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## Adaptation to Climate Change: An Anthropological Study on Changing Livelihood Strategies in South-West Coastal Bangladesh

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Abstract: Bangladesh is a disaster-prone and one of the most vulnerable countries to climate change. The country has a long coastal area which is frequently being affected by several types of natural disasters due to climate change. The disasters have impacts on the life and livelihood of different natural resources depending on communities living in the coastal areas. The Malo is a Hindu religious traditional fishing community living at Sarafpur Union of Dumuria Upazila of Khulna district of south-west coastal Bangladesh. Fishing is the only means of their livelihood and the community has been engaged in fishing practices inherently in rivers, estuaries, and sea for more than 300 years. and they are totally dependent on this traditional occupation. But, in recent year's climate change has negative impacts on their only livelihood option. The study aims to examine the impacts of climate change on the livelihood of Malo fishing community in south-west coastal Bangladesh, identify the adaptation strategies undertaken and practiced by Malo fishing community to cope with climate change and sustain their livelihood and explore the changing adaptation strategies undertaken by Malo fishing community and others. The study has been conducted from both qualitative and quantitative perspectives. Data has been collected from both primary and secondary sources. The primary data has been collected in the participatory observation approach following both qualitative and quantitative method. The primary source of data includes village census, face-to-face interview and in-depth case studies using structured questionnaire. The secondary source of the literature includes different national and international documents, policy papers, books and articles; related websites and peer-viewed documents on climate change, vulnerability, adaptation, livelihood, and fisheries. The study has identified different practices of adaption to climate change by Malo fishing community and others in the selected area. Three types of adaption practices have been identified. Firstly, the indigenous adaptation practices by Malo fishing community to cope with climate change have been identified. These identified adaptation practices by Malo fishing community include; ensuring drinking water and sanitation facilities, planting trees to tackle impacts of cyclone, excavating dumps to preserve the valuable assets, growing vegetables and rearing domestic livestock to earn surplus money, taking loans for ensuring continuation of present livelihood and migrating to near city or towns for better livelihood options. Secondly, adaptation initiatives undertaken by the government have provided limited facility to this vulnerable fishing community and made them benefited. And thirdly, some adaptation initiatives commenced by few non-government and community-based organizations have also made the Malo fishing community as beneficiaries. The study has suggested recommendations for Malo fishing community to overcome the challenges and impacts of climate change for retaining their traditional fishing livelihood. The accumulated recommendations would be very useful for the researchers, academicians, policy-makers of Government and non-government organizations to conduct more researches and take initiatives for Malo fishing community to make them more capable to sustain their fishing livelihood.

Keywords: climate change, livelihood, adaptation, anthropology, vulnerability

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