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The Determinants of child labour in India

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Abstract - Child labour is one of the problems that prevails in India. Childhood is a period of school-learning, of recreation, of physical, mental and social development, and not primarily of income bearing work. For the present study, the employment and unemployment survey conducted in 1993-94, 1999-2000, 2004-05, and 2011-12 has been used. It has been found that Incidence of child labourers has reduced from 6.5% to 1.5% during 1993-94 to 2011-12. The determinants has statistically significant impact on incidences of chila labour in India.

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INTRODUCTION

The rise in India's growth in output and employed has been largely associated with the kind of labour market that is informal in nature. Child labour is a complex problem that is basically rooted in poverty. The elimination of child labour is a priority and is being implemented at the grass roots level in India. A huge number of non-governmental and voluntary organizations are involved in this process along with national and international organizations. Child Labour abolition has become part of developmental process at National and International level. Still, in this modern world, social issues like child labour are highest in third world countries including India. Child Labour has directly linked with poverty, health, education, adult unemployment, human development and over all development of the society (Skoufias; 1994),

In India incidences of child labour in 1993-94 was 6.5 %, 4.4% in 1999-00, 3.4% in 2004-05, and 1.5% in 2011-12. Agriculture and allied activities were the source of income of more than half of population of child labourers and this is true for 1993-94 to 2004-05, and this proportion slightly declined by 2011-12.

LITERATURE REVIEW

Children whose fathers are self employed are the least exposed to income shocks, while daily wage labour yields very uncertain earnings. Participation of child labour as daily wage work is generally higher from agricultural labour households. This statement is supported by the evidence found in studies of Jayraj (1995), Skoufias (1994), Leclereq (2001), Dev and Ravi (2001) which established positive linkages between proportion of agricultural labourers in total labour and incidence of child labour. Hence, it becomes imperative to understand and examine the economic, social and educational background of the households that these working children belong to.

Many studies have attempted to explain the reasons for the involvement of children in work. These studies have examined the processes underlying the dynamics of child labour in India, and have in focused specially on the impact of poverty on children's participation in work. Various aspects underlying the prevalence of child labour have been reviewed. In the work of Basu and Van (1998) captured the importance of poverty figured that attributed a crucial role to income and poverty variables. On the basis of Pakistan data Ray (2000a), Bhalotra (2000) provided evidence to show that household poverty is a significant determinant of wage based child labour employment. Evidence provided by Jayraj (1995), Chaudhri and Wilson (2001) and Ray (2000b) also showed 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 female child work participation and incidence of poverty 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 found a negative relation with the work participation rates of children. However, some researchers pointed towards lack of definite evidence on the inter-linkage of poverty and child labour. Bhatty (1998), and Lieten (2000), argued 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) variable and have analyzed the impact of various determinants of income level such as prevailing wage rates and land owned by the household. Kanbargi and Kulkarni (1991) and Skoufias (1994) in their studies found that in households owning less than 10 acres of land had a

greater need for productive work of children than in households owning large land holdings. But, Jayraj (1995), Chaudhri and Wilson (2002), Leclercq (2001), and Gumber and Gupta (2002) reported 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.

Another important determining factor for work participation rates of children is the significance of children's contribution to household income. Leclercq (2001) have indicated in their study that children's direct contribution to household income constituted a fraction of adult wages although the days spent by them on agricultural and non-agricultural wage labour was 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 indicated 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. Nagrajan (1997), Duriasamy (1997), Leclercq (2001), and Ray (2000) all indicated this phenomenon. According to Chaudhri, children's enrolment rate at primary level and middle school (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), found that several elements of school quality improve enrollment, and grade attainment, with a large impact of mid-day meals, especially for girls.

This review of evidence on the causes of child labour in rural India indicated that 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 is not always clear and straight forward. Although, 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 reduces the participation of children in work. In fact, child participation in work is increases presumably through higher involvement in household enterprise. It is 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 cannot afford to hire outside labour). But this may not be the case among 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 (with some exceptions) and also do not include the analysis of child labour participation rates for landless and land owning households. Perhaps certain methodological problem some of the variables related to land reveals conflicting statistical results. 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 (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. Therefore, it is 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. Therefore, it is 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

It is evident from the literature available on working children that:

a) The differences that prevail 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. 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 it 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.

b) Poverty, as reflected in the income level, emerges as one of the major determinants of child labour. Farm-size 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.

OBJECTIVES

Based on the issues discussed and review of literature, the present study focuses on the following objectives. The specific objectives of the study are as follows:

- To analyse the determinants of child labour in India.

RESEARCH QUESTION

Based on reviewing the literature research questions arises are:

- What are the factors responsible for children being involved in workforce in India?

HYPOTHESES

- Incidence of child labour is negatively associated with size of landholding.
- Incidence of child labour is positively associated with the households involved in agriculture and allied activities.
- Incidence of child labour is positively associated with illiterate head of the households.
- Incidence of child labour is negatively associated with income of the head of the households.
- Incidence of child labour is varies with the caste background of the household.

DATA SOURCES AND METHODOLOGY

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 in starting, it has conducted annual surveys using a small sample till about 1974. However, since 1972-73 NSSO started conducting large sample based Quinquennial surveys on employment and unemployment situation in India every five years. Since, then these five yearly surveys have been conducted in 1977-78 (32^{nd}round), 1983 (38^{th}round), 1987-88 (43th round), 1993-94 (50^{th}round) and 1999-2000 (55th round), 2004-05 (61^{st}round), and 2011-12 (68^{th}round). For the present study, the employment and unemployment survey conducted in 1993-94, 1999-2000, 2004-05, and 2011-12 has been used. Data in the survey is furnished at the household as well as at the individual level. Logit Model has been used in this study to analyse the variables which influence children to get into workforce during period (1993-94 to 2011-12).

Importantly, this paper is also devoted to examine the economic background of the head of the households of child labourers (under 5-14 age group) and to examine about the determinants that are responsible for children to employed in labour work. Thus, the main objective of this chapter is to examine the strength of relationships between child labour and the following characteristics of their head of the households:

1. Economic position of the households, including size of landholdings and the nature of work that the household is engaged in.
2. Educational background of the head of the household of child labour (5-14 age group), and
3. Poverty Ratio of the head of the household of child labour (5-14 age group).

In the present study, child labour has been examined at the state level by gender, sector, and social groups. The nature and type of work that boys and girls undertake in different economic activities has been studied in detail. Further, the household characteristics of the children whose work is directly productive has been analyzed in detail. These household characteristics include land owned, occupation pursued, poverty level, and education of head of the households. In this study an attempt has been made to systematically estimate the incidence of child labour at the state level. Finally, building on previous studies on determinants of child labour in 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. This study has attempted to examine child labour at state level, this study focused only on 15 major states. They are Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Jammu and Kashmir,

Karnataka, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal.

IMPORTANCE OF THE WORK

Relatively little has been documented with a quantitative assessment of child labour, where the activity type and compensation is the outcome of a complex interplay between various social and economic factors. To simplify, most of the existing studies on child labour 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. 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.

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The model

The social and economic characteristics of head of the households of the child labourers have been examined in chapter four and the results of Logit Model has also presented in the same chapter that gives the factor that responsible behind children being involved in child labour. And the last chapter includes the summary, conclusions and policy implications of this study.

Logit Model has been used in this study to analyse the variables which influence children to get into workforce during period (1993-94 to 2011-12). We used Logit model in this study because we have dichotomous dependent variable that is child labour (1- participation in any economic activities, 0 otherwise) and we applied Logistic Regression for the year 1993-94, 1999-00, 2004-05, and 2011-12 separately. Hence, we have multiple linear regression equation in which we have one independent variable as child labour and five explanatory variables.

Size of landholdings

In order to facilitate the understanding of the land ownership pattern within each of the major state.The land holding categories are as under:

Landholding Categories	Land owned (ha)
Landless	No Land
Marginal	0.001-1.0
Small	1.001-2.0
Semi-medium	2.001-4.0
Medium	4.001-10.0
Large	10.01 and above

Source: NSS- land and livestock holding Survey-2013

At the all-India level, incidence of child labourers reported 6.5% in 1993-94, 4.4% in 1999-00, 3.4% in 2004-05, and 1.5% in 2011-12This table also showedincidence of child labourers across major state in India during 1993-94 to 2011-12. Andhra Pradesh showed highest incidences of child labour during 1993-94 to 1999-00 and,on the other hand, Uttar Pradesh registered highest incidences of child labour during 2004-05 to 2011-12. And, Haryana showedlowest incidence of child labour during 1993-94 to 2011-12 except in the year 2004-05. Tamil Nadu captured lowest incidences of child labour (1.5%) during 2004-05 (Table 1).

Table 1: Number of child population and child labour during 1993-94 to 2011-12

Years	Total population of Children (in Millions)	Number of Child labour (in Millions)	Number of Male Child labour (in Millions)	Number of Female Child labour (in Millions)	Incidence of working children = (No. of children 5-14 age group)/Total number of children (5-14 age group)*100
	175	11.3	6.16	5.19	6.5
1999-00	206	9.5	5.04	4.43	4.4
2004-05	207	6.9	3.68	3.25	3.4
2011-12	221	3.1	3.23	1.88	1.5

Source: NSS- Employment and unemployment survey report, 1993-94, 1999-00, 2004-05, and

2011-12. Note: the above table is estimated under 5-14 age group.

Table 2: Incidences of child labour to total child population in India (under 5-14 age group), 1993-94 to 2011-12.(Per Cent)

States	1993-94	1999-00	2004-05	2011-12
Andhra Pradesh	12.1	10.3	6.2	1.6
Assam	2.6	2.6	1.8	0.5
Bihar	2.7	2.3	1.6	1.1
Gujarat	3.3	4.8	2.5	1.7
Haryana	2.5	1.4	1.7	0.2
Jammu and Kashmir	5.6	1.6	2.8	0.8
Karnataka	9.3	6.8	4.5	1.2
Madhya Pradesh	6.0	4.4	3.3	0.7
Maharashtra	4.5	3.6	3.4	1.1
Orissa	6.2	4.0	4.9	1.4
Punjab	2.5	2.9	1.7	1.0
Rajasthan	10.3	7.9	4.9	1.4
Tamil Nadu	7.8	3.8	1.5	0.3
Uttar Pradesh	4.1	3.0	3.9	2.1
West Bengal	4.1	4.4	3.5	3.2
India	6.5	4.4	3.4	1.5

Source: Calculated by unit level NSS data - employment and unemployment survey, 1993-94 to 2011-12

Overall analysis of Table 2 reported that incidences of child labourers have declined at national as well as at state level during 1993-94 to 2011-12. This drastic changed in the incidence of child labourers might be due to increase in enrollment of children in schooling that might be possible by successful implementation of "The Right of Children to Free and Compulsory Education (RTE) Act, 2009"[1]- amended in 2012, and "Child labour (Prohibition and Regulation) Act, 1986"[2] - amended in 2012, this act prohibits children under 14 age group from working in any occupation except their family business.

Determinates of participation of child labour in economic activities

To get a quantitative assessment of the incidence of child labour, logistic regression was used because the y-variable (Child labour) is categorical and dichotomous(1- participation in any economic activities, 0 otherwise), linear regression was not an option as the explanatory variables are also categorical, and logistic regression is ' better suited to such a situation, with the outcome being expressed in "odds ratios" rather than predicted values. Correspondingly, while the value of a particular variable like social group may not directly imply the incidence of child labour, it can be seen from some data analysis that, among working children, the probability of the family belonging to a particular social group is much higher than another. This result is encapsulated in the odds ratios that will be provided by the logistic regression. A logistic regression exercise has therefore been undertaken to ascertain the following:

- To obtain the odds of a child being in the work force, given the variations in the social groups, landholding size, types of economic activities of the head of the household, poverty level and educational level of the head of the household.

This section examines the logistic regression output that gives us the odds of a child being in the work force, regressed individual and household socio-economic characteristics.

The aim of this section is to analyse the odds of children being in the work force given the variation in the social groups, landholding size, economic activities of head of the household, educational levels, and poverty level of the head of the household from 1993-94 to 2011-12.

The equation of logit model is:

$$Y_i = \beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+u_i$$

Where:

Y_i: Child labour (1- participation in any economic activities, 0 otherwise)

β_0 :Intercept

β_1 to β_5 : slop coefficients of their respective explanatory variables (X_1 to X_5)

X_1 : Social group

[1] http://mhrd.gov.in/rte Under this act, every child has a right to full time elementary education of satisfactory and equitable quality in a formal school which satisfies certain essential norms and standards.

[2] http://www.childlineindia.org.in/child-labour-prohibition-and-regulation-act-1986.htm

X_2 :Educational background of head of the households of child labour.

X_3:Employment status (by Economic activity) of head of the households of child labour.

X_4 : Land holdings

X_5 : Income level on the basis of MPCE of head of the households of child labour.

u_i: Error term.

Table 3 presents the parameter estimates of logit regression of a child's participation in an economic activity on a selection of demographic and socio-economic characteristics. The estimation was performed on a data set consisting of 85,684observations on children.

Table 3: Results of Logistic regression for the year 1993-94, 1999-00, 2004-05, 2011-12

Child labour	1993-94.	1999-00	2004-05	2011-12
SC/ST: ref category				
OBC	-	0.8595*	0.8380*	0.7934*
		(0.0321)	(0.0373)	(0.0695)
Others	0.7307	0.6418*	0.7446*	0.8346***
	(0.0235)	(0.0280)	(0.0405)	(0.0890)
Illiterate: reference category				
Primary	0.5543	0.5654*	0.5573	0.5123*
	(0.0199)	(0.0223)	(0.0339)	(0.0627)
Middle	0.2994	0.2906*	0.3385	0.3670*
	(0.0200)	(0.0200)	(0.0257)	(0.0484)
Secondary	0.1927	0.1896*	0.1934	0.1890*
	(0.0191)	(0.0188)	(0.0243)	(0.0385)
Higher secondary and above	0.1774	0.1523*	0.1749	0.1689*
	(0.0174)	(0.0161)	(0.0211)	(0.0329)
Agriculture and allied activities: ref category				
Industrial sector	0.9510	0.9458	0.9243	0.9382
	(0.0432)	(0.0421)	(0.0462)	(0.0877)
Service sector	0.6844	0.7434*	0.7792	0.7336**
	(0.0313)	(0.0330)	(0.0396)	(0.0757)
Land holdings	1.0001	1.0001*	1.0000	0.9999
	(0.0065)	(0.0076)	(0.0081)	(0.0298)
Non-poor: ref category				
Poor	0.6490	0.8698*	1.1882	1.3205*
	(0.0675)	(0.0293)	(0.0566)	(0.1125)
constant	0.1864	0.0849	0.0516	0.0209
	(0.0198)	(0.0029)	(0.0029)	(0.0022)
Number of observations	1817.82	110017	89722	61929
Log likelihood	-17500.2	16533.43	-11672.14	-3601.98

Social group: reference category 'SC/ST'

The odds ratio of child labouramong social group throws up a very useful result. Children from 'other' social group with factor of 0.73are less likely to be involved in child labour than children belong to SC/ST social group at 1 per cent level of significance. Note that here "SC/ST" (Social Group) has been taken as the reference group against which all the other groups are being compared in 1993-94.

In 1999-00, Children from OBC social group with factor of 0.85 are also less likely to be involved in child labour than children belong to SC/ST social group at 1 per cent level of significance and Children from 'other' social group with factor of 0.64 are less likely to be involved in child labour than children belong to SC/ST social group at 1 per cent level of significance that implies children belongs to OBC social group has higher odds as compare to children belongs to 'others' social group. Note that here "SC/ST" (Social Group) has been taken as the reference group against which all the other groups are being compared.

The odds ratio of child labourvaries with the caste background of the households. Children belonged to OBC social group with factor of 0.83 were less likely to be involved in child labour than children belonged to SC/ST social group at 1 per cent level of significance and Children from 'others' social group with factor of 0.74 werealso less likely to be involved in child labour than children belonged to SC/ST social group at 1 per cent level of significance which implies that children belonged to OBC social group has higher odds as compare to children belonged to 'others' social group in 2004-05.

The odds ratio of child labouramong social group throws up a very dramatic result. Children belong to OBC social group with factor of 0.79 were also less likely to be involved in child labour than children belong to SC/ST social group at 1 per cent level of significance and Children from 'other' social group with factor of 0.83 were less likely to be involved in child labour than children belong to SC/ST social group at 1 per cent level of significance. Generally, Children belong to OBC social group children has higher odds than 'others' social group to be employed in work force but the Logit regression output resulted children belong to 'others' social group has higher odds as compare to children belongs to OBC social group.

Educational level of the head of the household

The logistic regression output for child labour versus the educational level of the head of the household indicates a strong association between education and child labour- literate head of household's children are less likely to get employed in work force than illiterate head of household's children. It is evident from the regression output that children who belongs to households where the person heading the family is illiterate has the highest odds of being in work force in 1993-94.

Logistic regression output for the year 1999-00 resulted that child labouramong the educational level of the head of the household has a strong association between education and child labour- literate head of household's children were less likely to being employed in child labour than illiterate head of households. It is evident from the regression output that children belong to households where the person heading the family is illiterate has the highest odds of being in work force.

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Economic activities of head of the households

Taking agriculture and allied activities as the base category, we find that child labour's head of the households employed in Industrial sector has moderately higher odds of being involved in child labour than the service sector of the livelihood categories of the households. As against this, the odds of a child being in work force those head of the households are employed in service sector comparatively lower than the other. Thus, we find that the children who belong to households which are involved in either agriculture and allied activities or Industrial sector have the highest odds of being in work force as compared to the head of the households involve in the service sector.

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Logistic regression resulted that children's head of the households employed in Industrial sector has higher odds of being involved in childlabour than the service sector which imply that odds of a child being in work force whose head of the households are employed in service sector comparatively lower than the other. Thus, we find that the children who belong to households which are involved in either agriculture and allied activities or Industrial sector have the highest odds of being in work force as compared to the head of the households involve in the service sector.

Land holdings

Generally, the incidence of child labourhas an inverse relationship with the size of landholding but logistic regression output for child labour versus landholding indicates that incidence of child labourhas positive relationship with the size of landholding at 1 per cent level of significance. The incidence of child labourhas an inverse relationship with the size of landholding but logistic regression output for child labour versus landholding indicates that incidence of child labourhas positive relationship with the size of landholding at 5 per cent level of significance.The incidence of child labourhas an inverse relationship with the size of landholding but logistic regression output for child

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Poverty ratio: reference category-'non poor'

Child labouramong poverty indicates a fairly strong association between poverty and child labour- Generally, children from poor households (as defined in this dissertation– allhead of the households having less monthly per capita expenditure than their state poverty line) are more likely to be involved in the work force but logistic regression output resulted those children from poor households with factor of 0.64are less likely to be involved in labour as children from non-poor households.

Again, logistic regression output for child labour among poverty resulted that children from poor households (as defined in this dissertation– allhead of the households having less monthly per capita expenditure than their state poverty line) factor of .86 wereless likely to be involved in labour as children from non-poor households.

The logistic regression output for child labouramong poverty indicates a fairly strong association between poverty and child labour- children from poor households (as defined in this dissertation– allhead of the households having less monthly per capita expenditure than their state poverty line) factor of 1.18 weremore likely to be involved in labour as children from non-poor households.

Again, logistic regression output for child labouramong poverty resulted children from poor households (as defined in this dissertation– allhead of the households having less monthly per capita expenditure than their state poverty line) factor of 1.32 were more likely to be involved in labour as children from non-poor households.

CONCLUSION

Incidences of child labour hadreduced from 6.5% to 1.5% during 1993-94 to 2011-12. Among gender, male child labourers occupied highest incidence of child labourin India than female and this was true only at national level while variation can be found at the state level.Among sectors, rural areas of India recorded higher proportion of child labour but their proportion of child labour in rural India has declined during 1993-94 to 2011-12.This was true at all India level as well as state level. And, Proportion of child labourers in urban India was very much lower than the proportion in rural India but the proportion of child labourers increased during 1993-94 to 2011-12 in urban India.Among social groups, the incidence of child labourwas the highest among schedule castes as compared to the OBC and the 'others' categories in 1999-00 but during 2004-05 to 2011-12 the incidence of child labourwas slightly highest among the OBC as compared to schedule castes followed by the 'others' category of social group.This was true at national level and variation can be found at the state level.

Finally, the logistic regression analysis undertaken in this study provides statistical evidence to demonstrate that economic vulnerability of the household, reflected in small asset base (land and capital), and poverty act as a strong stimulus to children taking up work.

In reference to child labour an extremely strong relationship between the social background of the child's family and the incidence of child labour in the household was observed. From the logistic regression analysis of child labour we find that a child from scheduled caste and backward caste was more likely to be involved in the work force as compared to the children from the upper caste. It is evident from the logistic regression output that children belonging to households where the person heading the family is illiterate has the highest odds of being in work force.Similarly, children who belong to households which are involved in agriculture and allied activities are more likely to be involved in labour activities as compared to the children from households who belong to other economic activities. Further, children from poor households were more likely to be working in workforce as compared to children from non-poor households during 2004-05 to 2011-12.

Household's poverty is the most important reasons for children entering the work force followed by the economic development of the states. Similarly the nature of occupation of the household (agriculture and allied sector versus industrial sector) is the most important factors in determining boy's involvement in workforce followed by poverty of the households. Finally, parents' occupation, poverty levels of the household and the educational levels of the heads of the households determine the likelihood of being children in work force. It was also observed that, all other things being equal, a child from the "lower caste" (SC) is more likely to be involved in work force during 1999-00 while followed by SCs are more likely to be involved in work force during 2004-05 to 2011-12, OBCs. Finally, rising levels of awareness among the adult members of the households todiscourage child labour, and encourage child schooling.

Policy Implications

The analysis indicates that the reasons for children engaged in agriculture and allied sector are largely economic, i.e., they work to supplement household income and lack of education.There are some policy suggestions that can be considered to address the problem of child labour:

- Government should focus on employment generation that will help poor households to get more opportunities for employment in non-agricultural sector as agriculture and allied sector still remain as low productive sector.
- Government should focus on skill development that will help to enhance the level ofincome of the poor households.
- Government should focus on proper implementation of laws and policies in favour of poor children to eliminate problem of child labour.
- Government should focus on rising levels of awareness among the adult members of the households to discourage child labour, and encourage child schooling.

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