



Research in

ISSN : P-2409-0603, E-2409-9325

AGRICULTURE, LIVESTOCK and FISHERIES

An Open Access Peer Reviewed Journal

Open Access

Res. Agric. Livest. Fish.

Research Article

Vol. 3, No. 3, December 2016: 433-442

INVOLVEMENT OF CHILD LABOUR IN AQUACULTURE ACTIVITIES IN MYMENSINGH DISTRICT, BANGLADESH

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ARTICLE INFO

ABSTRACT

Received
23.11.2016

Accepted
14.12.2016

Online
18 December 2016

Key words
Child labour,
Aquaculture,
Mymensingh

A study was conducted to know the involvement of child labour in various aquaculture activities in two upazilas namely Trishal and Muktagacha in Mymensingh district. Data were collected during December 2013 to April 2014 from 35 aqua farms having 492 workers, among them 100 (20.33%) were identified as child labour. All the child workers were interviewed through structured questionnaire. Feed preparation, feeding, sorting and grading of fish and rearing of fry in ponds were the major activities where maximum child labours were found to involve. It was observed that the main cause of children to involve such activities was poverty and dropped out from school. Overall 71% child labour worked to support their family and 48% recruited according to their parent's decision. About 55% child labour worked more than 60 hours per week and few (19%) of them got break during working hours. The child workers had very limited freedom in their working area and found to be abused mentally and physically to some extent by the farm owners. The children were also found associated with various hazardous works like contact with chemical, long time work in water logged area and lifting heavy weight. Generally, the farm owners recruited child labour in their farms as cheap worker and majority (77%) of the farm owners have no idea about the current laws of recruitment of child labour. More studies are needed to establish the extent of child labour in overall aquaculture sector of Bangladesh. It is also important to implement effectively the national minimum age legislation for aquaculture.

To cite this article: Ferdousi K and MAR Faruk, 2016. Involvement of child labour in aquaculture activities in Mymensingh district, Bangladesh. Res. Agric. Livest., Fish., 3 (3): 433-442.



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INTRODUCTION

Child labour issue is presently one of the great concerns throughout the world. A large number of labour forces of Bangladesh are engaged in informal activities. It is evident that job crisis, poverty and lack of skills are the major factors responsible for the increased labour in informal sectors (Ali, 2013). Child labour is also a notable feature of the country's growing informal labour market situation. A child is defined as an individual under the age 18 years (UN, 1989; ILO, 1999; MOWCF, 2011). Any work by children that interference within their full physical development, the opportunities for a desirable minimum education and of their needed recreation is called child labour (Stein and Davis, 1940). Child labour is also defined as work of children who are too young for the type of work they do, work that interferes with their schooling and, as applies to all children under 18 years of age, work that risks harming their health, safety or morals. According to the ILO (2010), some 60% of the estimated 215 million child labours worldwide are engaged in agricultural activities, including fisheries and aquaculture. There is about 3.2 million child labour in Bangladesh (ILO, 2006). No data exists however, on the prevalence and concentration of child labour in fishing and aquaculture sectors. Case studies indicate that child labour in this sector is most common in informal and small-scale operations of capture fisheries, aquaculture and post-harvest fish processing, distribution and marketing (FAO, 2010).

In aquaculture sector, the tasks that children undertake include collection of fish and shrimp seeds, distributing feed and applying chemicals and fertilizers, and harvesting aquatic organisms. Children may be exposed to many hazards such as carrying heavy loads, extreme temperatures, chemicals and contaminated water, animal bites and stings, and cuts and wounds from use of sharp tools (ILO, 2007). There is no in depth study however, on child labour involvement in the aquaculture sector of Bangladesh. The main objective of the study was therefore to know the various activities of child labour in aquaculture activities in Mymensingh district and to know the demography of child worker.

MATERIALS AND METHODS

The present study was carried out for five months from December 2013 to April 2014 in Trishal and Muktagacha upazila in Mymensingh district. Data was collected through questionnaire interview with 100 child labours (70 from Trishal and 30 from Muktagacha). A set of preliminary questionnaire was prepared and field tested with a few target people. In this pilot survey much attention was given to any new information, which was not designed to ask but was important and informative towards the objectives. Thus necessary modifications were made based on the feedback and the final questionnaire was prepared on the basis of pilot survey. The questionnaire was composed of both closed and open form of question. For the interview, random stratified sampling method was followed.

RESULTS

Age and education

The present study was conducted in 35 aquaculture farms where 492 people were found to work of which 100 were child labours (20.33%) and they were all boys. The children's ages were grouped into three categories. Overall, 16% of the children were between the ages of 10 and 12 years, 51% were between 13 and 15 years while 33% were between 16 and under 18 years of age (Table 1).

Table 1. Age distribution of children studied area recruited for child labour

Age group (Years)	Muktagacha n=30	Trishal n=70	Total n=100
10 - 12	3 (10)	13 (18.57)	16 (16)
13 - 15	15 (50)	36 (51.43)	51 (51)
16 - <18	12 (40)	21 (30.00)	33 (33)

n=Sample size; Data in the parentheses indicate percentage

Education levels among the respondents were found very low. Overall 27% working children had no education, 50% working children were dropped out at primary levels and the rest 23% dropped out either at class five or at class eight (Figure 1).

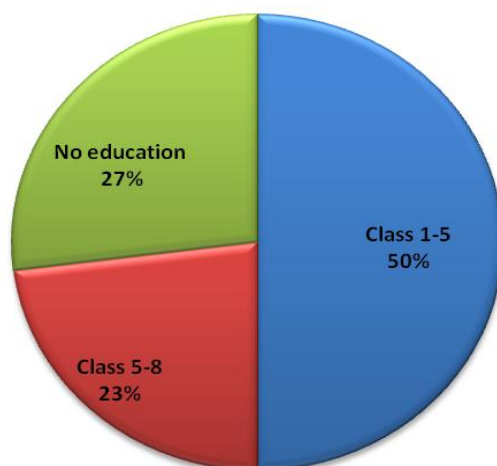


Figure 1. Educational background of child labour

Family members

All the respondents came from quite big families. They had between 4 and 10 members in their families. Majority (72%) of the child labourers had 7-8 members in their families, 24% had 4-6 members and the rest 4% came from bigger family included 10 members (Table 2). Father of child workers did various jobs to maintain their families which included daily labour (44%), working in aquaculture farms (22%) and casual labour (16%).

Table 2. Number of family members of the child worker

Number of family members	Muktagacha (n = 30)	Trishal (n = 70)	Total (n = 100)
4	1 (3.33)	1 (01.43)	2 (2)
5	3 (10)	8 (11.43)	11 (11)
6	1 (3.33)	10 (14.29)	11 (11)
7	10 (33.33)	28 (40.00)	38 (38)
8	12 (40)	22 (31.43)	34 (34)
10	3 (10)	1 (01.43)	4 (4)

n=Sample size; Data in the parentheses indicate percentage

Involvement of child labour in aquaculture activities

Child labour were found to work in various aquaculture activities which included in hatchery and nursery operation, water supply, pond preparation, feed preparation, feeding of fish, harvesting, sorting and grading, transportation, marketing and net making. The overall total percentages are shown in the (Figure 2). In hatchery operation 20% child labours were found to engage themselves in collection, rearing and transfer of eggs from pond to hatching tray (Figure 2 and 3a, b, c and d). In nursery operation about 27% child labours were found involve in fry releasing and rearing activities. No child labour was found to work either hatcheries or nurseries in Muktagacha. Only few (7%) of them worked in pond preparation which included digging, dike repairing, drying, de-watering, liming and poisoning (Figure 2).

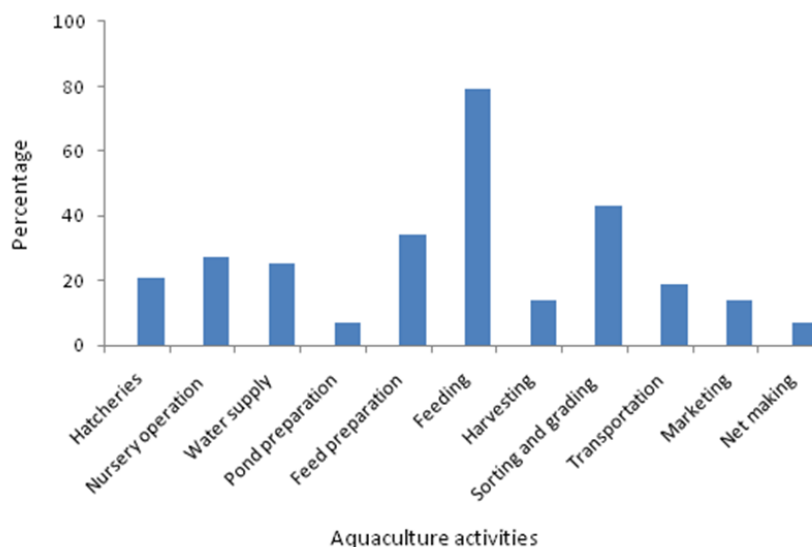


Figure 2. Involvement of child labour in different aquaculture activities

Fish feed preparation and feeding of fish were the two major activities where majority of the child labour were involved. They usually participated in preparing feed by mixing different ingredients, drying, packing and storing of homemade feed (21%) (Figure 2 and 3e and f). Overall, 79% child labours were involved in feeding of fish (Figure 2 and 3 g). The highest number of child labour were work in feeding was found in Muktagacha (83.33%) than Trishal (77.14%). Generally, they supplied feed two or three times a day.

Child labour was also seen to take part in harvesting (14%) and sorting and grading (43%) of fish (Figure 2). The highest percentage child labour were work direct harvesting was at Trishal and then Muktagacha. They usually take part pulling nets during harvesting and catching fish from net to buckets and also help in weighing of fish. Transportation and marketing of were another area where child labourer got themselves busy. It is found that on an average 19% child labours were engaged transportation of fish. Here they have to work hard like lifting heavy weight (Figure 3h) and loading water in drums for transportation of live fish (Figure 3i). Some of the child labours (14%) were directly involved in fish selling to the market. Very often they have to stay mid night in the market because of unsold fish. Many of them had to cut fish into pieces by sharp knives as per customer desire. The final involvement child worker that was noticed during the study was net making (14%) (Figure 2 and 3j).

Reasons for working

Children working at the various aquaculture activities had diverse reasons for doing so. Most of the respondents (71%) mentioned that they were working due to poverty and wanted to support family income. Dropped out from school (22%) was another reason of working and only 7% said that they work to become independent and to take care of themselves (Table 3).

Table 3. Reasons of work

Variables	Muktagacha (n = 30)	Trishal (n = 70)	Total (n = 100)
Poverty and to support family	23 (56.67)	48 (68.75)	71 (71)
School dropped out	4 (13.33)	18 (24.29)	22 (22)
Self-dependent	3 (10.00)	4 (5.71)	7 (7)

n=Sample size; Data in the parentheses indicate percentage



Figure 3. Activities of child labour in aquaculture farms. (a, b and c) Child labour working in hatcheries in Trishal, (d) Working in the water at nursery (e) Drying feed in sunlight (f) Carrying feed, (g) Feeding fish, (h) Carrying heavy weight for fish marketing, (i) Feeling water in drums for marketing, (j) Net making

Procedure of recruitment

No systematic procedure was followed to recruit children in aquaculture farms. Overall, 48% working children were recruited on the basis of their parent's decision followed by help from children's family friends/relatives (32%), brokers (12%) and only 8% working children came at the workplace by their own contact (Table 4).

Table 4. Methods of recruitment

Variables	Muktagacha (n = 30)	Trishal (n = 70)	Total (n = 100)
Parents	10 (33.33)	38 (54.29)	48 (48)
Family friend/relatives	14 (46.67)	18 (25.71)	32 (32)
Brokers	5 (16.67)	7 (10)	12 (12)
Self	1 (3.33)	7 (10)	8 (8)

n=Sample size; Data in the parentheses indicate percentage

Working hours and environment

Child labour who worked for monthly basis mostly had to stay night in the farm. They have to work long time (about 60 hours/week) without extra financial benefit. Overall, 55% child labour worked more than 10 hours daily, while 45% worked for 8-10 hours daily (Table 5). They enjoy very limited breaks and day off during the week. Average 19% of them reported of having breaks during working hours and only 15% got weekly holiday. It was also found that overall 67% child labours enjoyed annual leave once or twice a year on the basis of religious status.

Table 5. Working hours and environment of child labour

Variables		Muktagacha (n = 30)	Trishal (n = 70)	Total (n = 100)
Working hours				
Daily 8-10	Per week 48-60	17 (56.67)	28 (40)	45 (45)
Daily More than 10	Per Week > 60	13 (43.33)	42 (60)	55 (55)
Working environment				
Breaks during the day		4 (13.79)	15 (21.43)	19 (19)
Day off during the week		8 (26.27)	7 (10)	15 (15)
Annual leave		23 (76.67)	44 (62.86)	67 (67)

n=Sample size; Data in the parentheses indicate percentage

Family visit

About 48% of the working children had opportunities to visit their home once a month while 32% visited their home daily because of living near to the farms. About 17% of children were able to visit their homes at least once a week (Table 6).

Table 6. Family visit by child labours

Frequency of contact with family members	Muktagacha (n = 30)	Trishal (n = 70)	Total (n = 100)
Daily	14 (46.67)	18 (25.71)	32 (32)
Once a week	8 (26.67)	9 (12.86)	17 (17)
Once a month	7 (23.33)	41 (58.57)	48 (48)
Once a year	1 (3.33)	2 (2.86)	3 (3)

n=Sample size; Data in the parentheses indicate percentage

Wages and benefits

The average monthly wage was Tk. 3136 only while the minimum was Tk. 1625 and the maximum was Tk. 4700 (Table 7). It was found that 42% of them paid in cash and 58% paid part in cash and part in kind. About 49% child labour got free food and accommodation in the farms. The proportion of free food and accommodation found highest (63.33%) in Muktagacha.

In the Table 8, it was observed that 77% farm owners paid salary to the child worker at regular basis. Approximately 64% of the children received their own payment while 30% parents received the payment on behalf of the children. Only 6% child worker kept their payment to the farm owners as deposit. About 67% working children reported that their employers deducted their salary as penalty (missing days in the month) (Table 8).

Table 7. Monthly average wages, payment method and benefit

Items		Muktagacha (n = 30)	Trishal (n = 70)	Total (n = 100)
Monthly wages/ (Tk.)	Average	2850	3475	3163
	Minimum	1500	1750	1625
	Maximum	4200	5200	4700
Payment method	Cash only	10 (33.33)	32 (45.71)	42 (42)
	Cash and kind	20 (66.67)	38 (54.29)	58 (58)
Type of benefits	Free food and accommodation	19 (63.33)	30 (42.86)	49 (49)

n=Sample size; Data in the parentheses indicate percentage

Health condition and hazardous work

Average 51% of the respondent reported that they did not face any health problems while 49% working children fallen sick at work place during the period of work (Table 9). The reasons of sickness included fever, pain, allergic reaction, cutting by knives and many others water borne diseases. All activities in the farm were not suitable for the child workers. Some activities were be hazardous for them which included working more time in water (46%), lifting heavy weight (17%) and handling of chemicals (37%) (Table 10).

Table 8. Payment and recipient of salary

Items		Muktagacha n=30	Trishal n=70	Total n=100
Regular payment of wages	Paid regularly	17 (56.67)	60 (85.71)	77 (77)
	No regular payment	13 (43.33)	10 (14.29)	23 (23%)
Recipient of wages	Parents	16 (53.33)	14 (20)	30 (30)
	Kept by employer	2 (6.67)	4 (5.71)	6 (6)
	Self	12 (40)	52 (74.29)	64 (64)
Deduction of wages	Missing days	23 (76.67)	44 (62.86)	67 (67)
	Bad behaviour	0 (0)	0 (0)	0 (0)

n=Sample size; Data in the parentheses indicate percentage

Table 9. Health condition of child labour

Fallen sick during working	Muktagacha (n = 30)	Trishal (n = 70)	Total (n = 100)
Fallen sick	17 (56.67)	32 (45.71)	49 (49)
Good health	13 (43.33)	38 (54.29)	51 (51)

n=Sample size; Data in the parentheses indicate percentage

Table 10. Hazardous work assigned to child labour

Hazardous work	Muktagacha (n = 30)	Trishal (n = 70)	Total (n = 100)
Regular working with water	14 (46.67)	32 (45.71)	46 (46)
Lifting heavy weight	8 (26.65)	9 (12.86)	17 (17)
Contact with chemicals	10 (33.33)	27 (38.57)	37 (37)

n=Sample size; Data in the parentheses indicate percentage

Employer of child labour

Most of the employers did not have higher education and were aware of children's rights. Most of the employers thought that children work in various aquaculture activities is not harmful. Of the 35 farm owners interviewed, 8 of them had little idea about Child Right Convention and aware of children's rights. It was noticed that since maximum farm owners want more profit with minimum operation cost, they recruit child labour in their farm. They paid lower salary to child labour than adult worker. They also mentioned that child labours were more obedient and were not able to bargain with employer for salary. Most of the farm owners (60%) said that they use child labour for cheap of rate and 20% said, they are more obedient than adult worker (Figure 4).

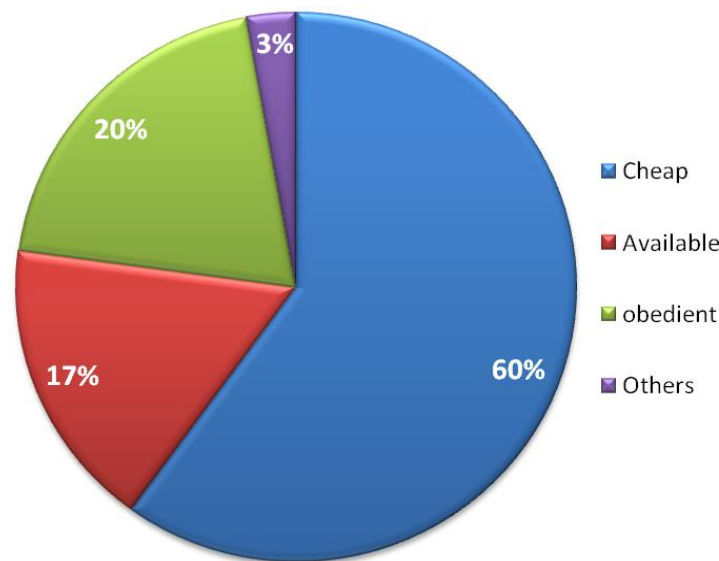


Figure 4. Reason for recruiting child labour in the aquaculture farm (%)

DISCUSSION

This study was carried out in two selected upazila namely Muktagacha and Trishal due to having high range of aquaculture activities. The number of child labour was found high in Trishal because of the higher density of big aquaculture farms and commercial hatchery operation. In Trishal, farm owner used more child labour in their farm to reduce operational cost. On the other hand, the availabilities of child labour were found lower in Muktagacha due to comparatively small aquaculture farms and hatcheries. In the present study, among all worker 20.33% were child labour and they were found to be involved in various aquaculture activities including hatchery, nursery, feed preparation, water supply, harvesting of fish, transportation of fish, marketing of fish and net making which were more or less similar to the finding of Mathew (2010) and FAO (2010). The child labours were also found to be involved in risky work like pond preparation, fish harvesting, fish marketing.

Majority of the child labour worked in aquaculture due to poverty and to support parent's family income. Dropped out from schools was another reason of working. In other situations, there is a lack of awareness, with children working seen as normal because parents do not understand the negative effects and long term consequences of child labour. Majority of the child labour came to work as their parent's decision. The absence of appropriate national policies and legislation on child labour and inadequate enforcement of existing legal frameworks further exacerbate the situation.

According to present study, children faced many health problems due to direct contact with chemicals which used for a number of reasons in aquaculture such as for disease control or to fertilize fish ponds. Due to these chemicals, children suffered burns of skin, skin irritation or allergies, inhalations which are mostly similar to the

findings of Erondu and Anyanwu (2005). Majority of child labour were involved in feeding of fish, they usually supplied feed in their ponds 2-3 times which require long hours in a day. Due to long hours of repetitive hand feeding musculoskeletal injury occur. Among all child workers, 34% involve in feed preparation where they use various feed additives which causes skin allergies. Negative consequences and impacts of child labour are highly contextual. Child labour often reinforces the vicious cycle of poverty and has a negative impact on literacy rates and school attendance and limits children's mental and physical health and development. Child labour in aquaculture may occur to substitute adult labour and reduce labour costs and more benefit from business. According to present study, 37% child labour faced many problems due to direct contact with chemical, injuries occurs among 17% child labour for lifting heavy weight and 46% child labour faced problem due to long hour's activity with water. In addition, child workers also faced various physical injuries from slips or fall on wet and slippery surfaces; cuts from using knives; and wounds from other equipment or machinery. Mymensingh region is very rich in aquaculture and due to more activities in the study area; the poor population of this area were prone to having the highest incidence of children in economic activity. In all countries, boys are generally more exposed to child labour than girls (FAO, 2010). In the present study, all child labours were boys. Harrison (2012) found that out of the total number of children sampled, 20% were girls while the remaining 80% were boys. In developing countries child labour in fisheries represents some 2-5% of the total number of labourers and most strikingly, children up to 91% of whom were boys (Allison et al., 2011).

In the present study, about 16% of the children were found to be between the ages of 10 and 12 years, 51% child labour were in 13 to 15 years age group and 33% was in 16 to under 18 years which was lower than the finding of Walakira and Byamugisha (2008) who observed that 94% child labour working in fish landing centre where 95% child labours were in 15-17 years age group. The minimum age convention of the ILO only exempts children between the ages of 12 and 14 years from doing light work for less than 14 hours per week. However, the age distribution of the children here showed that 16% of the children were found to be between 10 and 12 years, which are below the acceptable age for even light work. About 45% of the children indicated that they worked for between 48 and 60 hours per week while the other 55% work for more than 60 hours per week. The ILO's definition of child labour the minimum age convention includes all children below the age of 18 who work for more than 43 hours in a week. Therefore, even on the basis of hours of work, 100% of the children would qualify automatically to be child labourers where total number of them who work for between 48 hours and 60 hours may be working for more than the 43 hours per week and which is very harmful for children.

In a present study, 50% of all the child labour dropped out of school at the primary level and 23% secondary level while 27% have no formal education which are more or less similar to the findings of Kufogbe et al., (2005) where 45.5% of all the respondents dropped out of school at the basic level and secondary levels while about one-third (33%) had not any formal education. Several studies like Basu (1998), Rajan (2001) and Jafarey and Lahiri (2002) give interesting scenarios of how improvement in education improved tremendously the economic situation of people. They conclude that low level of education was a catalyst for poverty. Many employers in the present study found preferred children as labourers because they constitute cheap labour and they were not able to organize themselves against exploitation. Some employer used child labour because they found them obedient than adult worker and done all works without any question which are similar to the finding of Grootaert and Kanburi (1995) and ILO (2006).

CONCLUSION

In conclusion, higher number child labours were found to involve in aquaculture activities including some hazardous ones. Elimination of child labour from aquaculture industry is thus very important. More studies are needed to establish the extent of child labour in the aquaculture related activities by characterization into gender, formal or informal engagement and supporting or remunerated scenarios. It is important to establishment of national level commissions to monitor and eradicate child labour in aquaculture. Removal and rehabilitation of children engaged in hazardous work in the aquaculture sectors is also needed. Finally, effective implementation of the national minimum age legislation for aquaculture is essential.

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