

Making a Living in Monpura Island:

An Ethnographic Study of Livelihood Strategies of the Coastal People of Bangladesh

Muhammad Amirul Huque

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Making a Living in Monpura Island:

An Ethnographic Study of Livelihood Strategies of the Coastal People of Bangladesh

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Declaration by the Researcher

I hereby declare that the PhD dissertation entitled *"Making a Living in Monpura Island: An Ethnographic Study of Livelihood Strategies of the Coastal People of Bangladesh"* is the result of my original research work. The dissertation has been carried out under the supervision and guidance of my respected Supervisor and Co-Supervisor.

I take full responsibility for the content of this work, including all statements, analyses, and interpretations presented herein. To the best of my knowledge and belief, neither this dissertation nor any part of it has been submitted previously for any degree, diploma, or academic qualification at this or any other university or institution.



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Certificate of the Supervisor & Co-Supervisor

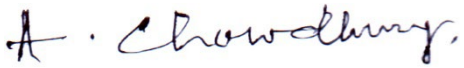
This is to certify that **Mr. Muhammad Amirul Huque** (Registration No. 35/2015–2016, Session: 2015–2016; Re-registration No. 15/2022–2023, Session: 2022–2023) has completed the PhD dissertation entitled *"Making a Living in Monpura Island: An Ethnographic Study of Livelihood Strategies of the Coastal People of Bangladesh"* under our supervision and guidance. The dissertation is an original piece of research and has been submitted to the **Department of Anthropology, Faculty of Social Sciences, University of Dhaka**, in partial fulfillment of the requirements for the degree of **Doctor of Philosophy (PhD)**. To the best of our knowledge, this work has not been submitted, in whole or in part, to any other university or institution for any academic award.

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To the resilient islanders of Monpura, I dedicate my warmest wishes for a future marked by prosperity, resilience, and sustainable livelihoods. May their indomitable spirit and rich cultural heritage continue to inspire and endure for generations to come.

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Abstract

This doctoral research, entitled *Making a Living in Monpura Island: An Ethnographic Study of Livelihood Strategies of the Coastal People of Bangladesh*, presents an in-depth anthropological exploration of two rural communities—Sonarchar, primarily engaged in agriculture, and Machpara, whose livelihoods revolve around fishing—located in Monpura Island, Bhola District. Conducted over a sustained period of eighteen months of intensive fieldwork between 2017 and 2023, complemented by preliminary visits in 2016, the study investigates how these communities navigate an intricate web of environmental, climatic, and socio-economic challenges.

Monpura Island occupies a precarious position within the Meghna estuary, a low-lying char land formed by centuries of sedimentation, tidal movements, and human settlement patterns. As part of one of Bangladesh's most ecologically fragile regions, Monpura is highly exposed to riverbank erosion, cyclonic storms, tidal surges, saline intrusion, and the gradual loss of arable land. Yet the story of Monpura is not one of unmitigated vulnerability; rather, it is equally a narrative of resilience, adaptive ingenuity, and the preservation of cultural heritage under conditions of perpetual change.

The research employs a classic ethnographic methodology, drawing on participant observation, life history interviews, focus group discussions, and the examination of archival and historical sources. By conducting fieldwork during multiple seasons and agricultural and fishing cycles, I was able to capture the seasonal rhythms of work, the dynamic interplay between environmental shifts and social life, and the subtle ways in which human relationships anchor economic survival. This long-term engagement made it possible to observe not only how people respond to sudden climatic shocks but also how they plan for, adjust to, and sometimes resist slower, more insidious transformations in their landscape.

Bangladesh's coastline extends for approximately 710 kilometers, encompassing a variety of estuarine and deltaic ecosystems. The southeastern and southwestern stretches are particularly marked by complex estuarine environments in which human livelihoods are intimately tied to the interplay of biotic and abiotic forces. Estuaries serve as critical transitional zones linking inland freshwater systems with the saline waters of the Bay of Bengal. Monpura Island itself, positioned at the mouth of the Meghna River, is composed of a cluster of small islands that reportedly emerged as a floating char in the early sixteenth century. Historical accounts indicate that between 1600 and 1666, the area came under the influence of Arakan Mug rulers and Portuguese maritime raiders, leaving traces on its settlement patterns and local memory.

The coastal zone of Bangladesh—where land, sea, and atmospheric systems converge—remains one of the most dynamic yet vulnerable geographical regions in the country. Recurrent cyclones,

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rising sea levels, and storm surges have had a cumulative effect on its low-lying areas, reshaping shorelines, altering agricultural viability, and threatening human security. Understanding this complexity requires an integrated, multi-scalar approach that considers environmental processes alongside social structures, economic systems, and cultural practices.

Monpura's recorded settlement history spans roughly two centuries. Early settlers contended with dense mangrove forests, wild animals, and unpredictable flooding patterns. Clearing mangrove stands to create arable land marked the beginning of sustained agricultural activity. Administratively, Monpura became a distinct Upazila in 1983, comprising four Union Parishads, eighteen Mouzas, and thirty-three villages. The agricultural economy today centers on crops such as paddy, pulses, chili, onions, sweet potatoes, and coconuts, alongside seasonal production of fruits including mangoes, jackfruit, papayas, watermelons, and bananas.

As in many other parts of coastal Bangladesh, rice cultivation forms the backbone of the local economy. Agricultural land use is shaped by factors such as periodic flooding, physiographic conditions, soil salinity, drainage congestion, and irrigation availability. Bangladesh's coastal belt contributes significantly to national food security, with about 16 percent of the country's total rice output coming from these regions. Rainfed monsoon paddy dominates agricultural cycles, covering approximately 70 percent of cultivated land in coastal districts. The cropping intensity in these areas stands at around 170 percent, reflecting efforts to maximize productivity under challenging conditions. Beyond rice, farmers produce pulses, oilseeds, betel leaves, winter vegetables, and potatoes, diversifying their livelihoods in response to shifting environmental constraints.

Yet, agricultural livelihoods in Monpura are increasingly shaped by environmental stressors. Farmers grapple with saline intrusion, seasonal flooding, and topsoil erosion. Adaptive strategies include altering crop varieties, raising field levels, diversifying income sources, and relying on reciprocal labor arrangements within extended kinship networks. Access to land remains a crucial determinant of resilience; landless households are especially vulnerable to livelihood shocks, as their capacity to implement adaptive measures is limited.

The fishing economy presents a different yet equally complex set of challenges. Monpura's fishermen operate within a volatile environment marked by seasonal fishing bans, declining fish stocks due to overfishing and ecological shifts, dependence on market intermediaries, and the dangers of venturing farther into open waters in search of catch. Adaptation here often involves altering fishing techniques, pursuing temporary wage labor during restricted seasons, or migrating seasonally for alternative employment. As with agriculture, environmental shocks can quickly reverse hard-won gains, driving some households into cycles of debt and economic precarity.

Despite these differences, the study finds that both agricultural and fishing households rely heavily on shared survival strategies rooted in kinship and reciprocity. Informal networks of

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exchange and mutual assistance frequently fill the gaps left by inadequate or poorly targeted government interventions. Women, though often excluded from formal decision-making spaces, play indispensable roles in household economy—engaging in food processing, small-scale trading, and resource management. However, their contributions remain underrecognized in policy frameworks, reflecting broader gender disparities in rural Bangladesh.

One of the key findings of this research is that adaptation in Monpura is not a simple matter of adopting new techniques or technologies. It is an ongoing process of negotiation between inherited knowledge systems—shaped by generations of environmental engagement—and innovations prompted by necessity. While such adaptations often demonstrate remarkable creativity, they are also constrained by structural inequities: unequal access to land and capital, dependency on exploitative market actors, and policy approaches that privilege external technical solutions over local experience. Without addressing these underlying issues, climate change is likely to deepen rather than alleviate existing vulnerabilities.

This thesis makes three primary contributions. First, it fills a notable gap in the anthropological literature by offering a richly detailed ethnographic account of a coastal char community that has been largely absent from previous scholarship. Second, it engages directly with policy debates on climate change adaptation and rural development, presenting grounded empirical evidence that explains why certain interventions fail to achieve their intended outcomes. Third, it proposes a framework for integrating local knowledge into development planning, arguing that sustainable livelihoods in fragile coastal environments cannot be achieved without recognizing and strengthening the social systems that communities themselves rely upon.

Ultimately, *Making a Living in Monpura Island* provides both a scholarly and human perspective on life in one of Bangladesh's most vulnerable regions. The research reveals the intertwined realities of environmental risk, economic necessity, and cultural resilience. It demonstrates that the people of Monpura are not passive victims of climate change, but active agents continually reshaping their strategies to survive and, where possible, to thrive. However, it also underscores that resilience has limits—without structural change in land tenure, market relations, and development policy, even the most resourceful communities will face mounting hardship in the decades ahead.

In presenting this ethnographic portrait, the thesis contributes to a deeper understanding of how coastal Bangladeshis live, work, and imagine their futures amid uncertainty. Its findings have implications not only for academic anthropology but also for policymakers, development practitioners, and environmental planners concerned with the complex realities of climate-vulnerable regions. Given that roughly one-quarter of Bangladesh's population resides in coastal areas, the stakes of this research extend far beyond Monpura itself, offering lessons for the sustainable management of fragile ecosystems and the equitable support of the communities who call them home.

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Table of Contents

Declaration by the Researcher **iii**
Certificate of the Supervisor & Co-Supervisor **iv**
Acknowledgement **v**
Abstract **vi**
List of Figures **xv**
List of Maps **xvi**
List of Tables **xvi**
Local Terms **xvii**

CHAPTER ONE: INTRODUCTION **1**

1.1. INTRODUCTION **2**
1.2. THE SETTINGS: ISSUES AND CONCERNS **3**
1.2.1. Locating the Island 3
1.2.2. Naming History 4
1.2.3. Population Distribution 6
1.2.4. Land Formation 7
1.3. SITUATIONAL DESCRIPTION **8**
1.3.1. Coastal Dynamics and Sediment Processes 9
1.3.2. Historical and Spatial Transformations of Deltaic Islands 9
1.3.3. Hydrological Systems and River Networks 11
1.3.4. Water Regime, Agriculture, and Human Settlement 13
1.3.5. Implications for Monpura and the Coastal Frontier 14
1.4. PROBLEM OF THE STUDY **14**
1.5. RESEARCH OBJECTIVES **16**
1.5.1. Broad Objective 16
1.5.2. Specific Objectives 16
1.6. RESEARCH QUESTIONS **17**
1.7. THEORETICAL FRAMEWORK **17**
1.7.1 Classical Anthropological Foundations 18
1.7.2 Interpretive Anthropology: Clifford Geertz and “Thick Description” 21
1.7.3 Contemporary Lenses: Political Ecology and Moral Economy 23
1.7.4 Integrative Framework for Analyzing Coastal Livelihood and Adaptation 25
1.8. SCOPE AND IMPORTANCE OF THE STUDY **27**
1.8.1. Scope of the Study 27
1.8.2. Importance of the Study 27
1.9. METHODOLOGY **28**
1.9.1. Participant Observation and Ethnography 30
1.9.2. Intensive Fieldwork and Ethnography 31
1.9.3. Duration of Fieldwork 35

1.9.4. Challenge of the study 36
CHAPTER TWO: REVIEW OF RELEVANT LITERATURE 37
2.1 INTRODUCTION 38
2.2 ANTHROPOLOGICAL STUDIES ON LIVELIHOOD AND SUBSISTENCE 39
2.3 COASTAL BANGLADESH: ENVIRONMENT, ECONOMY, AND SOCIETY 49
2.4 LIVELIHOOD AND CLIMATE CHANGE IN THE GLOBAL SOUTH 57
2.5 THEORETICAL AND METHODOLOGICAL ISSUES 61
2.6 SUMMARY AND RESEARCH GAP 64
CHAPTER THREE: THE VILLAGES UNDER STUDY: SONARCHAR AND MACHPARA 67
3.1. INTRODUCTION 68
3.2. SONARCHAR: AN AGRICULTURAL VILLAGE 69
3.3. MACHPARA: A FISHING VILLAGE 70
3.4. VILLAGE LIFE IN SONARCHAR AND MACHPARA 72
3.4.1. A Comparative Analysis 73
3.4.2. Social Dynamics in Machpara 73
3.4.3. Social Dynamics in Sonarchar 74
3.4.4. Comparative Realities 74
3.5. MONPURA ISLAND: SETTLEMENT HISTORY AND PATTERN 75
3.5.1. Housing Pattern 76
3.5.2. Location of the House 78
3.5.3. Household Submerged During Storm Surge 78
3.5.4. Sources of Drinking Water 79
3.5.5. Submerged Water Sources 80
3.5. LAND PROPERTY INFORMATION OF THE HOUSEHOLD 81
3.5.1. Current Property for Domestic Land 81
3.5.2. Total Market Value of Current Domestic Land 81
3.5.3. Land Used for Cultivation and Garden 82
3.5.4. Land Under Cultivation 83
3.5.6. Current Property Owned Fallow Land 84
3.5.7. Estimated Market Value of Total Fallow Land 85
3.6. INFORMATION ON AGRICULTURE, FARMING AND FISHING 85
3.6.1. Number of Poultry and Pigeon 85
3.6.2. Estimated Market Value of Poultry/ Pigeon 86
3.6.3. Number of Goat/ Sheep Own by Household: 87
3.6.4. Estimated Market Value of Goat/ Sheep Owned by Household 87
3.6.5. Estimated Market Value of Cow/ Buffalo 88
3.6.6. Number of Agricultural Equipment Own by HH 89
3.6.7. Estimated Market Value of Agricultural Equipment 89
3.6.8. Farming in Last Year 90
2.6.9. Name of Crops Farming in Last Year 91
3.6.10. Farming Tools Used to Cultivation 91

Dhaka University Institutional Repository

3.6.11. Quantity of Land Used for Crops Production in Last Year 91
3.6.12. Amount of Crop Production 92
3.6.13. Amount of Crop Utilization 93
3.6.14. Selling Amount of Crop Produced 93
3.6.15. Income From Selling of Crop Produced 94
3.6.16. Land Lease Contract 94
3.7. AGRICULTURE AND FISHING 95
3.7.1. Seasonal Crop Calendar 95
3.7.2. Average Crops Production in *Baisakh* 97
3.7.3. Earning From Farming in Last Three Years 98
3.7.4. Female Members Involvement in Sonarchar 98
3.7.5. Number of Fishing Net Own by HH 99
3.7.6. Fishing Net 99
3.7.7. Estimated Value of Fishing Net 99
3.7.8. Earning From Fishing in Last Three Years 100
3.7.9. Earning From Boats and Nets in Last Years: 101
3.7.10. Number of Solar Panel Own by HH: 101
3.7.11. Estimated Value of Solar Panel: 102
3.8. ANALYTICAL OVERVIEW OF THE FINDINGS 102
3.8.1. Economic Profile 102
3.8.2. Housing Patterns 103
3.8.3. Water and Sanitation Infrastructure 103
3.8.4. Land and Property Ownership 103
3.8.5. Agricultural Practices and Challenges 103

CHAPTER FOUR: SOCIAL ORGANIZATION AND KINSHIP 105

4.1. INTRODUCTION 106
4.2. *PARIBAR* (FAMILY): THE BASIC SOCIAL UNIT 107
4.2.1. Types of Families in Sonarchar and Machpara 108
4.2.2. Changing Patterns of Family 108
4.2.3. The Impact on the villages Social Fabric 109
4.2.4. Journey towards modernization 110
4.2.5. Local Modernity, not Westernization 111
4.2.6. Consequences and Community Response 111
4.3. UNITS OF ORGANIZATION 112
4.3.1. *Ghar* (House/ Home) 112
4.3.2. *Bari* (Household) 113
4.3.3. *Gusthi* (Lineage) 114
4.3.4. *Para* (Neighborhood) 116
4.3.5. *Gram* (Village) 117
4.4. MARRIAGE RULES AND DOMESTIC STRUCTURES 119
4.4.1. Household and Kinship Configurations 120

Dhaka University Institutional Repository

4.4.2. Lineage, Descent, and Reproductive Goals 120
4.4.3. Social Hierarchy and Local Stratification 120
4.4.4. The Role of *Izzat* (Respect) and Moral Economy 121

CHAPTER FIVE: SOCIAL HIERARCHY- CLASS, STATUS, AND POWER 122

5.1. SOCIAL HIERARCHY IN MONPURA ISLAND: AN INTRODUCTION 123
5.1.1. A Marxist Perspective on Class 123
5.1.2. A Weberian Perspective on Class, Status, and Power 124
5.1.3. The Interplay of Class, Status, and Power 124
5.1.4. Social Dynamics in Monpura Island 125
5.2. CLASS 126
5.2.1. Class in Monpura: A Marxist Analysis 126
5.2.2. Social Hierarchy in Monpura: A Weberian Perspective 126
5.2.3. Impact of Class on Islanders 127
5.2.4. Lived Realities of Class and Power in Sonarchar and Machpara 127
5.2.5. Sonarchar: Land, Labor, and Social Distance 128
5.2.6. Machpara: The Politics of Boats, Debt, and Dependence 128
5.2.7. Negotiating Class Through *Izzat* and Collective Identity 129
5.3. STATUS 129
5.3.1. Status in Sonarchar: Land, Labor, and Social Visibility in an Agrarian Setting 133
5.3.2 Land Ownership as the Axis of Status 134
5.3.3. Marginal and Small Farmers: Respect, Precarity, and Aspirations 134
5.3.4. The Landless: Invisible Labor, Collective Identity, and Moral Status 134
5.3.5. Political Position and Social Capital 135
5.3.6. Environmental Hardships and Status Fluidity 135
5.4. CASTE SYSTEM 136
5.5. POWER RELATIONS 138
5.5.1. Sources of Power 138
5.5.2. Power Relations Among People 139
5.5.3. Political Exercises 140
5.6. ANALYSIS OF CLASS, STATUS, AND POWER 142
5.6.1. Lived Realities of Class and Power 142
5.6.2. Status, Identity, and Moral Economy 143
5.6.3. Power Relations in a Changing Environment 143
5.6.4. Conclusion 144

CHAPTER SIX: BELIEF SYSTEMS, RITUALS, AND FESTIVALS 145

6.1. INTRODUCTION: RITUALS IN EVERYDAY LIFE 146
6.1.1. Muslim 147
6.1.2. Hindu 147
6.1.3. The Role of Religious Institutions in Monpura 148
6.1.4. Hindu Institutions in Machpara: Spiritual Continuity in a Coastal Fishing Society 149
6.1.5. THE TWO EIDS IN SONARCHAR 150

Dhaka University Institutional Repository

6.1.6. Eid-ul-Fitr 150
6.1.7. Eid-ul-Adha 151
6.2. MUSLIM RELIGIOUS RITUALS 152
6.3. MYTHS AND FOLK STORIES 155
6.3.1. Significance of Myths 156
6.3.2. Sacred Protection in a Landscape of Uncertainty 156
CHAPTER SEVEN: LIVELIHOOD STRATEGIES IN THE VILLAGES UNDER STUDY 159
7.1. INTRODUCTION 160
7.2. FISHING 163
7.2.1. Fishermen & Boat Owners 164
7.2.2. Fishing Net 164
7.2.3. Fish Business & Value Chain 164
7.3. AGRICULTURE 171
7.3.1. Findings in Agriculture of Monpura 172
7.3.2. Income from Farming 176
7.4. BUSINESS 180
CHAPTER EIGHT: IMPACTS OF NATURAL DISASTERS AND CLIMATE CHANGE ON LIVES AND LIVELIHOODS 184
8.1. NATURAL DISASTERS AND CLIMATE CHANGE IMPACTS 185
8.2. TYPES OF NATURAL DISASTER 186
8.2.1. Cyclones in Coastal Bangladesh 186
8.2.2. Recent Hit Natural Disasters in Monpura 188
8.3. CLIMATE CHANGE SCENARIOS 190
8.3.1. Trends in Temperature 193
8.3.2. Maximum Temperature in Bangladesh Context 195
8.3.3. Minimum Temperature in Bangladesh Context 195
8.3.4. Mean, Maximum, and Minimum Temperature in Study Area Context 195
8.3.5. Trends in Rainfall in Bangladesh Context 196
8.3.5. Trends in Rainfall in Study Area (Monpura Upazila) Context 197
8.4. RIVERBANK EROSION 198
8.4.1. Causes of Riverbank Erosion 199
8.4.2. Local Knowledge About Riverbank Erosion 202
8.4.3. Seasonality of Riverbank Erosion 203
8.4.4. Effects of Riverbank Erosion 204
CHAPTER NINE: CONCLUSION 206
9.1. INTRODUCTION 207
9.2. SUMMARY OF FINDINGS 208
9.2.1. Ecological Dynamics and Human Adaptation 209
9.2.2. Economic Structures and Livelihood Strategies 209
9.2.3. Cultural and Moral Dimensions of Survival 210

Dhaka University Institutional Repository

9.2.4. The Intersections of Ecology, Economy, and Culture 211
9.2.5. Methodological and Theoretical Reflections 211
9.2.6. The Ethics and Ecology of Resilience 212
9.3. THEORETICAL CONTRIBUTIONS 213
9.3.1. From Political Ecology to Moral Ecology 213
9.3.2. The Ethical Dimensions of Resilience 214
9.3.3. Gender, Care, and the Moral Economy of Adaptation 214
9.3.4. Knowledge, Meaning, and Embodied Ecology 215
9.3.5. Toward a Moral Ecology of Adaptation 215
9.3.6. Broader Theoretical Implications 216
9.3.7. Resilience as Moral Ecology 216
9.4. METHODOLOGICAL REFLECTIONS 217
9.4.1. The Rationale for Long-term Ethnography 217
9.4.2. Reflexivity and Positionality 218
9.4.3. Ethics of Representation 218
9.4.4. Navigating Power, Gender, and Access 219
9.4.5. The Transformative Nature of Fieldwork 219
9.5. POLICY AND PRACTICAL IMPLICATIONS 220
9.5.1. Recognizing and Institutionalizing Local Knowledge 220
9.5.2. Addressing Inequality and Vulnerability in Adaptation 221
9.5.3. Strengthening Decentralized and Participatory Governance 221
9.5.4. Integrating Moral and Cultural Dimensions into Policy 222
9.5.5. Linking Local Adaptation to National and Global Frameworks 222
9.5.6. Toward Culturally Informed Climate Governance 223
9.6. FUTURE RESEARCH DIRECTIONS 223
9.6.1. Comparative Coastal Ethnographies: Situating Monpura within a Regional and Global Context 223
9.6.2. Youth Migration, Translocal Livelihoods, and Changing Aspirations 224
9.6.3. Gender Transformation and Moral Economies of Care 225
9.6.4. Methodological Innovation: Toward Collaborative and Participatory Ethnography 225
9.6.5. Toward a Comparative Anthropology of Resilience 226
9.6.6. Resilience, Relation, and the Horizons of Future Inquiry 226

Monpura Island: Photographic Representation 228
References 262
Plagiarism Report 262

Dhaka University Institutional Repository

List of Figures

Figure 3.1: HH by Settlement History 76
Figure 3.2: Percentage Distribution of HH by types of house made 77
Figure 3.3: HH by Location of House 78
Figure 3.4: House Submerged 79
Figure 3.5: Percentage of Drinking Water Sources 80
Figure 3.6: HH by Submerging Drinking water source during last storm surge 80
Figure 3.7: Distribution of HH by Property 81
Figure 3.8: Percentage of Domestic Property 82
Figure 3.9: HH by Land Used for Cultivation 83
Figure 3.10: Percentage of Cultivated Land 84
Figure 3.11: HH own Fallow Land. 84
Figure 3.12: HH Market Value of Fallow Land 85
Figure 3.13: by HH own Poultry/ Pigeon 86
Figure 3.14: HH Estimated Market Value of Poultry/ Pigeon 86
Figure 3.15: HH by own Goat/ Sheep 87
Figure 3.16: by HH Market value of Goat/Sheep 88
Figure 3.17: HH own Cow/ Buffalo by Market Value 89
Figure 3.18: HH Own Agricultural Equipment 89
Figure 3.19: HH by Market Value of Irrigation Equipment 90
Figure 3.20: Farming in Last Year 90
Figure 3.21: HH by Names of Crops 91
Figure 3.22: HH by quantity of land for crop production 92
Figure 3.23: HH for Crop Production 92
Figure 3.24: HH By Utilization of Crops 93
Figure 3.25: HH by Crop Production 93
Figure 3.26: HH by Income from Crop Production 94
Figure 3.27: HH by Land Lease Contract 94
Figure 3.28: Crops in *Baisakh* 97
Figure 3.29: Percentage of Crops Price 97
Figure 3.30: HH earned from farming 98
Figure 3.31: HH By Female Members involvement in Agriculture 98
Figure 3.32: HH by Number of Fishing Net Own 99
Figure 3.33: HH By Total Market Value of Fishing Net 100
Figure 3.34: HH Earned from Fishing Last Three Years 100
Figure 3.35: HH Earning from Boats and Nets 101
Figure 3.36: HH own Solar Panel 101
Figure 3.37: HH Total Market Value 102
Figure 7.1: Fishing Calendar in Monpura 163
Figure 7.2: Commission against *Dadon*/ Investment 165
Figure 7.3: Number of Boat Ownership in Machpara 166

Dhaka University Institutional Repository

Figure 7.4: Fishing status of the households who own boats in Machpara 167
Figure 7.5: Agricultural Land owned by surveyed household in Sonarchar 172
Figure 7.6: Income from Farming from Farming Activities in Sonarchar 176
Figure 7.7: Land Tenure Diversity in Sonarchar: Cultivated Land Types 177
Figure 8.1: Mean, Maximum, and Minimum Temperature in Study Area Context 196
Figure 8.2: Monthly Average Rainfall and the Number of Monthly Occurring Rainfall Days 197
Figure 8.3: Seasonality of Riverbank Erosion (Local Knowledge-Based Data) 204

List of Maps

Map- 1.1: Location of Bangladesh, Bhola District, and Monpura Upazila. 3
Map- 1.2: The Monpura Island. 5
Map 1.4: Manpura Island Showing Erosion and Accretion between 1776 and 2021. 8
Map- 1.5: Map of River Flow of Bangladesh. 10
Map 1.6: The Ganges, Brahmaputra and Meghna basins. 11
Map 3.1: Location of Sonarchar in Monpura Upazila. 70
Map 3.2: Location of Machpara in Monpura Upazila. 71
Map 8.1: Satellite image of landscape dynamics in Monpura Island 199

List of Tables

Table 1.1: Administrative Units of Monpura Upazilla. 6
Table 1.2: *Char* Name and Area (km2) in the Meghna Estuary Area, in Bangladesh 7
Table 1.3: Major River Systems of Bangladesh and Their Key Characteristics. 12
Table 2.1: Educational Status of the Study Area 72
Table 3.2: Crop Calendar in Monpura Island. 95
Table-3.3: Seasonal Crop Calendar of Monpura's Island 95
Table 4.1: Distribution of Agricultural Land of Households under study of Sonarchar. 132
Table 6.1: Religious institutes in Monpura. 147
Table: 7.1: Distribution of Agricultural Land of Households in Sonarchar 173
Table 8.1: Trends in Mean Annual Temperature at some Selected Stations of Bangladesh 193
Table 8.2: Trends in Seasonal and Annual Mean Temperatures (1980 To 2007) 194
Table 8.3: Mean and Standard Deviation of the Winter, Summer, Critical Period, and Monsoon Rainfalls of Bangladesh. 196
Table 8.4: Five Years Scale and Decadal (10 Years) Average Rainfall of Study Area 197

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Local Terms

Local Terms	Standard Bangla Terms	English Terms
As/Aas	হাঁস	Duck
Autta	দধির টালি	Yogurt pot
Anda	ডিম	Egg
Aat	হাত	Hand
Amla	আমড়া	Hog plum
Ai	আমি	I/Me
Bilai	বিড়াল	Cat
Bargadar	বর্গাদার	Sharecropper
Bosti	বসতি	Informal settlement or slum.
Bori	বড়ই	Jujube fruit
Bonna	বন্যা	Flood
Bari	বাড়ি	Homestead / Household compound
Bhada	ভাটা	Low tide
Baurchi	বাবুর্চি	Cook
Bailla Pakhi	বাবুই পাখি	Baya weaver bird
Baga	বক	Egret/Heron
Bichon	হাতপাখা	Hand fan
Bhaur	ভাশুর	Elder brother-in-law
Badi	বাটি	Bowl
Bainan / Baiyon	বেগুন	Brinjal/Eggplant
Bodi	বটি	Kitchen knife
Beda	স্বামী	Husband
Char	চর	Riverine or coastal island formed by silt deposition.
Gher	ঘের	Enclosed pond or field for fish or prawn cultivation.
Cheidar	চৌকিদার	Watchman
Chermon	চেয়ারম্যান	Chairman
Chalun	তরকারি	Curry/Vegetable dish
Dewor	দেবর	Younger brother-in-law
Dama	ঢেউ	Wave
Doyan	দোকান	Shop
Doin	দক্ষিণ	South
Doi	দধি	Yogurt
Dowadar	দপাদাড়	Village guard
Dao	দা	Machete
Dail	ডাল	Lentils
Goiom	পেয়ারা	Guava
Girsti	চাষাবাদ	Cultivation
Girhasta	গিরস্ত	Household / Householder
Gang	নদী	River
Haat	হাট	Weekly rural market.

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Haori	শাশুড়ী	Mother-in-law
Hap	সাপ	Snake
Hatin	সতীন	Co-wife
Haur	শশুর	Father-in-law
Hurimach	শুটকি মাছ	Dried fish
Hoilmach	শোল মাছ	Snakehead fish
Hingmach	শিং মাছ	Stinging catfish
Hudimach	পুটি মাছ	Puntius fish
Hurra	ঝোল	Broth/Gravy
Hoa	শসা	Cucumber
Huaamma/ Bacha	ফুফু	Paternal aunt
Huta	সুতা	Thread
Hot	স্রোত	Current/Stream
Izzat	ইজ্জত	Honor / Social respect
Istar	ইফতার	Iftar
Ichamach	চিংড়ি মাছ	Shrimp/Prawn
Jowar	জোয়ার	High tide
Jumal	জোয়াল	Yoke
Jagurmach	মাগুর মাছ	Walking catfish
Jamai	ফুফা	Aunt's husband
Jamu	যাবো	Will go
Kutta	কুকুর	Dog
Kauwa	কাক	Crow
Kamla	কামলা	Day laborer, often landless, working for wages.
Kerpabagan	কেওড়া বাগান	Keora forest
Khandan	খানদান	Family lineage / Ancestry
Khaitan-no	খাবোনা	Won't eat
Koitor	কবুতর	Pigeon
Kadol	কাঁঠাল	Jackfruit
Kela	কলা	Banana
Kodu	লাউ	Bottle gourd
Kokia/Koiya	পেঁপে	Papaya
Kolos/Thilla	কলস	Pitcher
Kaka/Kaku	চাচা	Paternal uncle
Lozen	চকলেট	Candy/Chocolate
Lemu	লেবু	Lemon
Murka	মুরগী	Hen/Chicken
Meghna	মেঘনা	Major river estuary bordering Monpura.
Mouza	মৌজা	Smallest revenue collection unit of land.
Maiya	মেয়ে	Girl
Matari	মহিলা	Woman
Moich	মরিচ	Chili/pepper
Mosid	মসজিদ	Mosque
Moktob	মক্তব	Islamic school
Nembor	মেম্বার	Member

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Naiol	নারিকেল	Coconut
Nao	নৌকা	Boat
Nouk	নখ	Nail
Nun	লবণ	Salt
Nangal	লাঙ্গল	Plough
Nautta	নাপিত	Barber
Namaj	নামাজ	Prayer (Salat)
Olid	হলুদ	Turmeric
Oshudh	ঔষধ	Medicine
Peyaiz/Pemuz	পিঁয়াজ	Onion
Pola	ছেলে	Boy
Pucca or Semi-pucca	পাকা বা সেমি-পাকা	Permanent or semi-permanent
Poisa	পয়সা	Coin
Pug	পূর্ব	East
Pailla	পাতিল	Cooking pot
Paittamno	পারবোনা	Cannot do
Panikamri	পানকৌড়ি	Cormorant
Roun	রসুন	Garlic
Ruitmach	রুই মাছ	Rohu fish
Riska	রিক্সা	Rickshaw
Srot	স্রোত	Current / Flow (of water)
Sin	পাপ	Sin
Sugari	সুপারি	Betel nut
Taikna mach	টাকি মাছ	Spotted snakehead fish
Thal	প্লেট	Plate
Thilla/ Kolos	কলস	Pitcher
Tiya	টাকা	Money
Tin	টিন	Corrugated iron sheet
Theng	পা	Leg
Trawler	ট্রলার	Small or medium-sized fishing boat.
Undur	ইঁদুর	Mouse/Rat
Uthan	উঠান	Courtyard (open space within homestead)
Upazila	উপজেলা	Sub-district administrative unit in Bangladesh.

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CHAPTER ONE: INTRODUCTION

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INTRODUCTION

1.1. INTRODUCTION

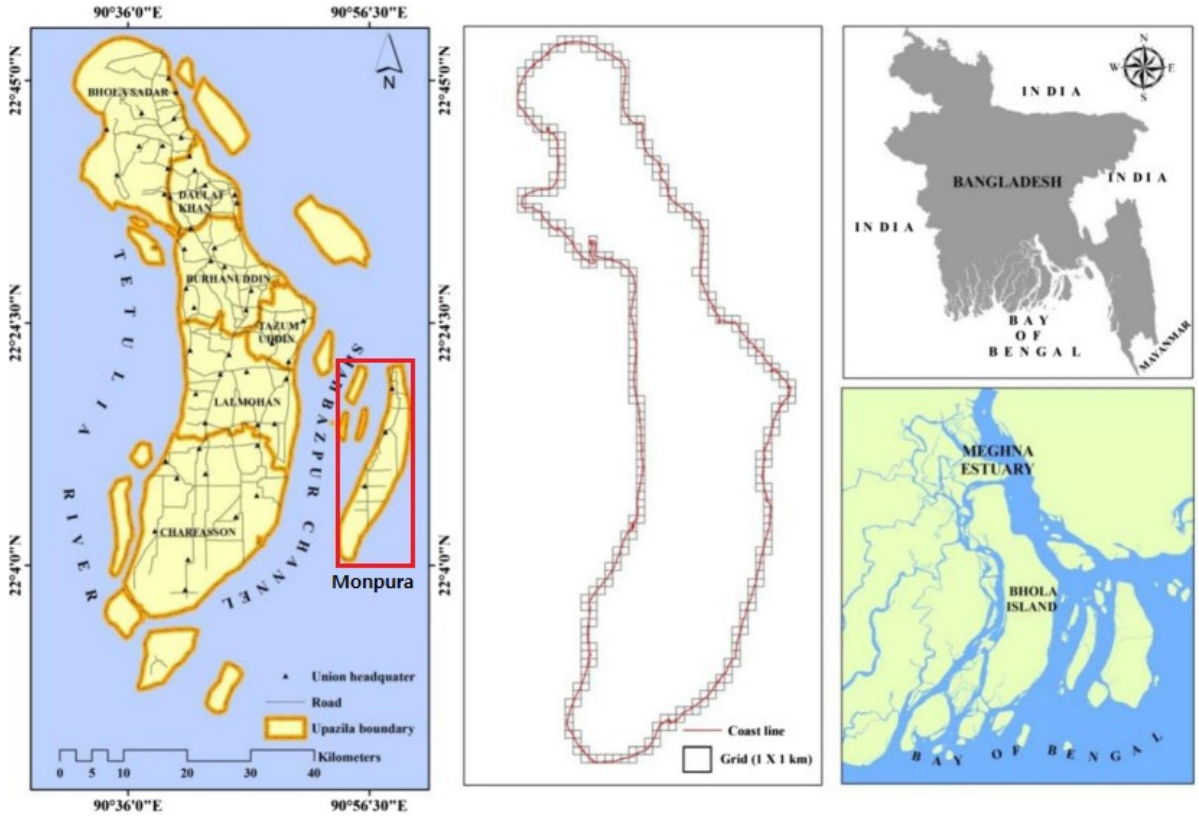
This anthropological study examines two rural communities on Monpura Island, located in the Bhola District of Bangladesh. The central focus is to understand the livelihood strategies of the people under study. This micro-level ethnography explores the everyday life of these rural communities within the changing environmental conditions of Monpura Island. The researcher conducted intensive fieldwork over an 18-month period to develop a comprehensive ethnographic account. The study vividly illustrates the impacts of climate change on the inhabitants of Monpura and contributes to the broader understanding of the livelihoods of coastal populations in Bangladesh.

Monpura Island—a distinctive and relatively unexplored part of coastal Bangladesh—serves as a critical case study for understanding the multifaceted livelihood strategies of coastal communities facing the growing challenges of climate change. This research, presented in the thesis *Making a Living in Monpura Island: An Ethnographic Study of Livelihood Strategies of the Coastal People of Bangladesh*, is the first anthropological investigation of its kind to examine life on Monpura Island. Based on periodic field visits over eight years (2016–2023), this study addresses a significant gap in the existing literature by providing an in-depth analysis of the island's socio-economic and environmental realities.

Bangladesh, with its extensive 710-kilometer coastline (Hussain, 2014), is recognized for its diverse and dynamic coastal zones. This region, shaped by intricate estuarine ecosystems, is profoundly influenced by the interactions among land, ocean, and atmospheric conditions. Monpura Island, located within the Meghna estuary and bordered by the Bay of Bengal, epitomizes the complexities of this coastal environment. Emerging as a floating char in the 1500s and historically associated with Arakanese Mugs and Portuguese sea pirates, Monpura Island presents a rich tapestry of historical and ecological significance (Bangladesh Bureau of Statistics [BBS], 2022). This research is grounded in the premise that Monpura Island's coastal community operates within a unique socio-ecological matrix that warrants nuanced anthropological understanding. The island's inhabitants, primarily engaged in agriculture and fishing, contend with an environment increasingly vulnerable to the impacts of climate change, including sea-level rise, intensified storm surges, and salinity intrusion. Accordingly, this study posits that an in-depth anthropological examination of Monpura Island's socio-economic fabric can reveal critical insights into how coastal communities adapt to and mitigate environmental challenges.

This thesis seeks to provide a holistic perspective on the livelihood strategies of Monpura Island's inhabitants by examining agricultural practices, fishing activities, and other economic pursuits while situating them within the broader context of climate change and environmental hazards.

Map- 1.1: Location of Bangladesh, Bhola District, and Monpura Upazila.



Source: Islam et al., 2015

Integrating primary ethnographic data with an extensive review of secondary sources, this research contributes to the fields of anthropology, coastal studies, and climate adaptation. The findings aim not only to deepen understanding of Monpura Island but also to offer actionable insights for policy and development initiatives that strengthen the resilience and well-being of coastal communities in Bangladesh and comparable deltaic regions. This introduction therefore establishes the groundwork for exploring Monpura Island's distinct environmental features, the adaptive strategies of its residents, and the broader socio-environmental context within which these strategies evolve.

1.2. THE SETTINGS: ISSUES AND CONCERNS

1.2.1. Locating the Island

Monpura Island, located in the Bhola District of Bangladesh, is well known for its scenic beauty and historical importance. Positioned between 22°06′ and 22°26′ north latitudes and 90°52′ and 91°01′ east longitudes (Banglapedia, 2025), the island covers an area of approximately 373.19 square kilometers (144.09 square miles) and is home to around 89,743 residents, according to the *Statistical Yearbook of Bangladesh 2023* (Bangladesh Bureau of Statistics [BBS], 2023). The island comprises four unions, 22 mouzas, and 33 villages, making it a socially and geographically diverse region (BBS, 2022).

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Although Monpura Island remains relatively unexplored by tourists, it is rich in natural beauty and ecological diversity. Visitors can observe spotted deer, monkeys, pythons, and numerous bird species across its landscape. The coastal greenery—developed through reforestation efforts by the Forest Department over a decade ago—has transformed Monpura into an attractive site for travelers. During winter, the island becomes a sanctuary for migratory birds from across the globe. Uniquely, Monpura offers the rare opportunity to witness both sunrise and sunset from the same vantage point (BBS, 2022).

Beyond its natural allure, Monpura Island holds considerable historical significance. It once served as a refuge for Portuguese pirates. After their departure, settlers from Bhola, Laxmipur, and Noakhali migrated to the island, contributing to its cultural diversity and complex historical heritage.

1.2.2. Naming History

Monpura Island lies approximately 80 kilometers from the district headquarters of Bhola and stands as an isolated landmass amid the Bay of Bengal (Upazila Land Office [ULO], 2024). The main transportation routes between Bhola Sadar and Monpura are sea trucks and trawlers, typically requiring about three hours of travel. At present, two large passenger launches—*Tipu* and *Panama*—operate regularly between Dhaka and Monpura.

The name *Monpura* carries notable historical and linguistic significance. According to local legend, a man named Mongazee was killed by a tiger on the island. During that period, the Betua River flowed through Bhola, and the suffix *pur* was added to the names of all mouzas located east of the river, while those on the west were termed *char*. Since Monpura Upazila is situated among several eastern mouzas of the former Betua River, the prefix *Mon* originated from Mongazee, and *Pur* from *Betua Pur*, ultimately forming *Monpura* (ULO, 2024). In Bangladesh, *char* lands—riverine islands formed through sediment accretion—are highly unstable, frequently reshaped by erosion and annual flooding.

These *char* areas—formed along major rivers such as the Jamuna, Ganges, Padma, and Meghna—are home to some of Bangladesh's most vulnerable and impoverished populations. Islam et al. (2014) observed that *char* dwellers, particularly those inhabiting isolated or unprotected chars, face persistent exposure to environmental hazards including floods and riverbank erosion. Similarly, Shampa et al. (2021) emphasized that climate change presents escalating risks to both riverine and coastal *char* regions, threatening livelihoods and heightening the vulnerability of populations residing in these dynamic and ecologically fragile environments.

Historically, the Portuguese established a port on Monpura in 1557, which later submerged due to riverine erosion. Local folklore still recalls their presence through tales of a rare breed of dogs (*kutta*) believed to have descended from those brought by the Portuguese—now nearly extinct. Another legend describes how a small brook between Bhola and Monpura transformed overnight into a mighty river following a powerful tidal surge—an exceptional example of sudden

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geomorphological change. Today, the Meghna River (Shahabajpur Channel) flows along both sides of Monpura (Chowdhury, 1987).

Map- 1.2: The Monpura Island.



Source: LGED, 2025.

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Prior to 1947, Raja Rajesh Kanto Ray served as a prominent landlord in the region, assisted by his *nayeb* (steward), Harendra Ray. Several mouzas in Monpura were subsequently named after the landlord's sons, including Char Krishno Proshad (from Krishno Proshad Ray), Char Gan (from Ganandra Nath Ray), Char Zatin (from Zatindra Nath Ray), and Char Nayeb Hat (from Nayeb Harendra Ray) (Chowdhury, 1987).

Administratively, Monpura Island was initially under the jurisdiction of the Sundarban Forest Commissioner in 1822 before being incorporated into Bhola District. It was first established as a union under Tazumuddin Thana. After the catastrophic flood of 1970—when water levels rose between 15 and 20 feet, claiming approximately 24,000 lives out of a total population of 35,000—the area was recognized as a separate *thana*. On November 7, 1983, following considerable administrative progress, Monpura was officially upgraded to an *upazila*. The tragedy of 1970 is memorably depicted in Shilpacharya Zainul Abedin's painting *Monpura 70*, which remains a powerful artistic record of the disaster (Chowdhury, 1987).

1.2.3. Population Distribution

According to the *Statistical Yearbook of Bangladesh 2023* (Bangladesh Bureau of Statistics [BBS], 2023), Monpura Island contains 20,067 households and a total population of 89,743, including 45,001 males and 44,742 females. Situated in the southernmost part of Bangladesh, Bhola Island—of which Monpura is a part—is among the country's largest islands, covering approximately 350 square kilometers. Encircled by the Meghna River and the Bay of Bengal, it possesses a distinctive natural beauty rarely found elsewhere in southern Bangladesh.

The mainland of Bhola was formed through the confluence of the distributaries of the Meghna River. Exploring this island provides an exceptional experience, as its diverse wildlife and lush forests offer captivating views. Monpura hosts various species, including deer, monkeys, pythons, dolphins, and numerous bird varieties (Harun, 2000). To protect the southern coastal region from cyclones and other natural disasters, the Department of Forest implemented extensive afforestation programs approximately a decade ago, transforming Monpura into a green landscape and potential eco-tourism destination.

Table 1.1: Administrative Units of Monpura Upazilla.

Name of union	Area (acre)	Population		Literacy rate (%)
		Male	Female	
Monpura	28154	9309	8958	27.70
Hajirhat	24420	13042	12448	38.10
Uttor Sakuchia	19385	8636	8594	30.00
Dakshin Sakuchia	20218	7759	7836	29.50
Total	92177	38746	37836	31.32%

Source: Bangladesh Bureau of Statistics. (2011). Bangladesh Population Census 2011.

1.2.4. Land Formation

The Meghna estuary, situated within the Ganges–Brahmaputra delta, functions as a dynamic, delta-building system. Originating in the Himalayas—a mountain range with exceptionally high sediment yield due to extensive drainage from both its northern and southern slopes—these rivers have contributed to the formation of a vast, ever-changing delta covering approximately 100,000 square kilometers (Goodbred, 2003; Hori & Saito, 2007).

Within this tide-dominated delta, islands play a vital role in shaping the landscape. Bangladesh is home to millions of people living on such islands, many of whom are highly exposed to both natural and anthropogenic hazards, including erosion, flooding, drainage congestion, cyclones, and storm surges. These challenges are increasingly intensified by the impacts of climate change.

The Meghna estuary contains numerous islands, many of which bear the prefix *char*—such as Urir Char and Bhashan Char. Among the 15 islands listed in Table 1.2, eight include *char* in their names. These *char* islands generally have short lifespans, often less than a century. However, several larger islands, including Bhola, Hatiya, Sandwip, and Monpura, have persisted for more than 240 years (Allison, 1998). The morphology of riverine *chars* is primarily shaped by fluvial dynamics, whereas estuarine islands are influenced by the interaction between riverine and marine processes. Notably, *char* lands comprise approximately 8% of Bangladesh's total land area (Haque & Jakariya, 2021).

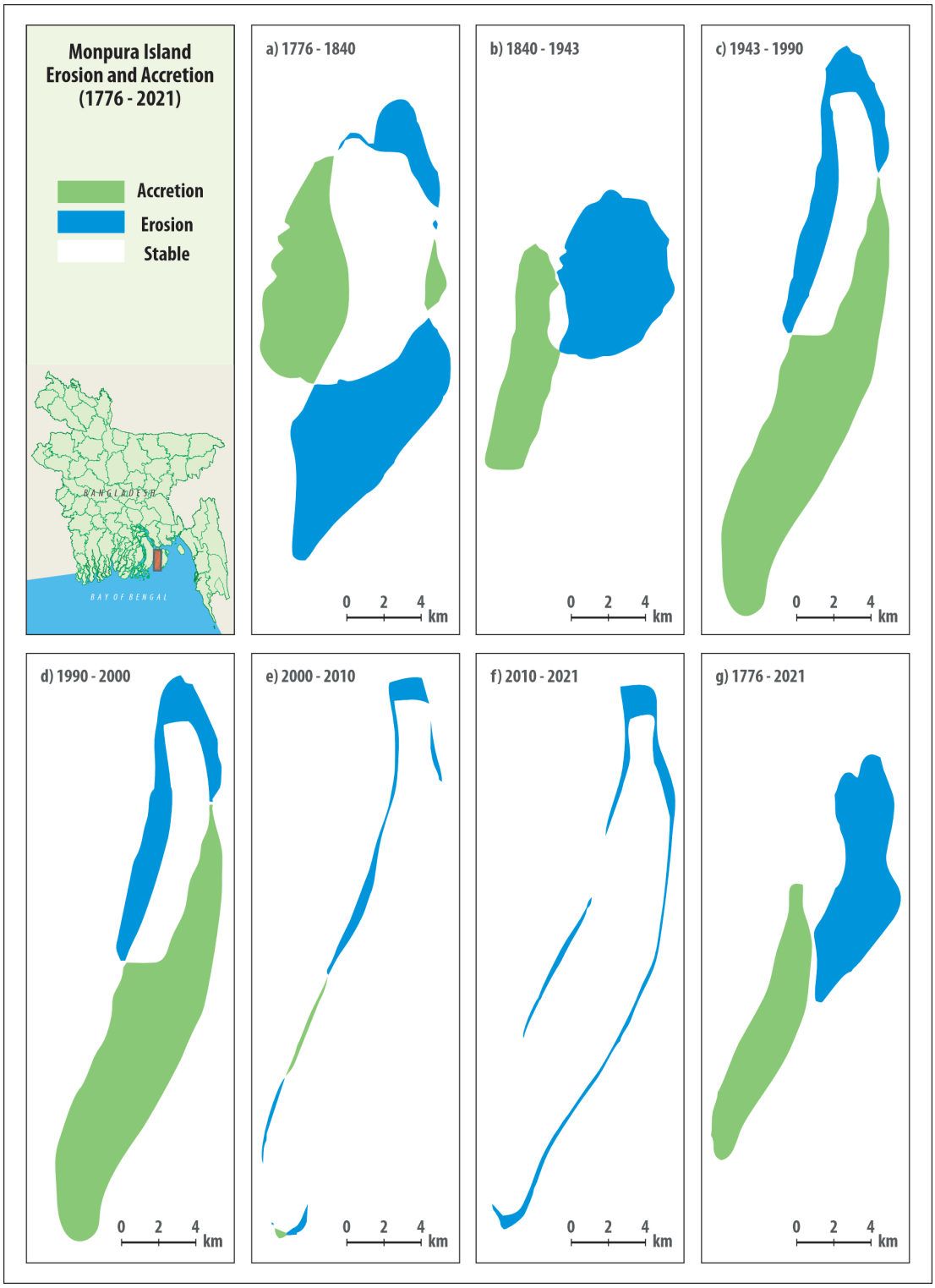
Table 1.2: *Char* Name and Area (km2) in the Meghna Estuary Area, in Bangladesh

Char Name	**Area (Km2)**
Urir Char	51.00
Jahajjir Char	227.00
Sandwip	194.00
Hatiya	330.00
NijhumDwip	43.00
Damar Char	19.00
Monpura	110.00
Char Montaz	94.00
Char Kukri Mukri	107.00
Bara Baisdia	231.00
Char Gajaria	48.00
Char Shabaz	14.00
Dhal Char	127.50
Char Padma	40.00
Bhola	1,340.00

Source: Sarker, M. H., Akter, J., & Rahman, M. M. (2021).

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Map 1.4: Manpura Island Showing Erosion and Accretion between 1776 and 2021.



Source: Biswas et al., 2022.

1.3. SITUATIONAL DESCRIPTION

Bangladesh's coastal and estuarine landscapes constitute one of the most dynamic deltaic environments in the world. Their morphology is the outcome of an intricate interplay between

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fluvial discharge, tidal amplitude, wave energy, and sediment deposition (Douglas & Slingerland, 2009). Historically, geomorphologists viewed these processes as predominantly natural, driven by sediment transport and hydrodynamic forces. However, recent decades have underscored the accelerating influence of anthropogenic interventions, climate change, and sea-level rise in reshaping these fragile environments. The lower delta plain of Bangladesh—marked by low elevation, dense population, and extensive floodplains—has become increasingly vulnerable to the cumulative pressures of subsidence, coastal erosion, and salinity intrusion (Brammer, Asaduzzaman, & Sultana, 1993).

1.3.1. Coastal Dynamics and Sediment Processes

The estuarine morphology of southern Bangladesh is shaped by the combined flows of the Ganges, Brahmaputra, and Meghna rivers, which together deliver approximately one billion tons of sediment annually into the Bay of Bengal (Goodbred & Kuehl, 2000). This vast sediment load maintains the world's largest delta system, yet its distribution is neither uniform nor stable. Sediment fluxes are strongly influenced by monsoonal variability, Himalayan tectonic activity, and upstream water management interventions (Goodbred et al., 2003). Notably, the 1950 Great Assam Earthquake altered the Himalayan drainage network and intensified sedimentation downstream in the Jamuna, Padma, and Meghna river systems (Verghese, 1999). Fine-grained materials such as silt and clay migrated through the delta within a decade, while coarser sediments required several decades to reach the Meghna estuary. This phase lag in sediment transport illustrates how temporal and spatial variations in sediment delivery shape long-term delta-building dynamics and island formation.

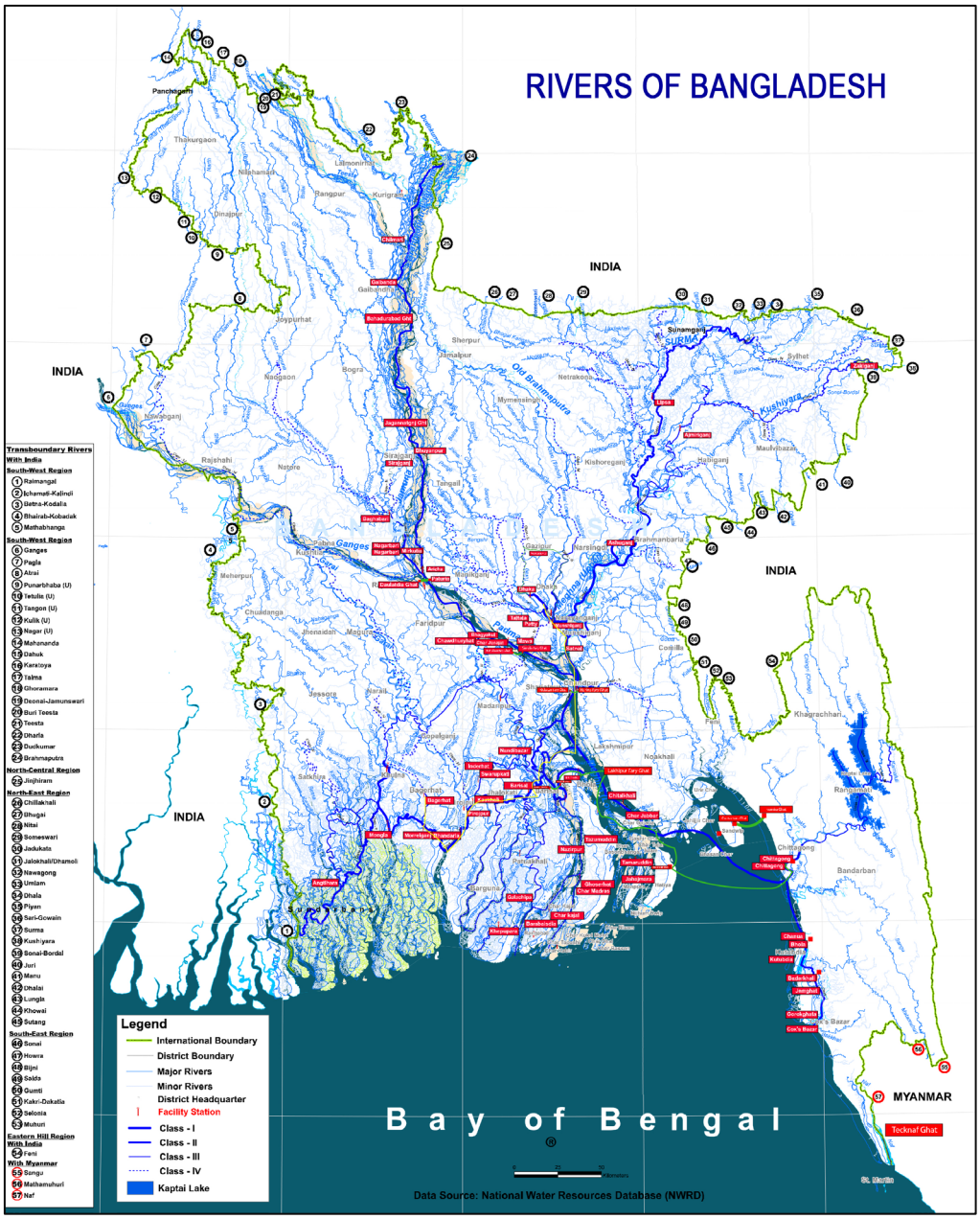
Over time, tidal action and wave refraction interact with these sediment flows to generate cyclic erosion and accretion along the Meghna estuary. Most estuarine islands—locally known as *chars*—emerge from these depositional processes and undergo continuous transformation. Among the principal islands—Bhola, Hatiya, Sandwip, and Monpura—each demonstrates distinctive geomorphic behavior shaped by fluvial discharge, tidal asymmetry, and residual currents. The Meghna estuary's morphology is therefore both a physical and ecological process: it determines not only the configuration of land but also the distribution of human settlement and livelihood opportunities.

1.3.2. Historical and Spatial Transformations of Deltaic Islands

The historical evolution of coastal Bangladesh reveals significant changes in shoreline configuration and island morphology. Cartographic records from the late eighteenth and nineteenth centuries indicate that the major islands of Bhola and Hatiya were once compact and oval in shape but gradually elongated and shifted southwestward between 1776 and 1840 (MES II, 2001). These shifts correspond to the reorganization of distributary inlets and tidal channels that periodically expanded, contracted, or abandoned certain routes in response to changing hydrodynamic conditions. Subsequent analyses of topographic maps (1943) and satellite

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Map- 1.5: Map of River Flow of Bangladesh.



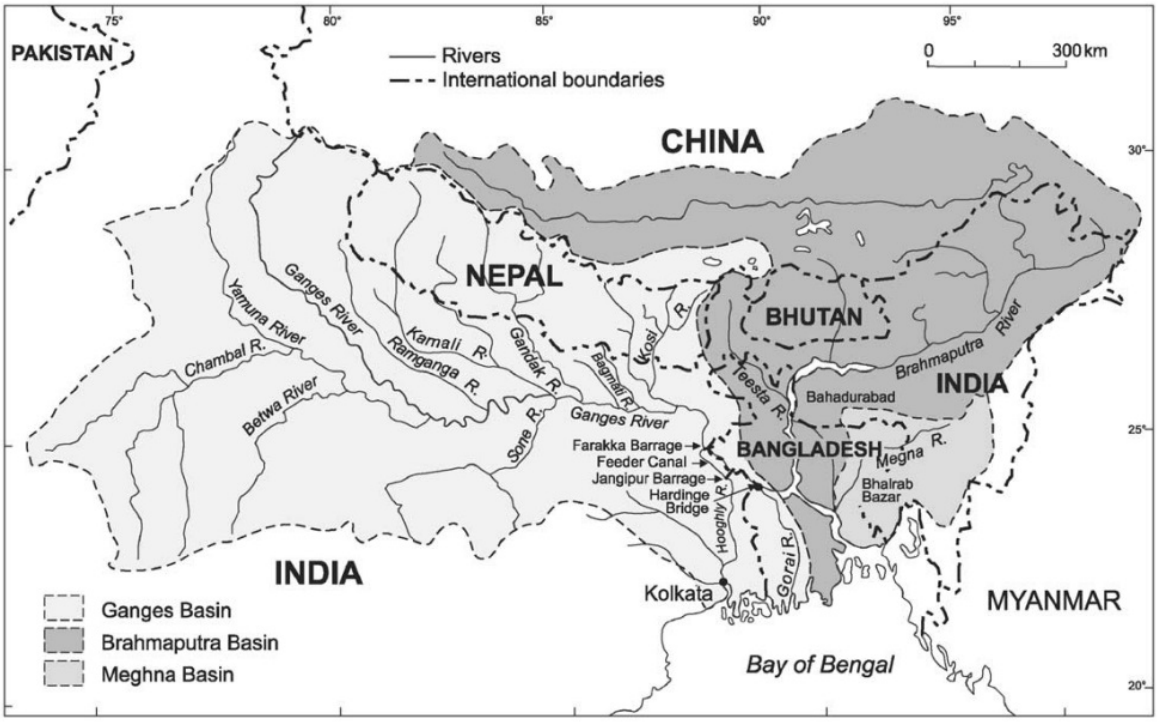
Source: NWRD, 2021.

imagery (1973–2018) demonstrate that this pattern of southwestward bending has persisted, driven primarily by sediment redistribution and tidal asymmetry.

The presence of two deep tidal conduits—the Kutubdia Channel and the Oceanic Trench, locally known as the *Swatch of No Ground*—further modulates these changes. These conduits accelerate tidal propagation along the coast, influencing the erosion and accretion balance across the delta (Sarker, 2021). The strengthening of the Sandwip Channel and the southward bending of Bhola and Hatiya exemplify how hydrodynamic connectivity governs geomorphological transformation. As their southern segments entered the tidal zone, both islands extended southwesterly—Bhola now stretches nearly 100 kilometers in length but has narrowed to approximately 13 kilometers in width, while Hatiya's southern tip has migrated by

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Map 1.6: The Ganges, Brahmaputra and Meghna basins.



Source: Mirza, 2002

about 30 kilometers. By contrast, Sandwip has remained relatively stable, exhibiting minimal shoreline change over the past two centuries.

These geomorphological processes are not merely physical phenomena; they have deep social and economic consequences. The instability of landforms directly influences patterns of habitation, agricultural cycles, and displacement. Communities such as those in Monpura live within a perpetual state of environmental precarity, adapting continuously to erosion, accretion, and the redefinition of land boundaries.

1.3.3. Hydrological Systems and River Networks

The deltaic plain of Bangladesh is sustained by five major river systems that collectively drain an area of nearly 1.5 million square kilometers (Mirza, 2002). These hydrological arteries—the Jamuna–Brahmaputra, Padma–Ganges, Surma–Meghna, Padma–Meghna, and Karnaphuli systems—function as both ecological lifelines and agents of geomorphic change.

The **Jamuna–Brahmaputra system**, extending approximately 292 kilometers through northern Bangladesh, originates as the Yarlung Zangbo Jiang in Tibet and becomes the Brahmaputra in Arunachal Pradesh, India. Upon entering Bangladesh and merging with the Teesta River, it assumes the name *Jamuna*. Its braided channel pattern produces highly unstable sandbars (*chars*) that frequently appear and disappear, rendering permanent settlement precarious

(Sarker et al., 2021). These ephemeral landforms are simultaneously a source of livelihood through agriculture and a site of vulnerability due to recurrent erosion.

The **Padma–Ganges system** forms the central deltaic corridor, consisting of two segments: the Ganges portion from the Indian border to the Jamuna confluence, and the Padma stretch extending to the Meghna River at Chandpur. This vast network spans over 2,000 kilometers of tributaries and distributaries that define Bangladesh's agricultural heartland (Mirza, 2002). The confluence zones serve as both fertile agricultural regions and erosion hotspots, where water discharge intensifies sediment reworking.

The **Surma–Meghna system**, originating from the northeastern uplands, is the longest river course in the country, flowing 669 kilometers before merging with the Padma at Chandpur. Its downstream segment, known as the Meghna, forms a crucial hydrological link between the inland floodplains and the coastal estuary. When the Padma and Meghna converge, they create the **Padma–Meghna system**, which ultimately discharges into the Bay of Bengal through multiple distributaries collectively termed the *Mouths of the Ganges*.

The **Karnaphuli River**, situated in southeastern Bangladesh, represents the fifth major hydrological system. Flowing through the Chittagong Hill Tracts and descending sharply toward the Bay of Bengal, it supports the country's principal seaport and hydroelectric infrastructure. Together, these river systems sustain the hydrological equilibrium of the delta while also contributing to its instability through sediment flux, tidal influence, and anthropogenic alteration.

Table 1.3: Major River Systems of Bangladesh and Their Key Characteristics.

River System	Origin and Course	Length within Bangladesh (km)	Key Tributaries / Distributaries	Geomorphological Features	Socio-Environmental Significance
Jamuna–Brahmaputra	Originates as the Yarlung Zangbo Jiang in Tibet; flows through Arunachal Pradesh as the Brahmaputra and enters Bangladesh as the Jamuna.	≈ 292	Teesta, Dharla, Dudhkumar	Highly braided channel with unstable *chars*; frequent channel migration and sedimentation.	Creates fertile floodplains; major site of erosion and displacement; supports seasonal agriculture and fishing.
Padma–Ganges	Enters Bangladesh from India near Chapai	≈ 258 (Ganges segment);	Arial Khan, Gorai, Kumar	Broad meandering floodplain; high sediment load;	Central agricultural corridor; vital for irrigation and

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	Nawabganj; merges with the Jamuna near Goalundo.	≈ 126 (Padma segment)		erosion-prone banks.	navigation; also major erosion zone.
Surma–Meghna	Originates in the hills of Meghalaya, India; becomes the Meghna after Kalipur and flows to Chandpur.	≈ 669	Kushiyara, Manu, Khowai	Strong monsoonal discharge; deep tidal estuary near Chandpur.	Longest river system; crucial for inland transport, fisheries, and estuarine ecology.
Padma–Meghna	Formed by confluence of the Padma and Meghna near Chandpur; flows into the Bay of Bengal.	≈ 145	Tetulia, Shahbazpur	Multiple distributary mouths; active sedimentation zone.	Controls delta-building processes; supports dense coastal settlements and fishing communities.
Karnaphuli	Originates in the Lushai Hills (India); flows through Chittagong Hill Tracts to the Bay of Bengal.	≈ 420 (with tributaries)	Sangu, Feni, Matamuhuri	Steep gradient; hydroelectric reservoir at Kaptai.	Key for hydroelectric power, port operations, and regional trade.

Sources: Adapted from Mirza (2002); Sarker (2021); Goodbred et al. (2003); MES II (2001).

1.3.4. Water Regime, Agriculture, and Human Settlement

Bangladesh's deltaic ecology is governed by a dual hydrological regime characterized by extreme seasonal variation. During the monsoon, river discharge averages around 140,000 cubic meters per second, whereas in the dry season, this volume drops to nearly 7,000 cubic meters per second (Sarker et al., 2021). Such fluctuations profoundly affect agricultural cycles and settlement patterns. Approximately 60 percent of the country's 9.1 million hectares of cultivable land is farmed during the monsoon, while about 40 percent is utilized in the dry winter season. This dual-cycle cultivation system reflects a long-standing adaptation to hydrological extremes, balancing flood-dependent fertility with the risks of inundation.

To manage these variations, successive governments have implemented extensive water management projects aimed at irrigation expansion, flood control, and drainage improvement. Large-scale infrastructural interventions—such as embankments, sluice gates, and polders—

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have been designed to regulate river flow, enhance agricultural productivity, and prevent waterlogging. These efforts are complemented by smaller-scale technologies, including tube wells and electric pumps, that facilitate localized irrigation during dry months. While such interventions have improved food security, they have also generated ecological trade-offs, including sediment deprivation, salinity intrusion, and wetland degradation.

1.3.5. Implications for Monpura and the Coastal Frontier

Monpura Island exemplifies the precarious equilibrium between land creation and destruction that defines Bangladesh's coastal frontier. Situated within the Meghna estuary, the island's geomorphology is continuously reshaped by sediment deposition from upstream and tidal dynamics from the Bay of Bengal. Its proximity to the confluence of major river systems exposes it to both fluvial and marine processes, including storm surges, cyclones, and saline intrusion.

This constant state of flux profoundly influences livelihood strategies. Agricultural and fishing communities in Monpura must continuously adapt to shifting coastlines, fluctuating salinity levels, and periodic displacement. Land tenure insecurity, erosion-induced migration, and infrastructure vulnerability remain persistent challenges. As Ahmed (2014) predicts, the cumulative impact of these processes could produce more than ten million climate migrants from Bangladesh's coastal belt by the end of the century—a scenario that underscores the urgency of integrated coastal management and social adaptation strategies.

The study of Monpura's environmental situation therefore requires not only a descriptive account of geomorphological change but also an analytical understanding of how these changes intersect with human experience. The island's social-ecological system reflects broader dynamics of resilience, adaptation, and marginality that characterize the deltaic landscape. It illustrates how physical instability translates into social vulnerability—and how, through knowledge, cooperation, and cultural continuity, local communities sustain life on a constantly shifting terrain.

1.4. PROBLEM OF THE STUDY

The coastal regions of Bangladesh—defined by the dynamic interaction of land, ocean, and atmospheric processes—face a range of interlinked challenges that significantly affect local livelihoods. Monpura Island, located within the Meghna estuary and bordered by the Bay of Bengal, exemplifies these challenges and provides a critical case study for understanding broader coastal vulnerabilities. Accordingly, the central problem addressed in this study is how the socio-economic and environmental dynamics of Monpura Island reflect and intensify the wider issues confronting coastal communities in Bangladesh.

A key issue investigated in this study concerns the vulnerability of Monpura Island's inhabitants to the multifaceted effects of climate change. Miller et al. (2010) define vulnerability as the unequal exposure of individuals or groups to diverse forms of stress—both current and anticipated—mediated by social, economic, and environmental conditions. Vulnerability,

therefore, is not a static condition; it evolves over time in response to shifting circumstances and can be analyzed through approaches such as livelihood sensitivity assessments and scenario modeling.

Bangladesh ranks among the world's most climate-vulnerable nations, facing acute threats from rising sea levels, intensified cyclones, and erratic precipitation patterns. Monpura Island, due to its low elevation and position at the confluence of the Meghna estuary and Bay of Bengal, is particularly exposed to these climatic hazards. This geographic vulnerability magnifies the risks of storm surges, tidal flooding, and saline intrusion—factors that directly undermine agricultural productivity and fisheries, the primary sources of local sustenance and income.

The scope of this study also encompasses the socio-economic repercussions of environmental stress on the livelihoods of Monpura's inhabitants. The interaction between ecological degradation and socio-economic fragility reveals systemic vulnerabilities within the local economy. For example, salinity intrusion, recurring floods, and cyclones have degraded arable lands, reducing crop yields and disrupting fisheries. Consequently, local households experience heightened economic instability, food insecurity, and declining income opportunities. Furthermore, environmental disruption has eroded traditional livelihood practices, compelling communities to devise adaptive strategies to sustain their livelihoods.

Addressing the central research problem requires a comprehensive understanding of both historical and contemporary livelihood strategies among Monpura's inhabitants. Traditionally, the island's economy has relied on agriculture and fishing; however, intensifying environmental hazards have forced significant adjustments in these practices. This study examines how historical land-use patterns, socio-economic hierarchies, and indigenous knowledge systems shape present-day adaptive responses to environmental pressures. The analysis also considers how evolving land ownership, farming methods, and fishing techniques reflect broader processes of social and economic transformation.

Another dimension of this study concerns the limitations of existing coastal management frameworks and policy interventions on Monpura Island. Despite Bangladesh's advances in coastal zone management and development planning, their effectiveness in addressing the distinct realities of island communities remains inadequate. This research critically examines the gaps in policy implementation and the efficacy of institutional mechanisms designed to enhance local resilience. Special attention is given to the *Coastal Zone Policy* (CZP) and related programs, assessing their degree of alignment with the lived experiences and priorities of Monpura's residents.

A broader challenge identified in this study is the lack of comprehensive, ethnographically grounded research on Monpura Island. Although the island represents an important site for understanding coastal livelihoods in Bangladesh, it has been largely overlooked in academic and policy discourse. This research addresses that gap by offering an in-depth ethnographic account of the island's socio-economic and environmental dynamics, thereby contributing to both

theoretical understanding and practical policymaking. The findings are intended to inform future research agendas and guide adaptive policy frameworks for similar deltaic and coastal environments.

In summary, this study addresses a constellation of interrelated challenges faced by the inhabitants of Monpura Island: vulnerability to climate change, socio-economic impacts of environmental hazards, transformations in livelihood strategies, inadequacies in coastal governance, and persistent knowledge gaps. By examining these dimensions, the research seeks to provide an integrated understanding of resilience, adaptation, and well-being among coastal populations in Bangladesh and comparable deltaic regions.

1.5. RESEARCH OBJECTIVES

1.5.1. Broad Objective

The overarching aim of this research is to ethnographically examine the livelihood strategies of the coastal people of Monpura Island, situated in the Meghna estuary of southern Bangladesh. The study seeks to understand how the island's inhabitants negotiate environmental transformations, socio-economic inequalities, and cultural values to sustain life and identity within a context of ecological uncertainty. It integrates ecological, economic, and moral dimensions to construct a holistic anthropology of adaptation and resilience in a climate-vulnerable deltaic landscape.

1.5.2. Specific Objectives

1. To document and analyze the livelihood practices of Monpura's inhabitants—farmers, fishers, and traders—highlighting how everyday economic activities are shaped by environmental conditions and social relationships.
2. To trace the historical formation and settlement processes of Monpura Island, documenting how waves of erosion, displacement, and resettlement have influenced the demographic and socio-spatial configuration of the island across time.
3. To analyze the ongoing environmental transformations—including riverbank erosion, salinity intrusion, and climatic variability—and assess how these ecological processes reshape the economic strategies, spatial organization, and adaptive behaviors of the island's population.
4. To explore the social and cultural structures—including kinship, class, and moral norms—that shape collective adaptation, cooperation, and inequality within the island's communities.
5. To understand local ecological knowledge and moral reasoning as foundations of resilience, focusing on how ethical practices and indigenous understandings of the environment guide adaptive responses.

1.6. RESEARCH QUESTIONS

Guided by the objectives outlined above, this study seeks to explore how the inhabitants of Monpura Island—living within a fragile coastal environment of the Meghna estuary—sustain their livelihoods, social relations, and moral worlds amid climate-induced transformations. The research questions are designed to elicit ethnographic depth and to situate Monpura's local experiences within broader anthropological debates on adaptation, resilience, and moral ecology.

Broad Research Question

How do the coastal inhabitants of Monpura Island negotiate environmental change, socio-economic inequality, and cultural values to sustain their livelihoods and collective well-being within conditions of ecological uncertainty?

Specific Research Questions

1. **Livelihood Practices and Adaptation**

   How do farmers, fishers, and traders in Monpura organize and sustain their livelihood practices amid environmental instability, and what strategies enable adaptation to salinity, erosion, and climatic unpredictability?

2. **Historical Formation and Settlement Dynamics**

   How have processes of erosion, accretion, and displacement shaped the settlement patterns and social geography of Monpura, and how do historical experiences of loss and mobility inform present-day adaptation?

3. **Social Organization, Inequality, and Moral Order**

   How do kinship, class, and gender relations structure cooperation, resource access, and resilience, and in what ways do moral norms and collective obligations influence adaptive capacities?

4. **Local Knowledge and Moral Ecology of Resilience**

   How do indigenous ecological knowledge, faith-based reasoning, and moral values guide people's understanding of and responses to environmental change?

1.7. THEORETICAL FRAMEWORK

Building upon the guiding research questions, this study employs an integrated theoretical framework grounded in classical anthropology, interpretive traditions, and contemporary analytical perspectives. The framework connects ecological realities with cultural meaning and moral reasoning, allowing for a multidimensional understanding of livelihood and adaptation in Monpura Island. It highlights that people's responses to environmental change are not only economic or technical but also profoundly ethical, social, and symbolic. The theoretical discussion unfolds through four complementary strands. The first strand, Classical

Anthropological Foundations, provides the epistemological roots for studying livelihood, social structure, and function, emphasizing the interdependence between culture and survival. The second strand, Interpretive Anthropology, centers on meaning-making and cultural interpretation, seeking to understand how individuals and communities construct significance through their everyday practices and moral engagements. The third strand encompasses Contemporary Lenses, including Political Ecology, Moral Economy, and Feminist Environmentalism, which together offer critical insights into power, inequality, and agency in human–environment relations. Finally, the fourth strand presents An Integrative Framework, which synthesizes these theoretical perspectives into a holistic analytical approach to understanding livelihood and adaptation. Through this integration, the study bridges material, symbolic, and ethical dimensions of human life in a fragile coastal environment, illustrating that adaptation in Monpura is as much a moral and cultural process as it is an ecological and economic one.

1.7.1 Classical Anthropological Foundations

Understanding the livelihood strategies and adaptive practices of coastal communities such as those of Monpura Island requires an integrated theoretical approach that bridges classical anthropology with contemporary environmental and moral perspectives. This section situates the study within three major intellectual traditions: (1) classical anthropological foundations of functionalism and structural analysis; (2) interpretive anthropology and its focus on meaning and symbolism; and (3) contemporary frameworks including political ecology, moral economy, feminist environmentalism, and resilience theory. Together, these perspectives provide a holistic framework for analyzing the ecological, economic, and cultural dynamics of adaptation in coastal Bangladesh.

Bronisław Malinowski and Functionalism

Bronisław Malinowski revolutionized anthropological research through his advocacy for long-term, immersive fieldwork. In his seminal work *Argonauts of the Western Pacific* (1922), Malinowski introduced the method of participant observation, a technique that transformed anthropology from an armchair discipline into an empirical social science. He proposed that to truly understand a culture, the anthropologist must "grasp the native's point of view," observing how daily practices, rituals, and institutions satisfy basic biological and psychological needs (Malinowski, 1922).

Malinowski's functionalism viewed culture as an integrated whole composed of interdependent parts that collectively ensure social stability and individual well-being. For Malinowski, every custom or institution—be it kinship, economy, religion, or law—served a *function* in meeting essential human needs such as reproduction, security, or cooperation. His framework suggests that societies, even in contexts of ecological or economic stress, develop adaptive mechanisms to sustain continuity and balance.

Applying Malinowski's insights to the study of Monpura Island, one can interpret local practices such as cooperative fishing, seed-sharing among farmers, and collective cyclone preparedness as culturally evolved strategies for fulfilling fundamental needs in an uncertain environment. These practices, though shaped by external forces like climate change and economic policy, reflect a deep-seated functional logic rooted in community interdependence and cultural adaptation.

Malinowski's notion of culture as an adaptive system resonates strongly with the coastal context of Bangladesh, where environmental volatility constantly challenges human survival. By employing a functionalist lens, this study explores how Monpura's inhabitants organize labor, maintain kinship solidarity, and transmit ecological knowledge to sustain livelihoods amid climate-induced disruptions.

A. R. Radcliffe-Brown and Structural-Functionalism

Where Malinowski emphasized the individual and psychological dimensions of culture, A. R. Radcliffe-Brown (1952) focused on the structural organization of society. In his work *Structure and Function in Primitive Society*, Radcliffe-Brown argued that societies are not mere aggregates of individuals but systems of social relations governed by structural rules and norms that maintain equilibrium and continuity (Radcliffe-Brown, 1952). His structural-functionalism emphasized that institutions exist not to satisfy individual needs but to uphold the collective stability of society.

Radcliffe-Brown's comparative studies of kinship, law, and ritual across societies demonstrated that recurring social structures—such as descent systems, political hierarchies, and exchange networks—form the foundation of social cohesion. These structures enable individuals to coordinate actions, allocate resources, and resolve conflicts within a shared moral order.

For Monpura Island, Radcliffe-Brown's framework provides a means to understand how social institutions and networks function as stabilizing mechanisms in a volatile ecological setting. The island's kinship-based fishing groups, informal dispute resolution systems (salish), and reciprocal labor exchanges during harvest seasons can be analyzed as structural arrangements that ensure social integration. Even in the face of resource scarcity or environmental crises, these institutions maintain communal order and facilitate collective adaptation.

Radcliffe-Brown's insistence on empirical fieldwork and systematic comparison also informs the methodological rigor of this study. By analyzing the interrelations among social institutions—kinship, economy, religion, and politics—this research situates Monpura's livelihood strategies within a coherent social structure. This perspective helps explain why resilience in coastal Bangladesh is not only ecological but also structural, embedded in enduring patterns of cooperation and obligation.

E. E. Evans-Pritchard: Context, Meaning, and Social Order

E. E. Evans-Pritchard, a student of both Malinowski and Radcliffe-Brown, bridged functionalism with interpretive and historical sensibilities. His ethnographies *The Nuer* (1940) and *Witchcraft, Oracles, and Magic Among the Azande* (1937) remain exemplary in their attention to meaning, rationality, and moral order within cultural systems. While influenced by functionalism, Evans-Pritchard departed from its mechanistic assumptions by emphasizing the cultural logic of action—how beliefs, rituals, and institutions express coherent worldviews rather than merely serving utilitarian functions (Evans-Pritchard, 1937; Evans-Pritchard, 1940).

In his study of the Nuer, Evans-Pritchard illustrated how ecological and social structures interlock, showing that the Nuer's pastoral economy and kinship system were intimately shaped by environmental rhythms and resource distribution. His attention to time, space, and seasonal cycles prefigures contemporary anthropological interest in climate, environment, and adaptation. Similarly, his analysis of Azande witchcraft revealed how seemingly "irrational" beliefs operate as moral frameworks for interpreting misfortune and restoring balance within the social order.

In the context of Monpura Island, Evans-Pritchard's theoretical contributions offer valuable tools for understanding how belief systems, rituals, and moral reasoning shape local responses to environmental uncertainty. Island inhabitants often interpret floods, cyclones, or erosion through moral and religious frameworks that attribute causality to divine will, communal harmony, or moral conduct. These interpretations, while spiritual in form, function socially to reinforce ethical norms and promote collective resilience.

Evans-Pritchard's focus on *emic* understanding—the interpretation of social phenomena from the insider's perspective—also informs this study's ethnographic approach. By engaging with Monpura's residents on their own terms, the research seeks to understand how people conceptualize risk, reciprocity, and responsibility within their own cultural logic rather than imposing external analytical categories.

Synthesis of Classical Perspectives

Collectively, the classical anthropological frameworks of Malinowski, Radcliffe-Brown, and Evans-Pritchard establish a coherent foundation for this ethnographic inquiry. Malinowski's functionalism highlights the adaptive and need-satisfying dimensions of livelihood practices; Radcliffe-Brown's structural-functionalism emphasizes the role of institutions in maintaining social cohesion; and Evans-Pritchard's interpretive realism reveals the moral and symbolic dimensions of adaptation.

Applied to the coastal communities of Monpura, these perspectives converge in illustrating how people construct and maintain social order under environmental stress. Livelihood strategies—whether fishing cooperatives, seed-saving collectives, or kin-based migration networks—are not

isolated economic activities but manifestations of an integrated cultural system balancing ecological necessity, moral obligation, and structural interdependence.

This classical anthropological foundation thus provides a lens for interpreting Monpura's social world not merely as a site of vulnerability but as a living system of adaptation and meaning. It establishes the epistemological groundwork upon which later interpretive and critical frameworks—such as political ecology, moral economy, and feminist environmentalism—build to deepen our understanding of resilience and transformation in the face of climate change.

1.7.2 Interpretive Anthropology: Clifford Geertz and "Thick Description"

The interpretive turn in anthropology, most notably advanced by Clifford Geertz, marked a decisive shift from the structural and functional paradigms of classical anthropology toward a hermeneutic understanding of culture. Geertz's contribution, particularly through his seminal work *The Interpretation of Cultures* (1973), repositioned anthropology as an interpretive science concerned not with discovering universal laws of human behavior but with elucidating the meanings that people assign to their actions within specific historical and cultural contexts. His concept of "thick description" transformed ethnography from a descriptive practice into a profoundly interpretive endeavor aimed at uncovering the webs of significance that humans themselves have spun (Geertz, 1973).

Geertz drew inspiration from Max Weber's notion that human beings are "animals suspended in webs of significance," arguing that the task of anthropology is to interpret these webs rather than to explain them causally. For Geertz, culture is not a set of rules or functions but a text—a symbolic system through which people express and interpret their realities. The anthropologist, therefore, acts as a "reader" of this cultural text, translating the symbolic meanings embedded in rituals, gestures, institutions, and everyday practices. This perspective foregrounded meaning as the central analytic focus of anthropology and positioned ethnography as a dialogic process between observer and observed.

In his famous essay "Thick Description: Toward an Interpretive Theory of Culture," Geertz elaborated that ethnographic interpretation requires situating behavior within its layers of meaning. "Thin description," as he called it, might simply record an act—such as a wink—whereas "thick description" situates that act within its social and symbolic context: Is it a joke, a flirtation, or a signal of complicity? This method insists that anthropological analysis must move beyond surface appearances to interpret the meanings that local actors attribute to their actions.

In the context of Monpura Island, Geertz's interpretive anthropology provides a powerful framework for understanding how coastal residents navigate, explain, and give meaning to their experiences of environmental change and social transformation. For instance, when islanders attribute a devastating cyclone to divine will or interpret erosion as a moral consequence of communal discord, these explanations are not mere superstitions—they are symbolic expressions of a moral cosmology that binds community, nature, and faith. A "thick description"

of such beliefs uncovers the moral and affective dimensions that underpin resilience and adaptation in coastal Bangladesh.

Geertz's approach also highlights that culture is a dynamic system of meanings continually reproduced through performance and discourse. In Monpura, rituals of boat-blessing before fishing expeditions, collective prayers after disasters, and annual religious festivals all function as cultural performances that reaffirm social solidarity and moral order in an environment of uncertainty. By interpreting these performances, one can grasp how islanders collectively construct a sense of belonging, continuity, and hope amid ecological precarity.

Another important aspect of Geertz's theory is his rejection of positivist objectivity. He argued that anthropological knowledge is inherently interpretive and partial, shaped by the ethnographer's positionality and the dialogic process of fieldwork. This recognition of subjectivity is especially relevant in studying Monpura's social world, where the researcher's role as both observer and participant becomes integral to understanding the lived experiences of climate vulnerability. By engaging reflexively with local narratives, the anthropologist can reveal how meanings of adaptation and survival are co-constructed through interaction and interpretation.

Furthermore, Geertz's emphasis on symbols as mediators of social order provides a way to understand how environmental adaptation is encoded in cultural practices. In Monpura, symbols such as the fishing net, the paddy field, or the mosque transcend their material functions to embody values of cooperation, faith, and continuity. These cultural symbols, when interpreted ethnographically, reveal the ways in which people make sense of and morally justify their adaptive strategies. For example, rebuilding a house after a cyclone is not only a technical act of reconstruction but also a symbolic reaffirmation of kinship ties, community resilience, and divine trust.

Through this interpretive lens, adaptation is not seen merely as a set of economic or ecological adjustments but as a cultural narrative of endurance and meaning-making. Monpura's inhabitants, by interpreting natural calamities through moral and spiritual frameworks, transform environmental vulnerability into a site of ethical reflection and communal solidarity. Their stories, rituals, and practices constitute a living archive of resilience—an ongoing negotiation between human agency, divine will, and ecological uncertainty.

In essence, Geertz's interpretive anthropology bridges the gap between structure and meaning, offering a method for analyzing the symbolic dimensions of adaptation. It emphasizes that every act of survival—whether rebuilding a home, sharing food, or praying for rain—carries a deeper cultural significance. For this reason, the study of Monpura's livelihood strategies demands not only documentation of behavior but also an empathetic interpretation of the values, emotions, and cosmologies that shape human responses to climate and change. Geertz's framework, therefore, complements the classical foundations of Malinowski and Radcliffe-Brown by shifting the analytical focus from external structures to internal meanings. It allows this study to

approach Monpura not simply as a site of material struggle but as a moral and symbolic landscape where adaptation is lived, narrated, and made meaningful through culture.

1.7.3 Contemporary Lenses: Political Ecology and Moral Economy

While classical and interpretive anthropology provided the structural and symbolic foundations for understanding social life, they paid limited attention to questions of power, inequality, and the global political economy that shape environmental realities. Contemporary anthropological frameworks—political ecology, moral economy, and feminist environmentalism—build upon and challenge these earlier traditions by situating human-environment relations within systems of power, ethics, and gendered experience. These perspectives enable a multidimensional understanding of adaptation in Monpura, where ecological degradation, livelihood insecurity, and social marginality intersect.

Political Ecology: Environment, Power, and Inequality

The emergence of political ecology in the 1980s marked a critical shift in environmental thought, linking ecological change to questions of political economy, historical processes, and social justice. Foundational texts by Blaikie and Brookfield (1987) argued that environmental degradation cannot be understood without addressing the structures of power and production that generate vulnerability. Later scholars such as Robbins (2012) and Crate and Nuttall (2016) extended this framework to global climate change, emphasizing how knowledge, governance, and representation shape adaptive possibilities.

From a political ecology standpoint, Monpura's environmental vulnerability—marked by coastal erosion, salinity intrusion, and recurrent cyclones—is not a purely "natural" condition. It is historically produced through policies of infrastructural neglect, centralized water management, and market-oriented development that marginalize peripheral island communities (Adger, Brown, & Surminski, 2018; Haque & Jakariya, 2021). As Blaikie and Brookfield (1987) remind us, "vulnerability is socially constructed." In Bangladesh, state-led embankment projects, shrimp aquaculture, and upstream dam regulation reshape hydrology while intensifying class inequality and ecological precarity.

The political ecology lens therefore reframes adaptation not as a neutral technical adjustment but as a political process involving contested claims over land, resources, and authority. It reveals how class, caste, and geography condition people's capacity to adapt. Wealthier landowners in Monpura can rebuild homes and shift occupations, while landless labourers depend on seasonal migration and social networks for survival. This differential access to adaptation resonates with Robbins' (2012) argument that environmental governance must be read through the "politics of scale," where global systems of production and policy decisions shape local resilience.

In this sense, political ecology provides a critical counterpoint to deterministic climate discourses, emphasizing that adaptation is embedded in histories of power, dispossession, and

resistance. It invites an ethnographic attention to how local actors engage with state institutions, NGOs, and markets to negotiate environmental futures.

Moral Economy: Ethics, Reciprocity, and Survival

While political ecology exposes structural inequality, the moral economy perspective foregrounds the ethical and relational dimensions of survival. Originating in the work of E. P. Thompson (1971) and James C. Scott (1976), the concept was initially used to describe peasant resistance against exploitative markets. In anthropology, it evolved into a framework for analyzing how moral values shape economic life, solidarity, and cooperation under conditions of scarcity (Hastrup, 2013; Oliver-Smith, 2016).

In Monpura, moral economy manifests in the collective practices of sharing, reciprocity, and mutual aid that sustain communities during crises. When erosion destroys homes or cyclones devastate crops, neighbours contribute labour, food, or shelter. These acts are not merely pragmatic but morally charged, reflecting values of compassion, *sabr* (patience), and *iman* (faith). As Whyte (2018) observes, resilience is not only an ecological property but a moral practice rooted in care and ethical responsibility.

Moral economy thus reframes resilience as a moral ecology, where social relations and ethical commitments are inseparable from ecological adaptation. This resonates with Folke et al. (2010), who conceptualize resilience as the capacity of social-ecological systems to absorb shocks and reorganize without losing their essential identity. In Monpura, the ability to endure and rebuild depends not solely on material resources but on sustaining moral ties and cultural meaning.

Furthermore, moral economy challenges the technocratic reduction of adaptation into cost–benefit calculations. It reasserts the human dimension of suffering, empathy, and hope that underlies community survival. As Oliver-Smith (2016) argues, disaster recovery is as much about restoring moral and emotional equilibrium as rebuilding infrastructure. For the people of Monpura, rebuilding homes after a cyclone is also an act of reasserting moral order and reaffirming dignity in the face of loss.

Feminist Environmentalism: Gender, Agency, and Ecological Knowledge

Feminist environmentalism, or feminist political ecology, deepens this discussion by showing that environmental knowledge, labour, and adaptation are gendered processes. Foundational works by Rocheleau, Thomas-Slayter, and Wangari (1996) and Agarwal (2010) reveal that women's interactions with the environment are shaped by both material dependence and social subordination. Elmhirst (2015) extends this to climate adaptation, arguing that women's roles in managing food, water, and care work make them central—but often invisible—actors in resilience-building.

In Monpura, women sustain households through unpaid labour— drying fish, maintaining seeds, conserving water, and supporting male migration during lean fishing seasons. These activities

represent both ecological knowledge and social endurance. Yet, women's adaptive work remains undervalued in formal policy frameworks that privilege male-dominated sectors such as agriculture and fisheries (Agarwal, 2010).

Feminist environmentalism challenges this erasure by redefining adaptation as a relational and embodied practice, not a gender-neutral technical process. It also illuminates how patriarchal structures limit women's access to decision-making and recovery resources after disasters (Rocheleau et al., 1996). Incorporating this perspective reveals how resilience is shaped by social hierarchies and how gender justice is essential to sustainable adaptation.

Moreover, feminist insights align with political ecology's concern for power and moral economy's emphasis on care. Together, they form a comprehensive framework for understanding adaptation as both a political act and an ethical practice—rooted in human relationships, cultural values, and ecological interdependence.

Integrating the Contemporary Lenses

By bringing together political ecology, moral economy, and feminist environmentalism, this study approaches Monpura's livelihood systems as moral-ecological assemblages rather than isolated economic or environmental phenomena. These frameworks collectively highlight that adaptation is never value-neutral: it is mediated by power, ethics, and identity.

The political ecology lens reveals how state and market forces structure vulnerability; moral economy uncovers how communities respond through moral reasoning and solidarity; and feminist environmentalism exposes how gender and emotion shape the everyday labour of resilience. This integrated framework aligns with resilience thinking (Folke et al., 2010) by emphasizing adaptability and transformation across interconnected systems—ecological, social, and ethical.

In doing so, the study advances a moral ecology of adaptation, a framework that situates resilience within lived experience, collective ethics, and gendered agency. It moves beyond the binary of vulnerability versus capacity, recognizing that the struggle to survive is also a struggle to uphold meaning, dignity, and care in a precarious world.

1.7.4 Integrative Framework for Analyzing Coastal Livelihood and Adaptation

The preceding theoretical discussions—classical anthropology, interpretive anthropology, political ecology, moral economy, and feminist environmentalism—collectively converge in shaping an integrative framework for this study. This framework guides the ethnographic exploration of Monpura Island's livelihood systems by recognizing that human adaptation to environmental change is simultaneously ecological, economic, moral, and cultural. It positions coastal livelihoods not as isolated economic arrangements, but as socially embedded and ethically sustained systems of interaction between people, environment, and institutions.

At its foundation, this integrative approach draws upon the classical anthropological insights of Malinowski (1922) and Radcliffe-Brown (1952), who emphasized that every social institution functions to maintain collective stability. In Monpura, kinship networks, religious practices, and community rituals operate as adaptive institutions that enable the population to survive environmental uncertainty. These classical perspectives highlight that adaptation involves the reproduction of social order and moral coherence, not merely material adjustment.

Building upon this, interpretive anthropology (Geertz, 1973) deepens the framework by emphasizing that adaptation is also a symbolic and moral act. The islanders' rituals, narratives of divine testing, and moral appeals to patience (*sabr*) and faith (*iman*) represent interpretive responses that give meaning to suffering and reinforce solidarity. Geertz's notion of "thick description" is crucial here: understanding livelihood strategies requires attending not only to what people do but also to what their actions mean within their moral universe.

Political ecology contributes a critical structural layer, illuminating how global economic systems, national development policies, and historical marginalization shape Monpura's exposure to risk (Blaikie & Brookfield, 1987; Robbins, 2012). Coastal erosion, for instance, cannot be understood without examining the state's centralized control over water management and unequal resource allocation. This structural lens exposes the power asymmetries underlying vulnerability, linking local hardship to broader political and economic forces.

Complementing this, the moral economy perspective (Scott, 1976; Thompson, 1971) situates adaptation within the ethical domain of reciprocity, compassion, and care. It interprets community-based mutual support, informal exchange, and shared rebuilding as moral practices that sustain social life under crisis. These interactions embody what Folke et al. (2010) term "resilience thinking," where social systems reorganize around moral and relational values to preserve continuity amid disturbance.

Finally, feminist environmentalism (Agarwal, 2010; Rocheleau et al., 1996) introduces the gendered dimension of adaptation, showing how women's labour and ecological knowledge underpin resilience. In Monpura, women's daily engagement in water collection, seed storage, and post-cyclone rehabilitation reflects the embodiment of adaptation as care work. This gendered analysis ensures that resilience is not abstracted from the lived inequalities that define who bears the burden of environmental change.

Taken together, these theoretical strands converge into a moral ecology of adaptation— a framework that conceptualizes livelihood as an ethically informed relationship between humans and their environment. It views resilience not as mere endurance, but as an active process of meaning-making, solidarity, and moral imagination. In this study, the integrative framework thus serves to interpret Monpura's adaptive practices as a composite of ecological negotiation, cultural reasoning, and ethical commitment, situating local experience within both global systems and deeply human values.

1.8. SCOPE AND IMPORTANCE OF THE STUDY

1.8.1. Scope of the Study

This study, *Making a Living in Monpura Island*, presents an ethnographic exploration of livelihood strategies among coastal inhabitants of Monpura Island, Bangladesh. The research scope is structured around two distinct yet interrelated villages—Sonarchar and Machpara—each representing different dimensions of Monpura's socio-economic and ecological landscape. Together, they provide a holistic understanding of the island's diverse livelihood systems and adaptive practices.

Sonarchar Village: Situated in the central part of Monpura Island, Sonarchar is predominantly an agrarian settlement. The research in this area examines how local farmers adapt to environmental pressures such as soil salinity, flooding, and land degradation. The analysis focuses on how these environmental stressors affect crop production and explores the adaptive strategies that farmers employ to sustain agricultural productivity and food security under changing ecological conditions.

Machpara Village: In contrast, Machpara embodies the fishing-based economy of Monpura. The research focuses on the livelihood strategies of fishers who rely on the Meghna estuary and the Bay of Bengal for their subsistence. It investigates challenges including overfishing, fluctuating fish stocks, and the ecological consequences of climate change. The study also analyzes how fishers modify their practices in response to environmental variability, economic constraints, and shifting resource dynamics.

Employing multiple qualitative methods—such as participant observation, in-depth interviews, focus group discussions, and archival analysis— the study provides a nuanced ethnographic understanding of livelihood practices in both Sonarchar and Machpara. This dual-site focus allows the research to capture the intersections between agriculture and fishing as primary economic activities while highlighting how each community responds to common and context-specific challenges.

1.8.2. Importance of the Study

The importance of this study is multifaceted, reflecting its contributions to both academic knowledge and practical policy development.

Understanding Local Livelihoods: This research offers valuable insights into the livelihood strategies of coastal communities in Monpura Island. By examining the agricultural practices in Sonarchar and the fishing activities in Machpara, the study provides a detailed account of how these communities navigate the challenges posed by environmental hazards and socio-economic pressures. According to Garai (2017), to cope with hazards, coastal communities in Bangladesh adapt by modifying their housing structures, seeking new employment opportunities, migrating to other areas, raising alternative livestock, borrowing money, and relying on relief assistance.

This understanding is crucial for appreciating the complexities of coastal life and the diverse ways in which communities adapt to their changing environments.

Addressing Climate Change Impacts: The study's focus on the effects of climate change on agriculture and fishing contributes to a broader understanding of how coastal communities are affected by global environmental changes. The findings highlight the specific vulnerabilities faced by Monpura Island's inhabitants and offer insights into the adaptive measures they employ. This information is essential for developing targeted interventions and support mechanisms to enhance the resilience of coastal communities to climate change.

Informing Policy and Management: The research identifies gaps in current coastal management and policy frameworks, providing evidence-based recommendations for improving the effectiveness of these measures. By evaluating the implementation of policies such as the Coastal Zone Policy (CZP) and their impact on Monpura Island, the study offers practical suggestions for policymakers and practitioners. These recommendations aim to enhance the resilience of coastal communities and ensure that policy responses are aligned with the needs and experiences of local populations.

Contributing to Anthropological Knowledge: As one of the first anthropological studies focused specifically on Monpura Island, this research fills a significant gap in the existing literature. The ethnographic insights gained from Sonarchar and Machpara contribute to a broader understanding of coastal life in Bangladesh and offer a model for similar studies in other coastal regions. The study's findings enrich the field of anthropology by providing a comprehensive account of livelihood strategies, social organization, and environmental adaptation in a unique coastal context.

Supporting Sustainable Development: The research supports sustainable development efforts by highlighting the importance of integrating local knowledge and practices into development planning. By documenting the experiences of Monpura's inhabitants and their responses to environmental and socio-economic challenges, the study advocates for approaches that respect and build upon local knowledge systems. This approach is crucial for fostering sustainable development in coastal areas and ensuring that interventions are effective and culturally appropriate.

In summary, the scope of this study encompasses a detailed exploration of livelihood strategies in Sonarchar and Machpara, while its importance lies in its contributions to understanding local livelihoods, addressing climate change impacts, informing policy and management, advancing anthropological knowledge, and supporting sustainable development.

1.9. METHODOLOGY

The critical realist ontology and interpretivist epistemology adopted in this study necessitate a methodological approach that is both flexible and responsive to the complexities of Monpura's socio-environmental context. Guided by these philosophical orientations, the research

acknowledges that social reality is both materially grounded and socially constructed—shaped by ecological processes, human agency, and cultural meaning. Understanding the livelihoods and adaptive strategies of Monpura's inhabitants therefore requires a methodological design capable of capturing the interplay between environmental forces, socio-economic structures, and moral worlds.

This study is grounded in the **anthropological tradition of ethnography**, which emphasizes long-term, immersive fieldwork and the study of lived experiences within their natural and social contexts. Ethnography allows for a nuanced understanding of how people interpret, negotiate, and respond to their environment, and how moral reasoning, local knowledge, and social relations shape adaptation. The methodological orientation is qualitative in nature, privileging interpretive depth over numerical generalization, and seeks to uncover how meaning, power, and practice intersect in everyday life.

1. Qualitative Methods: Given the emphasis on understanding lived experience and social constructions, this study employs qualitative methods such as intensive fieldwork, in-depth interviews, participant observation, and focus group discussions. These approaches provide rich, detailed accounts of how residents of Monpura Island perceive and respond to environmental changes, livelihood challenges, and social transformations. Fieldwork was conducted intermittently between 2017 and 2023, encompassing approximately sixteen months of on-site engagement across two key villages—**Sonarchar** and **Machpara**—which represent agrarian and fishing-based livelihoods, respectively. This dual-site design enables a comparative and contextualized understanding of how distinct ecological and economic settings influence adaptation and resilience.

2. Triangulation: To ensure a comprehensive and credible understanding of Monpura's socio-environmental realities, multiple sources and methods of data collection were triangulated. Primary ethnographic data were supplemented with secondary materials, including government reports, policy documents, academic literature, and archival records. This process of methodological triangulation allowed for the integration of empirical observations, local narratives, and institutional perspectives, thereby enhancing both the depth and reliability of the findings.

3. Contextual Sensitivity: Data collection and analysis were conducted with acute sensitivity to local context, norms, and ethical considerations. The research process respected cultural protocols and sought to engage participants as collaborators rather than mere subjects. Local idioms, customary practices, and ecological knowledge systems were not only recorded but interpreted as integral components of adaptive life in Monpura. Reflexivity—acknowledging the researcher's own positionality, relationships, and influence within the field—was maintained throughout the study to ensure ethical engagement and analytical transparency.

The methodological framework of this thesis, grounded in critical realism and interpretivism, provides a robust basis for exploring the complex interplay between environmental change and

human response in Monpura. By recognizing the material reality of environmental phenomena alongside the socially constructed nature of human experience, this study offers a nuanced and contextually rich account of resilience in a deltaic landscape. This approach not only advances academic understanding of coastal vulnerability and adaptation but also provides practical insights for policy and development planning, contributing to more inclusive and culturally informed strategies for supporting Bangladesh's coastal populations.

1.9.1. Participant Observation and Ethnography

Ethnography has a rich history that dates back to the early 20th century when anthropologists like Bronisław Malinowski and E.E. Evans-Pritchard pioneered intensive fieldwork and participant observation as core methodologies for studying cultures. Participant observation, a fundamental approach in ethnographic research, involves researchers embedding themselves in the communities they study to gain an insider's perspective. This method allows for an in-depth understanding of social practices, beliefs, and daily interactions within their cultural contexts.

In business research, the level of engagement in participant observation can vary significantly. On one end of the spectrum, researchers might conduct brief site visits (as exemplified by Bruni et al., 2004). On the other extreme, researchers may immerse themselves fully in the daily lives of individuals within the study setting to develop an insider's perspective. This immersion enables researchers to experience and understand the nuances of being part of the observed group, blending participation and observation effectively to offer insights that are accessible to external audiences (Wolcott, 2005).

The extent to which a researcher can assimilate into the culture being studied depends on the setting. For example, Ram (1999) used his ethnic background as a criterion for selecting field sites, choosing smaller companies where he could become a full member of the observed group. Business researchers have also embedded themselves in companies by offering their services, thus acquiring an insider's perspective (Watson, 1994). Active participation facilitates the development of a "working knowledge" that leads to a profound understanding of the observed culture (Rosen, 1991). While it may be impractical for a young business student to become a company manager, they can still engage as an assistant to a manager, gaining partial insider insights into managerial operations. Some ethnographers argue that a complete understanding of a culture does not necessarily require full membership in the observed group.

In my study of Monpura Island, I followed the method of participant observation to collect data on livelihoods, occupations, climatic influences, the impacts of climate change, social structures, marital systems, rituals, conflict dynamics, social hierarchies, and other aspects of social life in authentic field conditions. Over 12 months, I maintained intermittent immersion in the study area, allowing for comprehensive data collection.

Ethnographic research typically begins with intensive fieldwork and is supplemented by other data collection methods, such as interviews and document analysis. Maintaining meticulous field diary notes is crucial, as they record daily events and the perspectives and interpretations of

participants. Initial observations focus on a broad, unstructured collection of artifacts to understand fundamental cultural norms and linguistic conventions. This preliminary orientation establishes rapport with participants and assesses the alignment of the original research objectives within the local context. Ethnographers engage in participant observation to gain insights into the culture of interest, an evolutionary process shaped by time and interpersonal relationships in the field. This iterative process requires ethnographers to interact effectively with field inhabitants and record salient details pertinent to their research. These detailed field diaries constitute a substantial empirical data corpus upon which research conclusions are based.

In its final form, the ethnographic narrative contributes to and augments existing theoretical discourses. The integration of theory into the ethnographic paradigm serves two purposes: it helps formulate overarching research questions essential to ethnographic investigations and enhances the understanding of cultural dynamics across social groups. Applying theoretical constructs to empirical data gives it broader significance, necessitating the incorporation of theoretical paradigms into data analysis. Fieldwork encompasses a range of activities, including observations, interviews, and site-specific document collection. It is a personal endeavor influenced by individual researchers' diverse preferences and skills. When the target cohort is not confined to a single location, multi-sited fieldwork facilitates cross-cultural comparisons across different organizational entities, customer bases, personnel, managerial cadres, or countries. My field study on Monpura Island stands as a testament to the comprehensive utilization of ethnographic tools and methodologies.

1.9.2. Intensive Fieldwork and Ethnography

In studying the socio-environmental dynamics of Monpura Island, I directly applied the methodological principles established by Malinowski to enrich my research. Here are ways I incorporated Malinowski's approach into my thesis:

Participant Observation: Following Malinowski's immersive fieldwork model, I engaged in participant observation on Monpura Island. By living on the island, participating in daily activities, and observing interactions and practices, I gained a comprehensive understanding of the community's lifestyle, challenges, and resilience strategies. This method uncovered subtle social dynamics and environmental interactions that were not evident through other data collection methods.

Emic Perspective: I prioritized the emic perspective to understand the world from the viewpoint of Monpura's residents. Learning the local dialect and spending significant time with the community allowed me to grasp their unique cultural practices, beliefs, and values. This approach ensured that my findings accurately reflected the community's experiences and perspectives.

Holistic Approach: In line with Malinowski's holistic approach, I examined the interplay between various aspects of life on Monpura Island. I explored how economic activities like fishing and

agriculture were intertwined with social structures, cultural practices, and environmental challenges. Understanding these connections provided an integrated view of how the island's residents adapt to and manage their socio-environmental context.

Ethnographic Detail: Inspired by Malinowski's detailed descriptions of rituals and exchanges, I documented Monpura's cultural practices, local knowledge systems, and community responses to environmental changes with rich ethnographic detail. This depth of description enhanced the academic rigor of my thesis and provided valuable insights for policymakers and stakeholders interested in the sustainable development of Monpura Island.

By incorporating Malinowski's methodological framework, my thesis on Monpura Island achieved a thorough and empathetic understanding of the community's socio-environmental dynamics, contributing valuable ethnographic insights to the field of coastal and island studies.

A.R. Radcliffe-Brown's theoretical contributions to social anthropology, particularly his structural-functionalism, have significantly influenced my research approach in studying Monpura Island's socio-environmental dynamics. Radcliffe-Brown emphasized the importance of understanding social structures and their functions in maintaining the stability and cohesion of societies. His approach involves analyzing how various social institutions contribute to the overall functioning and equilibrium of a community.

Radcliffe-Brown's work underscores the interconnectedness of social institutions and their roles in maintaining social order. He advocated for a systematic analysis of the roles and functions of these institutions in a society, which provided a robust framework for examining how different elements of social life interrelate. His concept of social structure as a network of relationships that define the roles and statuses within a community has been particularly instrumental in shaping my analytical lens.

In my thesis on Monpura Island, I employed Radcliffe-Brown's structural-functional approach to investigate how social institutions and cultural practices contribute to the community's resilience and adaptation to environmental challenges. By focusing on the social structures of Monpura, such as kinship networks, economic activities, and communal rituals, I analyzed how these elements function collectively to sustain the island's socio-economic stability amidst environmental pressures.

Radcliffe-Brown's emphasis on empirical data and systematic observation guided my fieldwork methodology. I conducted in-depth interviews, participant observations, and focus group discussions to gather detailed information on the roles and functions of various social institutions in Monpura. This approach enabled me to identify the key structures that support the community's social cohesion and to understand how these structures help the islanders navigate environmental vulnerabilities.

By applying Radcliffe-Brown's theoretical framework, my research provides a comprehensive analysis of the structural dynamics within Monpura Island, illustrating how social institutions and

cultural practices interplay to maintain social stability and address ecological challenges. This perspective has been crucial in highlighting the resilience mechanisms embedded in the island's social fabric, offering insights into the broader implications of social structure and function in the context of environmental adaptation.

In conducting my study on Monpura Island's socio-environmental dynamics, I integrated key methodological principles from E.E. Evans-Pritchard's influential work, Witchcraft, Oracles, and Magic Among the Azande (1937). Evans-Pritchard's approach to understanding the Azande's belief systems through rigorous fieldwork and deep cultural immersion provided a valuable framework for my research. His emphasis on contextual understanding, thick description, and functional analysis significantly influenced my methods and analysis.

Contextual Understanding: Evans-Pritchard's insistence on understanding beliefs and practices within their cultural context was central to my study. On Monpura Island, I applied this principle by immersing myself in the community, learning the local dialect, and engaging deeply with residents' daily lives. This approach allowed me to capture the community's worldview and social practices as they relate to their environment, particularly in the context of climatic changes and socio-economic challenges.

Thick Description: Inspired by Evans-Pritchard's detailed descriptions of the Azande's rituals and social interactions, I aimed to provide similarly rich and nuanced accounts of Monpura's cultural practices and social structures. By documenting everyday activities, occupational practices, and community rituals, I was able to illustrate the complex interplay between the islanders' livelihoods, environmental conditions, and cultural beliefs. This depth of description enriched my ethnographic narrative and offered a comprehensive view of life on the island.

Functional Analysis: Evans-Pritchard's analysis of how witchcraft, oracles, and magic functioned to maintain social order and address conflicts informed my approach to understanding the social dynamics on Monpura Island. I examined how local beliefs and practices help manage environmental uncertainties and social cohesion. For instance, I analyzed how community rituals and collective activities related to fishing and agriculture serve not only economic purposes but also reinforce social bonds and shared identities in the face of environmental challenges.

By incorporating these methodological insights from Evans-Pritchard, my research on Monpura Island achieved a deeper and more empathetic understanding of the community's socio-environmental dynamics. This approach enabled me to present a holistic and contextually grounded analysis, contributing valuable ethnographic insights to the study of coastal and island communities.

François Bernier's observations, particularly his detailed accounts of Bengal's socio-economic conditions and the dynamics of Mughal rule, are highly relevant to this research on Monpura Island. Bernier's descriptions of Bengal as a region abundant in resources, yet plagued by widespread poverty and insecurity due to the exploitation by rulers, offer valuable historical context for understanding the socio-economic dynamics of coastal regions in South Asia.

Monpura Island, situated within the Bengal delta, shares similarities with the Bengal region that Bernier describes. Like Bengal, Monpura is endowed with natural resources such as fertile land for agriculture, abundant fish stocks, and access to waterways for trade. However, the island also faces challenges such as poverty, limited access to healthcare and education, and vulnerability to natural disasters. These structural inequalities, exacerbated by governance challenges and environmental vulnerabilities, mirror the historical patterns Bernier documented in Bengal under the Mughal administration. His critiques of exploitative taxation, resource extraction, and the monopolization of trade resonate with contemporary issues faced by Monpura's inhabitants, who struggle against economic marginalization and environmental instability.

By drawing parallels between Bernier's observations of Bengal and the socio-economic realities of Monpura Island, this research aims to contextualize the island's current conditions within a broader historical framework. Bernier's insights into the impact of colonial exploitation and unequal distribution of resources resonate with the socio-economic disparities observed on Monpura Island. His work serves as a reminder that economic and political inequalities are deeply embedded in historical processes, which continue to shape contemporary livelihoods.

Furthermore, Bernier's documentation of maritime activities and encounters with Portuguese pirates in Chittagong sheds light on the historical significance of coastal regions in trade and navigation. Monpura Island's location within the Bay of Bengal positions it within a historical network of maritime trade routes, highlighting its importance in regional commerce and exchange. The island's long-standing engagement with trade, fishing, and mobility echoes historical patterns of coastal livelihoods in Bengal, underscoring the continuity of socio-economic practices over time.

Analyzing Monpura through Bernier's historical lens provides a deeper understanding of the interplay between resource abundance and systemic inequality. This perspective also aligns with contemporary ethnographic approaches that emphasize historical continuity and structural factors in shaping social realities. By incorporating Bernier's insights into this research, the study aims to enrich the understanding of Monpura's socio-economic context and contribute to broader discussions on coastal development, resilience, and historical legacies in South Asia.

In conducting my intensive fieldwork on Monpura Island, I drew heavily on the foundational works of ethnographic giants such as Bronisław Malinowski and E.E. Evans-Pritchard. Their methodological innovations and theoretical frameworks profoundly shaped my research approach, enabling me to produce a nuanced and comprehensive ethnography of Monpura.

Malinowski's emphasis on participant observation, the emic perspective, and a holistic approach were instrumental in guiding my fieldwork. By immersing myself in the daily lives of Monpura's residents, participating in their activities, and observing their interactions, I was able to gather rich, qualitative data that provided deep insights into their socio-environmental dynamics. This methodological rigor ensured that my findings accurately reflected the lived experiences and

perspectives of the islanders, offering an insider's view into their cultural practices, economic activities, and resilience strategies.

Evans-Pritchard's focus on contextual understanding, thick description, and functional analysis further informed my approach. His work underscored the importance of understanding local belief systems and social structures within their cultural context. By applying these principles, I was able to document the complex interplay between Monpura's environmental conditions, social norms, and cultural practices. My detailed ethnographic descriptions and functional analyses revealed how community rituals, occupational practices, and social interactions contribute to social cohesion and adaptive strategies in the face of environmental challenges.

Through this intensive fieldwork, I was able to produce a thesis that not only provides a detailed ethnographic account of Monpura Island but also contributes to broader academic discussions on coastal and island communities. The application of Malinowski's and Evans-Pritchard's methodologies allowed me to capture the intricate socio-environmental dynamics of Monpura, offering valuable insights for policymakers, researchers, and stakeholders interested in sustainable development and cultural preservation in similar contexts. My work stands as a testament to the enduring relevance and adaptability of these pioneering ethnographic methods in contemporary anthropological research.

1.9.3. Duration of Fieldwork

My present research commenced in April 2017 and successfully concluded in September 2023. In the context of my fieldwork conducted on Monpura Island, I structured the annual research period into distinct seasons and delineated it into three segments, with a primary focus on comprehending the agricultural and fishing practices of the island's inhabitants. Each year, I allocated approximately one to two months for immersive fieldwork experiences. The temporal divisions chosen for this investigation included the first quarter of the year, specifically the months of April and May, representing the initial phase. The second quarter encompassed the months of July and August, while the third quarter was situated in November and December.

This systematic division of the research period served as a deliberate strategy to facilitate comprehensive observations of the islanders within diverse contexts and environmental settings. The utilization of these specific timeframes allowed for the examination of distinct phases of agricultural and fishing activities, which are intricately linked to seasonal variations. Over the course of my research endeavors, I accumulated a cumulative duration of approximately 16 months in the field, which provided ample opportunities for in-depth immersion and participant observation.

This meticulous structuring of the research timeline not only enabled a holistic understanding of the islanders' livelihood practices but also facilitated the capture of temporal variations and nuances inherent in their agricultural and fishing endeavors. Moreover, it ensured that the research outcomes were grounded in the lived experiences of the community, enhancing the depth and richness of the findings.

1.9.4. Challenge of the study

The residents of Monpura have exhibited a welcoming and cooperative disposition toward researchers, a commendable aspect of their community. However, the island's geophysical characteristics present significant challenges for many researchers seeking to conduct their work effectively. Monpura's remote location and limited transportation options pose considerable hurdles for both access and mobility.

Notably, the primary means of direct transportation from Dhaka to Monpura is via launch service departing from Sadarghat. Once on the island, local transportation largely relies on motorcycles, which can be a somewhat challenging mode of travel due to the island's terrain and infrastructure.

Moreover, conducting research on the nearby *chars* (riverine islands) presents additional complexities, as access to these areas typically necessitates travel by boat and trallers. These journeys, while essential for research, can entail certain risks and difficulties, as I personally experienced when sustaining an injury while en route to *Kolatolir Char* by boat.

Another significant challenge in conducting research on Monpura is the unpredictable coastal weather. Researchers often contend with severe rain and oppressive heat, both of which can contribute to discomfort and hinder the research process.

However, perhaps the most pronounced challenge encountered during my research endeavor was the dearth of adequate literature pertaining to Monpura. Prior to my work, there was an almost complete absence of sociocultural studies focused on the island, a significant limitation that necessitated substantial groundwork and data collection to develop a comprehensive understanding of Monpura's unique sociocultural dynamics.

CHAPTER TWO:
REVIEW OF RELEVANT LITERATURE

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2.1 INTRODUCTION

The review of related literature establishes the theoretical, empirical, and contextual foundation for this research on the livelihood strategies of the coastal people of Monpura Island, Bangladesh. It aims to situate the present ethnographic study within the broader anthropological and interdisciplinary scholarship that explores how human societies sustain life, adapt to environmental transformations, and construct meaning in the face of ecological uncertainty. The purpose of this chapter is therefore threefold: first, to trace how livelihood and adaptation have been examined across anthropological traditions; second, to highlight the empirical studies conducted in coastal and deltaic regions of Bangladesh and comparable contexts in the Global South; and third, to identify the analytical gaps and limitations that necessitate the present study.

The scope of this literature review extends across classical anthropological works, contemporary ethnographies, environmental studies, and interdisciplinary debates on climate change adaptation and resilience. It draws on theoretical frameworks such as functionalism, political ecology, moral economy, and feminist environmentalism to capture the intersection of ecology, economy, and culture in shaping human livelihood systems. While anthropology provides the epistemological grounding for this inquiry—emphasizing lived experience, meaning-making, and moral reasoning—environmental and development studies contribute critical insights into vulnerability, risk, and governance in climate-exposed regions. The integration of these domains allows the present research to approach Monpura Island not merely as a geographical site of environmental stress but as a complex socio-ecological system embedded in history, inequality, and moral imagination.

Methodologically, the review privileges individual published works as discrete contributions to knowledge, consistent with the convention of anthropological scholarship that values contextual depth and intellectual lineage. Each work is discussed separately to preserve the distinct theoretical and empirical contributions of its author(s), while the thematic organization ensures analytical coherence across the sections. The review is thus structured around interrelated themes that mirror the conceptual trajectory of this dissertation—from livelihood and subsistence to adaptation, resilience, and moral ecology.

Section 2.2, “Anthropological Studies on Livelihood and Subsistence,” revisits classic and contemporary ethnographies that illuminate the evolution of livelihood systems from subsistence economies to diversified survival strategies. This section grounds the study in anthropological debates about social structure, function, and meaning. Section 2.3, “Coastal Bangladesh: Environment, Economy, and Society,” turns to empirical studies that examine the

socio-environmental dynamics of the deltaic and char regions, focusing on the ecological processes and historical contingencies that shape human settlement and adaptation. Section 2.4, "Livelihood and Climate Change in the Global South," situates the Bangladeshi experience within global debates on adaptation, resilience, and displacement, drawing parallels with other coastal and small-island contexts. Section 2.5, "Theoretical and Methodological Issues," synthesizes conceptual frameworks from political ecology, moral economy, and feminist environmentalism to interrogate questions of power, inequality, and agency in adaptation research. Finally, Section 2.6, "Summary and Research Gap," identifies the key insights and shortcomings in existing literature, outlining the intellectual space that this study seeks to fill.

By organizing the review in this way, the chapter aims to demonstrate that livelihood in Monpura Island cannot be understood through economic or environmental analysis alone. Rather, it requires an anthropological understanding that connects material survival with cultural meaning, moral responsibility, and historical experience. The literature thus provides both a theoretical compass and an empirical backdrop for exploring how the people of Monpura make a living, sustain community, and reimagine resilience amid the uncertainties of a changing deltaic world.

2.2 ANTHROPOLOGICAL STUDIES ON LIVELIHOOD AND SUBSISTENCE

Anthropological inquiry into livelihood and subsistence has long been central to understanding how human societies organize production, exchange, and social reproduction within diverse ecological and cultural contexts. From its earliest stages, anthropology sought to document how people sustain life materially and symbolically, revealing that livelihood is never a purely economic pursuit but a deeply social and moral one. Classical ethnographies by figures such as Bronisław Malinowski, A. R. Radcliffe-Brown, and E. E. Evans-Pritchard established the foundations for analyzing how subsistence systems are embedded within networks of kinship, reciprocity, and ritual obligation. These early works demonstrated that the pursuit of livelihood is inseparable from the cultural logics and social structures that give it meaning.

In South Asia and particularly in Bangladesh, the anthropological study of livelihood evolved through empirical village studies that illuminated the relationship between ecology, economy, and hierarchy. Researchers such as Anwarullah Chowdhury, Peter J. Bertocci, and A. H. M. Zehadul Karim expanded this tradition by exploring agrarian organization, leadership, and social stratification in rural settings. Their analyses revealed how kinship, class, and patron-client relations mediate access to land, labor, and resources—processes that continue to shape the everyday lives of rural Bangladeshis. Later ethnographers introduced attention to gender, power, and the moral dimensions of survival, showing that livelihood strategies are also expressions of agency and resilience within unequal structures.

This section reviews key anthropological contributions that inform the present study's focus on Monpura Island. It begins with the classical foundations of ethnography that framed livelihood as a socially integrated system, then turns to Bangladeshi and South Asian village studies that

adapted these theoretical insights to agrarian and deltaic contexts. Taken together, these works provide the conceptual and methodological grounding for understanding livelihood as a total social phenomenon—where production, exchange, cooperation, and adaptation are intertwined with culture, ecology, and moral life. Through this lens, Monpura's people can be situated within a broader anthropological tradition that views making a living not merely as survival but as the continuous negotiation of meaning, identity, and interdependence within a changing environment.

A. R. Radcliffe-Brown's *The Andaman Islanders* (1922) presents one of the earliest systematic anthropological studies of an island society. His ethnography explores the geography, ecology, and socio-cultural life of the inhabitants of the Andaman and Nicobar Islands, which he identified as being home to two historically distinct populations. The Andamanese, belonging to what early anthropologists termed the Negrito racial group, were described as physically characterized by short stature, dark skin, and frizzy hair. Radcliffe-Brown provided a meticulous description of the archipelago's physical environment, noting that the Great Andaman comprises several landmasses—North, Middle, Baratang, and South Andaman—separated by narrow sea channels. Except for areas cleared for penal settlements, the islands were largely covered in dense tropical forests.

He also documented the region's ecological diversity, observing a limited number of large mammals such as wild pigs (*Sus andamanensis*) and civet cats (*Paradoxurus tytleri*), alongside various species of rodents, bats, reptiles, and birds. Radcliffe-Brown characterized the Andaman climate as consistently warm and humid, with average annual temperatures around 86°F at Port Blair and slight seasonal variations. His detailed account of the islands' environmental and climatic features provided an early example of how ecology can be interwoven with social analysis.

In his later work (*Structure and Function in Primitive Society*, 1932), Radcliffe-Brown extended these ecological and sociological observations to explain how environmental conditions influence patterns of social organization and cultural adaptation. While the Andamanese context differs markedly from that of coastal Bangladesh, his ecological approach offers valuable comparative insight. It illustrates how insular environments shape systems of livelihood, kinship, and collective survival—an analytical perspective relevant to understanding how the inhabitants of Monpura Island negotiate their own relationships between nature, economy, and society.

Bronisław Malinowski's (1922) seminal work, *Argonauts of the Western Pacific*, is a cornerstone of ethnographic research and participant observation methodology. In this classic ethnography, Malinowski provides a detailed account of the Trobriand Islanders' complex social and economic systems, with a particular focus on the Kula ring—a ceremonial exchange network involving the circulation of armbands and necklaces across various islands.

Malinowski's immersive fieldwork and his emphasis on understanding the natives' point of view were groundbreaking at the time. He employed a methodological approach that involved living

among the Trobriand Islanders for extended periods, learning their language, participating in their daily activities, and observing their cultural practices in situ. This method allowed Malinowski to gather in-depth, qualitative data that provided a nuanced understanding of the Islanders' social structure, beliefs, and economic systems.

Key elements of Malinowski's approach that are particularly relevant to ethnographic research include participant observation, emic perspective, and a holistic approach. Malinowski's method of engaging deeply with the community he studied, participating in their daily activities while maintaining a stance of observation, set a standard for ethnographic research. His commitment to capturing the native point of view (emic perspective) emphasized the importance of understanding cultural phenomena from within the cultural context. Additionally, Malinowski's comprehensive examination of the Islanders' social, economic, and cultural life demonstrated the interconnectedness of various aspects of a community's way of life.

Bronisław Malinowski's *Argonauts of the Western Pacific* (1922) is foundational in ethnographic methodology and offers an exploration of exchange systems among island communities. While Monpura does not have a Kula-like ceremonial exchange, Malinowski's emphasis on participant observation and local economies informs the methodological approach to studying economic practices in Monpura. His work reinforces the importance of understanding how local exchange networks, such as fish trade and remittances, sustain livelihoods in an island setting. Bronisław Malinowski's Argonauts of the Western Pacific (1922) is foundational in ethnographic methodology and offers an exploration of exchange systems among island communities. While Monpura does not have a Kula-like ceremonial exchange, Malinowski's emphasis on participant observation and local economies informs the methodological approach to studying economic practices in Monpura. His work reinforces the importance of understanding how local exchange networks, such as fish trade and remittances, sustain livelihoods in an island setting.

E.E. Evans-Pritchard's (1937) influential work, *Witchcraft, Oracles, and Magic Among the Azande*, is a landmark study in social anthropology that offers a profound exploration of the Azande people's belief systems and social practices. Evans-Pritchard's detailed ethnography focuses on the Azande's use of witchcraft, oracles, and magic to explain and manage misfortune and uncertainty in their lives. His work is notable for its in-depth analysis of how these beliefs are integrated into the social fabric and everyday life of the Azande.

Evans-Pritchard's approach was characterized by rigorous fieldwork, during which he lived among the Azande, learned their language, and engaged deeply with their cultural practices. This allowed him to provide a comprehensive and empathetic portrayal of the Azande worldview, demonstrating how their belief systems are logical and coherent within their cultural context. His work underscored the importance of understanding indigenous knowledge systems on their own terms, rather than through the lens of Western rationality.

Key methodological contributions from Evans-Pritchard's work that are particularly relevant to ethnographic research include contextual understanding, thick description, and functional

analysis. Evans-Pritchard's emphasis on understanding beliefs and practices within their cultural context highlighted the need to see the world from the natives' perspective. His detailed descriptions of rituals, social interactions, and everyday life provided a rich, nuanced view of Azande society. Additionally, his analysis of how witchcraft, oracles, and magic functioned to maintain social order and address conflicts illustrated the interconnectedness of belief systems and social structures. E.E. Evans-Pritchard's *Witchcraft, Oracles, and Magic Among the Azande* (1937) provides a detailed study of belief systems and their role in social cohesion and conflict resolution. This work is relevant for examining how traditional knowledge and superstitions influence Monpura's community decision-making, particularly in times of economic or environmental crisis. Understanding local interpretations of misfortune can add a nuanced dimension to Monpura's socio-cultural landscape.

François Bernier (1626-1688), a French physician and traveler, significantly contributed to the historical understanding of Mughal India through his detailed travel accounts. His observations during his travels from 1656 to 1668 have been invaluable for historians, providing a rich source of information on the social, economic, and political conditions of the Mughal Empire, particularly Bengal.

Bernier's travel memoir, initially published in French and later translated into English by Archibald Constable under the title "Travels in the Mogul Empire, AD 1656-68," is a cornerstone for historians studying Mughal India. His firsthand accounts offer a nuanced and perceptive view of the Indian subcontinent during a tumultuous period marked by the War of Succession among Emperor Shahjahan's sons. His presence in Delhi during Prince Dara Shikoh's capture and public humiliation provided unique insights into the political dynamics and the character of key figures such as Shahjahan and Aurangzeb.

A key aspect of Bernier's work is his detailed observations of Bengal, which he visited twice. He praised Bengal's immense resources, highlighting its abundant production of cotton, rice, sugar, and other commodities, and noted the incredibly low market prices. However, he also lamented the widespread poverty and insecurity among the general populace, attributing it to the rulers' expropriation of resources for their own opulence. His account underscores the stark contrast between the wealth displayed by the Mughal court and the plight of the common people, a theme that resonates in discussions of historical socio-economic inequalities.

Bernier's comparisons between Bengal and Egypt are particularly notable. He argued that Bengal's fertility and productivity surpassed that of Egypt, emphasizing Bengal's role as a significant supplier of rice, sugar, and other goods to various regions, including Patna, Masulipatam, Ceylon, and the Maldives. His admiration for Bengal's silk and cotton production further illustrates the region's economic importance within the Mughal Empire and beyond.

Moreover, Bernier's encounters with notable figures and events enrich his narrative. His descriptions of the Portuguese pirates in Chittagong, their interactions with the Mughal authorities, and the eventual Mughal conquest of Chittagong under Shaista Khan provide a vivid

account of the geopolitical and maritime dynamics of the period. Bernier's detailed portrayal of these events contributes to a broader understanding of the Mughal Empire's territorial expansions and administrative strategies.

The historical significance of Bernier's work extends beyond its immediate observations. His travel memoirs influenced contemporary European perceptions of India and contributed to the burgeoning field of Oriental studies. The English translation of his work inspired literary figures such as John Dryden, whose play "Aurang-Zebe" drew from Bernier's descriptions. Bernier's interactions with intellectuals like Pierre Bayle and Ninon de Lenclos further underscore his impact on European literary and philosophical circles.

In summary, François Bernier's travel accounts are indispensable for historians of Mughal India. His meticulous observations, combined with his ability to contextualize and compare different regions, offer a comprehensive view of the socio-economic and political landscape of the time. His work not only provides a valuable historical record but also bridges cultural and intellectual exchanges between Europe and India in the 17th century. Bernier's memoir remains a pivotal source for understanding the complexities and contradictions of Mughal rule, particularly in Bengal, and continues to inform historical scholarship on the period. François Bernier’s travel accounts of Bengal offer historical insights into the socio-economic structures of coastal regions. His observations on trade, agriculture, and class disparities provide a historical context for comparing Monpura’s present economic structures with past trends. This perspective can help trace continuities and changes in coastal livelihoods.

Anwarullah Chowdhury’s seminal work, *A Bangladesh Village: A Study of Social Stratification* (1978), provides an in-depth analysis of social stratification in a rural Bangladeshi village. His study was conducted in Meherpur, a pseudonymous village located in Munshiganj, approximately 25 miles northwest of Dhaka city. Chowdhury carried out intensive fieldwork over a total duration of ten months, spanning from April to November 1973 and March to May 1974. Employing participant observation and other anthropological methods, he sought to understand the complexities of social hierarchy in the village, focusing on three interrelated dimensions: class, social position (status), and power.

Chowdhury examined the historical impacts of key socio-political events on the structure of rural society, including the 1950 abolition of the *zamindari* (landlord) system, the 1952 Language Movement, the military regimes of 1958 and 1969, and the profound transformations brought by the Liberation War of 1971. These historical events, he argued, played crucial roles in shaping patterns of inequality, access to power, and social mobility within the village.

At the heart of his analysis lies land ownership, which he identified as the principal determinant of social stratification. Based on ownership and access to land, he categorized the villagers into three primary classes: landowners (*malik*), sharecroppers (*bargadar*), and landless agricultural laborers (*kamla or badla*). Landowners, who possessed substantial holdings, exercised significant

economic and political power, while sharecroppers and landless laborers remained largely marginalized with limited access to resources and decision-making processes.

In addition to class-based divisions, Chowdhury analyzed the hierarchical structure of social status among Muslim villagers. He identified three broad categories, first, *Khandan* Muslims, who held the highest social status due to their lineage, education, and economic position; secondly, *Girhasta* Muslims, who occupied a middle-tier status, often engaged in small-scale farming or trades; and lastly, *Kamla* Muslims, the lowest group, consisting of landless laborers. Furthermore, two Muslim occupational groups—*baddis* and *jholas*—were also perceived as lower-status due to their engagement in traditional artisanal and service-based professions.

The Hindu population in the village was similarly stratified into three categories: high-caste Hindus, who occupied positions of privilege and control; low-caste Hindus, engaged in menial occupations, and *Tafsili* Hindus, a marginalized group with the least social standing. Chowdhury's findings underscored that landownership remained a fundamental factor in determining one's social prestige and access to power, with those possessing land often wielding influence over village affairs, while the landless were systematically excluded from decision-making and economic opportunities.

To frame his study within a broader theoretical context, Chowdhury integrated the perspectives of Karl Marx and Max Weber. By employing Marxist class analysis, he illustrated how the means of production dictated social relations and power dynamics. Simultaneously, using Weberian theory, he explored how status, lifestyle, and education contributed to social hierarchies beyond economic class alone. His comparative approach drew insights from André Béteille's study of Tanjore village in North India and Bernard Cohn's research on South Indian rural structures, highlighting both similarities and distinctions between social stratification patterns in Bangladesh and India.

Chowdhury's work remains a crucial contribution to the study of rural Bangladesh, providing an intricate portrayal of class divisions, power relations, and historical transformations. His analysis not only captures the socio-economic realities of Meherpur village but also serves as a lens through which broader patterns of rural inequality in South Asia can be understood. His interdisciplinary approach, combining historical context, ethnographic fieldwork, and theoretical synthesis, makes this book an essential reference for scholars studying social hierarchy and rural life in Bangladesh.

Anwarullah Chowdhury's *A Bangladesh Village: A Study of Social Stratification* (1978) provides an in-depth analysis of class divisions in a rural Bangladeshi village, highlighting landownership as the primary determinant of social hierarchy. This study is crucial for understanding how land tenure influences economic and social mobility in Monpura. While Chowdhury's research was conducted in an inland agrarian setting, Monpura's island economy, dominated by fishing and climate-dependent livelihoods, presents a different dynamic. However, the framework of class and status remains applicable, allowing an examination of whether similar patterns of land-

based inequality exist in Monpura or if alternative hierarchies emerge due to its geographical uniqueness.

Anwarullah Chowdhury's article *"Families in Bangladesh"* (Journal of Comparative Family Studies, 1995) traces the changing patterns of family life in rural Bangladesh, offering both demographic data and sociological insights. The work examines how rural families adapt over time within shifting social and economic conditions, and it emphasizes the central role of family in rural social organization.

This study was particularly useful in my research on Monpura, as it provided a broader framework for understanding kinship, household composition, and social expectations. It helped me situate the family-based livelihood strategies observed in Monpura within the larger context of rural Bangladeshi society, where extended family networks often function as both economic and emotional support systems.

The edited volume *Pains and Pleasures of Fieldwork*, compiled by Anwarullah Chowdhury in 2015, brings together seventeen chapters written by Bangladeshi, Indian, and Western scholars who share their experiences of conducting intensive ethnographic fieldwork in Bangladesh and West Bengal. The book opens with Dr. A. K. M. Aminul Islam's chapter *"The Field of Ethnographic Fieldwork"*, where he emphasizes that the primary role of the anthropologist is to understand people through their own cultural values and experiences, not through external interpretations. He argues that ethnographic fieldwork is not merely about time or funding, but about immersing oneself in the everyday realities of the community studied.

This book was especially valuable for my fieldwork in Monpura, as it prepared me for the emotional, ethical, and methodological challenges of long-term ethnographic engagement. The reflections in the book helped shape my own approach to field relationships, positionality, and the responsibility of representing the voices of the coastal people of Monpura authentically and empathetically.

Peter J. Bertocci conducted an anthropological study entitled *Elusive Villages: Social Structure and Community Organization in Rural East Pakistan* (1979), using the anthropological method to explore economic and ritual stratification. His research primarily focuses on the organization of village communities and their economic and social structures. Bertocci argues that economic prosperity does not necessarily translate into increased social power. He observes that many families attain wealth through agricultural success but are unable to translate their economic rise into lasting social dominance due to existing power structures. As a result, wealth accumulation does not necessarily lead to a loss of power for other families, nor does it create significant disruptions in existing social relations.

He also categorizes the villagers based on land ownership and income, identifying different classes such as landless peasants, small landowners, debt-ridden peasants, debt-free peasants, middle-class landlords, and wealthy landlords. Additionally, he analyzes social hierarchy in terms of lineage, distinguishing between high-status, middle-status, and low-status lineages.

Bertocci further examines how traditional elite families (hereditarily high-status groups) and non-traditional elite families (those who gained power through economic means but lacked historical prestige) engage in power struggles. He describes this cyclical process of elite formation and dissolution as Cyclical Kulakism, demonstrating how land ownership and lineage dynamics influence power relations in rural East Pakistan.

Peter J. Bertocci's Elusive Villages: Social Structure and Community Organization in Rural East Pakistan (1979) explores village organization and power structures, arguing that economic success does not always translate into social power. This insight is particularly relevant for Monpura, where wealth generated from fishing or external remittances may not necessarily disrupt traditional social hierarchies. Bertocci's identification of cyclical elite formations provides a comparative model to investigate whether Monpura's elite structure follows similar patterns or if environmental factors create distinct shifts in power dynamics.

Arens and Beurden conducted a detailed ethnographic study of a village in Kushtia, Bangladesh, between June 1974 and May 1975, using the Participant-Observation method entitled *Jhagrapur: Poor Peasants and Women in a Village in Bangladesh* (1980). Their research focuses on agrarian class structures, women's roles in production, and social conflicts.

The study explores rural women's social positions, the lives of poor households, land ownership disparities, and the economic hierarchy in village society. It highlights the exclusion of women from agricultural production and their subordination in social structures. The research also delves into the rural credit system and the exploitative relationship between moneylenders and small farmers. Arens and Beurden identify the reasons behind women's vulnerabilities, emphasizing the intersection of poverty and personal land ownership. Even in families where women experience domestic abuse, they often remain silent due to fears of social ostracization. The study also notes a high rate of divorce, often initiated by men, exacerbating women's economic and social precarity.

To analyze economic and social stratification, they categorize the village population into four groups: poor households, middle-class households, wealthy households, and landlords. Their research highlights how these economic divisions shape rural power dynamics and social interactions. The study also explores rural political structures and incidents of violence. They document a case of mob lynching, illustrating how collective violence is used as a tool for social control. The persistence of traditional caste-based discrimination and economic oppression reveals the enduring inequalities within rural Bangladesh. Additionally, the research examines the power dynamics between wealthy moneylenders and poor farmers, showing how elite families manipulate agrarian labor structures to maintain their dominance.

J. Arens and J. V. Beurden's *Jhagrapur: Poor Peasants and Women in a Village in Bangladesh* (1980) offers a critical perspective on rural poverty and gender disparities. Their analysis of agrarian labor structures and women's exclusion from economic power can be instrumental in understanding gender roles in Monpura's fishing economy. Given that Monpura's primary

livelihood is different from the agrarian setting of Jhagrapur, this research invites an inquiry into how economic roles shape gendered vulnerabilities and agency within coastal communities.

William Van Schendel's work, *Peasant Mobility: The Odds of Life in Rural Bangladesh* (1982), investigates social mobility among peasants in Bangladesh using intensive fieldwork conducted in three villages from different districts: Gobindapur (Rangpur), Bogra, and Dhaniyapur (Comilla). His study focuses on the socio-economic dynamics of peasant life and the complexities of rural class structures.

He provides a clear theoretical framework to understand the relationship between upper and lower sections of the peasantry. His research demonstrates how social and economic structures shape rural class divisions and mobility opportunities. Van Schendel explores the role of traditional landlordism and how historical systems of power transition into modern economic relationships. He examines how traditional agrarian structures interact with emerging capitalist market forces, showing that while some peasants achieve economic success, others remain trapped in cyclical poverty. His study also highlights the political dimensions of local power structures, linking agrarian capitalism with regional political developments. He identifies key factors that influence changes in the rural economy, particularly the transformation of labor relations and land ownership.

One of his major findings is the contradictory nature of peasant mobility—while some rural households experience upward mobility, others face increasing economic distress due to fluctuating agricultural markets and exploitative credit systems. His research also emphasizes the growing role of non-agricultural employment in shaping rural livelihoods. Van Schendel's work provides an in-depth analysis of how peasant life in Bangladesh is shaped by both historical continuity and structural change. He argues that despite economic fluctuations, traditional social hierarchies remain largely intact, maintaining long-standing inequalities in village life.

While these studies primarily focus on villages in the plain lands of Bangladesh, my research examines similar themes within the unique context of Monpura Island, providing a comparative perspective on the interplay of geography, economy, and social hierarchy.

William Van Schendel's Peasant Mobility: The Odds of Life in Rural Bangladesh (1982) examines rural social mobility and how economic structures shape class transitions. His findings on agrarian capitalism and the persistence of inequalities despite economic fluctuations provide a lens through which to analyze whether Monpura's residents experience upward mobility through fishing, migration, or alternative income sources. Given the island's vulnerability to climate change, this work can also help assess whether environmental instability hinders long-term economic progress.

A.H.M. Zehadul Karim's *The Pattern of Rural Leadership in an Agrarian Society* offers a critical and comprehensive analysis of rural leadership in Bangladesh, focusing on the intricate interplay between traditional power structures and modern development institutions. Based on fieldwork conducted in the Rajshahi region, Karim investigates how authority is maintained, negotiated,

and restructured in rural society through both the indigenous institution of the samaj and formal governance mechanisms such as the Union Parishad (UP). This work contributes significantly to the literature on rural power, social stratification, and the politics of development by documenting how local elites adapt to shifting political and institutional environments without relinquishing control.

Karim's central argument is that while rural Bangladesh has undergone significant formal changes in governance since Independence in 1971, the structure of power remains largely intact, dominated by traditional elites. In the samaj—the informal village-level sociopolitical unit—leadership is traditionally held by pradhans (chiefs) and parmaniks (sub-chiefs). These roles historically included responsibilities for conflict resolution, maintaining order, and representing the village in broader decision-making processes. While development interventions have introduced new organizations, such as cooperatives, work-incentive programs, and welfare units, Karim finds that the actual leadership in these new domains is often inherited by the younger generation of the same elite families who have historically led the samaj.

In this context, the author argues that post-independence development programs have not democratized local power structures as intended. Rather, they have created new opportunities for elite capture, allowing powerful families to extend their influence into the realm of formal institutions. The younger, educated sons of traditional leaders have occupied leadership roles in newly established institutions, effectively maintaining the continuity of elite dominance. In doing so, these leaders have mastered the art of navigating bureaucratic systems, accessing development resources, and selectively distributing benefits to reinforce their authority. Thus, what appears to be change in form is, in fact, continuity in substance.

The book is structured in seven chapters. The first chapter introduces the research questions, significance, and methodology. Chapter two outlines the two domains of rural power—the samaj and formal state organizations. Chapter three provides ecological, cultural, and land ownership context of the two study villages, Dhononjoypara and Gopahlati. Chapter four explores the social institutions through which power is traditionally expressed, while chapter five elaborates on the formation and maintenance of leadership within the samaj. In chapter six, Karim turns to formal leadership and examines the roles of the Union Parishad, gram sarkar, and local organizations such as KSS and RSS. Finally, chapter seven presents conclusions and recommendations for development planning based on the findings.

Karim's methodological approach is rooted in ethnographic fieldwork, including participant observation and informal interviews. A notable strength of the study is its detailed attention to how leaders operate both formally and informally. However, the author himself notes a significant limitation: the study primarily focuses on the upper economic stratum of the village, particularly those already involved in leadership roles. As he candidly admits, this bias arose from the sensitive nature of the topic—leadership and power—and the difficulty of accessing lower strata perspectives while maintaining neutrality. As a result, the study offers less insight into the

experiences and perspectives of marginalized villagers who remain excluded from these systems of power.

Despite this limitation, the book provides valuable insight into the dynamics of rural leadership in Bangladesh. It offers a cautionary note to development planners and policy makers who assume that the introduction of formal institutions alone can ensure equity and inclusion. Karim's work shows that without mechanisms to challenge elite dominance, new programs often become vehicles for the reproduction of existing inequalities. His analysis challenges modernization theory's assumption that institutional change leads to structural transformation. Instead, he illustrates how traditional power holders adapt to and appropriate new institutional forms, reinforcing their dominance in the guise of modernization.

This analysis strongly resonates with the social and political dynamics I observed in Monpura. Similar to Karim's findings in Rajshahi, local leadership in Monpura remains concentrated in a few influential families who control land, social networks, and access to state support. My fieldwork showed that even when formal development projects are introduced, leadership and resource distribution often remain in the hands of those already holding power. Karim's concept of elite continuity under the guise of institutional change provides a useful lens to interpret how Monpura's social hierarchy persists despite external interventions.

2.3 COASTAL BANGLADESH: ENVIRONMENT, ECONOMY, AND SOCIETY

The coastal zone of Bangladesh, encompassing its riverine deltas, estuaries, and offshore islands, represents one of the most dynamic and fragile ecological systems in the world. Shaped by the confluence of the Ganges, Brahmaputra, and Meghna rivers, this region is both ecologically fertile and environmentally precarious—subject to cycles of erosion, accretion, cyclones, and salinity intrusion. These natural processes have historically determined patterns of settlement, livelihood, and mobility, giving rise to a distinctive socio-economic and cultural landscape. Understanding livelihood in such a context requires simultaneous engagement with environmental processes, historical transformations, and social institutions that mediate human adaptation and vulnerability.

Scholars and practitioners have long examined the interconnections between coastal ecology and human survival in Bangladesh. Studies on delta formation, char (riverine island) settlement, and estuarine morphology (e.g., Sarker, 2021; ICZMP, 2003; Meghna Estuary Studies, 1998, 2001) have revealed how the physical geography of the coast is in constant flux, producing new land while eroding old settlements. Anthropological and sociological research has complemented these environmental studies by documenting how communities respond to such transformations through migration, diversification of livelihoods, and the reconstitution of social networks (Baqee, 1998; Islam & Shafie, 2017). These studies highlight the adaptive ingenuity of coastal populations who continuously reconstruct their lives within an unstable terrain.

Within this literature, Monpura Island stands as a microcosm of the broader deltaic experience—where ecological volatility intersects with historical displacement, economic marginality, and

cultural resilience. Research on char dwellers, coastal fishers, and displaced farmers has illuminated the intertwined nature of poverty, risk, and adaptation in these environments (Abrar & Azad, 2004; Hussain & Saha, 2019). At the same time, works on coastal policy and environmental governance (Rahman, 1995; ICZMP, 2003; Ahmad, 2019) demonstrate that state planning often overlooks the lived experiences and local knowledge of communities most affected by environmental change.

This section reviews key interdisciplinary and ethnographic works that analyze the environmental, economic, and social dynamics of coastal Bangladesh. It situates Monpura within this evolving body of scholarship to show how the region's physical instability is mirrored by equally fluid social processes—where livelihood, settlement, and identity are continually reshaped by the tides of both nature and history. Together, these studies provide the empirical and conceptual foundation for examining Monpura as a living deltaic world—a place where environmental precarity and cultural creativity coexist in complex, enduring forms.

The book titled *"Anthropology of Climate Change: Culture and Adaptation in Bangladesh"* by **Zahidul Islam and Hasan Shafie**, published in 2017 by the Bangladesh Climate Change Trust (BCCT) in collaboration with the Department of Anthropology, presents a comprehensive examination of the intricate interplay between climate change and the socio-cultural dynamics of Bangladesh. This review encapsulates the principal findings and recommendations elucidated within the book.

The study's overarching objective is to conduct a strategic evaluation of potential adaptation strategies in the face of shifting climatic conditions in Bangladesh. The authors emphasize the multifaceted nature of Bangladesh's vulnerability to climate change, which emanates from intricate interactions between biophysical, social, economic, and technological factors. Central insights gleaned from the book encompass the severe economic repercussions of climate change on the nation, underscored by phenomena like sea-level rise, heightened temperatures, intensified monsoon patterns, and altered precipitation regimes. These adverse impacts pose a significant threat to Bangladesh's socio-economic development and overall progress.

The book also underscores the increasing magnitude of climate change impacts and how their severity hinges on the scale and intensity of climatic shifts. Ongoing trends suggest a gradual amplification of climate-related hazards, disrupting critical facets of life including food production, water availability, income generation, infrastructure resilience, and public health, affecting both rural and urban populations. Moreover, it highlights the existence of an adaptation deficit, indicating that current mitigation measures are insufficient to cope with the existing climate challenges, attributable to a myriad of obstacles like resource constraints, poverty, knowledge gaps, weak institutional frameworks, environmental degradation, inadequate infrastructure, and governance inefficiencies. Consequently, the book advances the imperative of establishing enabling conditions for adaptation and calls for the removal of structural barriers that hinder the populace's ability to adapt effectively. It underscores the pivotal role of government initiatives in surmounting these challenges, reinforcing institutional

functionality, and fostering inclusive and participatory approaches that empower local communities to manage their climate risks proficiently. Furthermore, it accentuates the significance of considering gender dynamics in climate change adaptation, advocating for the amelioration of gender-related vulnerabilities and the equitable engagement of women and men in adaptation endeavors. Lastly, the book champions the conservation and rehabilitation of natural resources and biodiversity through institutional and regulatory measures, as well as an integrated approach to adaptation and development, which synergizes adaptation and development initiatives to bolster resilience and sustainable progress.

Zahidul Islam and Hasan Shafie's Anthropology of Climate Change: Culture and Adaptation in Bangladesh (2017) is particularly relevant to Monpura, given its focus on how climate change impacts rural livelihoods. This book's discussion on adaptation strategies provides a theoretical framework for analyzing how Monpura's inhabitants cope with climate-induced challenges such as rising sea levels and extreme weather events. By integrating their insights, this study can explore whether local knowledge and adaptive mechanisms are sufficient or if external interventions are necessary for sustainable living conditions.

In his book *Peopling in the Land of Allah Jaane* (1998), **Abdul Baqee** examines how communities living in the char lands adapt and resettle amidst constant environmental uncertainty. He notes that disputes over land and settlement tend to be more frequent in areas where power is divided among multiple individuals or groups, compared to areas where control is centralized within a single *gushti* (kin-based group). Baqee also outlines three broad categories of community responses to the challenges of char life: structural responses aimed at protecting homes and belongings, agricultural responses to minimize or recover crop losses, and human responses focused on ensuring personal safety.

This framework is highly relevant to my study of Monpura, where residents similarly navigate complex power dynamics and environmental threats. The strategies identified by Baqee parallel the adaptive practices observed in Monpura's coastal households, particularly in how families protect their homesteads, secure food production, and safeguard their lives in the face of cyclones and river erosion. His insights help contextualize the lived resilience of the island's people within broader patterns of adaptation in Bangladesh's vulnerable char and coastal regions.

Guoqing Ma (2020) in his article *"Islands and the World from an Anthropological Perspective,"* explores into the intricate relationship between islands and the broader world through the lens of anthropology. Ma highlights the significance of island studies within the field of anthropology, emphasizing the academic value and practical importance of understanding islands as unique spaces where diverse forces of modernization and globalization intersect. He explores the multifaceted connections between continental and marine cultures, focusing on the concept of "viewing the world through the island." Ma underscores how islands serve as pivotal points in the interplay between land and sea, facilitating cultural exchange and contributing to the global network of cultures.

Islands, as defined by Ma, occupy a relatively small portion of the Earth's surface, yet they are inhabited by a significant portion of the global population. They often exhibit distinct natural ecologies and social cultures, making them compelling subjects for research across various disciplines. Ma elucidates the development of island studies and the interdisciplinary nature of this field. He introduces the concept of "islandness," which encompasses a wide range of topics, from ecology to political economy, emphasizing the holistic approach required to comprehensively understand islands and their impact on various dimensions of society.

Furthermore, Ma underscores the transformative nature of island societies and cultures in the face of modernity and globalization. He discusses how islands, acting as connecting points between land and sea, undergo significant changes while endeavoring to maintain their unique socio-cultural characteristics. The article offers valuable insights into the evolving dynamics of island societies and calls for a new methodology in island studies that considers the interconnectedness of islands within the global context. Ma, G. (2020).

Guoqing Ma's *Islands and the World from an Anthropological Perspective* (2020) offers valuable insights into how islands function within global socio-economic networks. By framing Monpura within broader island studies, this research can explore the extent to which globalization, migration, and external influences shape its economic and social structures. The study's discussion on island resilience and adaptation strategies provides a comparative framework to assess Monpura's place in global island anthropology.

The study conducted by **Biswas et al.** (2022) titled *"Impacts of morphological change on coastal landscape dynamics in Monpura Island in the northern Bay of Bengal, Bangladesh"* explores the complex relationship between coastal morphological changes and landscape dynamics in Monpura Island. The authors investigate how coastal landscapes in this region are influenced by various factors, including erosion, accretion, land use changes, population migration, and the broader impacts of climate change and sea-level rise. Their research aims to provide valuable insights into the evolving coastal ecosystem and its effects on the local community.

The study area, Monpura Island, located in the Meghna estuary of Bangladesh, is characterized by its fluvial-tidal environment, shaped by the dynamic processes of the Ganges-Brahmaputra and Meghna Rivers, as well as the influence of the Northern Bay of Bengal. This region faces significant challenges due to the high sediment load from these rivers, frequent flooding, and coastal erosion. Climate change and sea-level rise further exacerbate these issues, impacting both the physical landscape and the livelihoods of the local population.

To assess the morphological changes and their consequences, the study utilizes a combination of historical data, remote sensing technology, and GIS tools and techniques. The authors analyze shoreline dynamics, erosion, and accretion patterns over time, stretching back to the 18th century, using historical maps and satellite imagery from different years. They also examine land use and land cover changes and population migration trends to understand the evolving landscape and its impacts on the community.

The findings of the study reveal significant morphological changes in Monpura Island over the past two centuries. The spatial coverage of the island has substantially decreased, with erosion outpacing accretion, particularly along the eastern flank. The northern flank of the island has experienced substantial net shoreline movement (NSM) and changes in the rate of shoreline movement (expressed by EPR). These changes have implications for land use, with a significant decline in crop land, an increase in river and settlement spatial coverage, and the potential displacement of the population.

The study highlights the importance of remote sensing technology and GIS tools in assessing coastal morphological changes and their impacts. It also underscores the urgent need for coastal risk management and sustainable resource management in the face of ongoing environmental challenges. The research contributes to the existing body of knowledge by providing a comprehensive analysis of morphological dynamics and their consequences in a fluvio-tidal coastal zone, offering insights valuable for policy advisors, environmental managers, researchers, and local communities.

Biswas et al.'s Impacts of Morphological Change on Coastal Landscape Dynamics in Monpura Island (2022) provides an empirical analysis of coastal erosion, land loss, and population displacement specific to Monpura. While their study focuses on geophysical changes, incorporating ethnographic data will add depth by examining how these environmental shifts impact the everyday lives and decisions of Monpura's residents. This work is essential for connecting scientific research with lived experiences, bridging the gap between environmental studies and anthropology.

The *Integrated Coastal Zone Management Plan Project Report* (2003) provides an important scientific assessment of natural hazards in Bangladesh, with specific emphasis on the implications of climate change for coastal vulnerability. The report highlights that storm surges, which frequently accompany tropical cyclones, occur when high-velocity winds interact with shallow coastal waters, generating waves several meters high. These surges often overtop protective embankments and inundate extensive tracts of land, resulting in severe destruction. Historically, such tidal surges have devastated coastal regions—claiming millions of human and animal lives, damaging crops and vegetation, eroding saltpans and shrimp enclosures, and destroying critical infrastructure.

According to the report, the intensification of cyclonic activity due to climate change is likely to push storm surges further inland, magnifying both the scale and frequency of damage. Although more than two thousand cyclone shelters have been constructed across the coastal belt in recent decades to safeguard human lives, comparable protective infrastructure for livestock, stored food grains, and perishable goods remains absent. Consequently, these essential assets continue to face heightened risks of destruction during extreme weather events.

This study offers a valuable framework for analyzing the environmental exposure of Monpura Island to cyclones, storm surges, and sea-level rise. It underscores the urgency of developing

comprehensive adaptation and disaster-preparedness strategies that extend beyond human survival to encompass the protection of livelihoods, food security, and local ecosystems. The insights from this report are therefore instrumental in formulating policy recommendations aimed at enhancing long-term sustainability and resilience among the island's inhabitants.

Abdul Awwal Biswas's *The Rakkhains of Bangladesh: An Ethnographic Study* (2010) presents an in-depth anthropological account of the Rakhine community living along the southern coastal belt of Bangladesh. The study integrates coastal, ethnographic, ecological, and geomorphological perspectives to depict the complex relationship between people and their coastal environment. Using a pseudonymous village called *Belkata*, located on the Bay of Bengal coast, Biswas documents the cultural life, social organization, and adaptive practices of the Rakhine people, whose ancestral origins trace back to Myanmar (formerly Burma), situated to the southeast of Bangladesh.

Employing Rapid Rural Appraisal (RRA) techniques, Biswas gathered empirical data reflecting the community's contemporary social structures, livelihoods, and environmental interactions. His ethnography also examines local tourism and ecotourism dynamics, as well as the broader morphology of coastal landscapes that shape the Rakhine way of life. The work offers a valuable portrayal of how traditional communities negotiate their relationship with the sea, manage natural resources, and sustain cultural identity amid ecological challenges.

For the present study, Biswas's ethnography provides a relevant comparative framework for understanding the adaptive strategies of Monpura's inhabitants. The Rakhine case demonstrates how coastal populations develop localized forms of knowledge, resilience, and social cooperation to cope with environmental uncertainty—insights that resonate strongly with the experiences of Monpura's agrarian and fishing communities.

Atiur Rahman (1995) has written a book namely *Beel Dakatia-The Environmental Consequences of a Development Disaster.* In this book the author has said that the environmental consequences like those in Beel Dakatia began to be felt only after a decade or two. This was a part of a major embankment project. The stopping of natural flow of water due to ineffective management of the water control system induced siltation in the months of the channels and caused unprecedented congestion of water. This was accompanied by Stalinization which creped in through different cuts of the embankment. The twin problems of drainage congestion and siltation created havoc in natural and social environments. The agricultural production was seriously affected. The trees, livestock, fisheries, educational and health institutions were adversely impacted. The standards of living were suddenly lowered. People were forced to adjust to a changed environment for which they were not prepared. The author has been revealed the human dimension of the tragic story of Beel Dakatia in this book. He has been used both quantitative and qualitative information in this book. However, people's perception and wisdom have been in the forefront of author's consideration while writing this book. Atiur Rahman's Beel Dakatia: The Environmental Consequences of a Development Disaster (1995) critiques the unintended consequences of large-scale infrastructure projects. This work raises critical

questions for Monpura, particularly regarding embankments, erosion control measures, and their socio-economic impact on local livelihoods. Investigating whether similar development interventions have benefited or harmed Monpura's residents can contribute to policy discussions on sustainable coastal management.

Rafiqul Islam Montu is a journalist in South Bengal of Bangladesh. In 2008 author has written a book on Bengali versiom namely *Sidr-Biponno Upokuler Bibornno Rup*. In this book author has highlighted the devastating disaster, *sidr* in 15 November of 2007 and after disaster the life and living conditions and its impact of the south-western part of Bangladesh. Author has said that *sidr* has been attacked in the coastal belt of Bangladesh to wind speed of 220 km/hour. After its devastating of *sidr,* the total coastal belt was damaged. About 10 thousand people have died in this disaster. Author has also said that not only man but also different types of animals, trees, households, educational institutions and roads and highways has been damaged in this devastating disaster-*sidr*. Author has presented some statistically data in this book. He has said that the government data of *sidr* it has about 89 lac 23 thousand 259 people among the 20 lac 64 thousand 26 households of 200 upazila's in coastal belt has been damaged. Side by side author has also mentioned that the partial loss of crop production was 17 lac 30 thousand 117 acres and total loss was 7 lac 42 thousand 827 acres of land in this *sidr*. He has also mentioned that about 5 lac 63 thousand 877 households have been damaged in *sidr* 2007.The author has also highlighted the living and livelihood conditions of the fisherman in the separated island of the Bay of Bengal namely *Dublarchar*. About 14 thousand metric ton fish has been catch and 2 thousand metric ton dry fish has been produced by the fisherman of *Dublarchar* in every fishing season, but the socio-economic conditions of fisherman cannot be changed because of there are 10 powerful syndicate are active for their ill motive business. His work is essential in understanding how major climatic disasters have historically affected Monpura and how disaster management strategies have evolved.

Several studies and development projects have explored the Meghna Estuary over the past decades. Four notable initiatives, beginning in the 1970s, have shaped our understanding of this region: the Land Reclamation Project (LRP), the first Meghna Estuary Study (MES I, 1998), the second Meghna Estuary Study (MES II, 2001), and the Estuary Development Project (EDP). These initiatives defined the geographical scope of the Meghna Estuary for research and development purposes.

The Estuary Development Project (EDP) by the Bangladesh Water Development Board (BWDB) covers the Meghna Estuary, with its northern boundary at Chandpur and extending over 200 km east to west along the southern end (Figure 1). Each year, the three major rivers of Bangladesh—the Ganges, the Brahmaputra, and the Meghna—discharge around one trillion cubic meters (1,000 km^3) of water and up to one billion tons of sediment into the Lower Meghna River. The flow of the Lower Meghna is then distributed among several channels. According to MES II (2001), the Tetulia Channel carries about 15% of the monsoon flow, the Hatiya Channel about 10%, and the remaining flow passes through the Shahbajpur Channel.

Tides in the Bay of Bengal, which affect the Meghna Estuary, are semidiurnal, meaning there are two high tides and two low tides each day. The tidal range—how much the water level rises and falls—varies between 0.6 and 1.4 times the average, depending on whether it is a neap or spring tide (Sokolewicz & Louters, 2007). Hayes (1979) categorized estuaries based on tidal range into three types: micro-tidal (0–2 m), meso-tidal (2–4 m), and macro-tidal (>4 m). Interestingly, all three types are present in the Meghna Estuary:

- **Micro-tidal areas**: Found in the Tetulia Channel and the lower Meghna near Chandpur.
- **Meso-tidal areas**: Observed south of Bhola Island and north of Hatiya Island.
- **Macro-tidal areas**: Occur in the eastern parts of the Hatiya and Sandwip channels, with the highest tidal range exceeding 8.6 m near the northeast side of Urir Char.

This variation in tidal ranges, along with the immense river flows and sediment load, makes the Meghna Estuary a complex and dynamic system, influencing navigation, sediment deposition, flood patterns, and ecological habitats across the region.

In *Formation and Dynamics of Coastal Chars in Bangladesh*, **Maminul Haque Sarker** (2021) provides a detailed analysis of the geomorphological evolution of Bangladesh's estuarine and coastal landscapes. He argues that landform changes within the Meghna estuary occur at a much faster rate than those along the coastal islands and chars. Both the islands and the adjoining mainland areas are subject to rapid shoreline migration, which may extend several kilometers within a few decades. According to Sarker, tide-dominated deltas such as the Meghna are among the most dynamic and least predictable geomorphological systems, where sedimentation, erosion, and tidal forces interact in highly complex ways.

Sarker observes that, despite the ecological and socio-economic significance of these areas, systematic research on the Meghna estuary remains limited, and comprehensive studies focusing specifically on its islands are largely absent. He emphasizes that predicting physical changes in the estuarine landscape is crucial for improving livelihoods and ensuring the safety of populations residing on the islands. These communities remain highly vulnerable to cyclones, storm surges, and other coastal hazards.

Sarker further suggests that effective island and char management in the Meghna estuary requires a sound understanding of natural processes, extreme climatic events, and human-induced interventions. Such knowledge can serve as a foundation for strategies to mitigate the impacts of climate change and sea-level rise. He notes that vegetated islands, or *chars*, found along major rivers such as the Jamuna, Padma, and Meghna, exhibit varying degrees of stability, with an average lifespan of four to five years in the Jamuna basin. By contrast, islands located within the Meghna estuary tend to exhibit greater stability, although they remain susceptible to long-term morphological transformation.

Sarker's findings are particularly relevant to the study of Monpura Island, where land erosion, accretion, and shoreline shifts continuously reshape patterns of habitation, settlement, and

livelihood. His geomorphological insights provide a critical foundation for understanding how physical instability intersects with social and economic vulnerability in deltaic Bangladesh.

The study conducted by **M. S. Islam, T. Hasan, M. S. I. R. Chowdhury, M. H. Rahaman, and T. R. Tusher** in April 2013, titled *"Coping Techniques of Local People to Flood and River Erosion in Char Areas of Bangladesh,"* investigates into the survival strategies employed by local communities residing in the *char* land villages of Bangladesh. The research explores how these communities cope with the recurrent challenges of floods and riverbank erosion, shedding light on their indigenous techniques for adaptation and resilience.

The research methodology employed in this study includes social surveys, key informant interviews, focus group discussions, and field observations. Through these methods, the study assesses the impact of both flood and river erosion on the *char* land villages. It highlights the varying degrees of vulnerability and adaptation strategies employed by households, with a focus on socioeconomic and environmental factors such as education, income, and occupation.

The study emphasizes the importance of understanding the unique coping techniques developed by these communities, which significantly reduce their vulnerability without external assistance. Furthermore, it underscores the need for an effective early warning system, the integration of local coping practices with modern technology, and sustainable socioeconomic improvements to mitigate losses from flood and riverbank erosion. Overall, this research contributes valuable insights into the resilience and adaptability of *char* land communities facing environmental challenges in Bangladesh. It emphasizes the importance of local knowledge and practices in building resilience and calls for a comprehensive approach to disaster risk reduction in these vulnerable areas.

2.4 LIVELIHOOD AND CLIMATE CHANGE IN THE GLOBAL SOUTH

Across the Global South, the intersection of livelihood, climate change, and vulnerability has become a central focus of contemporary research in environmental anthropology, human geography, and development studies. From the deltas of South Asia to the islands of the Pacific and the arid regions of sub-Saharan Africa, communities are confronting climatic transformations that disrupt established systems of production, habitation, and meaning. These transformations are not only ecological in nature but also deeply social and political, reflecting global inequalities in exposure, capacity, and responsibility. For this reason, the study of livelihood under climate stress requires an approach that bridges biophysical processes with cultural interpretation, political economy, and moral reasoning.

Scholars have shown that climate change impacts—such as rising sea levels, increased cyclone frequency, erratic rainfall, and soil salinization—intensify existing patterns of marginality in the Global South (Adger et al., 2018; IPCC, 2007). Ethnographic and interdisciplinary studies across Bangladesh, India, Indonesia, and sub-Saharan Africa demonstrate that adaptation is rarely a purely technical matter; rather, it is shaped by histories of colonization, development policy, land tenure, and social hierarchy (Crate & Nuttall, 2016; Oliver-Smith, 2016). Within this growing body

of literature, scholars emphasize that local communities are not passive victims of environmental change but active agents who draw on indigenous knowledge, moral values, and collective networks to navigate uncertainty and maintain continuity.

The coastal and deltaic regions of Bangladesh offer particularly instructive examples within this global discourse. Studies on migration, displacement, and post-disaster recovery in South Asia (Black et al., 2011; Mallick & Vogt, 2015; Khalil et al., 2021) highlight how people's responses to climate stress involve complex trade-offs between mobility, livelihood diversification, and social cohesion. Comparative research on smallholder farmers, fishers, and island dwellers across Asia, Africa, and Latin America further underscores the need to understand adaptation as a cultural and ethical process—rooted in local values and collective memory (Hastrup, 2013; Whyte, 2018).

This section reviews key global and regional studies that situate Bangladesh within the wider patterns of adaptation and resilience in the Global South. It explores how vulnerability and agency co-exist in climate-affected communities, how migration and livelihood restructuring redefine belonging, and how moral economies of care underpin collective survival. By engaging with this literature, the discussion positions Monpura Island not as an isolated or exceptional case, but as part of a transnational dialogue on how human societies endure and reimagine life amid the planetary crisis of climate change.

In his influential work *Riverbank Erosion, Flood Hazard and Population Displacement in Bangladesh*, **K. M. Elahi** (1991) examines the profound socio-economic consequences of river erosion and flooding across the country. Elahi approaches erosion not merely as a natural hazard but as a deeply social problem that disrupts livelihoods, displaces populations, and reshapes patterns of settlement and adaptation. His analysis extends beyond physical geography to explore how individuals, communities, and the state respond to the recurring cycles of loss and rehabilitation.

The book highlights the multiple scales of response to riverbank erosion—from personal coping mechanisms to community-based support networks and national policy interventions. It provides an early recognition of displacement as both a social and developmental issue, requiring coordinated institutional assistance alongside local adaptive strategies.

Elahi's insights are particularly relevant to the present study of Monpura Island, where erosion-induced displacement and resettlement are central to understanding community resilience. His work offers a conceptual basis for examining how environmental hazards trigger socio-spatial reorganization and how affected populations negotiate stability and belonging within an ever-changing deltaic landscape.

Studies on displacement in Bangladesh reveal complex interactions between displaced populations and host communities, as well as varied causes of displacement. **Chowdhury R. Abrar and S. Nurullah Azad** (2004) found that the initial relationship between riverbank erosion settlers and host communities is often strained due to factors like increased pressure on local resources, lack of mutual understanding, historical conflicts, and poor sanitation practices. These

tensions manifest in conflicts over livestock grazing, crop damage, theft, and competition for limited resources. **Meghna Guhathakurta and Suraiya Begum** (2006) further categorized the multifaceted nature of internal displacement in Bangladesh, identifying five key types: displacement due to river erosion, armed conflict, post-election violence against religious minorities, economic displacement from shrimp cultivation, and forced evictions by the state. In the context of *char* lands, **Abdul Baqee** (1998) explored the adjustment and resettlement strategies of displaced people, highlighting that disputes are more prevalent when power is diffused among multiple groups. Baqee also identified three primary responses to displacement: structural adaptations to protect dwellings, agricultural strategies to mitigate crop losses, and human measures to ensure safety. His work, particularly the categorization of these adaptation strategies, provides a useful framework for understanding how communities in areas like Monpura cope with displacement, land loss, and economic uncertainty caused by environmental changes.

A. T. M. Nurul Amin (1991), in his article *Settlement Strategy for Riverbank Erosion Displacees in Bangladesh: A Human Resource Development Approach*, analyzes displacement and resettlement through the lens of human development. Drawing primarily on secondary data, Amin proposes a "human resource development approach" as an alternative to purely relief-oriented models of rehabilitation. He critically examines existing resettlement and land distribution policies in Bangladesh, highlighting their inadequacies in addressing the long-term needs of displaced populations. The study advocates for integrated short- and long-term strategies that not only provide immediate relief during erosion-induced crises but also promote sustainable livelihoods and community-based resettlement models. Amin's contribution is particularly relevant to understanding how displacement in areas like Monpura can be managed through participatory development frameworks that enhance local capabilities and social cohesion.

At a broader theoretical level, **Kazi Sadrul Hoque, Ishrat Shamim, and A. H. M. Zehadul Karim** (1990), in the second and revised edition of *Environmental Issues and Natural Resource Management in Bangladesh* (1992), identify key themes in environmental research within the national context. The authors review thirty-six major studies related to environmental degradation, offering a comprehensive synthesis that serves as a valuable reference for future scholars. Among the issues discussed, riverbank erosion is highlighted as a critical environmental and socio-economic concern. Their analysis situates erosion not only as a physical process but also as an indicator of broader structural and policy failures in environmental management. Together, these works contribute essential conceptual and empirical foundations for understanding how environmental change, displacement, and development intersect in Bangladesh's coastal and riverine settings.

Shamsuddoha and Chowdhury's (2007) paper titled *"Climate Change Impact and Disaster Vulnerabilities in the Coastal Areas of Bangladesh"* offers a comprehensive examination of the distinctive challenges faced by the coastal regions of Bangladesh. The authors not only emphasize the unique geo-physical characteristics of these coastal areas but also shed light on

the intricate sociopolitical consequences that restrict people's access to essential resources while perpetuating risks and vulnerabilities.

The paper delineates the geographical extent of the coastal areas, encompassing coastal plain islands, tidal flats, estuaries, neritic and offshore waters, extending to the edge of a continental shelf. Within this region, the authors highlight a significant river network, a dynamic estuarine system, and a drainage basin, all of which contribute to the coastal ecosystem's potential as a source of natural resources. The coastal area, covering 32 percent of the country's geographical area, is home to 28 percent of Bangladesh's total population, making it a densely populated and vulnerable region.

The authors underscore the scarcity of land as a critical issue in these coastal areas, where households perceive land as the most vital natural asset. The per capita availability of homestead land is notably lower within the coastal zone compared to other regions of the country. This scarcity extends to cultivable land, gross cropped area, and net cultivable area, further exacerbating land-related challenges for the coastal population.

The paper also delves into the profound impact of climate change on the coastal areas of Bangladesh, emphasizing the global rise in average temperatures, glacial retreat, sea-ice reduction, ocean heat content increase, and sea-level rise. These climate-related changes have intensified the risk of hydro-metrological disasters, which pose substantial environmental and economic threats, particularly to the least developed countries like Bangladesh. The authors specifically highlight the challenges of salinity and water logging, with sea-level rise leading to the intrusion of saline water into previously freshwater areas. This has far-reaching implications for agricultural practices, cropping patterns, and the ecology of the region.

Overall, Shamsuddoha and Chowdhury's paper provides a comprehensive overview of the complex challenges faced by the coastal areas of Bangladesh due to climate change and environmental vulnerabilities. It underscores the urgent need for adaptive strategies and policy interventions to address the multifaceted issues confronting this vulnerable region.

This chapter has provided a comprehensive foundation for the subsequent analysis of livelihood strategies on Monpura Island, Bangladesh, by thoroughly addressing the problem of the study, delineating the scope and importance of the research, and presenting the theoretical framework and methodology. The problem of the study, centered on the complex interplay between local livelihoods and environmental challenges, underscores the urgent need to understand how coastal communities adapt to and mitigate the impacts of climate change. The detailed exploration of the unique challenges faced by both agricultural and fishing communities in Sonarchar and Machpara highlights the necessity for targeted research and informed policy responses.

The scope of this study, focusing on the distinct yet interconnected experiences of the two villages, provides a nuanced understanding of the diverse livelihood strategies employed by the island's inhabitants. The importance of this research is reflected in its contributions to academic

knowledge, policy development, and sustainable practices. By bridging the gap between local experiences and broader environmental and socio-economic issues, the study offers valuable insights that are crucial for enhancing the resilience and well-being of coastal communities.

The theoretical framework and methodology outlined in this chapter establish a solid basis for the research, guiding the investigation through a combination of ethnographic methods and comprehensive literature review. This approach ensures a robust analysis of the livelihood strategies in Sonarchar and Machpara, informed by both primary data and existing scholarly work. The subsequent chapters will build upon this foundation, delving deeper into the specific findings and implications of the research, ultimately contributing to a greater understanding of coastal life and providing actionable recommendations for policy and practice.

2.5 THEORETICAL AND METHODOLOGICAL ISSUES

Understanding livelihood, adaptation, and resilience in a complex coastal setting such as Monpura Island requires engagement with both theoretical debates and methodological challenges. Anthropology, as a discipline, insists that theory and method are inseparable—each shaping how realities are conceived, observed, and interpreted. This section therefore examines the theoretical orientations and methodological traditions that guide the present research, combining classical ethnographic approaches with contemporary critical perspectives. It considers how anthropological theory informs methodological practice and how fieldwork, in turn, refines theoretical understanding. Such an integrative approach allows for a nuanced exploration of human agency, vulnerability, and creativity within ecological transformation, showing how adaptation is experienced as both a material and moral process.

Foundational ethnographic texts such as David M. Fetterman's *Ethnography: Step by Step* (1989) and Hammersley and Atkinson's *Ethnography: Principles in Practice* (1995) remain central to understanding the epistemological grounding of qualitative inquiry. These works established ethnography as a reflexive, iterative, and interpretive process—one that situates the researcher within the field while attending to the complexity of lived experience. Fetterman (1989) conceptualizes ethnography as a balance between systematic data collection and interpretive engagement, emphasizing that meaning arises through continuous interaction between observer and observed. Hammersley and Atkinson (1995) extend this by introducing the notion of methodological reflexivity, highlighting that ethnographic data are co-constructed through the positionality, emotions, and assumptions of the researcher. In a setting like Monpura, where the researcher is deeply enmeshed in local moral and ecological worlds, this reflexivity becomes essential. It ensures that ethnographic representation captures not only what people do but how they interpret, negotiate, and morally justify their actions within dynamic environmental and social conditions.

This methodological orientation is critical for a study like the present one, where fieldwork in Monpura involves tracing livelihood strategies, moral reasoning, and social relations within rapidly changing ecological conditions. The livelihood practices of Monpura's inhabitants—

whether farmers cultivating salinity-prone fields or fishers navigating eroding coastlines—cannot be meaningfully understood without attention to the cultural meanings and ethical judgments embedded in those activities. Here, ethnography functions not as detached observation but as an interpretive dialogue that connects micro-level experience with macro-level structures of power and inequality. As Geertz (1973) argued, "thick description" enables anthropology to move beyond surface behavior to the layered meanings through which people construct coherence amid uncertainty.

Similarly, **Khan and Seeley's** *Making a Living: The Livelihoods of the Rural Poor in Bangladesh* (2005) provides a regionally grounded ethnographic framework for analyzing the interplay between environment, poverty, and adaptation. Their work demonstrates how livelihoods in rural Bangladesh are situated within broader socio-political hierarchies, kinship systems, and informal networks of exchange and obligation. By examining how the poor mobilize social capital and local knowledge to survive environmental stress, Khan and Seeley illustrate that adaptation is not simply a matter of resource access but also of moral reasoning and relational solidarity. This localized yet theoretically informed approach bridges ethnography and development studies, revealing how micro-level practices intersect with national policy regimes and global environmental discourses. For the Monpura context, their framework underscores how community resilience emerges through cooperation, reciprocity, and negotiation with both ecological constraints and institutional exclusions.

Building upon these methodological foundations, the theoretical orientation of this research draws on three interlinked literatures—political ecology, moral economy, and feminist environmentalism—that collectively enable a multidimensional understanding of adaptation and resilience. Political ecology (Blaikie & Brookfield, 1987; Robbins, 2012) exposes how power, policy, and inequality shape environmental outcomes and human vulnerability. It critiques technocratic and depoliticized explanations of environmental problems by showing that degradation and adaptation are embedded in political histories and economic structures. In the context of Bangladesh, a political ecology perspective helps to illuminate how state-led embankment projects, shrimp aquaculture, and land tenure systems redistribute risk and privilege, often displacing the poorest to precarious char lands or exposed coastal margins (Haque & Jakariya, 2021; Sarker, 2021). Environmental crises, therefore, are not purely natural but are socially produced through unequal access to land, credit, and decision-making power. Applying political ecology to Monpura makes it possible to trace how local experiences of erosion and salinity are intertwined with larger political economies of neglect, marginalization, and infrastructural control.

While political ecology highlights power and inequality, the moral economy tradition (Thompson, 1971; Scott, 1976) brings an ethical and relational dimension to livelihood analysis. Thompson's (1971) study of the English working class and Scott's (1976) exploration of Southeast Asian peasants reveal that economic action is never purely instrumental but governed by moral expectations of fairness, reciprocity, and social obligation. In rural Bangladesh, similar moral logics underpin cooperative labor, credit exchange, and food-sharing practices that ensure

collective survival during crisis (Islam & Ahmed, 2004; Khan & Seeley, 2005). Such interactions are guided by moral judgments about obligation and entitlement, forming what James Scott termed the "subsistence ethic." In Monpura, these ethics of care and cooperation persist even under mounting environmental pressure: neighbors exchange seeds after floods, fishers share earnings with debt-laden crew members, and women pool resources to maintain food security. These acts, though small-scale, embody a deeply moral understanding of economy and resilience.

This perspective aligns with emerging debates in environmental anthropology that conceptualize adaptation as a moral project (Whyte, 2018). Adaptation is not merely about physical survival or economic optimization but about preserving dignity, identity, and continuity amid loss. The moral economy framework, therefore, complements political ecology by emphasizing that resilience is sustained not only through material resources but also through moral commitment, reciprocity, and trust. However, while moral economy highlights cooperation, it often underplays the gendered dynamics and emotional labor underpinning such relationships—a gap addressed by feminist environmentalism.

Feminist environmentalism and feminist political ecology (Rocheleau et al., 1996; Agarwal, 2010; Elmhirst, 2015) foreground the gendered nature of adaptation, revealing how environmental risk and resilience are distributed through social hierarchies of gender, class, and power. These perspectives emphasize that women's ecological knowledge—shaped by their roles in food preparation, water collection, and caregiving—is central to community survival, yet often undervalued in formal adaptation programs. Agarwal (2010) highlights how women's participation in environmental governance not only improves resource management outcomes but also transforms power relations. In coastal Bangladesh, women manage the hidden labor of resilience—maintaining households, negotiating access to relief, and sustaining social cohesion during crises—yet their contributions remain largely invisible in policy discourse. Elmhirst (2015) further shows that gender intersects with class and ecology, such that women in poorer households experience both environmental and patriarchal vulnerability. Applying this insight to Monpura allows the study to consider resilience not as gender-neutral but as relational and embodied, sustained through acts of care, endurance, and emotional labor.

Bringing these perspectives together, this research adopts a holistic view of adaptation as a moral ecology— a synthesis that integrates power, ethics, and gender within the lived experience of environmental change. Political ecology exposes structural inequalities; moral economy reveals the ethical logics of survival; and feminist environmentalism highlights the gendered and affective dimensions of resilience. Combined with ethnographic reflexivity, these frameworks enable an analysis that is simultaneously structural and experiential, empirical and interpretive. In this view, adaptation is neither a linear process nor a set of policy outcomes but an ongoing negotiation between people, environments, and moral values.

Nevertheless, significant analytical gaps remain in the existing literature. Political ecology's macro-level focus on power relations sometimes neglects the subjective and affective

dimensions of adaptation. Moral economy, while illuminating ethics and solidarity, tends to treat moral norms as static and underplays institutional transformation. Feminist environmentalism powerfully critiques gendered inequality but may not always connect localized experiences with the broader ecological and political economy. Moreover, resilience frameworks from sustainability science (Folke et al., 2010; Miller et al., 2010) often privilege systemic stability and adaptation efficiency over the human meanings of suffering, cooperation, and care. These conceptual silences point to the need for an integrated anthropological framework that captures both structure and sentiment, both ecology and ethics.

In addressing these gaps, this study proposes a perspective that views adaptation as simultaneously ecological, economic, and moral. Through long-term ethnography in Monpura, it investigates how people interpret environmental transformations not as external shocks but as lived conditions that demand social and ethical reorientation. The concept of a moral ecology of adaptation emerges here as both analytical and empirical: it reflects how people balance survival with moral responsibility, individual need with collective obligation, and local knowledge with external governance. This integrative approach builds upon the strengths of existing theories while situating them within the realities of deltaic Bangladesh—where resilience is not merely a policy goal but a daily practice of sustaining relationships, dignity, and hope within an uncertain world.

The theoretical and methodological discussions above provide the intellectual foundation for this study. They demonstrate that understanding livelihood and adaptation in Monpura Island requires moving beyond narrow economic or environmental explanations toward an integrated, ethnographically grounded approach. By combining classical anthropological insights with contemporary critical perspectives, the research situates coastal resilience within intersecting domains of ecology, economy, and morality. The following section synthesizes the reviewed literature to highlight key themes, unresolved tensions, and research gaps that shape the rationale and direction of the present study.

2.6 SUMMARY AND RESEARCH GAP

The preceding review has outlined the intellectual and empirical terrain within which this research is situated. Anthropological studies of livelihood and subsistence have long emphasized the interdependence between social organization, cultural values, and economic behavior. Classical ethnographies such as those by Malinowski (1922), Radcliffe-Brown (1952), and Evans-Pritchard (1940) demonstrated that livelihood cannot be reduced to material survival alone; it is also a moral and symbolic expression of social life. Subsequent interpretive traditions, led by Clifford Geertz (1973, 1983), advanced this understanding by situating economic and environmental practices within systems of meaning. Contemporary approaches—such as political ecology, moral economy, and feminist environmentalism—have further deepened this inquiry by showing how power, inequality, and ethics shape adaptation and resilience. Together, these bodies of work provide a multidimensional foundation for analyzing the complex realities of Monpura Island.

The reviewed literature on coastal Bangladesh reveals a rich but uneven body of scholarship. Geographical and environmental studies (Allison, 1998; Brammer et al., 1993; Sarker, 2021) have provided crucial insights into deltaic dynamics, riverbank erosion, and sedimentation processes. These works underscore that coastal transformations are both natural and anthropogenic, resulting from the interplay of hydrological systems, development interventions, and climate variability. Sociological and anthropological research (Elahi, 1991; Baqee, 1998; Islam & Ahmed, 2004) has documented how communities adapt to these changing conditions through migration, informal labor networks, and kin-based cooperation. However, many of these studies remain descriptive, often privileging macro-level environmental processes over the lived experiences of affected populations.

In parallel, the literature on livelihoods and adaptation in the Global South—especially in deltaic and small-island settings—provides comparative perspectives on vulnerability and resilience. Case studies from South and Southeast Asia (Adger et al., 2018; Crate & Nuttall, 2016; Mallick & Vogt, 2015) illustrate how climate-induced displacement, livelihood diversification, and gendered adaptation are shaped by social inequality and political marginality. Yet, much of this research is dominated by policy and development frameworks that prioritize technical solutions—such as infrastructure projects or disaster management plans—over the moral and cultural dimensions of adaptation. This technocratic orientation tends to underplay the everyday negotiations, emotional labor, and ethical reasoning that underpin resilience in marginal environments.

From a theoretical standpoint, three analytical gaps emerge from the reviewed literature. First, although political ecology has illuminated the structural inequalities that shape environmental risk, it often underrepresents the experiential and moral dimensions of adaptation. There is a need to understand how people themselves interpret vulnerability, suffering, and endurance within specific moral worlds. Second, while the moral economy tradition (Thompson, 1971; Scott, 1976) foregrounds reciprocity and obligation, it rarely engages with ecological processes or material constraints. Integrating moral reasoning with ecological understanding can thus enrich analyses of livelihood and adaptation. Third, feminist environmentalism and feminist political ecology (Agarwal, 2010; Rocheleau et al., 1996; Elmhirst, 2015) have revealed how gender mediates access to resources and decision-making power, yet their application to the deltaic contexts of Bangladesh remains limited. The intersection of gender, ecology, and moral practice remains a critical yet underexplored area in coastal research.

Methodologically, the review highlights that while survey-based and quantitative studies dominate climate change research in Bangladesh, there is a relative scarcity of long-term ethnographic work. Existing studies often capture the visible outcomes of environmental stress—such as migration, loss of land, or changes in occupation—but rarely delve into the everyday moral, emotional, and relational processes through which people make sense of and respond to ecological uncertainty. Ethnographic research in settings like Monpura can therefore offer valuable depth, capturing the meanings, negotiations, and ethical labor embedded in adaptation practices.

Within this broader landscape, Monpura Island remains a strikingly under-researched locality. Although environmental scientists have documented its geomorphological changes (Biswas et al., 2022; Sokolewicz & Louters, 2007), few studies have explored its social, cultural, and moral dimensions. The island's repeated cycles of erosion and resettlement, its hybrid economy of fishing and farming, and its exposure to multiple climatic hazards make it an exemplary site for studying the intersections of ecology, livelihood, and ethics. Yet, its marginal position—both geographically and administratively—has rendered it peripheral in national development and academic research alike. This thesis thus seeks to fill that gap by offering an ethnographic account that connects environmental transformation with social organization, economic behavior, and moral reasoning.

The research gap can therefore be articulated in three interrelated ways:

1. **Empirical gap** – Limited ethnographic research exists on Monpura's inhabitants, particularly concerning how they live, adapt, and sustain meaning amid environmental transformation.
2. **Theoretical gap** – Existing frameworks tend to isolate ecological, economic, or social dimensions of adaptation, lacking an integrative model that accounts for moral and cultural reasoning.
3. **Methodological gap** – Most studies rely on cross-sectional or survey data; few adopt immersive, reflexive fieldwork capable of capturing the complexity of coastal life-worlds.

By addressing these gaps, the present research contributes to an anthropology of adaptation that is both contextually grounded and theoretically generative. It situates Monpura within global debates on climate change and resilience while foregrounding the lived realities of those who inhabit its fragile deltaic landscape. In doing so, the study advances an understanding of livelihood as a moral and relational process—one that intertwines economic necessity, ecological knowledge, and ethical responsibility. Ultimately, the literature reviewed here converges on a central insight: that resilience in coastal Bangladesh cannot be understood solely through material indicators or policy frameworks but must be approached as an embodied, culturally mediated, and morally charged experience of living within uncertainty.

CHAPTER THREE:
THE VILLAGES UNDER STUDY:
SONARCHAR AND MACHPARA

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3.1. INTRODUCTION

The selection of Sonarchar and Machpara—two pseudonymous villages of Monpura Island—for this research was intentional and strategic, grounded in the objective of capturing the diversity of livelihood strategies practiced by coastal communities in Bangladesh. These two villages represent contrasting yet interrelated economic systems: agriculture and fishing, which are the two dominant forms of subsistence and income generation on Monpura Island.

Sonarchar was selected as a representative agricultural village. Its inhabitants rely primarily on farming and animal husbandry, shaped by the availability of cultivable land and favorable environmental conditions. This setting offers valuable insights into how agrarian communities organize their social and economic lives in a vulnerable coastal region, where land erosion, seasonal flooding, and limited infrastructure continuously impact agricultural productivity.

In contrast, **Machpara** was chosen for its fishing-based economy. Situated near the water's edge, this village reflects the realities of communities whose survival depends on marine resources. Fishing not only structures daily routines and household economies but also informs local knowledge systems, risk management practices, and social organization. Its distinct dependence on fishing—without any agricultural activity—provides a stark contrast to Sonarchar's livelihood model.

By selecting one agricultural village and one fishing village, this study aims to explore the ways in which environmental conditions, access to resources, occupational specialization, and infrastructural disparities shape differing livelihood strategies. This comparative approach enables a deeper understanding of the adaptive practices, vulnerabilities, and resilience mechanisms of coastal populations, thus enriching the ethnographic study of rural livelihoods in Bangladesh.

To better contextualize the demographic profile and organizational structure of Sonarchar and Machpara, it is essential to understand how each village's unique environmental conditions shape its primary livelihoods and community organization. This section examines each village's demographic characteristics, infrastructure, and socio-economic setup, based on fieldwork conducted across Monpura Island, with a focused lens on these two distinct communities. For confidentiality and ethical considerations, the exact locations of these villages will remain undisclosed.

This anthropological approach to study villages, specially the vulnerable one's situated in islands like Monpura is important. Chambers highlights that external actor frequently misunderstand or

overlook the actual conditions of rural poverty, which results in development efforts that are poorly suited to local needs (Chambers, 1983). He also stresses the importance of recognizing and incorporating the knowledge, practices, and lived experiences of rural communities themselves in formulating effective and meaningful development strategies. This can help us understand the actual rural dynamics of Monpura.

3.2. SONARCHAR: AN AGRICULTURAL VILLAGE

Located in an agriculturally favorable area of Monpura Island, Sonarchar benefits from natural resources that support farming and livestock rearing. This ecological suitability for agriculture has shaped Sonarchar's social and economic structure, encouraging community engagement in farming practices and the domestication of animals.

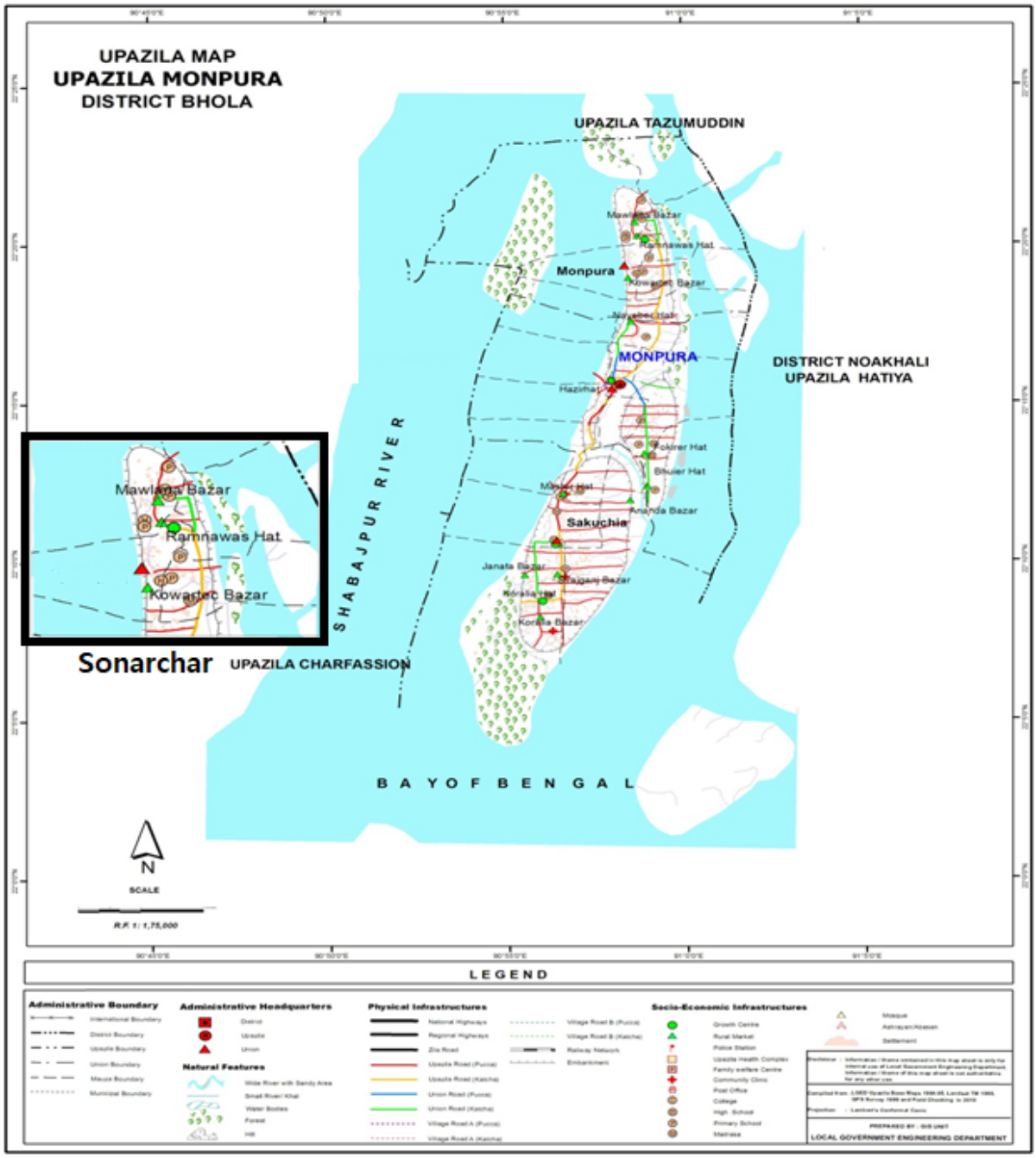
Demographic Overview: During the period of fieldwork, the population of Sonarchar was recorded at approximately 1,500 people. This population was distributed across 331 households, reflecting a stable, moderately sized village community. The gender ratio in Sonarchar was roughly balanced, indicating an equal distribution of males and females, which can impact various social and economic roles within the community.

Housing and Infrastructure: Most of the houses in Sonarchar are semi-*pucca*, combining traditional architectural elements with some modern materials. This is crucial because the quality and ownership of housing is an important component of vulnerability (Cutter et al., 2003). This style in Sonarchar reflects both the community's cultural heritage and adaptations to available resources. Community facilities are limited; there are two primary schools in the village, only one of which is private, providing a foundational level of education. Notably, there are no high schools or colleges in the vicinity, meaning that students who wish to pursue further education must travel outside the area. Religious infrastructure consists of two mosques, serving as both spiritual and community gathering spaces.

Socio-Economic Organization: The residents of Sonarchar largely pursue agriculture as their primary livelihood. The fertile soil and available resources support crop cultivation and animal husbandry, activities that require collective knowledge and community cooperation. This agrarian focus has fostered a lifestyle centered around seasonal farming cycles, with social structures that are reflective of this agricultural dependency.

Overall, Sonarchar's demographic profile and organization highlight its role as an agricultural community with limited educational facilities, a balanced gender composition, and a housing style that reflects both traditional values and practical adaptations. These characteristics provide insight into the village's collective lifestyle and the social dynamics shaped by its agricultural orientation.

Map 3.1: Location of Sonarchar in Monpura Upazila.

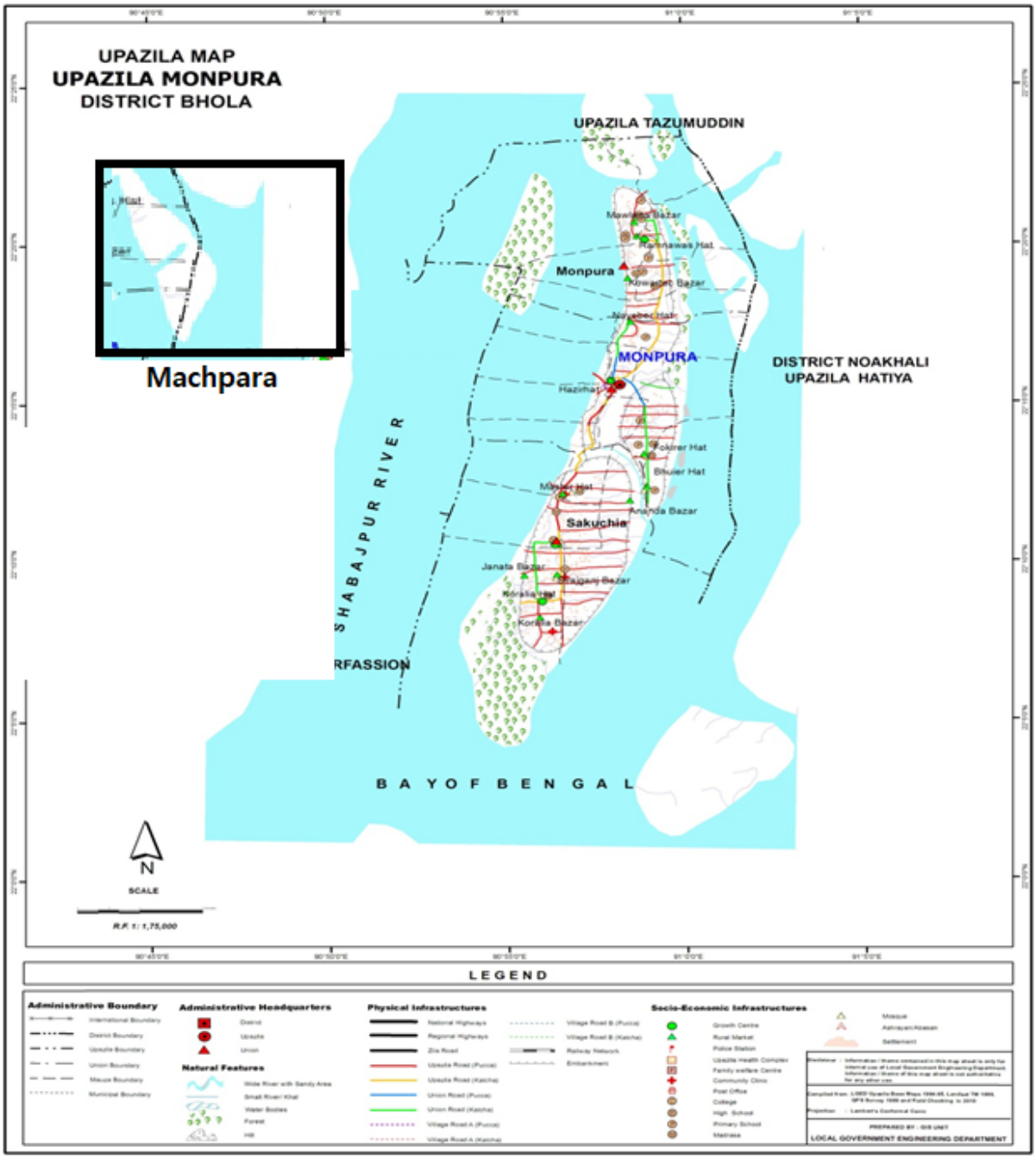


Source: LGED, 2025.

3.3. MACHPARA: A FISHING VILLAGE

Situated on the outskirts of Monpura Island, Machpara is a small community distinguished by its exclusive reliance on fishing as a livelihood. Unlike Sonarchar, the residents of Machpara do not engage in rigorous agricultural activities, as the natural environment and proximity to water have oriented the village toward fishing-based occupations. This coastal village's unique setting and lifestyle shape its demographic, social, and cultural characteristics in ways distinct from the agricultural community of Sonarchar.

Map 3.2: Location of Machpara in Monpura Upazila.



Source: LGED, 2025.

Demographic Overview: During my fieldwork, Machpara had an estimated population of around 800 people, distributed in approximately 170 households. The village have both Hindu and Muslim residents, reflecting a cultural and religious diversity that influences communal interactions, social practices, and mutual support networks. The absence of any educational institutions means that residents must travel outside the village to access schooling, a significant barrier to educational advancement for the community's younger generations.

Housing and Infrastructure: Just like Sonarchar, most homes in Machpara are *semi-pucca*; however previously, they were built with more transient and adaptable materials suited to the village's fishing-oriented lifestyle. The housing reflected the needs and challenges of a community living by the water, where mobility and adaptability are key. This coastal environment also means homes are at risk from weather-related threats, necessitating regular maintenance and, in some cases, reconstruction. There are no formal educational facilities or health clinics within the village, highlighting a critical gap in local infrastructure and access to essential services.

Socio-Economic Organization: Fishing is the primary occupation in Machpara, a profession that deeply influences the daily rhythms and social structure of the community. This shared livelihood fosters strong interdependence among villagers, who often work together to fish, mend nets, and process catches. Given the high dependency on the water, fishing activities vary with seasonal and tidal patterns, creating a unique lifestyle rhythm that connects the community to its natural surroundings.

3.4. VILLAGE LIFE IN SONARCHAR AND MACHPARA

In Sonarchar, early mornings are marked by the sight of villagers tending to their fields, and the air is filled with the scent of earth as farmers plow their land or water their crops. Children play near the primary schools, some stopping to watch the cattle graze nearby or helping their parents in small ways. The quiet hum of village life is punctuated by the call to prayer from the mosques, where residents gather not only for worship but also to discuss matters of communal interest, from upcoming planting seasons to local celebrations. The cooperative spirit is evident as families and neighbors join hands for larger tasks, whether building a new animal shelter or organizing the seasonal harvest festival, where traditional music and dance bring a lively energy to the community.

In Machpara, mornings start with the sight of fishermen readying their boats, carefully preparing their nets for the day’s work. At dawn, groups of men and women can be seen along the water’s edge, repairing fishing gear or discussing the day’s fishing prospects. Villagers share stories as they prepare, and there is a collective sense of anticipation as they head out to sea. Upon return, the day's catch is cleaned, salted, or dried, while women skillfully process the fish for sale or storage. The absence of a local school means children learn by observing adults, mastering the intricacies of fishing from a young age. Festivals in Machpara are celebrated by both Hindu and Muslim villagers, with colorful rituals, music, and food sharing, symbolizing a strong communal bond that transcends religious lines.

Table 2.1: Educational Status of the Study Area

Level	Machpara		Sonarchar	
	Number	Frequency	Number	Frequency
Illiterate	85	55.92%	100	14.68%
Literacy	08	5.26%	75	11.02%

Primary	23	15.13%	345	50.66%
Second. (6-9)	19	12.5%	58	
Secondary (SSC pass)	08	5.26%	28	08.552%
Higher Secondary	0	0%	07	01.02%
Graduate (BA,B.Com)	0	0%	07	01.02%
Children	09	05.92%	61	08.96%
Total	152	100%	681	100%

Source: Fieldwork in Sonarchar and Machpara

3.4.1. A Comparative Analysis

The educational status of Sonarchar and Machpara, as reflected in the data, highlights significant disparities in literacy and educational attainment between the two villages. These differences are rooted in their distinct socio-economic structures, access to resources, and cultural priorities. This analysis explores the implications of these differences on the social dynamics, realities, and potential futures of these communities.

The table reveals a stark contrast in educational attainment between Sonarchar and Machpara:

Illiteracy: In Machpara, 55.92% of residents are illiterate, significantly higher than Sonarchar's 14.68%.

Primary Education: In Sonarchar, 50.66% of residents have completed primary education compared to only 15.13% in Machpara.

Secondary and Higher Education: Machpara shows near-zero representation in higher education, with no graduates, while Sonarchar has modest numbers (1.02%) of residents completing higher secondary and graduate degrees.

These figures underscore the centrality of education in Sonarchar's socio-economic fabric and its relative neglect in Machpara.

3.4.2. Social Dynamics in Machpara

The high illiteracy rate and limited access to education in Machpara reflect its economic reliance on fishing and its geographic isolation. Without a school in the village, children lack formal educational opportunities, and their learning occurs predominantly through observation and participation in fishing activities. This reality perpetuates a cycle of dependency on fishing as the sole livelihood, limiting diversification or upward mobility. Education is not positioned as a communal priority, resulting in the perpetuation of fishing as the dominant occupation across generations. Social cohesion in Machpara is rooted in mutual dependency. The shared livelihood fosters strong communal bonds, but it also restricts individual aspirations. Religious diversity, with both Hindus and Muslims living together, creates a unique social fabric where communal

rituals and festivals provide opportunities for collaboration and interaction, potentially offsetting the challenges of economic precarity.

3.4.3. Social Dynamics in Sonarchar

Sonarchar's higher educational attainment levels reflect its agricultural base and better infrastructure, such as two primary schools, one of which is private. This foundational access to education has created pathways for individuals to pursue secondary and even tertiary education, albeit in small numbers. The higher literacy and education levels suggest the potential for diversification into non-agricultural jobs, such as small business ventures or government services. Families with educated members are more likely to break out of the cycle of poverty through better employment opportunities. This is reflected in the presence of graduates and those who have completed higher secondary education.

However, the absence of high schools or colleges limits the village's ability to significantly improve higher education outcomes. This gap highlights the need for external support or migration to pursue advanced education, a challenge that restricts many residents from realizing their full potential.

3.4.4. Comparative Realities

Sonarchar's proximity to resources and infrastructure allows for better educational access, while Machpara's isolation reinforces its reliance on traditional livelihoods. The agrarian lifestyle in Sonarchar appears to value education more as a tool for social and economic mobility, whereas Machpara's fishing-based economy focuses on sustaining immediate livelihoods. While the data does not explicitly disaggregate by gender, it can be inferred that education disparities may deepen along gender lines, particularly in Machpara where traditional roles may further marginalize women. Investing in educational infrastructure, particularly in Machpara, is essential to bridging the gap between these villages. Programs tailored to adult education, vocational training, and gender equity can create pathways for empowerment and reduce the disparities reflected in the data.

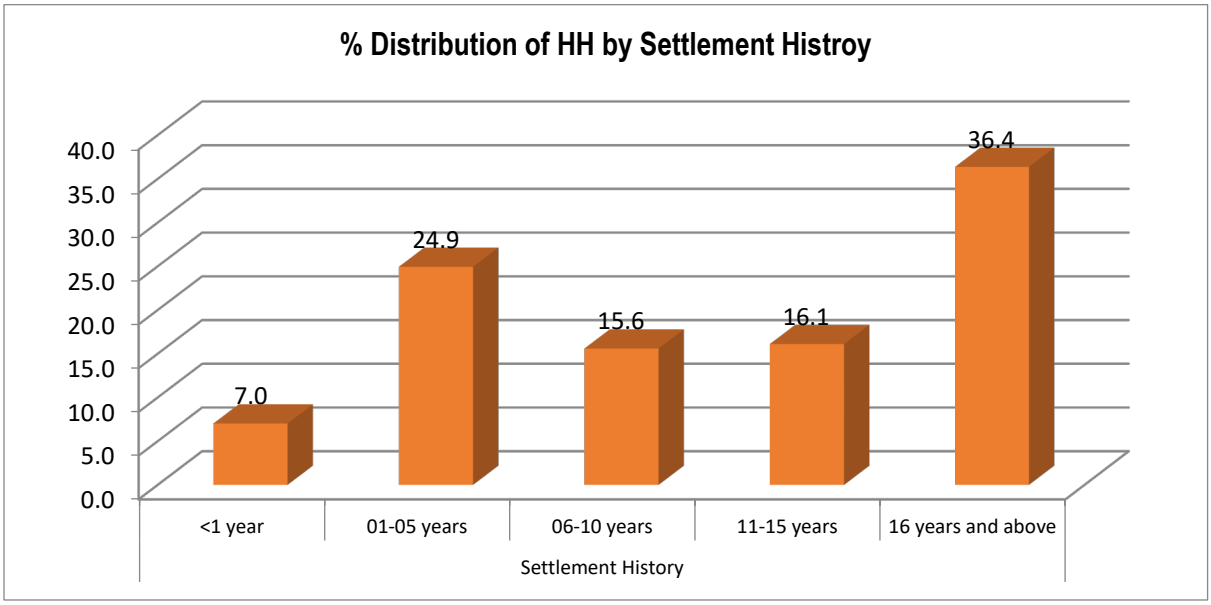
The comparison of Sonarchar and Machpara's educational profiles underscores the critical role of education in shaping social dynamics and economic realities. While Sonarchar shows signs of gradual upward mobility and diversification, Machpara remains constrained by its isolation and limited access to education. Addressing these disparities requires targeted interventions that align with each village's unique socio-economic and cultural context, fostering opportunities for sustainable development and resilience in both communities. Based on the collected data from the two villages, we can get an overall view of the Monpura island. The upcoming discussions will cover these aspects accordingly.

3.5. MONPURA ISLAND: SETTLEMENT HISTORY AND PATTERN

Monpura Island is characterized by a predominantly rural population engaged in agriculture and fishing, resulting in economic challenges and lower income levels compared to mainland areas. Agriculture on the island focuses on subsistence crops such as rice, jute, vegetables, and fruits. Access to infrastructure, healthcare, and education facilities is limited, often requiring travel to the mainland. Moreover, Monpura Island faces the constant threat of natural disasters like cyclones and tidal surges. This island boasts abundant natural resources that play a central role in the daily lives of its inhabitants. The study conducted a comprehensive questionnaire survey and employed various data collection methods to gain insights into the livelihood patterns and resources of the Monpura community. I have specifically inquired into two villages that played central role in deciding the outcomes of my fieldwork based qualitative research. In this chapter, I will present the data that I have collected from the two village communities that align with the core research objective of understanding the livelihood of the island.

Situated within the Meghna River estuary in proximity to the Bay of Bengal, Monpura Island has a historical legacy of intermittent foreign visits, particularly by Portuguese explorers who briefly sojourned on the island without establishing permanent settlements. Subsequently, the island remained a point of recurrent human visits without sustained habitation. During my fieldwork I have heard from the locals of Monpura that Portuguese pirates sought refuge on this island approximately six centuries ago. Following their departure, inhabitants from Bhola, Lakshmipur, and Noakhali regions began to establish permanent residence on the island, eventually leading to its formal inclusion as a permanent settlement under the Bhola district in 1833. Subsequently, in 1983, Monpura attained the status of an Upazila. To elucidate the island's human settlement history, respondents were queried regarding their duration of residence. The responses from the two villages revealed that a significant proportion from the overall (100%) population (36.4 percent) had resided on the island for 16 years or longer, while 24.9 percent had settled within the past 1-5 years. Additionally, 16.1 percent of respondents reported residing on the island for 11-15 years, 15.6 percent for 6-10 years, and 7.0 percent for less than one year. This historical account reflects Monpura Island's evolution from a temporary refuge for Portuguese pirates to a gradually established permanent settlement for inhabitants from neighboring regions. The varying durations of residence among respondents suggest a complex interplay of factors influencing the island's demographic history, potentially including economic opportunities, environmental conditions, and cultural ties.

Figure 3.1: HH by Settlement History

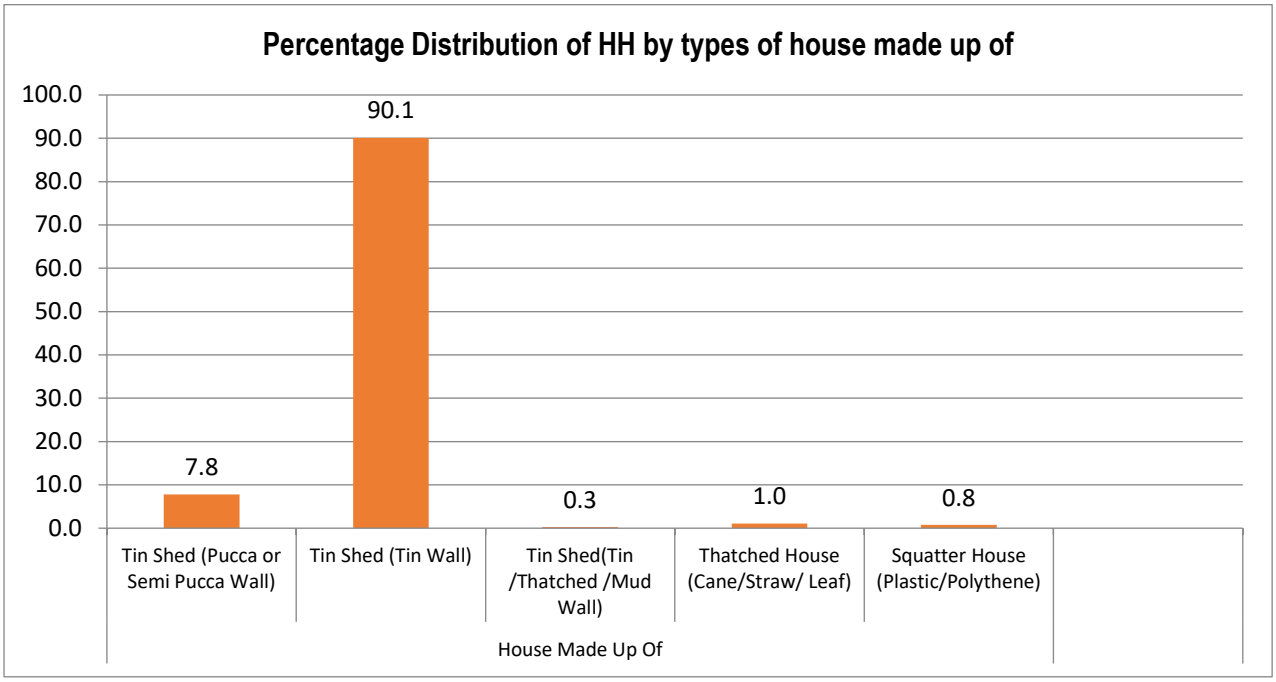


Source: Fieldwork in Sonarchar and Machpara

3.5.1. Housing Pattern

The construction of dwellings on Monpura Island exhibits a pronounced adaptability to the natural environment. The prevalence of *pucca* or semi-*pucca* wall structures is limited, primarily due to prevailing socioeconomic conditions. In response to the region's susceptibility to natural disasters, such as storm surges, a substantial proportion of the population (90.1 percent) opts for cost-effective housing solutions featuring *Tin* shed roofing and *Tin* wall cladding, which offer enhanced protection. Furthermore, individuals with greater financial means (7.8 percent) tend to invest in *Tin* shed housing with *pucca* walls. A minimal percentage (0.3 percent) of residents opt for *Tin* shed construction combined with thatched or mud walls. Additionally, there is evidence of thatched housing (1 percent) constructed from cane, straw, or leaves, as well as a distinctive category known as "squatter houses" (0.8 percent) within the Monpura area. These housing patterns underscore the region's adaptive strategies to mitigate the impact of natural disasters while considering economic constraints. The prevalent trend of using *Tin* shed and *Tin* wall construction in Monpura reflects the community's pragmatic response to the island's vulnerability to natural disasters, prioritizing resilience and cost-effectiveness. This housing approach, embraced by a significant majority, demonstrates a proactive measure to safeguard against storm surges and other environmental risks, aligning with the island's socioeconomic conditions.

Figure 3.2: Percentage Distribution of HH by types of house made



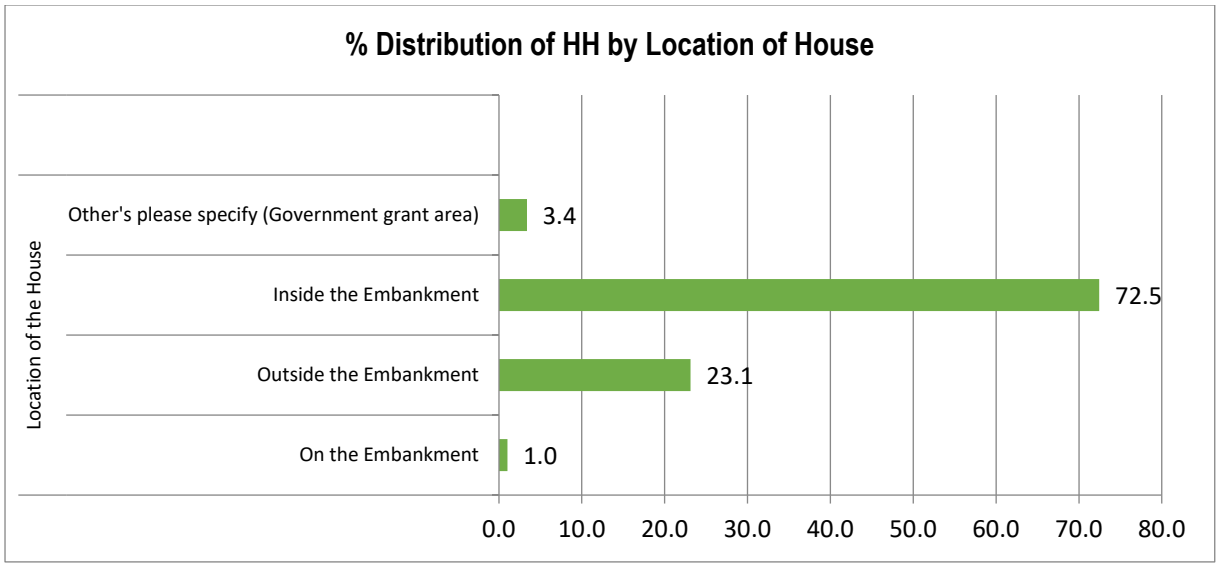
Source: Fieldwork in Sonarchar and Machpara

Monpura Island exhibits a diverse spectrum of housing types, encompassing *Pucca*, Semi-*Pucca*, *Kacha*, and *Machaal/Jhupri* dwellings. The predominant housing category on the island is the *Kacha* type, with a smaller percentage being Semi-*Pucca*, *Machan/Jhupri,* and the remaining houses being *Pucca* in structure. In the early stages of life, many islanders initially construct *Kacha* houses on their ancestral lands, as construction materials are not readily available locally. Consequently, residents often travel to Teknaf, Cox's Bazaar, or Chittagong to procure the necessary materials. Construction of *Kacha* or *Machan/Jhupri* houses typically involves the use of wooden or *Pucca* poles, which are accessible in local markets, as well as hilly bamboo, various types of wood, *tin*, asbestos, straw, and polythene, reflecting individual economic capacities. Middle-class islanders, depending on their financial means, opt for constructing Semi-*Pucca* or *Pucca* houses, utilizing materials such as bricks, cement, sand, rods, wood, *tin*, bamboo, and others, procured from nearby markets in Teknaf, Cox's Bazaar, or Chittagong. The island also boasts approximately one hundred fifty restaurants, a majority of which are eco-friendly, constructed with local materials like bamboo, wood, *tin*, and straw, while a few are high-rise structures that are less environmentally friendly. The restaurant structures predominantly exhibit Semi-*Pucca* characteristics, featuring brick construction with *tin* roofing. The prominence of *Kacha* and Semi-*Pucca* housing in Monpura Island highlights the islanders' ability to adapt to limited local construction resources by procuring materials from nearby regions. This housing trend emphasizes how the availability of construction materials and the financial capacity of residents jointly influence their decisions in shaping their housing preferences.

3.5.2. Location of the House

Monpura Island, enveloped by aquatic environments and fortified by a government-erected river embankment, serves as a protective barrier against the recurrent natural calamities that afflict the region annually. In light of the paramount significance of shielding against such adversities, a substantial majority of households, accounting for 72.5 percent, exhibit a distinct inclination toward situating their residences within the secure confines of the embankment. In contrast, a notable contingent of households, constituting 23.1 percent, opt to establish their dwellings outside the embankment's perimeter. A minority fraction, comprising 3.4 percent of households, elects to construct their abodes within government-designated areas, while a mere 1 percent of households choose to erect their homes atop the embankment itself. The predominant choice of housing within the government-constructed embankment on Monpura Island highlights the paramount concern for protection from recurring natural disasters. Conversely, a significant fraction of households opting to build outside the embankment suggests multifaceted factors influencing their housing decisions, while a smaller minority residing within government grant areas or atop the embankment reflects nuanced variations possibly linked to socio-economic or cultural influences.

Figure 3.3: HH by Location of House



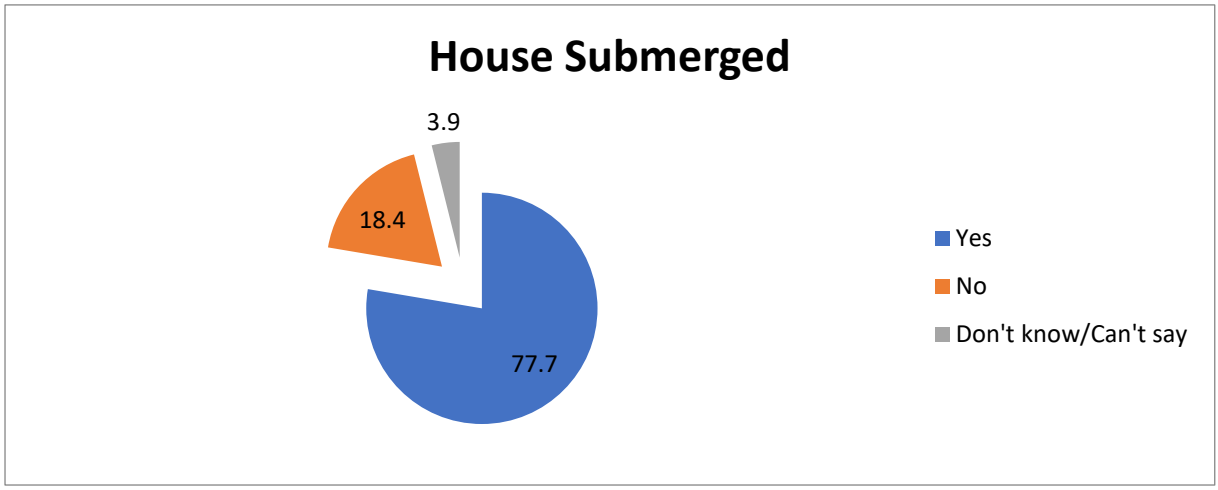
Source: Fieldwork in Sonarchar and Machpara

3.5.3. Household Submerged During Storm Surge

Monpura Island, enveloped by aquatic environments and fortified by a government-erected river embankment, serves as a protective barrier against the recurrent natural calamities that afflict the region annually. In light of the paramount significance of shielding against such adversities, a substantial majority of households, accounting for 72.5 percent, exhibit a distinct inclination toward situating their residences within the secure confines of the embankment. In contrast, a

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Figure 3.4: House Submerged

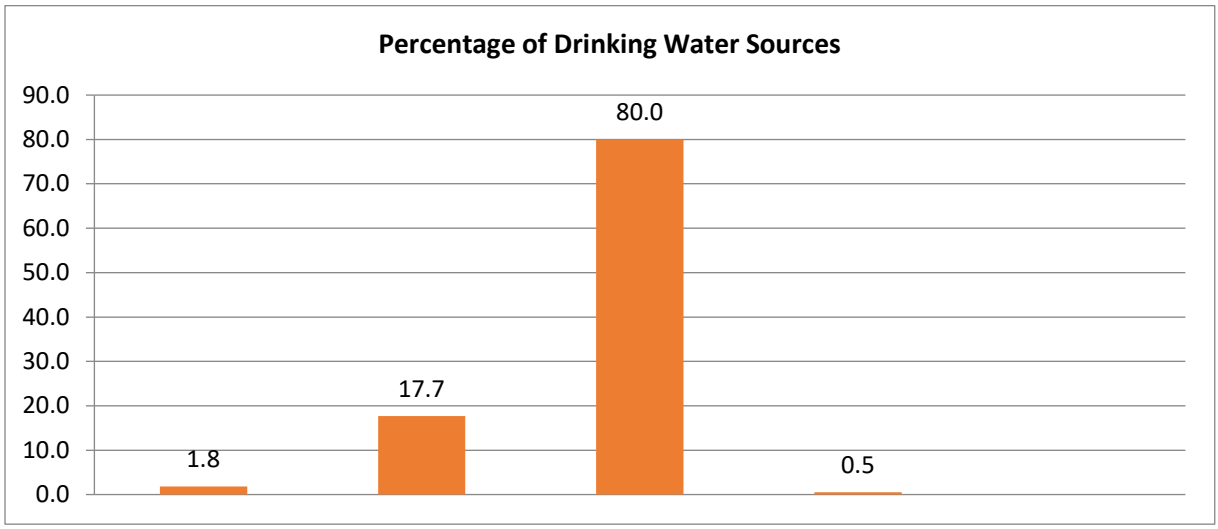


Source: Fieldwork in Sonarchar and Machpara

3.5.4. Sources of Drinking Water

Considering the geographical context of Monpura Island, there is a common assumption that access to pure water resources is readily available given its proximity to water bodies. However, insights from the censused population provide a more detailed perspective. The majority, comprising 80 percent of respondents, predominantly rely on tube wells as their primary source of drinking water. A significant minority, accounting for 17.7 percent of respondents, opt for deep tube wells as their preferred water source, while a negligible fraction of respondents chooses public utilities such as tap water to meet their drinking water needs. This variation in water source preferences highlights the island's diverse water infrastructure landscape, which may be influenced by factors such as water quality, ease of access, and historical practices. Furthermore, this data emphasizes the importance of comprehensive water resource management strategies on the island to ensure consistent and safe access to drinking water for its residents.

Figure 3.5: Percentage of Drinking Water Sources

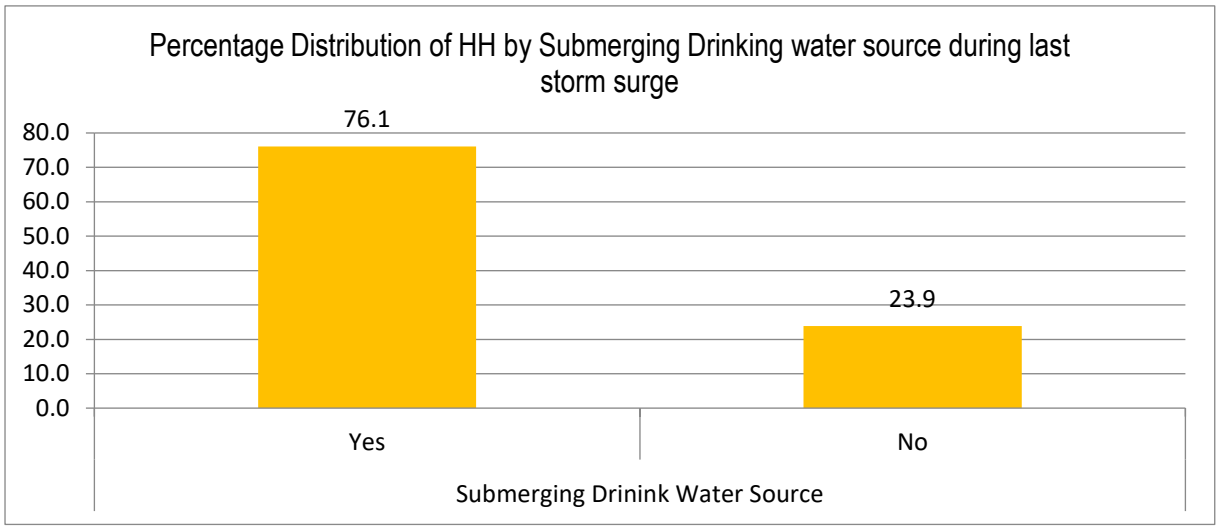


Source: Fieldwork in Sonarchar and Machpara

3.5.5. Submerged Water Sources

While access to a drinking water source is assumed due to the island's aquatic surroundings, the recurring challenge of submerging these sources during storm surges has been observed. A substantial majority of respondents, totaling 76.1 percent, reported that their drinking water source was submerged during the last storm surge. In contrast, 23.9 percent of respondents indicated that their drinking water source remained unaffected by submersion. This phenomenon highlights a significant vulnerability, as the accessibility of drinking water can be compromised during natural disasters. It underscores the imperative need for resilient infrastructure and disaster preparedness measures to ensure a consistent supply of safe drinking water, particularly in the face of climatic events.

Figure 3.6: HH by Submerging Drinking water source during last storm surge



Source: Fieldwork in Sonarchar and Machpara

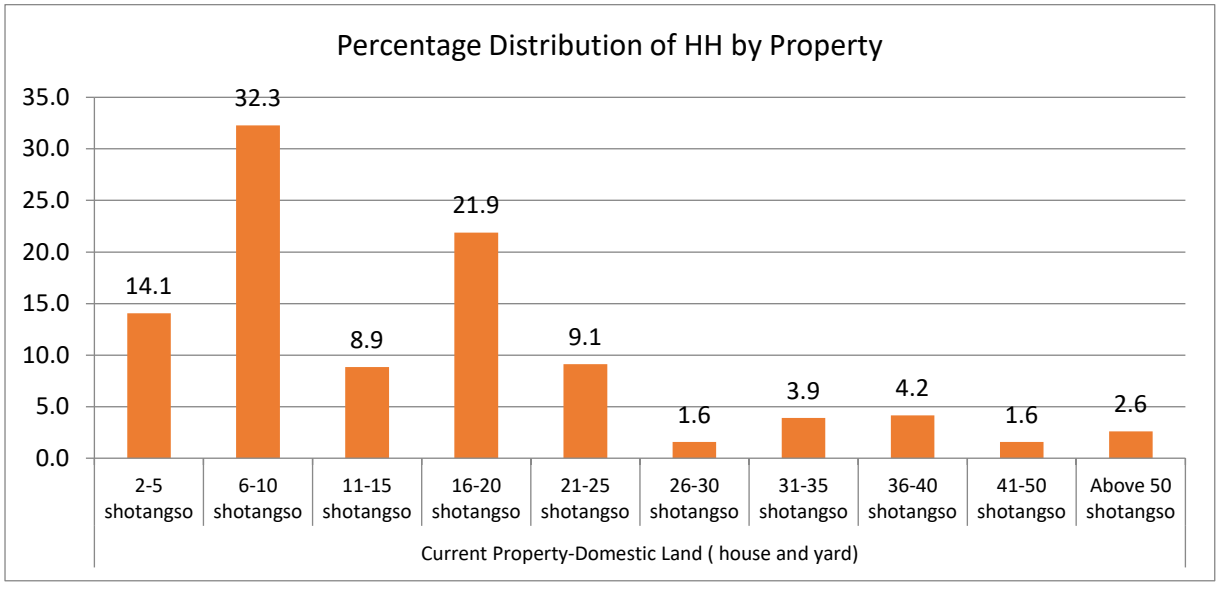
3.5. LAND PROPERTY INFORMATION OF THE HOUSEHOLD

This topic encompasses crucial details regarding the land ownership and tenure arrangements of households. It delves into the valuable insights into the socio-economic dynamics, asset distribution, and land-related vulnerabilities within the Monpura island community.

3.5.1. Current Property for Domestic Land

Monpura Island's comprehensive embankment system serves as a crucial protective measure against the annual recurrence of natural disasters in the region. The study provides insights into land property distribution among the populace, revealing that a significant portion, amounting to 32.3 percent, typically possesses domestic land properties ranging from 6 to 10 decimals in size. Furthermore, 21.9 percent of households hold land properties between 15 and 20 decimals, while 14.1 percent own properties encompassing 2 to 5 decimals for domestic and yard use. A smaller fraction, constituting 2.6 percent of households, possesses extensive land holdings exceeding 50 decimals for domestic yard purposes. This data highlights the heterogeneity in land ownership patterns, signifying potential socio-economic disparities and varying land-use requirements within the community. It underscores the relevance of land property information in understanding the demographic and economic landscape of the island.

Figure 3.7: Distribution of HH by Property



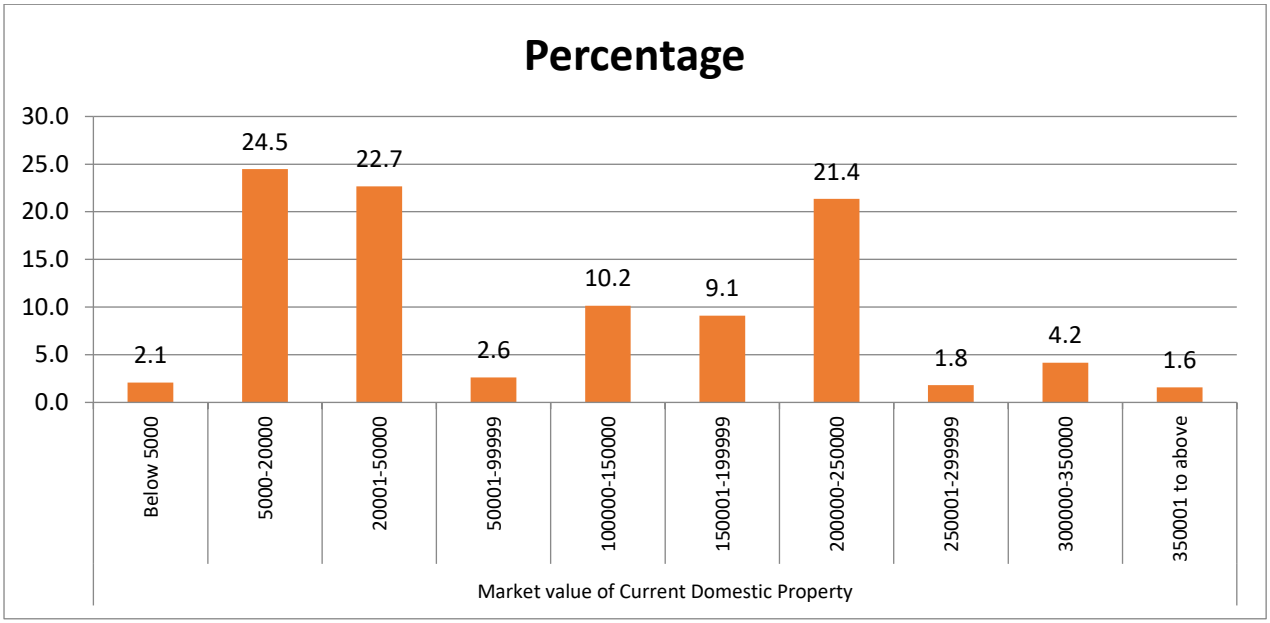
Source: Fieldwork in Sonarchar and Machpara

3.5.2. Total Market Value of Current Domestic Land

The research findings reveal distinct land utilization patterns among households on Monpura Island. A substantial majority, representing 45.8 percent, typically cultivate and garden on land parcels below 33 decimals in size. An additional 38.6 percent of households engage in agricultural activities on land holdings ranging from 33 to 99 decimals, while 14.5 percent manage cultivation and gardening on properties spanning 100 to 165 decimals. Conversely, a relatively small

minority, comprising 1.2 percent of households, possesses extensive land expenses exceeding 166 decimals designated for cultivation and gardening purposes. This diversified land utilization signifies varying agricultural practices and possibly distinct socio-economic conditions within the community, emphasizing the relevance of such data in understanding the island's agricultural landscape. It also suggests the need for tailored agricultural interventions to support the diverse needs of the population.

Figure 3.8: Percentage of Domestic Property



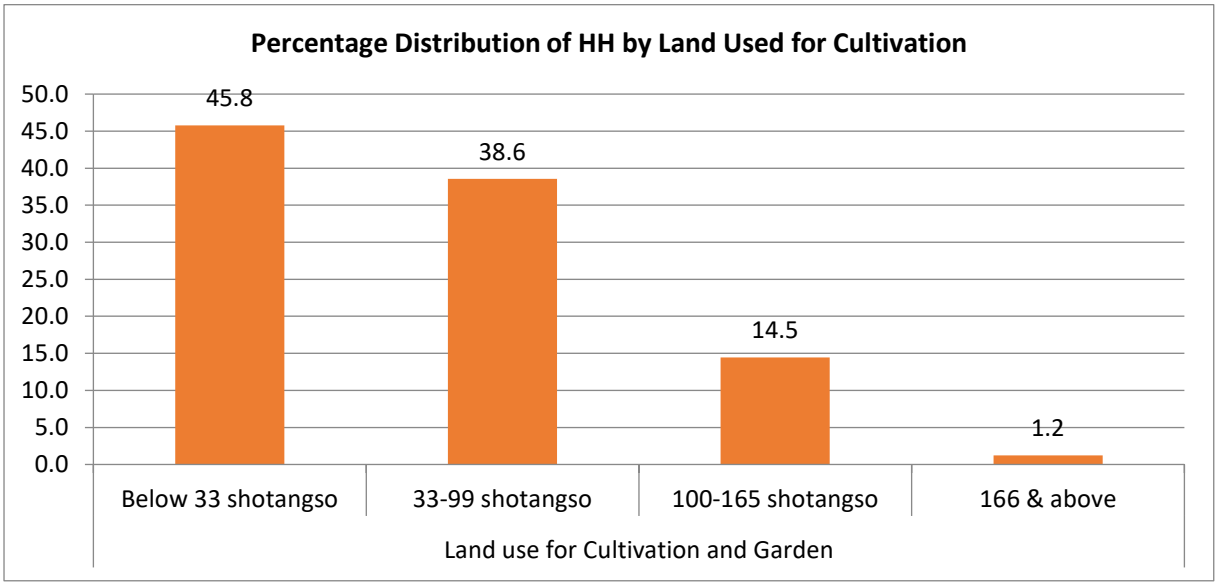
Source: Fieldwork in Sonarchar and Machpara

3.5.3. Land Used for Cultivation and Garden

The study reveals important insights into land utilization patterns among households. Notably, a significant portion, 45.8 percent, typically employs land areas below 33 decimals for cultivation and gardening purposes. Furthermore, 38.6 percent of households utilize land ranging from 33 to 99 decimals for these activities. In contrast, a smaller fraction, 14.5 percent, opts for land areas spanning from 100 to 165 decimals for cultivation and gardening. Intriguingly, only a mere 1.2 percent of households possess land exceeding 166 decimals designated for such agricultural and gardening pursuits.

This data underscores the diversity in landholding sizes and their allocation for cultivation and gardening within the under study population. It sheds light on the prevailing practices among households, which may have implications for agricultural productivity, resource management, and land-use policies.

Figure 3.9: HH by Land Used for Cultivation



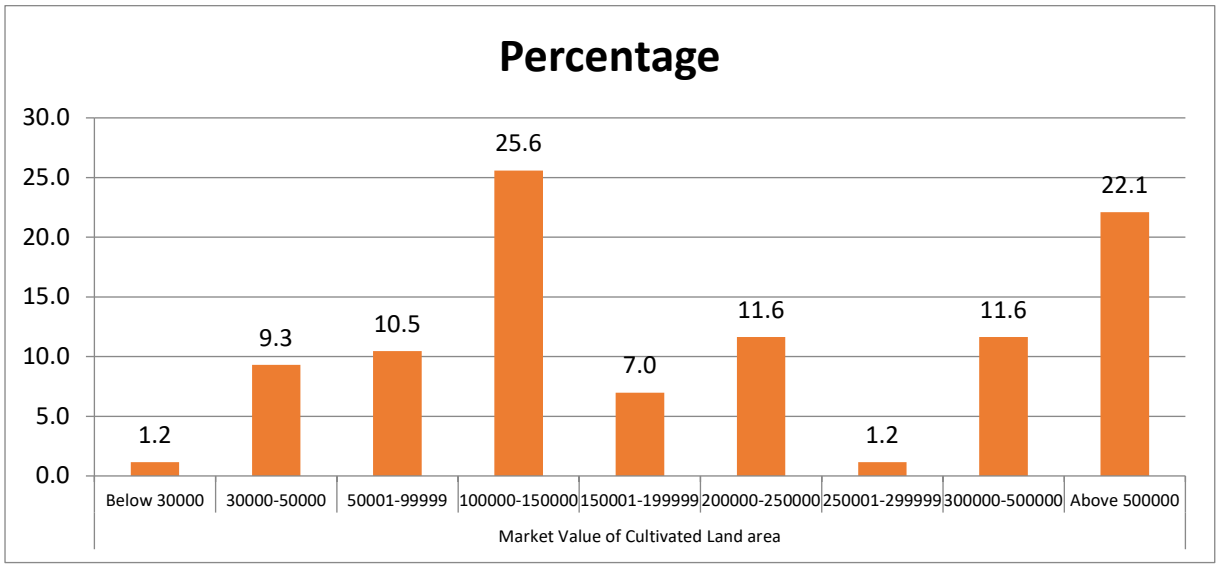
Source: Fieldwork in Sonarchar and Machpara

3.5.4. Land Under Cultivation

The presented data encompasses various facets of land utilization and valuation within households on Monpura Island. According to the graph, a significant majority, constituting 45.8 percent of households, predominantly cultivate and garden on land parcels below 33 decimals. Additionally, 38.6 percent of households manage agricultural activities on land holdings ranging from 33 to 99 decimals, while 14.5 percent utilize properties spanning 100 to 165 decimals for cultivation and gardening. Furthermore, an associated table illustrates the estimated land values, indicating that 25.6 percent of Monpura households possess land valued between 100,000 to 150,000 taka, with only 22.1 percent of households holding cultivated land valued above 500,000 taka. A notable 11.6 percent of households hold land valued between 200,000 to 250,000 taka, while an equivalent proportion, 11.6 percent, have land estimated between 300,000 to 500,000 taka. Additional data reveals that 10.5 percent of households hold land valued between 50,001 to 99,999 taka, and a minor fraction of 9.3 percent possess land with estimated values ranging from 30,000 to 50,000 taka.

These comprehensive insights into land utilization and valuation underscore the intricate relationship between land holdings and agricultural practices on sonarchar, offering a nuanced view of the island's economic landscape and the potential for targeted agricultural development initiatives. One noteworthy observation from the data is the contrast between the highest and lowest land values. While 22.1 percent of households possess cultivated land valued above 500,000 taka, a significant portion of 9.3 percent holds land with estimated values as low as 30,000 to 50,000 taka. This variation in land values suggests a considerable disparity in the economic resources and agricultural potential among households on Monpura Island.

Figure 3.10: Percentage of Cultivated Land

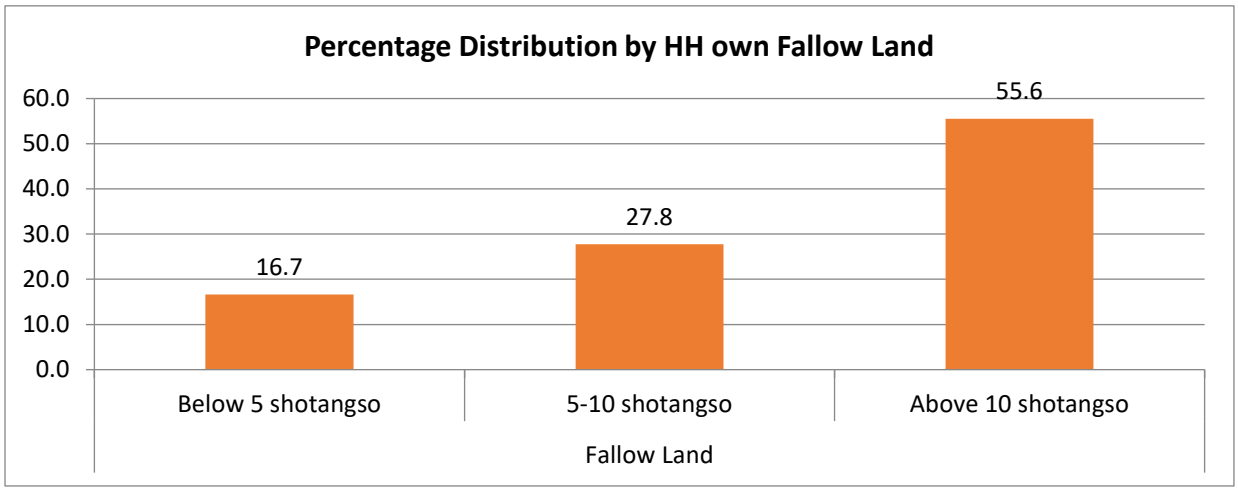


Source: Fieldwork in Sonarchar and Machpara

3.5.6. Current Property Owned Fallow Land

The empirical data derived from the field census reveals distinct patterns of fallow land ownership among households on Monpura Island's Sonarchar. Specifically, 55.6 percent of households typically possess fallow land exceeding 10 decimals in size, signifying a substantial proportion engaged in land conservation practices. Additionally, 27.8 percent of households maintain fallow land parcels ranging from 5 to 10 decimals, while 16.7 percent of households manage fallow land holdings below 5 decimals. This diversified ownership of fallow land highlights varying land utilization strategies and potentially underscores the island's agricultural diversity and resource allocation for future cultivation. It also suggests a range of factors influencing land management decisions, including economic considerations and environmental conservation practices.

Figure 3.11: HH own Fallow Land.

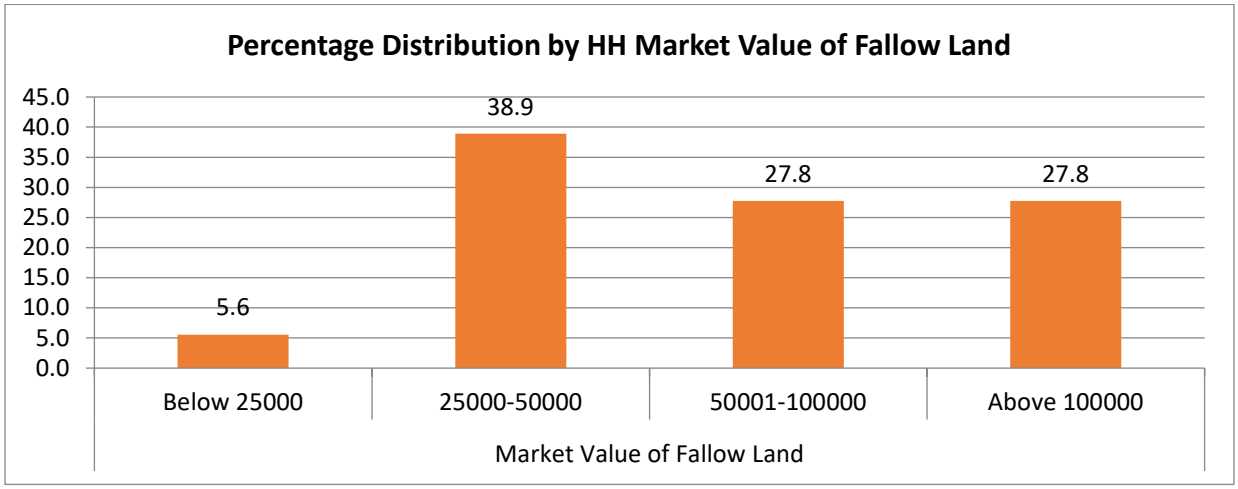


Source: Fieldwork in Sonarchar and Machpara

3.5.7. Estimated Market Value of Total Fallow Land

Examination of field data reveals distinct patterns in the estimated values of fallow land held by households on Monpura Island. Notably, 38.9 percent of households maintain fallow land valued between 25,000 to 50,000 taka, indicating a substantial proportion with land holdings in this mid-range value category. Conversely, 27.8 percent of households possess fallow land valued between 50,001 to 100,000 taka. An equivalent percentage, also at 27.8 percent, owns fallow land with estimated values exceeding 100,000 taka, signifying a significant presence of higher-value land parcels. Additionally, a smaller fraction, constituting 5.6 percent of households, manages fallow land valued at less than 25,000 taka. These varying estimates of fallow land values highlight the diverse economic and agricultural landscapes within the community, potentially reflecting disparities in land resources and resource allocation for future cultivation.

Figure 3.12: HH Market Value of Fallow Land



Source: Fieldwork in Sonarchar and Machpara

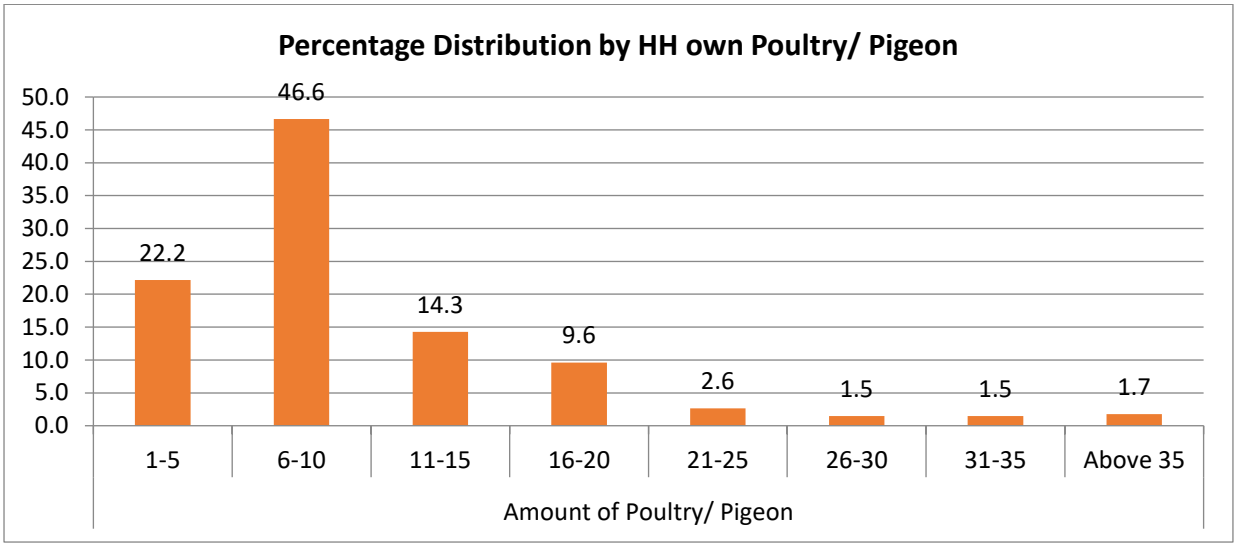
3.6. INFORMATION ON AGRICULTURE, FARMING AND FISHING

3.6.1. Number of Poultry and Pigeon

The findings from the field study report provide comprehensive insights into poultry and pigeon ownership patterns among households on Monpura Island. Notably, a substantial portion of 46.6 percent of households maintains poultry and pigeon populations ranging from 6 to 10 in number. Conversely, a minimal fraction of 1.5 percent of households possesses larger poultry and pigeon populations, specifically between 26 to 30 and 31 to 35 in number. Additionally, a small percentage of 1.7 percent of households manage poultry and pigeon populations exceeding 35. In contrast, 22.2 percent of households have more modest poultry and pigeon holdings, with populations ranging from 1 to 5. The data also reveals that 14.3 percent of households maintain populations of 11 to 15 poultry and pigeon, while 9.6 percent of households have populations of 16 to 20. This variation in poultry and pigeon ownership underscores the diversity in agricultural

practices and resource allocation within the community, reflecting both economic considerations and the varying roles of poultry and pigeon in household livelihoods. Notably, the presence of households with substantial poultry and pigeon populations alongside those with smaller numbers highlights the range of economic capacities and agricultural strategies on the island.

Figure 3.13: by HH own Poultry/ Pigeon

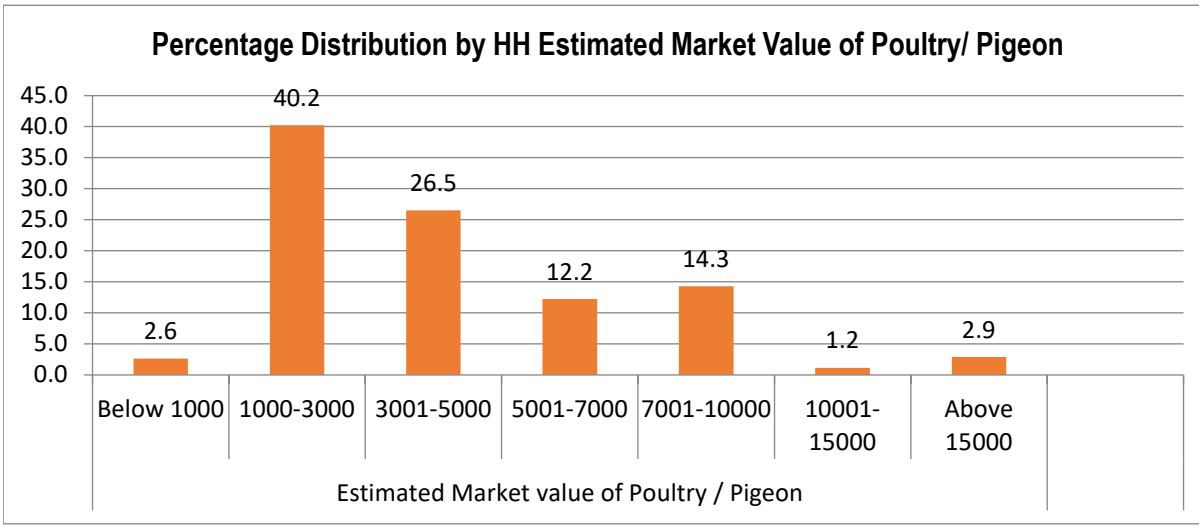


Source: Fieldwork in Sonarchar and Machpara

3.6.2. Estimated Market Value of Poultry/ Pigeon

Examining poultry and pigeon holdings on Monpura Island, the data reveals a wide range of estimated market values. Notably, 40.2 percent of households possess poultry and pigeon valued

Figure 3.14: HH Estimated Market Value of Poultry/ Pigeon



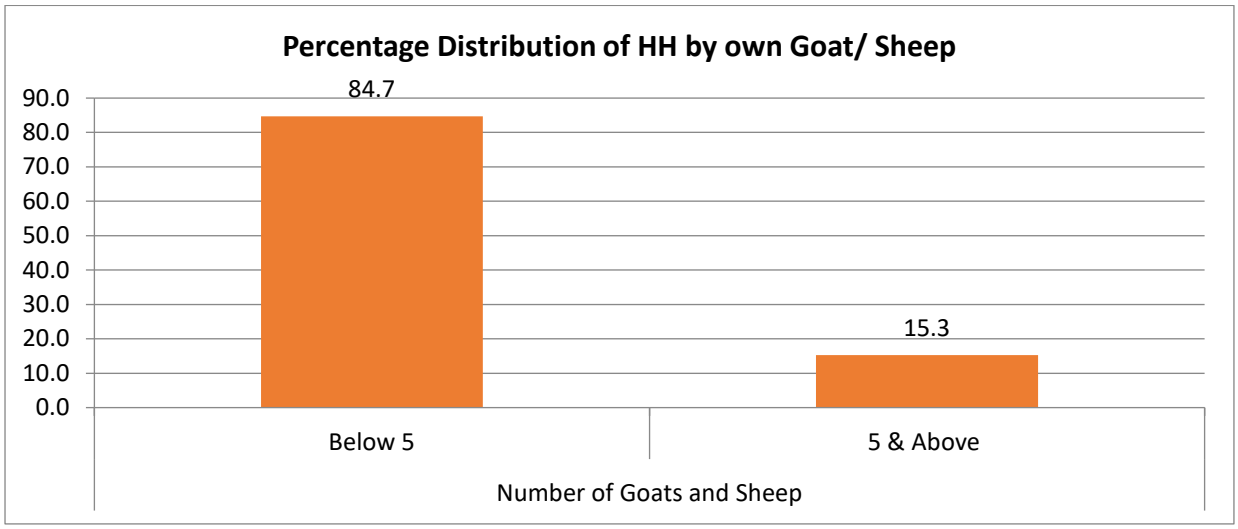
Source: Fieldwork in Sonarchar and Machpara

between 1,000 to 3,000 taka, representing a significant majority. In contrast, a smaller proportion of 1.2 percent of households own poultry and pigeon with higher estimated market values falling between 10,001 to 15,000 taka. This variation in poultry and pigeon values underscores the diverse economic capacities within the community, with some households maintaining considerably higher-valued poultry and pigeon populations alongside those with more modest valuations.

3.6.3. Number of Goat/ Sheep Own by Household

The field study report indicates that 84.7 percent of households possess fewer than 5 goats and sheep, while 15.3 percent of households own more than 5 goats and sheep.

Figure 3.15: HH by own Goat/ Sheep



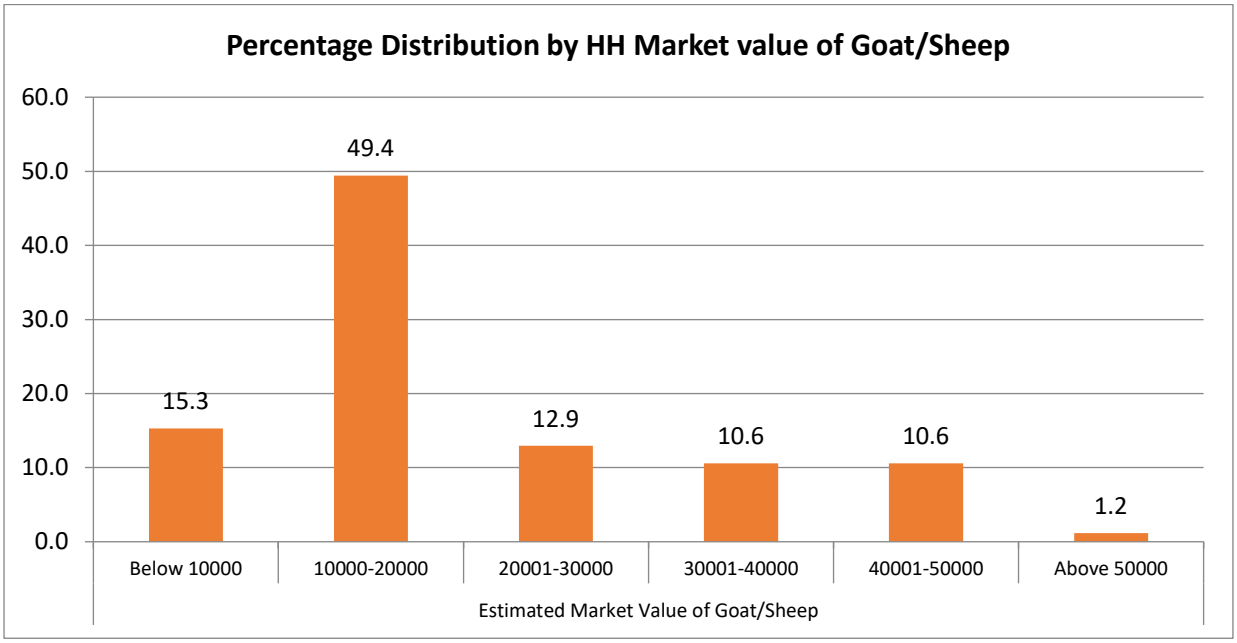
Source: Fieldwork in Sonarchar and Machpara

3.6.4. Estimated Market Value of Goat/ Sheep Owned by Household

The report reveals that 49.4 percent of households own goats and sheep with an estimated market value ranging from 10,000 to 20,000 taka, signifying a significant majority within this valuation category. In contrast, a mere 1.2 percent of households possess goats and sheep valued above 50,000 takas, representing a small fraction with considerably higher-valued livestock. Additionally, 12.9 percent of households maintain goats and sheep with estimated market values between 20,001 to 30,000 takas, while 10.6 percent own livestock valued between 30,001 to 40,000 takas, and another 10.6 percent own livestock valued between 40,001 to 50,000 takas. Remarkably, 15.3 percent of households possess goats and sheep with estimated market values falling below 10,000 takas. This data underscores the substantial variation in the market values of goats and sheep, reflecting diverse economic capacities and resource allocation strategies within the community. Notably, the presence of households with

goats and sheep valued significantly higher than the majority highlights the range of economic disparities and livestock management practices on the island.

Figure 3.16: by HH Market value of Goat/Sheep



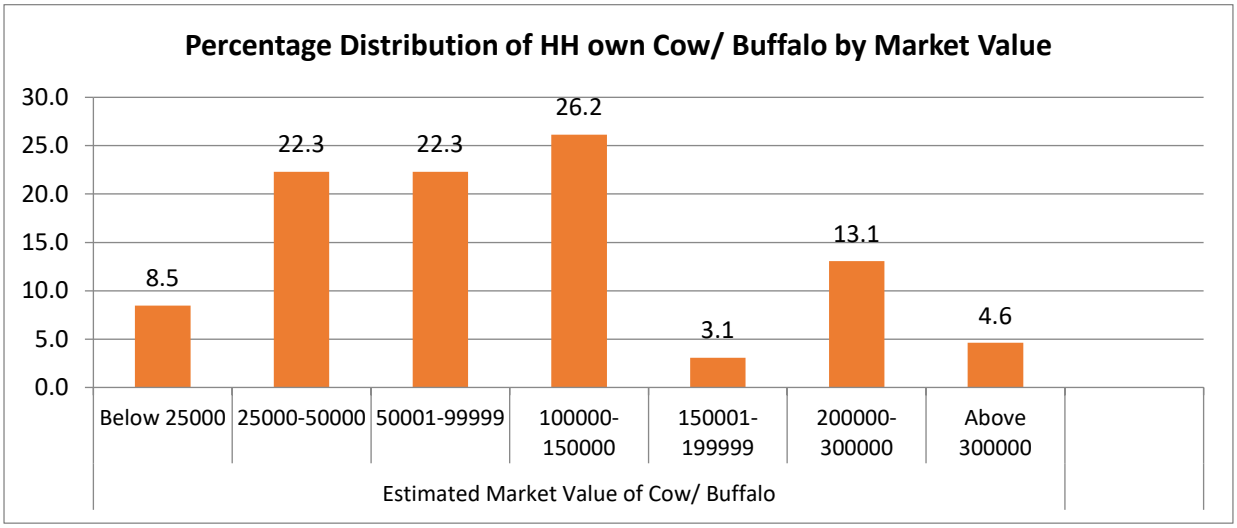
Source: Fieldwork in Sonarchar and Machpara

3.6.5. Estimated Market Value of Cow/ Buffalo

The data on the estimated market values of cows and buffaloes reflects a significant economic disparity within the community on Monpura Island. While a substantial portion of households possess livestock valued between 100,000 to 150,000 taka, indicating a moderate valuation category, there is a notable presence of households (3.1 percent) with considerably higher-valued cows or buffaloes ranging between 150,001 to 199,999 taka. Conversely, 8.5 percent of households own livestock valued below 25,000 taka, representing a lower economic stratum.

This disparity in livestock values could be attributed to factors such as variations in livestock quality, age, breed, and health, as well as differences in the intended use of the animals. The presence of households with livestock valued significantly higher than the majority highlights the diverse roles and economic significance of cows and buffaloes within the community, ranging from subsistence farming to potential income generation through sales. This insight underscores the need for tailored agricultural interventions and support mechanisms to address the varying economic capacities and livestock management practices among households.

Figure 3.17: HH own Cow/ Buffalo by Market Value

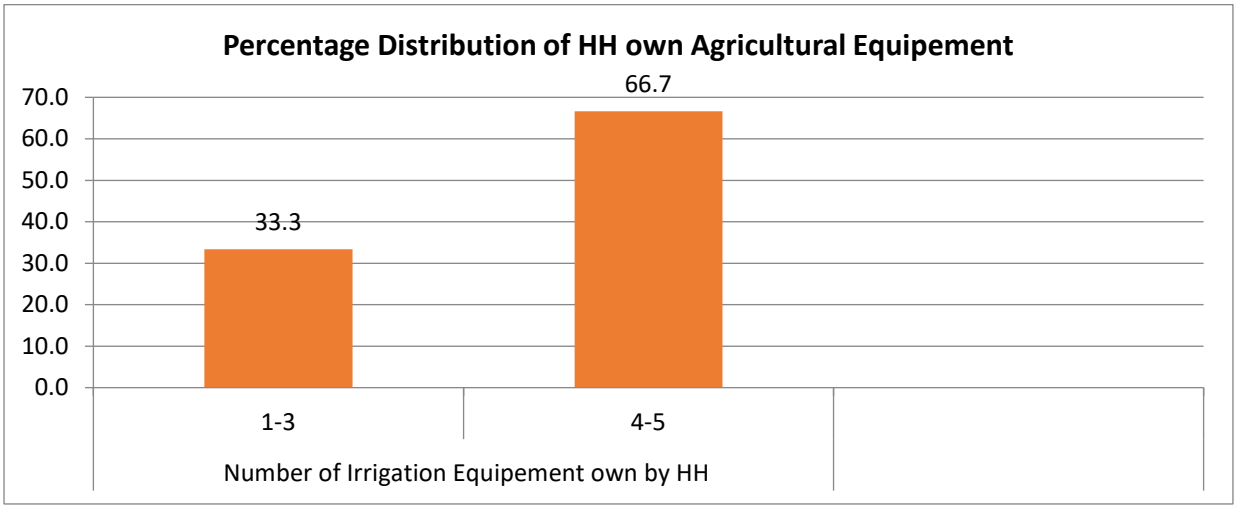


Source: Fieldwork in Sonarchar and Machpara

3.6.6. Number of Agricultural Equipment Own by HH

The major portion of Monpura Islanders relies on fishing and agriculture. The present occupation category display that some portion rely on other works. Every household has agricultural and fishing equipment's. The field data indicates that 66.7 percent household has 4 to 5 equipment.

Figure 3.18: HH Own Agricultural Equipment



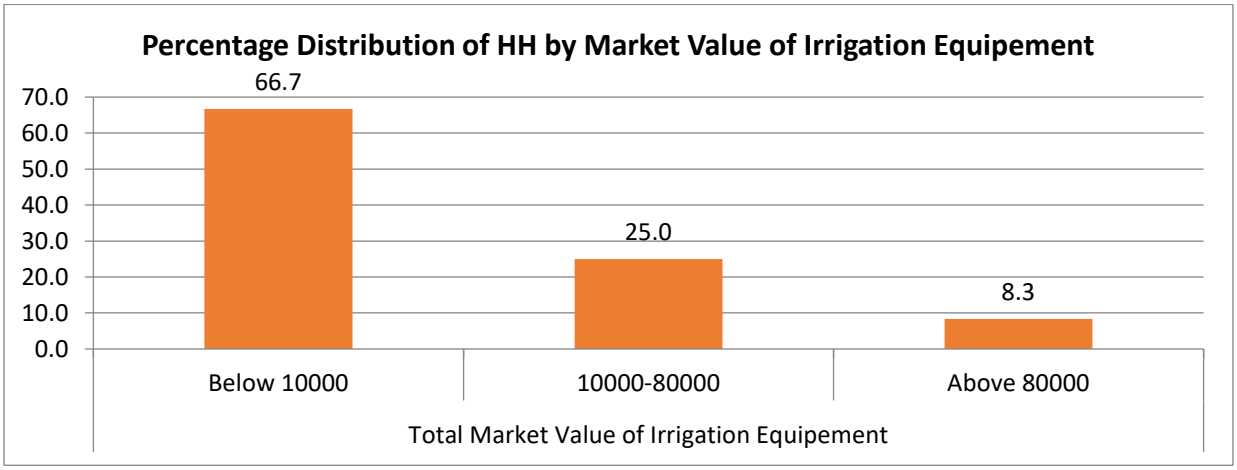
Source: Fieldwork in Sonarchar and Machpara

3.6.7. Estimated Market Value of Agricultural Equipment

The report shows that 26.2 percent households possess cow/buffalo that estimated market value is between 100000-150000 taka where only 3.1 percent households possess cow/buffalo that estimated market value is between 150001-199999 taka. Another 22.3 percent household possess cow/buffalo that estimated market value is between 50001 to 99999 taka where 22.3

percent households possess cow/buffalo that estimated market value is between 25000-50000 taka and 8.5 percent households possess cow/buffalo that estimated market value is below 25000 taka. 13.1 percent households possess cow/buffalo that estimated market value is between 200000-300000 taka

Figure 3.19: HH by Market Value of Irrigation Equipment

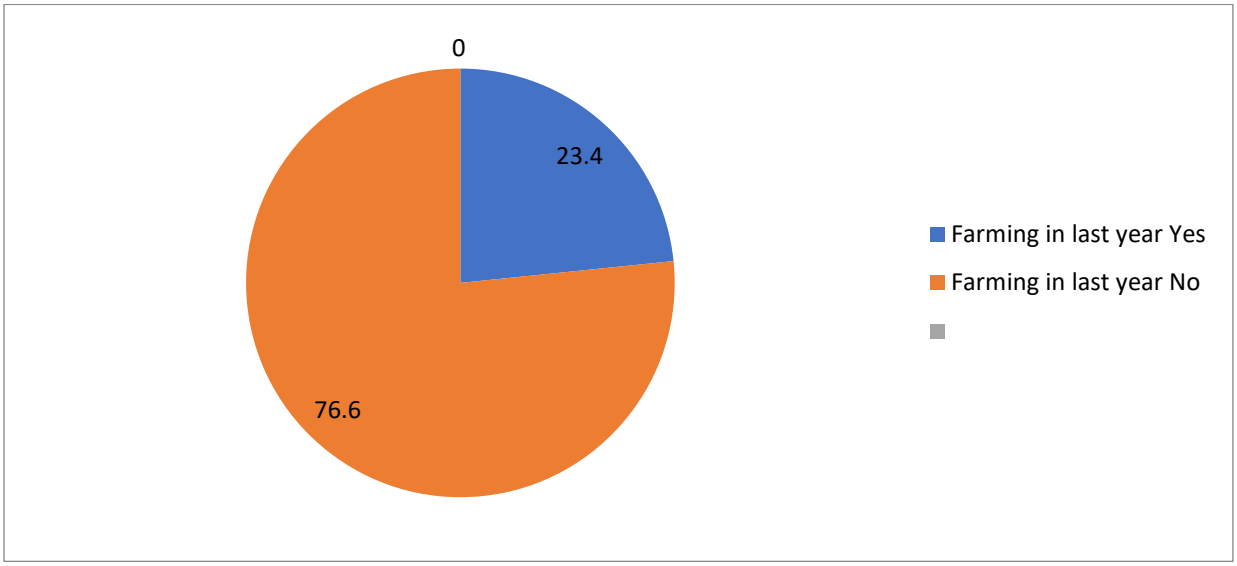


Source: Fieldwork in Sonarchar and Machpara

3.6.8. Farming in Last Year

The study shows that 76.6 percent Household did not cultivate in last year where where 23.4 percent household did not cultivate in last year (fieldwork 2017).

Figure 3.20: Farming in Last Year

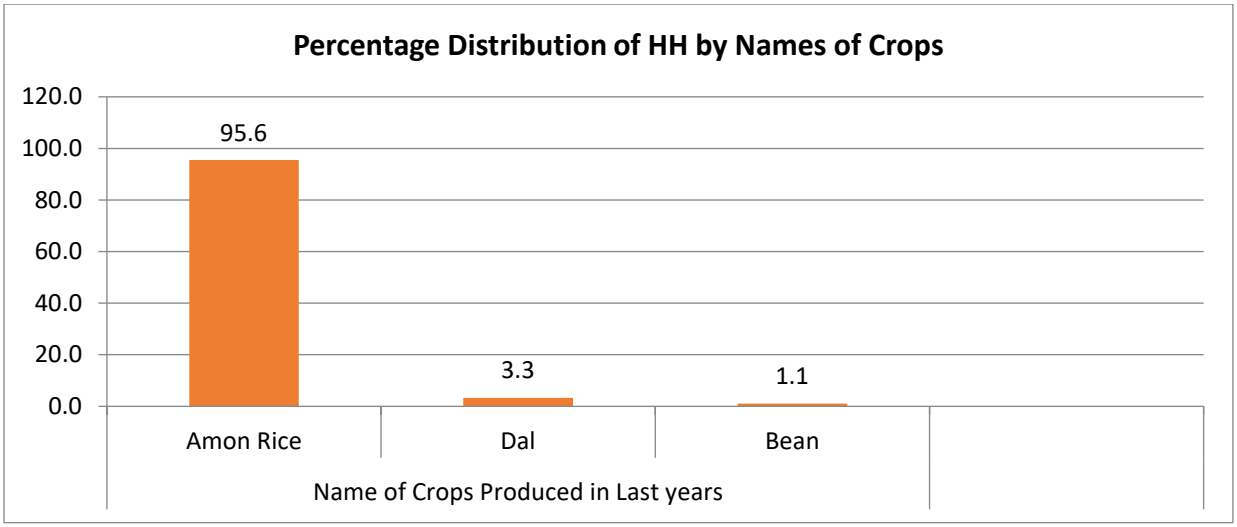


Source: Fieldwork in Sonarchar and Machpara

2.6.9. Name of Crops Farming in Last Year

The census report shows that 95.6 percent Household cultivated *Aman* rice in last year where 3.3 percent household cultivated *dal* in last year. Minimal portion (1.1 percent) cultivated bean in last year.

Figure 3.21: HH by Names of Crops



Source: Fieldwork in Sonarchar and Machpara

3.6.10. Farming Tools Used to Cultivation

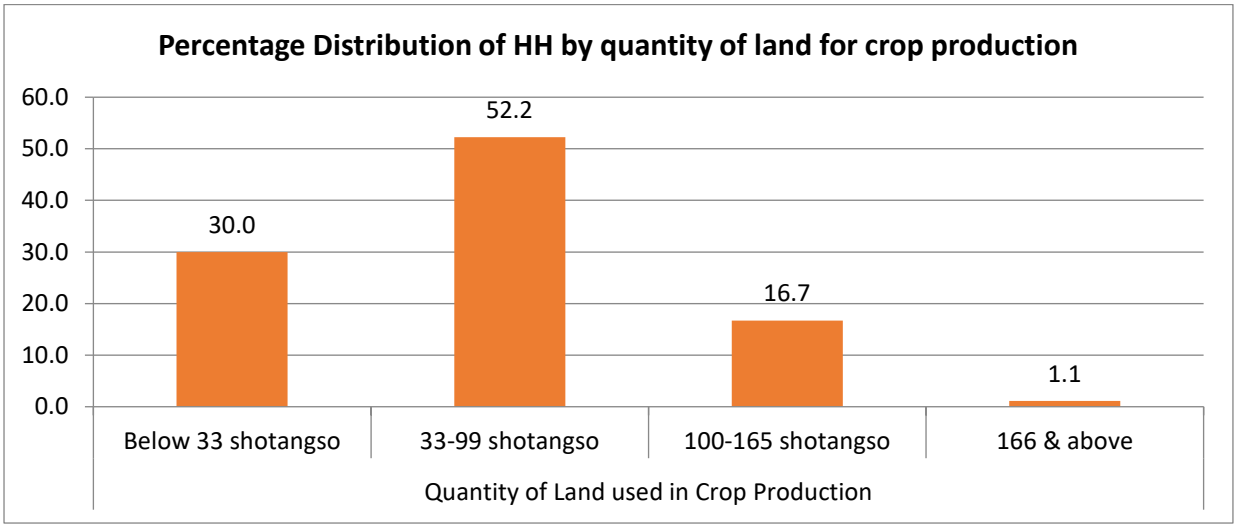
For Agricultural crop production of Monpura's Island, Farmer use local farming tools, in their own way. They use local plug (made by wood) and yoke (made by wood\bamboo) with the help of cow or buffaloes. It has also they have use a big sticks (made by wood for controlling cattle on the yoke), spade, mougetupi (a cap made by fatty cloth which can make a shade of savings farmers from sunshine and rain), *kaystah* (made by iron, use for cutting paddy), *dau* (made by iron, use for cutting jute, vegetable, etc), teen konahaat pump (made by *tin* used for irrigation), tepa machine etc. In the Boro and Rabi season farmers use pond water for the irrigation purposes of winter-based crop cultivation. For the availability of silt, most of the land of Monpura's Island are fertile. Cow dung and compost are used as indigenous fertilizer for crop cultivation in Monpura's Island. But the large farmers of Monpura have access to modern technologies like tractor for agricultural purposes.

3.6.11. Quantity of Land Used for Crops Production in Last Year

The study shows that 52.2 percent Household used 33 to 99 decimal lands for crop cultivation where 30 percent household used below 33 decimals for crop cultivation last year. A

mentionable portion (16.7 percent) household used 100 to 165 decimals for crop cultivation last year. Only 1.1 percent household used above 166 decimal land for crop cultivation last year.

Figure 3.22: HH by quantity of land for crop production

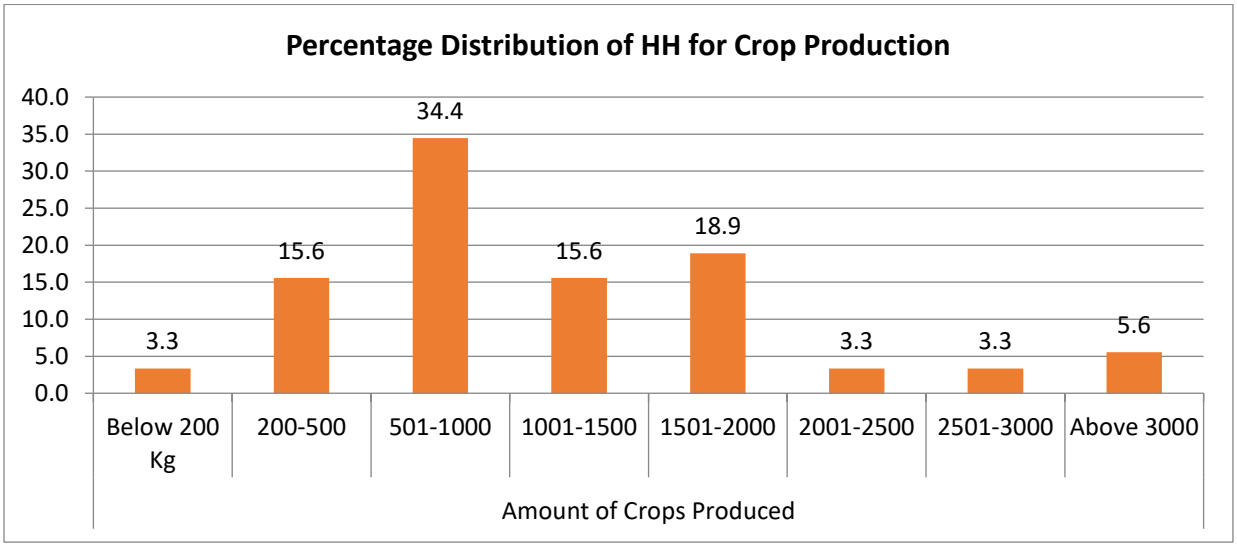


Source: Fieldwork in Sonarchar and Machpara

3.6.12. Amount of Crop Production

The study shows that 34.4 percent Household produced between 501-1000 kg crop last year where 3.3 percent Household produced below 200 kg crop. Another 15.6 percent Household produced between 200-500 kg crop, 15.6 percent Household produced between 1001-1500 kg crop, 3.3 percent Household produced between 2001-2500 kg crop and between 2501-3000 kg crop respectively. Only 15.6 percent Household produced between above 3000 kg crop.

Figure 3.23: HH for Crop Production

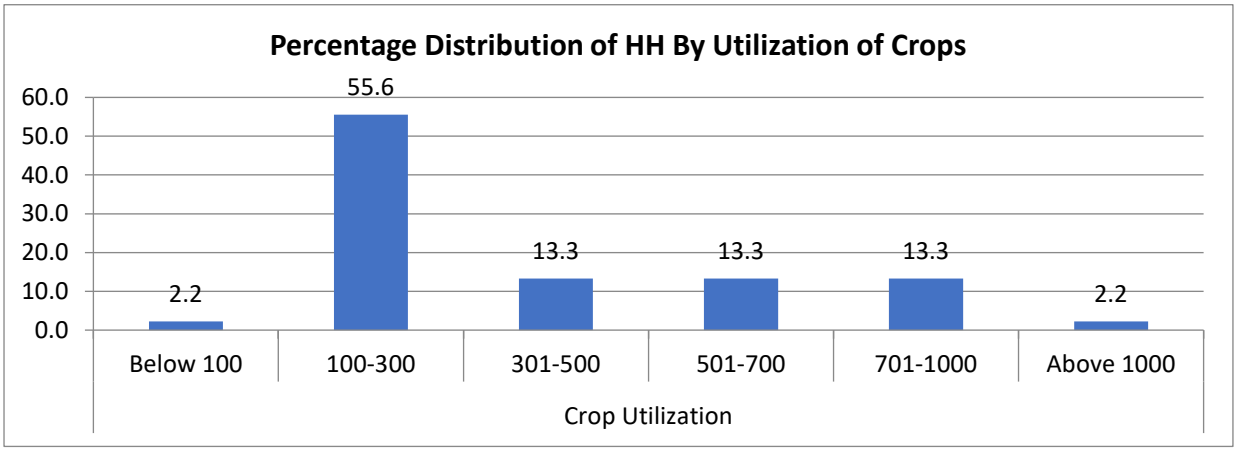


Source: Fieldwork in Sonarchar and Machpara

3.6.13. Amount of Crop Utilization

The study shows that 55.6 percent Household utilized between 100-300 kg crop last year where 13.3 percent Household utilized between 301-500 kg crop, 13.3 percent Household utilized between 501-700 kg crop, 13.3 percent Household utilized between 701-1000 kg crop last year. Only 2.2 percent Household utilized above 1000 kg crops last year.

Figure 3.24: HH By Utilization of Crops

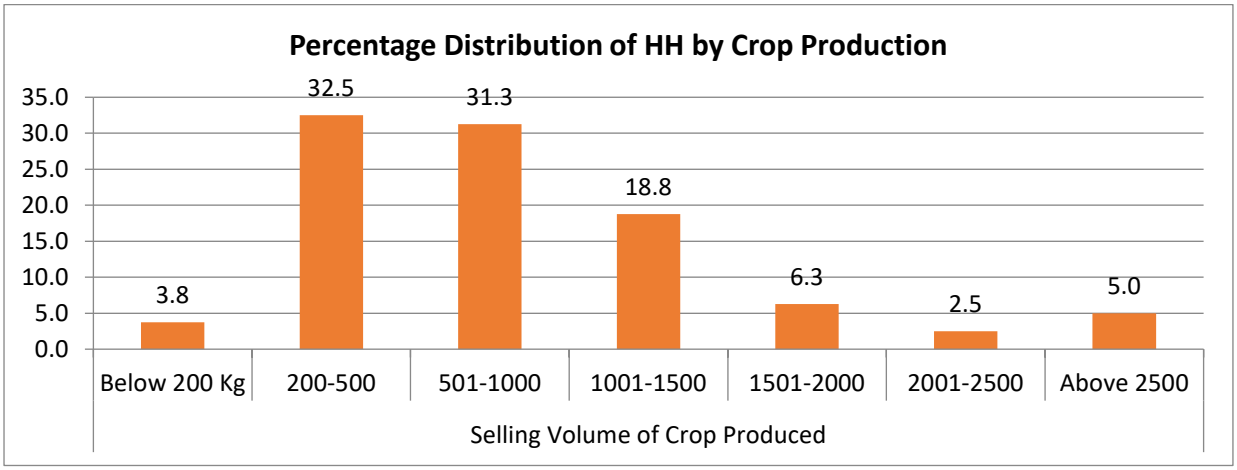


Source: Fieldwork in Sonarchar and Machpara

3.6.14. Selling Amount of Crop Produced

The study shows that 32.5 percent Household sold between 200-500 kg from crop produced last year, 31.3 percent Household sold between 501-1000 kg, 18.8 percent Household sold between 1001-1500 kg,6.3 percent Household sold between 1501-2000 kg,2.5 percent Household sold between 2001-2500 kg. Another 5.5 percent Household sold above above2500 kg crops produced in last year.

Figure 3.25: HH by Crop Production

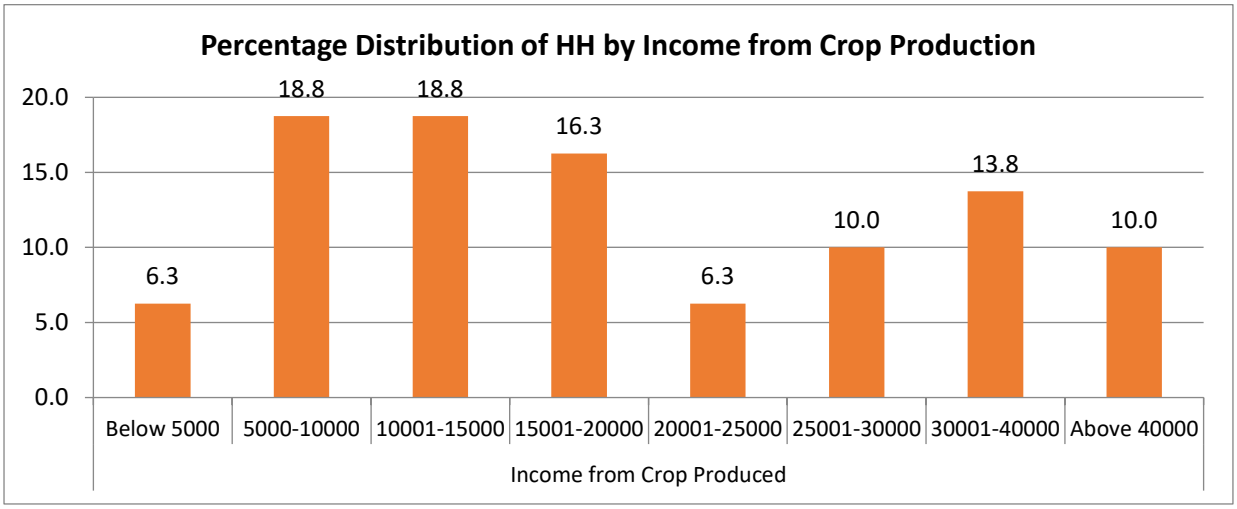


Source: Fieldwork in Sonarchar and Machpara

3.6.15. Income From Selling of Crop Produced

The study shows that18.8 percent household earned between5000-1000-taka, 18.8 percent household earned between10001-15000-taka,16.3 percent household earned between15001-20000-taka, 13.8 percent household earned between30001-40000-taka, 10 percent household earned between 25001-30000 taka and 10 percent household earned above 40000taka in last year from crop selling. Only 6.3 percent household earned between20001-25000-taka last year.

Figure 3.26: HH by Income from Crop Production

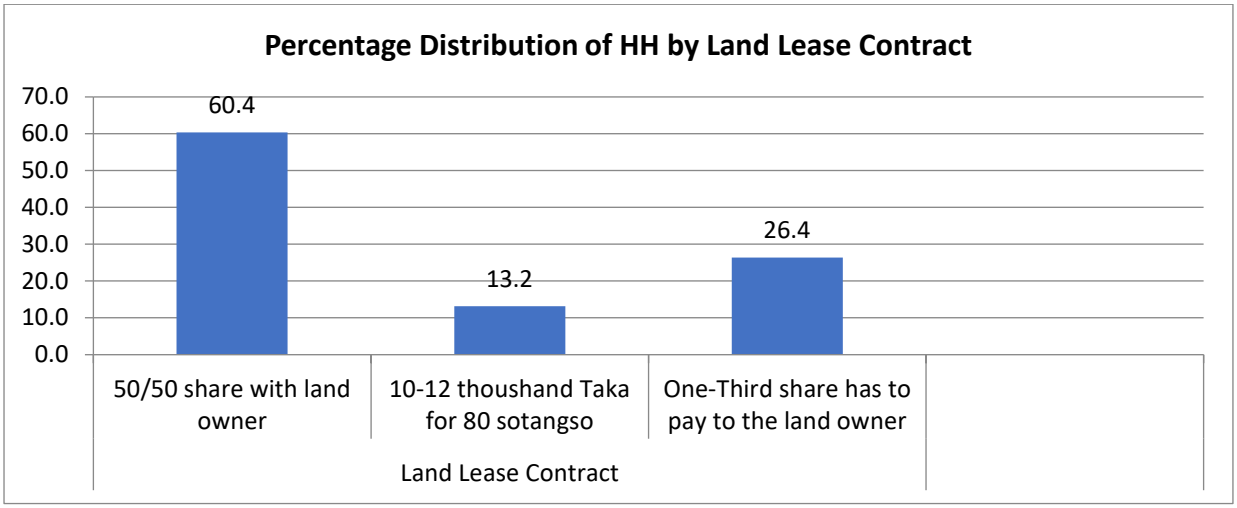


Source: Fieldwork in Sonarchar and Machpara

3.6.16. Land Lease Contract

The study shows that 60.4 percent household cultivated in leased land fifty fifty share with land owner where 26.4 percent household cultivated in leased land one third share with land owner. Another 13.2 percent household cultivated in contract land paying by 10-12 thousand takas for 80 decimals.

Figure 3.27: HH by Land Lease Contract



Source: Fieldwork in Sonarchar and Machpara

3.7. AGRICULTURE AND FISHING

3.7.1. Seasonal Crop Calendar

Following a calendar for chronological annuals activities of production technology with respect to crop, land preparation, fertilization, sowing/planting, weeding, irrigation/drainage, disease/insect killing for pest control, harvesting, etc has done properly is known as crop calendar (Banglapedia, 2008). Climate change leads to environmental impact such as sea surface warming, natural distance and disruptions in rain pattern. For the cause of climate change; the crop production has been hampered now-a-days. Four seasons have been identified in Saint Marti's Island; which can plays an important role for crop production; which are as follows;

Table 3.2: Crop Calendar in Monpura Island.

Bengali Month Calculated into English months following Crop Calendar in Monpura Island.			
SL.NO.	Name of the Season	Bengali Month	Calculated in English Month
(i).	Summer	Baishakh	April- May
		Jaistha	May-June
		Falgun	February-March
		Chaittro	March-April
(ii)	Rainy	Ashar	June-July
		Shravan	July-August
		Bhadra	August-September
(iii)	Autumn	Ashwin	September- October
		Kartik	October- November
		Agrahayan	November- December
(Iv)	Winter	Phawsh	December- January
		Magh	January- February
Source: Fieldwork in Sonarchar and Machpara			

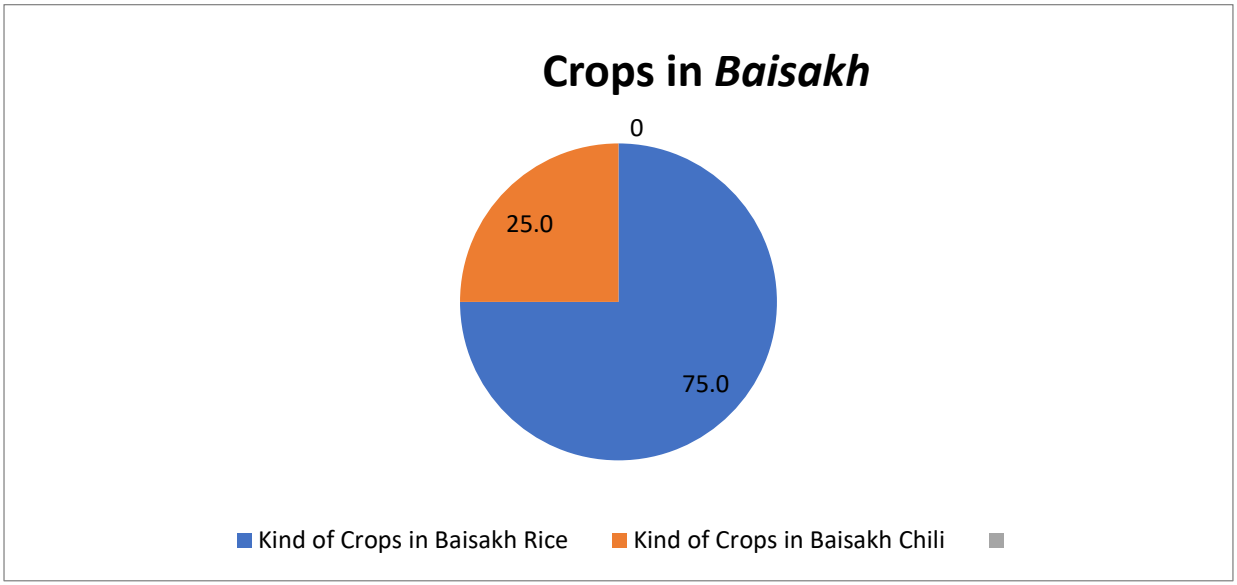
Table-3.3: Seasonal Crop Calendar of Monpura's Island

Season	Month (Bengali & English)	Name of Planting Crops	Name of Harvesting Crops
Summer	Ben: Baishakh Eng: April-May	Red leaves, Vegetable, Puisak, Papaya, Jute, Seeds of *Aman* Paddy, etc.	IRRI: BR-26, BR-28, and BR-29, Ground nuts, Onion, Garlic, Potato, Sweet Potato, Various Vegetables, etc.
	Ben: Jaistha Eng: May-June	Papaya, Puishak, Coconut Tree, etc.	IRRI: BR-26, BR-28, and BR-29.

	Ben: Falgun Eng: February-March	*Boro*Paddy, Various Vegetable, etc	Mustard, Maize, Palangk Shak, Various Vegetable, etc.
	Ben: Chaitro Eng: March- April	Coconut, Betel nut, etc.	Mustard, Maize, Various Vegetable, Sweet Potato
Rainy	Ben: Ashar Eng: June- Julay	*Aman* Paddy, others paddy, etc.	Jute.
	Ben: Shravan Eng: July- August	IRRI: BR-26 BR-26, BR-28, and BR-29, etc.	*Aman* Paddy, Jute, etc.
	Ben: Bhadra Eng: August- September	Nut, Mustard, Chili, Radish, Brinjal, etc	*Aman* Paddy, Jute, etc.
Autumn	Ben: Ashwin Eng: September-October	Chili, Tomato, Brinjal, Radish, Carrot, Cabbage, Beans, Onion, Garlic, Potato.	*Aman* Paddy, Jute, Coconut, Betel nut, etc.
	Ben: Kartick Eng: October- November	Seeds of Onion, Garlic, Chili, Potato, Tomato, Brinjal, Radish, Carrot, Cabbage, Beans, Sweet potato, Mustard, Maize, Oil Seeds, etc.	IRRI: BR-26, BR-28, and BR-29, Coconut, Betel nut, Tomato, Brinjal, Radish, etc
	Ben: Agrahayan Eng: November-December	Onion, Garlic, Chili, Potato, Tomato, Radish, Carrot, Cabbage, Beans, Sweet potato, Mustard, Maize, Oil Seeds, etc.	Chili, Tomato, Radish, Carrot, Cabbage, Beans, Onion, Garlic, Potato, Sweet Potato, Coconut, Betel Nut, etc.
Winter	Ben: Phawsh English: December-January	Red Leaves Vegetables, Wheat, Maize, Palangk Shak, Various Vegetables, etc.	Onion, Garlic, Chili, Potato, Tomato, Radish, Carrot, Cabbage, Beans, Sweet Potato, Mustard, Maize, Different Vegetables, Coconut, Betel Nut.
	Ben: Magh Eng: January- February	Boro Paddy, BR-26,28,29	Onion, Garlic, Chili, Potato, Tomato, Radish, Carrot, Cabbage, Beans, Mustard, Maize, Vegetables, Coconut, Betel Nut, Various Vegetables, etc.
Source: Fieldwork in Sonarchar and Machpara			

The study shows that 24.5 percent household produced chili in *Baisakh* month where 75 percent household usually produce rice in *baisakh* month.

Figure 3.28: Crops in *Baisakh*

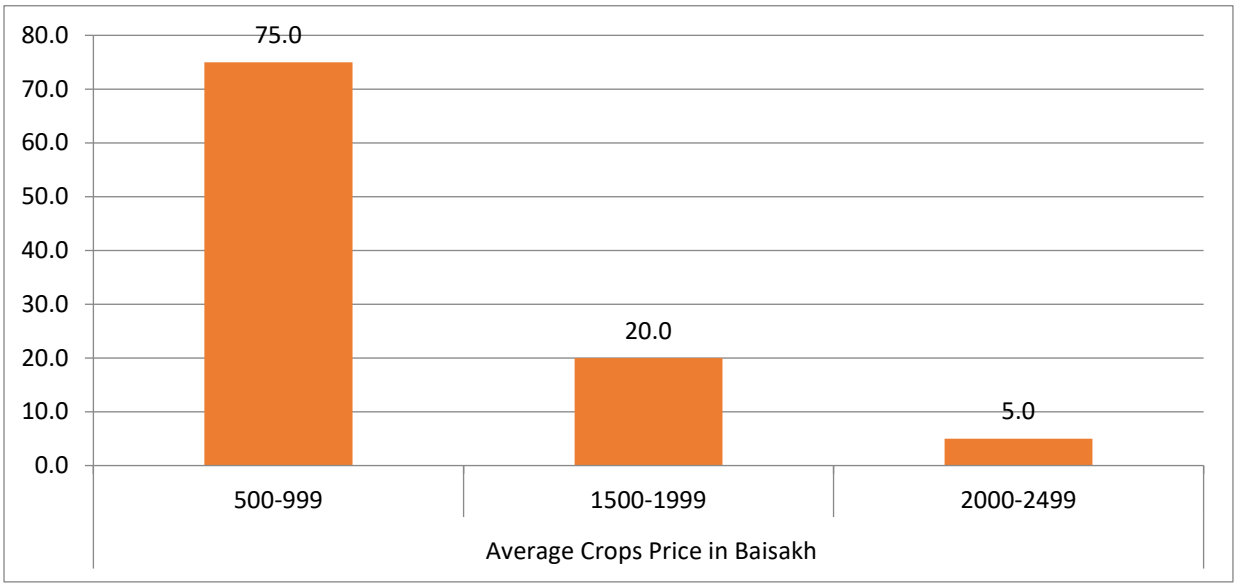


Source: Fieldwork in Sonarchar and Machpara

3.7.2. Average Crops Production in *Baisakh*

The census report shows that 75 percent household produce average 500-999 kg crops in *baisakh* where 20 percent household produce average 1500-9999 kg crops in *baisakh* and 5 percent household produce average 2000-2499 kg crops in *baisakh*

Figure 3.29: Percentage of Crops Price

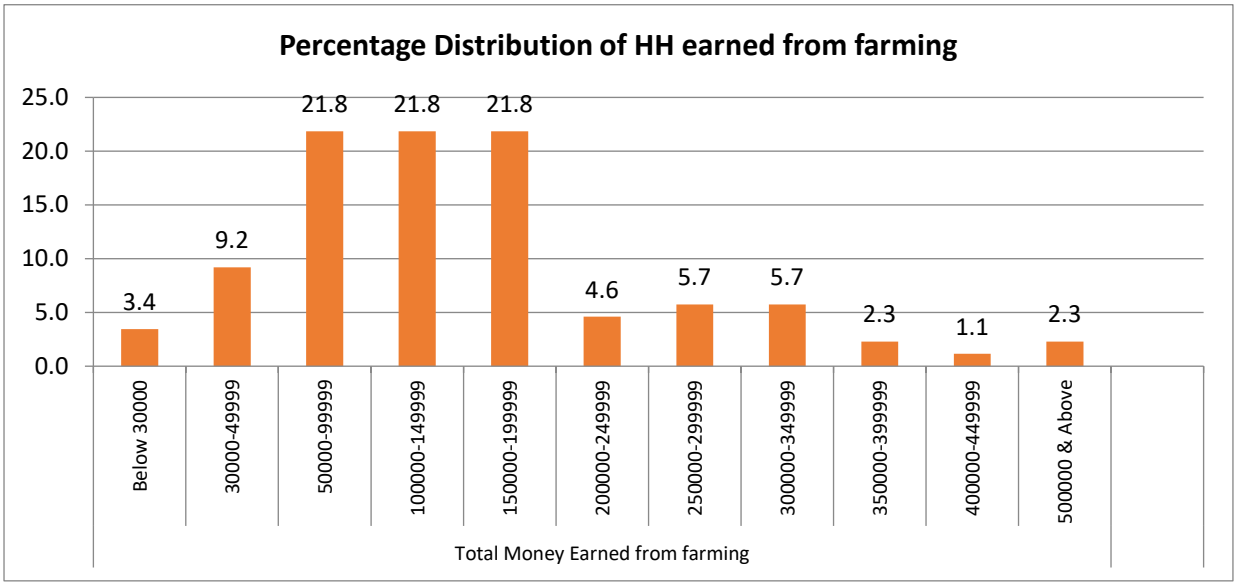


Source: Fieldwork in Sonarchar and Machpara

3.7.3. Earning From Farming in Last Three Years

The study shows that 21.8 percent household earned between 50000-9999 takas, 21.8 percent household earned between 100001-149999 taka, again 21.8 percent household earned between 15000-199999 taka from farming in last year. Only 2.3 percent household earned more than 500000 takas from farming in last year.

Figure 3.30: HH earned from farming

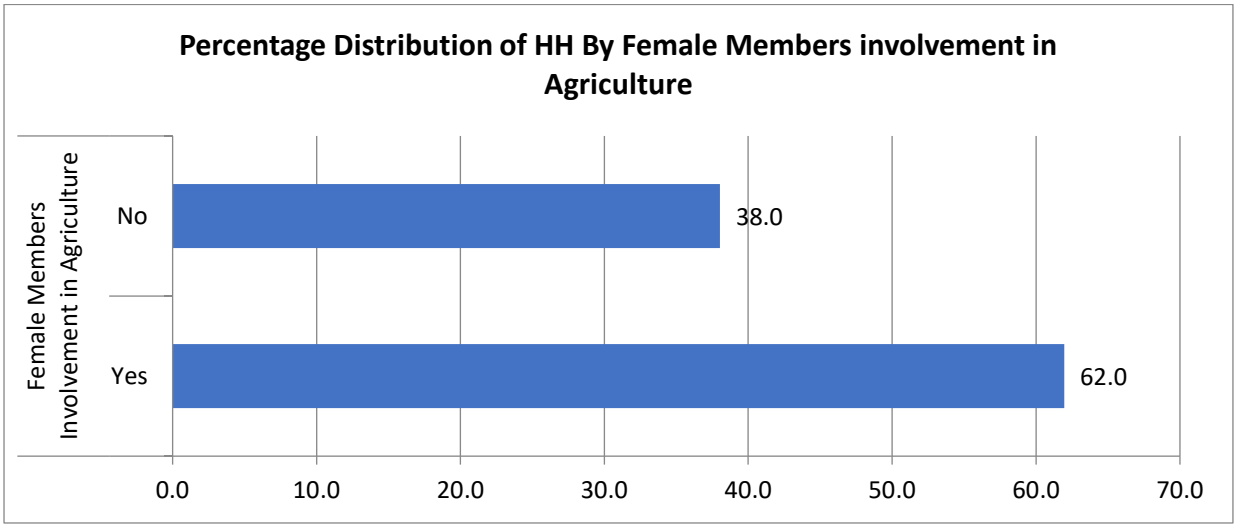


Source: Fieldwork in Sonarchar and Machpara

3.7.4. Female Members Involvement in Sonarchar

The study shows that 62 percent female members of household participate in agricultural activities.

Figure 3.31: HH By Female Members involvement in Agriculture

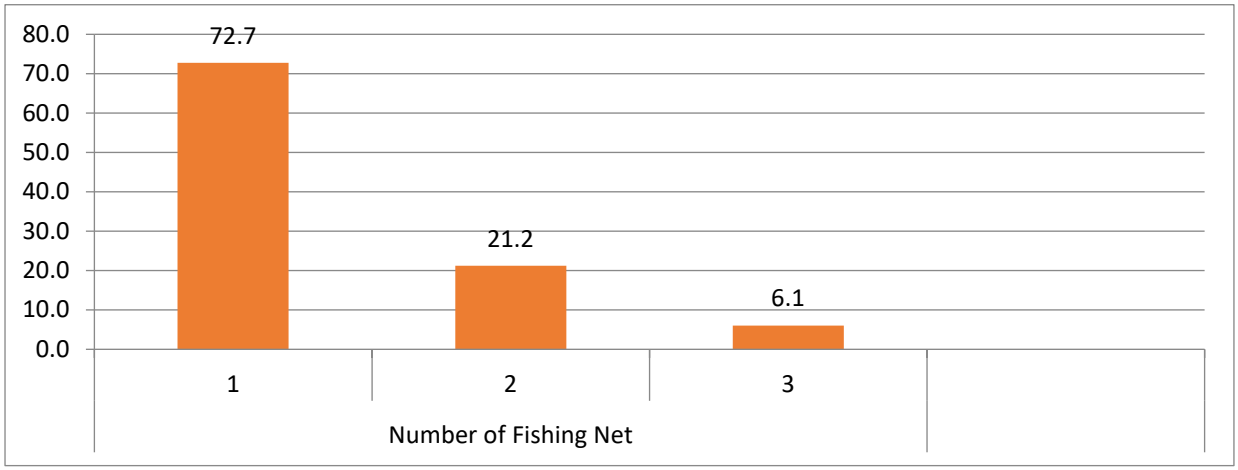


Source: Fieldwork in Sonarchar and Machpara

3.7.5. Number of Fishing Net Own by HH

Most of the people of Monpura are engaged in fishing occupation. The following graph shows that 72.7 percent respondent households of Machpara possess at least 1 fishing net and 21.2 percent respondent households possess at least 2 fishing net. Only 6.1 percent respondent households possess at least 3 fishing net.

Figure 3.32: HH by Number of Fishing Net Own



Source: Fieldwork in Sonarchar and Machpara

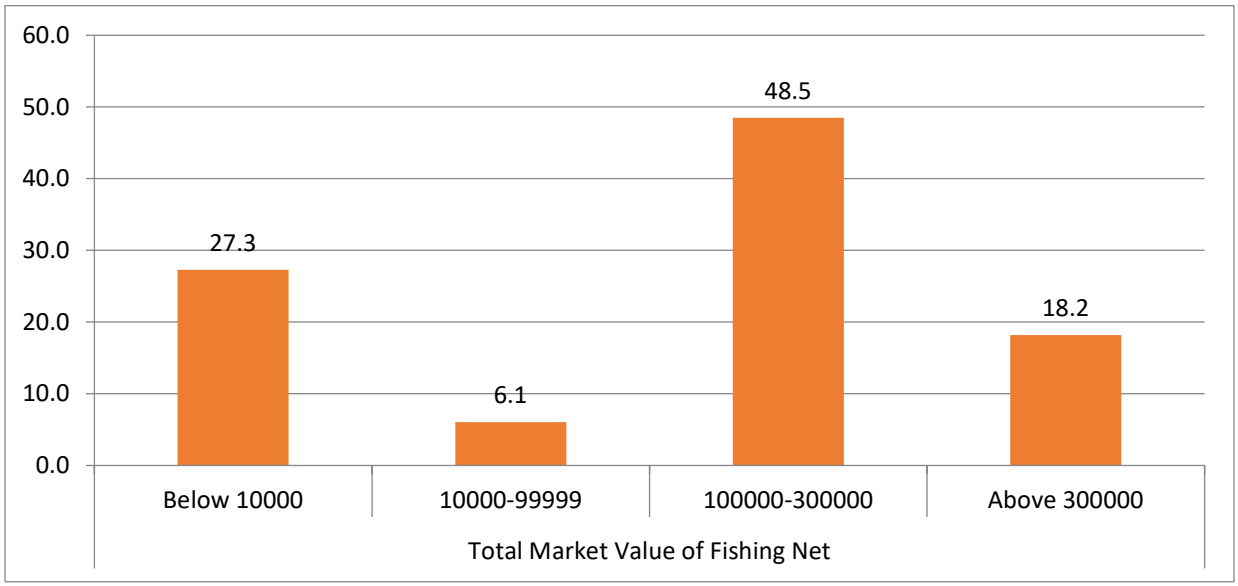
3.7.6. Fishing Net

The fishermen use different types of fishing net as per fish types & nature. All types of nets are applicable for catching all types of fishes. The *Hilsha* Fishes are caught by *Hilsha* Net, *Poa* fishes are caught by *Poa* Net, *Bindi/Bihundi* net is used for catching the small sized fishes, *Chi* Net is made with bamboo like a trap used for catching the small to medium fishes. Basically, it is a trap and no fish can release after entering into it. Mosquito net is the plastic net which is made for capturing the fish pollen of *Galda* and *Bagda*. *Beerjal* net is another trap which is used for catching fish during Ebb and flow tide. The *Jhaki Jal* is known locally as *Jhay Jal*. This net is portable used by thrown as convenient place for catching the fishes.

3.7.7. Estimated Value of Fishing Net

Monpura is surrounded by mighty Meghna river and situated in the estuary of Bay of Bengal. Most of the family use fishing net that is net seen in other part of the country. The census data indicates that almost fifty percent of the household possess the fishing net estimated market value is between 100000 to 300000 takas. A mentionable portion (18.2 percent) of respondents posses fishing net estimated market value above 300000 (three lac) takas. There is 27.3 percent respondent household posses fishing net estimated market value below 10000 (Ten thousand) taka. Another 6.1 percent respondent households posses fishing net estimated market value below one lac taka.

Figure 3.33: HH By Total Market Value of Fishing Net

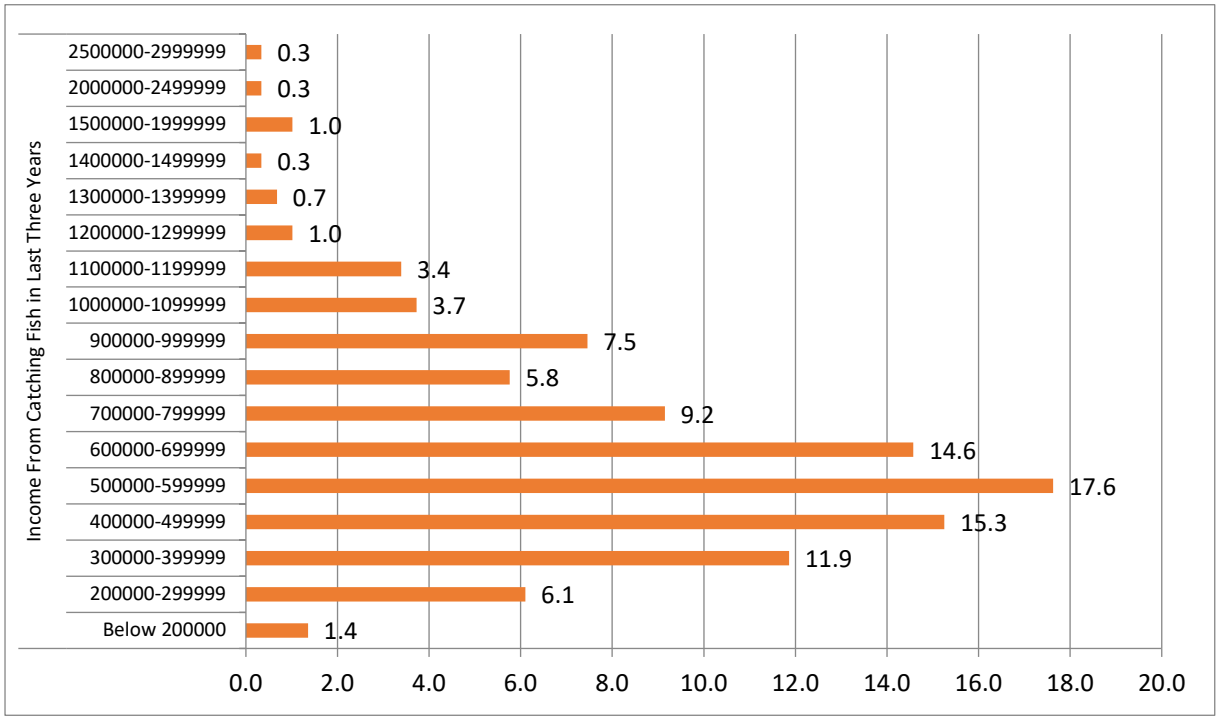


Source: Fieldwork in Sonarchar and Machpara

3.7.8. Earning From Fishing in Last Three Years

The study shows that 17.6 percent household earned from fishing between taka 500000-599999 from fishing activities.

Figure 3.34: HH Earned from Fishing Last Three Years

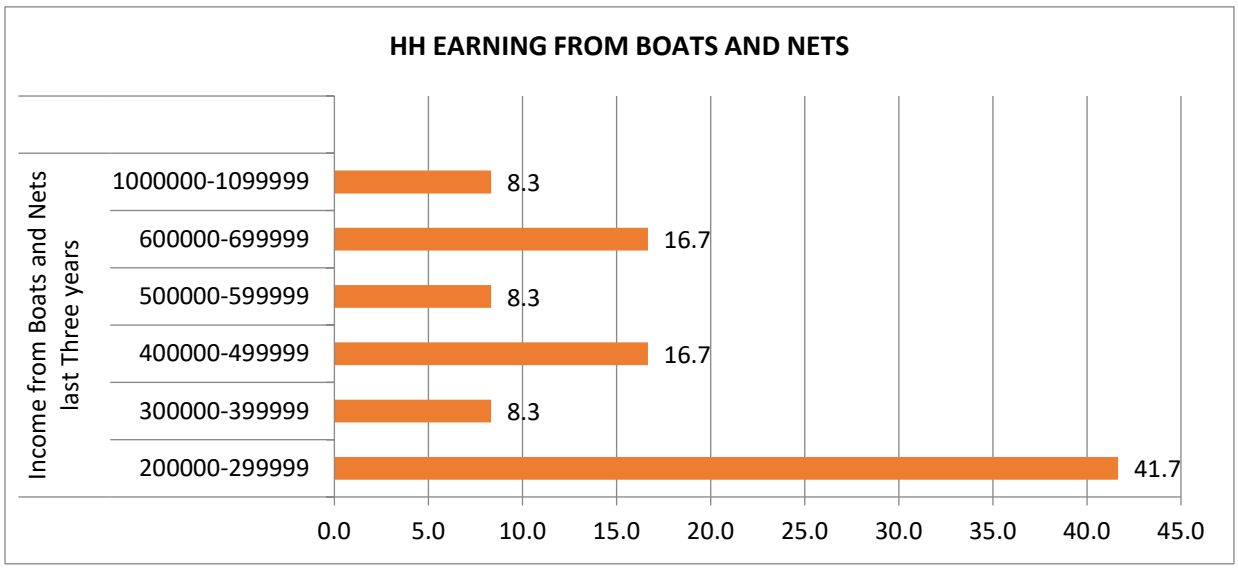


Source: Fieldwork in Sonarchar and Machpara

3.7.9. Earning From Boats and Nets in Last Years

The study shows that 41.7 percent household earned from boats and nets between taka 200000-299999.

Figure 3.35: HH Earning from Boats and Nets

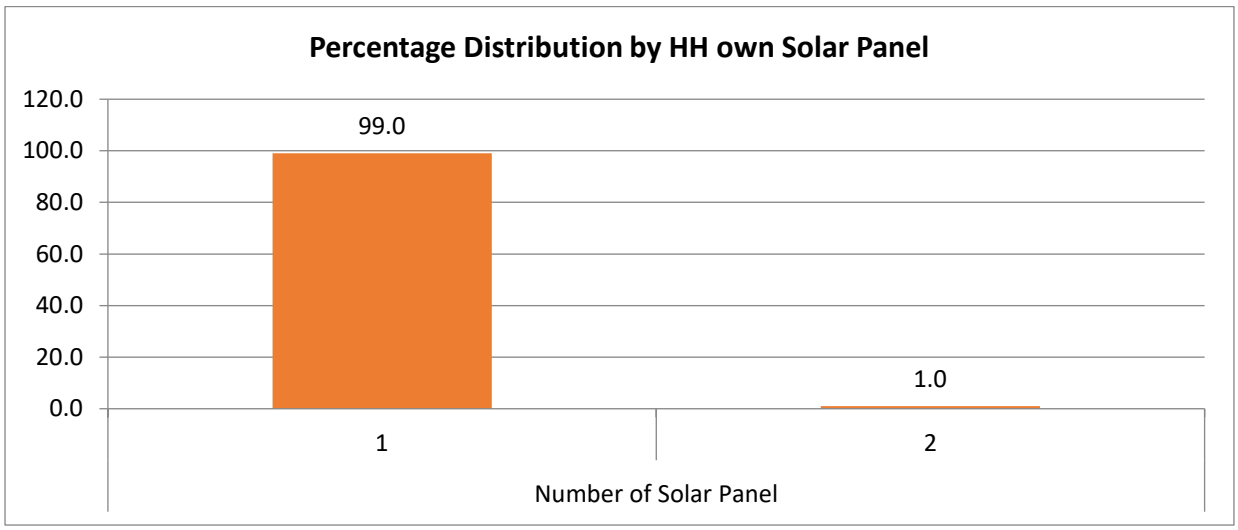


Source: Fieldwork in Sonarchar and Machpara

3.7.10. Number of Solar Panel Own by HH

The census report shows that 99 percent respondent households possess at least 1 solar panel and 1 percent respondent households possess at least 2 solar panel.

Figure 3.36: HH own Solar Panel

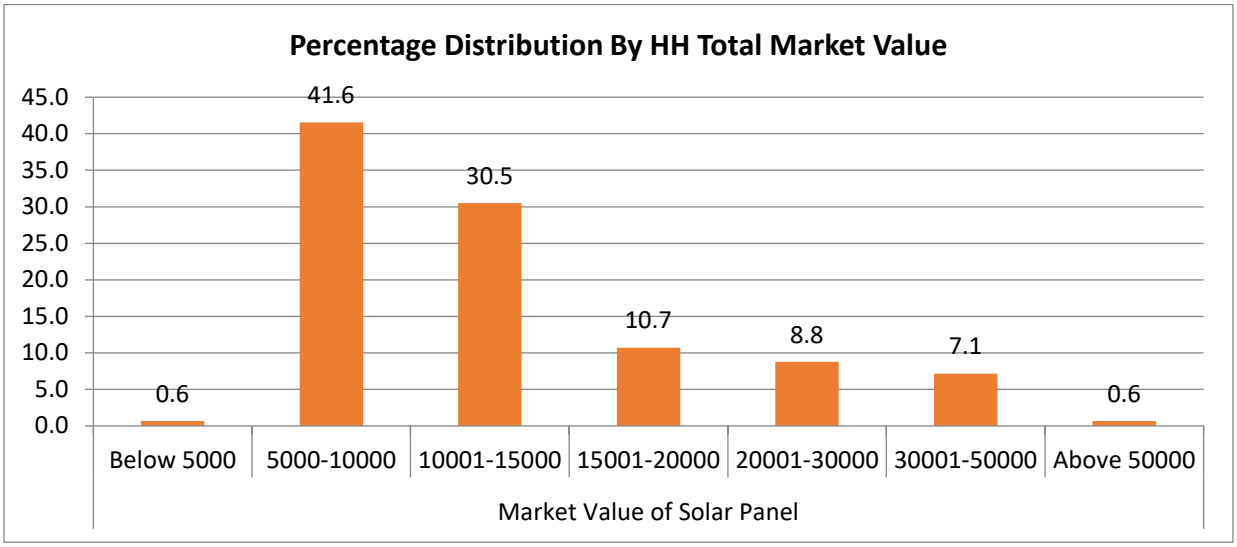


Source: Fieldwork in Sonarchar and Machpara

3.7.11. Estimated Value of Solar Panel

The census data indicates that 41.6 percent of the household possess the solar panel that estimated market value is between 5000 to 10000 takas. A mentionable portion (30.5 percent) of respondent posse's solar panel that estimated market value is between 10001- 15000 taka. There is 10.7 percent respondent household posses solar panel estimated market value between 20001- 30000 taka. Another 7.1 percent respondent household's posses solar panel estimated market value between 30001- 50000 taka.

Figure 3.37: HH Total Market Value



Source: Fieldwork in Sonarchar and Machpara

3.8. ANALYTICAL OVERVIEW OF THE FINDINGS

According to census data, the island's population varies in terms of duration of residence, with 36.4% having lived there for over 16 years, while others have settled more recently. This distribution reflects a range of factors influencing migration and settlement decisions, including economic opportunities and environmental stability. Here are some discussions.

3.8.1. Economic Profile

The economy of Monpura Island is largely based on fishing and agriculture, with the former being the most prevalent occupation. Around 76.6% of households engage in fishing, benefiting from the island's location in the Meghna estuary, while 23.4% are involved in agriculture, cultivating rice, jute, vegetables, and fruits. Households in formal employment, entrepreneurship, and other occupations are relatively rare. However, this economic reliance on fishing and agriculture leaves residents vulnerable to environmental factors like cyclones and tidal surges, which frequently disrupt their livelihoods.

3.8.2. Housing Patterns

Housing on Monpura Island is adapted to the island's socio-economic and environmental conditions. The majority of homes are of the *Kacha* type, built using locally available materials, including *tin*, bamboo, and asbestos. Around 90.1% of homes have *tin* shed roofs, reflecting the need for cost-effective, disaster-resilient housing. Some middle-income households invest in semi-*pucca* or *pucca* houses with brick and cement materials procured from other regions, such as Teknaf and Cox's Bazaar. Only a few homes are fully *pucca*, underscoring the economic constraints that influence building choices. The diversity in housing—from *Kacha* to semi-*pucca* to *pucca*—demonstrates how economic capacity, disaster vulnerability, and material availability shape construction practices.

3.8.3. Water and Sanitation Infrastructure

Access to drinking water on Monpura Island is heavily reliant on tube wells, with 80% of households using shallow tube wells and 17.7% using deep tube wells. However, these sources are susceptible to contamination during storm surges, affecting the water supply for 76.1% of households. This vulnerability highlights the need for resilient water infrastructure, as current solutions fail to ensure a safe and reliable supply in times of natural disasters. The island's location, surrounded by water, paradoxically complicates access to potable water, illustrating the challenges of resource management in such a context.

3.8.4. Land and Property Ownership

Land holding patterns on Monpura Island reveal socio-economic disparities within the community. A significant portion of households (32.3%) own small plots of domestic land between 6 to 10 decimals, while others have larger holdings up to 50 decimals or more. The agricultural value of land varies, with properties used for cultivation or fallow land ranging from modest to high economic worth. This disparity in land ownership and valuation underscores the economic challenges faced by smaller landholders, whose limited resources restrict agricultural output and income potential. Furthermore, about 60.4% of households engage in sharecropping arrangements, indicating a dependency on leasing practices for agricultural production, reflecting a broader trend of land scarcity and financial limitations.

3.8.5. Agricultural Practices and Challenges

Agriculture on Monpura Island is characterized by small-scale subsistence farming. Most households cultivate modest land parcels, producing crops like rice, jute, and vegetables. While some larger households yield surplus crops for sale, others primarily grow for self-consumption. The island's agricultural calendar is adapted to its climate, but it is increasingly impacted by climate change, with irregular rainfall patterns affecting crop cycles. These environmental challenges, coupled with limited access to irrigation and fertilizers, hinder agricultural productivity. Additionally, traditional farming tools and techniques are widely used, underscoring the need for modernization to improve efficiency and crop yields.

The settlement pattern and socio-economic profile of Monpura Island are emblematic of the challenges faced by rural, coastal communities in Bangladesh. The reliance on fishing and subsistence farming, coupled with vulnerability to natural disasters, has shaped the island's housing, water, and land-use patterns. Despite the resilience of Monpura's residents, there remains a need for infrastructure improvement, especially in disaster preparedness, water security, and agricultural modernization, to enhance the quality of life. By addressing these issues, Monpura Island can build a more stable socio-economic foundation for its inhabitants, fostering growth and resilience in the face of environment.

CHAPTER FOUR:
SOCIAL ORGANIZATION AND KINSHIP

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4.1. INTRODUCTION

The dynamics of rural societies in Bangladesh have long been a subject of scholarly inquiry, driven by the myriad factors that shape the social landscape of these regions. An intensive village study within the context of this South Asian nation offers a valuable lens through which to examine the intricate interplay of demographic transitions, landlessness, family structures, and traditional practices. In rural Bangladesh, these elements intertwine to influence the social organization of communities, notably in regions like Monpura, an island nestled within the coastal expanse.

With rapid fertility decline in the region, the question of how rural families adapt to the shifting demographic landscape becomes increasingly pertinent. Landlessness, a significant concern in many rural areas, imposes its own set of challenges on family structures and intergenerational relationships. It is essential to understand how these forces interact within the complex web of rural social organization.

In rural contexts, particularly on islands like Monpura, where the land meets the sea, family support remains a cornerstone of societal stability. This support system is notably pronounced among the elderly and women, highlighting the profound roles they play in the maintenance of familial and community well-being. This study posits that as landlessness encroaches upon these rural domains, the stress on intergenerational relationships intensifies, warranting an examination of the intricate balancing act between dependency and self-sufficiency.

It is imperative to note that while landlessness may be seen as a destabilizing factor, a unique demographic characteristic, a favorably low dependency ratio, has developed over time. This ratio, marked by a reduction in the number of elders relative to sons, stems from the remarkable decline in child mortality during the 1950s and 1960s. This demographic shift, driven by public health improvements, has allowed the familial burdens to be distributed across a greater number of sons. Consequently, the process of family disintegration that might be expected in the face of diminishing farm sizes and the evolving role of the farm economy in traditional peasant societies has, to some extent, been deferred.

Tradition, as a cohesive force in rural communities, has also played a significant role in maintaining family structures. The persistence of traditional living arrangements, where sons establish their households within the familial homesteads of their fathers, contributes to the preservation of familial ties. These traditional practices act as a counterforce to the disintegrative pressures exerted by modernization and urbanization.

Informed by over half a century of research within the domain of Population Studies, which has yielded substantial advances in demographic analysis, theories of demographic dynamics, and the application of these theories to a multitude of contexts, this study seeks to explore the nuanced interconnections between rural demographics, landlessness, and family structures in a unique setting like Monpura. The comprehensive coverage of this field, spanning applications in both developed and developing countries, offers a foundation upon which to build our analysis. Such an exploration is essential not only for extending scientific knowledge but also for guiding policy and practices that aim to maintain the social fabric of rural communities undergoing profound transformations.

In the chapters that follow, we delve into specific aspects of the social organizations within Monpura's Sonarchar and Machpara, considering not only the effects of landlessness but also the resilience of traditional practices and the enduring influence of familial bonds. This multi-faceted examination sheds light on the intricate tapestry of rural life, which continues to evolve in response to both internal and external forces, presenting a valuable case study within the broader context of Bangladesh and beyond.

4.2. *PARIBAR* (FAMILY): THE BASIC SOCIAL UNIT

Within the realm of kinship, the family is a cornerstone, uniting individuals through ties of blood or marriage. Families, anthropologically, assume various forms, with nuclear and extended configurations serving as prominent prototypes. The nuclear family, encompassing parents and their children, and the extended family, a more extensive collective comprising parents, children, grandparents, uncles, aunts, cousins, and others in close association, represent the two primary models.

These family structures not only hold social significance but also wield economic relevance. Families play a pivotal role in individuals' lives, bestowing upon them emotions, joy, serenity, and motivation. Bangladesh, as an anthropological landscape, predominantly exhibits two prevalent family paradigms – the nuclear and the extended families. The nuclear family, marked by its compact size of parents and children, contrasts with the expansive nature of the extended family, wherein generations coexist harmoniously.

Traditionally, the extended family in Sonarchar and Machpara reigned as the dominant familial archetype, epitomizing the sociocultural ethos. However, the tides of urbanization and industrialization are reshaping these traditional constructs. As these changes sweep through Bangladesh, the extended family fabric is gradually unwinding, making way for the ascendance of nuclear families. The nuclear family, lauded for its capacity to afford parents undivided attention in nurturing their children and granting family members individual autonomy, has gained favor. However, this transition is not bereft of challenges. The intimate joys of cohabiting with grandparents, cousins, and other extended family members, which the nuclear family often

lacks, are notably absent. Loneliness occasionally afflicts children in nuclear families, and parents who pursue careers outside the home grapple with the complexities of child-rearing. Despite these drawbacks, there exists a growing predilection for nuclear families in Bangladesh's anthropological landscape.

4.2.1. Types of Families in Sonarchar and Machpara

The social fabric of Monpura Island, nestled within Bangladesh's ever-shifting coastal landscape, is intricately woven with the threads of family life, mirroring the broader cultural tapestry of the nation while adapting to the unique challenges of its environment. Within the villages of Sonarchar and Machpara, the fundamental building blocks of society—families—present themselves in a rich diversity of structures, primarily falling into the well-established categories of nuclear and extended. The nuclear family, a compact unit typically consisting of parents and their immediate children, stands as a testament to the modern trend of prioritizing individual family units. This structure fosters a focused and intimate environment, allowing for concentrated attention on child-rearing and the strengthening of the immediate familial bond. The relative simplicity of the nuclear family can also provide greater flexibility in navigating the economic and environmental uncertainties that characterize life on Monpura.

Conversely, the extended family, a cornerstone of traditional Bangladeshi society, continues to hold significant sway on the island. This expansive network of kinship encompasses not only parents and their children but also grandparents, aunts, uncles, cousins, and other relatives, creating a robust support system. These extended families often share a common household or maintain close proximity, fostering a sense of collective responsibility and mutual aid. In the context of Monpura, where environmental challenges such as cyclones and floods are frequent, the extended family structure offers vital social and economic resilience. The pooling of resources, shared labor, and collective caregiving within extended families provide a crucial safety net, particularly during times of hardship. The wisdom and experience of elders, passed down through generations within these extended families, also play a vital role in navigating the complex interplay of traditional livelihoods and modernizing influences. The presence of these diverse family structures on Monpura reflects a society in transition, balancing the enduring values of kinship and community with the evolving realities of a changing world.

4.2.2. Changing Patterns of Family

The historical narrative of Monpura Island is a testament to the dynamic interplay between cultural continuity and societal change, a process that has profoundly reshaped the landscape of family structures within its communities. In the island’s earlier epochs, the extended family reigned supreme, serving as the bedrock of social organization, mirroring the broader cultural and social norms prevalent across Bangladesh. This traditional structure provided a robust framework for mutual support, shared resources, and the transmission of cultural values across generations. However, as Monpura began its journey towards urbanization and industrialization, driven by economic shifts and external influences, a gradual yet significant transformation

occurred. This evolution witnessed the ascendancy of nuclear family units, which began to supersede their extended counterparts, reflecting a global trend towards smaller, more individualized family structures.

The rise of nuclear families on Monpura brings with it a set of distinct advantages, particularly in terms of focused parental attention and enhanced individual autonomy. In these compact units, parents can dedicate more concentrated time and resources to their children's upbringing, fostering a closer parent-child bond. The emphasis on individual autonomy within nuclear families also empowers members to pursue personal goals and aspirations, contributing to a sense of self-reliance. However, this shift is not without its challenges. Children raised in nuclear families may experience feelings of loneliness or isolation, particularly in the absence of the extended family's broader support network. Moreover, parents, especially those engaged in demanding occupations such as agriculture or fishing, may struggle to balance the demands of work with their responsibilities in child-rearing. The pressures of modern life, coupled with the absence of extended family support, can create significant strain on these nuclear units.

Despite these challenges, the trend towards embracing nuclear family arrangements on Monpura is undeniable, reflecting the pervasive influence of modernization and the evolving societal norms. The allure of individual freedom, coupled with the economic realities that often necessitate smaller family units, continues to drive this transformation. The island's residents, like communities across the globe, are navigating the complex terrain of balancing traditional values with the demands of a rapidly changing world. This evolution in family structures represents a profound shift in the social fabric of Monpura, underscoring the island's ongoing adaptation to the forces of globalization and modernization.

4.2.3. The Impact on Social Fabric

The observed shift from extended to nuclear family structures in Sonarchar and Machpara, and indeed across Monpura Island, is not merely a change in household composition; it signifies a deeper, more profound transformation in the island's cultural and social systems. The historical prevalence of extended families on Monpura was deeply intertwined with the island's cultural and social fabric, where kinship ties served as the primary organizing principle for community life. These extended families, with their intricate network of relationships and shared responsibilities, were the very embodiment of social cohesion, providing a sense of belonging, security, and collective identity. The erosion of these extended family structures and the corresponding rise of nuclear families reflect a significant departure from this traditional social order, marking a shift towards a more individualistic and less communally oriented society.

Family units, regardless of their structure, serve as the cornerstone of strong societal bonds, fostering the development of interpersonal relationships that extend beyond the immediate family circle. They are the primary sites for the transmission of cultural values, social norms, and practical skills, shaping individuals' identities and their roles within the community. In the context of Monpura, extended families have historically played a crucial role in cultivating and

maintaining robust kinship networks, strengthening the social fabric of the island. These networks provided a vital support system, particularly in the face of environmental challenges and economic uncertainties, ensuring the well-being and resilience of the community. The shared experiences, mutual aid, and collective decision-making within extended families fostered a strong sense of solidarity and interdependence.

Conversely, the nuclear family structure, while offering certain advantages in terms of individual autonomy and focused parental attention, presents limitations in nurturing these broader kinship ties. The emphasis on the immediate family unit can lead to a narrowing of social connections, potentially resulting in a sense of isolation and detachment from the wider community. The absence of extended family support can also place greater strain on individual family members, particularly in times of crisis. The reduced emphasis on collective responsibility and shared resources within nuclear families can weaken the social safety net, making individuals and families more vulnerable to external shocks. Furthermore, the diminished role of elders in nuclear families can lead to a loss of traditional knowledge and cultural practices, potentially eroding the island's cultural heritage. The shift towards nuclear families, therefore, poses a challenge to the maintenance of strong societal bonds and the preservation of Monpura's unique cultural identity.

4.2.4. Journey Towards Modernization

The transformation of family structures on Monpura Island, though often described through the lens of modernization or Western influence, is in fact a gradual and deeply contextual process shaped by local ecological realities, economic pressures, and socio-cultural negotiations. Unlike the mainland or urban centers, remote islands such as Monpura are not immediately or wholly penetrated by global currents. Instead, change comes in waves, often mediated through state interventions, labor migration, education, disaster relief efforts, and satellite television, all of which trickle into the village ecosystem and slowly alter the lived experience of family life.

Historically, the extended family unit—comprising multiple generations, often across several closely situated households—was the normative and functional model of domestic life. In this arrangement, family was not only about blood or marriage—it was a mechanism for labor sharing, conflict mediation, childrearing, and collective survival, especially in an environment shaped by tidal floods, cyclones, and agricultural uncertainty. The extended *bari* was a space of mutual dependency, where age hierarchy, religious practice, and ancestral memory held the family together.

However, beginning in the late 1980s and accelerating through the 1990s, subtle yet discernible shifts began to emerge. With increasing out-migration to cities or the Middle East, and greater exposure to radio, television, and later mobile internet, younger generations began to reimagine aspirations and question older forms of authority. Crucially, this did not mean a wholesale rejection of traditional values, but rather a recalibration—where younger couples, for instance, sought privacy, autonomy in decision-making, and control over household income. This was

especially visible in Sonarchar, where agricultural households began separating after marriage, even if they remained physically close to their natal family land.

The rise of the nuclear family—husband, wife, and children—did not occur in opposition to extended family values, but rather as a pragmatic adaptation to new economic conditions. Land fragmentation, decreasing fertility of soil, and a growing emphasis on individual responsibility in farming or fishing investments meant that shared households sometimes created more tension than security. Moreover, NGOs promoting women's education, microfinance, and family planning indirectly reinforced nuclear family ideals by targeting small, self-contained units as beneficiaries.

In Machpara, this transformation followed a slightly different rhythm. Fishing communities—already accustomed to mobility, male absence, and risk-based livelihood strategies—saw early shifts in household structures. Fishermen often worked in rotating crews, staying away for long periods during peak seasons. Their absence required women to take on greater decision-making roles at home. In these contexts, establishing a separate nuclear household was less about adopting Western ideals and more about managing everyday life efficiently.

4.2.5. Local Modernity, not Westernization

It would be an oversimplification to attribute these changes to Westernization in a direct sense. Monpura is not an urban satellite, nor is it culturally porous in the way cosmopolitan areas are. Instead, what we observe is a form of "local modernity"—a selective, contextual engagement with global trends, often reinterpreted through Islamic ethics, village gossip, elder supervision, and local understandings of *izzat* (honor).

The idea of "freedom" that has emerged among youth is not imported wholesale from the West, but often grounded in Islamic justifications, NGO-framed language around "empowerment," and local debates about dignity, respectability, and independence. For instance, many women who express a desire for separate housing do so not to reject family values, but to exercise control over income, reduce household tensions, or gain privacy in childrearing. Likewise, men who prefer independent housing units often cite work pressures, marital harmony, or land disputes as reasons—not a desire for "freedom" in the Western liberal sense.

4.2.6. Consequences and Community Response

Despite these shifts, kinship and communal obligations remain strong. Elderly parents are still cared for, family ties are regularly reaffirmed through rituals, festivals, and remittances, and crises—such as illness, marriage arrangements, or cyclone recovery—still activate extended kin networks. What is weakening is not the sense of family itself, but the everyday practice of co-residence, and the authoritative power of senior family members.

Some elders in both villages express concern about the breakdown of traditional values, linking the rise of nuclear families with moral decline, increased domestic disputes, or youth

disobedience. They lament a perceived loss of respect, cultural continuity, and collective wisdom. However, this generational critique exists alongside an acceptance of necessity—that in an era of economic hardship, climate shocks, and educational aspirations, the old systems cannot be maintained in the same way.

Indeed, while some social issues—like rising youth crime or reduced care for elders—are cited, there is no clear evidence that nuclear family structures alone are responsible. Rather, these are symptoms of broader economic and institutional breakdowns, including lack of employment, poor education systems, and weak community leadership structures.

The evolution of family life on Monpura should be viewed not as a decline, but as a transformation within continuity. While the extended family is no longer the dominant residential form, its cultural and moral logic still shapes everyday life. Nuclear families are emerging not as a rupture, but as an adaptation to changing times—influenced by local economic needs, demographic pressures, and mediated forms of modernity, rather than a simplistic import of Western ideals.

Understanding this shift requires us to decenter the narrative of Westernization, and instead focus on how rural families negotiate change in ways that preserve dignity, respond to uncertainty, and reconfigure traditional structures to fit contemporary realities. Monpura's journey toward modernity is therefore not linear, but layered, reflecting the resilience of island communities as they adapt to the currents of time without entirely losing sight of their ancestral shore.

4.3. UNITS OF ORGANIZATION

4.3.1. *Ghar* (House/ Home)

In the context of Monpura, and more specifically within the agrarian village of Sonarchar, the notion of *ghar* (household or home) extends far beyond a physical dwelling—it embodies a nexus of kinship, economy, emotion, and ritual. A *ghar* in Sonarchar is most often identified with a *khana* or *chula*, literally the hearth or cooking unit, around which the life of the family is organized. This concept represents a co-residing unit that shares not just meals but labor, income, risk, and social obligations. It is the smallest and yet the most resilient institution in island life, especially amidst environmental vulnerability and economic uncertainty.

Typically, a household comprises a married man and woman, sometimes along with their children, unmarried siblings, or elderly parents. However, unlike urban nuclear models, Sonarchar's *ghar* is fluid—it may expand to accommodate married sons or contract due to out-migration, especially during the lean agricultural season when young men seek work outside the island. Despite its changing composition, the marital unit remains central. The husband-wife dyad acts as the core decision-making entity—allocating labor, managing household expenses,

and coordinating farming tasks. This partnership forms the nucleus around which social and economic life revolves.

Agricultural livelihoods are closely tied to the household structure. The *ghar* is both the site of reproduction and production—where seeds are preserved, farming strategies are discussed, and tools are stored. The courtyard (*uthan*) becomes a multifunctional space for drying rice, sorting seeds, repairing equipment, and socializing. Women, in particular, play crucial roles within this domain. While their work is often invisibilized in formal economic records, they are responsible for post-harvest processing, livestock care, kitchen gardening, and food preparation—tasks vital to household survival.

There is also a deeply emotional and symbolic dimension to the *ghar*. It is seen not merely as a shelter, but as a living entity that embodies family honor, ancestral memory, and continuity. The homestead (*bari*) is inherited, protected, and narrated through generations. Landless agricultural laborers, when interviewed, often expressed their desire to "build a *nijer ghar*" (own home), linking land and home to dignity and autonomy.

At a political level, *ghars* serve as the building blocks of village society. Community-level decisions—such as mutual aid during floods or cooperative harvesting—are coordinated at the household level. During natural disasters, it is the household that responds first, deciding what to save, who evacuates, and how to restart farming post-cyclone.

Thus, in Sonarchar, the *ghar* is not simply a spatial structure; it is an anthropological institution, one that organizes labor, redistributes resources, anchors identities, and negotiates with the broader social world. Understanding the rhythms, dynamics, and pressures of agrarian life in Sonarchar necessitates a close, ethnographically grounded reading of how *ghar* operates as both an intimate and strategic site of survival.

4.3.2. *Bari* (Household)

The "*bari*" or household emerges as a singular entity in the Monpura landscape, often comprising one or more married couples with or without offspring. This household unit serves as the foundation for the development of social and kin relations, as well as various institutions that revolve around it, working collectively to perpetuate its existence. Lineally traceable connections take precedence in the evolution of a household, emphasizing direct ancestral ties over collateral ones. These lineal and collateral connections constitute the economic and social subsystems of Monpura's society.

Traditionally, family and kinship were the bedrock of social life on Monpura Island. A family group residing within a "*bari*" functioned as the fundamental unit for economic endeavors, landownership, and social identity. The essence of a rural Monpura household lay in its collective cohabitation, sharing jointly held property, and partaking of sustenance from a communal kitchen. A "*bari*" might comprise one or more functional households, contingent on the complexities of familial relationships. Typically, married sons continued to reside in their parents'

household during their father's lifetime. Even when separate houses were constructed for nuclear families, the sons remained under the authority of their fathers, while wives were subject to the rule of their mothers-in-law. The passing of the father often marked the transition of adult brothers into establishing their own households. This shift seldom led to substantial changes in the physical layout of the "*bari*," with families at different life stages displaying varied configurations of household membership.

The family assumes the role of the basic economic unit within Monpura's social fabric. Generally, male household heads and other adult male members engage in agricultural activities and various economic pursuits beyond their homes. In contrast, female members often bear the responsibilities of cooking, housekeeping, child-rearing, home gardening, and tending to cattle and goats. Procurement of clothing, house-building materials, and household goods typically occurs through market transactions. Unskilled laborers in the household are primarily involved in farming, while skilled laborers gravitate toward manufacturing centers. Earning members in these households are esteemed for their contributions in sustaining the expected standard of living. Notably, in recent years, over two million adolescent and adult females from Monpura have sought employment in the garment industry, leading them to leave their household units for urban places of employment. This has contributed to the reduction of large households with multiple nuclear family units, eventually evolving into simpler nuclear family units, comprising a couple and their children.

4.3.3. *Gusthi* (Lineage)

In Sonarchar, as in much of Monpura Island, the household (*ghar*) is the core unit of production and reproduction, embedded within larger networks of kinship and affiliation. Most households in Sonarchar revolve around a conjugal unit—a husband and wife living with their children—often extended by aging parents or unmarried siblings. This structure, though seemingly nuclear at first glance, is deeply embedded in a broader kinship field that includes both lineal and collateral relatives, forming a flexible but enduring foundation of social life and agricultural cooperation.

From the perspective of the household head—most often male, though not exclusively so—lineal membership extends vertically through generations: from paternal grandfather and grandmother, to father and mother, to wife, sons, daughters, daughters-in-law, and grandchildren. Collateral kin, such as the father's brothers and their spouses, brothers and their wives and children, are also commonly included in household reckoning, especially in matters of land inheritance, conflict resolution, and seasonal labor sharing. This dual layering of kinship through lineality and collaterality creates a resilient framework within which economic and social decisions are negotiated.

In many cases, residence patterns in Sonarchar reflect a combination of patrilocal and neolocal tendencies. While sons tend to build homes on or near parental land, especially when they expect to inherit, others may establish independent households through NGO-supported home

construction or land lease. However, kinship proximity often translates to cooperative labor arrangements—such as helping during paddy transplantation or pooling funds for irrigation machinery—which blurs the boundary between economic and familial.

At the macro level, Sonarchar's social landscape is structured through a wider and more enduring unit known as "*Gushti*". A *gushti* encompasses multiple households claiming common ancestry, symbolic kinship, or marital linkage, often spanning across several *bari*s (homesteads) or even across village boundaries. While *gushti* affiliation is loosely formal, it carries real weight in terms of identity, status, and strategic alliance-building in agrarian life.

For instance, during agricultural crises—such as crop failure due to flooding or pest attack—households within the same *gushti* often come together to share stored rice, labor, or even reassign land temporarily. In this sense, *gushti* acts as a moral economy, a form of collective resilience, though access to its benefits is unevenly distributed along lines of class and seniority.

Women in Sonarchar experience dual *gushti* membership—retaining symbolic ties to their natal *gushti* while becoming affiliated through marriage to their husband's lineage. These dual affiliations can be both empowering and constraining. On one hand, they provide emotional and material support in times of hardship (especially childbirth or widowhood), and on the other, they often restrict a woman's full incorporation into decision-making in her marital *gushti*, especially regarding land or household assets.

Among the residents of Monpura, *gushti* identity is widely recognized and often cited in both formal gatherings (like village *shalish* or dispute mediation) and informal conversations. People can immediately trace a person's *gushti* through their father's name, location of homestead, or family profession. In agrarian life, this matters: land-sharing arrangements, eligibility for borrowing farming tools, or even participating in cooperative irrigation often depend on these kin-based networks.

Yet, *gushti* is not merely about tradition; it is also mobilized politically and economically. Wealthier *gushti*s sometimes assert symbolic distance from poorer or indebted members, especially when their social standing is at risk. In contrast, less affluent households may still claim distant kinship with wealthier *gushti*s to secure resources or resolve disputes. This reveals an asymmetrical but reciprocal logic that underpins community life: one of recognition, negotiation, and strategic kinship performance.

Despite growing economic inequality, *gushti* remains an enduring framework of belonging and identity. In agricultural Sonarchar, where labor is seasonal, climate is volatile, and external support minimal, the *gushti* offers not only symbolic lineage but a practical system through which households survive, strategize, and sustain life on the shifting edge of the Meghna River.

4.3.4. *Para* (Neighborhood)

While *paribar* (family) and *gushti* (kin group) are central units of kinship and social organization across Monpura Island, in the fishing village of Machpara, the concept of "*para*" introduces a distinct spatial and occupational logic to how people live, interact, and organize collective life. In this coastal setting, where rivers and tides shape both the geography and livelihood rhythms, the *para* is not just a residential unit—it is a territorial anchor in a highly fluid and uncertain environment.

In Machpara, the term *para* (from the Bengali root meaning “border” or “adjacency”) refers to a neighborhood or locality, often established on elevated high ground or embankments, safe from tidal surges and seasonal flooding. These settlements are carefully chosen with proximity to the river in mind—close enough for immediate access to fishing but far enough to avoid erosion and storm damage. As such, the geographical logic of the *para* in a fishing village differs significantly from that of an agricultural village like Sonarchar- where land fertility and field access drive settlement.

Each *para* in Machpara is composed of multiple *ghars* and *bari*s, typically formed by members of one or more interrelated *gushti*s. However, because fishing communities often operate in collective, occupational units—such as fishing crews, net-sharing partnerships, and boat groups—the bonds that hold a *para* together extend beyond kinship. Occupational affiliation, trust in crew cooperation, and shared equipment ownership all influence who settles where, who helps whom, and who participates in *para*-level decision-making.

Furthermore, religious and ethnic affiliations may also influence *para* composition. In Machpara, Muslim and Hindu fishing families are often found in separate but adjacent *paras*, a spatial arrangement that reflects both mutual respect and subtle differentiation. Within *paras*, households form tight support networks—sharing fishing nets, fuel for boats, food stocks, or even small cash loans during off-seasons.

Over time, many of these *paras* develop into cohesive socio-political units called "*samaj*." In Machpara, the *samaj* is both an extension and intensification of the *para*—it is not just a neighborhood, but a community-in-action. Every *para* may not automatically become a *samaj*, but when it does, it assumes institutional authority over the moral, cultural, and even legal aspects of daily life. The *samaj* organizes collective rituals, oversees dispute resolution, manages communal fishing equipment, and sometimes even negotiates with local government representatives or NGOs.

The fishing *samaj* in Machpara plays a particularly important role during:

- Cyclones or boat accidents, when emergency relief and collective mourning are coordinated through the *samaj*.
- Fishing bans or state-imposed restrictions, when decisions on alternative livelihoods or resource sharing are deliberated.

- Marriages and festivals, where contributions and food-sharing are organized communally, often blurring the lines between individual households.

The collective memory of past floods, accidents at sea, or successful catches binds people together under the umbrella of *samaj* identity. This shared identity is rooted in both kinship (*gushti*) and territorial and occupational proximity (*para*)—but the *samaj* gives it form, expression, and moral coherence.

Unlike formal administrative bodies, *samaj*s in Machpara function through oral negotiation, mutual consensus, and respect for seniority and reputation. Elders or influential boat owners often serve as informal leaders, though younger members are increasingly involved, particularly when navigating the complex bureaucracy of fishing licenses, marine restrictions, and NGO projects.

Despite the growing pressures of climate change, state regulation, and market fluctuations, the *samaj* remains a resilient form of local governance and identity. While wealthier fishermen sometimes attempt to distance themselves from poorer ones—especially by upgrading to mechanized boats or distancing from shared nets—the moral economy of the *samaj* still demands solidarity during crises.

Thus, in Machpara, *para* and *samaj* are not only spatial terms—they represent the social scaffolding of the fishing community. They provide mutual support, cultural continuity, and a forum for collective decision-making in a landscape marked by ecological vulnerability and livelihood uncertainty. The *samaj*, therefore, transcends the individual *ghar* or *gushti* to become the arena where the social and economic life of the fishing village is enacted, contested, and sustained.

4.3.5. *Gram* (Village)

Monpura, as a distinctive village in the cultural and social tapestry of Bangladesh, holds a myriad of traditions, taboos, and laws that govern the intricate behaviors among kin members of the household. The principles that guide marriage, deeply rooted in religious traditions, forbid unions between partners based on consanguinity, affinity, and fosterage. Among Hindus, the prohibited degrees of relationship span from full blood, half blood, and uterine blood to those formed by adoption. While arranged marriages have been a dominant tradition in Bangladesh, it is noteworthy that in many cases, it is the couples themselves, rather than their parents, who hold the final decision-making authority.

Monpura predominantly practices monogamous marriages, emphasizing the importance of the nuclear family structure. This emphasis leads to an increase in the number of households and a simultaneous reduction in the number of members within these households. Furthermore, setting up a separate domestic unit or household has become an increasingly expensive endeavor, thereby contributing to a rise in the age at which marriages are solemnized.

The ties of kinship and territorial affiliation remain robust in the context of Monpura, anchoring the family within a specific geographic area and community. The separation of newlywed couples into separate domestic units often stems from their individual aspirations for personal fulfillment. Couples endeavor to preserve the sanctity of their marital bond, with their interactions primarily driven by the goal of reproduction and self-preservation.

In this community, it is a common desire for most spouses to have at least one male and one female child, with the option for one additional male child. The preference for male offspring primarily arises from the strong emphasis on patriarchal principles within the social system. The descent of family names is intricately tied to the male lineage. Each lineage often bears the title or name of a prominent living or deceased member. Among the Hindus, the caste system recognizes a multitude of groups with varying ranks, forming a hierarchical structure of endogamous groups based on birth. An individual's occupation in this system is largely determined by the caste into which they are born.

The social hierarchy in the study area can be understood through several stages of relations. Firstly, an individual from a rural or Island village associates themselves with other existing social institutions. Secondly, interactions occur between two or more individuals, encompassing production and consumption dynamics. Thirdly, a family or "*paribar*" may consist of one or more households. The family or household serves as the foundational unit for the socialization process, where individual development commences. Fourthly, multiple households from a "*Bari*," which commonly refers to an extended household group or a collection of households living together but occupying separate spaces. It is observed that when a household seeks independence, it establishes a separate "*Bari*." Typically, the eldest male member of the "*Bari*" assumes the position of "*Bari*" head.

In contemporary rural Bangladesh, including Island villages like Monpura, the agrarian structure starkly reflects inequality in land ownership. It encompasses landowners at one end of the spectrum and numerous landless and marginal peasants at the other. The Monpura household population is categorized into five distinct groups, including the landless, marginal, small, middle, and large farms. Interestingly, the Island villagers themselves do not naturally employ these categories.

Regarding Muslim social stratification, it's crucial to note that in the Monpura area, approximately 86% of the population adheres to the Muslim faith, with no tribal population in the village. Mukherjee's work in the 1940s revealed Muslim stratification in the region. Significantly, Monpura is characterized by the absence of the caste concept among Muslims. Unlike the Hindu caste system, there is no hierarchy of endogamous groups based on birth within the Muslim community in Monpura.

Distinct social distinctions exist among the residents of Monpura, categorizing people into "*khandan*" such as *Bhuiyan, Mia* (high status), who are often landholders, and "*sat gerastha*" (low-middle status, cultivators). Cultivators within the "*sat gerastha*" stratum do not carry any

social stigma and are considered part of the broader social fabric. In Monpura, those who do not belong to the lowest strata hold a unique social standing. The fundamental criterion for differentiating individuals revolves around their involvement in physical agricultural labor.

The distinctions found among the inhabitants of Monpura primarily relate to their economic standing, with *izzat* (respectable behavior) and manners playing an integral role. Money, credit, social standing, popularity, religious devotion, and moral standards are closely associated with *izzat*. It is evident that economic factors significantly influence social stratification, alongside a complex interplay of social, cultural, and moral dimensions that ultimately determine an individual's position in Monpura's social hierarchy.

Monpura, as a distinctive island society within Bangladesh's broader cultural landscape, exhibits a rich fabric of kinship, marital norms, and social distinctions that structure everyday life. These dynamics take on particular meanings in the two communities studied—Sonarchar, an agriculturally dependent village, and Machpara, where livelihoods are rooted in fishing. While shared cultural and religious traditions underlie much of the social organization across both villages, the practical realities of labor, ecology, and economy shape kinship structures, marriage strategies, and social hierarchies in locally specific ways.

4.4. MARRIAGE RULES AND DOMESTIC STRUCTURES

Marriage in both Sonarchar and Machpara is governed by Islamic and Hindu religious principles, with prohibitions based on consanguinity, affinity, and fosterage. Among Hindus, this extends to include full and half-blood relations as well as adoptive ties. These norms form a moral boundary, ensuring that marriage upholds lineage purity and communal ethics. Among Muslims, although the caste system is formally absent, informal stratification and lineage consciousness persist, influencing marital alliances.

While arranged marriages remain the dominant form, increasing numbers of couples—especially younger individuals exposed to media and NGO education programs—assert greater agency in mate selection. In both villages, but more frequently in Machpara, where seasonal fishing expeditions and market interactions expose youth to external influences, love marriages or marriages negotiated by the couples themselves are becoming more visible, though often still negotiated within kin-based networks.

Both Sonarchar and Machpara practice monogamy, and monogamous marriages form the foundation of household formation. These nuclear households, often made up of a husband, wife, and their children, are the primary units of daily production and reproduction. Yet, household formation is increasingly delayed in both villages due to the rising cost of establishing separate housing, scarcity of land in Sonarchar, and unstable fishing income in Machpara. As a result, the average age of marriage is slowly increasing, particularly for men.

4.4.1. Household and Kinship Configurations

In both villages, a household (*ghar*) includes members of the same *khana* or *chula*—those who share a cooking pot. From the perspective of the household head, kinship extends along both lineal and collateral lines: sons, daughters, parents, and grandchildren, as well as brothers, their spouses and children. These connections remain essential for mobilizing labor, particularly during the peak agricultural season in Sonarchar or the major fishing seasons in Machpara.

In Sonarchar, where agriculture requires intensive and seasonal cooperation, extended households often pool their labor to plough fields, transplant seedlings, and harvest paddy. In contrast, in Machpara, household configurations are more fluid and mobile—fishing trips often require male members to be absent for weeks, while women and elders maintain the home. Here, crew-based alliances, often rooted in non-kinship ties, sometimes replace the traditional *bari* as the unit of cooperation.

Extended households (*bari*) are found in both villages, comprising several nuclear families occupying adjacent dwellings but sharing common ancestry. Typically, the eldest male serves as the *bari* head, managing land or fishing equipment and acting as mediator in conflicts. However, decentralization is more common in Machpara, where income is individualistic and boat crews function semi-autonomously.

4.4.2. Lineage, Descent, and Reproductive Goals

Descent is patrilineal, with family names and land claims passed through the male line. Across both Sonarchar and Machpara, families aspire to have at least one male and one female child, with an additional preference for another male child. Sons are valued not just for lineage continuity but for their economic utility—in Sonarchar, they assist in field labor; in Machpara, they are expected to learn fishing skills and eventually inherit nets, boats, or licenses.

Among Hindu families in Sonarchar, caste consciousness still informs identity and marriage arrangements. While the occupational stratification among Muslims in both villages does not follow a formal caste system, social distinctions do exist, often tied to economic class, ancestral titles, and land/fishing assets.

4.4.3. Social Hierarchy and Local Stratification

The agrarian class structure of Sonarchar reveals clear inequalities in land ownership. Households can be classified into landless, marginal, small, middle, and large farmers, though villagers themselves do not typically use these formal categories. Instead, people are judged by their capacity to lend, employ laborers, and manage land disputes. Landowners often belong to locally esteemed lineages, referred to as *Bhuiyan*, *Mollah*, or similar titles, while the landless may work as seasonal laborers or tenant farmers.

In Machpara, the social structure is similarly layered but based on access to boats, fishing licenses, and capital-intensive gear. Households that own motorized boats or large nets enjoy higher status, often assuming leadership roles in the *samaj*, while poorer households depend on daily wage labor on others' boats. Unlike the fixed land tenure system in Sonarchar, access to fishing income is more volatile, making social status in Machpara more performative and fluctuating.

Among Muslims in Monpura, there is no caste system per se, but "*khandan*" affiliations (such as *Bhuiyan*, *Mia*, and others) act as markers of historical status and respectability. These titles are often associated with land ownership in Sonarchar and ancestral leadership or religious scholarship in Machpara. Lower-status cultivators—often referred to as "sat gerastha"—are not socially excluded but are recognized as industrious, pious, and morally upright, thereby maintaining respect within the community.

4.4.4. The Role of *Izzat* (Respect) and Moral Economy

In both villages, *izzat*—a composite of reputation, moral behavior, wealth, religious piety, and community service—acts as the invisible thread that holds social hierarchy in place. A man who owns land or a boat but lacks religious devotion or generosity may lose respect in the community. Conversely, a poor man known for honesty, prayer, and moral advice can command significant informal authority.

Credit relations, invitations to weddings, roles in community rituals, and even seating in religious gatherings are shaped by *izzat*-based assessments. While economic capital plays a role in determining social standing, it is never entirely separate from cultural and moral dimensions.

In both Sonarchar and Machpara, the household is the basic unit of kinship and livelihood, embedded within larger webs of lineage, territoriality, and economic differentiation. While agricultural Sonarchar remains more grounded in land-based hierarchies and seasonal cooperation, fishing-based Machpara displays a more mobile, fluid, and occupationally stratified kinship landscape. Marriage rules, gendered aspirations, and social categories are shared across the island but acquire locally distinct meanings in how people navigate labor, risk, and respect. Kinship here is not just a system of descent—it is an evolving social map that organizes who works with whom, who marries whom, and who survives amid the rising tides of economic and ecological uncertainty.

CHAPTER FIVE:
SOCIAL HIERARCHY-
CLASS, STATUS, AND POWER

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5.1. SOCIAL HIERARCHY IN MONPURA ISLAND: AN INTRODUCTION

The social fabric of Monpura Island, as this ethnography reveals, is a complex tapestry woven from the threads of class, status, and power, which are deeply intertwined with the island's precarious environmental and economic realities. While the island is a single geographical entity, the distinct economic bases of its two study villages—Sonarchar, an agricultural village, and Machpara, a fishing village— give rise to different, yet equally compelling, forms of social stratification. To understand these dynamics, this research employs a dual theoretical lens, drawing on the foundational insights of both Karl Marx and Max Weber.

5.1.1. A Marxist Perspective on Class

From a Marxist standpoint, class relations on Monpura Island are fundamentally rooted in the ownership and control of the means of production. In Sonarchar, the primary means of production is land. The social structure is therefore defined by the relationship between those who own land (landowners) and those who do not, such as landless agricultural laborers and sharecroppers. Landowners, possessing substantial holdings, hold significant economic and political power. They are the "bourgeoisie" of the Monpura agrarian economy, controlling the land upon which the livelihoods of others depend. The landless laborers, or *kamla*, represent the "proletariat," selling their labor for wages to survive, placing them in a position of dependence and precarity. The sharecroppers, or *bargadar*, occupy a middle ground, working the land but not owning it, their surplus value often extracted by the landowner.

The Marxist analysis extends to Machpara, where the means of production shifts from land to capital-intensive fishing equipment like motorized boats and large nets. In this village, a clear class division exists between boat owners and the daily wage laborers who work on their boats. The boat owners control the capital, giving them power over the labor of the fishermen. This dynamic highlights the classic Marxist concept of exploitation, where the boat owners, as the "bourgeoisie," accumulate wealth by appropriating the labor of the fishermen, the "proletariat". The volatility of fishing income, unlike the more fixed land tenure in Sonarchar, makes this class dynamic more fluid, yet the underlying power imbalance remains. The dependence of the landless in Sonarchar and the debt-laden daily wage laborers in Machpara makes them highly susceptible to economic exploitation.

The unequal access to land and capital are key structural inequities that constrain the adaptive creativity of the islanders. Without addressing these issues, climate change will only deepen existing vulnerabilities and hardships.

5.1.2. A Weberian Perspective on Class, Status, and Power

While Marx's theory provides a robust framework for understanding the economic basis of social divisions, Max Weber offers a more nuanced perspective that incorporates the dimensions of status and power. For Weber, social stratification is not solely determined by economic class but also by social status (or *Izzat* in the local context) and political power. In Sonarchar, status is intimately tied to land ownership and the family's lineage, or khandan. While landless laborers may share a common economic class, their social standing, or *Izzat* (honor and social respect), can differ based on factors like their family reputation, ancestral titles, or their capacity to manage land disputes and employ laborers. The wealthy landowners often belong to historically esteemed lineages and hold positions of political power, which in turn reinforces their high status. Status is also performed through the ability to lend money and provide employment, which solidifies one's position in the social hierarchy. This reflects a key Weberian insight: social honor can be a source of power independent of economic class.

In Machpara, status is more volatile and performative. While boat ownership is a clear marker of wealth and power, a fisherman's status can fluctuate based on his success in fishing, his reputation for skill, and his leadership within informal community groups, or *samaj*. A successful catch can bring temporary respect and influence, but a bad season can quickly erode this social standing. This is a departure from the more fixed agrarian hierarchy of Sonarchar.

5.1.3. The Interplay of Class, Status, and Power

The thesis argues that both Marxist and Weberian frameworks are necessary to fully understand social stratification in Monpura. The class divisions, based on economic relations, set the stage for social life, but the pursuit of status and the exercise of power create a more dynamic and intricate social landscape.

For example, a landowner in Sonarchar not only holds economic power but also derives social respect from his position, which can be leveraged to gain political influence. Similarly, a boat owner in Machpara wields economic power, and his success allows him to assume leadership roles, further enhancing his status. The reverse is also true: those who lose land due to riverbank erosion or have a bad fishing season can lose not only their economic livelihood but also their social standing and political influence.

The concept of *Izzat* acts as a crucial link between class and status. While wealth can increase one's *Izzat*, a person from a respected *khandan* can maintain a degree of Izzat even with limited economic means, showcasing the power of social capital. This is particularly important for the marginalized and landless, who may find collective identity and moral status in their shared experience and mutual assistance, even if they lack economic resources.

In conclusion, the social structure of Monpura is not a monolithic entity. It is a system where economic class, social status, and political power intersect and influence one another in a constant process of negotiation and contestation. The distinct livelihoods of Sonarchar and

Machpara shape this process in unique ways, making the island a compelling case study for the application of classical sociological theory in a contemporary, climate-vulnerable context.

5.1.4. Social Dynamics in Monpura Island

The intricacies of island life unveil a rich tapestry of relationships, interactions, and dynamics that shape the social fabric of Monpura Island in Bangladesh. The islanders, driven by the imperative of meeting daily life needs, navigate a complex web of connections with individuals of diverse occupations and social classes. Central to these interactions is the bustling *bazar* and village *haat*, where commodities are exchanged, and the supply of essential goods is intricately linked to the islanders' survival.

Anthropology, as a lens to understand societies, unfurls a rich tapestry of interconnected themes such as class, status, and power. In the context of Monpura, an island deeply entrenched in the Bay of Bengal, these anthropological dimensions take on unique aspects, reflecting the intricate social structures of its fishing community. Status, denoting one's standing within the community, intertwines with economic roles and occupation. Caste, though not a traditional category, finds resonance in the economic disparities prevalent among the islanders, particularly in the realm of fishing. Power dynamics, manifested in the relationships between boat owners, fishermen, and local influencers, play a pivotal role in shaping the socio-cultural landscape. This chapter delves into the anthropological nuances of class, status, and power within the dynamic setting of Monpura, unraveling the interplay of cultural identity and economic intricacies that define the islanders' social world.

The primary nexus extends to various economic activities, involving day laborers, construction workers, and other occupational groups. Notably, the ubiquitous boat assumes a pivotal role in fostering transportation between islands and the mainland, symbolizing both connectivity and independence. Disputes, an inevitable facet of everyday life, prompt the islanders to seek resolution through an elaborate system. Neighboring kin provide initial recourse for land disputes and interpersonal conflicts, while legal channels are employed for more complex issues. Credit-related matters see engagement with local figures of influence, including area chairmen and members, while recourse to local moneylenders, known as *Mohajon*s, becomes imperative for financial facilities. The multifaceted nature of communication extends to interactions with banks, lending positions, and various non-governmental organizations. The islanders' health and well-being find guardians in the local *Kabiraj* (healer) and paramedical doctors, reflecting the diverse dimensions of their interaction system. This multidimensional approach mirrors the resilience and adaptability ingrained in the islanders' way of life.

Unity, a hallmark of Monpura's social landscape, is deeply ingrained in the collective consciousness. Islanders exemplify a strong sense of community, characterized by mutual assistance, readiness to unite for common demands, and a shared commitment to problem-

solving. The bonds forged through lineage ties and community sentiments act as cohesive forces, mitigating discord and fostering collaboration.

As we delve into the realms of class, status, power, and politics on Monpura Island, this chapter endeavors to unravel the nuanced layers of social dynamics, shedding light on the interconnectedness of economic, social, political, and religious spheres that define the islanders' solidarity and unity of Sonarchar and Machpara.

5.2. CLASS

Class, as a sociological concept, refers to a group of people who share common economic and social positions within a society. Class distinctions emerge from factors such as occupation, income, property ownership, and access to resources. Theories of class have been shaped by scholars such as Karl Marx and Max Weber, both of whom offer distinct yet complementary perspectives on class structures and their implications. In Monpura Island, class distinctions are deeply intertwined with land ownership, economic activities, and political influence, shaping the daily lives and opportunities available to the islanders.

5.2.1. Class in Monpura: A Marxist Analysis

Karl Marx's analysis of class is rooted in economic production and the relationship individuals have to the means of production. He identified two primary classes: the bourgeoisie (those who own the means of production) and the proletariat (those who sell their labor). In Monpura, this class dynamic manifests in the division between landowners and landless farmers, boat owners (*majhi*), and wage-dependent fishermen (*bhagi*).

1. **Landowners vs. Landless Farmers:** In Sonarchar, wealthier landowners, comprising middle and rich farmers, control agricultural production and have access to better irrigation and farming resources. In contrast, landless laborers and marginalized farmers must rely on seasonal work, often working under exploitative conditions.
2. **Boat Owners vs. Fishermen:** In Machpara, *majhi* (boat owners) function as a capitalist class, controlling fishing operations and determining the wages and work conditions of *bhagi* (hired fishermen). This system resembles Marx's idea of surplus value, where the labor of *bhagi* generates profits that primarily benefit the *majhi*.
3. **Dependency and Exploitation:** The *dadon* (loan) system further entrenches class divides. Boat owners and fish collectors (*aarotders*) provide loans to fishermen, who must repay by supplying fish at reduced rates. This system keeps *bhagi* in a cycle of debt and dependency, reflecting the exploitation Marx described in capitalist societies.

5.2.2. Social Hierarchy in Monpura: A Weberian Perspective

Max Weber expanded upon Marx's ideas by emphasizing that class is not solely determined by economic factors but also by status (social honor) and power (the ability to influence decisions).

He argued that class divisions are shaped by market opportunities and social prestige, which influence people's life chances.

1. **Status and Prestige:** In Monpura, wealthier landowners and *majhi* enjoy higher social status, often serving as local leaders or mediators in conflicts. Their influence extends beyond economic power, granting them a prestigious role in community decision-making.
2. **Political Power and Class:** Political affiliation is another determinant of class in Monpura. Those connected to dominant political parties have greater access to government resources, such as fishing licenses, agricultural subsidies, and infrastructure projects. This aligns with Weber's view that power structures reinforce class distinctions.
3. **Multiple Class Layers:** Unlike Marx's binary class structure, Weber's perspective allows for multiple class layers in Monpura. There are not only landowners and landless workers but also small farmers, middle-class traders, and bureaucratic elites who leverage political networks to maintain economic advantages.

5.2.3. Impact of Class on Islanders

Class differences in Monpura impact economic stability, political representation, and access to essential services. The wealthier classes—landowners, boat owners, and political elites—exercise control over labor markets and natural resources, while lower-class individuals often face economic hardship, debt dependency, and limited upward mobility.

However, the strong community ethos in Monpura, characterized by collective work and social unity, mitigates some class tensions. The islanders' reliance on mutual support networks, shared religious and cultural traditions, and collective responses to natural disasters fosters a sense of solidarity despite economic disparities.

The class structure in Monpura reflects both Marxist and Weberian perspectives. Economic relations define class hierarchies, but social status, political influence, and market access further complicate the dynamics. Understanding class in Monpura requires examining not just wealth and labor relations but also the broader cultural and political structures that shape opportunities and power distribution on the island.

5.2.4. Lived Realities of Class and Power in Sonarchar and Machpara

While theoretical models help us understand the structure of class, a grounded ethnographic lens reveals how class, status, and power are felt, expressed, and contested in the daily lives of islanders. In Monpura's two contrasting livelihood zones—Sonarchar (agriculture-based) and Machpara (fishing-based)—class relations are not abstract economic categories, but deeply embodied social experiences, shaped by work, gender, kinship, and moral narratives of honor (*izzat*).

5.2.5. Sonarchar: Land, Labor, and Social Distance

In Sonarchar, land ownership remains the primary axis of class. Families who possess large tracts of cultivable land are often perceived not only as economically secure but also as morally superior, capable of hosting feasts, offering zakat, or mediating disputes in the *samaj*. These landowning households may employ seasonal laborers during peak sowing and harvesting times, often selecting them from poorer neighboring *para*s. Such work is typically casual and poorly compensated, reinforcing both economic dependency and social deference.

Many landless and marginal peasants survive by leasing small plots, engaging in sharecropping (*barga*), or working as agricultural day laborers (*din mojur*). Their work is strenuous and seasonal, and they lack long-term security. Yet, many of these individuals maintain dignity and resistance by participating in collective farming, joining mosque committees, or asserting moral superiority through religious devotion and community participation. In village narratives, the image of the pious poor remains a powerful counterweight to elite status.

Marriage alliances in Sonarchar are also deeply tied to class, with dowry expectations differing significantly depending on landholding status. Poorer households are often compelled to marry daughters early, or marry them to older men with land, reinforcing gendered vulnerability as a classed experience.

Importantly, political influence intersects with class in Sonarchar. Union council members and local party affiliates often belong to the landowning class, granting them preferential access to agricultural subsidies, canal dredging projects, or relief goods. Thus, power is not only economic but administrative, echoing Weber's emphasis on status and authority.

5.2.6. Machpara: The Politics of Boats, Debt, and Dependence

In Machpara, class does not revolve around land but around access to fishing capital—primarily boats, nets, licenses, and storage. Boat owners (*majhi*) represent the upper class, as they invest in motorized vessels, employ crews, and control the marketing of the catch. These individuals often do not go to sea themselves; instead, they act as patrons who extract surplus labor from wage-dependent fishermen (*bhagi*), echoing Marx's bourgeois-proletariat relationship.

However, the situation is more layered. Fishing laborers may work for a share of the catch or fixed wages, but are often tied to boat owners through debt. The *dadon* system—where owners lend money during off-seasons in exchange for exclusive rights over a fisherman's future labor—creates a cycle of economic bondage. Many *bhagi* describe this as a trap with no exit, where even illness or storm damage increases their indebtedness. Despite this, they rarely voice direct opposition, because boat owners also provide emergency loans, mediate with police or port authorities, and sometimes support religious and cultural events—ensuring that dependency is layered with gratitude and obligation.

Fishing communities experience fluctuating income, leading to greater economic precarity than agricultural Sonarchar. A poor fishing season, a storm, or a state-imposed fishing ban can push entire families into food insecurity or seasonal migration. Despite this, Machpara exhibits a strong culture of crew solidarity, where boat crews and their families often form tight para-level support networks, sharing food, medical care, and moral encouragement.

Power in Machpara is also exercised through non-state actors—fish traders (*aarotders*), moneylenders (*mohajon*s), and politically connected syndicates who control access to markets. These figures may not be the richest in material terms but hold gatekeeping roles that give them immense influence over who gets to fish, sell, or receive emergency aid. In this sense, class is relational— experienced not just as a lack of wealth, but as an exclusion from decision-making and control over one's labor.

5.2.7. Negotiating Class Through *Izzat* and Collective Identity

Across both Sonarchar and Machpara, *izzat* (honor, dignity) plays a crucial role in how class is interpreted and contested. A poor man who prays regularly, settles disputes fairly, or helps others in crisis can still hold social authority in the eyes of the community. Conversely, a wealthy man who fails to fulfill social obligations—by avoiding charity, abusing laborers, or engaging in immoral conduct—can lose *izzat* and face social isolation.

Religious life, especially during Eid, Friday prayers creates temporary spaces of class equality, where all must bow in front of God. Similarly, natural disasters (like cyclones) momentarily dissolve class divisions, as villagers unite to rebuild embankments, repair homes, or share food. These moments do not erase class, but they reveal a moral economy rooted in solidarity and shared vulnerability.

While the class structures of Sonarchar and Machpara echo Marxist and Weberian theories, their local expressions are dynamic, context-dependent, and morally contested. In Sonarchar, land anchors class, while in Machpara, it is the boat and its network. Yet in both places, class is never only about income—it is about visibility, honor, religious piety, political access, and the ability to fulfill social obligations.

Understanding class in Monpura therefore requires more than identifying economic categories. It demands attention to the rituals of daily life, the stories people tell about dignity, the invisible debts owed, and the fragile solidarities that hold a community together amid sea tides, storms, and shifting economies.

5.3. STATUS

Nestled amidst the expansive waters of the Bay of Bengal, Monpura Island boasts a distinctive cultural and economic identity intricately woven with the art of fishing. This chapter embarks on a journey through the nuanced landscape of status dynamics within the island's fishing

community, unraveling how the occupation transcends the boundaries of livelihood to become an inseparable facet of the islanders' way of life.

In the tapestry of the fishing community of Machpara, two distinctive categories of fishermen emerge. The first encompasses the regular fishermen, locally identified as *majhi* (Boat Owner) and *Bhagi* (Fisherman), while the second group involves seasonal or occasional fishermen known as *Bhagi* only. This collaborative occupation sees 6-8 individuals working as *Bhagi* under a *majhi*, highlighting the communal nature that defines the island's fishing practices.

Machpara's fishermen employ a rich repertoire of fishing techniques, mirroring the ecological diversity of the region. Traditional methods like net fishing, hook and line fishing, and basket traps seamlessly coexist with more modern practices such as mechanized trawling. This diversity not only underscores the adaptability of the islanders but also speaks to their profound understanding of the aquatic ecosystem sustaining their way of life.

The dynamic relationship between fishermen (*Bhagi*) and boat owners (*majhi*) stands as a crucial aspect of the island's social structure. *Bhagi*, functioning as shareholders, collaboratively work under the guidance of the *majhi*, who may or may not directly partake in fishing activities. The *majhi*, pivotal for possessing both a boat and fishing net, serves as a liaison with local fish businessmen and collectors. These intricate relationships within the structure emphasize the communal ethos governing Monpura's overall fishing industry.

Machpara's fishermen deploy an array of fishing nets tailored to specific catches. From Hilsha Nets to *Poa* Nets, *Bindi*/*Bihundi* Nets, and *Chi* Nets, each serves a distinct purpose in capturing various fish species. This varied use of nets reflects the islanders' nuanced understanding of their aquatic environment. The fish business on Monpura Island operates through a complex value chain involving *Godighar* (primary fish collection center) and *Aarotder* (fish collector). *Aarotders*, providing *dadon* (loan) to *majhi*es, play a pivotal role in the island's fish economy. The *dadon*, invested in the fishing business for a specified period, represents a key component of the islanders' financial transactions. I have delved into the intricate dynamics of status within the fishing community of machpara, shedding light on interconnected relationships, collaborative efforts, and economic intricacies that define the islanders' way of life. The occupation of fishing, extending beyond a mere livelihood, emerges as a cultural, economic, and social identity deeply embedded in the fabric of Monpura's coastal existence.

The fishing community on Machpara operates within a unique social framework where status is intricately tied to wealth, occupation, and social relationships. The following sections highlight the key aspects of how status is manifested within this distinct context.

Wealth Disparities play a significant role in determining status within the fishing community. Boat owners (*majhi*), who possess both boats and fishing nets, hold a position of economic advantage and higher status compared to those solely engaged as fishermen (*Bhagi*). The distribution of wealth among *Bhagi*, who work collaboratively under a *majhi*, contributes to an

internal hierarchy within the fishing teams. Those with higher financial contributions or a larger share of the catch may enjoy elevated status among their peers. Occupational Roles also contribute to the status dynamics. *majhi*es, as boat owners, are not only economically influential but also hold a position of authority within the fishing operations. Their decisions significantly impact the livelihoods of the *Bhagi*. *Bhagi*, while essential to the fishing process, may experience disparities in status based on their level of dependence on fishing. Regular, full-time fishermen are likely to have a more profound connection to their occupation, influencing their social standing compared to occasional fishermen.

Credit Relations and Debtors introduce another layer to the status dynamics. The practice of seeking credit or *Dadon* from *aarotders* (fish collectors) may lead to perceived differences in economic viability and social status. *Majhi*es successfully securing larger loans are likely to enjoy a higher status within the community. The ability to repay loans, especially during profitable fishing seasons, contributes to the perceived financial stability of both the *majhi* and the *Bhagi*, impacting their social standing.

The Influence of *Godighar* (fish collection center) and *Aarotders* significantly shapes the economic landscape and social status of the fishing community. *Aarotders*, as primary fish collectors, wield influence over *majhi*es and, indirectly, over *Bhagi*. *Aarotders*' decisions on *Dadon* distribution and their economic transactions with *majhi*es contribute to the establishment of a hierarchical structure within the fishing industry. Successful and affluent *aarotders* may command higher social status. Community Solidarity and Unity are evident despite economic disparities. The fishing community of Monpura Island exhibits a strong sense of unity and solidarity. Lineage bindings and community sentiments discourage internal conflicts and quarrels, emphasizing the importance of collective well-being over individual status. The community's ability to work together in economic, social, political, and religious affairs underscores the cultural importance of unity, mitigating potential tensions arising from status differentials.

In conclusion, the practice of status within the fishing community of Machpara is multifaceted, intertwining economic factors, occupational roles, credit relations, and community dynamics. While wealth disparities and occupational roles contribute to internal hierarchies, the overall ethos emphasizes collective unity and shared well-being, mitigating potential conflicts based on status differentials.

In the agricultural landscape of Monpura Island, a delicate balance is struck between the vital role of farming as a livelihood strategy and the formidable challenges posed by the unique coastal environment. While the majority of the island's population relies on fishing, a substantial portion turns to agriculture as a supplementary or alternative means of sustaining their lives. Here we will discuss the context of Sonarchar.

Agricultural practices in Sonarchar are intricately shaped by the island's geographical and environmental constraints. A significant challenge arises during the dry season when freshwater

scarcity, compounded by the absence of a comprehensive irrigation system, hampers year-round rice cultivation. Farmers are compelled to adapt their cropping patterns within the constraints of water availability, creating a seasonal rhythm in their agricultural activities.

Table 4.1: Distribution of Agricultural Land of Households under study of Sonarchar.

Land Owned	Numbers	Percentage	Status
No Cultivable Land	40	45%	Landless
0.1 to 1 acre	23	25%	Marginal Farmer
1.1 acre to 2 acre	14	16%	Small Farmer
2.1 acre to 5 acre	10	11%	Middle Farmer
5 acre to above	4	3%	Rich Farmer
	Total- 90	Total- 100%	

Source: Fieldwork in Sonarchar and Machpara

Salinity intrusion emerges as another significant threat, gradually eroding soil fertility and impacting crop yields. Dasgupta et al. (2014) predict that by 2050, climate change will cause notable increases in river salinity in Bangladesh's southwest coastal region. This rise in salinity is expected to result in severe drinking water shortages in coastal urban areas and reduced water availability for dry-season irrigation. Additionally, it will significantly alter coastal aquatic ecosystems, affecting freshwater fish populations and thereby changing the composition of capture fisheries. However, the expansion of brackish water conditions may create new opportunities for brackish water aquaculture.

In the case of Monpura, the intrusion of saltwater into arable land necessitates a thoughtful selection of crops, further influencing the overall productivity of the agricultural sector on the island. Despite the lack of irrigation infrastructure, Sonarchar farmers showcase remarkable resilience and adaptability. They have devised strategies to optimize available resources and mitigate challenges. The sequential cropping system, involving the cultivation of Amon rice followed by drought-resistant crops, efficiently utilizes limited freshwater resources. Additionally, many farmers engage in alternative livelihoods, such as fishing, to complement their agricultural income, showcasing a multifaceted approach to resilience.

The distribution of land ownership within a community of 90 individuals, as delineated in the provided chart, paints a stark picture of economic disparity and vulnerability. The data, meticulously categorized and quantified, reveals a society stratified by access to cultivable land, a fundamental resource in agrarian economies. At the base of this hierarchy lies the most substantial segment, comprising 40 individuals, or 45% of the population, classified as "landless." This designation signifies a profound lack of access to the means of agricultural production, relegating these individuals to the most precarious economic circumstances. Their livelihoods are likely contingent upon daily labor, fishing, or other non-land-based activities, rendering them highly susceptible to economic shocks and fluctuations. The sheer magnitude of this landless

population underscores the prevalence of poverty and economic inequality within the community, highlighting the urgent need for interventions aimed at alleviating their plight.

Moving slightly up the economic ladder, we encounter the "marginalized farmers," a group of 23 individuals, representing 25% of the population. These individuals possess a meager landholding of 0.1 to 1 acre, a quantity barely sufficient for subsistence agriculture. Their status as "marginalized" reflects the precarious nature of their livelihoods, characterized by limited productive capacity and heightened vulnerability to food insecurity. While marginally better off than the landless, they remain trapped in a cycle of economic hardship, struggling to meet their basic needs and facing constant challenges in achieving financial stability.

The "small farmers," comprising 14 individuals or 16% of the population, occupy a slightly more secure position. Owning between 1.1 and 2 acres of land, they possess a greater capacity for agricultural production than the marginalized farmers, enabling them to cultivate crops for subsistence and potentially generate a small surplus for sale. However, they remain vulnerable to economic and environmental shocks, necessitating strategies to enhance their resilience and diversify their income streams.

Further up the hierarchy, the "middle farmers," numbering 10 individuals or 11% of the population, enjoy a more substantial landholding of 2.1 to 5 acres. This allows them to engage in more profitable agricultural activities, generating a surplus and investing in agricultural improvements. Their economic security is considerably greater than that of the lower-tier groups, positioning them as relatively stable members of the community.

At the apex of this economic pyramid reside the "rich farmers," a small elite of 4 individuals, representing a mere 3% of the population. Possessing 5 acres or more, they command significant land resources, enabling them to engage in large-scale agricultural production and potentially other business ventures. Their economic dominance bestows upon them considerable influence within the community, shaping its economic and social dynamics.

In this intricate web of agricultural practices and land distribution, power dynamics manifest. The size of agricultural land becomes a tangible marker of one's status, influencing economic prosperity and political clout. Traditional village politics in Bangladesh, deeply rooted in socio-economic structures, finds expression in Sonarchar’s agricultural hierarchy. As farmers grapple with environmental challenges, the power dynamics in agriculture become a crucial aspect of adapting, surviving, and sustaining the unique coastal way of life on Monpura Island.

5.3.1. Status in Sonarchar: Land, Labor, and Social Visibility in an Agrarian Setting

In the agrarian village of Sonarchar, status is not simply a reflection of economic wealth but a complex social construct shaped by landholding patterns, kinship affiliations, lineage prestige, religious devotion, and participation in community affairs. While the material foundation of status often lies in ownership and control over cultivable land, the lived experience of status in

this coastal village reveals a multidimensional and relational process that encompasses moral authority, work ethic, and political maneuvering.

5.3.2 Land Ownership as the Axis of Status

The most visible marker of status in Sonarchar is land. Access to land not only determines livelihood security but also bestows honor, respect, and influence. The village's stratified land distribution—ranging from the landless (45%) to the rich farmers (3%)—lays bare the stark disparities that shape rural life. Rich farmers, who command plots exceeding five acres, occupy the uppermost tier of this social pyramid. Their ownership of fertile, strategically located lands allows for greater productivity and income, enabling them to employ laborers, invest in technologies like shallow tube wells, and even lend money to smaller farmers—recreating a structure of informal dependency that mirrors feudal ties.

These households often assume the role of moral and social arbiters in village life. They are called upon during local conflicts, asked to sponsor religious feasts, and frequently serve as intermediaries between villagers and state authorities. Their children are more likely to receive extended education, and family members often occupy roles in union parishads or mosque committees, reinforcing their visibility and legitimacy as community leaders.

5.3.3. Marginal and Small Farmers: Respect, Precarity, and Aspirations

The marginal (0.1–1 acre) and small (1.1–2 acre) farmers, who collectively make up 41% of the population under study, live in a state of tenuous security. Their landholdings are small, often fragmented, and vulnerable to both salinity intrusion and market fluctuations. Yet, among these groups, status is not only tied to economic productivity but also to personal conduct, religious piety, and social contribution.

Many smallholders earn respect through honest labor, careful land stewardship, and participation in communal labor during planting or harvesting seasons. Their children may study at local madrasas or government schools, and their homes, while modest, are maintained with dignity. The social respect granted to a hardworking, devout smallholder may rival or even surpass that of a larger landowner who is seen as arrogant or exploitative. In this sense, status is moralized, and *izzat* (honor) becomes a fluid and negotiable currency that extends beyond class.

5.3.4. The Landless: Invisible Labor, Collective Identity, and Moral Status

The largest group in Sonarchar, comprising landless households (45%), occupies a paradoxical position. On the one hand, they lack material resources, often working as day laborers, seasonal sharecroppers, or casual construction workers. Their economic insecurity makes them vulnerable to exploitative wage rates, delayed payments, and limited bargaining power. They have little say in local politics and are generally excluded from resource allocation decisions made by local elites.

Yet, these households often cultivate a collective identity rooted in resilience and solidarity. Many form mutual aid networks, help each other rebuild homes after storms, and organize collectively for relief during disasters. Their status is frequently defined not by individual wealth but by communal reliability, reputation for hard work, and contributions to religious or social functions. Widows, elder day laborers, and devout imams within this group may even wield symbolic authority despite material poverty. This reveals how status in Sonarchar is decoupled from wealth in certain ritual, spiritual, and communal spheres.

5.3.5. Political Position and Social Capital

Social capital, as the web of social relationships and trust within a community, plays a vital role in disaster response and risk management. Research from various disaster contexts globally has demonstrated that strong social ties, whether within families and neighborhoods (bonding), across different groups (bridging), or with formal institutions (linking), enable communities to act quickly in times of crisis. These networks often lead rescue efforts, assist in relocating vulnerable individuals to safety, distribute food and clean water, offer shelter, and provide psychological support to those affected (Behera, 2023).

Bourdieu's (1986) concept of capital is useful in understanding the livelihood dynamics of Monpura. Beyond economic capital, social networks and cultural knowledge—such as local fishing skills or land inheritance practices—act as forms of capital that shape people's ability to adapt to changing environments. These capitals are unevenly distributed, reinforcing class and power hierarchies within the island's communities.

Beyond land, political affiliation—especially alignment with ruling party networks—affords individuals enhanced status. Those connected to Union Parishad members or local representatives often gain priority access to government services such as fertilizer subsidies, cash-for-work programs, and housing schemes. In many cases, a small or marginal farmer with party links may wield more real influence than a larger landowner without such connections. This dynamic showcase how political brokerage supplements and sometimes overrides agrarian class distinctions in shaping local status.

These intersections of class, kinship, and politics give rise to multiple status hierarchies in Sonarchar. One's influence in the mosque, school committee, or *Samaj* may not align perfectly with economic wealth, leading to competing claims to respect and authority. Elders still command deferential treatment, and lineage prestige—traced through "*gushti*" and ancestral homestead—remains a source of inherited status.

5.3.6. Environmental Hardships and Status Fluidity

Monpura's fragile ecological setting introduces a final dimension to the status structure: vulnerability and crisis. In years of poor harvests due to saline intrusion or storms, even the rich farmers face loss and decline. Such moments can equalize status temporarily, forcing families to depend on mutual aid regardless of prior class standing. Conversely, a landless household that

receives foreign remittances or secures NGO support may rapidly ascend the local status hierarchy. Thus, while status in Sonarchar appears rigid, crisis and opportunity periodically rearrange its contours.

In Sonarchar, the concept of status is not merely a reflection of land ownership or class; it is a socially constructed, morally interpreted, and politically negotiated phenomenon. While land remains central to economic power, factors such as religiosity, moral reputation, kinship ties, community engagement, and political affiliation coalesce to shape one's position in the village hierarchy.

Status here is not static— it shifts with the tides of the river, the moods of the harvest, and the rhythms of village politics. The resilience of Sonarchar's agricultural households, despite ecological and economic fragilities, is intimately tied to their ability to navigate and negotiate this complex status terrain, securing both survival and dignity in a rapidly changing world.

5.4. CASTE SYSTEM

The caste system is a feature of several societies, particularly in South Asia, for centuries. This stratification system categorizes individuals into distinct groups based on birth. It is based on ritual, pollution, and purity as sanctioned by Hindu religion. Each caste, or social class, traditionally has its own set of privileges, restrictions, and roles within the community. The alignment between caste, class, and power has weakened, allowing for some upward mobility, especially among Non-Brahmins. However, deep-rooted inequalities persist, particularly for marginalized groups like the Adi-Dravidas (Beteile, 1969))

The origin of the caste system is complex and intertwined with historical, religious, and cultural factors. In ancient Hindu society, the caste system was initially linked to the division of labor, with people assigned specific occupations based on their skills and aptitudes. Over time, this occupational division evolved into a hereditary system, where one's caste was determined by birth, and social mobility became significantly restricted.

The caste system typically comprises four main categories, known as Varnas, in Hindu tradition:

1. Brahmins (Priests and Scholars): Traditionally responsible for religious rituals, teaching, and maintaining sacred knowledge.

2. Kshatriyas (Warriors and Rulers): Involved in military and administrative functions, responsible for protecting the land and its people.

3. Vaishyas (Merchants and Landowners): Engaged in agriculture, trade, and commerce, contributing to economic activities.

4. Shudras (Laborers and Service Providers): Occupied with manual labor and service to the higher castes, serving the societal needs.

Beyond these four primary categories, there exists a fifth group known as "Untouchables" or "Scheduled Castes," historically marginalized and subjected to social discrimination. Scheduled Castes were often relegated to tasks considered impure or undesirable.

While officially abolished in many South Asian countries, the caste system's influence persists in various forms, impacting social interactions, economic opportunities, and political representation. Despite legal interventions and social reforms, challenges remain in eradicating deep-rooted prejudices associated with caste, and efforts continue to promote equality and social justice in regions where the system has historically prevailed. The caste system's legacy raises important questions about identity, privilege, and the ongoing pursuit of a more inclusive and equitable society.

In the unique cultural landscape of Monpura, the caste system exhibits distinctive characteristics, shaped by the island's history, demographics, and social transformations. While Monpura has a relatively small Hindu population, comprising only 6% of its residents, the practice of the traditional caste system among Hindus has significantly diminished. This shift can be attributed to historical migrations and geopolitical events, including the mass migration of Hindus to Monpura and the subsequent exodus following the partition of India and the Bangladesh Liberation War in 1971.

The Hindu community in Machpara, having migrated from various regions, has undergone a gradual assimilation, leading to a diminished emphasis on traditional caste distinctions. The communal bonds forged in the face of migration challenges and the need for collective survival have contributed to a more homogeneous and inclusive Hindu community on the island. Interviews conducted with the Hindu population of Monpura reveal that the practice of the caste system has faded into the background, with individuals identifying more closely based on shared experiences and common challenges.

While the Hindu population in Machpara has moved away from traditional caste distinctions, it is essential to note that the island also hosts a predominantly Muslim community. However, over the years, societal changes, education, and evolving cultural norms have played a role in diminishing the prominence of caste-based practices within the Muslim community.

In contemporary Monpura, the Muslim population no longer actively practices a rigid caste system. The island's social fabric has evolved, fostering a sense of unity and shared identity among its residents. The emphasis on Islamic teachings and principles of equality has played a role in diminishing the influence of caste-based practices. The community's focus has shifted towards a more egalitarian ethos, where individuals are recognized and valued for their contributions and character rather than their caste affiliations.

The unique demographic composition and historical events in Monpura have shaped distinctive patterns in the practice of the caste system. While the Hindu population has largely moved away from traditional caste distinctions, the Muslim community has experienced a parallel evolution,

with caste-based practices giving way to a more inclusive and egalitarian social structure. The cultural landscape of Monpura reflects the resilience and adaptability of its communities in navigating the complexities of caste dynamics and fostering a more harmonious coexistence.

5.5. POWER RELATIONS

5.5.1. Sources of Power

Power in Monpura Island, as in any society, stems from various sources that shape social hierarchies, economic control, and political influence. Power is not only derived from formal institutions but also emerges through land ownership, economic assets like boats, political affiliations, and wealth accumulation. These sources of power determine who wields influence in decision-making, resource distribution, and community affairs.

Land ownership remains one of the most significant determinants of power in Monpura. Those who own larger tracts of land have greater economic stability, higher social status, and a stronger voice in community matters. In Sonarchar, the categorization of farmers based on landholding sizes reflects this power dynamic. The medium-level farmers, comprising 52% of the agricultural population, hold substantial influence over local agriculture, labor arrangements, and even access to resources such as water and irrigation. Small-scale farmers, who make up 30% of the farming community, struggle with limited resources, making them more vulnerable to economic uncertainties and dependence on wealthier landowners.

The power of landowners extends beyond economic means; they often play roles in local governance, mediating conflicts, and influencing policy decisions at the union level. Access to land can also dictate social mobility—those who inherit or acquire land strengthen their position in the hierarchy, whereas landless laborers remain economically dependent on landlords for employment opportunities.

In the fishing community of Machpara, boats serve as a crucial source of power. Fishing is not merely an occupation; it is an economic structure where ownership of boats dictates social standing. The hierarchical relationship between *majhi* (boat owners) and *bhagi* (hired fishermen) exemplifies this power distribution.

The *majhi*, who owns the fishing boats, controls decision-making, sets the wages for *bhagi*, and determines the distribution of fish sales. This places them in a dominant position within the fishing village, while the *bhagi* remain dependent on them for employment and income. In times of economic hardship or natural disasters, such as cyclones, boat owners often act as lenders, providing loans to fishermen in exchange for labor commitments, further reinforcing their economic and social control.

Political parties in Monpura serve as another significant source of power, influencing both local governance and economic policies. Given that Monpura falls under Constituency No. 118 (Bhola-

4), political representatives play a key role in shaping policies related to fishing, agriculture, and infrastructural development.

Local political leaders and party members act as intermediaries between the community and the government, often determining who gets access to state resources, relief during natural disasters, and development projects. Those affiliated with dominant political parties gain leverage in securing jobs, business opportunities, and legal protections. In contrast, individuals without political backing may find themselves marginalized in decision-making processes. Political parties also control narratives around development and governance, mobilizing support during elections and maintaining networks of patronage that further entrench their influence. The allocation of government funds, licensing for fishing, and land use policies are often shaped by political interests, making political allegiance a crucial factor in securing power.

Wealth accumulation, whether through land transactions, fishing profits, or trade, serves as another avenue for gaining power in Monpura. Individuals who sell their land for a high price or engage in profitable business ventures can shift their status within the community. Economic power allows individuals to invest in assets such as additional boats, storage facilities, or modern fishing equipment, further consolidating their dominance in the fishing industry. Wealthier individuals also influence local economies by providing loans, controlling markets, and even financing political campaigns, thus strengthening their social and political clout. Furthermore, the ability to access education, healthcare, and modern infrastructure is often tied to wealth, creating disparities in opportunities between the affluent and the economically disadvantaged. In this way, economic power transcends immediate financial gains and extends to long-term social influence.

5.5.2. Power Relations Among People

Monpura Island, nestled in the Bay of Bengal, unfolds a nuanced tapestry of power relations intricately woven into the fabric of daily life. Power dynamics on the island are multifaceted, influenced by occupation, gender, and historical factors. As we explore the power structures, it's essential to examine the roles of farmers, fishermen, and the remnants of the caste system, intertwining these aspects with the context of women's conditions on the island. The social power structure within wetland communities in Bangladesh is marked by inequality. This unequal distribution of power stems from both internal and external factors. Among the internal sources, key elements include ownership and control over land, as well as access to different forms of capital (Choudhury et al., 2016).

In the agricultural realm of Sonarchar, power relations manifest through the dynamics between farmers and fishermen, each contributing significantly to the island's economic landscape. Farmers, categorized based on landholding sizes, delineate a hierarchical structure within the agricultural community. The majority, constituting 52%, falls within the medium-level farmers, indicating a prevalence of moderate-sized landholdings. This segment commands a significant presence, wielding influence over agricultural activities and contributing to the island's economic

vitality. Conversely, the 30% of households classified as small-scale farmers represent a demographic engaged in relatively modest agricultural operations. While their individual influence may be less pronounced, collectively, they contribute to the diversity of Monpura's agricultural profiles.

Fishermen, predominantly engaged in fishing as a primary occupation, operate within a communal structure led by boat owners (*majhi*) and fishermen (*Bhagi*). The hierarchical relationship between *majhi* and *Bhagi* underscores power dynamics, where decision-making and economic transactions are shaped by the boat owner's authority. The interdependence among fishermen highlights a collective power structure that defines the island's fishing industry.

The historical remnants of the caste system, though diminished, cast a subtle shadow on power relations in Monpura. Among the Hindu population, comprising 6% of the island, traditional caste distinctions have faded, replaced by a sense of shared identity forged through migration challenges and collective survival. In contrast, the Muslim community, once influenced by the caste system, has experienced a parallel evolution towards a more egalitarian social structure. The diminishing influence of caste-based practices reflects a collective shift towards unity and shared identity within the Muslim community.

In Monpura, women play multifaceted roles, engaging in various activities crucial for the island's sustenance. Their contributions, while essential, often go unrecognized and ungranted. Engaged in activities like cutting grass, working in agriculture, and maintaining households, women contribute significantly to the island's economy. However, the traditional norms and the "*Purdah*" system can lead to the underappreciation of women's labor capacity, contributing to a power dynamic where their efforts are taken for granted. However, In coastal Bangladesh, women often face exclusion from accessing natural resources and encounter socio-cultural and religious barriers that limit their interaction with external actors, thereby restricting their opportunities for broader engagement (Khalil et al., 2021).

Power relations in Monpura Island are a complex interplay of occupation, gender, and historical influences. Farmers and fishermen hold pivotal roles in shaping the economic landscape, while the residual impact of the caste system lingers in subtle ways. Recognizing the multifaceted contributions of women and understanding the power dynamics at play is crucial for comprehending the intricate social fabric that defines Monpura's island community.

5.5.3. Political Exercises

Monpura, an Upazila divided into four union parishads - Dakshin Sakuchia, Hazirhat, Monpura, and Uttar Sakuchia - is a crucial constituency in the context of national politics. Specifically designated as Bola-4 in the National Parliament elections, it holds significant importance in the political landscape, representing not only Monpura but also Charfashion Upazila. The parliamentary seat, identified as Constituency No. 118, plays a pivotal role in shaping the political dynamics of the region.

In the context of national politics, Monpura becomes a focal point for various discourses and political exercises. The constituency, with its diverse sectors like fishing and agriculture, stands as a microcosm reflecting the broader developmental and progressive aspirations of the nation. The political landscape in Monpura is likely to be influenced by the policies and initiatives of national leaders, particularly those addressing the unique challenges and opportunities prevalent in this coastal region.

The fishing sector, which is a cornerstone of Monpura's economy, is likely to feature prominently in political discussions. Issues such as sustainable fisheries management, access to modern technology, and infrastructural development for the fishing community may take center stage. The national discourse on economic policies, trade agreements, and international relations can significantly impact the livelihoods of those dependent on the fishing industry in Monpura.

Similarly, agriculture, another vital component of Monpura's economic framework, will be subject to political considerations. Discussions on irrigation facilities, crop diversification, and climate-resilient agricultural practices are likely to shape the political narrative in the constituency. As Monpura grapples with challenges like freshwater scarcity and salinity intrusion, national policies addressing these issues will undoubtedly influence the local political discourse.

Beyond these primary sectors, the overall development of Monpura, including education, healthcare, and infrastructure, will be key aspects of political discussions. The residents of Monpura are likely to engage with national leaders and political representatives to address their specific needs and contribute to the broader development agenda of the country.

Monpura's political landscape is intricately connected with national politics, reflecting the symbiotic relationship between local aspirations and broader policy frameworks. The dynamics of the fishing and agriculture sectors, along with other developmental concerns, will shape the political exercises in Monpura, influencing its journey towards progress and prosperity.

The multifaceted tapestry of Monpura Island's social fabric unravels a rich narrative of interconnectedness, resilience, and adaptation. The islanders, navigating the challenges of daily life, intricately weave relationships, power dynamics, and cultural nuances that define their collective identity. This exploration delves into key aspects of Monpura's social landscape, encompassing status, caste, power relations, and political exercises, shedding light on the nuanced interplay of economic, social, and cultural forces.

The status system, deeply interwoven with economic roles and occupation, reflects the diverse nature of the island's fishing community. While wealth disparities and occupational roles contribute to internal hierarchies, the overarching ethos emphasizes collective unity, mitigating potential conflicts. The hierarchical structure within the agricultural community, based on landholding sizes, underscores power dynamics, influencing economic prosperity and political clout.

The caste system, once a defining feature of South Asian societies, has undergone transformation on Monpura Island. The Hindu population, having migrated from diverse regions, has moved away from traditional caste distinctions, fostering a more inclusive and homogeneous community. Similarly, the Muslim community has evolved towards a more egalitarian ethos, emphasizing unity over caste-based practices. The island's unique demographic composition and historical events have shaped distinctive patterns in the practice of the caste system, reflecting the resilience and adaptability of its communities.

Power relations on Monpura Island manifest through the dynamics between farmers and fishermen, each contributing significantly to the economic landscape. The interdependence among fishermen, led by boat owners, defines a collective power structure within the fishing industry. Historical remnants of the caste system subtly influence power dynamics, while women's contributions, essential for the island's sustenance, often go unrecognized.

In the realm of national politics, Monpura emerges as a focal point for diverse discourses and political exercises. The fishing and agriculture sectors, along with broader developmental concerns, shape the political landscape, highlighting the symbiotic relationship between local aspirations and national policy frameworks.

Throughout this exploration, the narrative is woven with threads of unity and shared identity. Islanders exemplify a strong sense of community, characterized by mutual assistance, readiness to unite for common demands, and a shared commitment to problem-solving. The bonds forged through lineage ties and community sentiments act as cohesive forces, mitigating discord and fostering collaboration. As Monpura Island journeys towards progress and prosperity, the intricate social dynamics presented in this exploration serve as a testament to the islanders' adaptability, resilience, and commitment to collective well-being. The narrative of Sonarchar and Machpara of Monpura reflects not only the challenges faced by its communities but also the strength derived from unity, interconnectedness, and a shared vision for a vibrant and sustainable future.

5.6. ANALYSIS OF CLASS, STATUS, AND POWER

The nuanced analysis of class, status, and power in Sonarchar and Machpara reveals that social life in Monpura is a constant negotiation between structural forces and individual agency. The lived realities of these communities are shaped by a complex interplay of economic, social, and political factors that go beyond simple economic determinism. While the economic base, as highlighted by a Marxist perspective, is a foundational element, the Weberian insights into status and power provide the necessary depth to understand the everyday struggles and strategies of the islanders.

5.6.1. Lived Realities of Class and Power

In Sonarchar, the lives of landowners and the landless are starkly different. Landowners, with their secure economic base, have the capacity to withstand environmental shocks and invest in

adaptive strategies. They often hold leadership positions in local governance and community organizations, extending their economic power into the political realm. This elite dominance ensures that when formal institutions or development programs are introduced, they often become vehicles for the reproduction of existing power structures, rather than agents of equitable change. The landless, on the other hand, are perpetually in a state of precarity. They rely on the landowners for seasonal labor and often lack the resources to implement their own adaptive measures, leaving them highly vulnerable to economic and environmental shocks. Their "invisible labor" is a cornerstone of the agrarian economy, yet they are often excluded from systems of power and decision-making.

Machpara presents a different but equally stratified reality. The politics of boats, debt, and dependence define the social landscape. A fisherman who owns his boat and equipment has a degree of autonomy and security, but most fishermen are indebted to boat owners or market intermediaries, or depend on daily wages. These relationships are often exploitative, locking fishermen into cycles of debt from which escape is difficult. The control over capital gives boat owners immense power, not just economically but also socially. They can dictate terms of labor and often act as mediators in disputes, further cementing their authority. However, because the fishing economy is more volatile, social status in Machpara is also more fluid, shaped by daily successes and failures.

5.6.2. Status, Identity, and Moral Economy

The concepts of *Izzat* and collective identity serve as crucial buffers against the harsh realities of class inequality. In both villages, people negotiate their social standing through a moral economy of exchange, reciprocity, and mutual assistance. For landless laborers in Sonarchar and daily wage fishermen in Machpara, their sense of dignity is not solely tied to their economic standing. Instead, it is rooted in their collective identity, their ability to work together, and their adherence to community norms. Kinship and reciprocal labor arrangements are essential survival strategies that fill the gaps left by inadequate formal support systems.

The traditional caste system among the Hindu community in Machpara further adds a layer of complexity to the social hierarchy. While the study focuses on a Muslim-majority population, the historical vestiges of a caste-based system subtly influence social dynamics, with certain groups maintaining their identity and social standing based on their traditional occupations.

5.6.3. Power Relations in a Changing Environment

The analysis of power relations in Monpura reveals a dynamic and multi-layered system. Power is not just a top-down phenomenon exercised by elites. It is also a form of social capital, a source of influence, and a capacity to act, which is constantly being negotiated at the micro-level. The sources of power on the island are varied: control over land and capital, political position, access to formal institutions, and even informal knowledge and social networks.

The political exercises on the island are a clear manifestation of these power relations. Local politics is not just about formal elections but also about the constant negotiation between

different groups and interests. The social organizations (*samaj*) often serve as platforms for expressing power and managing disputes, sometimes in parallel to the formal state organizations. The study highlights that the introduction of formal institutions, like the Union Parishad, does not automatically lead to a more equitable distribution of power, as these institutions are often captured by the dominant elite. The thesis's findings echo the work of other scholars who have shown how elite dominance can perpetuate inequality even within seemingly democratic frameworks.

5.6.4. Conclusion

In its final analysis, this chapter demonstrates that social hierarchy in Monpura is a fluid and contested domain, where class, status, and power are constantly in motion. The vulnerability of the island's environment, marked by riverbank erosion, saline intrusion, and climate change, continuously reshapes these hierarchies, creating both new challenges and new opportunities for adaptation. The people of Monpura are not passive victims of these changes, but active agents who negotiate their social realities through inherited knowledge systems, community solidarity, and creative ingenuity.

However, the thesis also underscores a critical point: while resilience is abundant, it has limits. Without addressing the underlying structural issues of unequal access to land and capital, and without reforming policy approaches that favor external solutions over local knowledge, even the most resourceful communities will face mounting hardship. The journey toward progress on Monpura is not just a matter of economic development; it is a social and political journey that requires a deeper understanding of the intricate power relations that define community life. This research contributes to that understanding, offering a compelling case for a more holistic, and anthropologically informed, approach to development in climate-vulnerable regions. It is a testament to the fact that to truly understand the struggles of the Monpura people, one must look beyond simple economic metrics to the complex interplay of class, status, and power that shapes their lives.

CHAPTER SIX:
BELIEF SYSTEMS, RITUALS, AND FESTIVALS

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6.1. INTRODUCTION: RITUALS IN EVERYDAY LIFE

Bangladesh has a rich and diverse cultural heritage. Some of its customs go back to ancient times, while others have been preserved by hundreds of indigenous tribes who migrated to the region from different parts of the world. Many of these tribes, with their unique cultural traditions, still live in the plains, forests, and hills of Bangladesh. Their ancestors belonged to groups such as the Negritos, Proto-Australoids, Proto-Mongoloids, and Caucasoids. Later, Aryans arrived from West Asia.

The ethnic makeup of Bangladesh has been shaped by the fertile delta, nourished by numerous rivers, a favorable climate, and abundant resources that drew settlers, traders, and invaders. Over time, these groups blended together, creating a diverse population with a strong non-Aryan influence. The fertile land and extensive waterways made farming and fishing the main livelihoods, and rice, vegetables, and fish became staple foods for the people.

In Monpura, a prevailing Muslim majority characterizes the demographic landscape, as indicated by the 2011 Bangladesh Bureau of Statistics (BBS) census data, with 94% of the population identifying as Muslims. Notably, this census underscores the predominantly homogeneous religious composition, with Hindus constituting the sole minority at 6%. This demographic profile aligns with broader national trends, reflecting the religious diversity of Bangladesh. The daily religious practices in Monpura closely mirror those observed throughout Bangladesh. Within the Muslim population of Sonarchar, the majority adheres to Sunni Islam, engaging in the practice of offering five daily prayers, a fundamental tenet of Islamic devotion. The presence of several religious institutions throughout Monpura attests to the significance of communal worship and spiritual guidance within the community.

Conversely, the Hindu minority in Monpura, comprising 6% of the population, participates in distinctive religious practices that are integral to their cultural and spiritual identity. While practices may vary among individuals, common rituals include daily prayers, observance of religious festivals, and engagement in community celebrations. Hindus, like their Muslim counterparts, contribute to the rich tapestry of religious diversity in Monpura.

In the broader context of Bangladesh, daily religious practices among Muslims involve the observance of the five daily prayers called *Namaj* locally (Salah), fasting (*Roja*) during the holy month of Ramadan (Sawm), almsgiving (*Zakat*), and the pilgrimage to Mecca (*Hajj*) for those

able. Hindus, on the other hand, celebrate festivals such as *Durga Puja*, *Diwali*, and *Saraswati Puja*, engaging in worship, rituals, and communal festivities.

Here is a chart of religious institutes in Monpura:

Table 6.1: Religious institutes in Monpura.

Institute	Number
Mosque	115
Mandir	13
Nurani Madrasa	18
Maktab	90
Ibtedayi Madrasa	10
Forkania Madrasa	13
Hafizia Madrasa	4
Kaomi Madrasa	4
	Total = 267

Source: Fieldwork in Sonarchar and Machpara

The religious landscape in Monpura reflects the harmonious coexistence of different faith communities, contributing to the cultural mosaic of Bangladesh. The daily practices of both Hindus and Muslims not only foster spiritual fulfillment but also serve as vital components of community identity and cohesion in this island locale. Here is the list of rituals muslims and hindus follow in monpura:

6.1.1. Muslim

- Eid ul-Fitr - on the 1st day of Shawwal month of the lunar Islamic calendar.
- Eid ul-Adha - on the 10th day of Dhu al-Hijjah month of the Islamic calendar.
- ChaandRaat - on the 29th or 30th night of Ramadan month of the Islamic calendar.
- Ashura - on the 10th day of Muharram in the Islamic calendar.
- Eid-e-Meeladun Nabi – The Birth of the Prophet Muhammad
- Shab-e-Qadr
- Shab-e-Baraat
- Bishwa Ijtema

6.1.2. Hindu

- Durga Puja - from the 2nd to the 7th day of Kartik month of the Bengali calendar.
- Krishna Janmashtami - celebration of the birth of Lord Krishna
- Dolyatra
- Ratha Yatra, the most popular being Dhamrai Rathayatra.
- Kali Puja
- Saraswati Puja

- Ashtami Snan on Chaitra Shukla Paksha Ashtami (ninth day during the waxing phase of moon in Chaitra Month) as per Hindu Lunar Calendar

6.1.3. The Role of Religious Institutions in Monpura

Religious institutions in Monpura Island are far more than spaces of worship—they are foundational pillars of social life, moral discipline, cultural transmission, and community organization. With a total of 267 recorded institutions—115 mosques, 13 mandirs, 18 Nurani madrasas, 90 maktabs, 10 Ibtedayi madrasas, 13 Forkania madrasas, 4 Hafizia madrasas, and 4 Qaomi madrasas—Monpura represents a vibrant landscape where religion plays an integrative and organizing role in both public and private life. While Sonarchar, the agriculturally focused Muslim-majority village, is home to the majority of Islamic institutions, Machpara, inhabited primarily by Hindu fishing communities, is defined by its mandirs and rituals rooted in Hinduism. Each village's religious institutions reflect and reproduce the moral codes, educational practices, and collective identities of their respective communities.

In Sonarchar, religion—particularly Islam—pervades the rhythms of daily life and sustains the moral order of the agrarian society. The mosque, of which there are 115 across the island and several prominent ones in Sonarchar, serves as the heart of the village's spiritual and social world. These mosques are not only places of prayer but also forums of public deliberation. After *Jumma* (Friday) prayers, it is common for community members to linger, discussing everything from crop conditions and irrigation problems to disputes over land inheritance and dowry negotiations. The mosque committee often plays a central role in resolving local conflicts, reinforcing its function as an informal institution of justice.

The maktabs and madrasas—particularly Nurani, Ibtedayi, Forkania, Hafizia, and Qaomi—complement the mosque in shaping Islamic consciousness from a young age. Children from landless and marginal farming families often begin their formal education in a maktab attached to a mosque, learning to recite the Qur'an, memorize *duas* (prayers), and develop moral discipline. These institutions, though modest in infrastructure, carry immense weight in the spiritual and educational life of Sonarchar. Many boys who attend Hafizia madrasas commit the Qur'an to memory, attaining a respected status regardless of their family's economic condition. Similarly, Qaomi madrasas, unaffiliated with state oversight, foster deeper Islamic scholarship and often influence moral discourses regarding marriage, women's behavior, work ethics, and proper social conduct.

Islamic rituals such as *Milad Mahfils*, *Dua Onusthans*, and Pre-Departure Prayers for agricultural or economic ventures are frequently hosted in these mosques. The Imam often acts as a religious advisor and moral guide, consulted in family conflicts or major life events like marriage or death. In the absence of state support, mosque-based networks frequently facilitate the distribution of *zakat* (alms), relief during floods or cyclones, and the coordination of charity.

These institutions also reflect a form of religious democracy. In village life, even poor households contribute during religious occasions—be it donating rice during Ramadan, offering chickens for the mosque's *iftar*, or organizing a Qur'an recitation event in times of misfortune. Such collective practices reinforce solidarity, blurring some class lines even within a deeply stratified agrarian economy.

6.1.4. Hindu Institutions in Machpara: Spiritual Continuity in a Coastal Fishing Society

Contrasting with Sonarchar, Machpara is home to Monpura's Hindu minority, a community predominantly engaged in fishing, where mandirs function as both sacred and communal spaces. The 13 mandirs documented on the island—including several central ones in Machpara—are not just houses of worship but repositories of cultural identity, intergenerational memory, and everyday social regulation.

Mandirs in Machpara provide a spiritual rhythm to the village. Fishing expeditions, like agricultural tasks in Sonarchar, are preceded by blessings sought from deities, particularly *Ma Kali*, *Shitala*, or *Manasa*, who are locally revered as protectors against storms, illness, and misfortune at sea. Before major voyages or boat inaugurations, fishermen often organize pujas, with offerings placed before idols and blessings sought for safety and a fruitful catch. These pujas are typically organized by the boat owner or community elders and are attended collectively by neighboring households, reinforcing a strong sense of mutual dependence and cultural unity.

In the absence of temples run by large institutions, the mandir in Machpara is a community-run space, maintained through collective contributions and volunteer labor. Daily rituals such as *aroti*, *bhajan*, and *prasad* distribution are locally organized. Major festivals—*Durga Puja, Saraswati Puja, and Rath Yatra*—transform the village into vibrant centers of religious and cultural celebration. These festivals not only serve as spiritual events but also social spaces where caste hierarchies are negotiated, gender roles are performed, and village-level solidarities are reaffirmed.

The purohits (priests) and elderly community members act as custodians of traditional norms. They also function in quasi-judicial roles, mediating conflicts related to land, marriage, or caste offenses. Notably, many Hindu families in Machpara preserve syncretic religious practices, sometimes participating in Islamic *milads* or visiting nearby *mazars* (Sufi shrines), reflecting a long-standing history of interfaith coexistence on Monpura.

While religious institutions in Sonarchar and Machpara are distinct in theology, ritual, and spatial identity, they coexist within a shared ecological and economic landscape. Both the mosque and the mandir shape how islanders understand misfortune, prosperity, illness, morality, and death. For instance, both Muslim and Hindu communities organize collective prayers and offerings during cyclones, epidemics, or boat accidents—highlighting how religious institutions act as buffers during crisis, offering both spiritual solace and material aid.

Moreover, these institutions function as repositories of memory, teaching children not only about scripture but also about the island's past, values, and stories of survival against floods and economic hardship. In doing so, they preserve the cultural resilience of Monpura's people in the face of environmental vulnerability, poverty, and growing modernization.

Religious institutions in Monpura—whether the mosque and madrasa in Muslim Sonarchar or the mandir in Hindu Machpara—are vital infrastructures that sustain everyday life, guide moral conduct, and shape identity. They regulate social behavior, mediate conflict, educate children, organize communal labor, and provide shelter during collective trauma. These institutions, though grounded in religion, are deeply social in nature, forming the bedrock of Monpura's community life. In remote island settings, where state presence is minimal and material resources scarce, religion fills both the spiritual and institutional void, offering a powerful lens through which to understand the lived realities of the coastal people of Bangladesh.

6.1.5. THE TWO EIDS IN SONARCHAR

In the agrarian village of Sonarchar, located on the fragile and shifting grounds of Monpura Island, Eid-ul-Fitr and Eid-ul-Adha are not merely religious observances but essential expressions of faith, community cohesion, and rural identity. These two holy festivals, celebrated by the Muslim majority of the village, mark more than ritual devotion—they are deeply embedded in the seasonal, social, and economic fabric of life in Sonarchar.

While Eid is celebrated across the Islamic world, the meaning, performance, and social implications of the festivals in remote and vulnerable places like Sonarchar take on distinct characteristics. Here, the Eid festivals serve as a powerful cultural institution, reaffirming the community's spiritual values, solidifying kinship networks, and offering moments of respite, joy, and moral reflection in an otherwise labor-intensive and precarious rural life.

6.1.6. Eid-ul-Fitr

Eid-ul-Fitr, celebrated at the end of the holy month of Ramadan, arrives like a promise of light after a month of spiritual discipline and self-restraint. In Sonarchar, the anticipation of Eid begins weeks before the crescent moon is sighted. Families begin preparing by saving money, purchasing modest new clothes for children, cleaning their homes, and buying essential items from the local *haat* (market)—often the busiest in the final days of Ramadan.

Given the economic constraints faced by many families—particularly landless laborers and marginal farmers—preparations are carefully measured and modest. But even those with limited means participate fully, supported by a culture of sharing and communal solidarity. Zakat (obligatory charity) plays a vital role here. Wealthier farmers and traders provide zakat in the form of cash, rice, or clothing to the poorer members of the community, ensuring that everyone, regardless of income, can participate in Eid celebrations.

On the morning of Eid, men and older boys gather at the Eidgah, an open field near the central mosque, dressed in white *panjabi*s or clean traditional clothes. The prayer begins just after sunrise, accompanied by a sermon from the local Imam, who speaks about compassion, forgiveness, and community responsibility. After the prayer, villagers greet each other with heartfelt embraces and exchange the traditional greeting: "Eid Mubarak."

The ritual is followed by a festive morning meal at home, where vermicelli (*shemai*), rice pudding (*payesh*), and other simple delicacies are prepared. For many families in Sonarchar, this meal symbolizes renewal and spiritual satisfaction rather than material extravagance. Children, given small cash gifts (*salami*), roam the village visiting relatives and neighbors, receiving blessings and food wherever they go.

Eid-ul-Fitr also acts as a mechanism of social repair. Long-standing conflicts or personal misunderstandings are often resolved on this day. Families reconcile, apologies are exchanged, and the occasion becomes a platform to reaffirm broken bonds, guided by the Islamic ethic of mercy and community.

6.1.7. Eid-ul-Adha

Eid-ul-Adha, or the Festival of Sacrifice, observed approximately two months after Eid-ul-Fitr, carries a more profound theological and economic symbolism. Commemorating Prophet Ibrahim’s willingness to sacrifice his son in obedience to God, the festival in Sonarchar is centered on the ritual sacrifice (*qurbani*) of animals such as cows and goats.

Unlike wealthier urban or peri-urban areas, livestock ownership in Sonarchar is unevenly distributed, and only the middle and rich farming households can afford to sacrifice cattle. However, the spirit of the festival ensures inclusivity. It is common for several poorer families to jointly contribute to the cost of a cow, or to receive shares of meat from wealthier neighbors. The Islamic directive—that one-third of the meat be distributed to the poor—is strictly adhered to and often exceeded in the context of Sonarchar's close-knit community.

The day of Eid begins similarly to Eid-ul-Fitr with congregational prayer. After the sermon, which focuses on themes of sacrifice, obedience, and empathy for the less fortunate, the act of qurbani takes place in designated fields or the courtyards of homes. Children gather to watch the ritual with awe, while elders supervise the process. The division and distribution of meat becomes a social ritual of generosity, affirming ethical values and mitigating economic inequalities—if only temporarily.

For landless or marginal farmers, Eid-ul-Adha is often the only time of the year when meat is available in substantial quantities. The distribution of meat fosters a moral economy, where generosity is not seen as mere charity but as a religious and social obligation. These acts of giving strengthen village ties and solidify relationships across class lines, reinforcing the interdependence that sustains life in Sonarchar.

In Sonarchar, both Eid festivals also act as markers of sacred time, punctuating the agricultural calendar with celebration and reflection. Eid-ul-Fitr arrives after the post-harvest fatigue of the summer Amon season, while Eid-ul-Adha often coincides with the pre-monsoon or rainy period, when agricultural activities are reduced. This alignment allows for communal participation, with fewer economic disruptions, making the festivals all the more significant.

Beyond rituals, the Eids are moments for performance of cultural identity. Village youths organize small fairs or gatherings, while local mosques host religious discussions or Quran recitation contests. The mosque committees, madrasa teachers, and local elders collaborate to ensure that the festivals remain peaceful, inclusive, and spiritually fulfilling. These communal acts solidify the moral framework of Sonarchar society, keeping alive not only Islamic values but also indigenous traditions of hospitality and collective joy.

The two Eids in Sonarchar are more than religious holidays; they are a cultural mirror, reflecting the values, aspirations, and realities of rural Muslim life on an island shaped by both natural vulnerability and social resilience. The festivals act as social levelers, ritual reaffirmations of faith, and expressions of solidarity that bind together a community often fragmented by land, class, and scarcity.

In an age of modernization and urban migration, the Eid festivals remain among the most powerful mechanisms through which the moral, emotional, and religious life of Sonarchar's people is renewed. They remind the villagers that beyond the tides of hardship lies a greater purpose—one rooted in faith, fellowship, and shared humanity.

6.2. MUSLIM RELIGIOUS RITUALS

Ritualistic practices are inherent aspects of communal life, particularly evident among the predominantly fishing community residing on Monpura, where fishing constitutes the primary profession. Three notable rituals associated with the fishermen and the island's inhabitants have been documented:

1. **Pre-Sea Voyage *Milad Mahfil* and Special *Duah*:** During the fishing season, boat owners initiate their deep-sea journeys with a *Milad Mahfil*, a spiritual gathering, followed by a special prayer (*duah*) conducted in the mosque by the Imam. This practice is rooted in the belief that seeking the satisfaction of Almighty Allah through these rituals will safeguard them from potential hazards and natural calamities while engaged in deep-sea fishing.
2. **Pre-Departure Prayer and *Zikir*:** Prior to embarking on deep-sea fishing expeditions, many fishermen perform a special prayer (*Nofol Namaz*) and engage in *Zikir*, invoking the name of Almighty Allah. This ritual, undertaken before leaving their homes, symbolizes a collective plea for a safe and undisturbed return from the deep sea upon completing their fishing endeavors.

3. ***Milad* & *Dua Onusthan* for New Home Entry:** Upon establishing a new residence, islanders observe a formal entry ritual by inviting neighbors, friends, relatives, religious figures, and the Mosque Imam. A *Milad* and *Dua Onusthan* is arranged in the new home before occupation, as it is believed that satisfying Almighty Allah through these rituals will ensure the family's protection from adversities and calamities, fostering an environment of peace, prosperity, and divine blessings.

On Monpura Island, where life is inextricably linked to the sea and land, the Muslim fishing communities practice religious rituals that are deeply embedded in both spiritual devotion and everyday survival. These rituals are not isolated acts of piety but expressions of a lived Islam that reflects the precariousness of coastal livelihoods. Among the islanders, religious rituals associated with fishing, home life, and community transitions play a crucial role in shaping how people engage with uncertainty, seek protection, and create continuity between the sacred and the social. While these practices reflect broader Islamic traditions common across Bangladesh, their meanings and relevance on a remote island like Monpura take on a heightened intensity, driven by isolation, environmental vulnerability, and the lack of formal institutional support.

One of the most significant ritual practices observed among the fishing community is the organization of a *Milad Mahfil* and *special Duah* before embarking on deep-sea fishing voyages. These spiritual gatherings, held either at the local mosque or on the boats themselves, are usually initiated by the boat owners or *majhi* before each season begins. The ritual involves the recitation of Qur'anic verses, praises of the Prophet, and special prayers led by the Imam. The central objective is to seek divine protection against the dangers of the open sea—storms, mechanical failure, illness, or drowning. For a community whose livelihood rests on navigating the unpredictable forces of nature, this ritual acts as a powerful expression of both humility and hope. It reinforces the belief that divine mercy is the ultimate source of safety, reminding all participants of their spiritual dependency before setting sail. Yet beyond the religious dimensions, this act also establishes the moral responsibility of the *majhi*, whose leadership is legitimated not only by capital or ownership of boats but also by his invocation of Allah's blessings on behalf of his team.

In addition to the communal *Milad Mahfil*, many fishermen privately perform a *Nafl Namaz*—a voluntary prayer—before departing from their homes. This is often accompanied by *Zikir*, or the repetitive chanting of Allah's names, performed either alone or with family members. This ritual transforms the household into a sacred space of transition, where family members witness the spiritual preparation of a loved one about to venture into physical danger. These small, quiet prayers before leaving are acts of intimate surrender, filled with both emotional vulnerability and religious conviction. In these moments, the boundaries between the home and the sea blur, as personal spaces become extensions of sacred intention. The pre-departure prayer also serves as a way of coping with the anxiety that comes from economic necessity: it enables the fisherman

to leave his family with spiritual reassurance, trusting that the return—though uncertain—is now in the hands of Allah.

Another important ritual widely observed on Monpura Island is the *Milad* and *Duah Onusthan* organized during the entry into a new home. This event, often taking place on the very first day a family moves into a newly constructed or rebuilt house, brings together neighbors, kin, religious figures, and respected elders. It is a moment of celebration and sanctification—food is prepared, religious texts are recited, and the Imam offers a long-form prayer for the well-being, protection, and prosperity of the new household. In Monpura's geography, where natural disasters like cyclones and river erosion frequently displace families, entering a new home is not just about occupying physical space—it is about re-establishing a moral and spiritual order. The *Milad* affirms that this new beginning is aligned with divine blessings, and the presence of others during the ritual strengthens social bonds within the neighborhood. The act of hosting such a gathering also marks the household's emergence as a stable, responsible unit within the larger social and religious fabric of the village.

These three ritual practices—pre-voyage *Milad Mahfil*, private *Zikir* and *Nafl Namaz*, and house-entry *Duah Onusthan*—are interwoven with the rhythms of life and work on Monpura Island. Although they mirror Islamic practices common across rural Bangladesh, their embeddedness in Monpura's specific context of remoteness, vulnerability, and environmental instability gives them distinctive relevance. On the mainland, such rituals may be performed for spiritual completeness or traditional observance. On Monpura, however, they take on an existential urgency. The island's isolation means that there are limited formal institutions—state mechanisms, emergency services, or economic safety nets—that can protect or support people in times of crisis. Thus, turning to Allah becomes not only an act of faith but also a form of everyday resilience. Religion, here, is both a sanctuary and a system of survival.

Furthermore, these rituals also reinforce Monpura's collective ethos. Whether it is the fishermen gathering for a group *Milad*, neighbors sharing in a family's new home blessing, or family members joining hands in private prayer, the social texture of these practices is thick with cooperation, solidarity, and shared vulnerability. They affirm not only the individual's relationship to the divine but also the communal values of mutual care and moral responsibility. At the same time, these rituals operate within the broader framework of Sunni Islamic codes, familiar throughout Bangladesh—yet they are modified, emphasized, or reinterpreted in ways that respond to the island's specific social and ecological conditions.

On Monpura, the rhythms of religion and the rhythms of the sea are inseparable. An old fisherman explained that before venturing into the open waters, he and his companions always gather at the *mosid* (mosque) for *namaj* (prayer), where even the children from the *moktob* (Islamic school) join. "Without Allah's name, *ai paittamno* (I cannot do) anything," he said, describing how the sea's *hot* (current) and *dama* (waves) remind them of their fragility. During Ramadan, the village waits eagerly for *istar* (iftar). Families break the fast with dates, water, or simple *doyan* (shop) bread, and no one says *khaitan-no* (won't eat), for even the poorest share

what little they have. After *namaj*, the sound of *zikir* carries through the night, mingling with the roar of the river, binding the community in both faith and survival.

Life's transitions are equally marked by ritual. When a new home is built, neighbors and kin to join in Milad and duah. Just as prayers are offered before fishing voyages, blessings are sought for houses, boats, and families. To the islanders, these acts are more than religious duties—they are forms of protection, a spiritual infrastructure stronger than walls or nets. "Here on Monpura," the old man reflected, "religion is the rope we hold when the *hot* and *dama* try to pull us away."

In sum, religious rituals on Monpura are more than ceremonial events; they are cultural strategies for navigating the uncertainty of life on a fragile coastline. They embody the synthesis of belief and necessity, of collective ethics and personal devotion. As Monpura's islanders stand between the pull of the sea and the security of their homes, these rituals offer them a language of faith through which they negotiate fear, express gratitude, and assert control over the uncontrollable. They are, in essence, the island's spiritual infrastructure—built not of bricks and cement, but of prayer, hope, and deeply rooted trust in divine protection.

6.3. MYTHS AND FOLK STORIES

Mia Zamir Shah, a figure absent from historical records, is nonetheless venerated as a revered guardian within the confines of Monpura. Despite the lack of empirical evidence regarding his existence, the populace of Monpura exhibits unwavering faith in Mia Zamir Shah, transcending distinctions of caste and religion. Ascending to the status of a legendary persona, Mia Zamir Shah is enshrined in various facets of local life, as evidenced by the nomenclature of schools, madrasas, markets, ships, and food establishments bearing his name. Even a vanished village, submerged in the riverbed, once bore his namesake. The identity of Mia Zamir remains elusive, with the transformation of his historical semblance into a mythical being integrated into the secular narrative, purportedly safeguarding the denizens of erosion-prone regions.

Local lore persists in asserting that Mia Zamir has been sighted by individuals from the eastern realms. The erstwhile shrine dedicated to this benevolent guardian, situated in Nayeberhaat, succumbed to the relentless force of river erosion. The shifting landscape, from an eastern embankment to a western one, symbolizes the dynamic nature of the region. In proximity to the present western embankment, devotees have erected a modest structure, colloquially referred to as "Zamir's abode," where daily candle vigils are conducted in reverence to Mia Zamir. Pilgrims from distant locales traverse considerable distances to pay homage to this revered entity.

Once upon a time anyone entering or leaving Monpura island had to take a bit of soil in their mouth in this believe that if they do not do it, it will harm them. Though now a days, this is not a popular practice. In the name of Mia zamir shah there are many donation points in the island, where people donate in the believe of their wellbeing. There were frequent festivals organized in the past by the name of Mia zamir shah, but it is not seen or practiced today. Even though Mia

zamir shah is a revered name, no one from the village elders have ever seen him. Even there is no particular shrine or tomb of Mia zamir shah in the island. Over time, this stands as a myth.

The devotees' veneration extends to the extent of attributing sentiments to Mia Zamir Shah; any perceived disrespect towards Monpura is believed to incur his displeasure. Notably, the construction of a cross dam in 1977, christened after Mia Zamir Shah, stands as a tangible manifestation of the enduring impact of this mythical figure on the landscape of Monpura.

6.3.1. Significance of Myths

Myths are not merely stories of the past; they are living elements of culture that provide moral order, cosmological grounding, and collective memory. In Monpura Island, where the river's erosive force constantly threatens lives and land, the myth of Mia Zamir Shah emerges as a powerful symbolic anchor. Though no historical evidence confirms his existence, Mia Zamir Shah holds a sacred presence in the hearts of Monpura's people. His story functions not just as folklore but as a central cultural myth, structuring meaning in a region shaped by vulnerability, dislocation, and resilience. This essay explores the sociocultural significance of the Mia Zamir Shah myth, examining how it functions within the collective consciousness of the islanders, especially in relation to faith, belonging, landscape, and historical memory.

6.3.2. Sacred Protection in a Landscape of Uncertainty

The people of Monpura live with constant exposure to natural calamities—river erosion, tidal floods, cyclones, and loss of land. Within this precarious geography, Mia Zamir Shah emerges as a spiritual protector, embodying the islanders' hopes for safety and continuity. His myth transcends conventional religious divisions; Muslims, Hindus, and others equally invoke his name, suggesting a secular sacredness attached to him. While he is frequently referred to as a saint or guardian in Islamic terms—suggested by the *Milad*, candle vigils, and donation boxes in his name—there is no clear linkage to any known Islamic pirs or saints. In this ambiguity lies his strength: Mia Zamir Shah belongs to all.

In folk cosmologies across South Asia, land itself is not neutral but sacred. Mia Zamir Shah's supposed control over the fate of Monpura's land—whether a village submerges or survives, whether a boat returns from the sea safely or not—positions him as a guardian of sacred geography. This spiritual guardianship was not merely symbolic. In earlier times, any individual entering or leaving Monpura had to take a small bit of its soil in their mouth, a folk rite meant to appease Mia Zamir Shah and ensure safe passage. The practice, though no longer popular, reveals a cosmological relation between body, land, and myth.

Though Mia Zamir Shah has no tomb, grave, or shrine, his symbolic presence permeates Monpura's spatial and institutional landscape. Schools, bazaars, boats, and even major infrastructural projects such as the 1977 cross dam bear his name. A now-vanished village once bore his title, and donation boxes invoking his name are still scattered across the island. Such acts of naming constitute a ritual inscription of myth into everyday life—a way of making

memory permanent, despite the erasure caused by natural disasters or the absence of physical relics.

In this context, Mia Zamir Shah is less a person and more a mnemonic device—a cultural memory encoded in narrative and place. The reverence directed toward him is an act of cultural continuity, an assertion of rootedness in a land that often refuses to remain fixed. In a society where villages vanish under riverbeds, myths provide what the land cannot: permanence.

Like many folk deities and saints in South Asian village contexts, the myth of Mia Zamir Shah plays an implicit regulatory role. Disrespect toward Monpura or skepticism about the island's values is believed to incur his wrath. This serves as a moral boundary, creating a shared system of ethics that reinforces group loyalty and identity. The fear of divine displeasure—embodied not in the abstract notion of God but in the immediate and local figure of Mia Zamir—functions as a subtle mechanism for shaping behavior, encouraging communal respect and reverence for place.

Additionally, his myth was once socially mobilizing. Festivals in his name brought together people from across the island, creating a shared celebratory space that transcended caste and class. Though these festivals are no longer observed, elders recall them as moments of unity and cultural expression. These events functioned as social glue, reasserting community cohesion in the face of environmental rupture.

Despite his once-pervasive influence, the presence of Mia Zamir Shah in daily life has faded in recent decades. The rise of formal religious orthodoxy, the spread of formal education, NGO influence, and the penetration of state institutions into Monpura have contributed to a rationalization of belief systems, pushing local myths to the margins. Young people, shaped by textbook histories and digital connectivity, often lack the emotional connection to Mia Zamir Shah that older generations once held.

Yet even as his ritual significance declines, his symbolic presence remains—in the names of boats that cross dangerous waters, in the story passed on quietly from grandmothers to grandchildren, and in the dim candles lit in his "abode" near the western embankment. The enduring belief in his protection, especially in times of crisis, reveals that the myth remains a cultural reservoir of hope, resilience, and belonging.

The story of Mia Zamir Shah is not simply folklore—it is a cultural institution, an imaginative framework through which the people of Monpura have interpreted their world, coped with uncertainty, and constructed a sense of shared identity. In the absence of historical proof, the truth of his existence matters less than the social truth of his memory. He lives in the soil, in the names of places, in the rituals of protection, and in the quiet fears and hopes of Monpura's people.

In anthropology, myths are often understood as charters for social order (Malinowski) or expressions of the collective unconscious (Jung), and in Monpura, Mia Zamir Shah serves both

roles. His myth is a cultural anchor in a place where even land cannot anchor itself. His story offers not only comfort but a mode of continuity and belonging for a people in constant negotiation with nature's unpredictability.

CHAPTER SEVEN:
LIVELIHOOD STRATEGIES IN THE VILLAGES UNDER STUDY

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7.1. INTRODUCTION

The villages of Sonarchar and Machpara located in Monpura Island, serve as a distinctive backdrop for our exploration of livelihood strategies among the coastal communities of Bangladesh. Here, amidst the harmonious symphony of nature's whims and the resilience of its inhabitants, we delve into the intricate ways by which livelihoods are secured. Monpura Island's environment and geography, characterized by the convergence of river and sea, has molded the existence of its residents. It is a place where the ebb and flow of tides directly influence the livelihood choices of its people. Through an anthropological lens, we embark on an ethnographic journey to understand and document the diverse strategies employed by the inhabitants of Sonarchar and Machpara to sustain themselves and their communities.

Faced with the growing threat of global climate change, Bangladesh has long been exploring and implementing a range of adaptation strategies across various sectors to mitigate the adverse impacts of climate change (Hussain & Saha, 2019). This chapter scrutinizes five fundamental livelihood strategies that define life on Sonarchar and Machpara, each representing a unique facet of existence, replete with its own set of challenges, achievements, and narratives. We accompany the resilient fisherfolk of Machpara as they make their nets and navigate the capricious waters. We immerse ourselves in the verdant paddy fields of Sonarchar, where agricultural toil sustains traditions and livelihoods. We traverse bustling markets where entrepreneurial spirits thrive. We explore the coexistence of humans and domesticated animals within this unique ecosystem. We also venture into the service sector, uncovering the myriad ways in which individuals contribute their skills and labor to support their fellow islanders.

Livelihood strategies are the cornerstone of human survival and prosperity, reflecting the diverse ways in which individuals and communities secure their basic needs and improve their quality of life. These strategies encompass a wide range of activities, resources, and approaches that people employ to earn a living, and they often vary greatly depending on cultural, economic, social, and environmental factors. By examining livelihood strategies, anthropologists gain valuable insights into how communities adapt to their surroundings, interact with their environments, and cope with the challenges of existence.

In rural and agrarian societies, agriculture is often a central element of livelihood strategies. Communities engage in farming, cultivating crops and rearing livestock, to ensure their food security and generate income. Agriculture is not solely an economic pursuit but also a cultural practice deeply rooted in traditions, rituals, and shared knowledge, making it a rich subject for anthropological investigation. Anthropologists delve into the intricacies of agricultural practices,

from crop selection to land management, to understand how these activities shape the lives and identities of those involved.

For coastal and riverine communities, as found in places like Monpura Island in Bangladesh, fishing is a primary livelihood strategy. Fishing activities provide sustenance and economic support, while also serving as a conduit for cultural expressions and community bonding. By exploring the intricate relationships between fishermen, their environment, and the larger social structures, anthropologists can unearth the nuances of this livelihood strategy, shedding light on how it influences the daily lives and traditions of these communities.

In urban settings, livelihood strategies may encompass small businesses and service-based endeavors, where individuals provide goods and services to meet the needs of the local population. Anthropologists keenly observe the dynamics of these urban economies, delving into the social networks, cultural practices, and economic interactions that underpin these livelihood strategies. Through in-depth ethnographic studies, anthropologists uncover the stories, challenges, and aspirations of individuals navigating the complexities of urban life.

As anthropologists, our aim is to unearth the profound connections that link the people of Monpura to their chosen livelihoods. We endeavor to decode the cultural intricacies influencing their choices, the environmental determinants steering their decisions, and the economic factors shaping their existence. Together, we piece together the intricate puzzle of life on this coastal island, underscoring the complex interplay of tradition, adaptation, and aspiration.

Monpura Island, with its microcosm of human existence, serves as a stage where the age-old interplay between human initiative and the natural world takes center stage. This academic voyage invites the reader to join us in unveiling the livelihood strategies that sustain the coastal people of Bangladesh, within the captivating world they call home.

The annual sediment load transported by the rivers of Bangladesh to the Bay of Bengal, averaging around 2 billion tons annually, is a critical geological and hydrological aspect of this region. This load comprises a considerable quantity of fine sediments, with distinctions between the Ganges and the Brahmaputra rivers in terms of sediment composition. The Ganges River carries a substantial clay load, while the Brahmaputra predominantly conveys fine sand and silt in suspension. Conversely, the Meghna river appears to be a relatively low sediment-laden river, marked by an annual average concentration of approximately 100 mg/l, (MES II) contrasting starkly with its counterparts, the Ganges and Brahmaputra.

This intricate interplay of river systems, most notably the Ganges-Brahmaputra-Meghna (GBM) river system, along with their extensive network of tributaries and distributaries, plays a pivotal role in redistributing water and sediments within the expansive Bengal Basin and its deltaic region leading into the Bay of Bengal. As a consequence of the substantial sediment influx carried by these formidable river systems, many offshore islands have formed, redefining the landscape. Notably, Monpura Island, nestled within the Meghna estuary, is a product of this complex

geological process, making it a fascinating subject of anthropological study with particular regard to its inhabitants' livelihood strategies.

Over the past two centuries, the Meghna estuary has undergone significant transformations, marked by the shifting of river channels and the emergence of new islands in its southern reaches. Historical maps, such as Rennell's 1789 charting, depict a different course of the Meghna, meandering eastward with minor distributaries to the south. By 1898, within the span of a century, the Meghna's primary flow divided into two channels, one to the east and another to the west of Hatia Island. Subsequently, by 1945, over a mere 45 years, the eastern channel's current weakened, giving way to the dominance of the southerly Shahbazpur channel. The construction of the 12 km long Meghna Cross Dam-1 in 1957 redirected the flow southward through the Shahbazpur channel, further dividing the channel into two parallel streams, with Monpura Island positioned in between. This redirection of flow has consequences for the erosion of the island's coastline and adjacent lower areas, thus underscoring the relevance of these geographical and hydrological transformations in shaping the livelihood strategies of Monpura's inhabitants.

The transformation in river flow dynamics and the consequential erosion play a profound role in shaping the lives of Monpura Island's inhabitants. The alteration in river channels and patterns of sediment deposition directly impacts the island's topography and landmass. As the powerful Meghna River redirected its course, dividing into two parallel channels, with Monpura Island in between, it created a vulnerable environment for the islanders.

Erosion, primarily occurring on the frontier shore and adjacent lower areas of the island, threatens the very existence of homesteads and agricultural fields. Homes and livelihoods are continually at risk, as the powerful river currents encroach upon the land. This results in a constant struggle for the islanders, who must adapt to these dynamic and sometimes harsh environmental conditions. The changing river flow and erosion lead to the gradual loss of arable land, which, for a community largely dependent on agriculture, represents a significant threat to their food security and economic stability.

As a researcher observing the situation on Monpura Island, I've documented a clear pattern of migration driven by the escalating environmental challenges. The river bank erosion is a primary catalyst, leading to both complete and partial migration strategies. The distinction is crucial: complete migration signifies a permanent displacement, while partial migration represents a complex adaptation, with individuals seeking off-island employment while maintaining ties to their families and contributing to the local economy through remittances.

Monpura does not have any proper river bank protection structures in many areas of the island. Due to tidal force and river bank erosion these protection structures often decay, resulting into salinity of agricultural ground in many places of the island. This happens because the saline water cannot get out from the land easily and get stuck for a long time. As a result, the farmers can not grow crops as before. The production of crops decreases and fishes die in ponds.

Furthermore, my field observations corroborate the islanders' accounts of environmental degradation. The reported disappearance of date trees due to salinity intrusion aligns with documented impacts of rising sea levels and coastal erosion. Simultaneously, the fishing communities' shift to deep-sea fishing indicates a significant change in marine resource availability, likely a consequence of habitat disruption and altered salinity levels. These changes necessitate a thorough investigation into the islanders' livelihood strategies. Understanding how they navigate these evolving environmental pressures is paramount. This research aims to document the adaptive mechanisms, the economic implications of migration, and the resilience displayed by the community in the face of these profound challenges.

7.2. FISHING

In the coastal region of Monpura Island, fishing is not merely an occupation but a way of life deeply intertwined with the islanders' cultural and economic identity. The abundance of water bodies surrounding the island, including the Bay of Bengal, the Meghna River, and numerous smaller rivers and estuaries, offers a rich aquatic ecosystem that has sustained generations of Monpura's residents.

There are two types of fishermen in the Monpura's Machpara. The Primary type is the regular fishermen who are completely dependent on the fishing. The other is the Seasional/occasional fishermen who are not completely dependent on it but they have engagement with fishing in peak Hilsha seasons. The regular fishermen are locally known as *majhi* (Owner of the Boat) and/or *Bhagi* (Those who catch the Fish only). The occasional fishermen catch fish during the pick/Hilsha season as *Bhagi* Only.

Fishermen on Monpura Island employ diverse fishing techniques, reflecting the ecological diversity of the region. Traditional methods such as net fishing, hook and line fishing, and basket traps are used by many, while others have adopted more modern practices, including mechanized trawling. The island's coastal inhabitants target a wide array of fish species, including hilsa, shrimp, crab, pomfret, and various indigenous varieties. Here is the fishing calendar where we can see when do the Machpara fishermen catch which fishes.

Figure 7.1: Fishing Calendar in Monpura

Name of Fish	Fishing Calendar											
	January	February	March	April	May	Jun	July	August	September	October	November	December
	Pow	*Magh*	*Falg*	*Chait*	*Boi*	*Josth*	*Ash*	*Shra*	*Vad*	*Ashw*	*Kart*	*Agghr*	*Pous*
Hilsha												
Jhatka												
Poa												
Galda Chingri												
Bagda Chingri												
Gura Chingri												
Koral/Vetki												
Bata												
Baila												
Gulsha/Tengra												
Chawa Fish												

Source: Fieldwork in Sonarchar and Machpara.

The annual hilsa fish catch, especially, holds a significant cultural and economic value for the islanders. Hilsa, known as the "queen of fish" in Bangladesh, is a sought-after delicacy and a staple in the local diet. The seasonal hilsa migration from the sea into the estuaries and rivers marks a critical time for the community, with many fishermen and families eagerly participating in the fishing activities. It is a period of heightened activity and excitement, as fisherfolk prepare their boats and nets to harvest this prized catch.

7.2.1. Fishermen & Boat Owners

Fishermen*:* Locally the fishermen are known as *Bhagi*. The terms *Bhagi* means shareholder. Basically, the fishing is a group works where about 6-8 persons work in a boat/under a *majhi*. All are considered as *Bhagi* or Shareholder. The collected fishes/fish values are distributed among the all *Bhagi*/ shareholders

Boat Owners*:* The boat & fishing Net owners are locally known as *majhi*. *Majhi* is also a fisherman. The *majhi* whether a fish-catcher or not but must be a *Bhagi* due to have boat & fishing net. The *majhi* is connected with local fish businessmen/collector/*Aarotder*. Basically, the *bhagi* works under a *majhi*. A single *majhi* must have a boat, fishing net & a team of *bhagi*. The *majhi* takes Loan/ *Dadon*/advance payment from the local fish collector/ *aarotder* and distributed among the *Bhagi* as per their contact & needs.

7.2.2. Fishing Net

The fishermen use different types of fishing net as per fish types & nature. All types of nets are applicable for catching all types of fishes. The Hilsha Fishes are caught by Hilsha Net, *Poa* fishes are caught by *Poa* Net, *Bindi*/*Bihundi* net is used for catching the small sized fishes, *Chi* Net is made with bamboo like a trap used for catching the small to medium fishes. Basically, it is a trap & no fish can release after entering into it.

Mosquito net is the plastic net which is made for capturing the fish pollen of *Galda* & *Bagda*. *Beerjal* net is another trap which is used for catching fish during Ebb and flow tide. The *Jhaki Jal* is known locally as *Jhay Jal*. This net is portable used by thrown as convenient place for catching the fish swarms.

7.2.3. Fish Business & Value Chain

Godighar & *Aarotder: Godighar* is the primary center for collecting the fishes from the *majhi*es. The *Godighar* is run by a *aarotder*. The *aarotder* is the primary fish collector & lowest source for fish value-chain in Monpura fish market. The *aarotders*' business point is locally known as *Godighar*. The *aarotder*s are the fish businessmen who provide *Dadon*/loan to the *majhi* as contact for collecting fish for a certain period/season. An *aarotder* could have multiple numbers of Mashies who take *dadon*/loan against boat, fishing net & the team/*Bhagi*. The *dadon* is the

invest of an *aarotder* for ensuring the fishing business for the certain period/season. The *dadon* receiver *majhi*/boat can not sell any quantity of caught fishes to any other markets except *dadon* provider *Godighar*. The *Godighar*/*aarotder* earn from *majhi* 10-16 percent and 6 percent from *Dalal*.

Dadon/ Invest*: Dadon*/Invest is one kind of loan which is given by the *aarotder* to the *majhi* against the fishing boat, net & the fishing team. The *Dadon* is the local term of loan. A *majhi* can take *Dadon* from 2 lac to 12 lac taka based on boat size, volume of fishing net & strength of *Bhagi*/fishermen team. The *majhi* also distribute the collected *Dadon*/loan among the *Bhagi*/fishermen of the boat. The *Dadon* is not adjustable with fish selling but returnable during closing the contact. The *Godighar* takes 10-16 percent of total value on each lot of fish selling against the *Dadon* contact. The *aarotder* invest the *dadon* amount by either themselves or collecting from the next partners of *aarotders*' who are the secondary points of fish value chain. Here is a detailed chart on commission against *Dadon*/ Investment.

Figure 7.2: Commission against *Dadon*/ Investment

Dadon/Investment Amount	Rate of Commission	Box Commission
BDT 2-3 Lac	10.00%	Additional 5.00% is applicable for all as Boxing commission
BDT 4-5 Lac	12.00%	
BDT 6-12 Lac	16.00%	
BDT 15-25 Lac (Only for Sea Going Fishing Boat)	10.00%	

Source: Fieldwork in Sonarchar and Machpara.

The fish caught by the islanders not only serve as a source of nutrition but also as a means of generating income. In the bustling local markets, these catches are sold to traders, often through traditional auction systems. Fishing has played a pivotal role in the islanders' livelihood strategies, offering both subsistence and financial support. However, it is not without its challenges, including environmental factors like the changing river flows and increasing sedimentation in the Bay of Bengal. These challenges continually shape and redefine the islanders' relationship with fishing, prompting adaptations and innovative solutions to sustain their way of life.

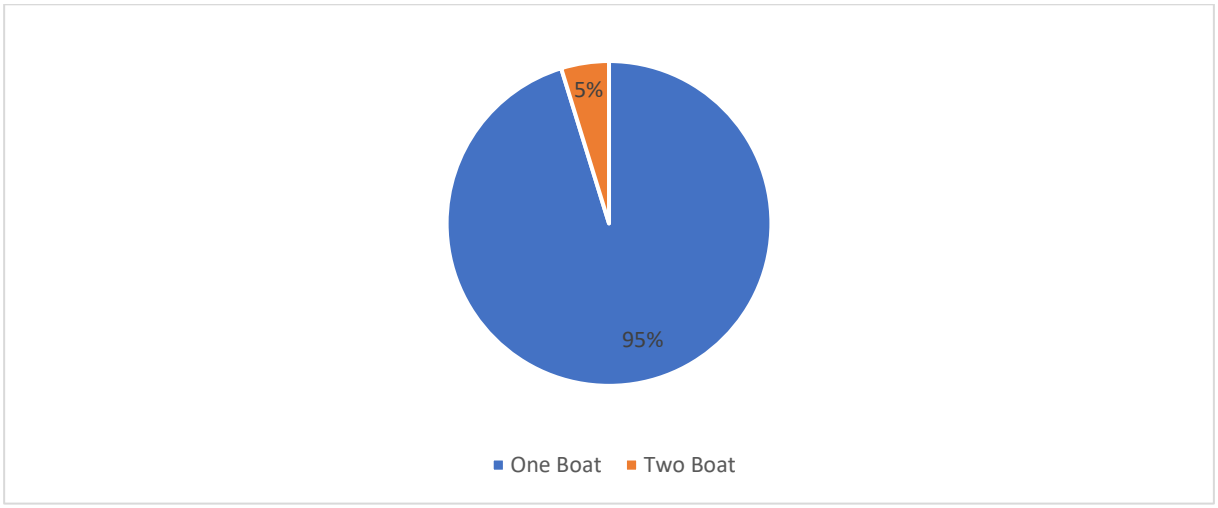
In the course of my research, encompassing a comprehensive study of two villages, a predominant pattern emerged wherein a significant proportion of these households relied on fishing as a primary means of sustenance. Out of the total surveyed households, a noteworthy 294 explicitly acknowledged their direct engagement with fishing activities, underscoring the pronounced influence of this occupation within the studied population. Furthermore, it is

noteworthy that 21 households within the sample set possessed personal fishing boats, indicative of a substantial investment in and commitment to the fishing industry.

These findings underscore the socio-economic significance of fishing as a livelihood strategy within the studied community, warranting further investigation into the multifaceted dimensions of this occupational choice. As such, this research contributes to the broader academic discourse on rural livelihoods, resource utilization, and community dynamics, providing valuable insights into the intricate interplay between households and the fishing industry.

In the context of Machpara, where fishing emerges as the predominant occupation, our investigation delved into households possessing boats, shedding light on the multifaceted nature of their economic pursuits. Recognizing the seasonal nature of fishing, with agricultural activities serving as a supplementary means of sustenance during off-seasons, we sought to elucidate the dynamics of boat ownership and its association with primary livelihoods.

Figure 7.3: Number of Boat Ownership in Machpara

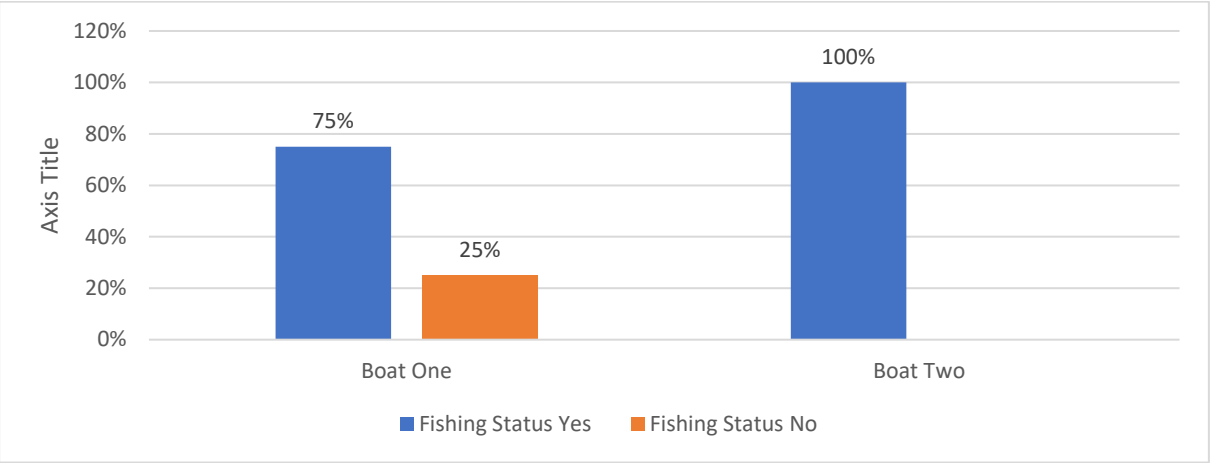


Source: Fieldwork in Sonarchar and Machpara.

Of the 21 households in possession of boats, a noteworthy finding emerged: a singular household owned two boats, while the remainder-maintained ownership of a single boat. This distribution suggests a prevalent pattern of resource allocation within the community. Furthermore, our scrutiny revealed that 75% of the single-boat households were directly engaged in fishing activities, attesting to the integral role of fishing as a primary economic endeavor.

Notably, a subset of five households with boats did not directly partake in fishing pursuits. Instead, their economic reliance stemmed from the revenue generated through boat rentals to fishermen during the fishing season. This nuanced observation underscores the interconnected economic dependencies within the community, wherein non-fishing households derive income indirectly from the fishing enterprise.

Figure 7.4: Fishing status of the households who own boats in Machpara



Source: Fieldwork in Sonarchar and Machpara.

The juxtaposition of these findings underscores the intricate socio-economic fabric of Machpara, where the seasonal rhythm of fishing converges with agricultural pursuits, forming a resilient economic strategy for households. These insights contribute to the scholarly discourse on rural economies, emphasizing the adaptive strategies employed by communities facing the inherent seasonality of certain livelihoods. Subsequent research may delve deeper into the socio-economic implications of such dynamics, informing sustainable development interventions and policies tailored to the unique challenges of Monpura.

Case study 1: Atikul Islam, The Fisheries *Mohajon of* Machpara

During my extensive ethnographic study on Machpara, I had the opportunity to interview Atikul Islam (pseudonym), a significant figure not only in the local fishing industry but also in the island's political landscape. At 42-45 years of age, Atikul serves as the running chairman of Monpura and owns a lucrative fishing business that has made him a millionaire. This case study delves into the intricate roles he plays as both a *Mohajon* and a political leader, his business ethics, and his relationships with local fishermen.

Atikul's prominence as a *Mohajon* is intertwined with his political power. He has been involved in the fishing business since his teenage years, gradually scaling up his operations to own 30+ fishing boats and a local fish market, known as "*Arot*," where his borrowers sell their catch. His rise as a *Mohajon* coincides with his ascent in local politics, culminating in his current role as the chairman of Monpura.

Atikul is the proprietor of several fishing boats, though he doesn't personally engage in the fishing activities. Instead, he operates under a system known as '*Dadon*'. In this arrangement, fishermen borrow Atikul's boats, while he also funds the major operational costs. Predominantly, Atikul's fleet comprises smaller boats that don't venture into deep-sea fishing but stick closer to the Meghna river. Fishermen, upon borrowing the boat and securing funds from Atikul, assemble their team for the fishing expeditions. A stipulation of this arrangement is that the catch must

exclusively be sold at Atikul's fish market. Representatives of Atikul monitor the volume of fish sold, and at the close of the season, profits are divided between Atikul and the fishermen. Given that Atikul provides the essential resources, a major portion of the profits is reserved for him. The fishermen, on the other hand, receive their earnings annually after the fishing season concludes. While Atikul enjoys the majority of the revenue, the fishermen seem satisfied, recognizing that without Atikul's assistance, they might face dire economic straits

While Atikul's family enjoys the comforts of life in Dhaka—his son attends a prominent college there—most of his subordinates on Machpara struggle with poverty. Even the *Mohajon*s of Monpura live a life of luxury in the islands as well. Atikul has a big house that is located in a prime spot in Machpara. Unlike the fishermen who borrow from him, Atikul has high mobility. He has easy access to speedboats and can quickly reach hospitals or other facilities when needed. This high level of access adds another layer of complexity to the power dynamics between him and the local fishermen. This stark contrast is a microcosm of the broader socio-economic disparities that are often observed in the coastal regions of Bangladesh.

Atikul perceives his operation fundamentally as a business. However, he is not seen as a cruel or exploitative figure by the local community. He takes measures to support the fishermen in various ways, from helping in weddings to assisting during medical emergencies. His role as a *Mohajon* is shaped by the local systems and traditions, which he navigates with a blend of business acumen and community concern.

Atikul's case presents a nuanced picture of the interplay between capitalism, politics, and local traditions. On the one hand, his operations align with capitalist models of maximizing profit; on the other hand, his political position and local influence add layers of complexity. The local community largely accepts his role as a *Mohajon*, and he, in turn, tries to mitigate the harsher edges of the system by offering some level of support to the fishermen.

Atikul Islam's case study provides a compelling illustration of the intricate ties between the fishing livelihood strategy and the pivotal role of *Mohajons* in Monpura Island. His multifaceted roles as a *Mohajon*, a political leader, and a business owner intersect to shape not only his personal success but also the broader dynamics of the local fishing industry. By exploring his story, we gain valuable insights into the interwoven relationships between these elements and the impacts on the livelihoods of the island's residents.

Atikul's ascent as a *Mohajon* is intrinsically linked with his political influence, a dynamic that sets him apart as a notable figure within the island's social fabric. His journey from a young fisherman to the owner of a substantial fishing business with over 30 boats highlights the fusion of business acumen with political power. This case study delves into the business model that defines Atikul's fishing operations, where he follows the '*Dadon*' system. In this arrangement, fishermen borrow his boats, and he also finances their major operational costs. A critical aspect of this model is that the fish catch is exclusively sold at Atikul's fish market, where representatives monitor sales, and profits are subsequently shared. This setup significantly favors Atikul due to his provision of

essential resources. The fishermen, in turn, receive their earnings annually, recognizing the economic support Atikul provides.

However, a socio-economic disparity is evident within this system. While Atikul's family enjoys a comfortable life in Dhaka, many of his subordinates on Monpura Island grapple with poverty. This sharp contrast underscores the broader socio-economic inequalities that prevail in the coastal regions of Bangladesh. Atikul's high mobility and privileged access to resources add another layer of complexity to the power dynamics between him and the local fishermen.

Atikul often framed his responsibilities through the language of kinship and obligation. “I have two *pola* (sons) and one *maiya* (daughter),” he explained, noting that their education in Dhaka is financed entirely from his fishing business. His role as a *mohajon* was not limited to profit-making; he frequently stepped in to support fishermen’s families. “When a *matari* (woman) falls sick or a *beda* (husband) dies, I try to help keep the household running, because without them my boats cannot move.” He also highlighted how kinship ties and politics were deeply entangled: his *haur* (father-in-law) once held the chairman’s position, and now he carries that legacy himself. Even conflicts within families sometimes reached his courtyard—“if *hatin* (co-wives) quarrel, I call them and try to settle it. A chairman is not just for elections but also for justice.” With his *bhaur* (elder brother-in-law) and *dewor* (younger brother-in-law) by his side, and his *kaka’s* (uncle’s) sons still working under his *dadon* system, Atikul positioned himself as both a patron and protector, weaving together business, kinship, and politics in the everyday life of Machpara.

Atikul's case study also sheds light on the ethical dimension of his business practices and personal morality. He operates within the framework of capitalism but is not perceived as an exploitative figure by the local community. He actively supports fishermen in various aspects of their lives, from participating in their weddings to assisting during medical emergencies. His role as a *Mohajon* reflects the fusion of local traditions with business acumen and community care.

In essence, Atikul's story unveils the intricate web of capitalism, politics, and local customs in the context of Machpara’s fishing livelihood strategy. It exemplifies the multi-layered relationships between *Mohajons* and fishermen, all set against the backdrop of political influence and the pursuit of profit. His case highlights the importance of understanding such figures to comprehensively grasp the intricate nature of life, livelihoods, and power dynamics in the coastal regions of Bangladesh.

Case study 2: The Solitary Survivor — Mohammad Sahabuddin and the Haunting Echoes of Cyclone Komen

Komen, which hit Bangladesh between July 30 and August 2 in 2015, was a moderately intense tropical storm that claimed the lives of many and left an indelible scar on those who survived. With winds up to 80 km/h, the cyclone wasn't just a meteorological event; it became a life-altering tragedy for Mohammad Sahabuddin, a fisherman from Machpara, Monpura. At 29 years

old, Sahabuddin's narrative is as much about survival as it is about the unpreparedness and vulnerability of coastal fishermen in Bangladesh.

Once a diligent fisherman, Sahabuddin's life was upended by a single disastrous fishing expedition. On that fateful journey, he and his 18-member crew aboard a fishing boat from Chittagong had no forewarning of the impending cyclone. With no radio and out of network range, they remained perilously unaware of Cyclone Komen's advance. As the tempest's fury unfolded, Sahabuddin's vessel was devastated, leaving him as the sole survivor. Armed only with a *boya* (a floating object), Sahabuddin endured a harrowing four-day ordeal. He attributes his survival to the Monsoon rains, which he believes made the seawater potable. Sahabuddin was eventually found on Noakhali's *Urir Char* in *Sandeep*. During these four days, he recounted the horror of watching fish eat the flesh from his hand, leg, and ear. His physical agony was paralleled by the psychological torment of losing all his crewmates. Out of 18 members, 15 were reported missing, two bodies were found — Rafik and Jakir — and Sahabuddin was the only survivor. The crew was ill-equipped for disaster with just 8 *boya* and 3 lifejackets among them.

Sahabuddin's survival story was narrated in fragments, often using the imagery of everyday coastal life. "When the waves hit, the sea sounded like hundreds of *kauwa* (crows) screaming together," he recalled, adding that in the long nights adrift, he thought of the *murka* (chickens) and *as* (ducks) he had left at home, unsure if he would ever feed them again. Hunger gnawed at him, and he imagined simple meals of *dail* (lentils) and *chalun* (curry), served in a *thal* (plate) with a pinch of *nun* (salt) and *roun* (garlic) — meals he once shared with fellow fishermen on the shore. The memory of fishing days returned vividly: catching *ichamach* (shrimp), *ruitmach* (rohu fish), or drying *hurimach* (dried fish) under the sun while *bailla pakhi* (baya birds) circled above. At sea, however, those familiar anchors were absent. "I held onto the *boya* like a *dao* (machete) against death," he said, his voice trembling. When finally rescued, Sahabuddin no longer felt whole — the *hoilmach* (snakehead fish) and *jagurmach* (walking catfish) that once gave him livelihood now haunted him in dreams, as if the sea itself had turned predator. His words revealed how survival was not just a fight against nature, but also a struggle to hold onto the ordinary rhythms of life — animals, fish, food, and kinship — that had once defined his existence in Machpara.

Today, Sahabuddin lives a life of mental instability. His experience isn't merely a tale of survival but a haunting psychological study revealing the deep scars left by the trauma of natural disasters on vulnerable coastal communities.

This case study underscores the fundamental importance of adequate preparedness and the dire need for equipping fishermen with information and emergency provisions. The tragedy reiterates that it isn't just storms that claim lives but a systemic lack of preparedness, education, and resources. The story of Mohammad Sahabuddin is a grim reminder that beyond the scientific jargon and statistical data, the real impact of these climatic events is felt at a profoundly human level. Given Sahabuddin's mental health condition, the interview was conducted cautiously, and ethical protocols concerning vulnerable interviewees were strictly adhered to.

7.3. AGRICULTURE

Agriculture plays a vital role in the livelihood strategies of the people of Monpura Island, albeit facing significant challenges due to the unique environmental conditions of this coastal region. While the majority of the population is engaged in fishing, a considerable portion of the community relies on agriculture as an alternative or supplementary means of making a living.

The people of Sonarchar, Monpura practice agriculture as an integral part of their livelihood strategy. However, the distinct geographic and environmental factors of the island present formidable challenges. One of the primary challenges is the scarcity of freshwater during the dry season. Sonarchar lacks a comprehensive irrigation system, making it impossible to cultivate rice throughout the year as in other parts of the country. The absence of freshwater for irrigation restricts the agricultural calendar, forcing the farmers to adapt their cropping patterns to work within the constraints of water availability.

Salinity, another significant threat, further complicates agricultural practices in Sonarchar. The increasing salinity of the soil gradually erodes its fertility, making it harder for farmers to achieve optimal yields. The intrusion of saltwater into arable land impacts the types of crops that can be grown and the overall productivity of the agricultural sector on the island.

The agricultural practices on Monpura Island are characterized by a seasonal rhythm. In the first season, most farmers cultivate Amon rice, taking advantage of the freshwater that is available. In the same year, they often follow the rice crop with the cultivation of drought-resistant crops like nuts, lentils, chili, and other vegetables. This sequential cropping system allows the efficient use of the limited freshwater resources while maximizing the agricultural output in a challenging environment.

While Monpura Island cannot match the 3 harvests per year common in other parts of the country due to its lack of irrigation infrastructure, the people of the island demonstrate remarkable resilience and adaptability. They have devised strategies to cope with the unique constraints of their environment, optimizing their use of available resources and seeking alternative livelihoods, such as fishing, to complement their agricultural income. Agriculture remains a central component of their livelihood strategies, reflecting their strong connection to the land, despite the many hurdles presented by their coastal surroundings.

In the unique coastal ecosystem of Monpura Island, agriculture plays a pivotal role as a livelihood strategy for the local inhabitants. While fishing is the primary occupation for many, a significant portion of the community relies on agriculture to diversify their income sources. However, agriculture in Monpura is not without its challenges. The island's dry season brings a scarcity of fresh water, making it impossible to cultivate rice without a reliable irrigation system. Regrettably, Monpura lacks the infrastructure for irrigation, leaving farmers at the mercy of the erratic monsoon rains. Salinity intrusion from the surrounding Bay of Bengal further exacerbates the challenges, gradually diminishing the fertility of arable lands.

To cope with these constraints, the agricultural practices in Monpura are adapted to the local conditions. Amon rice is typically grown in the first season when the monsoon provides adequate water. However, rather than leaving the land fallow for the remainder of the year, farmers often cultivate drought-resistant crops like nuts, lentils, and chili in the same plots. This multi-cropping strategy ensures that the limited arable land is used efficiently. Nevertheless, Monpura cannot replicate the 63 annual harvests common in other parts of the country, given the persistent lack of irrigation facilities.

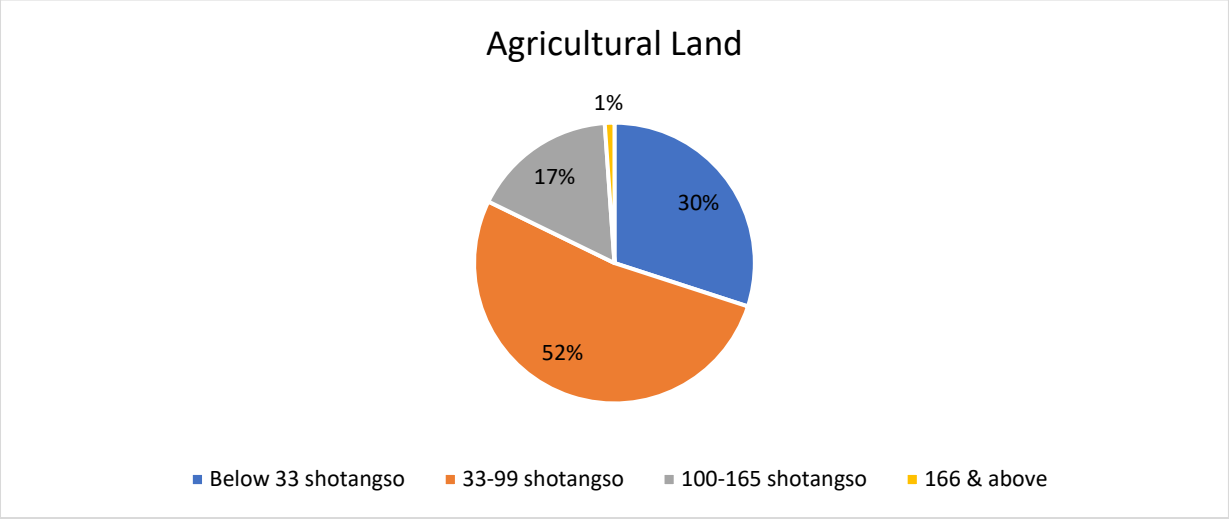
The importance of agriculture in the coastal ecosystem of Monpura extends beyond livelihoods. It acts as a buffer against soil erosion, especially important in a region vulnerable to the sea's encroachment. Moreover, the cultivation of salt-tolerant crops and mangrove reforestation can aid in preserving the delicate balance of the ecosystem. As the community grapples with environmental challenges, agriculture remains a key element in their strategy to adapt, survive, and sustain the unique coastal way of life on Monpura Island.

7.3.1. Findings in Agriculture of Monpura

Within the subset of 90 households actively involved in agriculture, a predominant trend emerges, wherein a majority of households (52%) exhibit landholdings in the range of 33-99 *shotangso*—a indicative classification of small-level farmers. Subsequently, the second-highest category in the distribution comprises marginalized farmers, representing 30% of the total, with landholdings below 33 *shotangso*.

This nuanced analysis provides valuable insights into the agricultural landscape of the surveyed community, illustrating the prevalence of small farming operations as a dominant feature. The classification of households into distinct landholding categories facilitates a nuanced understanding of the varied economic profiles within the agricultural sector.

Figure 7.5: Agricultural Land owned by surveyed household in Sonarchar



Source: Fieldwork in Sonarchar and Machpara.

Table: 7.1: Distribution of Agricultural Land of Households in Sonarchar

Agricultural Land	Frequency	Percentage	Status
Below 33 *shotangso*	27	30%	Marginalized Farmer
33-99 shotangso	47	52%	Small Farmer
100-165 shotangso	15	17%	Medium Farmer
166 & above	1	1%	Rich Farmer
	Total- 90	100%	

Source: Fieldwork in Sonarchar and Machpara.

The data pertaining to agricultural land distribution among the 90 engaged households reveals a nuanced classification of farmers based on landholding sizes. A majority of the households (52%) fall within the range of 33-99 *shotangso*, categorizing them as small farmers. This group forms a significant segment of the agricultural community, highlighting the prevalence of enterprises with moderate-sized landholdings.

The distribution further delineates the landscape, indicating that 30% of households possess below 33 *shotangso*, classifying them as marginalized farmers. This demographic underscores the presence of a considerable number of farmers engaged in relatively modest agricultural operations.

Conversely, 17% of households exhibit larger landholdings, falling within the range of 100-165 *shotangso*, designating them as medium farmers. This group signifies a notable proportion of the agricultural community engaged in more extensive farming endeavors.

Interestingly, a solitary household (1%) possesses a landholding of 166 *shotangso* and above, earning the classification of a rich farmer. This outlier represents a distinct category within the community, contributing to the diversity of agricultural profiles observed. The analytical breakdown of farmers based on land size provides a comprehensive snapshot of the agricultural composition within the surveyed community. The average agricultural land per household is 23 *shotangso* in mopura (fieldwork 2021).

Case study 1: Tides of Resilience: The Struggles and Dreams of Abdul Haque, a Coastal Farmer in Sonarchar

On the coastal island of Monpura in Bhola, a 63-year-old farmer named Abdul Haque has left behind a legacy of tenacity throughout his life in the village of Sonarchar. Abdul paints a moving picture of surviving in the face of adversity; his life is a reflection of the difficulties experienced by coastal farmers. His life is explored in this ethnographic case study, showing the complex web of challenges and aspirations that make up his identity.

A conundrum involving land introduces Abdul's tale. He does not own any land, in contrast to most farmers. Instead, he is dependent on the goodwill of the neighborhood's landlords, known

as the *Mohajon*, who lend him the plots he cultivates. These land agreements are, at best, shaky, leaving him constantly exposed. This dependency is a harsh reality for many farmers in coastal Bangladesh. The *Mohajon* exercise considerable power and often take a significant portion of the harvest as rent. For Abdul Haque, this means that a substantial portion of his hard-earned produce is shared with the landowner, leaving him with limited resources to support his family. Abdul's story is one of eviction since the Meghna River's constant erosion caused him to lose his last two residences. His house, the only thing in his life that has remained constant, serves as evidence of his unbreakable character.

Agricultural pursuits are tied to the rhythm of the seasons. Twice a year, Abdul toils on borrowed land to cultivate that ensure the family's survival. Abdul Haque, like many coastal farmers, practices two main crop cycles each year. The first is dedicated to rice cultivation, while the second focuses on lentils. Rice, being a staple in the Bangladeshi diet, is crucial for his family's sustenance. However, the reality is heartbreaking. The rice harvest hardly generates any profit, and Abdul Haque primarily cultivates it to meet his family's basic dietary needs. The meager surplus, if any, is sold to cover essential expenses.

Lentil production, on the other hand, offers a glimmer of hope. It not only diversifies his family's diet but also provides a small income when sold at the local market. Yet, the profits from lentils are meager, and it remains a constant challenge to break free from the cycle of subsistence farming. He hopes for government intervention to buy rice directly from local farmers, bypassing the middlemen who reap the lion's share of the profits.

Living on a coastal island presents Abdul with yet another major obstacle: access to fresh water. His capacity to grow *boro* rice in the winter is hampered by the lack of freshwater. The merciless presence of saline water in this area makes the ground unusable. Also, the island does not have sufficient fresh water to irrigate the paddy fields. His family thus misses out on the benefits that *boro* rice would have to provide.

Abdul's family is not entirely reliant on the production of grains and lentils. He keeps a small herd of cows that give his family milk. But due to the topography and other factors, these cows are not used in the agriculture of rice. He tends to papaya, guava, and coconut plants around his simple home as a symbol of his resourcefulness and inventiveness. He has a secondary source of income from the fruits of these trees, which he uses to feed his family. He has some hen that helps him to get eggs and necessary protein.

The family of Abdul has faced its fair share of difficulties and upheavals. With five sons, three daughters have been married off, and four have left to start their own families. After his daughter got divorced and remarried, he was left to take care of his 12-year-old granddaughter. He resides with one of his sons, who helps him with farming. Abdul is left to handle the obligations on his own because his wife, who had been by his side through thick and thin, has passed away.

Abdul's narrative commences with the poignant predicament of land ownership, or rather, the lack thereof. In a region where land is the lifeblood of existence, Abdul finds himself dependent on the goodwill of local landlords, commonly known as the *Mohajon*. These land agreements are far from secure, leaving farmers like Abdul in a perpetual state of vulnerability. This dependency is a stark reality shared by many coastal farmers in Bangladesh, where the *Mohajon* wield considerable power and extract a significant share of the harvest as rent. For Abdul, this translates into a substantial portion of his hard-earned produce being claimed by the landowner, leaving him with meager resources to sustain his family. It's a challenging existence further compounded by his recurrent eviction due to the relentless erosion of the Meghna River. The story of Abdul Haque provides a moving account of the struggles faced by Bangladeshi coastal farmers. Themes that resound strongly in his novel include the precariousness of land tenure, the struggle against nature's destructive powers, and the quest for a respectable living. His goals are straightforward: to ensure a consistent income from rice farming, to receive direct government assistance for local farmers, and to take care of his family. Although Abdul's life was tragic, it serves as a monument to the fortitude of the coastal farming settlements in Monpura, Bhola. The situation of farmers like Abdul is a call to action for policymakers to take into account and work towards a more stable and sustainable future for them.

The rhythm of Abdul's life revolves around the agricultural cycles that the changing seasons bring. Twice a year, he toils on borrowed land to cultivate crops that are vital to his family's survival. The first season is dedicated to rice cultivation, an essential staple in the Bangladeshi diet. However, the profits from rice hardly suffice, serving mainly to meet the family's basic dietary needs. In contrast, the second season focuses on lentils, offering a glimpse of hope as they not only diversify his family's diet but also provide some income when sold at the local market. Nevertheless, escaping the cycle of subsistence farming remains an arduous task, and Abdul yearns for government intervention to directly purchase rice from local farmers, bypassing intermediaries who claim the lion's share of profits.

Challenges compound further when it comes to the scarcity of freshwater, a stark reality in a coastal environment. This shortage, coupled with the intrusion of saline water, renders his land unsuitable for growing *boro* rice during the winter months. With no irrigation system to counter these challenges, Abdul's family misses out on the benefits that *boro* rice could bring. Despite these hurdles, Abdul's ingenuity shines through as he tends to fruit-bearing trees like papaya, guava, and coconut around his home. These trees not only provide an additional income source but also diversify the family's diet.

Abdul Haque's story goes beyond the contours of his own life. It mirrors the struggles of countless coastal farmers in Bangladesh, echoing themes of precarious land tenure, an unwavering battle against the forces of nature, and the relentless pursuit of a dignified livelihood. In the backdrop of his hardships, Abdul's aspirations are unpretentious: a steady income from rice farming, direct government support for local farmers, and the ability to care for his family. His life story, though marked by tragedy, serves as a monument to the resilience

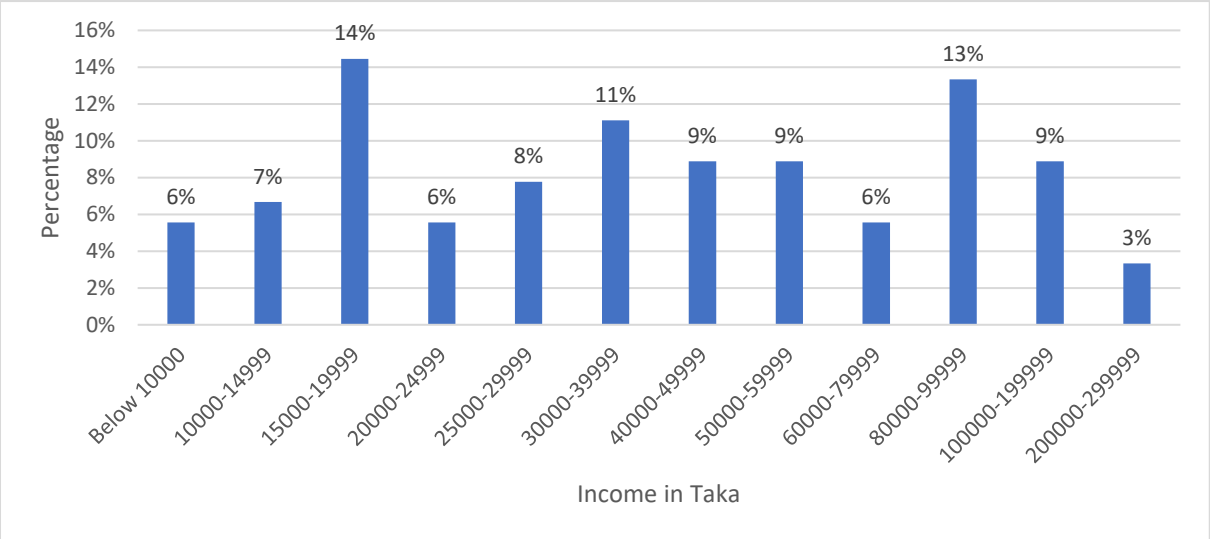
of the coastal farming communities in Monpura, Bhola. The predicament of farmers like Abdul is an imperative call for policymakers to acknowledge and work towards securing a more stable and sustainable future for them.

7.3.2. Income from Farming

The provided table made from my fieldwork data offers a comprehensive overview of income distribution from farming activities, considering both owned and leased land, within the surveyed households. A notable observation is that the highest frequency, comprising 14% of the respondents, falls within the income range of 15,000-19,999. This finding implies a substantial portion of the farming community derives income at this mid-range level, signifying a core economic bracket within the agricultural sector.

It is noteworthy that the distribution across income categories is relatively even, with no single category dominating significantly. This equitable spread suggests a diversified agricultural landscape where farmers operate at various income levels. The absence of a pronounced concentration in any specific category underscores the economic diversity within the surveyed community.

Figure 7.6: Income from Farming from Farming Activities in Sonarchar



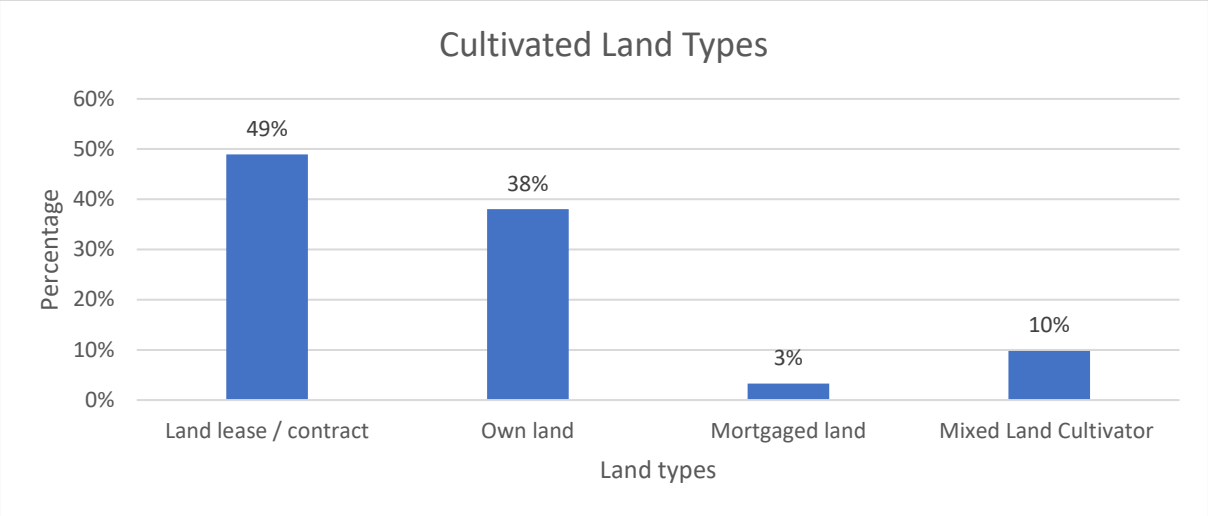
Source: Fieldwork in Sonarchar and Machpara.

In terms of moderate and high incomes, a noteworthy subset of households (13%) reports income levels in the range of 80,000-99,999. This indicates the presence of a significant group of farmers achieving relatively higher levels of income from their agricultural activities. Furthermore, the categories of 30,000-39,999 and 50,000-59,999 demonstrate noteworthy frequencies at 11% and 9%, respectively. These findings underscore the diversity of income levels within the community, showcasing a range of economic success stories in agriculture.

Conversely, while lower income brackets (below 30,000) collectively account for a smaller percentage of households, they remain relevant to the overall economic landscape. The 6% frequency in the below 10,000 category reflects a segment of farmers facing income challenges. Recognizing and addressing the needs of this group is crucial for ensuring inclusive agricultural development and fostering economic resilience among the farming community.

In conclusion, this detailed analysis of income distribution provides valuable insights into the economic dynamics of the surveyed agricultural sector. The observed patterns not only contribute to a nuanced understanding of income variations but also offer a foundation for devising targeted policies and interventions aimed at supporting farmers across diverse income brackets within the community.

Figure 7.7: Land Tenure Diversity in Sonarchar: Cultivated Land Types



Source: Fieldwork in Sonarchar and Machpara.

The tabulated data provides a detailed account of cultivated land types derived directly from my fieldwork in Monpura. This analysis unveils the diverse landscape of land tenure arrangements within the surveyed households, offering a nuanced perspective on the intricate dynamics of agricultural practices in this region.

The predominant land tenure category, comprising 49% of the surveyed households, is "Land lease/contract." This observation underscores the prevalence of lease or contractual agreements governing land cultivation, shedding light on the prevalent practices that characterize agricultural activities in Sonarchar.

Following closely, the category of "Own land" represents 38% of households. This significant proportion of farmers engaging in cultivation on their personally owned land highlights the importance of individual landownership in shaping the agricultural fabric of the community.

A distinct subset, constituting 10% of the respondents, identifies as "Mixed Land Cultivators." This category implies a flexible approach, where households cultivate land under a mix of

ownership structures—leased, owned, and potentially mortgaged. This adaptive strategy reflects the resourcefulness of a noteworthy segment of the Sonarchar community.

A smaller yet noteworthy proportion, comprising 3% of households, reports "Mortgaged land." This category provides insight into a unique aspect of land tenure, where farmers cultivate land currently under mortgage agreements. Although a minority, this group contributes to the diverse array of land utilization strategies within the community. The findings underscore the socio-economic complexity of Monpura's agricultural landscape, revealing diverse land tenure patterns that influence farming practices.

Case study 2: The Livelihood Strategy of Shimul Chandra Das and His Family in Sonarchar

In the course of my ethnographic fieldwork in Monpura Island, I had the opportunity to interview Shimul Chandra Das, a 55-year-old Hindu farmer residing in the village of Sonarchar. This case study aims to shed light on the complex livelihood strategies employed by Shimul and his family, including his 40-year-old wife Rani Das, in an agricultural landscape that is increasingly proving to be unprofitable.

Shimul and Rani have three sons, the eldest of whom has joined the Bangladesh Army. The family owns a small parcel of land and also borrows additional agricultural land from local moneylenders, known as *mahajans*. Rani Das actively participates in the agricultural process, assisting Shimul in cultivation and rice processing for their household consumption. Furthermore, the family is indebted to the unflagging support from Shimul’s brother's family, who also aid them in farming activities. Without this community and familial support, survival would have been exceedingly challenging.

Shimul Chandra Das does not solely rely on his small piece of land for agricultural activities. He also borrows land from *mahajans*, an arrangement that has its own set of challenges and implications. This borrowing of land places the family in a perpetual cycle of debt and dependency, but it also enables them to cultivate sufficient crops for both sustenance and, in better years, modest economic gain.

Rani Das is not merely a spectator in the family’s agricultural endeavors. She assists Shimul in multiple capacities, from sowing seeds to harvesting crops. Post-harvest, she also takes the lead in processing rice for the family's own consumption. Her contribution is critical in sustaining the family's way of life, echoing the larger but often under-acknowledged role those rural women play in Bangladesh's agricultural sector.

The Das family does not operate in isolation; they are part of a broader community and family network that is crucial for their survival. Shimul's brother and his family often help in agricultural work. This interdependence reveals an intricate support system, which is indispensable in a landscape of volatile climate conditions and economic uncertainties. In our ethnographic study, we noted that many of our primary informants leaned on their kinship ties for assistance during natural disasters and other crises. This support manifested in various forms, from extending

minor loans to providing land for those displaced by river erosion. Thus, for the residents of Monpura, especially the more vulnerable ones, the kinship network serves as an indispensable support system.

Rani Das once took a small loan from a local NGO with a specific purpose in mind. However, the loan was not used for the intended reason, pointing to the volatile financial landscape they navigate. Whether due to an emergency need or a reassessment of priorities, this deviation underscores the complex financial decisions that families like Shimul must often make on the fly. In another account, the family grappled with the lingering interest from a minor loan taken out by Shimul's father in the 90s. Though Shimul's father passed on in 2007, the family only managed to settle the debt in 2022. What began as a modest sum ballooned over the years, becoming a weighty obligation for the family. When we sought to review the loan documents, the family was amenable. We discerned that the loan, sourced from a governmental bank for agricultural purposes, shouldn't have continued post the death of Shimul's father as per the bank's policy. Yet, the reasons behind the bank's insistence on repayment and the family's unawareness remain puzzling to us. This narrative underscores the growing complexities and challenges surrounding rural loan systems in Bangladesh.

With the eldest son joining the Bangladesh Army, the family is on the cusp of a significant transition. The family is contemplating abandoning agriculture and rice production, mainly due to its diminishing profitability. This impending shift represents a broader trend affecting many families in Sonarchar and is reflective of the generational changes and economic pressures that many traditional farming families are experiencing today. Shimul told us that depending on agriculture is not profitable for the villagers. Even Shimul struggled to pay the educational expenses of his children in the past.

The case of Shimul Chandra Das and his family serves as an intimate snapshot of the intricate dynamics of livelihood strategies in Sonarchar. Through Shimul and his family, we observe how community and familial networks become lifelines in the context of economic vulnerability. The case also provides valuable insights into the changing attitudes towards traditional agricultural livelihoods and how economic pressures and opportunities outside agriculture are influencing younger generations. Lastly, it sheds light on the vital yet often overlooked role that women play in sustaining these complex, fragile systems.

The case study of Shimul Chandra Das and his family in Sonarchar offers a poignant exploration of livelihood strategies in a challenging agricultural landscape. Within this context, several key themes and dynamics emerge:

Shimul and Rani Das, a husband and wife in their 50s, navigate the complexities of coastal farming in Bangladesh. They do not solely rely on their small parcel of land but also borrow land from local moneylenders known as *mahajans*, perpetuating a cycle of debt and dependency. These arrangements allow them to cultivate crops for sustenance and modest economic gain, underscoring the trade-offs and intricacies of such arrangements in coastal agriculture.

Rani Das's active involvement in agricultural activities, from sowing seeds to processing rice, highlights the significant yet often under-acknowledged role of rural women in Bangladesh's agricultural sector. Her contributions are critical to sustaining the family's way of life, emphasizing the vital role of women in supporting livelihoods in this context.

The family's interdependence with Shimul's brother's family showcases the essential role of extended family networks. In an environment marked by volatile climate conditions and economic uncertainties, this support system is indispensable. It highlights the significance of kinship ties in providing assistance during crises, such as natural disasters and displacement due to river erosion.

In summary, Shimul Chandra Das's case study is a microcosm of the livelihood strategies in coastal Bangladesh. It emphasizes the intricate dynamics of land borrowing, the indispensable role of family networks, the active participation of women, complex financial decisions, and shifting attitudes toward traditional agricultural livelihoods. This case study offers valuable insights into the challenges, resilience, and adaptability of agrarian communities in the context of coastal Bangladesh, highlighting the evolving nature of livelihood strategies and the pivotal role of community and family networks in sustaining these complex systems.

7.4. BUSINESS

In the tranquil coastal expanse of Monpura, like in many rural regions of Bangladesh, an intricate web of livelihood strategies thrives. While agriculture and fishing dominate the economic landscape, it's essential to recognize the role of various services offered by small shops and businesses in sustaining the local population. These enterprises, often modest in scale, are not the primary economic engines, yet their significance cannot be overstated in the pursuit of subsistence.

Monpura Island, nestled in the Bay of Bengal, presents a unique microcosm of life in coastal Bangladesh. Surrounded by brackish waters, it grapples with challenges like river erosion, saline intrusion, and the unpredictability of climate. Within this context, small shops, tea stalls, repair workshops, and other service-oriented establishments have woven themselves into the fabric of daily existence. Their offerings are diverse, ranging from basic groceries to minor repairs and refreshments. While these enterprises may not fuel the island's economy in the way agriculture and fishing do, they fill crucial niches in the lives of the island's residents.

In the course of this case study, we delve into the world of one such business, a yogurt maker in Machpara. By exploring the nuances of his work, challenges, and aspirations, we gain insights into the multifaceted strategies that residents employ to ensure their livelihoods. The case of the yogurt maker is a testament to the resilience and resourcefulness embedded within the business sector, which quietly but indispensably supports life in coastal Bangladesh.

Case Study 1: Arjun Chandra Ghosh, The Buffalo Yogurt Maker of Machpara

In Monpura, Bangladesh, I encountered Arjun Chandra Ghosh, a 35-year-old buffalo yogurt maker and seller. Living in Machpara, Monpura, Arjun offers a fascinating glimpse into the intricacies of local businesses adapted to the ecological and socio-cultural fabric of the region. This case study aims to unpack Arjun's entrepreneurial ventures in collecting buffalo milk from various "*chars*" (sandbanks) outside Monpura, making yogurt, and sustaining a business that has transcended generations.

Every dawn, Arjun and his two hired men embark on a milk collection journey. Using local boats, colloquially called '*Kosa* boats,' they navigate through water channels to reach remote *chars*, including *Patar Char*, *Kolatolir Char*, *Bodnar Char*, *Mia Jamir Shah Char*, *Samsuddiner Char*, and *Dhal Char*. Each *char* presents an opportunity for Arjun, not just in terms of milk collection but also as an investment into the local buffalo-rearing community. The yogurt in question holds a prominent place in the local culture, making its demand exceptionally high. Islanders of Monpura traditionally savor this yogurt as a dessert during ceremonial feasts. Consequently, the team is committed to collecting milk daily, regardless of the weather conditions, to meet this demand. Navigating the *chars* using *kosa* boats is a challenging endeavor, as it requires an overall three hour-long journey to access these distant regions. Due to the inherent characteristics of the buffaloes, they aren't typically reared on the mainland. Thus, these *char* farms stand as the exclusive sources for buffalo milk, which is essential for producing this particular yogurt.

Arjun has invested a substantial amount of money into these local buffalo farmers, particularly in *Patar Char*, where his investment amounts to 284k Bangladeshi Taka. Usually, the *char* farm owners are respectable businessmen and community leaders. Remarkably, none of these financial engagements are bound by official documents. They are instead solidified by the weight of trust and mutual respect. No one has ever cheated him, a testament to the ethical integrity of both Arjun and the buffalo owners. This unique mode of investment epitomizes the unspoken ethos and simplicity of local business transactions in Monpura.

The Ghosh family of Machpara has been in the buffalo yogurt-making business for generations. Arjun's father and grandfather laid down the foundations on which he builds today. The yogurt he makes has a special reputation, owing much to time-honed techniques passed down through family lines. Although the business operates on a relatively small scale, Arjun's yogurt is famed within the community. Due to the introduction of solar electricity in the island, the business is growing significantly as now the yogurt storage has become better. Also, now the communication between the *char* farmers and Arjun has become easy because of mobile phones. Arjun and his brothers can call the farmer in advance before coming.

Arjun has tactically used loans taken from NGOs for different purposes to invest in his yogurt business. This shrewd financial maneuver allows him to augment his operation's scale and scope. His wife and son actively participate in the yogurt-making process, thereby keeping the business a family affair. His son’s involvement, in particular, signals the likely continuance of this business

into yet another generation. Arjun's sister and sister-in-law reside in Dhaka. He informed us that his sister's family also supports them in case of an emergency. Specially if they have to attend some emergencies in Dhaka they go to their sister's house. We can see the role of kin network in this context as well.

The research involved in-depth interviews with Arjun and field observations. Ethical considerations like informed consent were adequately dealt with. The interview was conducted in a relaxed setting to ensure the authentic narrative flow.

Arjun Chandra Ghosh's life and business offer an intriguing case of how localized businesses adapt and thrive in unique ecological settings. His is a story of calculated financial risks, family involvement, community investment, and unspoken trust. It paints a nuanced picture of small-scale entrepreneurship, socio-cultural dynamics, and environmental adaptability.

This case study provides insights that could be instrumental for policymakers, researchers, and practitioners interested in fostering sustainable, localized businesses in similar settings. Moreover, Arjun's case serves as an invaluable addition to the ethnographic texture of Monpura, enriching our understanding of its complex socio-economic and cultural tapestry.

The insights from Arjun's life do not merely inform us about the economic strategies of buffalo yogurt making but also enlighten us on the enduring values of trust and community engagement, which, in essence, define the socio-economic fabric of Monpura.

As a whole, these case studies reveal that the pursuit of livelihoods in Monpura is a complex web of tradition, resilience, and adaptation to environmental and economic challenges. The islanders' reliance on diverse sources of income, from fishing to farming, points to their ability to withstand adversity and continually strive for better lives. These narratives also underscore the vital role that local communities and familial networks play in supporting one another.

Every morning, Arjun and his helpers load their *nao* (boat) before the *jowar* (high tide) to cross the *gang* (river) and collect buffalo milk from the *chars*. The journey is risky—sometimes a *hap* (snake) is spotted on the muddy banks, or sharp *nouk* (nails) on the boat planks cut their *theng* (legs) and *aat* (hands). Yet, Arjun insists, these challenges are worth facing because the *doi* (yogurt) made from this milk is not only his family's livelihood but also an essential part of Monpura's feasts and rituals. In clay *autta* (yogurt pots), the product becomes more than food—it becomes a cultural marker of hospitality and community pride. Arjun joked once that even if he were a *baurchi* (cook), no dish could bring the same joy as his *doi*.

Arjun's business is also deeply tied to Monpura's social networks. He invests *tiya* (money) with char farmers, and though no *poisa* (coins) or documents formalize the deals, trust binds the arrangements. Local leaders—the *Chermon* (Chairman), *Nembor* (Member), and *Cheidar* (village watchman)—sometimes mediate disputes, but rarely are they needed. Arjun's kinship ties stretch beyond the island; his *huaamma* (paternal aunt) in Dhaka and her *jamai* (husband) provide shelter when his family must travel for emergencies. Even within his own home, his wife

spins *huta* (thread) into cloth while helping prepare the yogurt, keeping the household economy balanced. In this way, Arjun's story is not just about making yogurt—it is about weaving survival through *nao* journeys, kinship bonds, community trust, and the everyday resilience of Monpura's people.

In conclusion, these ethnographic case studies from Monpura Island provide a comprehensive view of the myriad ways in which individuals and communities shape their livelihood strategies. They exemplify the enduring spirit of the coastal population as they face the ever-present challenges of nature, economics, and societal structures. These stories serve as invaluable insights into the intricacies of livelihoods in this unique corner of Bangladesh, highlighting the importance of tailored policies and support systems to enhance the resilience and prosperity of the island's inhabitants.

CHAPTER EIGHT:
IMPACTS OF NATURAL DISASTERS AND CLIMATE CHANGE ON LIVES AND LIVELIHOODS

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8.1. NATURAL DISASTERS AND CLIMATE CHANGE IMPACTS

According to ADB's Disaster Management Handbook, disasters have been defined in various ways, though most definitions share common features. They typically refer to significant disruptions to normal life, often sudden, unexpected, and widespread in nature. Disasters usually result in serious human consequences, such as loss of life, injury, health crises, and general hardship. They also affect broader social structures by damaging or destroying institutions, infrastructure, communication systems, and essential services. In response, affected communities often require urgent support, including shelter, food, healthcare, and social assistance. Dictionary definitions also reflect this understanding—for instance, the *Concise Oxford Dictionary* describes a disaster as a sudden or great misfortune or calamity, while *Webster's Dictionary* defines it as a sudden catastrophic event causing major damage and distress. Recognizing the diversity of definitions, this particular framework adopts a comprehensive one: a disaster is any natural or man-made event, whether sudden or gradual, that causes such severe impact that it necessitates extraordinary community responses (Asian Development Bank, 1991).

Climate change-driven extreme events threaten existing physical infrastructure significantly. By 2030 and 2050, flood damage to national motorways is projected to reach approximately 1,011 km and 3,315 km, respectively. Embankments are expected to suffer damage of about 4,271 km by 2030 and increase to 13,996 km by 2050. Additionally, the combined damage to health centers and hospitals from floods, cyclones, sea level rise, and salinity intrusion is estimated at 1,682 km in 2030 and will rise to 5,212 km by 2050 (BRTC-BUET 2005).

The Meghna estuary stands as a highly dynamic coastal system characterized by elevated rates of erosion and accretion, where river widening and offshore island migration are prevalent phenomena. Sediment concentrations remain consistently high throughout the estuary, manifesting not only during the wet monsoon season but persisting in the dry season as well, leading to the accretion of small islands. Tidal currents, with sufficient strength to keep sediments in suspension, are instrumental in trapping river-borne sediments within the estuary, facilitated by the effects of pumping residual circulation.

Tidal action in the Meghna estuary exhibits a dynamic nature, experiencing variations not only seasonally but also throughout the year, resulting in a continuously changing geography. The

swift travel of waves from the Indian Ocean through the Bay of Bengal contributes to the dynamic tidal conditions at locations such as Cox's Bazar and Hiran Point. Refraction and distortion of the tidal wave occur due to the shallow area in front of the delta. In the eastern part of the Bay, a deep tidal inlet further accelerates tidal travel, adding to the complexity of the tidal dynamics.

Bangladesh, due to its geographical location, land characteristics, extensive river network, and monsoon climate, has a longstanding history of natural disasters. Between 1980 and 2008, the country faced 219 natural disasters, with floods, cyclones, storm surges, riverbank erosion, earthquakes, droughts, salinity intrusion, fires, and tsunamis posing significant threats. Cyclones, particularly those in 1970, 1991, 2007, and 2009, resulted in substantial casualties, with 364,000, 136,000, 3,363, and 190 lives lost, respectively.

8.2. TYPES OF NATURAL DISASTER

Bangladesh's coastal regions faced several devastating cyclones in the years 1797, 1822, 1876, 1897, 1901, 1941, 1960, 1961, 1963, 1965, 1969, 1970, 1985, 1991, and 1996. Notably, the cyclones of 1970 and 1991 resulted in significant human and material losses. A 1991 study by the Bangladesh Bureau of Statistics revealed that individuals aged 15 to 49 demonstrated a higher capacity to secure themselves, while children, the elderly, and women experienced greater vulnerability. The coastal areas in 1970 lacked robust protective measures like encircling embankments, and the early warning and cyclone tracking systems were not as advanced, contributing to substantial loss of life.

In 1970, Monpura Island was directly affected by the Bhola Cyclone. The first person to observe its approach on the island was Kammaluddin Chodhury, a farmer who initially mistook the distant glow for something benign before realizing it was a wave generated by the impending cyclone.

8.2.1. Cyclones in Coastal Bangladesh

The coastal belt of Bangladesh is one of the most cyclone-vulnerable zones in the world, frequently exposed to intense tropical storms during both the pre-monsoon and post-monsoon seasons. Owing to this extreme exposure to recurrent natural hazards, scholars often describe the region as a geographical “death trap.” Historical data reveal that since 1820, nearly one million people have lost their lives to cyclonic events in Bangladesh. Although only about 10 percent of global cyclones originate in the Indian Ocean, this basin accounts for nearly 85 percent of global cyclone-related casualties and destruction (Gray, 1968).

The human toll from cyclones in Bangladesh is shaped by a convergence of socio-economic and environmental vulnerabilities. The country’s dense coastal population, widespread poverty, fragile housing structures, inadequate numbers of cyclone shelters, and limited access to effective forecasting and early warning systems all contribute to its heightened risk. Additionally, the low-lying nature of the deltaic terrain leaves much of the region susceptible to storm surges and flooding, exacerbating the destructive potential of each event.

Cyclones and associated storm surges are recurring phenomena along the coastal fringe of Bangladesh, particularly during the transition between the monsoon and retreating monsoon seasons. The term *cyclone* derives from the Greek word *kyklos*, meaning "circle" or "coil of snakes." Scientifically, it denotes a region of low atmospheric pressure where winds rotate inward—counterclockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere (Choudhury, 2009). These storms, frequently accompanied by tidal surges, have long been a defining environmental hazard for the people of coastal Bangladesh.

Between 1891 and 1898, approximately 178 severe cyclones formed in the Bay of Bengal, each with wind speeds surpassing 87 kilometers per hour, causing widespread loss of life and extensive property damage. From 1970 to 1998 alone, 38 cyclones reached catastrophic proportions. The cyclone of November 12, 1970, remains one of the most devastating natural disasters in human history, killing an estimated 500,000 people and causing property losses exceeding one billion U.S. dollars, while nearly 90 percent of marine fisheries suffered major destruction. The April 1991 cyclone, though even stronger in magnitude, caused about 140,000 fatalities and roughly USD 2.4 billion in damages (Choudhury, 2009). Given that the coastal population had nearly doubled between 1970 and 1991, researchers suggest that if the 1970 event were replicated under similar demographic conditions, the death toll might have approached one million. Historical accounts show that storm surges—such as those recorded in 1876, 1919, 1961, 1963, 1965, 1970, and 1991—have consistently been the most lethal element of these events.

The 1970 Bhola Cyclone, also referred to as the Great Cyclone of 1970, marked a tragic turning point in the region's history. Striking the coastlines of East Pakistan (now Bangladesh) and India's West Bengal on November 12, 1970, it remains the deadliest tropical cyclone ever recorded and one of the most catastrophic natural disasters worldwide. Death estimates range from 300,000 to 500,000, with most victims drowned by the massive storm surge that submerged the low-lying islands of the Ganges Delta. Classified as the sixth and most powerful storm of the 1970 North Indian Ocean cyclone season, Bhola reached peak wind speeds of approximately 185 kilometers per hour (115 miles per hour) (Choudhury, 2009).

The cyclone developed over the central Bay of Bengal on November 8 and moved steadily northward, intensifying before making landfall on November 12. The resulting surge obliterated entire villages, wiped out crops, and displaced thousands of families. In Tazumuddin upazila alone, over 45 percent of the local population—around 167,000 people—lost their lives.

The inadequate disaster response that followed deepened public outrage and revealed the political inequities between East and West Pakistan. The central government, led by General Yahya Khan, faced severe criticism for its delayed and insufficient relief operations. Both local leaders and international observers condemned the government's negligence and indifference to the scale of human suffering. This growing resentment fueled widespread political mobilization in East Pakistan. In the national elections held a month later, the Awami League achieved an overwhelming victory. The subsequent deterioration of relations between East

Pakistan and the central government culminated in the Bangladesh Liberation War of 1971, ultimately leading to the country's independence.

8.2.2. Recent Hit Natural Disasters in Monpura

Cyclone Aila (May 2009)

Cyclone Aila hit the Bangladesh on Monday 25 May 2009 and has produced substantial damage across areas of southern Bangladesh. It caused 190 people dead and 3,935,341 people affected. The total damage was USD270 million.

Cyclone Sidr (November 2007)

Cyclone Sidr hit the coastal areas on 15 November 2007. It affected 8,978,541 people and killed 4,234. The economic damage caused by the cyclone is USD2.3 billion.

Cyclone (April 1991)

A cyclone occurred in April 1991 in Chittagong killed 138,866 people and affected 15,438849 people. The total damage was UD$1.78 billion.

Flood

Flooding is a persistent issue in Bangladesh, with occurrences almost every year affecting various parts of the country. These floods, primarily during the monsoon season, represent the most significant natural hazard, causing extensive damage to both human life and property. The country's geographical and meteorological characteristics make it susceptible to various geo-hazards and hydrometeorological disasters, resulting in frequent flooding. Notable devastating floods include those of 1987, 1988, and 1998, with the 1988 flood setting a new record for the flooded area, and the 1998 flood being unprecedented in its prolonged duration.

Two distinct types of floods occur in Bangladesh: annual floods (*barsha*) covering up to 20% of the land area, and low-frequency floods of high magnitude (*bonna*) inundating more than 35% of the area. Recent catastrophic floods in 1954, 1955, 1974, 1984, 1987, 1988, 1993, 1998, 1999, 2000, and 2007 have been highly destructive, posing a significant threat to lives and the economy (Choudhury, 2009). In terms of human exposure to flood hazard zones, nearly 19,279,960 people reside in these areas, ranking Bangladesh 1st among 162 nations (Hassan, 2016).

In 2013, the country experienced normal flooding incidents in July and September. The onset of the monsoon affected a wider part of North Bengal and the central region along the Brahmaputra River. The north-western part faced flooding with a high affected area but a relatively short duration. Prolonged floods occurred in the south-western part, particularly in Satkhira and Khulna districts, attributed to poor drainage conditions, especially in the Kobodak-Haribhanga and Shibsa river catchment areas. In Jhikorgacha of the Kobodak River, water flow

exceeded the danger level for 120 consecutive days, resulting in nine fatalities and impacting about 28,000 families (Mallick, 2014).

Case Study 1: The Deepening Crisis: Amanullah's Struggle for Water in Sonarchar

Sonarchar has long been sustained by its agricultural roots. The farmers of this region have battled the forces of nature for generations, adapting to shifting tides and unpredictable monsoons. Yet, a growing crisis now threatens their way of life—one that is not as visible as cyclones or floods but just as devastating: the acute shortage of pure water. Amanullah, a seasoned agriculturalist in Sonarchar, has spent his life tilling the land, nurturing crops, and raising livestock. Now in his late fifties, he sees the worsening water crisis as the greatest challenge the community has ever faced.

Sitting under the shade of a large tamarind tree near his house, Amanullah reflects on how things have changed over the years. "Years ago," he explains, "when we needed pure drinking water, we would dig a tube well 150 to 200 feet deep. It was hard work, but we could always find clean water. Now, things are different. The wells must go deeper—600 feet or more. And in the other *char* areas, it's even worse; they have to dig 800 or even more. The more we dig, the more we realize how much salinity has spread beneath our feet."

The increasing salinity in the groundwater has turned fresh water into an expensive commodity. Farmers like Amanullah now rely on shared deep tube wells, but even these are not always reliable. The water, when found, tastes slightly brackish, a constant reminder of the encroaching sea. The crisis does not only affect drinking water— it is reshaping agriculture and livestock rearing as well.

Amanullah has spent his life cultivating rice and seasonal vegetables. In earlier times, the irrigation systems in Sonarchar relied on small ponds and wells, but these sources are drying up or turning salty. The impact on farming is devastating. "Our rice crops need fresh water, especially during the dry season," Amanullah says. "But now, with no way to irrigate, our yield is falling. The soil is losing its fertility, and we are left helpless." Farmers who once harvested healthy crops of rice, lentils, and vegetables now find themselves struggling to maintain productivity. The loss of irrigation water means they must depend on rain alone, which is unpredictable and insufficient.

Water scarcity does not just affect farming; it is also threatening the livestock that many families rely on for their livelihoods. In Sonarchar, buffalos play a crucial role, grazing in the open *char* lands and providing milk, meat, and labor. However, as Amanullah notes, these animals now face a dire situation.

"Buffalos need large amounts of fresh water," he says, watching his animals rest near a shallow pond. "But our ponds are drying up, and what's left is too salty for them to drink. They grow weak, produce less milk, and fall sick more often." Many herders are now forced to take their buffalos to distant water sources, sometimes miles away, just to keep them hydrated. But with

every passing year, these sources become more unreliable. Salty water is bad for grass production, as a result a crisis of food for livestock is also observed in these *chars.* The deer living in the nearby *chars* sometimes come to peoples home searching for food and fresh water. Many take this opportunity to kill these deer for their flesh and skin- resulting into the loss of unique biodiversity of Monpura.

Amanullah's story is not just his own—it reflects the collective struggle of Sonarchar's farming community. As the groundwater crisis deepens, the islanders find themselves at a crossroads. They need urgent intervention, whether through rainwater harvesting systems, desalination projects, or government-supported irrigation initiatives. Without these, the very foundation of life in Sonarchar is at risk.

Looking towards the horizon, Amanullah sighs. "If we don't find a solution soon, our children will inherit a land where farming is impossible, where buffalo herders will have nothing left to graze, and where finding a single glass of fresh water will be a luxury."

His words echo the fears of an entire generation of farmers who, despite their resilience, face an uncertain future. The crisis of pure water in Sonarchar is no longer a distant threat—it is a present reality demanding immediate attention.

Amartya Sen's (1981) *entitlement approach* provides a valuable framework for understanding how natural disasters in Monpura lead to unequal outcomes among different groups. Rather than focusing solely on the physical scarcity of resources, Sen emphasizes access and control over entitlements such as land, work, and relief. This perspective helps explain why some households in Monpura experience greater food insecurity and hardship during cyclones or tidal surges.

8.3. CLIMATE CHANGE SCENARIOS

Climate change and its consequential impacts are manifesting through shifts in temperatures, altered precipitation patterns, rising sea levels, and changes in the frequency and severity of climate-related extremes. These climate-induced hazards have widespread effects, affecting millions globally each year. Between 2005 and 2015, over 1.5 billion people experienced the impacts of various natural disasters, with vulnerable groups like children and women disproportionately affected (UNISDR, 2015). Developing countries, particularly in low-lying coastal regions, bear a higher burden of climate-induced hazards such as frequent cyclones and storm surges (Hoque et al., 2021).

The exposure of people and assets to natural hazards in coastal areas has surged, outpacing the reduction in vulnerability (World Bank, 2016). Consequently, the disaster risk of communities has increased, leading to significant socioeconomic, health, cultural, and environmental losses (UNISDR, 2015; Mallick et al., 2017). Understanding the potential disaster risk of coastal areas is crucial for effective mitigation and minimizing the impact on communities.

Bangladesh, recognized as one of the most disaster-prone countries globally (Islam et al., 2013), routinely grapples with climate-induced disasters such as floods, tropical cyclones, tornadoes, tidal surges, droughts, and large-scale riverbank erosion (Roy et al., 2009; Mallick et al., 2017). The coastal areas of Bangladesh, particularly vulnerable to natural hazards and meteorological disturbances due to climate change, face recurring severe events, including tropical cyclones like SIDR and AILA (Perch-Nielsen et al., 2008; Mallick et al., 2017).

The irony lies in the fact that countries least responsible for global climate change are often the most susceptible to its detrimental impacts. Bangladesh's extensive coastline exposes it to potentially multi-hazard threats resulting from climate change. Covering 32% of the total land area and 30% of cultivable land, the coastal zone supports a significant population engaging in diverse livelihood activities (Khan, 2005). The coastal population, which was about 35.1 million in 2001, is projected to grow to approximately 57.9 million by 2050 (Islam, 2004). Vulnerable communities, particularly the poor and marginalized, heavily rely on climate-sensitive sectors like agriculture and fisheries for their livelihoods, often adopting various strategies to cope with the impacts of different climate hazards (Parvin et al., 2008; Helgeson et al., 2013).

Over the preceding two decades, the inhabitants of the coastal regions of Bangladesh have confronted an escalating level of vulnerability attributed to the compounding multi-hazard risks. This risk denotes the likelihood of a hazard transforming into a disaster, inflicting substantial adverse impacts on households or communities. Vulnerable communities experience severe disruptions to their lives and livelihoods, surpassing their capacity to cope or withstand using internal resources. Consequently, the affected population undergoes extensive human, material, economic, or environmental losses (Wallman, 2005; Ashraful Islam et al., 2016).

The southwestern coastal region of Bangladesh stands out for its distinctive environmental characteristics, rendering it exceptionally susceptible to a spectrum of natural hazards, including floods, cyclones, tornadoes, tidal surges, storm surges, riverbank, and coastal erosion. In 2007, Cyclone SIDR made landfall on the Bangladesh coastline, followed by Cyclone AILA in 2009, both delivering substantial damages, featuring 13-foot-high waters, impacting embankments, dykes, and causing the erosion of lives and livelihoods in coastal communities (Saha, 2015; Mallick et al., 2017). The district of Khulna, situated in the southwestern coastal belt, emerged as one of the most severely affected regions.

Rising sea levels will worsen several existing problems for coastal areas. We can expect more coastal flooding, leading to the displacement of communities. Coastal land and vital ecosystems like wetlands and mangroves will erode more rapidly, leaving coastlines even more vulnerable (Black et al., 2011). Additionally, low-lying agricultural land will become increasingly salinized, reducing crop yields. Beyond sea level rise, changes in the frequency or intensity of tropical storms and cyclones will also increase the risk of coastal flooding and damage. However, shifts in mid-latitude (extra-tropical) storm patterns are less likely to significantly impact migration, as these events have historically caused less displacement compared to tropical cyclones (Black et al., 2011).

Natural resources, defined as valuable substances occurring naturally in their unmodified form, derive their value from both the available quantity and market demand. Commodities are categorized as natural resources when extraction and purification represent primary activities, distinct from creation processes. The encompassing concept of natural resources includes land, forests, water bodies, trees, wildlife, agricultural areas, and watershed areas, possessing cultural, economic, political, and spiritual significance. These components fulfill functions in ecosystem processes and provide utility to humans. Integrated natural resource management seeks to achieve a balance between environmental quality and human life functions.

Natural resources are typically classified as renewable or non-renewable. Renewable resources, such as fish, forests, and renewable energy sources like solar and wind, can restock themselves when used sustainably. Non-renewable resources, like fossil fuels, exist in fixed amounts and cannot be regenerated as quickly as consumed. The origin-based classification distinguishes between biotic resources derived from living organisms and abiotic resources from the non-living world. Natural resource management involves the responsible and comprehensive management of land, water, forests, and biological resources to sustain agricultural productivity and prevent degradation. It aligns with the principles of sustainable development, focusing on conserving and preserving natural resources.

Understanding the causes of disasters in Monpura requires more than focusing solely on natural events like cyclones or river erosion. Disasters in the region are deeply shaped by broader social, political, and economic conditions that influence how different groups experience and cope with these hazards (Blaikie et al., 1994). Treating disasters as purely ‘natural’ risks overlooking the social structures such as poverty, marginalization, weak infrastructure, and limited access to state support that make certain communities more vulnerable.

Livelihood, as an integral component of human well-being, encompasses capabilities, assets (material and social resources), and activities necessary for a means of living. Sustainable livelihoods can withstand stress and shocks while preserving capabilities and assets without undermining the natural resource base. Livelihood strategies are undertaken by households to secure economic well-being and long-term survival. Secure ownership or access to resources and income-earning activities enhances livelihood sustainability, enabling households to offset risks, manage shocks, and address contingencies.

The Sustainable Livelihood Framework, formulated by DFID, encompasses five essential capitals: natural, human, financial, physical, and social. In this framework, natural capital, representing natural resources, plays a pivotal role. The significance of natural capital is particularly pronounced for impoverished individuals, who heavily rely on resources like land, water, crops, fish, trees, fruits, vegetables, poultry, and livestock to sustain their livelihood portfolios. Any degradation or loss of access to these natural resources directly impacts the livelihood potential of the poor.

The impoverished populations worldwide primarily depend on natural resources for their livelihoods, engaging in activities like cultivation, herding, collecting, or hunting. Therefore, the sustainability of livelihoods is intricately linked to the sustained availability of natural resources. The vulnerability of poor communities is heightened when environmental degradation or restricted access to natural resources occurs.

Bangladesh, due to its geophysical settings, faces extreme vulnerability to climate change. Long-term investigations into climatic variables, including temperature, rainfall, and flood discharge, reveal increasing trends in annual and seasonal mean temperatures. Moreover, trends in seasonal rainfall totals exhibit variations in different seasons. The implications of these climatic changes on Bangladesh's agriculture and irrigation are explored in the subsequent sections.

8.3.1. Trends in Temperature

Here has been examined the mean temperature of some selected stations on Bangladesh.

Mean Temperature in Bangladesh Context

Daily maximum and minimum temperature were available at 34 locations for a period of 60 years (1948-2007). From these two temperatures, mean temperatures were calculated. The estimated trends in mean annual temperature for some selected stations are given in Table 7.1.

Table 8.1: Trends in Mean Annual Temperature at some Selected Stations of Bangladesh

Stations	Available Period of data	Number of Available Years	Trend (degree Celsius/ century)	Significance
Cox's Bazar	1948-2007	60	2.6	**
Jessore	1948-2007	59	2.1	**
Chittagong	1949-2007	59	1.6	**
Srimangal	1948-2007	58	1.2	**
Satkhira	1948-2007	58	0.8	**
Faridpur	1948-2007	57	2.8	**
Khulna	1948-2007	57	-0.1	NS
Bogra	1948-2007	56	2.8	**
Comilla	1948-2007	56	0.2	NS
Dhaka	1953-2007	55	2.1	**
Barisal	1949-2007	55	-0.5	NS
Maijdee Court	1951-2007	54	1.9	**
Mymensingh	1948-2007	54	0.1	NS

Dinajpur	1948-2007	52	-0.4	NS
Sylhet	1956-2007	51	1.1	NS
Rangamati	1957-2007	51	-1.1	**
Iswardi	1961-2007	46	0.3	NS
Rangpur	1957-2007	45	0.1	NS
Rajshahi	1964-2007	43	1.2	**
Bhola	1966-2007	41	2.2	**

Source: Climate Change Cell (CCC) 2008

Note: **Significant at the 95% level of confidence

*Significant at the 90% level of confidence

NS – Not significant at the 90% level of confidence

It is seen from the table that most of the stations in Bangladesh exhibit increasing trends in mean annual temperatures. In fact, this analysis including all the 34 stations suggests that the trend is 1.03 ^{0}C per century (100 years). The corresponding winter, summer and monsoon trends are 1.67, 0.26 and 1.05 ^{0}C per century.

Table 8.2: Trends in Seasonal and Annual Mean Temperatures (1980 To 2007)

Season	Trend in all Bangladesh mean temperatures (^{0} C per century) for data period of	
	1948-2007	1980-2007
Winter (Nov-Feb)	+1.67	+1.33
Summer (Mar-May)	+0.26	+2.15
Monsoon (Jun-Oct)	+1.05	+2.44
Annual (Jan-Dec)	+1.03	+2.14

Source: Climate Change Cell (CCC) 2008

The tabulated data reveals an escalating trend in annual mean temperatures over the 1980-2007 period, amounting to approximately 2.1 degrees Celsius per century. Notably, this figure is twice the computed value derived from data spanning the entire period from 1948 to 2007. The projected increase in mean annual temperatures for South Asia, as indicated by the Intergovernmental Panel on Climate Change (IPCC) in 2007, stands at 3.3 degrees Celsius, with a range of 2.0 to 4.7 degrees Celsius. Consequently, the ongoing trend aligns with the lower boundary of the IPCC projection. The utilization of recent data, as opposed to historical data, yields results that closely approximate the IPCC projection.

Analyzing seasonal trends, it becomes evident that the monsoon and summer trends have intensified, while the winter trend has diminished in the recent period. According to the IPCC's 2007 median projections for quarterly temperatures, there are anticipated increases of 3.6, 3.5, 2.7, and 3.1 degrees Celsius in December-February, March-May, June-August, and September-November, respectively, by the conclusion of the 21st century. These projections for seasonal temperatures also surpass the existing seasonal trends. However, it is noteworthy that the projections are not implausible, considering that recent trends surpass historical ones and may further intensify in the future.

8.3.2. Maximum Temperature in Bangladesh Context

The time series of annual mean maximum temperatures for all-Bangladesh shows that the maximum temperature has started rising since 1970s or 1980s. The rising trend is 0.63^0C per century since 1948 and 2.58^0C per century since 1980.So the recent trend since 1980 is much higher than the historical trend since 1948. The seasonal trends are 0.74, -0.50 and 1.38^0C per century for winter, summer and monsoon seasons, respectively, since 1948. The corresponding trends from 1980 are 1.81, 2.63 and3.13 degree Celsius per century. It is noted that even the sign of the trend for the summer season changes with the consideration of the recent data.

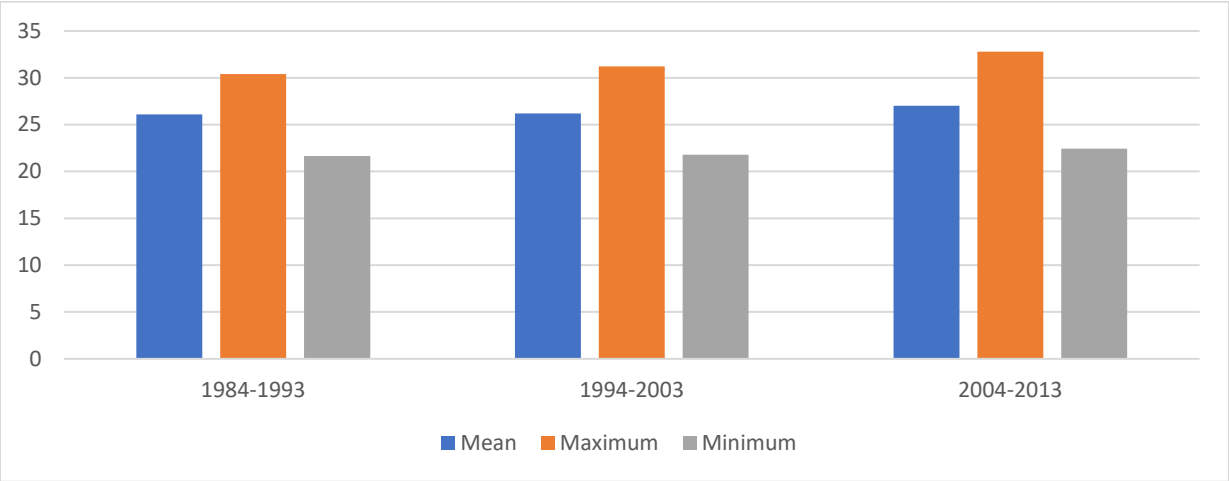
8.3.3. Minimum Temperature in Bangladesh Context

The time series of mean annual temperatures for all-Bangladesh is shown in Table: 7.1. and Table 7.2. It is seen from the table that unlike the mean and maximum temperatures, the minimum temperatures show an increasing trend from the very beginning. The trend is 1.44 0C per century since 1948 and 1.69 0C per century since 1980; the difference is not much. The trends in winter, summer and monsoon temperatures are 2.62, 1.04 and 0.70 0C per century, respectively, since 1948 and 0.91, 1.37, 1.65 0C per century since 1980. It is noted from the values that the winter trend has substantially decreased and the monsoon trend has substantially increased in recent years.

8.3.4. Mean, Maximum, and Minimum Temperature in Study Area Context

In the study area, low temperature is observed or counted in the month of December and January that is in average of nearly 20.00 degree Celsius. The highest temperature is observed in April that goes up to 41.10 degree Celsius and the lowest cold temperature is counted in February that comes down 5.6 degree Celsius. However, in the following figure, researcher has been examined the decadal (10 years) average of the maximum, minimum, and mean temperature of study area which indicates that temperature has changed in decade by decade (CCC, 2009).

Figure 8.1: Mean, Maximum, and Minimum Temperature in Study Area Context



Source: Climate Change Cell (CCC) 2008

8.3.5. Trends in Rainfall in Bangladesh Context

To see the long-term changes in rainfall of Bangladesh, the data were divided into two halves, each with 21 years of records. The first half is from 1960 to 1980 and the second half is from 1981 to 2001. The average and standard deviation of measured rainfalls during these two halves are given in the following table for the winter (November February), summer (March-May), critical period (11 March-10 May) and monsoon (June-October) seasons, respectively.

Table 8.3: Mean and Standard Deviation of the Winter, Summer, Critical Period, and Monsoon Rainfalls of Bangladesh.

Seasons	1961-1980		1981-2000		Deference	
	Mean (mm)	Standard Deviation (mm)	Mean (mm)	Standard Deviation (mm)	Change in Mean	Change in Std. Deviation
Winter	60.3	62.7	80.4	60.3	33%	-2.4%
Summer	427.5	178.0	544.0	218.7	27%	23%
Critical Period	238.1	130.8	312.9	162.7	31%	24%
Monsoon	1748	342	1751	407	0.17%	19%

Source: *CCC, 2009. Characterizing Long-term Changes on Bangladesh Climate in Context of Agriculture and Irrigation. Climate Change Cell, DoE, MoEF, June 2009, Dhaka.*

It is seen from table that the winter rainfalls are higher during the second half of the available time series compared to the first half. The variability, measured in terms of the standard deviation, has also increased except. For the summer, the rainfall has increased in Bangladesh. The critical period and monsoon rainfall have also increased. But, the further statistics about monsoon rainfalls have decreased some stations of Bangladesh.

8.3.5. Trends in Rainfall in Study Area (Monpura Upazila) Context

Like other part of Bangladesh this upazila is also under tropical monsoon climate. Among the six, here three seasons are strongly noticeable. Rainy season lasts generally May to October. 89% rainfall happens in this time. The annual rainfall ranges from 1893 mm to 2516 mm. Winter starts in November and continues till February. This season is extremely dry and cold, a small amount of rains comes every now and then. March and April comprise summer or pre-rainy season. However, 5 years scale and decadal (10 years) average rainfall has given below.

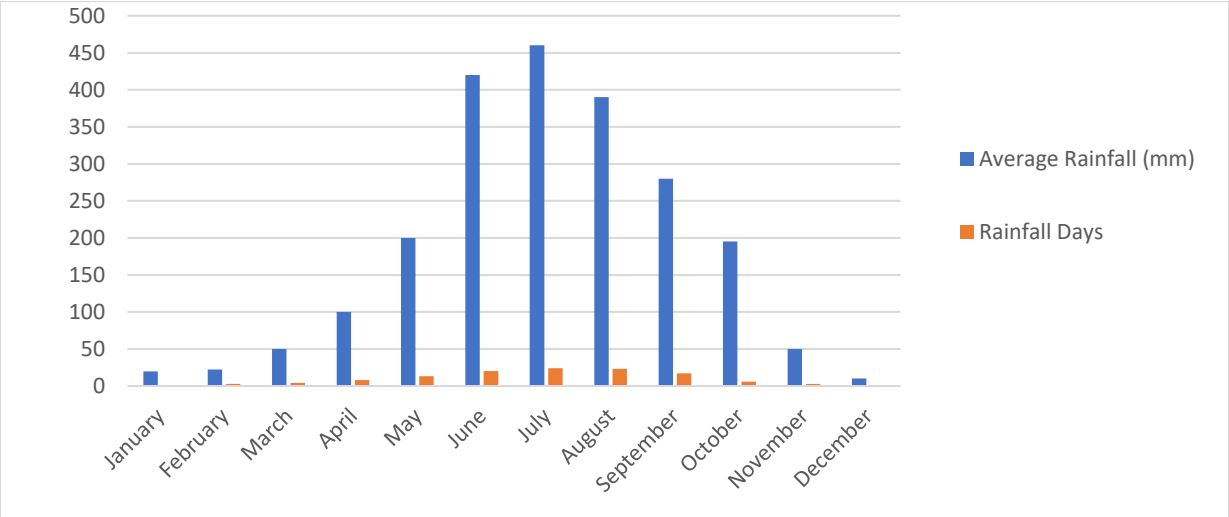
Table 8.4: Five Years Scale and Decadal (10 Years) Average Rainfall of Study Area

5 Years Scale	Average Rainfall (mm)	Decadal Average Rainfall (mm)
1984-1988	1893	1944.5
1989-1993	1996	
1994-1998	2378	2128
1999-2003	1872	
2004-2008	2116	2296
2009-2013	2476	

Source: Land and Soil Resources Using Catalogue, Monpura Upazila, Bhola, 2000, Soil Resource Development Institute, Dhaka, Bangladesh and BMO, 2014.

In rainy season excessive rains come in some months and it does not follow any regular rules. November to March are called 'Dry month' since monthly rate of rainfall is lower than 75 mm in these months. During monsoon, the tidal water enters into the char-land and even mainland. Local people have said that rainfall occurred according to seasonal crops calendar in the before, now rainfall is occurring more excessively or creating drought. That's why crops calendar has changed as well as river bank erosion has increased by heavy rainfall during monsoon. Following figure shows the monthly average rainfall and the number of monthly occurring rainfall days.

Figure 8.2: Monthly Average Rainfall and the Number of Monthly Occurring Rainfall Days



Source: Climate Change Cell (CCC) 2008

8.4. RIVERBANK EROSION

Bangladesh, situated at the confluence of some of the world's largest river systems, forms one of the most extensive deltas on Earth. The country is intersected by approximately 230 rivers and rivulets and bordered by a coastline stretching about 710 kilometers, encompassing an exceptionally diverse ecological landscape (NPA Report, 2006). The coastal zone, broadly defined as the interface where land and sea converge, represents an area of complex environmental and socio-economic interaction (Islam, 2004).

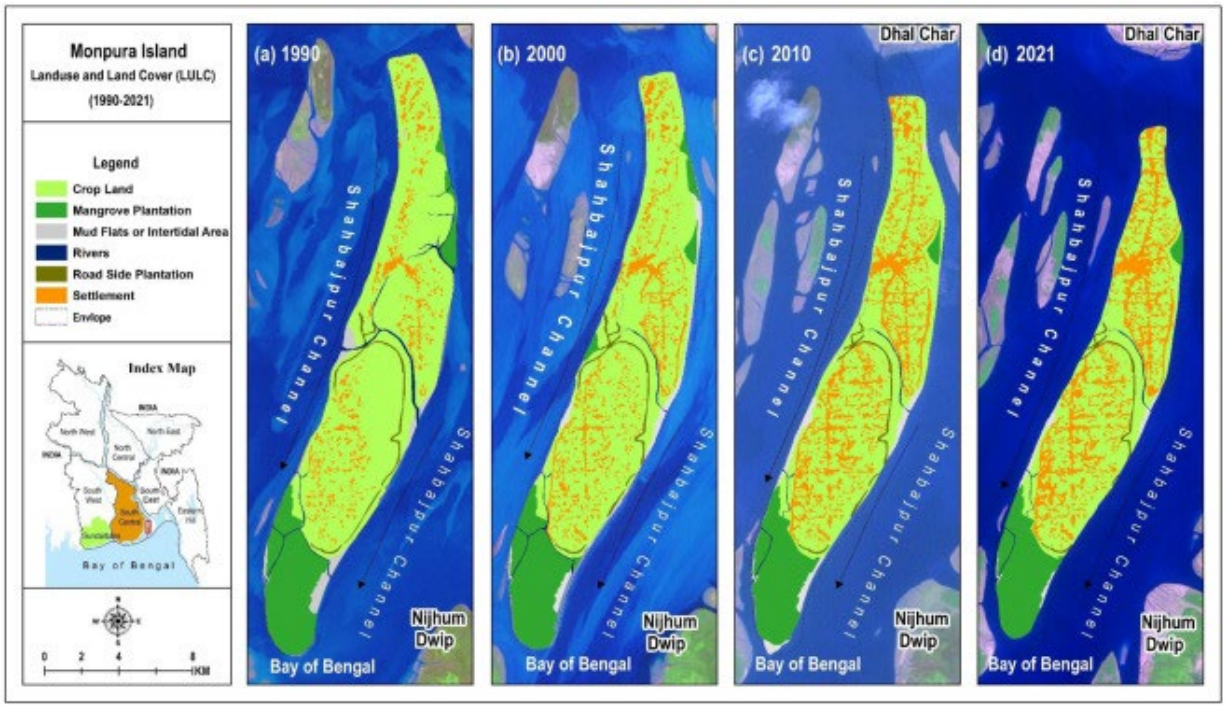
According to the Integrated Coastal Zone Management Plan (ICZMP) of Bangladesh, the national coastal region comprises 19 districts with 147 upazilas. Of these, 48 upazilas within 12 districts—those directly adjacent to the sea or situated along the lower estuaries—are classified as the *exposed coast*. The remaining 99 upazilas constitute the *interior coast* (as cited in NPA Report, 2006). Roughly 36 million people inhabit these coastal areas, relying predominantly on agriculture, fishing, forestry, small-scale navigation, and salt production for their livelihoods.

However, these coastal and riverine environments are subject to recurrent natural hazards that severely affect local communities. Riverbank erosion, alongside cyclones, storm surges, and seasonal flooding, represents one of the most destructive and continuous processes of land loss in Bangladesh. The erosion of riverbanks displaces thousands annually, forcing repeated migration and contributing to landlessness and social instability. In conjunction with other environmental and anthropogenic pressures—such as the high arsenic concentration in groundwater, persistent waterlogging, increasing soil and water salinity, and widespread pollution—these phenomena have significantly heightened the vulnerability of coastal populations (Islam, 2004).

For many coastal communities, including those in settlements such as Sonarchar and Machpara, rivers are the foundation of both livelihoods and daily survival. Residents depend heavily on river water, tube wells, and local ponds for household and economic activities, including bathing, washing, fishing, and collecting drinking water. Domestic ponds occupy approximately 10 percent of the land surface, excluding paddy fields, and are primarily replenished by rainwater. Nonetheless, these water bodies remain highly susceptible to contamination from saline river intrusion, surface runoff, and polluted shallow groundwater (Rahman & Ravenscroft, 2003).

As a result, riverbank erosion in Bangladesh cannot be viewed as an isolated geomorphological process; it is intimately tied to the broader coastal ecology, water insecurity, and socio-economic marginalization of deltaic communities. The gradual degradation of land and freshwater sources continues to threaten the delicate balance between environmental resilience and human sustenance across the country's riverine and coastal frontiers.

Map 8.1: Satellite image of landscape dynamics in Monpura Island



Source: (Biswas et al., 2022)

8.4.1. Causes of Riverbank Erosion

Riverbank erosion in Bangladesh is a complex geomorphological process resulting from the interaction of multiple physical, hydrological, and anthropogenic factors. It generally occurs through three primary mechanisms: (1) sub-aerial weakening and weathering, (2) fluvial erosion, and (3) mass failure. These processes often operate simultaneously but vary in dominance along different sections of a river (Mengoni & Mosselman, 2006). Sub-aerial processes—including weathering, soil desiccation, and surface runoff—act as preparatory mechanisms that weaken riverbanks before significant erosion occurs. Such processes are most prevalent in the upper reaches of rivers, where direct water flow may be less forceful but prolonged exposure to climatic factors gradually reduces the cohesion and strength of bank materials. Fluvial erosion refers to the mechanical detachment and transportation of soil particles by the direct action of flowing water. This process dominates the middle reaches of rivers where current velocity is high, channel migration is active, and sediment load is significant. In contrast, mass failure occurs when the weakened bank materials collapse under the influence of gravity, typically in the lower reaches where banks are steep or saturated (Thorne, 1982). The cumulative interaction of these three mechanisms makes riverbank erosion a continuous and often unpredictable hazard across deltaic Bangladesh.

Beyond these natural processes, several specific factors intensify erosion along Bangladeshi rivers:

- **Channel shifting and siltation:** In the southwestern deltaic plains, heavy silt deposition and the formation of new *char* (sandbar) lands frequently alter river courses. These

channel shifts exert new hydraulic pressures on previously stable banks, leading to renewed erosion and loss of land.

- **Deforestation and loss of vegetation cover:** Extensive removal of natural vegetation and the decline of mangrove forests along major river systems reduce soil cohesion and the stabilizing effect of root structures, accelerating bank collapse.
- **Extreme hydrological events:** Sudden floods, heavy monsoonal rainfall, and strong downstream freshwater flows increase the erosive force of rivers, particularly during peak discharge periods.
- **Inadequate river management and infrastructure:** The absence of well-planned embankments, protective revetments, and consistent maintenance contributes to the rapid destabilization of banks in erosion-prone zones.
- **Lack of early warning and monitoring systems:** Unlike cyclones or floods, Bangladesh lacks a comprehensive forecasting mechanism for erosion events, leaving affected communities unprepared for sudden displacement.
- **Climate change impacts:** Global warming caused by increased greenhouse gas (GHG) emissions accelerates glacier melt in the Himalayas, resulting in excessive discharge of meltwater into the Ganges–Brahmaputra–Meghna (GBM) river system. This rising volume of flow intensifies sediment load and hydraulic stress on riverbanks, exacerbating erosion across the deltaic landscape.

In essence, riverbank erosion in Bangladesh is not merely a natural outcome of fluvial dynamics but a multidimensional environmental process shaped by both climatic changes and human interventions. Effective mitigation therefore requires an integrated management strategy that combines river engineering, afforestation, community preparedness, and regional climate adaptation policies.

Riverbank erosion has had a devastating impact on rural livelihoods along the Padma River, particularly on the left bank, where the loss of stable agricultural land has been severe. Between 1973 and 2011, approximately 189.4 km² of land was eroded on the left bank, with only 23.66 km² of accretion, resulting in a net loss of around 155 km² (Bhuiyan et al., 2017). In contrast, the right bank experienced a relatively balanced transformation, with 166.53 km² eroded and 134.45 km² accreted. The newly formed char lands are of significantly lower value and fertility than the original mainland, leading to reduced agricultural productivity and income. This environmental hazard has pushed many previously well-off farmers into marginal farming or complete landlessness, contributing to a shift in class structures. The total monetary loss in the affected region was estimated at over 1,414 million BDT (roughly 17.4 million USD). Besides land loss, infrastructural damage and changing cropping patterns due to siltation have further deepened the socio-economic vulnerability of affected households (Bhuiyan et al., 2017). Similar stories can be found in the context of Monpura as well.

Case Study 2: The Changing Shores: Sopon Bissas on Migration and Loss in Machpara

Machpara has always been shaped by the ebb and flow of the Meghna River. The river provides life but also takes it away. Sopon Bissas, a longtime resident, has witnessed firsthand how riverbank erosion has altered not just the physical landscape but also the social fabric of the community. As families leave and the village changes, he reflects on the deep impact migration has had on Monpura's people, wildlife, and economy.

Sopon recalls how the village once stretched much farther into the river, with homes and fertile fields that no longer exist. "Every year, the river takes a little more," he says, pointing to the eroded banks. "We used to have neighbors here, families who lived for generations on this land. Now, many of them have moved away, seeking safety in district towns like Bhola, Chattogram, and Dhaka."

Migration is no longer a choice but a necessity. Families, unable to rebuild their homes after repeated losses, are forced to abandon their ancestral lands. Those who can afford it move to cities, finding work in factories, markets, or as day laborers. However, urban life is not easy, especially for people accustomed to farming and fishing. They struggle to adapt, often facing economic hardships and social alienation in unfamiliar surroundings.

Not all who leave Machpara end up in cities. Many migrate to nearby *chars*—newly formed river islands. These *chars* offer a temporary refuge, but they come with their own challenges. The land is unstable, access to resources is limited, and fresh water remains scarce.

"As people settle in the *chars*," Sopon explains, "they clear land for homes and cultivation. This has led to a loss of biodiversity. Deer, which once roamed freely, are becoming rare. Many birds that nested in our trees are disappearing. The balance of nature is shifting." These ecological disruptions are a consequence of human survival. As more land is cleared for settlements and agriculture, habitats for wildlife shrink. Fishermen also report that certain fish species, once abundant in Monpura's waters, are declining due to changes in the river's flow and increased human activity in the *chars*. The river flow gets slower due to the *chars*, as the river gets filled with landmass and the depth of the river at many places decrease. The fishes usually do to come near the char areas as they lack depth and as a result the fishing boats go to deep seas.

For those who remain in Machpara, erosion presents ongoing difficulties. In Sonarchar, agricultural land, once fertile and vast, is being swallowed by the river. Farmers who once grew rice, vegetables, and lentils on their ancestral plots now struggle with smaller fields and declining soil quality. The encroaching river not only reduces farmland but also increases salinity in the soil, making cultivation even more difficult. Overall, Saline water intrusion leads to soil degradation, reduced agricultural and fishery yields, restricted mobility, and increased health issues like diarrhea and skin diseases. These impacts ultimately result in significant income loss for affected communities (Miah, 2010).

Fishing, another pillar of Monpura's economy, has also suffered. "With erosion comes unpredictability," Sopon says. "Fish breeding grounds are disturbed, and nets get swept away by strong currents. The fishermen have to go farther into the river, taking greater risks just to catch enough to survive."

Sopon's voice carries both sorrow and resilience. The village he knew is disappearing, but the people of Machpara continue to adapt. Those who remain fight to protect their land, while those who leave struggle to build new lives elsewhere. The loss is not just of homes and fields but of a way of life that once thrived in harmony with nature.

"The river gives and the river takes," he says with a sigh. "But if we do not find ways to protect our land, to support our farmers and fishermen, we will lose more than just soil—we will lose our community, our traditions, and the nature that has sustained us for generations." Sopon's story is a call for action, urging policymakers and environmentalists to address the growing crisis of erosion and migration. Without intervention, the forced displacement of Monpura's people will continue, leaving behind empty villages, struggling ecosystems, and a fading cultural heritage.

8.4.2. Local Knowledge About Riverbank Erosion

For communities living along the riverbanks of Bangladesh, riverbank erosion is not simply a physical or environmental phenomenon—it is a lived reality deeply embedded in their collective consciousness. Over generations, these communities have cultivated a profound understanding of the rhythms, moods, and movements of the rivers. This locally grounded knowledge, transmitted through oral traditions, storytelling, and daily observation, constitutes a vital body of indigenous ecological wisdom. It informs how people interpret changes in the river's behavior, anticipate dangers, and respond to displacement and loss.

Within such communities, local knowledge functions as both a repository of environmental understanding and a tool for resilience. Villagers learn to recognize subtle environmental cues—such as changes in water color, soil cracking, or shifts in current direction—that often precede major erosion events. When erosion begins, their collective memory provides strategies for identifying safer ground, organizing communal labor for temporary embankments, and sharing resources during forced migration. Thus, riverbank erosion is not viewed solely as a disaster but also as part of an ongoing dialogue between humans and their dynamic riverine environment.

In the study area, residents articulate a rich and locally nuanced explanation of the causes of riverbank erosion (RBE). Their interpretations blend environmental observation with spiritual and moral reasoning, reflecting the intertwined nature of material and metaphysical worldviews. The major causes, as described by local informants, can be summarized as follows:

- **Srot (tidal surge):** Local people emphasize that during the rainy season, tidal surges—referred to as *srot*—become particularly strong and violent. These intensified currents

strike the riverbanks, causing rapid erosion and washing away agricultural land and homesteads.

- **Small char (river islets):** Residents of Monpura describe how numerous small *chars* (sandbars or river islands) have formed along the northern, eastern, and western edges of the island. These *chars* obstruct the natural flow of the river, redirecting currents toward the mainland and intensifying erosive pressure on the banks.

- **Pap (sin):** Beyond physical explanations, many community members invoke a moral-spiritual dimension to erosion. Some believe that when sin (*pap*) increases in a particular area, divine will (*Allah-er hukum*) commands the land to erode, cleansing it and restoring spiritual balance. This interpretation situates erosion within a cosmology of morality and divine justice, reflecting how faith and environment are deeply interwoven in local perceptions of ecological change.

Such vernacular explanations reveal that local knowledge is multidimensional— rooted simultaneously in empirical observation and cultural meaning. Recognizing these perspectives is crucial for developing inclusive environmental management strategies. As Sillitoe (1998) argues, integrating indigenous knowledge into environmental planning not only enriches scientific understanding but also empowers communities to participate actively in adaptation and policy processes. In the context of Bangladesh's deltaic landscape, these locally grounded interpretations of erosion illuminate the human dimensions of ecological vulnerability, demonstrating that adaptation is as much cultural and moral as it is technical.

8.4.3. Seasonality of Riverbank Erosion

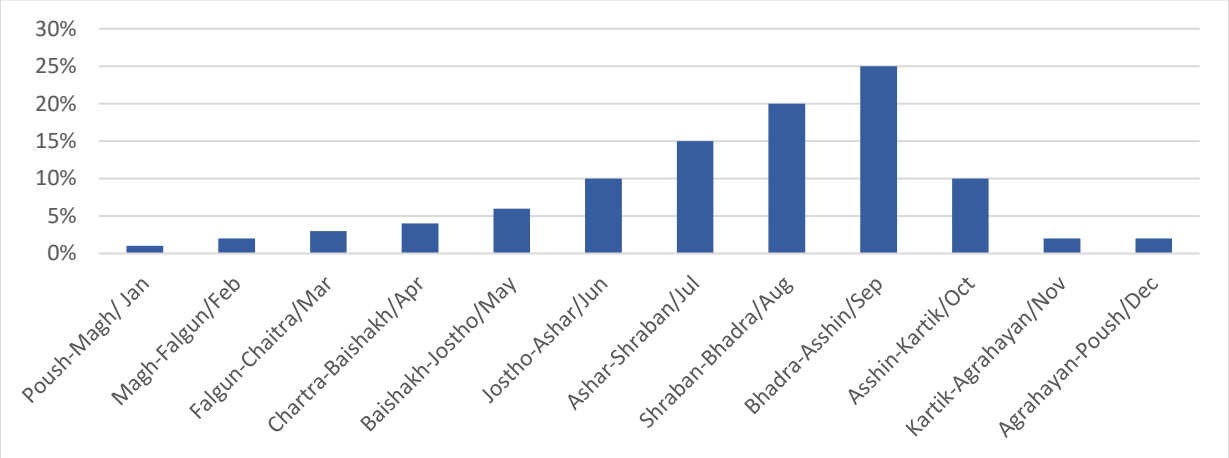
The seasonal rhythm of Bangladesh's monsoon climate plays a decisive role in shaping the intensity and frequency of riverbank erosion (RBE). In the study area, erosion levels peak during the rainy season, particularly between June 15 and August 15, when heavy monsoonal rainfall and high river discharge significantly increase erosive activity along riverbanks. The combination of strong water currents, saturated soils, and continuous rainfall accelerates bank collapse during this period.

Conversely, during the summer and dry months, the rate of erosion remains relatively low due to reduced river flow and limited precipitation. However, in recent years, climate change has intensified these seasonal patterns, leading to heavier and more erratic rainfall. Even moderate rain events now trigger substantial erosion in areas already weakened by previous floods or unprotected by vegetation and embankments. This has made riverbank erosion increasingly unpredictable and destructive across coastal and deltaic zones.

As shown in *Figure 8.3*, approximately 80 percent of riverbank erosion in the study area occurs between June 15 and October 15, with the highest concentration—around 60 percent—recorded during July to September, coinciding with the peak monsoon rains. These months represent the period of greatest vulnerability for riverine communities, when intense rainfall,

tidal surges, and upstream water pressure converge to reshape the riverbanks and force repeated displacement.

Figure 8.3: Seasonality of Riverbank Erosion (Local Knowledge-Based Data)



Source: Fieldwork in Sonarchar and Machpara.

8.4.4. Effects of Riverbank Erosion

In the Indian subcontinent, the rivers Ganges, Son, Yamuna, the Brahmaputra, Chambal and Mahi, all are tough competitors when it comes to their bank erosion (Chatterjee & Mistri, 2013). It is a very concerning issue throughout the region. Riverbank erosion in Monpura unfurls a cascade of both natural and socio-economic effects, significantly shaping the landscape and livelihoods of the affected communities. On a natural front, the persistent erosion brings about extensive land degradation, stripping away fertile topsoil and rendering once-productive land unsuitable for agriculture. The dynamic alterations in the topography, as the river reshapes its banks, not only redefine the physical appearance of the region but also pose challenges to established settlement patterns.

While vulnerability assessments are not always rooted in the local context, they do focus on the particular social, economic, environmental, cultural, historical, and political features of specific places (Eakin & Luers, 2006). In the case of Monpura Island, understanding vulnerability means paying close attention to the unique coastal geography, patterns of land ownership, social hierarchies, historical marginalization, and limited access to state services that shape how different groups experience risk and hardship.

Ecologically, the impact is profound, with the destruction of natural habitats disrupting the delicate balance of the local ecosystem. The erosion-induced sedimentation adversely affects water quality, introducing pollutants and nutrients into water sources. This has direct consequences for aquatic life and raises concerns about the availability of clean water for human consumption. Furthermore, the altered landscape heightens vulnerability to natural disasters, particularly floods, compounding the challenges faced by the affected communities.

On the socio-economic front, riverbank erosion exacts a toll that reverberates through every facet of community life. The displacement of families from their homes is a stark reality, leading to a humanitarian crisis as communities grapple with the urgent need to find new places to settle. The predominantly agricultural community of Monpura faces significant losses as arable land diminishes, resulting in food insecurity and economic hardships for farmers.

The economic decline extends beyond agriculture, impacting businesses related to fishing and local trades. The loss of property and assets contributes to the overall economic downturn. Simultaneously, the social disruption is palpable as close-knit communities are forced to relocate. Bonds between neighbors and extended families may weaken, and the collective sense of community may erode, leading to psychological stress and a profound sense of loss.

The repercussions extend to education, with disruptions caused by displacement potentially impeding regular school attendance for children. This poses a long-term risk to the socio-economic development of the community. The health risks in temporary settlements, resulting from inadequate sanitation and living conditions, add an additional layer of complexity to the challenges faced by the displaced populations.

Economically challenged, the displaced communities may become more susceptible to exploitation, as they navigate unfavorable working conditions or engage in activities jeopardizing their well-being in a bid to survive. Moreover, the strain on social services in resettlement areas is evident, with schools, healthcare facilities, and other essential services struggling to accommodate the increased demand.

Addressing these multifaceted challenges necessitates a comprehensive approach that combines environmental conservation efforts, sustainable livelihood initiatives, and robust social support systems. Only through such holistic strategies can communities in Monpura build resilience in the face of ongoing environmental changes and chart a path toward sustainable recovery and development.

CHAPTER NINE:
CONCLUSION

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9.1. INTRODUCTION

This thesis set out to ethnographically examine how the coastal inhabitants of Monpura Island—a geographically fragile and historically marginalized region within the lower Meghna estuary of southern Bangladesh—negotiate the intertwined forces of environmental transformation, socio-economic inequality, and moral obligation in sustaining their livelihoods. Situated at the dynamic confluence of river and sea, Monpura encapsulates the paradox of deltaic life: abundance and erosion, security and loss, permanence and displacement. The island's landscape, perpetually reshaped by riverbank erosion, salinity intrusion, and cyclonic events, forms both the material and moral terrain upon which human endurance unfolds. Within this volatile ecology, Monpura's people have developed complex systems of adaptation that weave together economic pragmatism, ecological knowledge, faith, and collective care.

Guided by the overarching research objective—to construct a holistic anthropology of adaptation and resilience in a climate-vulnerable deltaic landscape— the study approached livelihood not as a purely material pursuit but as a moral and symbolic project. The ethnographic focus on two distinct yet interdependent communities, Sonarchar (agriculturally oriented) and Machpara (fishing oriented), revealed that the struggle to "make a living" is also a struggle to preserve dignity, belonging, and ethical coherence amid recurring uncertainty. Each community embodies a unique constellation of strategies through which people respond to environmental instability while reaffirming social continuity and moral order.

The first objective—to document and analyze the livelihood practices of Monpura's inhabitants—demonstrated that economic life in Sonarchar and Machpara is deeply embedded in kinship networks, cooperative labour, and moral reciprocity. Agricultural cycles mirror monsoon rhythms and tidal calendars, while fishing expeditions are guided by ecological cues and spiritual beliefs. These practices affirm that livelihood is simultaneously material and moral, sustained through shared labour, trust, and intergenerational knowledge.

The second objective—to trace the historical formation and settlement processes of Monpura—revealed how waves of erosion, displacement, and resettlement have inscribed vulnerability and resilience into the island's physical and social fabric. Collective memory and oral histories of past floods, cyclones, and resettlements shape present-day settlement patterns, forging a historical consciousness that informs how people interpret loss and renewal.

The third objective— to analyze ongoing environmental transformations— highlighted how climate change, salinity intrusion, and riverbank erosion continually reconfigure the economic and spatial organization of life. Farmers' adoption of salt-tolerant crops and fishers' adaptation to fluctuating stocks illustrate dynamic, knowledge-driven responses to ecological precarity. Yet

adaptation is unevenly distributed; class, access to technology, and political patronage mediate who can innovate and who remains vulnerable.

The fourth objective—to explore the social and cultural structures that shape collective adaptation—revealed that kinship, class, and gender hierarchies underpin both cooperation and inequality. Patron–client relations, religious obligations, and moral economies of care sustain social cohesion even as they reproduce dependency. Festivals, rituals, and communal practices translate environmental uncertainty into shared moral experience, transforming vulnerability into solidarity.

The fifth objective—to understand local ecological knowledge and moral reasoning as foundations of resilience—demonstrated that indigenous epistemologies, spiritual beliefs, and ethical norms guide adaptive behaviour. Islanders read the landscape through signs—soil texture, wind direction, lunar cycles, and divine will—infusing environmental knowledge with moral interpretation. This fusion of cosmology and pragmatism sustains what may be called a *moral ecology of resilience*, where endurance is not only a technical capacity but an ethical disposition rooted in cooperation, reciprocity, and faith.

Taken together, these objectives address the central research question: *How do the people of Monpura negotiate environmental change, socio-economic inequality, and cultural values to sustain their livelihoods and collective well-being within conditions of ecological uncertainty?* The findings affirm that adaptation in Monpura is not reducible to engineering or policy intervention; it is a lived process embedded in affective relations, moral commitments, and cultural creativity. The islanders' capacity to persist amid erosion and marginality reveals that resilience is not merely survival— it is the moral work of living well within uncertainty.

This concluding chapter synthesizes these insights to articulate a broader anthropological argument: that the resilience of coastal communities such as Monpura arises from the intersection of ecology, economy, and ethics. Through this lens, the study contributes to the understanding of how human adaptation in climate-affected environments is both materially grounded and morally inspired—a testament to the enduring interplay between nature, society, and the moral imagination.

9.2. SUMMARY OF FINDINGS

This research set out to understand how the people of Monpura Island, one of Bangladesh's most environmentally fragile coastal territories, make a living amid recurring ecological disruptions and socio-economic insecurities. Through long-term ethnographic engagement, the study integrated ecological, economic, and cultural perspectives to illuminate how livelihood, adaptation, and resilience are experienced and enacted in daily life. The findings demonstrate that the relationship between people and their environment in Monpura is neither purely material nor strictly deterministic; it is mediated by social relations, moral obligations, and cultural meanings that shape every aspect of survival.

9.2.1. Ecological Dynamics and Human Adaptation

The ecological reality of Monpura Island is one of flux and uncertainty. Over the last five decades, temperature rise, erratic rainfall, and riverbank erosion have continuously redefined the island's geography (Shahid, 2010; Sarker et al., 2021). The fieldwork revealed that residents interpret these changes not only as climatic phenomena but as part of the moral and cosmological order of life. For many, environmental volatility is both a physical challenge and a test of faith, reinforcing what Crate and Nuttall (2016) call the "cultural embeddedness of climate experience."

Farmers and fishers have adopted diverse adaptive practices to respond to environmental change. Agricultural households adjust crop calendars, introduce saline-tolerant rice varieties, and rely increasingly on short-duration crops to cope with unpredictable rainfall (Islam et al., 2011). Fishers adapt by shifting fishing seasons, diversifying species targets, and forming cooperative groups to share risks. These responses reflect the community's ecological intelligence—an understanding of land, water, and seasons grounded in generations of observation and experimentation. Yet, these practices are constrained by factors such as land scarcity, unequal access to technology, and limited institutional support.

At the ecological level, the study shows that adaptation is relational rather than purely technical. People do not simply respond to environmental change; they negotiate it within social networks that distribute both risk and resources. As Adger et al. (2020) argue, adaptation capacity is shaped by the interplay of social capital, cultural norms, and governance structures. Monpura's experience confirms that climate resilience is built within community relations, not external interventions.

9.2.2. Economic Structures and Livelihood Strategies

The island's economy is characterized by diversification and dependency. Agriculture and fishing remain the primary livelihoods, but increasing environmental unpredictability has forced households to adopt supplementary income sources such as wage labour, petty trade, and seasonal migration. The research found that livelihood diversification functions as a form of risk management that balances short-term income with long-term sustainability (Ellis, 2000).

Agricultural households in Sonarchar depend heavily on land fertility, which fluctuates with salinity and sedimentation. The decline in cultivable land due to erosion has pushed many smallholders into sharecropping arrangements or tenancy. These arrangements, however, reproduce dependency on landowners and moneylenders. Meanwhile, the fishing communities in Machpara face constraints linked to market monopolies and the *dadon* credit system, through which boat owners and traders control fishers' access to capital and profits. These findings echo the broader pattern of structural vulnerability identified in other coastal economies, where environmental shocks reinforce existing class hierarchies (Blaikie & Brookfield, 1987; Mallick et al., 2022).

The economic data collected during fieldwork indicate that adaptation has both collective and gendered dimensions. Women's contributions, often invisible in official statistics, are central to economic resilience. They process fish, manage household finances, and participate in informal savings groups. Despite limited control over assets, women's economic roles have expanded as men migrate seasonally for work. This feminization of adaptation parallels findings from feminist environmental research, which emphasizes that women's knowledge and labour are crucial to the reproduction of household economies under stress (Agarwal, 2010; Nightingale, 2011).

Economic adaptation in Monpura thus operates through a complex interplay of livelihood diversification, social reciprocity, and structural constraint. While the poor innovate through informal cooperation, their capacity to sustain these practices is undermined by inequality and limited institutional recognition. The study highlights that resilience cannot be understood solely through economic efficiency; it must be contextualized within the moral and relational dimensions of livelihood.

9.2.3. Cultural and Moral Dimensions of Survival

The cultural dimension of livelihood is perhaps the most profound insight emerging from this research. Across both villages, people describe their relationship with the environment using moral idioms of patience (*sabr*), endurance (*dhôirjo*), and divine trust (*tawakkul*). These values form a moral ecology that guides human behaviour in conditions of uncertainty (Whyte, 2018). Far from being passive resignation, this moral orientation represents an active engagement with hardship—an ethical framework that allows people to sustain dignity amid deprivation.

Religious and ritual practices play a key role in shaping community resilience. Prayers for rain, collective feasts after cyclones, and offerings to river deities reflect a cosmology where human and non-human forces coexist in mutual dependence. Such practices, as Geertz (1973) would suggest, are not simply expressions of faith but symbolic systems through which people interpret environmental change and reaffirm social bonds.

Cultural responses to loss also include storytelling and collective remembrance. Survivors of major cyclones narrate their experiences as moral parables, emphasizing lessons of humility and solidarity. These narratives serve as what Hastrup (2013) calls "cultural memory of the climate," transmitting knowledge about danger and endurance across generations. The shared retelling of disaster experiences reinforces a collective identity centered on resilience and care.

The ethnography also highlights the gendered nature of moral agency. Women often frame their suffering and labour within religious narratives of sacrifice, positioning themselves as moral custodians of the household. Their strength is expressed not in public leadership but in everyday acts of care, frugality, and endurance. This gendered ethic of responsibility challenges conventional notions of resilience as individual strength, illustrating instead how moral practice sustains collective survival.

9.2.4. The Intersections of Ecology, Economy, and Culture

A central contribution of this study lies in demonstrating how ecological, economic, and cultural systems intersect to produce differentiated experiences of vulnerability and adaptation. Ecological instability shapes economic dependency, which in turn is filtered through cultural norms of reciprocity and obligation. In Monpura, environmental change is both a material and moral field where class, gender, and power are constantly renegotiated.

For instance, during periods of crop failure, wealthier households use accumulated capital to lease new land or invest in mechanized irrigation, while poorer families rely on kin-based labour exchange or remittances. These economic responses are legitimized through moral language—helping kin is seen as an ethical duty rather than a financial transaction. This intertwining of economy and morality reflects the "moral economy" concept originally developed by Thompson (1971) and expanded by Scott (1976) in Southeast Asian peasant studies, which describes how subsistence ethics moderate market relations. In Monpura, the moral economy of care and obligation mediates survival in a fragile ecology.

Moreover, the study found that adaptation decisions are often influenced by cultural perceptions of risk and divine control. Some households resist relocation despite repeated erosion, interpreting mobility as a sign of spiritual weakness or moral failure. Others view migration as an act of faith, trusting that "God will provide land wherever we go." These contrasting moral interpretations reveal that adaptation is as much a cultural decision as an environmental necessity.

The integration of ecological, economic, and cultural dimensions underscores that resilience is not a single attribute but a dynamic process embedded in social relations. Policies focusing narrowly on infrastructure or technological adaptation risk overlooking these lived dimensions. As Adger et al. (2020) argue, effective adaptation must engage with values, identity, and ethics—domains that define how communities actually live with change.

9.2.5. Methodological and Theoretical Reflections

Methodologically, the study demonstrates the strength of ethnography in revealing the nuanced connections between environment and society. Long-term participant observation allowed the researcher to witness the cyclical rhythms of work, ritual, and disaster recovery that shape Monpura's life-worlds. This temporal depth provided insight into adaptation as process rather than event, aligning with the anthropological emphasis on everyday practices (Pink & Morgan, 2013).

Theoretically, the findings contribute to debates in political ecology, feminist environmentalism, and moral anthropology. Political ecology helps explain how structural inequalities—land tenure, market dependence, and patron-client relations—mediate environmental vulnerability (Robbins, 2012). Feminist environmentalism highlights how gendered labour and knowledge systems underpin adaptation but remain undervalued in formal policy frameworks (Agarwal,

2010; Elmhirst, 2015). Moral anthropology, in turn, reveals how ethical reasoning provides coherence and purpose to lives marked by uncertainty (Whyte, 2018). Integrating these frameworks, the study conceptualizes livelihood in Monpura as an "ecological moral economy"—a system where survival depends on both environmental adaptation and ethical interdependence.

9.2.6. The Ethics and Ecology of Resilience

The findings of this study reaffirm that the people of Monpura are not passive victims of climate adversity but active participants in reshaping their ecological and social world. Their strategies of adaptation are built on a fusion of ecological awareness, economic improvisation, and moral imagination. Through years of observation and dialogue, it becomes clear that survival on the island is not simply about adjusting to environmental hazards— it is about sustaining a moral order that gives meaning to precarious life.

The ethnography demonstrates that ecological uncertainty produces both vulnerability and creativity. The same floods and cyclones that destroy homes also inspire new forms of cooperation, knowledge-sharing, and faith. Local responses to crisis—rebuilding homes through kin-based labour, sharing food after storms, or organizing communal prayers—are deeply moral acts that reinforce belonging. These practices reveal that resilience is not a static attribute but a moral and relational process that continually reaffirms social bonds amid instability (Whyte, 2018; Adger et al., 2020).

Economically, Monpura's inhabitants show flexibility within constraint. Livelihood strategies evolve in response to erosion and salinity, yet they remain rooted in social reciprocity rather than market rationality. The island's informal credit systems, labour exchanges, and women's cooperative groups exemplify how moral economies regulate access to resources and distribute risk. These arrangements challenge the assumption that adaptation follows purely economic logic. Instead, as Scott (1976) argued, peasant societies negotiate survival through ethical notions of fairness and obligation. In Monpura, helping kin or neighbours during crises is not charity but an act of moral duty— a reaffirmation of collective worth in a volatile world.

Culturally, adaptation is framed as both divine trial and human responsibility. Religious narratives about fate and endurance serve as interpretive tools for understanding environmental change. Rather than breeding fatalism, such beliefs provide coherence and hope. Cyclones are narrated as reminders of humility, while successful harvests are celebrated as divine blessings. This spiritual framing, as Crate and Nuttall (2016) suggest, allows people to transform climatic uncertainty into moral purpose. Faith, in this sense, becomes a form of ecological knowledge—an interpretive system through which people read the changing environment and find strength to act.

The interdependence of ecological, economic, and cultural systems underscores the central argument of this research: resilience is not engineered but lived. Technical interventions such as

embankments or shelters are essential but insufficient if they ignore local moral worlds. True adaptation must engage with how people perceive and enact their relationship to the environment. This requires policymakers and researchers to listen to vernacular narratives, respect community ethics, and recognize that adaptation strategies derive legitimacy from moral, not merely material, foundations (Hastrup, 2013; Agarwal, 2010).

The study further suggests that inequality remains the greatest obstacle to resilience. Those with access to land, technology, and political networks can recover faster, while the poor depend on fragile social support. Yet, even in unequal conditions, collective ethics mitigate suffering. Women's unpaid labour, neighbourly reciprocity, and religious charity operate as hidden infrastructures of survival. By sustaining these moral economies, the people of Monpura continually reconstitute their world in the face of erosion, both literal and social.

In conclusion, the synthesis of ecological, economic, and cultural insights reveals that resilience in coastal Bangladesh is a moral and symbolic project as much as an environmental one. It is about maintaining continuity—of identity, faith, and community—amid forces that constantly threaten to undo them. Recognizing these dimensions is essential for building climate policies that uphold human dignity and cultural integrity. The people of Monpura remind us that living with change is not only a matter of survival; it is an act of meaning-making that binds ecology and ethics into a single, enduring narrative of life.

9.3. THEORETICAL CONTRIBUTIONS

This research contributes to anthropological and interdisciplinary debates on climate adaptation by advancing the concept of a moral ecology of adaptation and resilience. Drawing on the lived experience of Monpura Island's inhabitants, it reconceptualizes resilience not as a technical capacity or developmental outcome, but as a moral, relational, and ecological process. The moral ecology framework integrates political ecology's attention to power and inequality, feminist environmentalism's focus on gendered agency, and moral anthropology's concern with ethics, care, and meaning. Together, these approaches offer a deeper understanding of how people sustain life and dignity amid chronic uncertainty.

9.3.1. From Political Ecology to Moral Ecology

Political ecology provides a foundational framework for understanding how environmental change is mediated by social structures and power relations. Classic studies by Blaikie and Brookfield (1987) and Robbins (2012) established that environmental degradation is rarely the result of ecological forces alone; it is shaped by political economy, land tenure, and institutional inequality. In coastal Bangladesh, state-led development projects, market dependency, and uneven access to resources all influence who adapts and who remains vulnerable (Adger et al., 2020; Mallick & Vogt, 2015).

The ethnographic findings from Monpura confirm these insights but extend them by highlighting the moral dimensions of environmental action. Residents interpret adaptation through ethical reasoning—what they should do for their families, neighbours, and God—not merely through instrumental calculations of gain or loss. A landowner's decision to share rice with displaced neighbours or a woman's choice to rebuild her home despite repeated floods are acts embedded in social expectations and moral worth.

By foregrounding these ethical logics, this research reorients political ecology toward what may be termed a *moral ecology*. This framework examines how people negotiate environmental challenges through culturally grounded values of justice, reciprocity, and responsibility. It suggests that environmental adaptation is not only about access to material resources but also about sustaining moral order. Such a perspective resonates with recent anthropological work calling for the integration of ethics and emotion into the study of resilience (Hastrup, 2013; Crate & Nuttall, 2016).

9.3.2. The Ethical Dimensions of Resilience

Resilience, in development and policy discourse, is often defined in technical or ecological terms—an ability to "bounce back" after disturbance (Folke et al., 2010). However, in Monpura, resilience is not a mechanical recovery but a moral achievement. People describe survival through idioms of *sabr* (patience), *iman* (faith), and *izzat* (dignity). These ethical categories guide behaviour and shape collective responses to crisis.

By conceptualizing resilience as moral practice, this study aligns with and extends the insights of Whyte (2018), who argues that resilience among Indigenous and marginalized communities is inseparable from questions of justice and relational responsibility. In Monpura, resilience is enacted through reciprocal labour, care for kin, and ritual acts that reaffirm belonging. Such practices reconstitute the social fabric, ensuring that recovery is not only physical but ethical.

This moral orientation challenges technocratic approaches to adaptation that focus narrowly on infrastructure or policy efficiency. It demonstrates that resilience is embedded in cultural systems of meaning. To understand why certain communities rebuild despite chronic loss, we must attend to the ethical emotions—trust, hope, and compassion—that animate social cooperation. As Oliver-Smith (2016) observed, disaster recovery is as much about reweaving moral order as reconstructing material life.

9.3.3. Gender, Care, and the Moral Economy of Adaptation

A key theoretical contribution of this study lies in its integration of feminist environmentalism into the moral ecology framework. Feminist scholars such as Agarwal (2010) and Elmhirst (2015) emphasize that adaptation and resource management are deeply gendered processes. Women often bear the hidden burdens of environmental stress, performing unpaid care work and sustaining the moral economy of households.

In Monpura, women's adaptive agency operates within and beyond patriarchal constraints. Their roles in food preservation, seed storage, and household budgeting embody what Rocheleau, Thomas-Slayter, and Wangari (1996) call "gendered resource mapping"—an intimate knowledge of ecological systems grounded in daily care. Yet women's resilience is not merely practical; it is moral. Their endurance is framed as sacrifice and responsibility, expressed through Islamic virtues of patience and service.

This moralized form of adaptation challenges the dichotomy between vulnerability and agency. It reveals how women transform care into a form of resistance and authority. The study contributes theoretically by showing that moral economies of care—reciprocity, compassion, and endurance—constitute an essential but often overlooked dimension of resilience. Recognizing these moral economies is vital for developing gender-sensitive climate policies that value relational ethics alongside technical adaptation.

9.3.4. Knowledge, Meaning, and Embodied Ecology

The ethnographic evidence from Monpura also contributes to the anthropology of knowledge by demonstrating how environmental understanding is embodied, affective, and symbolic. Villagers interpret climate variability through bodily experience—the feeling of heat on the skin, the rhythm of tides, the smell of wet soil. Such sensory and emotional knowledge aligns with Hastrup's (2013) notion of "social attunement to climate," where perception and action are inseparable.

This embodied engagement with the environment constitutes an epistemology of care. Knowledge is transmitted not only through formal training or observation but through shared stories, prayers, and rituals that connect people to place. This finding expands the scope of adaptation studies by incorporating the phenomenological dimension of environmental change—how people feel and interpret the world they inhabit.

By linking embodied experience with ecological processes, the research offers a new perspective on human-environment relations. It suggests that adaptation involves continuous moral calibration: deciding when to plant, when to move, and how to share limited resources. Such decisions are rarely guided by abstract models but by situated ethics rooted in everyday life.

9.3.5. Toward a Moral Ecology of Adaptation

The synthesis of these insights leads to the conceptual proposition of a moral ecology of adaptation. This framework recognizes that environmental adaptation is simultaneously ecological, social, and ethical. It emphasizes three interrelated principles:

1. Moral Relationality: Adaptation decisions are embedded in networks of kinship, reciprocity, and obligation. Resilience emerges through cooperation and moral duty rather than individual autonomy.

2. Cultural Meaning: Environmental change is interpreted through religious, symbolic, and affective vocabularies that assign meaning to suffering and endurance. These cultural interpretations influence the trajectory of adaptation.
3. Ethical Agency: Communities act not only to survive but to uphold moral and spiritual integrity. Their responses to crisis are shaped by values of fairness, compassion, and respect for life.

This moral ecology approach reframes adaptation as an ethical relationship between humans and their changing environment. It acknowledges that survival involves both practical ingenuity and moral imagination. By integrating insights from political ecology, feminist theory, and moral anthropology, it provides a holistic model for analyzing resilience in vulnerable ecologies such as coastal Bangladesh.

9.3.6. Broader Theoretical Implications

The concept of moral ecology extends beyond Monpura. It offers a framework for comparative analysis in other contexts where people live with environmental uncertainty—whether in Pacific islands facing sea-level rise, African Sahel communities coping with drought, or Arctic Indigenous societies confronting ice melt. In each case, adaptation is shaped by moral logics that bind ecology to ethics (Barnes et al., 2013; Crate & Nuttall, 2016).

Furthermore, moral ecology challenges the universalizing tendencies of global climate policy. By foregrounding local ethics and cultural meanings, it calls for a plural understanding of resilience—what Tsing (2015) describes as "living in the ruins" with creativity and care. Such an approach aligns with decolonial perspectives that prioritize Indigenous and local knowledge systems as legitimate forms of climate understanding (Whyte, 2018).

Theoretically, this perspective enriches resilience scholarship by bridging structure and subjectivity. It connects the macro-level analysis of power and inequality with the micro-level experience of morality, emotion, and faith. This synthesis contributes to what Adger et al. (2020) term the "social processes of adaptation," expanding it to include ethical and cultural dimensions that shape human-environment relations.

9.3.7. Resilience as Moral Ecology

This study's theoretical contribution lies in articulating resilience as a *moral ecology*— a framework that situates human adaptation within networks of ethical relations, cultural meaning, and ecological interdependence. Rather than treating the environment as an external force or human responses as purely technical adjustments, this perspective recognizes adaptation as a moral and relational process through which people sustain both livelihoods and values. It challenges conventional models that fragment the social from the ecological or privilege economic recovery over moral coherence.

The lives of Monpura's people illuminate that resilience is not only a matter of rebuilding physical structures but of restoring dignity, maintaining faith, and renewing social solidarity. In their adaptive practices— whether tending saline soil, mending fishing nets, or sharing scarce resources— lie deeply moral acts of care and responsibility toward both community and nature. Such actions show that ecological sustainability depends equally on moral sustainability: the capacity to preserve compassion, reciprocity, and collective belonging in times of crisis.

By theorizing from Monpura's lived experience, this research contributes to a grounded anthropology of climate adaptation that reconnects the ecological with the ethical. It argues that resilience is neither an abstract metric nor a purely structural condition; it is a lived negotiation between vulnerability and hope. This perspective invites a more humane, plural, and culturally inclusive understanding of adaptation—one that values the ethical imagination through which communities continually recompose life amidst change.

9.4. METHODOLOGICAL REFLECTIONS

This research was grounded in the methodological tradition of long-term ethnography, which privileges immersion, sustained observation, and the cultivation of trust as pathways to understanding the complex intersections of ecology, economy, and culture in Monpura Island. Over several years of intermittent yet cumulative fieldwork between 2020 and 2024, I lived among the residents of Sonarchar and Machpara, participating in their everyday activities, attending religious gatherings, joining fishing trips, and observing agricultural cycles. This long-term engagement provided not only empirical depth but also a moral and emotional awareness of what it means to live with environmental uncertainty.

9.4.1. The Rationale for Long-term Ethnography

Ethnography, as conceptualized by Geertz (1973), is an interpretive act—an attempt to render meaning visible through "thick description." Long-term ethnography enhances this interpretive capacity by allowing the researcher to witness repetition, change, and contradiction over time. The cycles of flooding, planting, fishing, and rebuilding in Monpura cannot be understood through a snapshot approach. They demand patient observation of how people's responses evolve across seasons and crises.

The duration of fieldwork also revealed the layered nature of adaptation. In the early months, conversations centered around material hardship— loss of land, declining fish stocks, and market dependency. Over subsequent visits, deeper moral and emotional narratives emerged: memories of past cyclones, religious interpretations of suffering, and reflections on fairness in relief distribution. The longitudinal presence enabled me to see how adaptation is not merely technical but profoundly temporal—a continuous negotiation between memory and anticipation.

Moreover, long-term ethnography created opportunities for participatory observation rather than mere observation. Joining farmers during planting, travelling with fishers on night expeditions, or sharing tea during religious festivals transformed research encounters into shared experiences. This intimacy illuminated subtle aspects of community life— tone, gesture, humour, and silence—that formal interviews often miss. As Clifford and Marcus (1986) argue, ethnography is not just about gathering information but forming relationships that generate reciprocal understanding.

9.4.2. Reflexivity and Positionality

A critical component of this ethnographic process was reflexivity—an ongoing awareness of how my own background, values, and assumptions shaped both access and interpretation. As a Bangladeshi researcher familiar with rural life but not a native of Monpura, I occupied a position that was simultaneously insider and outsider. This duality afforded empathy but also required sensitivity to difference. Villagers often viewed me with curiosity, sometimes as a teacher, sometimes as a government agent, occasionally as a potential benefactor. Recognizing these perceptions was essential to avoid imposing external expectations or reinforcing dependency.

Maintaining reflexivity involved continuous questioning of my interpretive stance. When women spoke of patience (*sabr*) or men described divine tests, I initially interpreted such expressions through a sociological lens—as coping mechanisms under stress. Over time, however, immersion revealed that these were not rhetorical responses but deeply held moral convictions. The process of living alongside participants reshaped my analytical vocabulary: resilience was no longer a policy term but an ethical practice embedded in faith, kinship, and labour.

Reflexivity also extended to moments of discomfort. Witnessing poverty, displacement, and gendered labour burdens often evoked emotional responses that blurred the boundary between empathy and analysis. Rather than suppressing these reactions, I treated them as part of the ethnographic data, consistent with the feminist methodological perspective that emotions are integral to knowledge-making (Agarwal, 2010; England, 1994). Recording these reflections in field diaries helped trace how my own positionality evolved from detached observer to engaged participant.

9.4.3. Ethics of Representation

The ethics of representation formed another core aspect of reflexivity. The act of writing about vulnerable communities carries inherent risks of distortion and appropriation. Throughout this study, I sought to represent participants not as victims of climate change but as moral agents navigating structural constraints. This ethical stance aligns with the anthropological commitment to portraying lived experience with dignity and complexity (Scheper-Hughes, 1995).

Informed consent was obtained through transparent communication, but ethical engagement extended beyond paperwork. It involved reciprocal gestures—sharing meals, explaining the purpose of the research, returning photographs, and discussing findings in accessible language.

Such practices built trust and accountability. Participants often corrected my interpretations or offered alternative readings of events, reminding me that ethnographic knowledge is co-produced rather than extracted.

Moreover, the process of transcription and translation presented interpretive challenges. Local idioms—such as *manusher kosto* (human suffering) or *Allah'r porikkha* (God's test)— carried layers of moral and affective meaning that could not be captured by literal translation. Preserving the texture of these expressions required balancing linguistic accuracy with cultural resonance, acknowledging that every translation is also an interpretation.

9.4.4. Navigating Power, Gender, and Access

Power dynamics in fieldwork were not static but continually negotiated. As a male researcher, my access to women's spaces was initially limited by cultural norms. To address this, I collaborated with local female assistants who facilitated interviews and translated sensitive conversations. Their insights often expanded my understanding of household dynamics, revealing aspects of women's agency that might otherwise have remained hidden.

Similarly, class and political hierarchies influenced data collection. Local elites, such as landowners and boat owners, were more visible and willing to engage, while landless labourers and widowed women often remained peripheral. To counter this imbalance, I adopted a snowball sampling strategy that relied on kin networks to reach marginalized voices. By spending extended time in poorer households, I was able to capture how inequality and dignity coexisted in everyday life.

These methodological negotiations illustrate that ethnography is as much about humility as expertise. The field challenges the researcher's authority, demanding flexibility, patience, and ethical attentiveness. As Marcus (1998) notes, reflexive ethnography involves "studying through"—tracing how structures of power intersect with personal encounters. In Monpura, this meant recognizing how my own presence sometimes reinforced hierarchies, and consciously redirecting attention to those least heard.

9.4.5. The Transformative Nature of Fieldwork

Ultimately, long-term ethnography transformed not only the research but the researcher. Fieldwork in Monpura blurred the boundaries between professional inquiry and human relationship. Moments of collective prayer during cyclones, shared laughter over fishing failures, or quiet evenings in tea stalls revealed the profound ordinariness of resilience. These experiences reshaped my understanding of knowledge as relational rather than objective—produced through empathy, dialogue, and mutual vulnerability.

Reflexivity thus became both a methodological tool and an ethical commitment. It demanded attentiveness to how my interpretations might affect those whose stories I told. It also required acknowledging that understanding is always partial and situated. By embracing this humility, the

research moved closer to what Geertz (1988) called "being there"—a recognition that ethnography is less about speaking for others than about learning to listen deeply.

In conclusion, the methodological journey of this study affirms that long-term ethnography, grounded in reflexive awareness, remains indispensable for understanding the moral and ecological dimensions of human adaptation. It is through sustained presence and ethical engagement that the invisible textures of resilience—the emotions, silences, and solidarities that animate life in Monpura—come into view. This commitment to reflexivity ensures that the thesis not only documents adaptation but participates in the ongoing dialogue between knowledge, ethics, and the lived realities of those navigating an uncertain world.

9.5. POLICY AND PRACTICAL IMPLICATIONS

The ethnographic insights drawn from Monpura Island provide valuable lessons for designing more inclusive and contextually grounded approaches to climate adaptation and development governance in coastal Bangladesh. The people of Monpura live at the intersection of environmental volatility, economic precarity, and social inequality, yet their everyday practices reveal sophisticated systems of adaptation, mutual care, and moral reasoning. The challenge for policymakers, therefore, is not simply to introduce new technologies or infrastructure but to recognize and build upon these local systems of resilience. This section synthesizes the study's findings into four interrelated policy directions: valuing local knowledge, addressing inequality, strengthening participatory governance, and integrating ethical and cultural dimensions into adaptation planning.

9.5.1. Recognizing and Institutionalizing Local Knowledge

The fieldwork shows that adaptation in Monpura is sustained by local ecological knowledge (LEK)— a cumulative body of understanding based on observation, experimentation, and intergenerational transmission. Farmers test soil salinity by touch and taste; fishers read water colour, tides, and bird movements to predict fish availability; women preserve seeds and food stocks in anticipation of floods. These practices represent not superstition but an empirical environmental intelligence that allows people to manage risk in conditions of uncertainty (Berkes, 2012; Fazey et al., 2016).

However, state and NGO-led adaptation programs often marginalize this expertise. Top-down interventions—such as embankment construction, hybrid crop introduction, and disaster preparedness plans—frequently neglect local insight, resulting in maladaptation or dependency (Islam & Shamsuddoha, 2018). Effective climate governance should therefore institutionalize community knowledge within decision-making processes, creating platforms where local actors can co-design adaptation strategies.

Practical mechanisms might include community climate forums, participatory mapping, and joint monitoring systems where local indicators (such as soil salinity or tidal patterns) are combined with scientific data. This approach would bridge epistemological divides and promote knowledge co-production, ensuring that adaptation remains both scientifically credible and socially legitimate.

9.5.2. Addressing Inequality and Vulnerability in Adaptation

Monpura's experiences illustrate that vulnerability is not evenly distributed. Access to land, credit, and political networks determines who adapts effectively and who bears the costs of environmental change. Wealthier households can rebuild embankments or invest in mechanized boats, while the poor rely on loans, migration, or charity. Women, widows, and landless labourers often occupy the most precarious positions, their unpaid labour sustaining families without recognition or compensation.

Therefore, climate policy must move beyond technical adaptation to confront structural inequality. This involves redistributive measures such as secure land tenure for displaced households, microcredit tailored to women's economic initiatives, and subsidized inputs for small farmers and fishers. Programs like social safety nets or livelihood diversification grants should be integrated with adaptation planning, reducing the need for distress migration and debt dependence (Ahsan & Warner, 2014).

Moreover, resilience-building must prioritize social justice. Adaptation cannot succeed if it reinforces class hierarchies or deepens gender disparities. Inclusive climate governance should promote women's participation in decision-making, recognize care work as part of adaptation infrastructure, and ensure equitable access to resources and benefits. Policies framed within climate justice principles—fairness, participation, and accountability—are more likely to generate enduring resilience across social groups (Schlosberg et al., 2017).

9.5.3. Strengthening Decentralized and Participatory Governance

A key lesson from Monpura is that centralized adaptation planning often fails to reach peripheral regions. Bureaucratic distance, corruption, and the dominance of urban technocrats result in limited attention to the specific needs of char and island communities. Local government bodies, including Union Parishads and community-based disaster committees, are often underfunded and lack decision-making authority.

Strengthening decentralized governance structures is essential for effective adaptation. This entails devolving both resources and authority to local institutions while ensuring mechanisms for transparency and accountability. Participatory budgeting, community monitoring, and inclusive representation of marginalized groups can enhance responsiveness to local realities (Biermann & Gupta, 2011).

For example, disaster management programs could integrate local volunteer groups, women's cooperatives, and youth associations in planning and response. Community-managed adaptation funds—operated through transparent village councils—can finance small-scale projects such as pond re-excavation, embankment repair, or early warning systems. Such participatory approaches shift adaptation from a technocratic exercise to a civic process, empowering communities as co-governors rather than passive beneficiaries.

9.5.4. Integrating Moral and Cultural Dimensions into Policy

Perhaps the most profound insight from this ethnography is that adaptation is not only a technical or economic challenge— it is also a moral and cultural enterprise. People in Monpura interpret environmental hardship through ethical frameworks rooted in religion, kinship, and collective responsibility. Acts of mutual aid, prayer gatherings during cyclones, or rituals of thanksgiving after harvests are moral performances that sustain social cohesion.

Policies that overlook these moral dimensions risk alienating communities or undermining local legitimacy. Development agencies should therefore engage with cultural idioms of care, trust, and obligation as integral components of adaptation. For instance, religious institutions such as mosques and *madrashas* can serve as platforms for awareness programs and disaster coordination, leveraging existing moral authority. Similarly, incorporating cultural rituals and storytelling into environmental education can make adaptation messages more meaningful and enduring.

At a broader level, ethical governance must guide adaptation policy. This includes ensuring transparency in aid distribution, fairness in compensation, and sensitivity to cultural norms during resettlement. A moral-ecological perspective—grounded in compassion, reciprocity, and respect for local autonomy—offers an alternative to bureaucratic efficiency as the measure of success.

9.5.5. Linking Local Adaptation to National and Global Frameworks

Finally, the lessons from Monpura have implications beyond the island itself. They highlight the need to bridge local practices with national and global adaptation frameworks, such as the Bangladesh Delta Plan 2100 and the UNFCCC's community-based adaptation agenda. National policies often emphasize infrastructure (embankments, cyclone shelters) and technology (salinity-resistant crops, irrigation systems), but these must be integrated with social resilience strategies derived from field-based understanding.

Embedding ethnographic insights into national planning can ensure that adaptation remains context-sensitive and equitable. Policymakers should also engage local voices in international dialogues, recognizing that grassroots experiences offer critical evidence for shaping sustainable development pathways. In this sense, Monpura's struggles mirror the broader dilemmas of global climate governance: how to balance scientific expertise with lived experience, and how to pursue resilience without erasing difference.

9.5.6. Toward Culturally Informed Climate Governance

The case of Monpura Island demonstrates that climate adaptation is not a technical endpoint but a moral-political process requiring empathy, participation, and justice. Policy interventions that respect local knowledge, empower communities, and address social inequalities are more likely to foster genuine resilience than those driven by top-down efficiency.

In essence, development governance must evolve from managing risks to nurturing relationships—between people, institutions, and ecosystems. Climate adaptation, viewed through this ethnographic lens, becomes a shared moral project: a process of reimagining collective life amid ecological transformation. Only by grounding adaptation in local ethics and experiences can policy move beyond the rhetoric of resilience to create conditions for human dignity and sustainable coexistence.

9.6. FUTURE RESEARCH DIRECTIONS

The findings of this study open several important avenues for future research that can deepen and extend the understanding of coastal livelihoods, adaptation, and social transformation in Bangladesh and beyond. The ethnographic exploration of Monpura Island has revealed that the intersections of ecology, economy, and morality are complex, fluid, and historically situated. Yet, these intersections cannot be fully comprehended through a single-site analysis. Broader comparative and thematic inquiries are needed to situate Monpura's experience within the wider tapestry of coastal life in South Asia and the global South. The following sections identify three interlinked directions for future research: comparative coastal ethnographies, youth migration and translocal adaptation, and gender transformation under climate stress.

9.6.1. Comparative Coastal Ethnographies: Situating Monpura within a Regional and Global Context

While this study has provided an in-depth account of Monpura Island, the dynamics observed here—erosion, salinity intrusion, livelihood diversification, and moral adaptation—are shared across many deltaic and estuarine settings. Future research should therefore adopt a comparative coastal ethnographic approach to explore how environmental uncertainty and social resilience manifest in other regions of coastal Bangladesh, such as Bhola, Kutubdia, or Hatiya, as well as in comparable contexts like the Sundarbans delta of India or the Ayeyarwady delta of Myanmar.

Comparative ethnographies could reveal both convergences and divergences in how communities conceptualize resilience and belonging. For example, while Monpura residents interpret environmental hardship through Islamic moral frameworks emphasizing *sabr* (patience) and *tawakkul* (trust in divine will), Hindu or Buddhist communities in other deltaic regions may frame adaptation through cosmologies of karma, balance, or fate. Comparative

inquiry would thus help decenter universalist models of adaptation by revealing the plural moral and spiritual vocabularies through which people make sense of climate change (Crate & Nuttall, 2016; Hastrup, 2013).

Furthermore, regional comparison could illuminate the political ecology of displacement—how governance, market integration, and infrastructure shape divergent adaptation outcomes. While Monpura's isolation reinforces local self-reliance, more connected coastal areas may experience greater state intervention but also more dependence on external aid. Comparative research could explore whether increased integration necessarily translates into resilience, or whether autonomy and moral cohesion, as seen in Monpura, offer alternative pathways to sustainability.

Methodologically, a multi-sited ethnographic design (Marcus, 1998) would enable scholars to trace flows of people, goods, and knowledge across islands, deltas, and mainland urban centers. Such an approach can situate local adaptation practices within the larger political-economic networks of migration, trade, and resource governance. This comparative framework would also enhance theoretical generalization, positioning Monpura not as an isolated periphery but as part of a translocal climate frontier where environmental, moral, and developmental processes intersect.

9.6.2. Youth Migration, Translocal Livelihoods, and Changing Aspirations

A second promising direction concerns youth migration and the emergence of translocal livelihoods. During fieldwork, it became increasingly evident that younger generations in Monpura are redefining their relationship to the island's ecology and economy. Many young men migrate seasonally or permanently to urban centers such as Barisal, Dhaka, or Chattogram, seeking employment in factories, transport, or construction. This mobility reshapes both the material and affective landscapes of the island, creating a social world that is neither fully rural nor urban but translocal (Brickell & Datta, 2011).

Future research should explore how youth migration transforms local livelihood strategies, gender norms, and intergenerational relations. Remittances have become a key economic lifeline, yet they also alter social hierarchies and dependency patterns. Households receiving remittances gain relative autonomy, while those without mobile members experience new forms of marginalization. Moreover, migration introduces new ideas of modernity, masculinity, and aspiration that challenge the moral economy of reciprocity and restraint historically prevalent in coastal communities.

Ethnographic attention to return migration and circular mobility can further enrich understanding of how young people negotiate belonging between multiple places. Some migrants return to Monpura with new skills and technologies, investing in motorized boats or retail businesses. Others bring back altered social values, contributing to the slow erosion of traditional norms around kinship, marriage, and gender. Studying these processes comparatively

across different coastal regions could illuminate how mobility functions as both an adaptive strategy and a cultural transformation.

Additionally, youth migration must be studied within the broader context of climate-induced displacement. As erosion and salinity increase, migration may shift from voluntary economic mobility to forced ecological displacement. Future research should therefore investigate the continuum between migration as adaptation and migration as loss, examining how mobility simultaneously embodies resilience and vulnerability (Black et al., 2011). Such inquiry could integrate ethnographic insights with demographic and policy analysis to inform humane and equitable migration governance.

9.6.3. Gender Transformation and Moral Economies of Care

The third major area for future exploration is the gendered transformation of adaptation and resilience. This study highlighted that women in Monpura play central but often invisible roles in sustaining livelihood systems through unpaid care work, food preservation, and emotional labour. As men migrate and economic pressures intensify, women's responsibilities expand across productive and reproductive domains. This "feminization of adaptation" (Resurrección, 2013) requires deeper ethnographic attention.

Future research could examine how women's increased workload is accompanied by shifts in authority, mobility, and moral identity. Are women gaining greater decision-making power within households and community organizations, or are they merely bearing additional burdens without corresponding recognition? Longitudinal studies could trace how changing gender roles interact with class and religion to reshape family structures and social norms.

Moreover, the moral discourse of resilience often idealizes women's endurance and sacrifice. Ethnographic work could critically interrogate this narrative, asking how cultural expectations of patience (*sabr*) and piety reinforce gender inequality under the guise of moral virtue. Comparative studies across Muslim, Hindu, and indigenous coastal communities could illuminate how religious ethics intersect with climate governance to produce distinct gendered subjectivities.

Attention should also be paid to young women and adolescent girls, who represent the future of adaptation yet remain under-researched. Their aspirations for education, urban life, and technological literacy challenge traditional gendered boundaries tied to land and sea. Understanding how these aspirations interact with ecological uncertainty could reveal new forms of agency and possibility within constrained environments.

9.6.4. Methodological Innovation: Toward Collaborative and Participatory Ethnography

In addition to thematic extensions, future research should pursue methodological innovation. Building on this thesis's long-term ethnographic foundation, future projects could adopt participatory and collaborative approaches that empower local communities as co-researchers

rather than subjects. Participatory video, community storytelling, and digital ethnography can help document local perspectives while amplifying marginalized voices in policy dialogues (Kindon et al., 2007).

Comparative coastal research could also integrate ethnography with remote sensing, GIS mapping, and participatory cartography to visualize ecological change alongside social narratives. Such mixed-method frameworks would bridge qualitative depth and spatial analysis, offering more holistic insights into the relationship between environment, livelihood, and identity.

Furthermore, collaborative research networks across South and Southeast Asia could facilitate comparative analyses of coastal resilience, fostering intellectual exchange among scholars, practitioners, and local communities. Such partnerships would not only advance knowledge but also democratize the production of climate science, aligning research practice with the ethical principles of decolonial and engaged anthropology.

9.6.5. Toward a Comparative Anthropology of Resilience

The ultimate theoretical goal emerging from this study is the development of a comparative anthropology of resilience—one that transcends disciplinary and geographic boundaries. By situating Monpura within a constellation of coastal societies experiencing environmental transformation, scholars can interrogate how moral economies, state policies, and ecological imaginaries co-produce adaptation.

This comparative anthropology would connect localized ethnographies to global climate debates, demonstrating that resilience is not a universal trait but a situated process defined by historical, cultural, and ethical contexts (Adger et al., 2020; Tsing, 2015). It would challenge dominant technocratic discourses by foregrounding the moral and affective dimensions of adaptation that often remain invisible in policy frameworks.

Such a comparative framework also holds implications for the anthropology of the Anthropocene. Coastal Bangladesh—like many other deltaic frontiers—is both a site of acute vulnerability and a laboratory of human creativity. Comparative research can illuminate how ordinary people, through everyday acts of care, improvisation, and meaning-making, are actively redefining what it means to live well amid crisis.

9.6.6. Resilience, Relation, and the Horizons of Future Inquiry

Future research inspired by this study must continue to weave ethnographic intimacy with comparative and global vision. Comparative coastal ethnographies can illuminate the multiplicity of adaptation logics; investigations into youth migration may map the moral and affective geographies of mobility; and studies of gender transformation can reveal how resilience is lived, negotiated, and reimagined in embodied ways.

Together, these trajectories gesture toward a more plural, relational, and ethically grounded anthropology of climate adaptation—one that conceives resilience not merely as survival, but as an ongoing negotiation among ecology, identity, and hope. In the shifting worlds of deltas and islands, the work of endurance is inseparable from the imagination of futures.

Monpura Island: Photographic Representation



Image 1: Women are taking grass from the field for their cows.



Image 2: The Monpura dog: It is locally believed that, these dogs came here with the Portugese during colonial era.



Image 3: Local farmers are farming in their paddy fields



Image 4: River erosion is destroying Agricultural field



Image 5: Tidal wave causing damage to the soil quality.



Image 6: Children of Monpura beside paddy field (near the river Meghna).



Image 7: Children of Monpura beside paddy field (near the river Meghna).



Image 8: Children are collecting *chat* (worms) for feeding the duck.



Image 9: The Donation boxes of Mia Jamir shah



Image 10: Inside the donation box of the Mia jamir shah

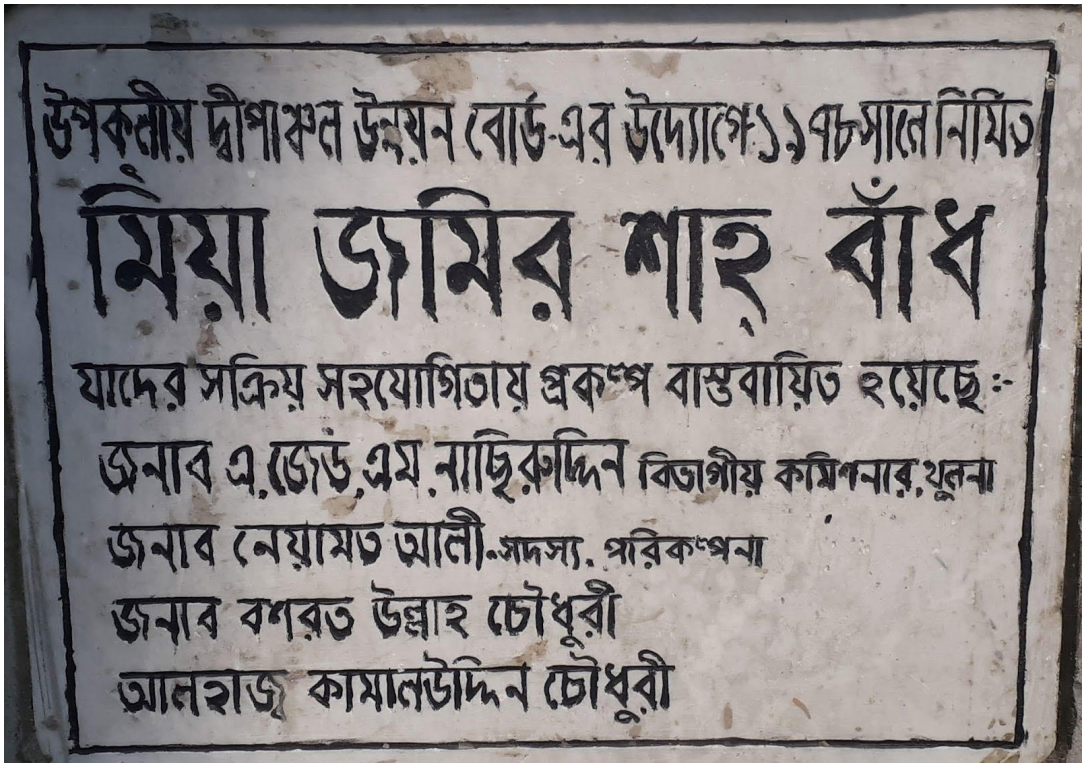


Image 11: Embankment named after Mia Jamir Shah in Monpura.



Image 12: Restaurant Hotel named after Mia Jamir shah



Image 13: FGD with the local farmers of Monpura



Image 14: The Monpura high school



Image 15: The poor lady who can not afford solar electricity in Monpura



Image 16: Children playing marvel in Monpura

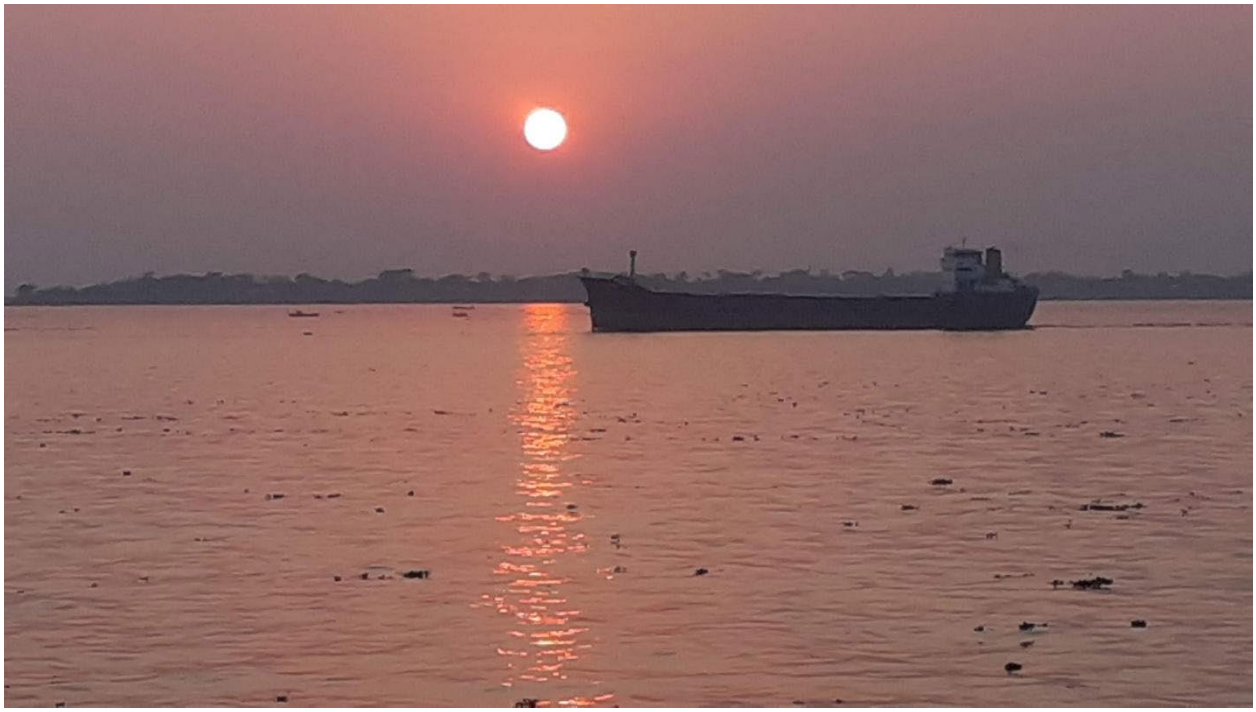


Image 17: Sunset at the shores of Monpura



Image 18: A farmer is planting Chili seeds in his land



Image 19: The previous launch terminal at Monpura that was risky



Image 20: Traditional village of the rural elita at Monpura



Image 21: Kitchen of a regular Monpura village



Image 22: Interview with the local fisherman community



Image 23: Woman enaged in agricultural duties



Image 24: Woman enaged in agricultural duties 2



Image 25: FGD with the locals



Figure 26: FGD with the locals of Monpura



Image 27: Three types of Jhail jhal and a fisherman



Image 28: Fisherman taking preparation for departure



Image 29: Local food at a restaurant

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Image 30: Fisherman making Ilish nets.

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Image 31: Making nets for fishing community.

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Image 32: Making nets for fishing community.

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Image 33: Fishing Boats at Monpura



Image 34: Fishing Boats at Monpura near embankment



Image 35: Fisherman in action



Image 36: Fisherman catching fish from Meghna river



Image 37: Creating a fishing boat



Image 38: Locals catching eel

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Image 39: Locals catching eel

Dhaka University Institutional Repository



Image 40: Erosion has forced a family to leave their original home.



Image 41: River erosion causing soil degradation

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Image 42: Fisherman with *chai Jal* (trap).



Image 43: *chai Jal* (trap).



Image 44: Bricks used to set up *chai Jal* (trap) in the river.



Image 45: Another type of small *chai Jal* (trap)

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Image 46: Local crabs breeder

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Image 47: Local crab collector

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Image 48: Mosquito net for catching baby shrimps



Image 49: Local people recycling fish remains for making fish food



Image 50: Fisherman after a successful catch and selling the fish



Image 51: Large fishing boats at the canal

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Image 52: Social work in Monpura, Tree plantation initiative



Image 53: Creating awareness among women in courtyard meeting



Image 54: Tidal water flow causing inconvenience in transportation in Monpura



Image 55: Local fisherman selling Hilsa fish at Monpura



Image 56: Local fisherman weaving fishing nets at Monpura



Image 57: Local women in a training program (Fieldwork, 2019)



Image 58: Radhe Krisna Gobinda Mandir, Monpura (Fieldwork, 2023)



Image 59: A launch namer after Mia Jamir Shah

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