CHAPTER I
INTRODUCTION

Despite the fact that over 90% of India's child labour is found in rural areas, much literature on the subject focuses on the child labour in factories and cottage industries across urban India. Little has been documented on the wide prevalence of child labour across rural India. The key difference in this practice between rural and urban areas is that it is much more difficult to measure child labour in rural areas, especially because of the widespread prevalence of "invisible" forms of child labour – activities assisting parents, relatives, etc. in household chores and/or unpaid labour. These activities contribute to the overall welfare or output of the household, but are not captured in national surveys. Further, very little has been documented on the economic characteristics of the household to which these children belong. Another important aspect that has been neglected is the occurrence of child labour amongst the social groups like schedule caste, tribes and other backward caste groups where the incidence is relatively high. In this context it is important to understand the phenomenon of child labour in the social and economic context.

Issue of Defining Child Labour

Definition of child labour has been subjected to intense debate in the recent years and has been approached in diverse ways. The ILO, a key player on this issue, has a broad definition and defines 'child labour' as "any work that deprives children of their childhood, their potential and their dignity, and what is harmful to their physical and mental development. Work is described as that which is mentally, physically, socially and morally dangerous to children, and, work that interferes with the children schooling by depriving them the opportunity to attend school, by obliging them to leave school prematurely or that demands them to combine school attendance with heavy work."¹ There are others who believe that the "concept of child labour should be restricted to the spheres of production and services that interfere with the normative development of children and a single estimate of child labour which includes children who are engaged in hazardous work as well as children who do non-hazardous work, children who work full time and who work part time, children

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who work for wages and who work as un-paid family workers is detrimental for policy purposes”.

Broadly, child labour has been understood by the following characteristics:

1. Those children who work in exploitative, hazardous conditions.
2. Any child involved in an economically gainful employment.
3. Any child involved in work (household work) that can interfere with his/her schooling.
4. Any child not in school and not in the workforce (the “nowhere children”); implying that anyone not in school must be working.

Over time, the estimate of child labour has expanded from the first definition to the second, and recently many authors and activists have been advocating the third and the fourth characteristics too. While the first definition is restricted to the more extreme forms of child labour and ignores an important segment of children working elsewhere, the third definition is too broad – parents not convinced or aware of the benefits of schooling their children (male or female) cannot automatically be inferred to be exploiting child labour by engaging their children in household work. At the same time, it is unquestionably the work that adds to the economic management of the household and interferes with the schooling of the child. In this study, three segments are considered separately – the child labour segment, which includes all children employed in economically gainful employment, and the child worker segment, which considers the children working in household chores. The third category of children under study are the ‘nowhere’ children who neither are in school, nor are gainfully employed and nor do they work in household chores. It is important to identify and differentiate between categories of the working children which will not only help in policy formulation but will also help in understanding the causes of child labour.

Review of Literature

Literature on child labour has been reviewed by categorizing it according to the following different themes.

1. Definition of child labour and their estimates; according to the definitional criteria;

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2. Participation of children in economic activities;
3. Child labour and educational linkages;
4. Factors responsible for child labour

Concepts and the Estimates on Magnitude of Child Labour

Literature on child labour is marked by a substantial debate on what constitutes child labour, the various definitions/concepts of child work, and, the resulting estimates. A review of current literature on ‘child labour’ reveals that on the one hand, there is an official definition of ‘child labour’ which is conventional and restrictive in nature and on the other hand there is definition which is liberal one. The official definition is obtained from Population Census and National Sample Survey, which are the two main government sources of information on child labour. The definition of a worker, adopted by these two sources refers to those children who are employed either as paid workers or engaged in production-related activities in which at least a portion of the produce is marketed. Those children who work as unpaid workers in domestic duties are not included in this definition. The advocates of the official definition argue that a child is considered working if the work he/she is engaged in interferes with their physical development, with their possibility to go to school and with their need for recreation. The official definition incorporates this concept of work and, unpaid household work is incidental in nature and cannot be classified as child labour in the strict sense of the term (Lieten: 2001).

The liberal definition on child labour, on the other hand, encompasses all those children who are not accounted for in the official statistics and they neither are in school nor are listed as working. Such children are termed as ‘nowhere children’ (Chaudhri, 1996) or ‘invisible’ children (Jayraj and Subramanian, 2002). Supporters of this definition believe that a child who does not go to school can be assumed to be a working child especially in rural areas (Sinha, 1996, Ramchandran, 2002). Such work may not qualify for official classification as ‘child labour’ but is certainly not devoid of work. The estimates for ‘child labour’ including these children would be larger than those based on the official definition.

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3 This type of work combines household work that helps to manage the home and assist indirectly in many ways to contribute to livelihood. Collection of water, fuel, maintenance of the house and taking care of younger siblings all constitute work that is unpaid but indirectly assist the family members in generating income. Hence in the context of rural India, therefore, a non-working, non-school going child does not exist (Ramchandran, 2001 & Kannan, 2001).
that does not take into account the unpaid work. Kannan (2002) argues that discussion on child labour should be focused on children out-of-school, who are working in one way or the other to help themselves and/or their families. It is in this sense that Kannan uses the term ‘child deprivation’ which is a summation of estimates on child labour and nowhere children.

These are some broad concepts used to analyze and estimate working children. The magnitude of children working would differ according to the definition. In rural India, based on the official definition of child labour according to the Census, 1981, there were 6.7 million male and 3.5 million female children working as main workers i.e. working for more than six months in a year. The child work participation rate (WPR) was about 8% to 9% for males and 4% to 5% for females (Srikantan: 1991, Jayraj: 1995; Duriasamy: 1997, Chaudhri: 1997, Deshpande: 2002). The work participation rate for child marginal workers (i.e. children working for less than 6 months in a year) was 7% for males and 2.1% for females (Deshpande: 2002). Another government source of information on working children is National Sample Survey, which gives data on employment every five years. NSSO estimates give a higher incidence of child labour than the Census. According to NSS, in India, an estimated 21.45 million children worked in 1983, as against just 13.7 million enumerated by the Census in 1981 (Deshpande: 2002). In 1991, Population Census estimated that 11.4 million children were working in the rural areas and their work participation rate was 5.3% (Chaudhri: 1997, Deshpande: 2002, Daly et al: 2002). While the NSSO estimates show that in 1993-94 12.4 million children were working and their WPR was 7.2% (Deshpande: 2002).

Studies employing the concept of child labour according to liberal definition indicate that about 79 million are ‘nowhere’ children in rural India and these unaccounted children who do not go to school are actually working children. (Sinha: 1996, Chaudhri: 1997, Daly et al: 2002). The magnitude of the ‘nowhere’ children have been on the rise from 1951 to 1991. Estimates on incidence of children working in the context of ‘child deprivation’ as seen by Kannan (2002) are even higher. Studies indicate that in 1961 in rural India, the proportion of deprived children was 60% for boys and 80% for girls. This came down to 43% and 54% respectively in 1991 (Kannan; 2002).

The level of child work is not uniformly distributed across the states. The incidence of child work is highly concentrated in some of the states like AP, Karnataka, MP, Rajasthan, Orissa, Bihar and West Bengal most of which are less developed states. (Daly et al: 2002, Chaudhri: 1997, Jayraj: 1995, Dev and Mahendra: 2002). Further, there is a wide variation in
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the inter-state incidence of child work in rural areas. The proportions of main and marginal workers amongst children are as high as 6.24% in AP and as low as 0.4% in Kerala. Incidence of ‘nowhere’ children varies too at state-level. It is high in the relatively backward states like Bihar, Rajasthan, Orissa, MP, UP, West Bengal and Assam. The southern states of Kerala and Tamil Nadu show much lower incidence of child labour (Daly, Bhattacharya and Dash: 2002, Chaudhri: 1997, Mahendra and Dev: 2002). Studies on incidence of child labour based on secondary sources in rural areas at state level are few and far between. In rural Rajasthan according to 1991 Census 7.8% children were engaged in work that was higher than the national average. The proportion of working plus ‘nowhere’ children in rural Rajasthan was 50%, which was much higher than the national average of 36% (Bhattacharya, Mathur and Dash: 2002). In Tamil Nadu under the ‘restrictive’ definition according to NSS data (1987-88) eleven out of every one hundred children were in workforce.

The count increases in magnitude when estimates are studied based on ‘liberal’ definition, which includes the ‘nowhere’ children. According to 1981 Census, by the liberal definition the number of child workers per 100 is over 40 in Tamil Nadu (Jayraj and Subramanian: 2002). Kerala has the lowest incidence of child labour in the country. According to the official definition of child labour, proportion of working children to total child population was 3.4% for boys and 3.0% for girls in 1981. By 1991, incidence of child labour declined to 0.5% for boys and 0.4% for girls, the lowest in the country. However, the proportion of deprived children or ‘working children + out-of-school’ even in Kerala was close to 34% for boys and 42% for girls in 1961, whereas the figures for all India were 60% to 80% respectively. By 1991, deprived children declined to 13% for both boys and girls, whereas for all India it was 43% for boys and 54% for girls (Kannan: 2002).

Micro studies support the estimates on the incidence of child labour presented by the government sources. A study on the rural areas of Madhya Pradesh, Bihar, Rajasthan and Uttar Pradesh indicates that full-time child work is a significant but limited phenomenon in the rural north India. Work is the primary occupation of 9.4% of girls and 4.2% of boy’s aged 5 to 14 (Leclercq: 2002). This estimate is corroborated by the findings of another study in Uttar Pradesh where the author finds 5% of the children working (Lieten: 2000). Similarly, Nangia and Khan (2002) report that work participation rates for children were 15% for Andhra Pradesh, 8% for Madhya Pradesh and 3% for Orissa. An overwhelming majority of working children fall in the age group 10-14 years. Raj and Satpathy (2002) in their study to
assess food insecurity and its impact on child labour in backward regions of rural Orissa employ the official definition of child labour to measure its magnitude. They define child labour as children who work either full-time or part-time. They found that among the 282 households in the sample, there were 214 child labourers, in the school going age-group (i.e. 5-14 years), thereby implying 1.32 child labourers per household. They point out that given an average family size of six persons, including the parents and four children it may be safely assumed that even if all the children in these families are in the age group, 5-14 years, at least one child of families in rural western Orissa could be classified as child labour.

The magnitude of child labour gets compounded when the unpaid work is included with the paid work done by children. A primary level study in rural Bihar by Antony (2002)\(^4\) indicates that approximately 25% of all working children belong to agriculture and allied sector. While nearly 50% of all working children are engaged in household work. Further, 40% of children in the study area reported neither working nor going to school. Ramchandaran and Karan (2002) in their study on child deprivation in the tribal region of Jharkhand report, that 35% of the children in the age group 10-14 are full time workers. Even in the age group 5-9 years, 6% are full-time workers. Taking main and subsidiary occupations together the proportion rises to 58% for the age-group 10-14 and 11% for the age group 5-9. Additionally, 26.5% of the children in the age group 5-14 neither are in school nor at work. Vlasoff M. (1980), in his primary study of 371 households in rural Maharashtra measures the work participation rates of children by including paid work as well as unpaid work. The study indicates that 56% of all boys and girls provided no economic benefits to their families. However, percentage of boys giving no help declined rapidly after the age 12, and by age 17 nearly all boys in the sample households helped out, at least occasionally. Hence work participation rates for children increase after the age 12.

**Magnitude of Girl Child Worker**

The definition employed to measure the magnitude of working children greatly determines the magnitude of a girl child worker. Girls are mainly engaged in unpaid household chores that in the official definition are not counted as ‘work’. This is borne out from the fact that from Population Census and NSS the estimates on girl child labour is lower.

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\(^4\) This study takes into account (a) children productively employed as agricultural labourers in cultivation and in animal grazing and (b) children doing household work which is non-remunerative, to measure the incidence of child labour.
than the boys (Jayraj: 1995, Srikantan: 1991, Deshpande: 2002, Kannan: 2002). But when we include the ‘nowhere children’, the incidence of child labour/or child deprivation increases significantly for girls and their incidence becomes higher than the boys. Hence, the incidence of children who are neither in school nor in the work force is higher for girls than for boys. Hence, there is a possibility that the conventional definition of a worker is conducive to gross underestimation of magnitude of child labour especially for girl child. In 1991, at an all India level about 51% of nowhere children were girls as against 37.7% of boys (Kannan: 2002). The level of girl ‘nowhere’ child is not uniformly distributed across the states. Highest proportion of girl children who are not found in school and not in the work force is found in Bihar (71 percent). Jayraj and Subramanian (2002) indicate that in Tamil Nadu, the number of working girl children was higher than the boys when the number of children who were not going to school nor were listed as workers were estimated. Girl children form the overwhelming bulk of ‘invisible’ workers. Kannan (2002) in his study on Kerala indicates that deprived children are more in proportion for girls (54.1%) than for boys (43%). Bhattacharya, Mathur and Dash (2002) similarly found a higher proportion of female ‘nowhere’ children in rural Rajasthan. The percentage of girl children in the age-group 5-14 years was 60% in the nineties. The study indicates that the WPR of boys in the age group 5-14 years has come down from 5.98% to 5.19% and that for girls have gone up from 5.26% to 7.88 per cent in the State during 1981-91.

Micro-studies strengthen the contention that a higher percentage of girls work than boys that is not captured in the official definition. Vlasoff (1980) in his primary study in rural Maharashtra indicated that the length of economic participation of rural girls increased earlier than the boys. That is, girls under 12 years, on an average in a year worked more than the boys.5 Similarly a village level study by Skoufias (1994) indicates that in rural Andhra Pradesh and Maharashtra, irrespective of age there were persistent differences in the time use between boys and girls. Girls were more likely to participate in labour market and home activities, whereas boys were more likely to be in school. Similarly, Leclercq (2002), finds that in rural North India work is the primary occupation for girls: (9.4%) and boys (4.2%) aged 5 to 14. Hence, in Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh, a higher proportion of girls are involved work than the boys. Antony (2002), in his primary study on

5 Girls work included household chores, farm work etc. which are not generally considered gainful activities (Vlasoff, 1980).
six districts of Bihar, found out that 70% of all working children are engaged in household work and girls mostly do this work. Ramchandaran and Karan (2002) in their study in tribal region of Jharkhand report that cutting across caste and class difference the girl child in rural areas is discriminated against in terms of work. In the age group 5-9 years, 3% of the boys work, while the corresponding figure for girls is 8.5%. In the age group, 10-14 years, 21.5% of boys are engaged work as against 49% of girls in the same age group. In the SC and ST groups, proportion of girl child worker is three to six-fold higher than that of male child worker. Similarly Nangia and Khan (2002) report in their study based on NFHS data, that in districts of Andhra Pradesh and Madhya Pradesh, work participation rates for female are higher than for male children.

From the above review on the magnitude of child labour it is apparent that there are divergent viewpoints on the definition of child labour. Broadly, the perspectives through which one can measure the number of working children are:

a. **The official definition:** Children who work only in economically productive activity are counted as child labour.

b. **The Liberal Definition:** Census estimate is short of what would be a minimal estimate according to the other perspective. There is a large proportion of children (especially girls) who are not accounted for in labour statistics but also not found going to school. Children not in school system are assumed to be working in activities that are necessary inputs in the economic management of the household. The government statistics do not account for these children. The liberal definition considers all these as 'deprived' and includes them in the realm of child labour.

**Participation of Children in Economic Activities**

In India, 90% of children work in the rural areas. Based on the Census data the three main industrial categories - cultivation, agricultural labour and forestry and fisheries account for 85% of the child labour. Out of this proportion more than half of the children between the age group 5-14 years are employed as agricultural labourers while a lesser proportion are engaged in their own farms as cultivators. (Chaudhri: 1997, Deshpande: 2002, Thorat and Sadana: 2003). There are variations in the participation in economic activities between boys and girls. According to 1991 census a higher proportion of girls were working as wage workers in agriculture than boys. The participation in the household and non-household
industry was also higher for girls than boys, while boys were more likely to be engaged in
cultivation on their farms and livestock rearing in the farm sector in rural areas. Further, data
indicates that a higher proportion of boys work in construction, trade and commerce,
transport and services of the rural non-farm sector, than the girls (Deshpande: 2002). NSS
reports that incidence of child labour between 5-9 age group is very less, the bulk of working
children are concentrated in the age-group 10-14 years, with most of it occurring in the wage
labour activity (Thorat and Sadana: 2003). According to both i.e., the Census and the NSS, the
proportion of working children as agricultural labourers or wage labourers has been on an
increase while the proportion of children working on their own farms as cultivators has
1997).

Literature on modes of employment of working children is limited at state-level. There are only a handful of studies that have analyze' modes of employment of children
selecting a state of India as a unit of analysis. A study on Tamil Nadu which is based on
Census data, reports that 99% of working children in rural Tamil Nadu are employed in
agricultural labour, cultivation and household industry. NSS data for Tamil Nadu provides a
similar finding and additionally it reports that casual labour is predominant mode of
employment in the farm sector than the non-farm sector in rural Tamil Nadu (Jayraj and
Subramanian: 2002).

Another source of information on the activities of children is the Time Use Survey
(conducted by Department of Statistics), which unlike the other two surveys', reports animal
husbandry as the predominant sector employing children. According to this survey carried
out in Haryana, Madhya Pradesh, Gujarat, Orissa, Tamil Nadu and Meghalaya, reports that in
all these states the predominant economic activity for children in the age-group 6-14 was
animal husbandry followed by collection of fuel wood, water, fodder fruits etc. A higher
proportions of girls than the boys were engaged in this activity. Crop farming was only the
third important economic activity that working children were engaged in. There was no
difference between the proportions of boys as compared to girls in this activity. It is
interesting to note that Haryana with a higher index of economic development than Orissa
had a similar level of participation rate of working children in animal husbandry. In terms of
maximum number of hours spent on an economic activity, boys spent their maximum time in
mining and quarrying implying that many of them are engaged in these activities on a full-
time basis. This is followed by manufacturing, animal grazing and then crop farming. About 18% of children in these states were neither economically active nor enrolled in school. It is reported that these children participate in activities which are not strictly economic in nature but contributes to the economic/family welfare. Of these ‘nowhere’ children, 42% of girls in the age-group 10-14 years were working in household management and maintenance, especially cleaning and upkeep of dwelling followed by cooking food and cleaning utensils. It maybe noted that the gender gap in the time use pattern of boys and girls in the unpaid household work is the highest in Haryana (Hirway: 2002).

In India, the states of Andhra Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Orissa and Rajasthan have high incidence of child labour. A few micro studies have been carried out in these states to understand the predominant form of work that working children are engaged in. Broadly, there are two types of economic activities. In the dry land agricultural regions which cover the states of Andhra Pradesh, Gujarat, Madhya Pradesh and Maharashtra, the nature of work that children are engaged in is predominantly non-formal (unpaid) work. This includes activities such as tending crops in their own farm and animal husbandry. Of the total labour engaged in collection of fuel, fodder, fiber and food items from the CPR’s, 70% are children (Jodha and Singh: 1991; Skoufias: 1994). It is important to mention here that a study in the late nineties in AP reported a higher proportion of children engaged in wage labour than working on their own farm. The earlier studied mentioned were carried out in the eighties. Another study on rural Maharashtra and Karnataka reported that children are predominantly engaged in animal husbandry followed by working on their own farm (Vlasoff: 1980; Kanbargi and Kulkarni: 1991; Shariff: 1991).

In contrast to the engagement of child labour in informal (unpaid) activities in the dryland agriculture states, its engagement in formal (i.e. wage earning) activities is much lower. Of the total wage earners, children constitute only 1% predominantly working in pod-picking process (Jodha and Singh 1991, Skoufias: 1994, Vlasoff: 1980). Similarly in rural Karnataka children spend less time working for wages and more on directly productive work like tending livestock and working on their own farm (Shariff: 1991; Kanbargi and Kulkarni: 1991). Most of the literature acknowledges noticeable differences in the time allocation patterns of boys and girls in these states. In rural Maharashtra, girls had a considerably higher participation rates in formal/labour market activities compared to boys. In addition, it is reported that the participation rates of girls in productive activities within the household is
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consistently higher than those of boys with majority of the girls time devoted to domestic activities as opposed to crop production and animal husbandry activities performed by boys (Skoufias: 1994). In rural Karnataka, though one study does not find any differentials in market work (wage based work) between boys and girls. (Kanbargi and Kulkarni: 1991). Similarly micro-studies carried at village level in states of Bihar, Madhya Pradesh, Rajasthan and West Bengal find wage labour not a dominant work pursued by children. Children are found working predominantly on unpaid agricultural and non-agricultural activities especially in collecting firewood, cow dung for fuel, animal grazing and working as help on their own farm. Boys largely carry on these activities while girls are engaged in domestic duties and household work. In Madhya Pradesh it is reported that a large majority of girls also work as agricultural labourers besides carrying out domestic duties. (Leclercq: 2002, Nangia et al: 2002, Antony: 2002, Ramchandaran and Karan: 2002).

In some parts of India where majority of children work for wages micro-level studies carried out in Orissa, Gujarat, Punjab and Tamil Nadu report that a significant proportion of children are found working primarily as attached/permanent agricultural labourers followed by casual labour. Majority of children working for wages work in agricultural operations like weeding, harvesting, cleaning and sieving. Girls by a higher proportion are engaged in productive household work while the boys work as agricultural labourers, especially in parts of Tamil Nadu and Punjab (Raj and Satpathy: 2002, Nagrajan: 1997).

Hence, from the above review it is clear that empirical studies on the nature of work of children indicate that wage employment in agriculture for children is not a significant phenomenon in majority of the states in India. These micro level empirical studies indicate that predominantly children work on their own farms as helpers or are engaged in animal husbandry. This is reflected at the secondary level through Population Census only for some of the states like Bihar, Karnataka and Maharashtra while for Andhra Pradesh, Madhya Pradesh and Rajasthan it does not. Primary level studies carried out in states of Orissa, Gujarat, Punjab, Tamil Nadu and West Bengal report majority of working children are engaged as wage labourers while a lesser proportion are engaged in unpaid agricultural activities. Interestingly the same finding is available at the secondary level through Population Census and National Sample Survey for all these states.
**Work and Education of Child Labour**

About 5% of working children in India combine work with their studies (Cigno and Rosati: 2001). Studies on the magnitude of working children according to their literacy level and education status are rather limited for the rural India. The researches increasingly have documented that combination of school and work by children is a resultant phenomenon of economic deprivation. A large proportion of children who work and study belong to the households with low per capita income and expenditure (Thorat: 1999, Cigno and Rosati: 2001, Chaudhri and Wilson: 2001, Ray: 2000). Moreover, these children who enter the labour force without leaving school have a higher probability of dropping out and start working at a younger age. NSS data reveals that 18.12% of drop-outs in rural areas preferred to work rather than to continue the studies. Children of schedule castes and tribes are worst affected with their drop-out rates higher than the overall population. Research further indicates that at an all India level, 60% of the drop-outs work in household enterprises while a 40% seek wage employment in the farm and rural non-farm sector. Hence, this type of activity alter by the children after they drop out from schools brings out the compulsion involved in the process (Thorat: 1999).

Micro level studies which are field based are an important source of information on time utilization of children in work and school. These studies give information on literacy and educational level of working children, the nature of activities that the school going children participate in, drop-out rates of these children and plausible causes for drop-out from school. Among the field based studies that provide information on literacy educational level of the working children, the study of Ramchandaran and Karan (2002) on Jharkhand contributes significantly to this issue. They report that among all the working children 78% are illiterate. Among the literates, 17% had studied till the pre-primary level, 3% had studied up to primary level while only 1% had completed primary schooling. None of the working children had attained middle level education. In addition, they also have reported that 100% of the children engaged as non-agricultural labourers were illiterate, followed by 50% illiteracy among those engaged as agricultural labourers and 33.3% as cultivators, 72.2% of children doing household work were illiterate and these were also the least in proportion who...

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6 Ray also reported that rural children from female headed households have a higher probability of combining work with education, or have a lower probability of attending school at all being involved in full-time work.
were enrolled in pre-primary level education. Ogale (1993) reported that in rural Gujarat one-fifth of the working children were illiterate, one-fifth had studied up to middle school and three-fifth had some primary level education. Literature on the nature of work activities of school going children points out that a higher proportion of time is spent by the school going boys on directly productive activities while for girls on household work. Moreover, school going girls on the whole contribute more than the boys in both productive and household work. It is noted that girls in the 12-14 age group put in about 8 hrs a day in household and other productive work\(^7\) (Kanbargi and Kulkarni 1991, Nagrajan: 1997, Antony: 2002).

Children who combine school with work are the most prone to dropt-out of school and become full time labourers. This is especially true in the dry regions of India where the agricultural period is quite short and extends over 3 or 4 months of the monsoon season. To extract maximum benefit from the monsoon season, the peasant attempts to engage all resources available to him in one activity or another. Children including those attending school also have to contribute to the process in different ways.\(^8\) Withdrawal takes place in order to reduce the expenses and to exploit the possible means to supplement low income during drought. The children have to adjust to this erratic environment where the parents sometimes also migrate for employment or cattle grazing to better endowed areas. The net result of frequently interrupted studies is the final stoppage of studies for most of the children. In Madhya Pradesh, it is reported that more than half of districts show a higher drop-out rate at the middle level than the states average. Moreover, the districts that have a higher drop-out rate at middle level of education are the one’s that have a higher incidence of child labour (Prakash: 2002).

Research at micro level indicates that poverty acts as one of the strongest reasons to children taking up work and losing out on studies. Many studies have reached to conclusion that size of land holding, average per capita income, wages earned by parents, value of agriculture implements which are indicators of level of poverty have a negative relation with child dropping out of school. Thus, these variables significantly affect the propensity to drop-out of school for children. Female work input and caste affects school attendance in a

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\(^7\) Directly productive work includes tending to own livestock, working in own farm, on family trade.

\(^8\) Cattle grazing, fodder and fuel gathering, food collection through harvesting of minor crops for self-provisioning are some examples. In some cases they have to support the adult workers by bringing food and water taking care of siblings adversely affects schooling (Kanbargi & Kulkarni 1991).

_Major Determinants of Child Labour_

A number of studies have attempted to explain the reasons for the involvement of children in labour. The studies, which have examined the processes underlying the dynamics of child labour in rural India, have in particular focused on the impact of poverty on children's participation in work. Various aspects underlying the prevalence of child labour have been reviewed in Fyfe (1989), Weiner (1989) and Dingwaney et al. (1988). The importance of poverty figured prominently in the work of Basu and Van (1998) that attributed a crucial role to income and poverty variables. Based on Pakistan data Ray (2000a), Bhalotra (2000) provided evidence to show that household poverty is a significant determinant of wage based child labour employment. Jayraj (1995), Chaudhri and Wilson (2001) and Ray (2000b) also provide evidence to show that household poverty is a significant determinant of wage based child labour employment. Deshpande (2001), in a state level analysis of India, observed a positive relationship between the incidence of poverty and female child work participation in rural area. Duriasamy (1997), Chaudhri (1997), Chaudhri and Wilson (2001), Dev and Ravi (2001) by employing net state domestic product in agriculture and monthly per capita expenditure of households (both proxy variables for poverty levels) in rural areas establish a negative relation with the work participation rates of children. However, some researchers point towards lack of definite evidence on the interlinkage of poverty and child labour. Bhatti (1998), Iftikar (1999) and Lieten (2000), among others, argue that poverty has in itself only a limited role in explaining the incidence of child labour. They have stressed inequality (rather than poverty) in the distribution of income, particularly in the sources of income such as agricultural land.

Some studies have gone beyond the income (or poverty) and have analyzed the impact of various determinants of income level such as land owned by the household and prevailing wage rates. Kanbargi and Kulkarni (1991) and Skoufias (1994) found that in

\(^9\) Micro level studies have been carried out in Rajasthan, Madhya Pradesh, Gujarat, Karnataka, Bihar, Andhra Pradesh and Maharashtra.
households owning less than 10 acres of land had a greater need for productive work of children than in households owning large land holdings. Further, while the results of Rosenzweig and Evenson (1977) and Vemuri and Sastry (1991) indicate an unfavorable impact of the inequality in land distribution on reducing the participation of children in work, Jayraj (1995), Chaudhri and Wilson (2002), Leclercq (2001), and Gumber and Gupta (2002) report the opposite results. Nagrajan (1997) also observed that improvement in holding size does not increase child participation in work. In fact, it increased the participation of the children, particularly of boys, in the school. The aspiration level of boys for education also rises with the size of holding. Further, Nagrajan also found a favorable impact of increased farm income on withdrawal of the child labour from work.

The results related to favourable impact of wage rates are less conflicting. Higher wages of adult male and female generally help to reduce child labour. But there is also an indication in the literature that a higher wage rate for children already working tends to increase their participation. The impact of higher wages on child work varies between boys and girls and also between cultivating and non-cultivating households. In a state level cross-section analysis, Rosenzweig and Evenson (1977) observed that greater access to agriculture land, high agricultural productivity and high (child) wages rate were closely associated with a high participation of children in work. However, a higher male and female wage rate tends to reduce the child participation in work. Vemuri and Sastry (1991) also indicated that higher adult female wage rates generally help to reduce participation of children both in the cultivating and non-cultivating households in rural areas. Skoufias (1994) estimated the determinant of child time allocation in market, home, leisure and schooling activities and observed that changes in the adult or child wage rates appear to have a significant effect on the extent of time allocation in any given activity by children. Higher wages of already working children tend to further induce high work participation. In a state level analysis, Chaudhri and Wilson (2002) observed that the total factor productivity and rural wage rates have a pronounced favourable effect on reducing child labour.

Participation of children in wage work is generally higher from the agricultural labour households. This stems from the fact that these households have high poverty levels. This statement is supported by the evidence found in the studies of Jayraj (1995), Skoufias (1994), Leclercq (2001), Dev and Ravi (2001) which find a positive linkage between proportion of agricultural labourers in total labour and child work participation rates.
Another important determining factor for work participation rates of children is the significance of children’s contribution to household income. Jodha and Singh (1991) and Leclercq (2001) have indicated in their studies that children’s direct contribution to household income constitutes a fraction of adult wages although the days spent by them on agricultural and non-agricultural wage labour is relatively high. Child labour often share the task given to adult workers and are given a lower wage rate than to the adult worker. They further go on to indicate that the indirect contribution of children to the household income generated through their involvement in household work far exceed the direct contribution.

Education and child labour have a strong positive linkage. Adult literacy is observed to have a positive influence in the reduction of child labour. Vemuri and Sastry (1991), Nagrajan (1997), Duriasamy (1997), Leclercq (2001), Dev and Ravi (2001), Rosenzweig and Evenson (1977), and Ray (2000) all indicate this phenomenon. Chaudhri and Wilson (2001) employ enrolment rate at primary level and middle school (a proxy for education) and per child educational expenditure to indicate a negative relation with the incidence of child labour. Leclercq (2001) and Dreze and Kingdon (2001), finds that several elements of school quality improve enrolment, retention and grade attainment, with a large impact of midday meals, especially for girls.

This review of evidence on the causes of child labour in rural India indicates that in the ultimate analysis, it is the income level of the household which matters the most in the decision to push the children to work (particularly the wage base labour). The statistical evidence about the direction of causality, however, is not always clear and straightforward. In general, favorable access to sources of income (measured in terms of indicators like a lower percentage of agricultural labour and less inequality in the distribution of land) does help to reduce child labour. Low proportion of agricultural wage labour, low inequality in landholding and larger farm-size help to improve the access to income, and, thereby, reduce the participation of children in work. However, some studies have also come out with different statistical results and indicate that higher farm size and high proportion of marginal and small holdings, in fact, increases child participation in work, presumably through higher involvement in household enterprise. It is perfectly possible that the increase in farm-size (particularly among the household located at the lower end of the land size distribution) and the number of smaller size of holdings encourage participation of family members including children (as they can not afford to hire outside labour). But this may not be the case among
Introduction

large land size holdings with greater command over land and resulting higher income level. Since these studies do not examine child labour participation rates over the entire spectrum of farm size (exceptions apart) and also do not include the analysis of child labour participation rates for landless and land owning households, the real impact of the farm size variable is not appropriately captured. Hence, due to this methodological problem some of the variables related to land reveal conflicting statistical results. The results related to favorable impact of wage rate are less conflicting. Higher wage of adult males and females generally help to reduce child labour. The impact of higher wages on child work varies between boys and girls and between cultivating and non-cultivating households. There is also indication in the literature that increase in wage rates for already working children tends to increase their participation. The favorable impact of higher adult literacy rate and educational level on child labour is observed in most of the studies. Further improvement in school quality and accessibility augment enrolment, retention and grade attainment.

It is necessary to recognize that some of the problems (or conflicting results) in the statistical exercises of causal analysis of child labour may be due to the methodology used in the estimation of the impact of some variables. For instance, one of the features of the state level (or district level) cross-sectional studies on the determinants of child labour is that most of them have used a single equation approach. There are two limitations of this approach (Fan, Hazell and Thorat: 2000). Firstly many of determinants of child labour, such as income, agricultural productivity, land ownership, wages, employment, etc. are generated from the same economic process and are relatively related. The higher wage rate and employment, or high educational attainment may be generated from the same sources like the high farm size. In other words these variables are endogenous and are affected by common economic processes. It is, therefore, necessary to recognize the inter-linkages and capture the influence of exogenous (or real independent) factors to estimate the magnitude of their impact. Secondly, some of these variables affect the child labour in multiple ways. For example, high agricultural productivity helps to reduce child labour directly through increased income and also indirectly by improving the wages and employment. Similarly the higher expenditure on education and rural infrastructure also help to reduce child labour directly through favourable educational facilities and indirectly through improvement in rural non-farm employment. It is therefore, necessary that these direct and indirect effects are properly captured to estimate the overall impact of income on a child labour participation in work.
Emerging Issues from the Literature Review

To recapitulate, it is evident from the literature available on working children that:

a. Divergent views prevail in defining a ‘working child’. The resultant estimates on the magnitude of child labour vary with the definition of child ‘work’ employed. Official definition measures a child work only in economic activity which is enumerated and is alleged to under-estimate the magnitude of child labour. Researchers define child labour as all those children who are working not only for wages but also in the household which indirectly contribute to its economy. These children, in official statistics, are neither found in the labour pool nor in the school. The estimated magnitude for working children according to this definition increases manifold.

b. The difference that prevails at the definitional level also prevails at the type of work these children engage in. Within the government sources according to population census and national sample survey the predominant form of activity that children are engaged is wage labour, while, time-use survey carried out by department of statistics reports that children in rural India are predominantly engaged in animal husbandry. On the other hand most of the micro level studies (barring a few) indicate that children working for wages in rural parts of India are an extremely limited phenomenon. Most of the children work in household activities which are productive in nature and contributes indirectly to the economy of the household. Gender differentiation comes into play with boys contributing to agriculturally productive work while girls to domestic duties. Some studies at micro level indicate that girls work twice as much as boys. Hence, gender bias in participation in labour force is towards girls.

c. A large proportion of children who work either for wages or in unpaid household productive work, also combine school with their work. These are the children who are prone to drop-out off school and join the labour force early in their life. It is reported that 5% of the children in rural India combine work with study. It is found that usually boys combine work with study but girls only work and do not study. Their work is unpaid and hence, not counted in labour statistics.

d. Poverty, as reflected in the income level, emerges as one of the major determinants of child labour. Farm-size, wage-rates of adults and distribution of land-holdings (as factors of income generation) emerge as important determinant of child labour. Adult literacy rates too emerge out to be important determinant in the studies reviewed.
Significance of this work

Relatively little has been documented with a quantitative assessment of child labour in the rural context, where the activity type and compensation is the outcome of a complex interplay between various social and economic factors. To elucidate, most of the existing studies on child labour in rural areas have firstly tended to pool the sex-wise data for all the social groups of the society. This aggregation prevented the identification of the core-social groups that the child labour belongs to. Secondly, very few studies have been able to identify the differences in the types of work performed by boys and girls. Thirdly, the economic characteristics of the households from which child labour came have not been examined in detail. Moreover, the impact of parental education on the phenomenon of child labour has been largely ignored in the existing studies. Fourth, though identification of the children who are engaged in household chores has been undertaken, but their household characteristics have not been studied at all. These children who are mostly girls, work in household chores and like child labourers do not attend school and hence, enter their adulthood without human capital i.e. education. Similarly the social and economic characteristics of ‘nowhere’ children have also not been identified in the existing literature. Thus, it is hard to say whether deprivation, (which is in the form of lack of education), is distress induced or it is a non-distress induced phenomenon, involving factors other than poverty.

In the present study, child labour has been examined at the aggregated as well as at the disaggregated levels by social groups. The nature and type of work that boys and girls undertake in different social groups has been studied in detail. Further, the household characteristics of the children whose work is directly productive and those children whose work is indirectly productive has been analyzed in detail. The social and economic characteristics of households of ‘nowhere’ children are also analyzed in the present study. These household characteristics include land owned, occupation pursued, poverty level, family size and education of the head of the households.

In this study an attempt has been made to systematically estimate the magnitude of child labour, child work and ‘nowhere’ children. Finally, building on previous studies of determinant of child labour in rural India, we have attempted to identify the causes by capturing the direct and the indirect impact of relevant economic factors on the incidence of child labour. Hence, the aim of this study is to identify the core groups that these children belong to. In the end to substantiate the results obtained in the analysis, estimates have been
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attempted on the basis of logit model which presents us with the likelihood of a child being in school, in labour force, in household chores or ‘nowhere’ given the social and economic characteristics of the household that the child belongs to.

Objectives

This study is focused on analysing the patterns and causes of child labour in agriculture and non-farm activities in rural areas of Haryana. The main objectives of the study are:

• To make a quantitative estimate of the magnitude of child labour by using various alternative concepts of child labour at the aggregated level.

• To estimate the magnitude of child labour among the social groups (schedule caste, other backward caste and ‘other’), and by gender (male and female).

• To study the types of economic activities in which the child labourers are engaged.

• To study the economic and social characteristics of the households of the child labour, in terms of their land ownership, occupation e.g. wage labour, self employed, regular salaried and others, and educational and social background.

• To study the linkages of child labour and poverty, and the characteristics of child labour households, at the aggregated level and by social groups. The characteristics of poor households include land ownership background and household types.

• To study the linkages between child labour and education, in term of school attendance, educational level, drop-out, and the reasons for non-attendance and drop-out.

• To study the determinants of child labour focusing mainly on the income, landholding size, household types, education, social background and other factors. The determinants of child schooling have also been examined.

• Finally, based on the results to suggest the policy measures to curb the incidence of child labour in rural areas.
Research Questions and Hypotheses

The magnitude and characteristics of child labour are examined in terms of important questions while in case of determinants and causal factors of child labour some hypotheses have been developed. The research questions are:

- Who are the child workers, and what are the characteristics of their households and the causes for being involved in work.
- Who are 'nowhere' children and what are their household characteristics and the causes for being neither in school nor in work.
- What are the economic activities child labourers are engaged in rural areas of Haryana.
- What is the inter-linkage between poverty-school drop out & child labour. One type of drop-out is poverty induced which leads to child labour. Another category of drop-out may not be poverty induced but due to other factors. This might not lead to child labour but child work. This has a gender dimension.

Hypotheses

- Hypotheses on child labour and their determinants: The incidence of child labour is closely associated with income, land owned by the household, livelihood in terms of household type, the education of the parents and the social background of the household. It is hypothesized that:
  - Higher incidence of child labour is positively associated with landlessness/small size of landholding.
  - Higher incidence of child labour is positively associated with the wage labour households and lower income level of the household.
  - Higher incidence of child labour is negatively associated with households dependent on self-employment i.e. self-employed households will have a lower incidence of child labour.
  - Higher incidence of child labour is positively associated with lower level of education of the parents.
  - Higher incidence of child labour is positively associated with the caste background of the household.
Introduction

- **Hypotheses on child work and their determinants:**
  
  - High incidence of child work (household chores) is closely associated with landlessness, marginal landholding size and lower educational background.
  
  - High incidence of child work is also positively associated with cultivating households.
  
  - High incidence of child work is positively associated with households of all social groups.
  
  - Though child work may be closely associated with economically vulnerable households such as landless and wage labour but is also found among large landowning cultivating households indicating ubiquitous nature of child work in rural areas.

- **Hypotheses on 'nowhere' children and their determinants:**

  The incidence of 'nowhere' children is closely associated with: income, land owned by the household, livelihood in terms of household type, the education of the parents, gender of the child and the social background of the household.

  - A higher incidence of 'nowhere' children is observed among boys as compared to girls.
  
  - High incidence of 'nowhere' children is positively associated with all social group households.
  
  - Higher incidence of 'nowhere' children is positively associated with landlessness and small size of land holding, wage labour households and lower income level of the household.
  
  - Higher incidence of 'nowhere' children is negatively associated with self-employed households.

**Data Source**

To generate estimates of child labour, one of the most comprehensive and widely recognised sources of data is the one collected by the National Sample Survey Organisation. The NSSO was set up in the year 1950 and since then has been collecting data at both state and national levels. Since its inception it has conducted annual surveys using a small sample,
till about 1974. However, since 1972-73 NSSO started conducting large sample based quinquennial surveys every five years. Since, then these five yearly surveys have been conducted in 1977-78 (32nd round), 1983 (30th round), 1987-88 (43rd round), 1993-94 (50th round) and 1999-2000 (55th round). These sample surveys ascertain the consumption expenditure and employment and unemployment status of the population along with information on other relevant variables. For the present study the employment and unemployment survey conducted in 1999-2000 has been used. Data in the survey is furnished at the household as well as at the individual level. The estimated household size and population distribution by gender (1999-2000 survey) is as under:

<table>
<thead>
<tr>
<th>Table (1.1)</th>
<th>Data Base: NSS, 55th Round (1999-2000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural Haryana</td>
</tr>
<tr>
<td>Number of Households</td>
<td>3,356,884</td>
</tr>
<tr>
<td>Number of Persons</td>
<td>18,458,755</td>
</tr>
<tr>
<td>Children in the age (5-14)</td>
<td>4,915,177</td>
</tr>
<tr>
<td>Children in the age (10-14)</td>
<td>2,622,449</td>
</tr>
</tbody>
</table>

The survey not only provides information on the employment status and the industry of employment and the occupation pursued but also information related to:

- Land holding sizes (landless, marginal, small, medium, large and very large). Table 1.2 and 1.4 presents the estimated number of children in 5-9 and 10-14 age groups by landholding categories.

- Status of employment across household type (self employed/helper to self employed, casual labourers, regular salaried and others). Table 1.3 and 1.5 presents the estimated number of children in 5-9 and 10-14 age groups by household type.

- MPCE classes across households.

10 The "Household Types" of the surveyed households are classified by the NSS on the basis of the reported major source of income or livelihood during the last year for the household as a whole. 'The category of "others" covers two types of earnings, namely (a) those households whose major source of income arises mostly from contractual employment with regular wages and salaries and (b) those who earn their living from non-labour assets without direct participation in gainful economic activity. The latter category of non-participatory earnings (as distinct from participatory earnings in (a) may include current returns from ownership of immovable assets (land or real estate) or from past financial investments, or receipts from public or private transfers (including pension and remittances). http://www.cgedse.org/pdf/work118.pdf#search='povertyestimates. India', p3.
Introduction

- Educational levels; (illiterates, primary educated, secondary and higher secondary, graduate and above).
- Demographic features such as social background of the individual’s, sex ratio and number of children per household. Table 1.1 presents the estimated size of population by social group.

Methodology

Definition of Child Labour: In this study, the incidence of child labour is measured separately based on the following concepts which are categorized under three segments:

<table>
<thead>
<tr>
<th>Child Labour Segment</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>This includes all children who are employed in economically gainful activities on a full time (UPS) and part-time basis (SS). The economic activities pursued on a full-time and part-time basis are classified into:</td>
<td></td>
</tr>
<tr>
<td>1. Worked in Household Enterprise as a helper.</td>
<td></td>
</tr>
<tr>
<td>2. Worked as Regular Salaried/Wage Employee.</td>
<td></td>
</tr>
<tr>
<td>3. Worked as Casual Wage Labourer in public works.</td>
<td></td>
</tr>
<tr>
<td>4. Worked as Casual labourer in other types of work.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Child Work Segment</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>This includes all children who work in household (domestic) chores which are non-economic in nature and the produce is for household use.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>'Nowhere' Children</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>This segment includes all those children who are neither in school nor they are gainfully employed and nor do they work in household chores.</td>
<td></td>
</tr>
</tbody>
</table>

Total Child Labour | This segment is a summation of children working as labourers, children working in domestic duties and 'nowhere' children.

The NSS has adopted three different approaches of work or employment based on the activities pursued by the persons during specified reference period. The three approaches are based on the reference period used in assigning the working status. In this study the analysis of the magnitude of child labour is based on the Usual Principal Status, Usual Subsidiary Status and an addition of both the status i.e. Usual Principal and Subsidiary Status (UPSS) which is the following: The Usual Status (US) is assigned by taking a reference period of 365 days preceding the date of survey. Usual status approach is further divided into two categories.

(a) Usual Principal Status – A person who is engaged relatively for a longer time during the reference period of 365 days in any one or more work activities is considered as principal status worker.
(b) Usual Subsidiary Status – A person who pursued some gainful activity in a subsidiary capacity is considered to be a subsidiary status worker.

Participation of children working in the economic activity is available for the agriculture and the non-agriculture sectors. The specific industry of work is obtained from the National Industrial Classification of 1998 and the specific occupation from the National Classification of Occupations-1968. The detailed activity categories of employed persons included under principal usual status and usual principal and subsidiary status are as follow:

Usual Activity (Principal Status) and its Activity Categories:

<table>
<thead>
<tr>
<th>Activity Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Code)</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Worked in Household enterprise (self employed): own account worker.</td>
</tr>
<tr>
<td>12</td>
<td>Worked in Household enterprise (self employed): employer.</td>
</tr>
<tr>
<td>21</td>
<td>Worked as helper in Household enterprise (unpaid family worker)</td>
</tr>
<tr>
<td>31</td>
<td>Worked as regular salaried/wage employee</td>
</tr>
<tr>
<td>41</td>
<td>Worked as casual wage labour in public works</td>
</tr>
<tr>
<td>51</td>
<td>Worked as casual wage labour in other types of work</td>
</tr>
<tr>
<td>81</td>
<td>Sought or seeking/available for work (Unemployed)</td>
</tr>
<tr>
<td>91</td>
<td>Attended educational institution–91</td>
</tr>
<tr>
<td>92</td>
<td>Attended domestic duties only.</td>
</tr>
<tr>
<td>93</td>
<td>Attended domestic duties &amp; was also engaged in free collection of goods (vegetables, roots, fire-wood, cattle feed, etc.), sewing, tailoring, weaving, etc. for household use.</td>
</tr>
<tr>
<td>94</td>
<td>Rentiers, pensioners, remittance recipients, etc.</td>
</tr>
<tr>
<td>95</td>
<td>Not able to work due to disability.</td>
</tr>
<tr>
<td>96</td>
<td>Beggars, prostitutes.</td>
</tr>
<tr>
<td>97</td>
<td>Others.</td>
</tr>
<tr>
<td>11-97</td>
<td>Total Population</td>
</tr>
</tbody>
</table>


- The magnitude of child labour has been examined for three categories of social groups:
  - Schedule castes
  - Other Backward Castes
  - Others (Non SC/ST/OBC)

- Furthermore, the magnitude of child labour has been examined by gender i.e. boys and girls.
The incidence of child labour has also been analyzed by age groups (5-9 and 10-14 years) separately.

Poverty Ratio: Incidence of poverty has been calculated as the number of persons living below the state specific poverty line as a percentage of the total state population. The official poverty line for the rural sector of Haryana is a MPCE of Rs. 362.81.

Statistical Techniques: The following are the statistical techniques have been employed in this study to measure:

- **Magnitude of Child labour**: Work Participation Rate (WPR) for Children (Gender-wise) includes those children in the age group 5-9 and 10-14 which fall in the activity categories with codes from 11 to 51.

  \[
  WPR_{g(i)} = \frac{W_{g(i)}}{P_{g(i)}} \times 100
  \]

  Where
  
  - WPR_{g(i)} = Work Participation Rate of gender ‘g’ in segment (i)
  - W_{g(i)} = Workforce of gender ‘g’ in segment (i)
  - P_{g(i)} = Population of gender ‘g’ in segment (i)
  - (i) = Year under consideration

- **Magnitude of Child Work** has been measured as the ratio of the working children in household chores to the total number of children. Working children include those categories of children who fall in the activity categories (domestic duties) with codes 91, 92 and 93.

  \[
  WPR_{g(i)} = \frac{W_{g(i)}}{P_{g(i)}} \times 100
  \]

  Where
  
  - WPR_{g(i)} = Work Participation Rate in domestic duties of gender ‘g’ in segment (i)
  - W_{g(i)} = Workforce of gender ‘g’ in segment (i)
  - P_{g(i)} = Population of gender ‘g’ in segment (i)
  - (i) = Year under consideration
• *Magnitude of ‘Nowhere’ Children* has been measured by taking the ratio of those children who fall in the activity category of 97(*Others*) to the total number of children. This category of children neither fall in 11 to 51 activity categories (workers), nor in 91 to 93 activity categories (domestic duties) nor in the activity category of 91 (school going children).

• Further the incidence of child labour, child domestic workers and ‘nowhere’ children across various economic, social and demographic categories for different activity status have been calculated using the SPSS package by generating various cross classifications.

• In the end a logistic regression exercise has been conducted to ascertain the odds of a child working given his/her economic and social background.

The basic form of the logistic function is

\[
P = \frac{1}{1 + e^{-z}}
\]

Here \( Z \) is the predictor variable and \( e \) is the natural logarithm equal to 2.71828... An alternative form of this equation is

\[
P = \frac{1}{1 + e^{z}} = \frac{\exp (z)}{1 + \exp (z)}
\]

Where \( \exp (z) \) is another way of writing \( e^z \). When \( Z \) becomes infinitely negative, \( e^z \) becomes infinitely large, so that \( P \) approaches 0. When \( Z \) becomes infinitely positive, \( e^z \) becomes infinitely small, so that \( P \) approaches unity.

Given, \( P = \frac{1}{1 + e^z} \) then \( \frac{P}{1 - P} = e^z \)

Taking natural logs on both sides, we get

\[
\log \frac{P}{1 - P} = z
\]
The quantity \( \frac{p}{1-p} \) is called the “odds” and \( \log \left( \frac{p}{(1-p)} \right) \) is called the log odds or the logit of \( P \). Thus \( \text{odds} = \frac{p}{1-p} = \Omega \).

**Geographical Personality of the Study Area**

The present study pertains to the rural areas of Haryana State, located in north-western part of India between 27°39'0" and 30°55'5" North latitudes and 74°27'8" to 77°36'5" East longitudes (Fig. 1.1). The State, presently divided into nineteen districts, was carved out from composite Punjab on 1st November 1966 under ‘Punjab Reorganization Act, 1966’. It covers a geographical area of 44212 Km², and is surrounded by Himachal Pradesh in north, Uttar Pradesh and Delhi in the east, Rajasthan in the south and the south-west, and Chandigarh and Punjab in the north-west. Agriculture is the predominant sector of economy in Haryana and it is one of the prosperous states of India. The rationale for choice of Haryana as the study area was to see whether the economic prosperity of the state has reflected in the social prosperity. This state is marked by a very high proportion of area under agriculture (82 percent) and a high cropping intensity (166 percent). This State is also characterized by diverse physical features as well as soil and climatic conditions, and hence can be divided into four macro-ecological regions (Jauhari 1971; Government of India 1988):

- **Siwalik,**
- **Eastern Haryana,**
- **Western Haryana and**
- **Aravalli.**

Major geographical characteristics of these regions can be summarized under following heads:

**The Siwalik Region**

The Siwalik region comprises Ambala, Panchkula and Yamunanagar districts of the state. It has sharply rising hills and rolling plains in the foothills of the Siwalik ranges. The soils are light loam (bet), piedmont (ghar and kandi) and Siwalik (pahar).
HARYANA

Fig 1. i

Plate 1
Introduction

The Eastern Haryana Plains

This ecological region covers the districts of Kurukshetra, Kaithal, Karnal, Panipat, Jind, Rohtak, Jhajjar and Sonipat. It is a part of the Indo-Gangetic plain and is formed by the deposition of alluvial sediments brought by rivers, named Ghaggar, Markanda, Yamuna etc. The soils of this region are loam (bhangar and nardak), silty loam (khadar, bet and naili), coarse loam (dahar and cheknote) and relatively sandy loam type.

The Western Haryana Plains

The Western Haryana plains consist of Sirsa, Fatehabad, Hisar and Bhiwani districts, and geographically known as Bhiwani Bagar. The region is mainly an alluvial plain dotted with sand dunes of various shapes and sizes. It has semi-arid climate, and sandy, soft loam and silty clay soils.

The Aravalli

This region includes Gurgaon, Faridabad, Rewari and Mahendragarh districts. It is represented by low hills of the Aravalli range, interspersed with sand dunes depicting the aeolian topography. The region has semi-arid climate and light (particularly sandy loam and sand (bagar) and medium soils i.e. light loam (seoti), loam (bangar and nadrak) and coarse loam (dahar and cheknote).

Structure of the Study

The present study has been divided into eight chapters. Chapter one is the introduction with the literature review and deals with the definitional aspects of working children, objectives, hypothesis data source and methodology, along with the geographical personality of the study area. Second chapter has been devoted to examine the socio-economic characteristics of population in Haryana. Magnitude of child labour, child work and 'nowhere' children according to social groups as well as the type of economic activities which the child labourers participate in rural areas of Haryana has been presented in chapter three. The social and economic household characteristics of the child labourers, child workers and 'nowhere' children have been examined in chapter four. Level of parent's education of these three categories of children has also been examined in chapter four. In chapter five, an attempt to understand the link between poverty of the household and incidence of child labour, child work and 'nowhere' children has been undertaken. This chapter also examines
the differences in the nature of work by children from poor vis-à-vis non-poor households and analyses the 'reasons for working' by the children who are in the work force. Chapter six has been devoted to examine the 'poverty-school drop-out-child labour nexus' and to undertake a comparative analysis of this phenomenon across social groups. In chapter seven logistic regression analysis has been presented that gives the odds of a child being in the labour force, in household chores and in school given the variations in the social groups, land size holding, livelihood categories, poverty level and the education of the family head. And the last chapter (eight) includes the summary, conclusion and policy implications of the study.