VOL. 7, NO. 12, DECEMBER 2012 ISSN 1990-6145
ARPN Journal of Agricultural and Biological Science


www.arpnjournals.com

CHILD LABOUR AMONG RURAL HOUSEHOLDS IN DASS LOCAL GOVERNMENT, BAUCHI STATE, NIGERIA

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ABSTRACT

The incidence of child labour is widespread and a growing phenomenon in developing countries, including Nigeria. The study examined the incidence, extent and factors affecting child labour among rural households in Dass Local Government Area of Bauchi State. Primary data was collected using structured questionnaires and analyzed using both descriptive statistics and multinomial logit regression. Household's access to credit should be used to purchase labour-saving technologies to ensure a reduction in the use of children for work on the farm and other productive activities. Also, school-aged children should not be denied access to full-time schooling because of their younger ones.

Keywords: child labour, Bauchi state, school-aged children, pre-school children, incidence.

INTRODUCTION

Globally, child labour continues to decline but to a lesser extent than before as there are still 215 million children caught in child labour with 115 million children in hazardous work. Children's work is declining in the Asia-Pacific region and in Latin America and the Carribean, but is increasing in sub-Saharan Africa (ILO, 2010). Most child labourers aged 5 to 17 years old are in agriculture (about 60 percent), 27 percent in Services and 7 percent in Industry. Two-thirds of children in the 5 -17 years age group are unpaid family workers - 64% boys and 73% girls; while those in paid employment and self-employment respectively are 21% and 5%, respectively (ILO, 2010). However, age-appropriate tasks that are of lower risk and do not interfere with a child's schooling and leisure time, can be a normal part of growing up in a rural environment. Indeed, many types of work experience for children can be positive, providing them with practical and social skills for work as adults.

Despite this, in the areas of rural Nigeria, it has been detected that child workers that engaged in farming have lower school attendance compared to their urban working peers (Robson, 2004).

There is relatively higher incidence of children participating in economic activities and lower participation of children in school in North East than any other regions in Nigeria (Okpukpara *et al.*, 2006; Badmus, 2008). Horticultural crops feature prominently in the farming systems of this zone which has the largest concentration of fruits and vegetables production (Mordi *et al.*, 1995). Thus, there is an urgent need to pay more attention to the early years of children's lives in the North east region (of which is Bauchi State) prompting the need to look into the incidence and the factors affecting child labour among horticultural-based farming households in Dass Local Government Area of Bauchi State.

Objectives of the study

The main objective of this study is to assess the incidence and factors affecting child labour in Dass Local Government Area of Bauchi State. More specifically, the paper intends to:

- Profile incidence of child labour in the study area.
- Examine the factors affecting child labour in the study area.

METHODOLOGY

Study area

Bauchi State became a distinct state in 1996, has a population of 4, 676, 465 according to 2006 estimate (Bauchi State of Nigeria, 2009). Located in the North-Eastern part of the Nigeria, Bauchi State covers 45, 837 square kilometers. Bauchi State is bounded by Kano and Jigawa to the north, Yobe and Gombe to the east and Kaduna State to the west and Plateau and Taraba State to the south. The entire western and northern parts of the state are generally mountainous and rocky. This is as a result of the closeness of the state to the Jos Plateau and Cameroun mountains. Bauchi state is one of the states in the Northern part of Nigeria that span two distinctive vegetation zones, namely, the Sudan Savannah and the Sahel Savannah. Two main rivers transverse the state; the Gongola and Hadejia Rivers. The climatic condition of Bauchi State is very hot in the months of April and May, while December and January are the coldest months (Bauchi State of Nigeria, 2009).

The study was carried out in Dass Local Government Area one of the twenty local government areas of Bauchi State. This local government belongs to the Western Agricultural zone of the State, Agricultural Development Programme.

Sampling procedure

The study used primary data collected with the aid of well-structured questionnaire administered to 59 household units comprising 442 individuals and 135 children aged 5-14 years from 3 communities in Dass Local Government Area of the State. A multistage

sampling procedure was employed in the collection of data. The first stage is a purposive selection of Bauchi State as one of the States in North East Nigeria because it was reported to have the highest incidence of child labour in the country (Okpukpara *et al.*, 2006; Badmus, 2008). The second stage is purposive selection of the Western Agricultural zone in the state due to the prominence of horticultural crop production (tomatoes and pepper) and the random selection of a local government in the zone. The final stage of the sampling involved a random selection of 3 communities from the 11 village areas in Dass Local Government area of Bauchi State.

Method of data analysis

Descriptive statistics was used to profile the incidence of child labour in the study area. This included the use of frequencies, percentages and means. Multinomial logit regression was used to examine the factors affecting child labour in the study area.

In this analysis, the three categories considered are:

a) Going to school and not working (School only)
b) Working and going to school (School and work)
c) Working and not going to school (Work only)

The multinomial logit for choice across S states (s = 1, 2, 3) can then be specified as:

$$P(Y = s) = \frac{e^{\beta jZ}}{1 + \sum_{j-2}^{s} e^{\beta jZ}} \text{ for s not equal to 1}$$

$$P(Y = 1) = \frac{e^{\beta jZ}}{1 + \sum_{j-2}^{s} e^{\beta jZ}}$$

The parameters β_i will be estimated. An iterative maximum likelihood algorithm will be used to estimate the empirical models in order to obtain asymptotically efficient parameter estimates (Greene, 1992). The log-likelihood function for the multinomial logit model is

$$1nL = \sum_i \sum_j d_{ij} InP_{ij}$$

Where P_{ij} is the probability

X_i Include the following child, household and community characteristics:

Child characteristics

X_1 = age of child in the household (in years)

X_2 = gender of child (female = 1; 0 = otherwise)

Parents'/ household characteristics

X_3 = number of pre-school-aged children in the household

X_4 = number of school-aged children in the household

X_5 = age of household head (in years)

X_6 = years of schooling of household head

X_7 = years of schooling of mother in household

X_8 = ownership of land-assets by household (farm-owing household = 1, 0 = otherwise)

X_9 = access of household to credit (yes = 1, 0=otherwise)

X_{10} = household's monthly expenditure (Naira)

RESULTS AND DISCUSSIONS

Incidence of child labour

Child activity status by gender and age

Table-1 shows that 59.56 percent of the children combine school and work; 32.35 percent of them are involved in schooling as their only activity while only 8.09% of them do work only without attending school. Considering their sex, more girls (59.09%) attend school only than boys (40.91%); there were more working boys (72.73%) than girls (27.27%), also more boys (61.73%) combine school and work than girls (38.27%). This implies that more boys are exposed to work while the girls are more involved in schooling activity only in the study area. This result is in consonance with the findings of Okpukpara and Odurukwe (2006) that in terms of gender-specific activity options across zones in Nigeria, male participation in full-time schooling dominates that of females except in North East Nigeria (of which is Bauchi State) where there is a marginal difference in favour of female child education. Two things could be responsible for this. First, there may be less evidence of discrimination in the zone. Secondly and more importantly, nomadic influences may be more prominent in the zone, which favours the migration of male children to other zones.

In terms of their age, the results showed that 50% of boys aged 12-14 combine school with work; all boys in this age group are working with only 22.22% attending school as their only activity. 50% of boys aged 5-8 years were found to be in school only and compared to 42.31% of girls in this age group. Girls aged 9-11 years are observed to combine school and work (58.06%) than their male counterparts (26.00%); also more of the girls engaged in schooling alone (46.15%) were also found in this age group. In addition, results show that all the girls found to have work as their only activity are aged 12-14 years. This shows that the older the child, the more likely the possibility of working without attending school. Thus, the result is in line with apriori expectation that child labour incidence increases as age of a child increases (Badmus, 2011).

Table-1. Activity status of children across gender and age.

Age group/sex	School and work	School only	Work only
	Frequency (percentage)	**Frequency** (percentage)	**Frequency** (percentage)
Male			
5-8	12(24.00)	9(50.00)	-
9-11	13(26.00)	5(27.78)	-
12-14	25(50.00)	4(22.22)	8(100.00)
Total	50(61.73)	18(40.91)	8(72.73)
Female			
5-8	9(29.03)	11(42.31)	-
9-11	18(58.06)	12(46.15)	-
12-14	4(12.90)	3(11.54)	3(100.00)
Total	31(38.27)	26(59.09)	3(27.27)
All	81(59.56)	44(32.35)	11(8.09)

Source: Field survey, 2011

Children activities by sex

The results showed that 36.04 percent of children in the study area are involved in household chores such as cleaning, washing, fetching water, cooking, general errands such as shopping and splitting logs. Table-2 shows that 22.97 percent work on family farm; while 21.20 percent participate in recreation and cultural activities such as religious duties, visiting friends and family. Different types of activities are peculiar to each sex; 86.15% of the children working on family farms were found to be boys with only 13.85% as girls. Household chores that have to do with cleaning, fetching water, cooking, shopping and splitting logs were carried out more by boys (57.84%) rather than girls (42.16%).

Table-2. Types of activity engaged in by sex of child.

Activities engaged in by children	**Frequency** (percentage)
Work on family farm	65 (22.97)
Male	56 (86.15)
Female	9 (13.85)
Household chores such as washing, cooking, caring for younger ones	56 (19.79)
Male	17 (30.36)
Female	39 (69.64)
Recreation and cultural activities such as religious duties, visiting friends and family	60 (21.20)
Male	40 (66.67)
Female	20 (33.33)
Household chores such as cleaning, washing, fetching water, cooking, general errands such as shopping and splitting logs	102 (36.04)
Male	59 (57.84)
Female	43 (42.16)

Source: Field survey, 2011

Extent of child labour

Child exposure to child labour

The Table-3 shows working conditions experienced by children in the study area; exposure to these conditions predisposes them to child labour. Any child that is exposed to one or more of these conditions is termed to be experiencing child labour. About forty percent (39.22%) of the children were found to be exposed to dusts, fumes, gases and vapours causing respiratory and/or skin as well as eye problems; 31.37% of them operate tools or machines at work which are not supposed to be handled by children. It was also observed in the study area that, boys are more exposed to these conditions (child labour) than girls. About 75 percent of the children exposed to dusts, fumes and other micro-organisms that can lead to respiratory and other health problems, were boys; more boys (81.25%) are required to trek long distances to sell produce and they (82.35%) are made to transport load too heavy for a child. Only boys reported work under the sun for more than 8 hours a day. In agreement with the results from this study, data from the cocoa sectors in Ghana and Cote D'Ivoire show that boys work longer hours and that they are more engaged in spraying pesticides (GAWU 2006; MMYE/ NPCLC, 2008; Nkamleu and Kielland, 2006). The Ghanaian cocoa certification report shows that, apart from working without adequate basic protective equipment, boys engage more than girls in all other hazardous activities.

Table-3. Exposure to child labour.

Working conditions	**Frequency** (Percentage)
Work under hot sun for more than 8 hours a day	13(12.75)
Male	13(100.00)
Female	-
Operate tools or machines at work	32(31.37)
Male	29(90.63)
Female	3(9.38)
Transportation of load too heavy for a child	17(16.67)
Male	14(82.35)
Female	3(17.65)
Presence of dusts, fumes, micro-organisms, gases and vapours causing respiratory and/or skin/eye problems	40(39.22)
Male	30(75.00)
Female	10(25.00)

Source: Field survey, 2011

Factors affecting child labour

Table-6 reveals the result of the multinomial logit estimations of children combining school with work and those working only compared to those who are schooling only. The odd ratios represent the impact of each explanatory variable holding all other variables constant, on the dependent variable. An odd ratio equals to 1 suggests that the explanatory variable leaves the dependent variable unchanged. If it is greater (less) than 1, it implies that the effect of explanatory variable is to increase (reduce) the dependent variable.

The result shows that an addition to the age of household head ($r=1.21$, $p<0.01$) and number of pre-school-aged children in the household ($r=1.82$, $p<0.01$) increases the likelihood of a child combining school with work relative to attending school alone in the study area.

When working children are compared to those schooling alone, a unit increase in the age of child increases the likelihood of a child working by 8.48 units ($p<0.01$). This is corroborated by Khanam (2004) which revealed that the probability of working increases with age.

An additional year to the age of household head, increases the likelihood of a child working by 1.47 units ($p<0.01$). This is consistent with the result of Okpukpara and Odurukwe (2006) and is probably because older parents (father) may have lesser opportunity of gaining employment that is needed to pull their children from economic activities.

When household heads adds a year to his/her schooling years, it increases child participation in work only by 2.41 ($p<0.05$). This is contrary to the findings of Okpukpara and Odurukwe, (2006).

A unit increase in the number of school-aged children ($p<0.05$) and number of preschool-aged children ($p<0.05$) increases the likelihood of a child to be involved in working only by 9.69 units and 6.65 units respectively. An increase in school aged children and the likelihood of working only; could be due to the fact that households intend to cut expenses on schooling of this group of children. On the other hand, the study attests to apriori

expectation that number of pre-school -aged children in a household increases the likelihood of a child working relative to schooling (Khanam, 2004).

When households have access to credit it increases the likelihood of a child working relative to schooling only by 705.38 units ($p<0.05$). This supports the findings of Hazarika and Sarangi (2008) which reported that in rural Malawi, children tend to work more in households that have access to micro credit.

However, a naira increase in the household's monthly expenditure ($r=0.99$, $p<0.05$) reduces the likelihood of a child working relative to schooling only. This is supported by the study of Okpukpara and Odurukwe, (2006), which implies that an increase in household income reduces the odds of a child participating in economic activities.

Table-5. Factors affecting child labour.

Explanatory variables	Combining school and work		Working only	
	Odd ratio	Z-Statistics	Odd ratio	Z-Statistics
Age of child	1.089078	0.73	8.475121	2.62***
Sex of child	2.011135	1.23	2.943091	0.69
Ownership of farm	0.4253348	-1.34	4.34e+09	1.52
Access to credit	0.4255676	-1.33	705.3831	2.13**
Age of household head	1.208245	3.58***	1.472917	2.74***
Years of education of mother in household	1.028804	0.37	0.8204551	-0.63
Years of education of household head	1.027689	0.32	2.411551	1.96**
Number of school-aged children	1.41072	1.53	9.693484	1.96**
Number of preschool-aged children	1.821358	2.78***	6.645894	2.21**
Household monthly expenditure	0.9999308	-1.27	0.9983618	-2.20**
Log likelihood = -56.262084 LR $chi^2(20)$ = 120.94 Prob >chi^2 = 0.0000 Pseudo R^2 = 0.5180				

Source: Computer print-out of data from Field Survey, 2011 (***- significant at 1%, **- significant at 5%)

CONCLUSIONS

The results showed that there were more working boys and those combining schooling with work than girls as more girls were seen to have schooling as their only activity option in the study area. Most of the older children are engaged in work or combine school with work. Factors that determine child activity option (child labour) in the study area include age of household head and number of pre-school aged children in the household for children combining school with work when compared with those schooling alone. Age of child and household head, access to credit, years of schooling of household head, number of pre-school and school aged children in the household all significantly increase the likelihood of a child working. However, an increase in household monthly expenditure reduces the likelihood of a child working.

RECOMMENDATIONS

- Households should be sensitized not to allow the children's participation in domestic chores and family farm hinder their academic progress. They should also be enlightened on the negative effect of exposing children (especially boys) to dangerous working conditions now and even in adulthood.
- Sensitization of households on the need not to deprive school aged children of access to full-time schooling because of other younger ones and their peers in the household; all children should be allowed access to at least basic education.
- Household heads in the study area should be encouraged to participate in adult education as their observed year of schooling was low.
- Credit obtained by households should be used to purchase labour-saving technologies to ensure a reduction in the use of children for work on the farm and other productive activities.

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