

Note on: Socio-Economic Status of Al-Kalakla Fishery in the White Nile in Sudan

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ABSTRACT

The present study aimed to provide baseline information of socio-economic status of Al-Kalakla fishery in the White Nile in Sudan due to there is lack information in this field. Results showed that age groups of fishermen ranged between 20 to 90yr where age group 30-40yr was dominant. Seven tribes were recorded such as: Ja'lyieen tribe, Beja tribe, Kahli tribe, Jamuae tribe, Hamadabi tribe, Maqrabi tribe and Hassani tribe. Ja'lyieen tribe was dominant (64%); whereas, Beja had the lowest percentage (1%). Three educational categories were recorded where general educational was dominant (60%); whereas, illiteracy was the second (38%). Professional fishermen were dominant (91%); whereas, part-time fishermen were the lowest (1%). Most of fishermen used own fishing gears; operated lawfully for fishing periods ranged between 5-10 hours.

Keywords: Freshwater fisheries, the White Nile fisheries, fishermen, secio-economic status

INTRODUCTION

Al-Kalakla fishery area is considered as one of the main fisheries in Khartoum state. It locates in the White Nile at 29.5km north to Jabel Awlia dam in south of the state and 16.3km south to the capital of the state Khartoum [1,2]. Both inland and marine fisheries resources play an important role in food security and export trade especially in developing countries. In Sudan fisheries, especially those in Khartoum state, the profession of fishing has traditionally been learned by mimicing where a few of them have learned by concerned institute [2]. Most of fishermen of the state have basic education of 47%; whereas, the illiterate fishermen constituted 31.7 % [3, 4]. 90% of whole fishermen have owned their fishing gear and have no formal training to do fishing [4].

On the other hand, fishes list of Al-Kalakla fishery are only 33 fish species that are caught mainly by gillnets [1], but the most fishing ways used in this fishery are drifting method followed by fixed method [3]. Water transparency gets high reading during December and February, but it decreases during flood season due to the distribution of the suspended materials such as planktons and detritus [1]. Therefore, this present study aimed to provide baseline information of socio-economic status of Al-Kalakla fishery in the White Nile in Sudan due to there is lack documented data in this field.

MATERIALS AND METHODS

Study area

Al-Kalakla fishery is in Khartoum state and its southern part locates at 32°27'45.95" E and 15°27'19.6" N with elevation 375m; whereas, its northern part locates at 32°28'41.65" E and 15°30'17.3" N with elevation 381m. A distance from Al-Kalakla fishery to the capital of the state is 16.3km and bearing 29°t [2].

Data Collection

Raw data of this study were gathered through a questionnaire during 2005/2006. The questionnaire was designed to provide essential socio-economic information related to: fishing occupation, fishermen tribes, education levels, owing fishing gear, learning fishing job, ways of fishing used, training programs, time spending in fishing and fishing license. Eleven fishermen were questioned every month for whole year representing nearly 5% of total fishermen numbers.

Data analysis

Descriptive analysis was done for analyzing the raw data of the study by using Excel Microsoft Software 2003.

RESULTS AND DISCUSSION

Social data showed that age groups of fishermen in Al-Kalakla fishery ranged between 20 to 90yr. Age group 80-90yr had the lowest percentage as 3%; whereas, age group 30-40yr was the dominant (24%), followed by age group 20-30yr(20%) and age group 60-70yr (19%). These results reflect that most fishermen who practiced fishing activity were youth and this dominance may also be due to flood season, during which rate of fishes are high that may attract youth to get benefit and probably they are able to practice fishing during strong wind and high waves of the water. This result is in agreement with results of [3, 1]. In contrary, age group 60-70yr may represent the rate of the professional fishermen who practice fishing during whole year. This result is in harmony with results of [3, 2]. As regards to fishermen tribes, results showed that there were seven tribes that fishermen belonged to. They were Ja'lyieen tribe, Beja tribe, Kahli tribe, Jamuae tribe, Hamadabi tribe, Maqrabi tribe and Hassani tribe. Ja'lyieen tribe was the dominant tribe (64%), followed by Hassahi tribe (19%); whereas, Beja tribe was represented by very few number of fishermen (1%). The dominance tribes of Ja'lyieen and Hassani may be due to their high abundances in demographics of Al-Kalakla village, from which the fishermen belonged to. This result agrees with result of [4]. On the other hand, results showed three educational levels those were: general educational level (60%), high educational level (2%) and illiteracy (38%); the general educational was dominant followed by illiteracy. This result may be the concept of local community toward fishing career and low benefit of returns of fishing that may be for over-fishing.

Economic results showed that three categories of fishermen (professional fishermen, part-time fishermen and occasional fishermen) were presented with different percentages such as: 91%, 1% and 8% respectively. Category of profession was dominant and explains why age group 60-70yr was one of the dominance age group of fishermen. This result also harmonizes with results of [3;2]. In addition, most of fishermen used own fishing gears; operated lawfully and fishing periods between 5-10 hours. These results reflect the how range of administration policy followed in this fishery. These results support those results of [4].

REFERENCES

1. Hamza, K. M. (1981). Studies on fish populations in Jabel Awlia reservoir, M. Sc. (Zoology) thesis, University of Khartoum, Khartoum, Sudan.
2. Mohammed, M.O. (2006). Effects of gill nets and fishers on fisheries of Al-Kalakla and Jabel Awlia Dam. M. Sc. (Aquatic animal) thesis. Sudan Academy of Sciences, Khartoum, Sudan.
3. FDKS (2003). Database program of the Khartoum state fisheries. Report(In Arabic), Fisheries Department, Ministry of Agriculture and Animal Wealth, Khartoum State (FDKS), Khartoum, Sudan, p. 32.
4. Mohammed, M. O. (2004). Studies on fishing gear, fish compositions and fishermen sector in the fisheries of Khartoum State, B. Sc. (Honour in Zoology) dissertation. University of Khartoum, Khartoum Sudan.