

Authorization

I hereby declare that I am the sole author of the thesis. I authorize the Chattogram Veterinary and Animal Sciences University (CVASU) to lend this thesis to other institutions or individuals for the purpose of scholarly research. I further authorize the CVASU to reproduce the thesis by photocopying or by other means, in total or in part, at the request of other institutions or individuals for the purpose of scholarly research.

I, undersigned, and author of this work, declare that the **electronic copy** of this thesis provided to the CVASU Library, is an accurate copy of the print thesis submitted, within the limits of the technology available.

Palash Chandra Das

June, 2022

Acknowledgments

The author is indebted to Almighty who enabled him to complete the research work and write up the dissertation successfully for the degree of Master of Science (MS) in Fisheries Resource Management under the Department of Fisheries Resource Management, Chattogram Veterinary and Animal Sciences University (CVASU).

The author is indebted to his parents whose blessings have enabled him to complete his research work successfully despite of many adversities.

The author would like to convey his sincere thanks and gratitude to his supervisor **Sk. Istiaque Ahmed**, Assistant Professor, Department of Fisheries Resource Management, CVASU for his valuable supervision and guidance. It was really a great pleasure and an amazing experience for the author to work under his supervision. The author really deemed it and the author realized it was an opportunity for him to work under his creative guidance.

The author is greatly indebted to his co-supervisor, **Dr. Sk. Ahmad Al Nahid**, Associate Professor and Head, Department of Fisheries Resource Management, CVASU, for his encouragement and cooperation at every stage of this study from its inception to completion.

It is author privilege to acknowledge **Abrar Shakil**, Assistant Professor, Department of Marine Bioresource Science, CVASU, for his moral support and cooperation.

The author sincerely thank to all, especially **Saifuddin Rana**, and the technical staffs of the Department of Fisheries Resource Management, CVASU for their encouragement and support during research work.

The author express his deepest sense of gratitude, cordial respect of feelings to his beloved family members and dearest classmates, juniors for their immense sacrifice, blessings love and encouragement.

The Author

Palash Chandra Das

CONTENTS

Chapter	Contents	Page
	AUTHORIZATION	i
	ACKNOWLEDGEMENTS	ii
	TABLE OF CONTENTS	iii- iv
	LIST OF TABLE	v
	LIST OF FIGURES	vi
	LIST OF APPENDICES	vii
	ABSTRACT	viii
Chapter I	INTRODUCTION	1-3
	1.1 Background	1-3
	1.2 Objective of the study	3
Chapter II	REVIEW OF LITERATURE	4-7
Chapter III	MATERIALS AND METHODS	8-12
	3.1 Study Area and Study period	8
	3.2 Experimental Design	9
	3.3 Data collection technique	9
	3.3.1 Personal interviews	10
	3.3.2 Focus group discussion	11
	3.3.3 Key informant interviews	11
	3.4 Data analysis	12
Chapter IV	RESULTS	13-30
	4.1 Gender	13
	4.2 Participant religion	14
	4.3 Marital status of fisherman	14
	4.4 Participant occupation of the fishermen community	15
	4.5 Educational background of the all participants in fisher's community	16
	4.6 Education background of fisherman	17
	4.7 Family Type	18
	4.8 Age group of fishermen	19
	4.9 Children education condition of Fishers' community	19
	4.10 Housing condition of the participants	20
	4.11 Income of fisherman	21
	4.12 Electricity use	21

	4.13 Working person in the participant family	21
	4.14 Economic condition of the participant family	22
	4.15 Sanitation type	23
	4.16 Potable water source	24
	4.17 Net Type	24
	4.18 Catch composition size	25
	4.19 Engaged Time	25
	4.20 Stockholder's Conflict	26
	4.21 Shocks those they regularly faced	26
	4.22 Common problem faced	27
	4.23 Crises faced in last 12 months	27
	4.24 Fish resources decreasing factors	28
	4.25 Initiative measure to arise fish production	29
	4.26 List of fish species distribution in their fishing areas	30
Chapter V	DISCUSSION	31-34
Chapter VI	CONCLUSION	35
Chapter VII	RECOMMENDATIONS	36
	REFERENCES	37-40
	APPENDICES	41-52

List of Table

SL. NO	Name of the table	Page
1	Working person in the participant family	21
2	Overview of fish species distribution in their fishing areas	30

List of Figures

SL. NO	Name of the figure	Page
1	Study area map	8
2	Flow chart of investigation design	9
3	Personal interview	10
4	Focus group discussion	11
5	Key informant interviews	11
6	Gender distribution of fishermen in Chandgaon	13
7	Religion status of participant of fishers' community	14
8	Marital status of fisherman	14
9	Participant occupation of the fishermen community	15
10	Educational background of the all participants	16
11	Education background of fisherman	17
12	Family type of fishermen community	18
13	Age group percentage of fishermen	19
14	Children education condition of fishers' community	19
15	Housing condition of the participants	20
16	Fisherman daily income	21
17	Economic condition of the participant family	22
18	Sanitation type	23
19	Potable water source	24
20	Net type they use	24
21	Catch composition size in percentage	25
22	Engaged time of fishing of fisherman	25
23	Stockholder's conflict	26
24	Regularly faced shock	26
25	Common problem they faced	27
26	Crises they faced in last 12 months	27
27	Fish resources decreasing factors	28
28	Initiative measure to arise fish production	29

List of Appendices

SL. No	Name of Appendix	Page
1	Questionnaire used in this field survey	41-49
2	Study area fishermen activities	50
3	Study area fisher's community environment	51
4	Study area Local fish market	52

ABSTRACT

The goal of the current survey was to evaluate the socio-economic and livelihood situation of the fishing community along the Karnaphuli River in the Chattogram district as well as to provide a general overview of the distribution of fish species within those areas from July to December 2021. The socioeconomic and livelihood status was provided by gender, occupation, age group, family type, housing situation, marital status, education condition, the income of a fisherman, electricity, and a working individual financial situation, type of sanitation, source of potable water, kinds of net, and engaged time, etc. The participant's demographics were as follows: 50% were fishermen, 27% were businessmen, and 27% were employees. Only 54% of them could sign their name, while 9.09% of them were totally illiterate in terms of writing and reading. Most families (43 %) consisted of 5-6 members. About half (48%) of fishermen were in the age group of 31–40. Their main residence had a tin roof and walls (37.21 %). Among those 68.18 % of the population used partially concrete-made sanitation (semi-pacca) and 31.82 % used concrete-made (pacca). The residential facilities included access to electricity and sanitary facilities for all. Each household had a maximum of five capable workers, with the lowest number being one. The fisher community comprised many people living below extreme poverty line (11.63%) while the other significant portions (55%) were not devoid of poverty. Even though most of them had access to pure drinking water. Most of the catch (72%) was medium-sized. The maximum engaged time for fishermen was over 20 years (43.75%). Fishermen's yearly income range was 36,000–144,000 TK. Pollution, tidal flooding, less catch, and lack of working opportunities were the main problems in this survey area. Pollution and saltwater inflow reduce freshwater fish availability, but Poa fish catch has increased compared to the past. By fishing, fishermen could not advance their economic or educational standard. As a result, many of them were switching their profession. So, the time has come to foster the conditions of their living as a collaborative effort from the Govt. and NGO's.

Key words: Fisherman, Karnaphuli River, livelihood, pollution, community.