



**DISASTER RISK REDUCTION
INTERVENTIONS IN BANGLADESH:
A CASE STUDY ON SELELECTED
VILLAGES OF SOUTHWEST REGION**

TUHIN ROY

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Declaration by the researcher

I declare that '**Disaster Risk Reduction Interventions in Bangladesh: A Case Study on Selected Villages of Southwest Region**' is my own work and all the sources that I have quoted have been indicated and acknowledged by means of complete references and this dissertation has not been submitted for any other degree at the University of Dhaka or any other institution.

Signature

.....

(Tuhin Roy)

Certificate from supervisor

In my capacity as supervisor of the dissertation, '**Disaster Risk Reduction Interventions in Bangladesh: A Case Study on Selected Villages of Southwest Region**' submitted by **Mr. Tuhin Roy** for pursuing Doctor of Philosophy degree in Disaster Management, I do hereby declare that the dissertation has been conducted by the researcher's own efforts. The candidate declares that this dissertation, or any part of it, has not been submitted anywhere else for the award of any degree.

Signature

.....
(**Mahbuba Nasreen, PhD**)

Director,
Institute of Disaster Management and Vulnerability Studies
University of Dhaka
&
Former Professor
Department of Sociology
University of Dhaka

Abstract

This research deals with the problems encountered by stakeholders in different sectors attempting to meet the needs of natural disaster-affected people in southwest region of Bangladesh. The questions this paper sought to answer include: what are the disaster risks and vulnerabilities in southwest region; who are the main actors in disaster management, both in formal and informal sectors; what types of intervention programmes are taken up by government organisations, development partners and national and international non-government organisations (INGOs); how does the community view those intervention programmes and what are their expectations; and what are the changes observed due to those interventions in the studied coastal community? To find answers to these questions, a sociological perspective was adopted, but other approaches were not altogether excluded. The work was set when disasters in Bangladesh used to be handled without a coordinated disaster management efforts and gradually developed having various policies and laws aimed at mitigating disaster risks and vulnerabilities. Over the past few years, however, Bangladesh has introduced more comprehensive and coordinated disaster management programmes for mainstreaming disaster management in development plans and programmes. The study attempts to gain an understanding of the fundamental difficulties experienced by stakeholders in meeting the needs of the affected people and communities. This study is descriptive in nature. The subject has been approached using quantitative and qualitative research methods, including personal engagement in disaster zones. In the quantitative section, social survey method was followed. In the qualitative section, Focus Group Discussions (FGDs) and key informants interview (KII) methods were applied to gain vital information and an in-depth understanding. Besides, for in-depth investigations, a semi-structured interview schedule and a check-list were designed to conduct FDGs and KII, considering the main variables of the study. Data were collected from 360 households to identify the disaster risk and vulnerability in the southwest region with a view to illustrate and evaluate the effectiveness of the existing Disaster Risk Reduction (DRR) interventions in the study area. The present study mainly incorporates both Crunch Model and Release Model in explaining the mitigation strategies as well as the DRR intervention process. Findings included the three resistance factors occupying the most significant position to be: magnitude of

disaster (risk and vulnerability); the state of disaster management actors both in formal and informal sectors; and DRR interventions in southwest Bangladesh. Any DRR interventions must also include these five factors: physical assets, environmental protection, livelihood, Water and Sanitation (WatSan) and training and awareness. For any DRR interventions to be successful, stakeholders should concentrate on the social structure and various socio-cultural factors like religious perceptions, social values, village politics, and dominance of local leaders and so on. Moreover, limited participatory approach have been followed by stakeholders (both government and non-government) and using various indicators of existing DRR interventions such as physical assets and environmental protection in the study area. All these compromise the effectiveness of the existing DRR interventions in the study area to a great extent. Discussions on the study findings focus on the relevance of DRR interventions and the operational efficiency of the stakeholders as well as local leaders. These include the importance of planning for high magnitude disasters and capacity-building at the local level, including education of vulnerable communities and coordination of disaster management policy, legal and institutional framework. For effective disaster mitigation and preparedness it is vital to pay continued attention to these issues. This research seeks to address an identifiable problem that has not been previously examined in social science discipline, while also offering suggestions regarding the scope for further research on Disaster Risk Reduction interventions.

Dedication

I dedicated this work to my mother Putul Roy and father Rabindra Nath Roy

&

All the vulnerable people of disaster-prone areas.

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Abbreviation

| | |
|---------|--|
| AADMER | Agreement on Disaster Management and Emergency Response |
| ADPC | Asian Disaster Preparedness Centre |
| ASEAN | The Association of Southeast Asian Nations |
| AVA | Agri-Food and Veterinary Authority |
| BBS | Bangladesh Bureau of Statistics |
| BCCSAP | Bangladesh Climate Change Strategy Action Plan |
| CBA | Community-based Adaptation |
| CC | Climate Change |
| CCA | Climate Change Adaptation |
| CCDMC | City Corporation Disaster Management Committee |
| CDMP | Comprehensive Disaster Management Programme |
| CFW | Cash-for-work |
| CPP | Cyclone Preparedness Programme |
| CPPIB | Cyclone Preparedness Programme Implementation Board |
| CSO | Chief Security Officer |
| DC | Deputy Commissioner |
| DDMC | District Disaster Management Committee |
| DIPECHO | Disaster Preparedness DG ECHO |
| DM&RD | Disaster Management and Relief Division |
| DMB | Disaster Management Bureau |
| DRC | Disaster Resistant Community |
| DRM | Disaster Risk Management |
| DRR | Disaster Risk Reduction |
| DRRO | District Relief and Rehabilitation Officer |
| EPAC | Earthquake Preparedness and Awareness Committee |
| ESCAP | United Nations Economic and Social Commission for Asia and the Pacific |
| EUR-OPA | Economic Commission for Europe |
| FF | Feed Forward |
| FFW | Food-for-work |
| FGD | Focus Group Discussion |
| FPOCG | Focal Point Operation Coordination Group of Disaster Management |
| GDP | Gross Domestic Product |
| GFDRR | Global Facility for Disaster Reduction and Recovery |
| GNDR | Global Network for Disaster Risk Reduction |
| GO | Government Organisation |
| HFA | Hyogo Framework for Action |
| HIES | Household Income and Expenditure Survey |
| ICRC | International Committee of the Red Cross |
| IDNDR | International Decade for Natural Disaster Reduction |
| IFRC | Federation of Red Cross and Red Crescent Societies |
| IMDMCC | Inter-Ministerial Disaster Management Co-ordination Committee |
| INGO | International Governmental Organisations |
| IPCC | Intergovernmental Panel on Climate Change |

| | |
|--------|---|
| IWM | Integrated Waste Management |
| KII | Key Informants' Interview |
| LDCs | Least Developed Countries |
| MDGs | Millennium Development Goals |
| MoDMR | Ministry of Disaster Management and Relief |
| MRVA | Multi-hazard Risk Vulnerability Assessment |
| NAPA | National Adaptation Programme of Actions |
| NDMAC | National Disaster Management Advisory Committee |
| NDMC | National Disaster Management Council |
| NDRRMP | National Disaster Risk Reduction and Management Plan |
| NGO | Non-Government Organisation |
| NGOCC | NGO Coordination Committee on Disaster Management |
| NPDM | National Plan for Disaster Management |
| NPDM | National Professional Development Matrix |
| NPDRR | National Platform for Disaster Risk Reduction |
| NY | New York |
| NDRCC | National Disaster Response Coordination Center |
| PADR | Participatory Assessment of Disaster Risk |
| PDMC | Pourashava Disaster Management Committee |
| PIO | Project Implementation Officer |
| PRSPs | Poverty Reduction Strategy Paper |
| SOD | Standing Orders on Disaster |
| SFDRR | Sendai Framework for Disaster Risk Reduction |
| SPSS | Statistical Package for the Social Sciences |
| UDMC | Union Disaster Management Committee |
| UK | United Kingdom |
| UN | United Nations |
| UNDP | United Nations Development Programme |
| UNFCCC | United Nations Framework Convention on Climate Change |
| UNISDR | United Nations International Strategy for Disaster Reduction |
| UNO | Upazila Nirbahi Officer |
| USA | The United States of America |
| UZDMC | Upazila Disaster Management Committee |
| VFL | Views from the Frontline |
| WB | World Bank |
| WCDR | World Conference on Disaster Reduction |

Acronyms

| | |
|----------------------|---------------------|
| BDT | Bangladeshi Taka |
| % | Percentage |
| CI | Confidence Interval |
| <i>e.g</i> | For example |
| Ed. | Edited by |
| <i>et al.</i> | And many others |
| etc. | Etcetera |
| <i>f</i> | Frequency |
| <i>i.e.</i> | That is |
| n | Sample size |
| OR | Odds Ratio |
| Sq.Km | Square kilometer |