

Fishing Related Activities and their Impact on Pupils Participation in Education

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Abstract

The purpose of this study was to investigate impact of fishing related activities on pupils' participation in primary education. The study sought to answer the following research question; 'to what level does selected variables on pupils involved in fishing related activities impact on their participation in education?'. Social-ecological theory was used in this study to explain the dynamic interaction between individual and their immediate environment. Descriptive survey was employed on a target population of 1231 standard six and seven pupils from schools within the beaches of Lake Victoria. A total of 123 pupils were selected using Systematic random sampling technique. The questionnaires were the main data collection tools while interview schedules supplemented information gathered through questionnaire. Frequencies and percentages were used in data analysis and chi-square test was used to test significance. The study established that demographic characteristics of pupils involved in fishing industry influenced their participation in primary education. The study therefore concluded that gender, age and class level of pupils involved in fishing industry influenced their participation in education.

Key words: Impact of fishing industry, primary education, pupils, participation in

1.1 Background of the study

Over 70 per cent of the world's children are involved in fisheries (ILO, 2002). In Europe, both in the EU and Eastern Europe involvement of children in fisheries is signally under-researched and reported issue, the popular view is that child labour in formal and informal sector including fisheries has been rooted out of our Western societies. Far from disappearing, the worst forms of child labour in fisheries unfortunately still persists. In Northern Europe especially in the United Kingdom there are some kinds of paid jobs in fisheries where school children are involved. Children, mostly with immigrant backgrounds are found to be working fisheries.

Many countries in the Africa continent have denied their children the opportunity to access education by involving them in fishing activities. For example in Ghana the practice of involving school going children in fishing related activities is rather prominent among some communities in the great Accra and central region in Ghana more so in the communities where there were no schools located close to the beaches. The

tendency of the children to enter fishing at tender age is very high. It was therefore common to see children between the ages of 8 and 12 as crew members (Mensah and Koranteng, 2006).

In Kenya the coastal province has experienced problems in educating its children. Majority of working children age between 10 and 14 years are involved in beach related activities which has denied them the opportunity to attend school and achieve their full potential. It is common practice in fishing communities that children are often assimilated into fishing industry at an early age by having to help their parents or guardians in fishing and fish processing. This has denied many children along the beaches of Lake Victoria the opportunity to go to school. There are reported cases of children from the fishing communities along the beaches of Lake Victoria not attending school regularly. The children are mostly involved in fishing related activities which has affected their participation rates in education. With disposable cash at the hands of school boys at younger

age and through peer influence, school boys do not value going to school. This in effect has increased dropout and absenteeism rate amongst school boys found along the beaches of Lake Victoria. *Oywa (2002)* addresses the question of increasingly high school dropout rates of 63% among girls in Nyanza Province in Kenya. This evidence shows that there is high dropout of girls from formal schooling in Nyanza province which could be attributed to involvement of school girls in fishing related activities. Many school-aged boys and girls in fishing communities living along the beaches of Lake Victoria have been deprived of their right to education. Primary school participation rates are very low in schools that are along the beaches of Lake Victoria in Nyanza province. Education system in schools around the beaches experience high wastage as a result of absenteeism, low completion rate, high rate of drop-out and low performance in national examination. For example preliminary result from North Rachuonyo district education office (DEO) shows that completion rate of 41.8% for girls and 55.6% for boys and drop-out rate being 19.5% for girls and 10.3% for boys (DEO's office, department of statistics, 2009) when the foregoing statistics is compared with those of Nyamira district which has a drop-out rate of 5.8% for girls and 5.3% for boys and completion rate being 58.3 for girls and 64.2% for boys (MoE, 2008) we find that participation of pupils' in primary education in North Rachuonyo district is alarming. This can be attributed to many factors among which are fishing related activities.

The purpose of this study was to investigate the extent to which fish related activities influenced pupils participation in primary education. Demographic characteristics such as age, sex, class level and social status of the pupils are important factors that determine pupils' participation in fishing related activities. Pupils' demographic characteristics are major variables that influence pupils' participation in fishing related activities. It therefore important to develop a disaggregated

analysis of pupils' demographic factors that influence participating in fishing related activities. Such analysis would provide the basis for understanding the extent to which demographic characteristics of pupils participating in fishing activities influences participation in primary school education. Education participation rates amongst the school children from fishing communities have been influenced by their demographic characteristics. Primary school participation rates have been noted to poor in fishing communities around the world notably in South Eastern and African continent.

Involvement of school going children in fisheries is something that cannot be overemphasized in the continent of Africa. The tendency of the children to enter fishing at tender age is very high is notably in countries such as Ghana, Zambia, Chad, Uganda, Tanzania and Senegal. These countries have denied their children the opportunity to access education by involving them in fishing related activities. According to child labour website (Not Dated) 70.5% of boys and 29.5% of girls from the fishing communities in the central regions of Ghana are involved in fishing related activities. About 42% of boys are engaged in actual fishing, draining water from the canoe, paddling the canoe and about 11% of girls are engaged in fishing-related activities such as smoking, buying and selling fish products. The involvement of school children in fishing related activities have tremendously affected the education of children in the central regions of Ghana. This is evidenced by low participation rates in primary schools amongst the fishing communities in Ghana. 45.5% of school going children from the fishing communities in central regions of Ghana have dropped out of formal school and about 33% of children in

such communities have not had any formal education. Only 14.8% of boys and 6.6% of girls aged between 5- 9 years have either dropped out at the primary level or are still attending primary school. 21% of children aged between 10- 15 years have dropped out of school and a considerable percent of about 5.1% of children in the same age group have not had any formal, (N.D). Mensah and Koranteng (2006) notes that the practice of involving school going children in fishing related activities is rather prominent among communities in the great Accra and central region in Ghana more so in the communities where there are no schools located close to the beaches.

Walakira and Byamugisha (2007) study on Child labour in the Fisheries Sub-sector in Uganda focused on major water bodies of Lake Victoria, Kyoga, Edward and George. The study found that about 94% of all children living in fishing villages in Uganda are involved in fishing related activities, 87% of these children are children aged 5-11 years and 98% are children aged 15 –17 years. In all age categories, the proportion of labouring children is incredibly high although as expected, highest among the older children aged 15-17 to the tune of 98%. 87% of younger children aged 5-11 years are also involved in fishing related activities. There is a slight variation by gender, there are more boys (95%) than girls (88%) who are involved in fishing related activities in the fishing communities in Uganda. With respect to age, variations can be seen in the types of work children undertake particularly in the lower age group of 5-11 years. These younger children predominantly undertake less heavy work such as collecting fire wood. The participation of children in more heavy, risky and technically demanding activities increases with age. Hence, the older children are more into fishing, scaling fish, bisecting fish, sorting fish, rowing the boat and emptying water from boat. In relation to gender, girls are more preoccupied with activities that are carried out away from lake water with the exclusion of fetching water. Girls are mostly involved in feminine responsibilities.

The study finding estimates that 29% of girls from the fishing villages in Uganda are basically involved in collecting firewood , 25% in fish cleaning and 24% in scaling. Boys normally clean nets, ferry fish from boats to the weighing scales/selling Stalls, hook fish, do ride boats to carry out fishing inside the lake. Hooking fish is normally done offshore, school boys as young as 5 years can hook fish on their own and are able to get some income from the sale of fish caught. Walakira and Byamugisha (2008) *laments that the involvement of school going children in fishing related activities have tremendously affected the education of children in Uganda. About 59% of school going children from the fishing communities in Uganda are not attending school and that the rate of dropout from formal schooling account for 54%.*

1.2 Theoretical framework

This study is based on the social-ecological theory which explores the dynamic interaction between individual and their immediate environment. This theory developed out of the work of Urie Bronfenbrenner's(1979) which focused on the relationship between the individual and the environment. one of the feature of socio-ecological theory is that it takes into account the environment and its relationship to people at individual, interpersonal, organizational and community levels. This theory looks at individual's behavioural patterns within the context of system of relationships that form ones environment. The social-ecological theory therefore helps us to identify factors that promote participation in a given activity by recognising the multiple factors that influences an individual's behaviour. In this study socio- ecological theory was used to explain how the individual, social environment and physical environment

influences individual's participation in any given activity

2. Methodology

In this study the independent variables represented pupils' personal characteristics and for the purpose of this study, age and gender were selected. Another variable that was considered as independent was students' class level. The dependent variable constituted sub-components of pupils' participation in education which included; attending school regularly, sneaking out of school and dropping out of school. The study employed descriptive survey research design. The research design was suitable for this study since it aimed at collecting and analysing information regarding attitude, knowledge, opinion and views of respondents on how they are affected by fishing related activities. The target population was 1,231 pupils drawn from standard six and seven pupils found within the study region. The target population occupied an area spreading 20 Kilometre in radius from the shore of Lake Victoria. The study site had several beaches which included; Alum, Mainuga, Rawi, Doho and Miti Mbili beaches of Lake Victoria in Rachuonyo Division. A sample of 231

respondents was drawn from the target population which included 168 pupils, 42 class teachers and 21 head teachers. A total of 8 pupils (Four from each sampled class) were systematically sampled from each of the 21 primary schools that participated in the study. To cater for gender balance stratified random sampling was used where equal number of boys and girls were sought at every class. Questionnaires and interview schedules were used as the main data collection instruments. Descriptive statistics such as frequencies and percentages were used as data analysis techniques. Hypotheses were tested using chi-square at 0.05 level of significant.

3. Find and discussions

3.1 Fishing related activities and pupils school attendance

Demographic characteristics of pupils participating in fishing related activities were examined in relation to their participation in primary education. Pupils were asked to indicate whether or

Table 3.1: Pupils and their attendance to school

Demographic characteristic	Response			
	Yes		No	
	Frequency	Percentage	Frequency	Percentage
Gender				
Male	50	29.8	34	20.2
Female	43	25.6	41	24.4
Total	93	55.4	75	44.6
Age category				
10-13	43	25.6	31	18.4
13-16	48	28.6	42	25.0
16-19	02	1.2	02	1.2
Total	93	55.4	75	44.6
Class level				
Class 6	49	29.2	36	21.4
Class 7	44	26.2	39	23.2
Total	93	55.4	75	44.6

A proportion of 93 (55.4 %) of pupils mentioned that they had failed to attend school regularly due to fishing related activities while 75 (44.6 %) said that they attended school regularly. Out of 93 pupils who said that they failed to attend schools due to being involved in the fish related activities, 50 (29.8%) were male while 43 (25.6%) were female. Statistics implies that more than a half (55.4%) of the pupils could not attend schools regularly due to fishing related activities within the school environment and most of the pupils (29.8%) that were affected are of male gender. These findings are almost similar findings in a study carried out by Nakabugo, Byamugisha and Bathaghalire (2008) on future schooling in Uganda also found that 64.2% of absenteeism cases in the fishing villages of Rwangara and Ntoroko in Uganda were caused by pupils' involvement in fishing related activities. A study by walakira and byamugisha (2008) on child labour in the fishing sector in Uganda found that more boys (95%) than girls (88%) who were involved in fishing related activities in the fishing communities in Uganda were not attending school regularly due to influence of fishing related activities.

Absenteeism was highly realised in pupils aged between 13-16 years as pupils in this age group registered 48 (28.6 %) of pupils who failed to attend school regularly but reduced to 43 (25.6 %) for pupils aged 10-13 and 2 (1.2 %) for pupils aged 16-19. However, 31(18.4 %) of pupils aged 10-13years, 42 (25.0%) of pupils aged 13-16 years and 2 (1.2 %) of pupils aged 16-19 years attended school regularly. In relation to age of the pupils participating in fishing related activities the study finding revealed that pupils aged between 13-16 years failed to attend school regularly more than pupils

aged between 10-13 years. This implied that as the pupils matured in age they became more involved in fishing related activities a factor that probably influenced their attendance to school. The study finding also revealed that 25.6 % of pupils aged between 10-13 years who failed to attend school regularly almost neared the highest percentage 28.6 % of pupils aged between 13-16 years. This finding showed that many pupils aged between 10-16 years failed to attend school regularly a factor that probably indicated high child labour amongst school going children.

Class 6 pupils registered a higher percentage of 49 (29.2%) of pupils who failed to attend school regularly due to participation in fishing related activities than 44 (26.2 %) of pupils in class 7 who equally did the same. On the contrary 36 (21.4 %) of pupils in class 6 and 39 (23.2 %) of pupils in class 7 attended school regularly and therefore their attendance to school was not in any way influenced by fishing related activities. From this analysis it is evidenced that pupils in class 6 failed to attend school regularly than pupils in class 7. This state of affairs is explained by the fact that more of class 6 pupils were involved in fishing related activities than pupils in class 7.

The study further sought to establish whether pupils' participation in primary education as represented by pupils' attendance to school differed significantly by gender. The following null hypothesis was tested using X² test at 0.05 level of significant;

H₀. There is no significant relationship between gender of pupils participating in fishing related activities and their

Table 3.2: Chi square test on gender and attendance

Gender	Response on attendance				X ²	df
	YES		NO			
	Frequency	percentage	Frequency	Percentage		
Male	50	29.8	34	20.2	1.16	1
Female	43	25.6	41	24.4		
Total	93	55.4	75	44.6		

α = 0.05

Table 3.2 shows the X^2 calculated value of 1.16 at 1 degree of freedom. At 0.05 level of significant, critical value was found to be 3.84. In this case X^2 calculated is less than critical value. The null hypothesis that there is no significant relationship between gender and participation in education as influenced by fishing related activities was not rejected. This means that gender and school attendance are independent of each

other, meaning that there are other factors that influence attendance to school other than gender of pupils involved fishing related activities.

Given the above findings, teachers' opinion on the same was sought. Teachers were asked to comment on whether pupils' attendance to school was influenced by fishing related activities and the responses were presented in table 3.3.

Table 3.3: Teachers' opinion on pupils' attendance to school

Response	Class teachers		Head teachers		Total
	Frequency	Percentage	Frequency	Percentage	
Yes	36	85.7	20	95.2	56
No	6	14.3	1	4.8	7
Total	42	100	21	100	63

The study finding revealed that 36 (85. %) of class teachers agreed that fishing related activities made pupils fail to attend schools while 6 (14.3 %) did not agree. To the head teacher, 20 (95.2 %) agreed that fishing related activities made pupils fail to attend schools as opposed to 1 (4.8 %) who did not agree.

On overall, it can therefore be inferred that majority 56 (88.8 %) of teachers agreed that fishing related activities made pupils fail to attend schools. This finding concurs with statistics in table 3.1 where 93 (55.4 %) of pupils who participated in the study mentioned that they had failed to attend school regularly due to fishing related activities.

3.2 Pupils' retention in school

This section discusses the influence of fishing related activities on pupils' retention in school. The study sought to examine the extent at which personal characteristics of pupils participating in fishing activities influenced their retention in school. It was necessary to know whether or not children sneaked out of school to participate in fishing related activities. To achieve this, pupils were asked to indicate whether or not they had ever sneaked out of school to participate in fishing related activities. The responses were cross-tabulated with their gender, age and level of their class and results presented in table 3.4.

Table 3.4: Pupils who sneaked out of school to participate in fishing related activities

Demographic characteristics	Response			
	YES		NO	
	Frequency	Percentage	Frequency	Percentage
Gender				
Male	44	26.2	40	23.8
Female	35	20.8	49	29.2
Total	79	47.0	89	53.0
Age category				
10-13	34	20.2	38	22.6
13-16	43	25.6	49	29.2
16-19	02	1.2	02	1.2
Total	79	47.0	89	53.0
Class level				
Class 6	45	26.8	39	23.2
Class 7	34	20.2	50	29.8
Total	79	47.0	89	53.0

A proportion of 79 (47 %) of pupils sneaked out of school to participate in fishing related activities as opposed to 89 (53 %) who never sneaked out of school to participate in fishing related activities. From this analysis it is evidenced that fishing related activities had less influence on the rate at which pupils sneaked out of school as mentioned by 89 (53 %) of the pupils who participated in the study.

Study finding also revealed that to some extent fishing related activities influenced the rate at which pupils sneaked out of school as mentioned by 79 (47 %) of the pupils. This finding concurs with statistics on table 3.6 where majority of teachers of sampled primary schools mentioned that many pupils sneaked out of school to participate in fishing related activities.

In relation to gender, the study revealed that more boys 44 (26.2 %) than girls 35 (20.8%) sneaked out of school to participate in fishing related activities as opposed to 40 (23.8 %) of boys and 49(29.2 %) of girls who never sneaked out of school to participate in fishing related activities. From this analysis it is evidenced that more boys than girls sneaked out of school to participate in fishing related activities. The problem of boys and girls sneaking out of school to participate in fishing related activities is not unique to this study. In a similar study carried out by Walakira and Byamugisha (2008) on child labour in the fishing sector in Uganda also found that (95%) of boys and (88%) of girls from the communities in Uganda were not attending school regularly as in most cases they either sneaked out of school or totally absented themselves from school.

The rate of sneaking out of school was higher to the tune of 43 (25.6 %) in pupils aged between 13- 16 years but reduced to 34 (20.2 %) in pupils aged 10-13 and 2 (1.2 %) in pupils aged 16-19 years. On the contrary 38 (22.6%) of pupils aged 10-13years, 49 (29.2%) of pupils aged 13-16 years and 2 (1.2 %) of pupils aged 16-19 years never sneaked out of school to participate in fishing related activities. In relation to age of the pupils participating in fishing related activities the

study finding revealed that pupils aged between 13-16 years sneaked out of school to participate in fishing related activities more than pupils aged between 10-13 years, this implied that as the pupils matured in age they became more involved in fishing related activities a factor that probably influenced the rate at which they sneaked out of school.

A higher proportion of 45 (26.8%) of pupils in class 6 sneaked out of school to participate in fishing related activities as opposed to 34 (20.2 %) of pupils in class 7 who equally did the same. On the contrary, 39 (23.2 %) of pupils in class 6 and 50 (29.8 %) of pupils in class 7 never sneaked out of school to participate in fishing related activities. From this analysis it is evidenced that pupils in class 6 sneaked out of school to participate in fishing related activities than pupils in class 7. This state of affairs is explained by the fact that more of class 6 pupils were involved in fishing related activities than pupils in class 7. This factor probably influenced the rate at which pupils in class 6 sneaked out of school to participate in fishing related activities. It might as well be inferred that pupils in class 7 sneaked out of school less than pupils in class 6 because of the fact that they were more engaged in learning activities a factor which probably influenced their stay in school.

Study finding that class 6 pupils sneaked out of school more than pupils in class 7 does not concur with finding by Walakira and Byamugisha (2008) who in a study on child labour in the fishing sector in Uganda found that as pupils advanced in level of their classes they become aggressively engaged in fishing related activities which in effect affect their education attainment than pupils in lower class.

The study further sought to establish whether pupils' participation in primary education as represented by sneaking out of school differed

significantly as per class level. The following null hypothesis was tested using X^2 test at 0.05 level of significant:

H_0 , There is no significant relationship between the class level of pupils involved in fishing related

Table 3.5: Chi square test on class level and rate of sneaking out of school

Gender	Response on sneaking out of school				X^2	df
	Yes		No			
	Frequency	percentage	Frequency	Percentage		
Male	45	26.8	39	23.2	2.86	1
Female	34	20.2	50	29.8		
Total	79	47.0	89	53.0		

$\alpha = 0.05$

Table 4.13 shows the X^2 calculated value of 2.86 at 1 degree of freedom. At 0.05 level of significant, critical value was found to be 3.84. In this case X^2 calculated is less than critical value. The null hypothesis that there is no significant relationship between class level and participation in education as influenced by fishing related activities was not rejected. This means that class level and sneaking out of school are independent of

each other, meaning that there are other factors that influence sneaking out of school other than class level of pupils involved in fishing related activities.

Given the above findings, teachers' opinion on the same was sought. Teachers were asked to estimate the rate at which pupils' sneaked out of school to participate in fishing related activities and the results were presented in table 3.6.

Table 3.6: Distribution of teachers who gave estimate of pupils who sneaked out of school

Estimate of pupils who sneaked out	Class teachers		Head teachers	
	Frequency	Percentage	Frequency	Percentage
Less than 5 %	3	7.1	2	9.5
5-10 %	3	7.1	3	14.3
10-15 %	8	19.1	5	23.8
15-20 %	11	26.2	9	42.9
20-25 %	17	40.5	2	9.5
Total	42	100	21	100

The study finding revealed 17 (40. %) of class teachers estimated that between 20-25 percent of pupils sneaked out of school to participate in fishing related activities, 11 (26.2 %) estimated between 15-20 percent, 8 (19.1 %) estimated between 10-15 percent and 3 (7.1 %) estimated that between 5-10 percent of pupils sneaked out of school to participated in fishing related activities. Only 3 (7.1 %) of class teachers estimated that less than 5 percent of pupils sneaked out of school to participate in fishing related activities.

Conversely 9 (42.9 %) of head teachers estimated that between 15-20 percent of pupils sneaked out of school to

participate in fishing related activities while 5 (23.8 %) estimated that between 10-15 percent, 3 (14.3 %) estimated that between 5-10 % and 2 (9.5 %) estimated that 20-25 % and less than 5 % of pupils sneaked out of school to participated in fishing related activities.

On overall, it can therefore be inferred that majority of teachers estimated that many pupils sneaked out of school to participate in fishing related activities, this finding corresponds with statistics in table 3.4 where 79 (47 %) of pupils mentioned that they had sneaked out of school to participate in fishing related activities

3. 3 Pupils' knowledge of pupils who had dropped out of school to participate in fishing related activities.

Pupils' opinion on influence of fishing related activities on pupils' drop out in school was sought to provide information on

rate of school dropout. To achieve this, pupils were asked whether they knew any pupil who had dropped out of school to participation in fishing related activities and the responses were presented in table 3.7.

Table3.7: Distribution of pupils who gave their opinion on pupils' drop out in school

Response	Frequency	Percentage
Yes	153	91.1
No	15	8.9
Total	168	100

The study finding revealed that 153 (91.1 %) of pupils mentioned that they had knowledge of a pupil who had dropped out of school due to influence of fishing related activities while 15 (8.9 %) said that they had no knowledge of any pupil who had dropped out school due to involvement in fishing related activities. The finding revealed that there was high drop out of pupils from school as evidenced by pupils' knowledge of pupils who had dropped out of school. Pupils' knowledge about school dropout concurs

with observation made by Oywa (2002) who alluded to the fact that 63 % of girls in Nyanza province *had dropped out of school to participate in fishing related activities.*

Given the above findings, teachers' opinion on the same was sought. Teachers were asked to estimate the percentage of pupils who dropped out of school in last one year to participate in fishing related activities and the results were presented in table 3.8.

Table 3.8: Distribution of teachers who gave estimate of pupils who dropped out of school

Estimate of pupils who drop out	Class teachers		Head teachers	
	Frequency	Percentage	Frequency	Percentage
Less than 5	9	21.4	2	9.5
5-10	7	16.7	5	23.8
10-15	13	31.0	4	19.1
15-20	10	23.8	7	33.3
20-25	3	7.1	3	14.3
Total	42	100	21	100

The study finding revealed 13 (31.0 %) of class teachers estimated that between 10-15 percent of pupils dropped out of school to participate in fishing related activities, 10 (23.8 %) estimated between 15-20 percent, 7 (16.7 %) estimated 5-10 percent and 9 (21.4 %) estimated less than 5 percent of pupils dropped out of school to participated in fishing related activities. Only 3 (7.1 %) of class teachers estimated that between 20-25 percent of the pupils dropped out of school. Conversely 7 (33.3 %) of head teachers estimated that between 15-

20 percent of pupils dropped out of school, 5 (23.8 %) estimated 5-10 percent, 4 (19.1 %) estimated between 10-15 percent and 3 (14.3 %) estimated that between 20-25 percent of pupils had dropped out of school. Only 2 (9.5 %) of head teachers had estimated that less than 5 percent had dropped out of school due to involvement in fishing related activities.

On overall, it can therefore be inferred many pupils had dropped out of school to participate in fishing related

activities as estimated by majority of teachers. This finding corresponds with statistics in table 3.7 where majority 153 (91.1 %) of pupils mentioned that they had knowledge of a pupil who had dropped out of school.

3.4 Pupils' transition in school

This section discusses the influence of fishing related activities on pupils' transition in school. The study sought to examine the extent at which personal

characteristics of pupils participating in fishing activities influenced their transition to next class level. It was necessary to know if the children had repeated a class at any point in time due to the influence of fishing related activities. To achieve this, pupils were asked to indicate whether or not they had ever repeated a class at any point in time due to fishing related activities. The responses were cross-tabulated with their gender, age and level of their class and results presented in table 3.9.

Table 3.9: Distribution of pupils who had repeated a class due to involvement in fishing related activities.

Demographic characteristics	Response			
	YES Frequency	YES Percentage	NO Frequency	NO Percentage
Gender				
Male	17	10.1	67	39.9
Female	16	9.5	68	40.5
Total	33	19.6	135	80.4
Age category				
10-13	16	9.5	56	33.3
13-16	16	9.5	76	45.3
16-19	01	0.6	03	1.8
Total	33	19.6	135	80.4
Class level				
Class 6	21	12.5	63	37.5
Class 7	12	7.1	72	42.9
Total	33	19.6	135	80.4

The analysis showed 33 (19.6 %) of pupils had repeated a class in their school lifetime due to participation in fishing related activities while 135 (80.4%) had not repeated a class. From this analysis it is evidenced majority 135 (80.4%) of pupils had not repeated a class due to the influence of fishing related activities. This state of affairs could be attributed to fact that education policy restrains pupils from repeating a class and as stipulated in Kenya vision 2030, education and training must embrace equity issues such as equal opportunity for access, retention and completion. Study finding also revealed that fishing related activities influenced pupils' transition rate as mentioned by 33 (19.6 %) of pupils. This finding showed that fishing related activities

to some extent influenced pupils' transition rate in schools.

In relation to gender, both sexes had repeated a class with almost equal proportion as shown by a response of 17 (10.1 %) of boys and 16 (9.5 %) of girls. Conversely 67 (39.9 %) of boys and 68 (40.5 %) of girls had never repeated a class at any point in time. Study finding that both sexes in almost equal proportion had repeated a class due to the influence of fishing related activities implied that the boys and the girls to some extent were influenced in their repetition rate by fishing related activities.

In all the age categories there was equal proportion of repetition rate

as shown by a response of 16 (9.5 %) for pupils aged between 10 -16 years and to the pupils aged between 16-19 years only 1 (0.6 %) had repeated a class. On the contrary 56 (33.3 %) of pupils aged between 10-13 years, 76 (45.3 %) of pupils aged between 13-16 and 3 (1.8 %) of pupils aged between 16-19 years had never repeated a class at any point in time due to the influence of fishing related activities. In relation to age of the pupils participating in fishing related activities the study finding revealed that pupils aged between 10 -13 years and 13 -16 years had repeated a class with equal proportion. The ages of the pupils did not therefore have any bearing on pupils' rate of repetition. However, to the pupils aged 16-19 years only 1 (0.6 %) had repeated a class, this is because there was only one pupils in this age bracket who mentioned that he or she had repeated a class due to the influence of fishing related activities

The study finding revealed that 21 (12.5 %) of pupils in class 6 had repeated a class due to the influence of fishing related activities as compared to 12 (7.1 %) of pupils in class 7 who equally did the same. Conversely 63 (37.5 %) of pupils in class 6

and 72 (42.9 %) of pupils in class 7 had never repeated a class at any point in time due to influence of fishing related activities. From this analysis it is evidenced that more of class 6 pupils had repeated a class at any point in time due to the influence of fishing related activities than the pupils in class 7. This state of affairs is explained by the fact that education policy is quiet strict on pupils being forced to repeat a class as the head teachers are made to account for number of pupils promoted to class 8. This fact probably influenced pupils' transition rate in class 7.

3.5 Performance in examination

Teachers' opinion on pupils' performance in examination was sought to provide information on influence of fishing related activities on pupils' performance in examination. To achieve this, teachers were asked to rate the extent at which poor performance in their classes or schools could be attributed to influence of fishing related activities and the results were presented in table3.10.

Table 3.10: Distribution of teachers who attributed poor performance in examination to influence of fishing related activities

Performance in CAT	Class teachers		Head teachers		Total	percentage
	Frequency	Percentage	Frequency	Percentage		
Very large extent	6	14.3	4	19.0	10	15.9
Large extent	26	61.9	14	66.7	40	63.4
Rarely	8	19.0	2	9.5	10	15.9
No extent	2	4.8	1	4.8	3	4.8
Total	42	100	21	100	63	100

A number of 40 (63.4%) of teachers to a large extent ascribed low performance of pupils in the examination to the influence of fishing related activities while 10 (15.9 %) mentioned that fishing related affected performance of pupils in the examination to a very large extent. On the contrary 10 (15.9 %) of teachers mentioned that fishing related activities rarely affected performance of pupils in the examination while 3 (4.8 %) of teachers held the preposition that fishing

related activities did not affect performance of pupils in examination.

The study findings revealed that poor performance of pupils in the examination to a large extent could be attributed to involvement of pupils in various fishing related activities as about 50 (79.3 %) of teachers held the preposition that fishing related activities affected pupils' performance in the examination. This preposition concurs

with statistics in table 3.11 where 73 (43.4 %) of pupils who had done poorly in the CAT to some extent attributed poor performance in the CAT to the influence of fishing related activities.

Given the above findings, pupils' opinion on the same was sought. Pupils were asked to rate their performance in the previous CAT and the responses were cross-tabulated with their gender, age and level of their class. The findings indicated that a proportion of 73 (43.4%) of pupils mentioned that they had done poorly in the previous CAT as opposed to 95 (56.6 %) whose performance were rated as good. From this analysis it evidenced that many pupils accounting for 95 (56.6 %) had their performance in the CAT not influenced by fishing related activities. Of the pupils who had done poorly in the CAT 41 (56.2%) mentioned that fishing related activities affected their performance in the CAT to a large extent while 32 (43.8%) said that fishing related activities affected their performance to low extent.

The study finding revealed that 73 (43.4 %) of pupils who had done poorly in the CAT to some extent had their performance affected by participation in fishing related activities. This finding therefore revealed that fishing related activities had influence on pupils' performance in the CAT. This finding concurs with information provided by (AEO'S office, department of examination, 2011) which showed that the mean score for first term 2011 evaluation test for standard 6 and 7 was 236.9 which was below the average mean. It also concurs with statistics in table 3.10 where 50 (79.3 %) of teachers mentioned that fishing related activities affected pupils' performance in the examination. It can therefore be hypothesized that poor performance in examination probably could be attributed to several factors among which are fishing related activities.

In relation to gender more boys 38 (22.6%) than girls 35 (20.8 %) registered poor performance in the CAT as opposed to 45 (26. %) of boys and 50 (29.8 %) of girls who noted good performance in the CAT.

The study finding revealed that in both sexes the boys were affected more in their performance in the CAT than the girls. This could be attributed to the fact that more boys than girls were involved in fishing related activities which probably influenced their performance in the CAT.

In all the age categories, a higher proportion of 47 (28.0 %) noted poor performance in the CAT in pupils aged between 13-16 years than all the other age groups. 24 (14.2 %) of pupils aged between 10-13 years and 2 (1.2 %) of pupils aged between 16-19 years noted poor performance in the CAT. On the contrary 41 (24.4 %) of pupils aged between 10-13 years, 52 (31.0 %) of pupils aged between 13-16 years and 2 (1.2 %) of pupils aged between 16 -19 years noted good performance in the CAT. In relation to age of the pupils participating in fishing related activities the study finding revealed that pupils aged between 13-16 years noted poor performance in the CAT more than pupils aged between 10-13 years. This implied that as pupils matured in age they became more involved in fishing related activities. This fact probably influenced their performance in the CAT.

A higher proportion of 40 (23.8%) of pupils in class 6 note poor performance in the previous CAT than pupils in class 7 who registered 33 (19.6 %) of pupils who did poorly in the CAT. Conversely 44 (26.2%) of pupils in class 6 and 51 (30.4 %) of pupils in class 7 noted good performance in the previous CAT. The study finding revealed that 73 (43.5 %) of pupils in class 6 and 7 had their performance in the CAT influenced by fishing related activities. This finding concurs with observation made by (DEO's office, department of statistics, 2009) that education system in schools around the beaches in North Rachuonyo district experienced high wastage as a result of low performance in national examination.

3.6 Pupils participating in fishing related activities and their time for homework

This section discusses the influence of fishing related activities on pupils' time for doing homework. The study sought to examine the extent at which personal characteristics of pupils participating in fishing activities influenced their time for homework. It was necessary to know whether or not pupils' time for homework was interfered with by involvement in fishing related activities. To achieve this, pupils were asked to indicate whether or not fishing related activities interfered with their time for homework. The responses were cross-tabulated with their gender, age and level of their class.

It was established that a proportion of 95 (56.6 %) of pupils mentioned that fishing related activities interfered with their time for homework as opposed to 73 (43.4 %) who said that fishing related activities never interfered with their time for homework. Study finding revealed that fishing related activities had influence on the pupils' time for homework as 95 (56.6 %) of pupils alluded to the fact that their time for homework had been interfered with by involvement in fishing related activities. The problem of fishing related activities interfering with pupils' time for homework is not unique to this study. In a similar study carried out by Kodonya, Madihi and Mtwana (2002) on child labour in informal sector in Tanzania it was also found that 88.2 % of school children involved in actual fishing in Mwanza region in Tanzania had a lot of difficulty in participating in learning activities in their schools as they could not have appropriate time to learn and complete class assignments given to them by their teachers at school.

In relation to gender, both boys and girls were affected in almost equal proportion as 48 (28.5 %) of boys and 47 (28.0 %) of girls had their time for homework interfered with due to participation in fishing related activities. On the other hand 36 (21.4 %) of boys and 37 (22.0 %) of girls had their time for homework not interfered with by participation in fishing related activities.

From this analysis it is evidenced that fishing related activities had influence on pupils' time for homework as mentioned by 95 (56.5 %) of the boys and girls. This finding concurs with research finding documented in [child labour website \(ND\)](#) that majority of school girls who were engaged in fish processing in Ghana were primarily engaged in fish processing at the expense of their education. Occasionally the girls had to keep up to late hours at the beach while waiting for the fishermen to return from sea, this tendency therefore denied them of adequate time needed for studies.

In all the age categories, a proportion of 54 (32.1 %) of pupils had their time for homework interfered with due to participation in fishing related activities in pupils aged between 13-16 years than all the other age groups. 39 (23.2%) of pupils aged between 10-13 years and 2 (1.2 %) of pupils aged between 16-19 years had their time for homework interfered with due to participation in fishing related activities. On the contrary 33 (19.6%) of pupils aged between 10-13 years, 38 (22.6%) of pupils aged between 13-16 years and 2 (1.2 %) of pupils aged between 16 -19 had their time for homework not interfered with by participation in fishing related activities. In relation to age of the pupils participating in fishing related activities the study finding revealed that pupils aged between 13-16 years had their time for homework interfered with more than pupils aged between 10-13 years. This therefore implied that as the pupils matured in age they became more involved in fishing related activities a factor that probably made them lose their time for doing homework to influence of fishing related activities.

A proportion of 49 (29.1%) of pupils in class 7 and 46 (27.4%) of pupils in class 6 had their time for homework interfered with by involvement in fishing related activities.

Conversely 38 (22.6%) of pupils in class 6 and 35 (20.8 %) of pupils in class 7 had their time for homework not interfered with by fishing related activities. From this analysis it is evidenced that 27.4 % of pupils in class 6 who had their time for homework interfered with by involvement in fishing related activities almost neared the highest percentage 29.1% of pupils in class 7 who had their time for homework interfered with due to involvement in fishing related activities. This therefore implied that fishing related activities regardless of class level influenced pupils' time for homework.

4.0 Conclusion

The study concluded that gender, age and class level of pupils participating in fishing related activities affected pupils' participation rates in primary education in terms of participation in leaning activities, school attendance, retention and transition in school. It was further concluded that gender of pupils participating in fishing related activities and pupils' attendance to school were independent of each other. There was no significant relationship between pupils' gender and their attendance to school meaning that there were other factors that influenced pupils' attendance to school other than gender of pupils involved fishing related activities.

5.0 Recommendation

Based on the findings of the study, the following are the recommendation given regarding the influence of fishing related activities on pupils' participation in primary education along the beaches of Lake Victoria:

1. The government should provide policy framework that takes into account larger socio-economic context of the fisher community .It is crucial to address root causes of structural poverty of poor fisher households. As majority of pupils involved in fishing activities come from impoverished households and from vulnerable groups, it is imperative to address the root causes of poverty by the governments through enacting appropriate legal and policy framework and ensuring the successful implementation of

the same. This can be best done by initiating financial support programme in affected areas along the beaches to help alleviate poverty levels amongst the fishing communities and also help support sustainability of affected pupils.

2. The government should review the Beach Management Unit bylaws and policies. The Beach Management Units should be strengthen by been provided with institutional capacity to pass bylaws and or enforce the existing laws to prohibit children from participating in fishing activities. Provincial administration, department of fisheries, local councils, BMUs should form child protection committees in collaboration the ministry of education to monitor the implementation of bylaws and other initiatives to prevent involvement of children in fisheries.

3. The government should review and update national legislation on involvement of school children in fishing related activities and develop practical policies on child labour in fisheries. As a member of the international community the government should take proactive steps to curb involvement of school children in fisheries by evoking act No.182 of the work in fishing convention.

4. Ensuring synergy between all concerned Stakeholders. There is need to establish better communication and cooperation between various stakeholders. Stakeholders' participation should be encouraged when discussing matters of education more so educational issues affecting the children from the fishing communities. Increased involvement of stakeholders' participation is necessary because stakeholders have stake in matters of education more so on issues affecting the children from the fishing community. Relevant stakeholders such as the ministry of education, the general community, Ministry of fisheries,

Provincial administration, school sponsors and NGOs operating along the lake region should be brought on board while discussing matters affecting the education of children from the fishing communities. Through such initiative concerted efforts can be made to help mitigate the influence of fishing related activities on pupils' participation in education.

5. The government should facilitate community sensitization programmes in areas affected by fishing activities. Social mobilization and community participation is a key prevention strategy that can be used to mitigate the effects of fishing on pupils' participation in primary education. This requires systematic policy framework for guidance and counselling both the parents and the pupils participating in fishing activities. It is also important to sensitise the general fisher community through appropriate trainings and orientations on the importance of education. Youth Volunteers, social animators, CBOs and NGOs can take

leading role in imparting such sensitization programmes. The role of these actors as social mobilizers should be acknowledged and an environment of cooperation should be developed among the governments and other stakeholders to prevent pupils' participation in fishing related activities.

6. The levies that are imposed on the school children by the school administration should be reduced. It has been noted that the levies imposed on the pupils is the cause of child labour along the beaches of Lake Victoria in North Rachuonyo district. Levies imposed on the pupils by the school administration is one of the major reasons that makes school children to drop out of school to participate in fishing related activities. The ministry of education should therefore regulate the amount of school levies imposed on school children as this is the main cause that drives school children into fishing.

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