

**CAPITAL PENETRATION AND COPING
STRATEGIES OF TRADITIONAL HINDU
FISHERFOLK IN BANGLADESH**

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STRATEGIES OF TRADITIONAL HINDU
FISHERFOLK IN BANGLADESH**

by

MOHAMMED MAMUN OR RASHID

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TABLE OF CONTENTS

ACKNOWLEDGEMENT	ii
TABLE OF CONTENTS	v
LIST OF TABLES	xiii
LIST OF FIGURES	xvi
LIST OF ABBREVIATIONS	xviii
LIST OF GLOSSARIES	xxiii
LIST OF APPENDICES	xxv
ABSTRAK	xxvi
ABSTRACT	xxviii
CHAPTER 1 INTRODUCTION	1
1.1 Overview of Study	1
1.2 Fisheries Sector in Bangladesh	4
1.3 Hindu Fishing Community	10
1.4 Problem Statement	12
1.5 Research Questions	19
1.6 Research Objectives	20
1.7 Significance of Study in Social Work	20
1.8 Structure of Thesis	24
CHAPTER 2 LITERATURE REVIEW	26
2.1 Fishing Communities in the World	27
2.1.1 Fishing Communities in Bangladesh	30
2.1.2 <i>Jaladas</i> as Traditional Fishing Community	35

2.1.3	Issues and Challenges for Fishing Communities in Bangladesh	39
2.2	Capital Development in Fishing Communities	46
2.2.1	Capital Inflows in Fishing Communities	48
2.2.2	Market Functionaries in Fishing Communities	50
2.3	Social Transformation as Outcome of Capital Inflows in Fishing Communities	51
2.4	Responses to and Coping with Capital Inflows in Fishing Communities	55
2.5	Review of Existing Relevant Policies and Laws	59
2.6	Theoretical Framework	64
2.7	Conceptual Framework	77
CHAPTER 3 RESEARCH METHODOLOGY		93
3.1	Introduction	93
3.2	Research Design	93
3.3	Study Village Selection	95
3.4	Location of Study Villages	96
3.5	Household Survey	98
3.5.1	Population of Household Survey	98
3.5.2	Sample Size and Sampling Technique	99
3.5.3	Research Instrument	100
3.6	Menu of Qualitative Method: A Realistic View	101
3.6.1	Key Informant Interview (KII)	101
3.6.1(a)	Selection of Interview Participants	102
3.6.1(b)	Interview Protocol	103
3.6.2	Focus Group Discussion (FGD)	104

3.6.2(a) FGDs and Selection of Participants	104
3.6.2(b) Mode of Conduct and Insights	105
3.6.3 Household Level Case Studies	106
3.7 Secondary Sources	107
3.8 Pilot Study	108
3.9 Reliability and Validity of Data	108
3.10 Data Analysis	110
3.10.1 Survey Data	111
3.10.2 Qualitative Data	111
3.10.3 Thematic Analysis	112
3.11 Ethical Consideration	113
3.12 Research Plan and Process	115
CHAPTER 4 RESEARCH FINDINGS	117
4.1 Location and Features of Villages	117
4.1.1 North Salimpur Fishing Village	117
4.1.2 South Dhurung Fishing Village	118
4.2 Profile of FGD Respondents, Key Informant (KI) Interviewees and Respondents of Household Survey	120
4.2.1 FGD Respondents in North Salimpur Fishing Village	120
4.2.2 FGD Respondents in South Dhurung Fishing Village	121
4.2.3 Interviewees from Parliamentary Standing Committee on Ministry of Fisheries and Livestock in Bangladesh	122
4.2.4 Household Survey Respondents in North Salimpur Fishing Village	123

4.2.5	Household Survey Respondents in South Dhurung Fishing Village	126
4.3	Objective-1: To Identify Socio-Economic Transformations in <i>Jaladas</i> Communities by Inflows of Diversified Capitals	129
4.3.1	Findings for North Salimpur Fishing Village	129
	4.3.1(a) Human Capitals	130
	4.3.1(b) Physical Capitals	137
	4.3.1(c) Natural Capitals	146
	4.3.1(d) Financial Capitals	147
	4.3.1(e) Social Capitals	149
	4.3.1(f) Cultural Capitals	152
	4.3.1(g) Political Capitals	155
4.3.2	Findings for South Dhurung Fishing Village	157
	4.3.2(h) Human Capitals	158
	4.3.2(i) Physical Capitals	168
	4.3.2(j) Natural Capitals	174
	4.3.2(k) Financial Capitals	175
	4.3.2(l) Social Capitals	177
	4.3.2(m) Cultural Capitals	178
	4.3.2(n) Political Capitals	179
4.4	Objective-2: To Analyze Roles of Various Market Functionaries in the Processes of Capital Penetration	186
4.4.1	Findings for North Salimpur Fishing Village	186
	4.4.1(a) Pattern of Indebtedness	187

4.4.1(b) Fish Marketing	187
4.4.2 Findings for South Dhurung Fishing Village	188
4.4.2(a) Pattern of Indebtedness	188
4.4.3 Financial Investment and Technological Innovation	191
4.5 Objective-3: To Analyze Changes of Traditional Social Institutions, Cultural Practices, and Power Relations in and out of <i>Jaladas</i> Communities	193
4.5.1 Findings for North Salimpur Fishing Village	193
4.5.2 Findings for South Dhurung Fishing Village	199
4.6 Objective-4: To Examine Coping Strategies of <i>Jaladas</i> Communities with Their Present Situation	204
4.6.1 Lives and Livelihoods	204
4.6.2 Shocks and Vulnerabilities	205
4.6.3 Coping Strategies	214
4.7 Objective-5: To Provide Recommendations for Improving Policy Instruments, Laws and Fisheries Management Approaches to Ensure Inclusion and Well-being of <i>Jaladas</i> Communities	219
4.7.1 Fisheries Policies, Laws, Rules and Guidelines	219
4.7.2 Fisheries Institutions of Bangladesh	223
4.7.3 Approaches of Fisheries Management in Bangladesh	224
4.8 Summary of Findings from Research Questions	228
CHAPTER 5 DISCUSSION, IMPLICATION, RECOMMENDATIONS AND CONCLUSION	231
5.1 Discussion and Implication	235
5.1.1 Objective # 1 (To Identify Socio-Economic Transformations in <i>Jaladas</i> Communities by Inflows of Diversified Capitals)	235

5.1.1(a) Education	236
5.1.1(b) Training and Skills	238
5.1.1(c) Access to Financial Institutions (Formal and Informal)	240
5.1.1(d) Employment	242
5.1.1(e) Income	243
5.1.1(f) Land Ownership and Housing Condition	245
5.1.1(g) Fishing Assets	246
5.1.1(h) Health	246
5.1.1(i) Embankment	248
5.1.1(j) Life-Saving Cyclone Shelter	248
5.1.1(k) Road and Transportations	249
5.1.1(l) Electricity, Water and Sanitation	249
5.1.1(m) Cooperatives and Self-Help Group	250
5.1.1(n) Identity Card	251
5.1.1(o) Bargaining Power	252
5.1.1(p) Caste and Kinship	253
5.1.1(q) Social Alliance and Networking	254
5.1.1(r) Fishery Policies and Laws	255
5.1.1(s) Fishery Resources and Ecological Conservation	256
5.1.1(t) Free Access to Extract Fishery Resources	256
5.1.1(u) Climate Change	257
5.1.2 Objective # 2 (To Analyze Roles of Various Market Functionaries in the Processes of Capital Penetration)	259

5.1.2(a)	Financial Investment	259
5.1.2(b)	Technological Innovation and Consequences	260
5.1.2(c)	Over-Exploitation	261
5.1.2(d)	Fish Marketing and Oppression	262
5.1.2(e)	Role in Policy Formulation	263
5.1.2(f)	Employment Generation	264
5.1.3	Objective # 3 (To Analyze Changes of Traditional Social Institutions, Cultural Practices, and Power Relations in and out of <i>Jaladas</i> Communities)	265
5.1.3(a)	<i>Samaj</i>	265
5.1.3(b)	<i>Sardar</i>	266
5.1.3(c)	<i>Salish</i>	266
5.1.3(d)	Religious Rituals	267
5.1.3(e)	Caste Identity	268
5.1.3(f)	Beliefs and Customs	269
5.1.3(g)	Dress-up and Language	270
5.1.3(h)	Power Relations	270
5.1.4	Objective # 4 (To Examine Coping Strategies of <i>Jaladas</i> Communities with Their Present Situation)	272
5.1.4(a)	Problem Coping	272
5.1.4(b)	Emotional Coping	274
5.1.4(c)	Economic Coping	274
5.1.4(d)	Social Coping	276
5.1.4(e)	Technological Coping	277

5.1.4(f) Cultural Coping	278
5.1.5 Objective # 5 (To Provide Recommendations for Improving Policy Instruments, Laws and Fisheries Management Approaches to Ensure Inclusion and Well-being of <i>Jaladas</i> Communities	279
5.1.5(a) Integrated Development	279
5.1.5(b) Coordination	280
5.1.5(c) Institutional Strengthening	280
5.1.5(d) Management Plan	281
5.1.5(e) Security at Fishing Ground	282
5.1.5(f) Welfare of Fishing Labors and Their Family	282
5.1.5(g) Scientific Research	283
5.1.5(h) Traditional <i>Faar</i>	283
5.1.5(i) Income Generating Activities and Supports	284
5.2 Policy Recommendations	285
5.3 Implication to Social Work Practice	291
5.4 Implication to Social Work Education	293
5.5 Implication to Policy	294
5.6 Limitations	295
5.7 Future Study	296
5.8 Conclusion	297
REFERENCES	300

APPENDICES

LIST OF PUBLICATIONS

LIST OF TABLES

	Page
Table 1 Annual Fish Production (2017-2018) in Bangladesh	5
Table 2 Annual Fish Production (Capture) in Inland Water for 2012-2013 ..	7
Table 3 Historical Trends of Population in Bangladesh	37
Table 4 Industrial Fishing Trawlers with Gear Type in Bangladesh	48
Table 5 Features of Research Design	94
Table 6 Work Plan of Research	115
Table 7 FGD Respondents in North Salimpur Fishing Village	120
Table 8 FGD Respondents in South Dhurung Fishing Village	121
Table 9 Interviewees from Parliamentary Standing Committee on Ministry of Fisheries and Livestock in Bangladesh	122
Table 10 Household Survey Respondents in North Salimpur Fishing Village	123
Table 11 Household Survey Respondents in South Dhurung Fishing Village	126
Table 12 Age and Education of Members of Selected Households in North Salimpur	131
Table 13 Employment Status of Fishing Households in North Salimpur	136
Table 14 Monthly Income of Fishing Households in North Salimpur	137
Table 15 Ownership Patterns of Land (in Acre) in North Salimpur	139
Table 16 Types of Houses in North Salimpur	139
Table 17 Fishing Assets Followed by Respondent and Their Father in North Salimpur	140
Table 18 Comparison of Fishing Assets between Respondent and Their Father in North Salimpur	142

Table 19	Indebtedness of Respondents to Financial Actors in North Salimpur	148
Table 20	Transportation Means and Domestic Valuables in North Salimpur	148
Table 21	Religious Rituals in <i>Jaladas</i> Community	153
Table 22	Age and Education of Members of Selected Households in South Dhurung	158
Table 23	Employment Status of Fishing Households in South Dhurung	166
Table 24	Monthly Income of Fishing Households in South Dhurung	167
Table 25	Ownership Patterns of Land (in Acre) in South Dhurung	171
Table 26	Types of Houses in South Dhurung	172
Table 27	Fishing Assets Followed by Respondent and Their Father in South Dhurung	173
Table 28	Comparison of Fishing Assets between Respondent and Their Father in South Dhurung	173
Table 29	Indebtedness of Respondents to Financial Actors in South Dhurung	175
Table 30	Livestock, Transportation Means and Domestic Valuables in South Dhurung	176
Table 31	Summary of Findings of Research Objective No. 1	184
Table 32	Debt Position in North Salimpur	187
Table 33	Debt Position in South Dhurung	188
Table 34	Summary of Findings of Research Objective No. 2	192
Table 35	Summary of Findings of Research Objective No. 3	203
Table 36	Indicators of Standard Lives and Livelihoods Expressed by <i>Jaladas</i> Communities	204
Table 37	Problems of Respondent by Considering Multiple Answers	205

Table 38	Coping Strategies of Respondent during Crisis (Multiple Answers)	215
Table 39	Summary of Findings of Research Objective No. 4	217
Table 40	Summary of Findings of Research Objective No. 5	227
Table 41	Summary of Findings from Research Questions	228

LIST OF FIGURES

		Page
Figure 1	Trends of Annual Fish Production in Metric Ton	6
Figure 2	Trend of World Capture Fisheries and Aquaculture Production	27
Figure 3	The DFID's Sustainable Livelihood Framework	56
Figure 4	Theoretical Framework	77
Figure 5	Conceptual Framework: Capital Penetration	92
Figure 6	Map of Bangladesh Showing Study Areas (Marine Fishing Villages)	97
Figure 7	Major Steps of Key Informant Interview (KII)	102
Figure 8	Six Steps for Thematic Analysis	112
Figure 9	<i>A Dinghi Boat</i>	141
Figure 10	<i>A Wooden Boat</i>	141
Figure 11	<i>Fiberglass Engine-Boat</i>	142
Figure 12	<i>Set-Bag Net</i>	144
Figure 13	<i>Gill-Net</i>	144
Figure 14	<i>Kutubdia Island</i>	168
Figure 15	<i>Thatched House</i>	172
Figure 16	<i>Boat of Hindu Fisher</i>	174
Figure 17	<i>Burning of Illegal Net</i>	174
Figure 18	<i>Application for Filing Case against Miscreants in Bengali</i>	183
Figure 19	<i>Medium Size Mechanized-Fishing Boat</i>	190
Figure 20	<i>Industrial Fishing Trawler</i>	190

Figure 21	Hypotheticals ‘eyes’ of the Goddess ‘ <i>Monosha</i> ’	202
Figure 22	Poster in Bengali on 65-day Fishing Ban	209
Figure 23	Poster in Bengali on 22-day Fishing Ban	210
Figure 24	Official Trend of DoF about Marine Catches; and Mental Record of Fishermen on Catch Per Unit Effort (CPUE)	212
Figure 25	Map of Fishing Grounds of Bangladesh Continental Shelf	233
Figure 26	Summarized Recommendations from Policymakers	284

LIST OF ABBREVIATIONS

AR5	Fifth Assessment Report
ASA	Association for Social Advancement
BAL	Bangladesh Awami League
BANBEIS	Bangladesh Bureau of Educational Information and Statistics
BB	Bangladesh Bank
BBS	Bangladesh Bureau of Statistics
BFDC	Bangladesh Fisheries Development Corporation
BFRI	Bangladesh Fisheries Research Institute
BILS	Bangladesh Institute of Labor Studies
BKB	Bangladesh Krishi Bank
BOBLME	Bay of Bengal Large Marine Ecosystem
BOBP	Bay of Bengal Programme
BRAC	Building Resources Across Communities
BRS	Boat Rental Scheme
CARE	Cooperative for Assistance and Relief Everywhere
CBOs	Community Based Organizations
CC	Community Clinic
CCRF	Code of Conduct for Responsible Fishery
CCVI	Climate Change Vulnerability Index
CLC	Community Learning Centre
CMFRI	Central Marine Fisheries Research Institute
COAST Trust	Coastal Association for Social Transformation Trust

CODEC	Community Development Centre
COFCON	Coastal Fisherfolk Community Network
CoP	Conference of the Parties
CPP	Cyclone Preparedness Programme
CPUE	Catch Per Unit Effort
CRC	Community Resource Centre
CSOs	Civil Society Organizations
CSR	Corporate Social Responsibility
CZ	Coastal Zone
DANIDA	Danish International Development Agency
DFID	Department for International Development
DIHR	Danish Institute for Human Rights
DoE	Department of Environment
DoF	Department of Fisheries
EEZ	Exclusive Economic Zone
ENRICH	Enhancing Resources and Increasing Capacities of Poor Households towards Elimination of their Poverty
EPZ	Export Processing Zone
FAO	Food and Agriculture Organization
FGD	Focus Group Discussion
FLID	Fisheries and Livestock Information Department
GBV	Gender Based Violence
GDP	Gross Domestic Product

GoB	Government of Bangladesh
GPS	Global Positioning System
HDI	Human Development Index
HHs	Households
HIES	Household Income and Expenditure Survey
HP	Horse-power
HSC	Higher Secondary Certificate
ICZMP	Integrated Coastal Zone Management Plan
IFSW	International Federation of Social Workers
IGAs	Income Generating Activities
IPCC	Intergovernmental Panel on Climate Change
ITLOS	International Tribunal for the Law of the Seas
JP	Jatia Party
KII	Key Informant Interview
LEK	Local Ecological Knowledge
LGSP	Local Governance Support Project
LPG	Liquefied Petroleum Gas
MFIs	Microfinance Institutions
MFO	Marine Fisheries Office
MJF	Manusher Jonno Foundation
MM	Millimeter
MoDMR	Ministry of Disaster Management and Relief
MoFA	Ministry of Foreign Affairs

MoFL	Ministry of Fisheries and Livestock
MOH&FW	Ministry of Health and Family Welfare
MP	Member of Parliament
MRA	Microcredit Regulatory Authority
MT	Metric Ton
NEET	Not in Employment, Education and Training
NSI	National Security Intelligence
OC	Officer-in-Charge
PKSF	Palli Karma-Sahayak Foundation
PSN	Production Service Network
RAB	Rapid Action Battalion
RMG	Ready-made Garments
SCMFP	Sustainable Coastal and Marine Fisheries Project
SDF	Social Development Foundation
SDGs	Sustainable Development Goals
SDI	Society for Development Initiatives
SES	Social Ecological Systems
SHG	Self-Help Group
SHN	Surjer Hashi Network
SIDA	Swedish International Development Cooperation Agency
SLA	Sustainable Livelihood Approach
SSC	Secondary School Certificate
SSF	Small-Scale Fisheries

TCB	Trading Corporation of Bangladesh
TEK	Traditional Ecological Knowledge
UBA	Unskilled Birth Attendant
UH&FWC	Union Health and Family Welfare Center
UMIC	Upper Middle-Income Country
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children’s Fund
UNO	Upazila Nirbahi Officer
UP	Union Parishad
VERC	Village Education Resource Center
VGD	Vulnerable Group Development
VINAFISH	Vietnam Fisheries Association
VO	Village Organization
VRC	Village Resource Center
WARPO	Water Resources Planning Organization
WB	World Bank
WHO	World Health Organization
YPSA	Young Power in Social Action

LIST OF GLOSSARIES

Amar Bari, Amar Khamar	My House, My Farm
Aratdar	Trader / wholesaler / fish assembler
Asrayan	Rehabilitation
Bahaddar	Owner of a mechanized boat who usually operates for mid-sea fishing
Bazar	Market
Beel	Small depressed land that becomes inundated during monsoons
Behundi Jal	Set-bag net
Char	Lands which are accreted by sediment
Dadan	Advance payments as loans
Dadandar	One who makes advance payments as loans
Dala	Period of low catches
Dhuti	Traditional cloth
Faar	The space for fixing-up nets
Ghat	Landing place
Hilsa	Herring type fish
Jal	Net
Jaladas	Slave of the water
Jatka	Juvenile <i>hilsa</i> fish
Jele	Fisherman
JO	Peak period during fishing season when plenty of fish used to be caught
Khas Land	Government land

Krishok	Farmer
Mondir	Temple
Paiker	Middleman who makes advance payment against the supply of fish, mostly representative of wholesaler
Panjika	Calendar; mainly of Bengali lunar month
Para	A set of households which may be relatively autonomous from the village in terms of primary social relations and / or kinship
Prashad	Holy food
Protima	Idol of the Goddess
Puja	Worship
Puthi Pat	Script of poetic tales and fairy religious stories of ancient Bengal
Salish	Non-formal court where problems are mitigated
Samaj	A samaj is comprised of the members of patrilineal who have continuous residence. It is in a sense of confederation of one or more kin groups whose leadership has been entrusted by common consent upon one or more individuals
Samity	Association
Sardar	Traditional leader
Shonglap	Dialogue
Taka	Currency of Bangladesh. 1 US\$ = Taka 84.83 (as on 30 September 2020. Source: Bangladesh Bank)
Thana	Police station
Tong Jal	Gill-net
Unnoyon	Development
Upakulio	Coastal
Upazila	Sub-district

LIST OF APPENDICES

- Appendix A Clearance Letter from Human Research Ethics Committee
USM (HREC) for Fieldwork in Bangladesh
- Appendix B Questionnaire to Collect Data from Fishing Villages for
Research Work
- Appendix C Participant Consent Form
- Appendix D Key Informant Interview (KII) Guideline
- Appendix E Two Household Level Case Studies
- Appendix F Maps of Two Upazilas and Study Villages

PENEMBUSAN MODAL DAN STRATEGI DAYA TINDAK NELAYAN HINDU TRADISIONAL DI BANGLADESH

ABSTRAK

Bangladesh adalah negara berpendapatan sederhana-rendah yang terletak di Asia Selatan di mana nelayan tradisional atau *Jaladas* terdedah kepada kemiskinan kronik. Kajian ini dijalankan di dua perkampungan nelayan Hindu tradisional untuk mengenal pasti perubahan sosio-ekonomi disebabkan oleh aliran masuk modal oleh pelbagai pihak, dan peranan fungsi pasaran, institusi sosial tradisional, dan hubungan kuasa. Selain itu, kajian ini mengkaji strategi daya tindak, dan mencadangkan dasar untuk penerimaan dan kesejahteraan golongan ini. Kajian ini menggunakan reka bentuk penyelidikan kualitatif, khususnya kaedah Temubual Informan Utama (KII), Perbincangan Kumpulan Fokus (FGD), dan kajian kes di peringkat isi rumah. Satu tinjauan rawak terhadap 100 isi rumah telah dijalankan. Hasil kajian menunjukkan bahawa intervensi NGO untuk meningkatkan kesedaran, latihan kepimpinan, pendidikan, akses kepada kemudahan kesihatan dan sanitasi, dan melatih kemahiran pekerjaan alternatif bagi meningkatkan kualiti hidup di salah satu perkampungan yang dikaji. Dalam hal ini, peningkatan jumlah pengusaha komersial yang pesat telah meningkatkan eksploitasi ke atas sumber perikanan di mana fungsi pasaran bertanggungjawab mengawal struktur pemasaran sumber perikanan. Pada masa yang sama, fungsi ikatan sosial, kekeluargaan, dan peranan institusi tradisional semakin berkurangan dengan peningkatan kemasukan modal daripada pelbagai sumber. Keadaan ini menimbulkan keadaan kritikal yang mengurangkan pendapatan & aset sebenar nelayan, mendorong mereka keluar dari pekerjaan yang diwarisi. Komuniti

nelayan telah menggunakan inisiatif individu dan kolektif dalam menangani situasi ini. Oleh itu, kajian ini menggesa badan penderma tempatan dan global untuk memberikan perhatian khusus dalam pemberdayaan sosio-ekonomi dan politik golongan *Jaladas*. Sehubungan dengan itu, terdapat keperluan untuk merancang pengurusan nelayan kecil-kecilan yang terpinggir, pembentukan bank khusus yang membolehkan pemindahan tunai secara langsung semasa larangan memancing, dan memastikan peruntukan undang-undang dilaksanakan untuk membela buruh di kapal besar dan golongan nelayan yang tidak bernasib baik.

CAPITAL PENETRATION AND COPING STRATEGIES OF TRADITIONAL HINDU FISHERFOLK IN BANGLADESH

ABSTRACT

Bangladesh is a lower-middle-income country in South Asia where traditional fishermen, herein, *Jaladas* are at risk of chronic poverty. This study was conducted in two *Jaladas* villages to identify the socio-economic transformations caused by the inflows of capitals from different actors and the roles of various market functionaries, traditional social institutions, and power relations. Moreover, it aims to examine the coping strategies; and providing policy recommendations for their inclusion and well-being. This study adopted the qualitative research design, specifically the Key Informant Interview (KII), Focus Group Discussion (FGD) and household level case studies. A random survey of 100 households was conducted. The findings revealed that NGO-led interventions increase awareness, leadership development, education, access to health and sanitation facilities, and provide alternative employment skills to improve the quality of life in one of the villages studied. In the meantime, the increase numbers of commercial entrepreneurs have led higher over-exploitation of fisheries resources where powerful market functionaries control the fish marketing structure. At the same time, social bondage, kinship, and roles of traditional institutions become dysfunctional due to the entrance of multiple capitals. This situation creates critical conditions reducing the fishermen's real income and assets, pushing their way from their inherited occupation. *Jaladas* communities cope with individual and collective initiatives. Based on this situation, this study urges state and global donor agencies to take special and urgent

attention to the socio-economic and political empowerment of the *Jaladas*. Correspondingly, there is a need for a management plan for marginalized artisanal fishers, formation of specialized banks, allowing direct cash transfer during fishing ban, and ensuring the proper execution legal provisions for fishing labors in big boats, and policy revision in favor of disadvantaged fishermen.

Chapter 1

INTRODUCTION

This chapter describes about background information of the study. A superficial eye-view on Bangladesh and its fisheries sector is anticipated to be comprehensively mentioned in this study. Small-scale fisheries, traditional fishers and rising of business people in fisheries sector with challenges are also briefed in this chapter. Finally, the problem statement, research questions, objectives, significance and structure of thesis are conferred with a logical sequence.

1.1 Overview of Study

The first chapter of this study has sketched out fisheries sector in Bangladesh. It describes trends of annual fish production; and contribution to national economy and particularly engagement of artisanal marine fishers. Evolution of Hindu fishing communities including *Jadadas* has been described in this chapter. Inadequate study on traditional Hindu fisherfolk of Bangladesh, adverse effects of climate change, socio-economic challenges of *Jaladas* communities, and major research gaps have been identified in problem statement; as well as ways of new contribution by research. The aims of this study, hereby, to explore inflows of multiple capitals and coping strategies of *Jaladas* communities; effectively guides for specifying research questions and objectives. In addition to that, significance of this study in social work and uses of new knowledge by social workers have been prescribed. Literature review in second chapter has been

organized according to relevant key concepts. This chapter deals to outline the scenario of fish harvesting in world, fishing communities in Bangladesh including *Jaladas*, capital expansionists, social transformation in small-scale fishing communities because of capital inflows at home and abroad, responses and coping with capital inflows, and reviewing the fisheries policies & laws of Bangladesh. In literature review, four theories (e.g. capital theory, coping theory, livelihood theory, community development and empowerment theory) have been applied. This chapter also explains on how these theories are incorporated in this study. Conceptual study framework portrays to operationalize the issues of capital inflows and coping strategies of *Jaladas* communities. Third chapter writes out the research design chosen to accomplish the study objectives and lay ground for data analysis. Moreover, justification of study village selection and its location, sources of secondary data, ethical considerations, process and plan of fieldwork are described in this chapter. The study mainly adopted qualitative method; and applied three research techniques i.e. Key Informant Interview (KII), Focus Group Discussion (FGD), and household level case studies. Nine participants of Parliamentary Standing Committee on Ministry of Fisheries and Livestock (MoFL) attended in KII. Interview protocol and KII guideline were appropriately maintained to obtain required information. Total 20 male participants and 20 female participants attended at four separated FGDs in two study villages. Two household-level case studies were used as a sensitized tool during conduction of KII and FGD. In addition, 100 households survey were conducted to find out socio-economic conditions of *Jaladas* communities. Fourth chapter contains research findings from fieldwork. Research findings show two different types of features regarding capital penetration and coping strategies in two study villages; though a few of

them is common. First study village (North Salimpur Fishing Village) is comparatively in advanced position especially in the areas of formal education, vocational training, alternative employment, social awareness, community-led advocacy, and bargaining capacity than second study village (South Dhurung Fishing Village). NGO-led interventions mainly contribute for such advancement. Birth-ascribed fishing generation of second study village has been pushed out from traditional occupation and turns into big fishing boat as labor; and working within very difficult situation. People of first study village lose a bit their caste-based kinship and traditional social institutions are mostly dysfunctional due to wave of so-called facilities of modernization. Reverse picture has been identified in case of second study village. Individual and collective coping strategies have been adopted by the people of two study villages. In majority of cases, coping strategies are closely linked with multiple capitals. Study findings prove that fisheries policy, laws, rules and guidelines of Bangladesh are not properly implemented for well-being of marginalized fishing communities including *Jaladas*. Fifth chapter addresses the discussion, implication, recommendations and conclusion of this study. Discussion and implication section analytically explain and interpret research findings with previous studies. A set of recommendations, for example, integrated planning of respective ministries, effective coordination among relevant stakeholders, sectoral reforms, segregated management plan, increasing the vigilant of Bangladesh Navy, fixing minimum wages for marine fishing labors, research-based policy making, and financial & technical supports for alternative income generating activities of *Jaladas*. This study urges to increase required capitals by the state and donors for *Jaladas* communities with considering them as global citizen.

1.2 Fisheries Sector in Bangladesh

Bangladesh is located in Asia continent especially in South Asia within 147,570 square kilometers. The male population is around 81.4 million and female 81.3 million. It has about 2,835 kilometers of rail-way, 21,269 kilometers of paved road and roughly 6,000 kilometers of perennial and seasonal waterways. Bangladesh is mainly an agricultural country. Agriculture is the single largest producing sector of the economy and contributes about 10.98% to total Gross Domestic Product (GDP) of the country. This sector also accommodates around 40.6% (in 2016-17) of labor force. It is rich in fish wealth. *Hilsa*, lobsters and shrimps are some of the fish varieties that are exported to foreign countries (Bangladesh Bureau of Statistics [BBS], 2018). Poverty rate in Bangladesh fell from 24.3% in 2016 to 21.8% in 2018. In 2015, Bangladesh crossed over from a World Bank classified low-income economy to a lower middle-income economy. Now it aspires to reach the Upper Middle-Income Country (UMIC) status by 2030.

Bangladesh, the biggest deltaic region of planet; is surrounded by river systems, its tributaries and distributaries. In addition, most of plain lands are flooded by an excess of torrential monsoon rains during rainy season. It turns the farmland into a large freshwater reservoir for nearly half of a year. Along with immensity of saline water in the Bay of Bengal; these large, inland and sweet water bodies create a robust ground for extensive and diversified fisheries. Fishing has always been an important part of livelihoods for people of Bangladesh. Profession of fishing is more primordial than agriculture.

Country's fisheries resources are divided into two major groups such as inland fisheries and marine fisheries. Inland fisheries are further divided into two groups i.e. aquaculture and inland capture. Inland fisheries occupy an area of 4.70 million hectares. Besides, there is vast of marine fisheries resources expanding over an Exclusive Economic Zone (EEZ) of 166,000 square kilometers. The Government of Bangladesh (GoB) also settled disputes of maritime boundary delineation with Myanmar in 2012 and India in 2014. According to decision of International Tribunal for the Law of the Seas (ITLOS); Bangladesh obtained exclusive economic and territorial rights over the sea extending 200 nautical miles into the Bay of Bengal, continental shelf beyond 200 nautical miles. However, the culture fisheries include ponds, ox-bow lakes and coastal shrimp farms. The flood-plains and the *beels* (small depressed lands that become inundated during monsoons), which cover an area of 2.83 million hectares, offering tremendous scope and potential for augmenting fish production by adopting aquaculture- based enhancement techniques. Only 15.30% of total fish production comes from marine capture fisheries and 84.70% from inland fisheries (Department of Fisheries [DoF], 2018).

Table 1.2 reveals that total fish production was 4,276,641 metric tons in 2017-2018. Figure 1.2 shows upward trends of fish production over last 10 years comparison from 2008-2009, herein, 2,701,370 metric tons; whatsoever its contribution to GDP is somewhat increased comparing with other sub-sectors.

Table 1.2: Annual Fish Production (2017-2018) in Bangladesh

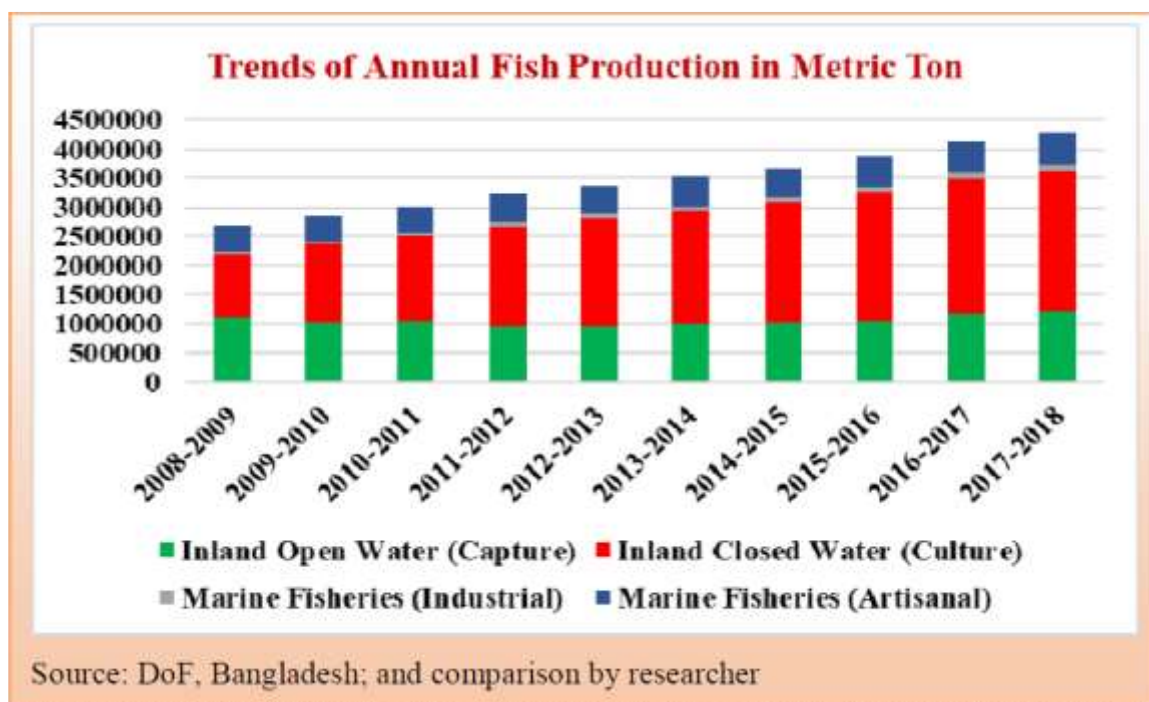
Sector of Fisheries	Total Production (Metric Ton)	Percentage
A. Inland Fisheries	-	-
(i) Inland Open Water (Capture)	1,216,539	28.45
(ii) Inland Closed Water (Culture)	2,405,415	56.25

Sector of Fisheries	Total Production (Metric Ton)	Percentage
B. Marine Fisheries	-	-
(i) Industrial Trawler	120,087	2.81
(ii) Artisanal	534,600	12.49
Country Total	4,276,641	100

Source: DoF (2018)

Figure 1.2 also shows that production of inland culture was significantly increased. It increased from 39.34 to 56.25 percent over last 10 years. The Sixth Five Year Plan (2011-2015) of Bangladesh Planning Commission cited that capture fisheries dominated and highly contributed for production in the 1970s. Now culture fisheries have a major role for growth and development of this sector in Bangladesh. The structural framework, institutional capacities and commitments are inadequate for planning, strategies, coordination and proper implementation. Department of Fisheries (DoF) suffers from insufficiency of manpower, particularly at the field levels. Fish conservation, processing, quality control and chain of marketing especially for capture fisheries are also weak.

Figure 1.2: Trends of Annual Fish Production in Metric Ton



There are different views on delimitation of coastal areas. The conventional view is that the land that is inundated by high and low tides is called the coastal belt. Coastal zones refer to areas where land and sea meet. Three indicators have been considered for determining the landward boundaries of coastal zone of Bangladesh. These are: influence of tidal waters, salinity intrusion, and cyclones / storm surges. Total 19 districts of the country are being affected directly or indirectly by some of these natural phenomena. Table 1.2.1 indicates that coastal districts have significant contribution for fish production (capture) in inland water.

Table 1.2.1: Annual Fish Production (Capture) in Inland Water for 2012-2013

Categories	In Metric Ton					
	River	Sundarbans	Beel	Kaptai Lake	Flood Plain	Total
Bangladesh	147,264	15,945	87,902	9,017	701,330	961,458
Coastal Districts	124,377	15,945	2,396	0	210,274	352,992
Percentage	84.46	100	2.73	0	29.98	36.71

Source: DoF (2014); and calculation by researcher

Small-scale fisheries¹ (used as synonym for artisanal fisheries) are not only a source of livelihood for the rural fishers, but also an ‘art of living’ that is characterized by a long tradition of adaptation to the dynamics of social and natural environment. Bangladesh has a coastline of 710 kilometers. The country has a vast river network and dynamic estuarine ecosystem. The fisheries sector contributes 3.57% of the GDP and 1.5% to foreign exchange earnings (DoF, 2018). The Ministry of Fisheries and Livestock (MoFL),

¹ Glossary of FAO (2019) refers Small-Scale Fisheries as are traditional fisheries involving fishing households (as opposed to commercial companies), using relatively small amount of capital and energy, relatively small fishing vessels (if any), making short fishing trips, close to shore, mainly for local consumption. In practice, definition varies between countries. In the fisheries and anthropological literature, small-scale fishing is also known as artisanal, inshore, traditional, municipal, pre-industrial and subsistence fishing.

Bangladesh approved guidelines for registration of fisherman and issue of Identity Card in 2019. This guideline professed that there was no proper statistics of fishermen in Bangladesh before 2012. DoF implemented one project from January 2012 to June 2017 for registration and online database of real fishermen. This project registered 1.62 million fishermen and gave them Identity Card. DoF undertakes updating of registration in their regular activities. However, Bangladesh Institute of Labor Studies (BILS, 2015) cited that 510,000 people are marine water fishermen and majority of them are traditional artisanal. Labor engagement in fishing sector is increasing approximately 3.50% yearly. It is important to divulge that all of them are not fishing labor. They are fishers too. Khan (2006) revealed that total 92.7% of marine catches are landed by artisanal fishers who employ smaller and less efficient fishing boats and gear to catch post-larvae and juveniles. Marine Fisheries Office (MFO, 2019) cited that artisanal fishers contribute 83.72% of total marine catches.

Fish has become one of the main food menus of Bangladesh, evident from the traditional saying: *Mache Bhate Bangalee* (Bengali with a food habit of fish and rice). Traditionally, it was the low caste Hindus who engaged in the fishing profession: the *Jaladas*, the *Malos*, the *Malla Burmans*, all popularly known as the *Jeles*, the *Naiyas* or the *Neyes*. They live more on water in their boats than on land. A relatively newfangled development is the introduction of big trawlers in this area. They not only catch fish in competition with the small-scale fisheries, but they discard huge quantities also of by-catch, considering as trash fish into the sea. "It has been revealed through a survey in the Indian territory of the Bay of Bengal that east coast trawlers have discarded about

100,000-130,000 MT of small fishes in the year 1988.” (Bay of Bengal Programme [BOBP], 1991). The trawler operations represent a threat to the small-scale fisheries due to its heavy pressure on the scarce resources (Associate Service, 1979). Industrial trawlers usually discard huge catches that have low economic value (Alam, 1996; Islam, 2011).

Another threat is, foreign boats fishing illegally in the waters of Bangladesh. This is frequently highlighted in the media of the said country: “All records have been broken by foreign pirate boats operating inside Bangladesh territory.” Insecurity at fishing grounds i.e. physical torture, extra judicial killing and claiming ransoms from fishermen are very common in Bangladesh (Alam, 1996; Dastidar, 2009; Islam, 2011; Rashid, 2014). Environmental degradation may constitute one of the most serious problems for the fishery. The increase in water management activities in the delta, in the form of flood control, irrigation and large-scale shrimp farming has had a negative impact on fish resources, as the breeding grounds for many fish species have been affected. The use of chemical fertilizers and pesticides and other forms of pollution have an increasingly negative impact on the fishery. Further, the use of small mesh fishing nets and other damaging fishing techniques have influenced resources.

Large-scale fishing has become an industry, a sector with good possibilities for profitable investment. Profit appears, however, to be made without due consideration of the long-term sustainability of the resources. Artisanal fisherfolk are certainly exposed to a reality and competition for which they are poorly prepared. In the face with reality, they have

had to accept the changes. The power base and structure have changed, leaving the fishing communities almost completely at mercy of the newly emerged powerful and resourceful operators and fish traders, who were invariably from the Muslims community. The business classes, who only have begun to involve themselves in the fishing business, are making the situation worse. They have established a new marketing chain based mainly on the exploitation of the fishing communities by setting up an artificial pricing chain through intermediaries in different levels. The artisanal fishing profession has been taken over by the investors; with the artisanal fishermen becoming in most cases de facto waged labors of the traders.

1.3 Hindu Fishing Community

Sen (1985) cited that the hunting age dawned 40 / 50 thousand years ago in Europe. In the same process of evolution of the ages and different social changes in Bangladesh, one can find natural resemblance between the ancient men of hunting age and the fishing community. A clear conception of very ancient times of Bengal or of prehistoric age of Bengal is not instituted yet. However, the people of Bengal used to live in a body in forests and jungles. They used to hunt birds, animals and catch fishes in the rivers and the sea.

The Australoid in Bangladesh were only engaged in catching fish, hunting animal and farming. But they also put the commercial economy on the original footing by building big and small boats of different types for communication between places in the littoral and riverine Bangladesh, and for commerce and trade. The ancient history of the boats of

Bangladesh substantiates it (ibid, pp. 28-30). The fishing groups of Bangladesh have been traditionally categorized into different castes and sub-castes of the Hindu, Muslim and Buddhist communities. The census of 1901 found that there were 550,000 fishers in Bengal, of them over 95% consisted of Hindu fishing castes (Pokrant & Rashid, 1995).

Traditional Hindu fishing group and caste in the colonial Bengal were *Kaibartta / Kaivarta, Kewat, Mala / Jhala / Malo / Jhalo, Tiwar / Tiwar (Rajbangshi), Karita, Pod, Das Shikari (Rajbangshi origin), Berua (Namasudra sub-caste), Jiani (Namasudra sub-caste), Bind / Bindu, Bagdi, Nadial, Mali / Bhuimali, Gonrhi / Gunhri / Mallah, Banpar (sub-caste of Gonrhi), Lohait / Lohait-Kuri, Muriari / Mariyari, Mala (possible Kewat connection), Surahiya / Kalwat-Mallah, and Patni* (Gupta, 1908; De, 1910; Pokrant & Rashid, 1995; Dastidar, 2009).

Few significant studies revealed that *Jaladas* (slave of water) communities are fishing in the Bay of Bengal over many generations (Associated Services, 1979; BOBP, 1985; Ahmed, 1994; Alam, 1996). Dastidar (2009) indicated that the *Jaladas* are statistically prominent at small-scale fishing sector in southeastern part of Bangladesh (Cox's Bazar and Chittagong). Unfortunately, there is still lack of comprehensive information about Hindu fishing communities in Bangladesh regarding their number and socio-economic profile. It is found from Coastal District Information- 2005 under Integrated Coastal Zone Management Plan (ICZMP) Project of WARPO, majority traditional fishermen are Hindus in coastal districts of Bangladesh. In majority cases, they live in segregated *para* (kinship) which is located within a community. By and large, the high caste Hindu and

the Muslim aristocrats do not do social interaction with them. Moreover, in general perception of Bangladeshi people, fishing is treated as an occupation with low status.

Rashid (2019) stated that *Jaladas* communities of Bangladesh have distinctness from socio-economic, cultural, political, geographical, technological and informational perspectives. In wider sense, they are socially and culturally disregarded; and financially insolvent. Public commons (Bay of Bengal, rivers, open water bodies, canal, *khas* lands, embankments and *char* lands) are their main sources of livelihood. Their income is seasonal. Therefore, they have limited income and very inadequate savings. Majority of *Jaladas* do not have access to government banks due to lack of mortgaged documents particularly lawful papers of lands. They are basically landless. In general, dropout of boys and girls from school, rate of early marriage of girls is higher due to lack of awareness, long distance of high school, abject poverty and social insecurity. Youth delinquency is another major issue of *Jaladas* community.

1.4 Problem Statement

There are very limited recent studies on lives and livelihoods of traditional Hindu fishing communities. Few previous researches (e.g. Alam (1996), Kleih et. al. (2003), Dastidar (2009) and Deb (2010)) also did not comprehensively focus on entering holistic capitals and its impact in fisheries sector and communities. This is a vital research gap. Alam (1996) gave a qualitative description on internal characteristics, community boundary, socio-economic changes and relationship with outside of Hindu fishing villages in Bangladesh. A comparison was made between Hindu and Muslim fishers under

community discussion. Unfortunately, this study did not analyze the coping strategies with diversified capitals those entering in fishing communities. Kleih et. al. (2003) identified access to fishery resources in the sea and the river of traditional livelihoods asset by households in a coastal fishing community of Bangladesh. This was complemented by gear such as boats and nets. Other assets included land and means of agricultural production, transport, health, education and financial resources in the form of savings, cash, or credit. This study did not address the impact of different capitals in artisanal fishing communities of Bangladesh. The study by Dastidar (2009) examined development of different capitalists and innovation of technologies in open-water capture fisheries of Bangladesh. It indicated that pre-existing forms of production organization among traditional fishers had been partially weakened by arrival of new technologies, while new forms of capital-mediated production had emerged under control of commercial entrepreneurs. But this study did not describe how capital, mainly financial, development and innovation of new technology influence the way of well-being or ill-being in traditional fishing community. Deb (2010) described about policy instruments, fisheries management and institutional weaknesses of fisheries management in Bangladesh. But it did not adequately provide information about policy coherence, institutional exclusion, and the role of state and development agencies for such economically and socially downtrodden people. The proposed study has a propensity to fulfill aforementioned research gap through examining inflows of multiple capitals and coping strategies of *Jaladas* communities in Bangladesh.

Historically, fishers in Bangladesh have not gained significant upgrades in their livelihoods (Deb & Haque, 2011). Livelihoods are often influenced by policies, institutions and systems that are affected by external factors associated with natural disasters (Carney, 1998). Rahman (2015) cited that for a variety of reasons fishing communities are economically, socially and politically disadvantaged people in Bangladesh. They do not have access to bank loans due to the poverty level of fishers. No bank is interested to finance fishers due to the uncertainty of their source of income. Fishing communities have lacking of land ownership, fishing equipment, security and safety in their livelihoods. Most of the families that rely on fishing as their primary source of income are socio-economically disadvantaged. Families that own their boat and fishing equipment are better off compared to the general fishers. The ordinary fishers and boat owners / lessors face enormous challenges in their livelihoods due to frequent natural hazards, lack of safety equipment, socio-economic disparities and environmental influence.

Small-scale fishers of Bangladesh suffer from living and working in risky environments with poorly defined rights and representation in policy arenas. They remain poor and powerless and are in a constant struggle for survival in settings beyond their control (Food and Agriculture Organization [FAO], 2010; Jentoft et al., 2011; Pomeroy & Andrew, 2011). In addition to that, climate change creates serious threats for lives and livelihoods of coastal fishing communities. Hasan and Nursey-Bray (2018) indicated that traditional fishing communities of coastal areas in Bangladesh are victims of climatic events. Islam et. al. (2014) described that adverse effects of climate change impact on

climatic variables and physical features of maritime such as higher cyclone frequency and length, and hidden sandbars. Fishermen face several constrained. These are technologically weak boats, unreliable weather predictions, poor radio signal, limited access to suitable credit, low wages, underestimation about cyclone frequency, intimidation by boat owners, lack of health facilities, education, training, safety measures & livelihood options, and others. These small and wider elements create obstacles for completion of fishing trips, survival with cyclones at sea, safe return from sea and engagement with alternative livelihood.

Traditional Hindu fishing communities of Bangladesh face chronic poverty from generation to generation. Rahman et. al. (2002) specified that the fishing village is characterized by a high degree of poverty among the fishermen. It was estimated that about 88% of the households were below the poverty line. Lack of proper input supply to take up fishing as an economically viable occupation, the year round, may be the major reason for high incidence of poverty among the fisherfolk. Jentoft and Midré (2011) urged that Hindu fishing communities of Bangladesh do not only suffering the income erosion but also different forms of poverty like poor sanitation, poor access to healthcare, lack of education and so on.

Socio-cultural traits of small-scale marine fishers are unique and, in a number of respects, totally separated from perspectives of Bangladeshi society. Historically, majority of artisanal fishermen live in isolated rural areas primarily on the Bay of Bengal coastline and on river banks. Fishermen live and work in a particular area named '*Jelepara* (fishing

community)' as a group. Within the community, most families are likely to be involved in various fishing related activities. Customarily, fishing is done by the *Jaladas* (slave of the water) belonging to Hindu religion. In comparison, to Hindus, Muslims catch fish full-time or part-time because of population pressure, displacement of locations, limited employments in inland and growing demand for seafood, etc. These are reasons behind the ongoing entrance of Muslim fishers into fishing industry (Hasan & Nursey-Bray, 2018). *Jaladas* find themselves in persistent poverty and in a dreadful debt trap. Jonayed (2009) revealed that debt is a deadly factor for social distress of the fisherfolk community. The fishing people take *dadan* (advance payments as loans) for variety of reasons (e.g. continue their living expenses at the time of off season, repairing and buying net, boat and fishing gears, bearing accidental cost, payment for sickness, marriage, etc.) on condition that they will deliver their catches to the *Dadandar* (informal moneylender). But the *Dadandar* exploits them by fixing lower price of the caught fishes than the real market price. Not only this, the tale of *dadan* is so painful and pathetic that it enslaved the social freedoms of fishermen. Poor organization and fragile institutions are other dimensions of vulnerabilities; poor fishers live without bargaining power. Thus, they become defenseless against any mistreatment, for example by middlemen (Jentoft et al., 2011). Consequently, they are put in the position of a class-exploited group. Dastidar (2009) specifically analyzed the indebtedness of *Jaladas* community though no existing literature explained causes and consequences of debt issue. This is a gap area of research which will be addressed in present study. Moreover, present study will also address impacts of multiple capitals at *Jaladas* communities particularly in the areas of poverty and debt. It will focus new dimensions of loan patterns, if prevailing, from bank, NGOs,

private sectors and other sources in the study areas. Moreover, social transformations of *Jaladas* communities will take place inside the existing study.

Fishers usually receive loans and social shelter from moneylenders, like *Aratdar* (wholesaler) / *Paiker* (middleman who gives advance payment, mostly representative of wholesaler) / *Dadandar* (advance payment giver), at high interest rates and generally on the condition that the borrower would be obliged to handover all catches to the moneylenders. This study has planned to be advanced further in dynamic modes of capital penetration that influence traditional social institutions, production organizations, harmonization, leadership, power structure and voices of such native communities. It would assess whether erosion of sense of belongings to community has taken shape or building solidarity among them.

Habib (1992) and Rashid (2016) stated that incoming Muslims who take up fishing as their new profession creates serious pressure on lives and livelihoods of traditional Hindu fishing communities. The newcomers are either self-employed or searching employment as a fishing labor. The *Jaladas* sincerely believe that it is difficult for them to adjust with other occupations as they involved with fishing since long. Majority of them have a socio-psychological barrier to switch occupation. Proposed study claimed to be analyzed the actual situation of *Jaladas* communities. Capital penetration and its impact are the innovative and uniqueness of current study. It attempts to assess whether over-exploitation of fishery resources, if not in the biological sense of the word then in the economic sense, has taken place over the last few years due to capital (e.g. human,

physical, natural, financial, social, cultural and political) penetration or not over-exploiting. More specifically, it is focused on the role of industrial fishing. If over-exploitation of fishery resources proves to be the case; it will look into what problems arise from it, how it affects the lives and livelihoods of *Jaladas* communities, and how the communities cope with changed situation. This study will also address the perception and attitude formation of *Jaladas* communities whether affirmative, in what ways, of capital penetration in open-water bodies and communities. Thus, this study will emphasize on changes of socio-economic and cultural issues in targeted communities. It will address local realities and local understanding in *Jaladas* communities. Coulthard (2012) indicated that adaptability is a key contributor for resilience within integrated social-ecological system. Small-scale marine fishers have low adaptive capacities because of, largely, constrained in proper resources management and societal limits to adaptation. Whatsoever, existing study will identify and explain coping strategies by utilizing different types of capitals (e.g. penetration from state, donors, NGOs, private sectors and other sources). None of previous studies did address it in such holistic way. Addressing of all these issues, in inclusive manner, is a new contribution and areas of exploration of present study.

Fishery policies and laws are not pro-poor, particularly for capture fishers (Alam et al., 2008). Main policies and laws include: The Protection and Conservation of Fish Act, 1950; The Marine Fisheries Ordinance, 1983; The Protection and Conservation of Fish Rules, 1985; National Fisheries Policy, 1998; and Coastal Zone Policy, 2005. Some sections of the policies and laws are seen to be destructing the fishing resources. This

study anticipates that environmental degradation, industrial pollution, agro-chemicals, ship-breaking, illegal fishing by foreign trawlers and sea piracy are, most probably, threatening fishing communities. People of fishing communities are governed by state-led policies and laws under the shape of political capital. This study will provide a set of recommendations for improving policy instruments, laws and fisheries management approaches reflecting protection and promotion of lives and livelihoods of traditional Hindu fisherfolk, herein, *Jaladas* communities. It may also give suggestions on the issues relating to institutional setting, governance, coordination and execution. Since there is a lack of study with regards capital penetration and coping strategies, the proposed study attempts to fill-up these research gaps.

1.5 Research Questions

On the basis of considerations as described and desired upstairs; principal research questions have been formulated. The study will, therefore, answer of the following questions:

1. What are the socio-economic transformations in *Jaladas* communities by inflows of diversified capitals?
2. What are the roles of different market functionaries in the processes of capital penetration?
3. What are the changes in the setting of traditional social institutions, cultural practices, and power relations in and out of *Jaladas* communities?
4. How have the *Jaladas* communities responded to the changes and how have they coped with their present situation?
5. How to improve policy instruments, laws and fisheries management approaches for inclusion and well-being of *Jaladas* communities?

1.6 Research Objectives

The aim of this study is to comprehend inflows of multiple capitals and coping strategies of *Jaladas* communities in Bangladesh. It has been broken down into five specific objectives as follows:

1. To identify socio-economic transformations in *Jaladas* communities by inflows of diversified capitals.
2. To analyze roles of various market functionaries in the processes of capital penetration.
3. To analyze changes of traditional social institutions, cultural practices, and power relations in and out of *Jaladas* communities.
4. To examine coping strategies of *Jaladas* communities with their present situation.
5. To provide recommendations for improving policy instruments, laws and fisheries management approaches to ensure inclusion and well-being of *Jaladas* communities.

1.7 Significance of Study in Social Work

Despite lives and livelihoods of *Jaladas* communities of Bangladesh living in coastal region are dynamic and complex in nature, still research works are inadequate in this area. Lives and livelihoods of *Jaladas* communities are generally overlooked by research community. Present study will address problems of lives and livelihoods of *Jaladas* communities and coping with diversified capitals for their well-being.

This study will find out holistic picture of capital inflows in *Jaladas* communities and fisheries sector. It will analyze coping of fishing households with present situations and

its impact on community bondage, traditional organizations and power structure. Issues and concerns of moneylenders and their exploitation process will be addressed in this study. In addition, policy recommendations will be provided for fishermen-friendly policies and laws. Therefore, current study is a comprehensive and innovative for its nature and prosperity of future reference. As for example, Jonayed (2009) cited that education bridges between society and development. The rate of literacy is gradually increasing in *Jaladas* communities. Here, parents bear a fascination in their mind to educate their child at least send them school for few years. More children of *Jaladas* families are now receiving formal education than their parents. Development agencies and NGOs have prime contribution for their higher education. It brings change in socio-cultural arena of the society, increases job diversity, broadens the horizon for young people, removes social superstitions and helps to develop competent future leader. Unfortunately, no study was conducted about perception and attitude formation of such educated youths (due to donor capitals) from *Jaladas* communities on their lives & livelihoods; and responses to ever changing of socio-economic, political and cultural contexts. Moreover, there is no comprehensive study about relationship between penetration of integrated capitals and coping mechanism in *Jaladas* communities. These research gaps will be filled-up in present study.

It is felt that development planners often forget about socio-cultural conditions of ‘small’ people like the *Jaladas* communities during preparation a plan. Coming from another world with its own pre-determined beliefs, planners prescribe remedies which often fail to address the real problems. This research has a target to attract decision-makers

especially policymaking body of Bangladesh by publication and evidence sharing on implication of small-scale fishers in coastal Bangladesh. In addition, it aims to build close relationship with respective stakeholders including government, non-government and private sectors during different phases for brainstorming and suggestions on issues of small-scale fishers. It will diffuse findings of research to other parts of world for attention of global stakeholders about small-scale fishing communities in Bangladesh.

From the perspective of the International Federation of Social Workers, social work supports changes in the societal aspects, solutions of the problems in understanding and relationships, and also freedom of the communities to advance their lifestyle. Social work consists of some primary principles supported by human rights and social justice that work significantly as a motivation to take actions and also developed from the idea of democracy and humanity. Moreover, it provides importance to inclusivity and respect to everyone to eradicate paucity and ensure equality to bring balance among people (International Federation of Social Workers [IFSW], 2000). Social workers who work in a community should have the ability of developing plan, arranging and examining the activities of community, etc. since the development of a community depends on the improvement of economic and social progress. By utilizing skills and knowledge, social workers can play a vital role for improving a community without any help from experts.

To develop lifestyle of a community and eradicate poverty for the betterment, social workers are involved with various creative activities like, case work, group work, and community building. Usually, social workers address the core problems of community

like poverty and take action to create knowledge to reduce it and work with underprivileged group of people as eliminating poverty from the community becomes a significant key task for the social work and workers (Bogazici University Social Policy Forums [BUSPF], 2004). To fight with the poverty efficiently, community social workers can come forward with different sustainable plans and assistances to help and support the *Jaladas* communities so that eventually, they can become self-dependent to work on their futures and economic & social progression. Furthermore, the young people from the *Jaladas* communities should get sufficient assistance of the social workers to get jobs. The fishing families from the community can also get various hands-on training on employment prospects and earnings individually or collectively from the social workers. They can also be informed about the importance of education, technology, healthy life, insurance, sanitation, human rights, etc. By taking various effective attempts, social workers try to reach out the beneficiaries to fight with poverty and live a better life. Coping with unpleasant circumstances and the consequences of poverty, and working together to eliminate adversity of poverty, inequality, etc., it would have not been possible without a direct engagement of the social workers.

Finally, social workers work restlessly to help individuals, groups and communities in order to make them for dealing with their own and social problems to create a comfortable condition. So, the objective of this particular study is to make a holistic plan that will create knowledge to help the social work and also develop the lifestyle and living standards of the Bangladeshi *Jaladas* communities.

1.8 Structure of Thesis

This thesis comprehends five chapters. These are arranged successively to provide distinguished contributions for fulfilling research questions and objectives.

Chapter One sets out the areas and overview of research; research questions, objectives, significance and organization of thesis.

Chapter Two, after scrutinizing existing literatures, examines the lives and livelihoods of *Jaladas* communities and debate of entering capitals in fishing sectors and communities. Literature reviews competently guide to construct theoretical and conceptual framework of this thesis.

Chapter Three describes research methodology. It addresses selection of study villages, location, rationality of study villages selection, menu of methods, pilot study, reliability and validity of data, data analysis, ethical considerations, process and work plan to carry out the research.

Chapter Four elucidates research findings. It writes the location and features of two study villages briefly. Profile of respondents of Focus Group Discussion (FGD), Key Informant Interview (KII) and household survey is given herein. Objective-based research findings have been detailed out in this chapter. Main research findings are identification of inflowed capitals in fisheries sector & *Jaladas* communities and its effect on socio-economic transformations, roles for market functionaries, impact on social institutions,