

**Livelihood Vulnerability of Women in the context
of Climate Change Impacts: Insights from Coastal
Bangladesh**

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Declaration of Originality

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Muhammad Asaduzzaman

Signature:

Date:

Dedication

I dedicate this humble work to the memory of my late father Amzad Hossain Master who desired me to be a good human being and to be highly educated. In his absence, I am trying my best to fulfill at least one of his desires.

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Abstract

Bangladesh is frequently cited as a country that is most vulnerable to climate change. In Bangladesh, most of the adverse effects of climate change occur in the form of extreme weather events, such as cyclone, flood, drought, salinity ingress, river bank erosion and tidal surge, leading to large scale damage to crops, employment, livelihoods and the national well-being. Although it is generally stated that women are relatively more vulnerable than men in the context of climate change, few studies have been done to closely examine this statement, especially in Bangladesh. The present study, therefore, investigates the structure of women's livelihoods, livelihood vulnerabilities and coping capacity in the context of climate variability and change in a disaster vulnerable coastal area (*Shyamnagar upazila of the Satkhira district*) of Bangladesh. Utilising the concepts such as the sustainable livelihood framework (SLF) and the disaster crunch model (DCM), allows for a greater understanding of these issues on the ground. Moreover, two livelihood vulnerability indexes, namely the LVI and the IPCC-LVI, are used to measure the degree of livelihood vulnerability of women in the study area. The results show that the distribution of five livelihood capitals (human, natural, financial, social and physical) of women are heavily influenced by several climatic events, such as cyclones that periodically affect the region. Women also face several vulnerabilities in their livelihoods, including vulnerability to their income, household assets, lives and health, food security, education, water sources, sanitation and transportation systems, because of ongoing climate change impacts. They only have limited adaptation strategies

that enable them to reduce the climate related risks. However, they do practice some traditional coping strategies to assist with the increasing effects of climate change. While quantifying the degree of vulnerability, both of the indexes indicate a ‘high vulnerability’ level in regards to women’s livelihoods. In particular, women are more vulnerable in terms of physical and financial capitals in their present livelihood system. The results indicate that it is extremely important to instigate strategies to help build the adaptive capacity of women to reduce the burden created by their livelihood vulnerability. Overall, this thesis contributes empirical evidence to current debates in the literature on climate change by enhancing an understanding of the characteristics and determinants of livelihood vulnerability of women in the coastal areas of Bangladesh. The findings have important policy relevance for all involved in disaster and risk management, both within Bangladesh itself and outside. The findings of this thesis also allow identification of a range of measures that could be utilized to help address the impacts of current and future climate variability and change in regards to women’s livelihoods, particularly in the poorer, rurally-based coastal communities of Bangladesh and, potentially, beyond. Based on the research findings, the thesis also provides some recommendations for improving the sustainable livelihoods of women in the coastal communities of Bangladesh.

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Acronyms and Abbreviations

ADB	Asian Development Bank
BBS	Bangladesh Bureau of Statistics
BCAS	Bangladesh Centre for Advanced Studies
BDT	Bangladeshi Taka
BGMEA	Bangladesh Garment Manufacturers and Exporters Association
CCC	Climate Change Cell
CPD	Centre for Policy Dialogue
DAW	United Nations Division for Advancement of Women
DCM	Disaster Crunch Model
DFID	Department for International Development
FAO	Food and Agricultural Organisation
FGD	Focus Group Discussion
GAR	Global Assessment Report
GDP	Gross Domestic Product
GoB	Government of Bangladesh
HH	Household
IDS	Institute of Development Studies
IFAD	International Fund for Agricultural Development
IPCC	Intergovernmental Panel on Climate Change
IUCN	International Union for Conservation of Nature
KII	Key Informant Interview
LVI	Livelihood Vulnerability Index
MJF	Manusher Jonno Foundation
MoDMR	Ministry of Disaster Management and Relief
MoEF	Ministry of Environment and Forestry
MoF	Ministry of Finance
MoFDM	Ministry of Food and Disaster Management
NGF	Nowabenki Gonomukhi Foundation

NGO	Non Government Organisation
NIPORT	National Institute of Population Research and Training
NTFPs	Non Timber Forest Products
OECD	Organisation for Economic Cooperation and Development
PRDI	Participatory Research and Development Initiative
SLF	Sustainable Livelihood Framework
SRDI	Soil Research Development Institute
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children’s Fund
UNIFEM	United Nations Development Fund for Women
UNISDR	United Nations International Strategy for Disaster Reduction
USAID	United States Agency for International Development
VGD	Vulnerable Group Development
WEDO	Women’s Environment and Development Organization
WHO	World Health Organisation