbanized, the scores were 56.96% in Hindi and 49.40% in maths. In this study, the mean scores of 3 rural localities (Mandla, Rewa and Rajnadangaon) were much lower than the overall mean score of the total sample. Scholars explain that in these 3 rural localities, infrastructural facilities were poor and there was a single system of government schools, which all the children attended. The urban localities had a dual system of government and private schools, which segregated children according to their socio-economic background. Children performed better in private schools due to the pattern of the centralized management and monitoring practices of schools (Govinda and Varghese 1993). Panda, who studied academic performance of rural, urban and tribal students of Orissa, on the other hand reveals a contrary trend and found a higher achievement score of class V in rural children compared to urban and tribal students. Bashir’s data from Tamil Nadu shows differences in achievement scores between rural and urban areas with performance actually being higher in the rural schools.

Similarly, Jayalakshmi’s baseline survey of SSA in Karnataka found that mean scores of rural children exceeded those of urbanites in most districts, in both subject areas in grade I. In grade III, where general performance was poor, rural children have performed uniformly better than urban children in both language and maths. Hasan finds no uniform trend in Bihar with urban students doing better in some districts and rural children in other districts (Panda 2001;
Research studies have come up with diverse set of findings on gender variations in achievement scores. Shukla’s nation-wide study concluded that boys had higher mean achievement scores than girls, especially in the tests of maths and word knowledge. This trend was noticed in Rajasthan, Tripura, UP and West Bengal. However girls did better than boys in maths in Meghalaya, Mizoram, Punjab, and Delhi. Aikara’s study of learner achievement in 4 states has shown similar conclusions, with boys performing better than girls on all the 3 tests.

Though the difference was not significant in language and EVS, in maths, however, boys scored 34% and the girls scored 32.6%. In Hasan’s Bihar sample, gender differences were not found to be significant in class IV but performance of boys was a shade better in numeracy tests of class II. In Aggarwal’s study of Delhi schools, the mean score obtained by girls was much lower than boys, especially in maths. Differences in achievement between boys and girls were significant in Hindi medium schools, but were absent in English medium schools. Roy, Mitra and Ray, in West Bengal, as well as Varghese in Kerala, found no significant differences between the achievement of boys and girls. Jayalakshmi’s baseline survey of Karnataka found that in grade I, while girls excelled over boys in many districts in language, in maths, boys scored better than girls, through mean differences between the two were minimal. However, in grade III, the gender differences in mean scores for
language and maths were not significant (Shukla et.al 1994; Aikara 1997; Hasan 1995, Aggarwal; Roy, Mitra and Ray 1995; Varghese 1999; Jayalakshmi 2001). A small sample study of gender variations in maths achievement was conducted on class IV children in rural Maharashtra by Pai and Chitra Natarajan. Their findings revealed that the mean score obtained by girls on maths concepts was 19.70, as against 17.41 for boys. It was also found that boys and girls in urban areas liked maths teaching more than their rural counterparts. The girls in urban areas perceived maths as less difficult than their rural counterparts. This study thus contradicts the findings that boys always out-perform girls in maths achievement. It finds gender differences across context, but within a context gender plays little role (Pai and Natarajan 1997).

With reference to the variations in learner achievements by social category, several studies have found that children from scheduled castes and scheduled tribes are the poorest achievers. The NCERT survey by Shukla and others found that, for the entire country, the backward classes and others did better than the SC and ST pupils, whereas SCs had a higher mean compared to STs. Aikara’s study found a similar pattern across all the four states studied i.e., Bihar, Rajasthan, Karnataka and Maharashtra. Hasan’s study of Bihar found that in both grade II and grade V, the mean scores of SC/ST children were lower than other caste groups in language and maths, due to social disadvantages. Yash Aggarwal’s study of schools of Delhi found that a predominant proportion of SC children studied in government schools. The performance of these
students is far lower compared to the general category. Jayalakshmi finds variations between social groups in achievement levels to be marginal in the Karnataka baseline study. Within caste groups, gender variations became important. The Delhi study found girls in the SC/ST category having far lower achievement scores than boys (Shukla et.al 1994; Aikara 1997; Hasan 1995; Aggarwal 2000). Reasons for the poor achievement of SC/ST children can be attributed to the fact that the SC/ST population is acutely disadvantaged socially and economically, with many pupils being first generation learners. They get few educational facilities; do not use and derive enough benefit from such facilities; and finally the language of ST groups is different from the standard language of the school, resulting in poor achievement (Sharma 1998; Aggarwal 2000).

Studies also highlight the differences in achievement between public and private schools in their study sample. Govinda and Varghese, in their study of five districts in M.P., found the prevalence of a dual system of schooling in urban localities, where both government and private schools exist. In urban areas, private schools out-performed the government schools, whose conditions were similar to the government schools of underprivileged rural areas. The possible explanation for this performance differential appears to be the pattern of organisation in the school. Urban government schools are mainly attended by children of poor socio-economic background, whereas in rural areas, the government schools are attended by all. The urban private schools attract
children from the higher socio-economic strata. The better performance of private schools, as compared to government schools in urban areas, is explained by better facilities as well as by effective internal monitoring practices (Govinda and Varghese 1993).

3.4 Conclusion:

The studies, particularly in Indian context, on various aspects of schooling such as access, participation, equity, pedagogic renewal and quality and other important aspects have provided much of the basic knowledge. Scholars in the field, however, are of the opinion that, still there is a paucity of studies that could provide contextual information regarding why India lags behind in UEE. This becomes more important in the context of UEE for states in the NER. One very important point that was noted during literature review was that much of the studies conducted in India had their focus on the major states like Bihar, Rajasthan, Madhya Pradesh, Uttar Pradesh, Karnataka, Andhra Pradesh and Tamil Nadu. Few studies have been conducted in NE India with major focus being on the state of Assam. However few studies like Barua, (1971), Das, (1975), Tali, (1980), Katakky, (1982), Devi, (1983), Deka, (1985), Lohar, (1985), Kapzauva, (1986), Thakur, et al (1988), Gupta, et al (1989), Majaw (1991), Gyaneswar, (1992), Bhuyan, (1993), Sarma, (1994), Josephine, (1998), SCERT, Nagaland (1999) and Teronpi (2000) in Malhotra and Mittal, (2001) pertaining to the children’s enrolment, drop out and academic achievement at elementary stage in this region, have been conducted
over the years. These studies have pin-pointed the causes of low enrolment, high drop out and wastage and stagnation. Many have identified the causes of various hindrances to school enrolment and retention and proposed appropriate remedial measures to reduce/remove them. Researchers have identified factors such as poverty and economic backwardness of parents, backwardness of society as a whole, non-stimulating social environment, illiteracy of and negligence by parents, lack of trained teachers, absence of ancillary services like mid-day meal, uniforms, books, science and game equipments located in urban areas only. However, no special effort has been made to find out the problems related to schooling of primary school children in rural areas in the NER in general and West Garo Hills District of Meghalaya, in particular. Hence there is a pertinent need to take up the present study as per the stated objectives.