

FLOOD RISK REDUCTION AND PREPAREDNESS PLAN FOR THE BATTICALOA MUNICIPAL COUNCIL AREA

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The Batticaloa Municipal Council area, located in the Eastern Province of Sri Lanka is often affected by diverse natural hazards while flooding is identified as the most frequent hazard. The main reason for flooding within this area is the lack of proper drainage facilities that has resulted due to poor maintenance of natural drainage stream system and associated riparian environment of stream bank. Unauthorized human encroachments into the reservation areas of the natural streams hinder the drainage paths and causes flood. The flood observed in this area cause diverse negative impacts on human life including loss of agriculture production and infrastructure damage. This study was carried out to identify and investigate the causes for flooding and propose engineering and management solutions for mitigation of impacts due to flood in the area. Necessary information was gathered based on a questionnaire survey carried out among general public and through a series of interviews and discussions held with key stakeholder government and private sector institutions. Software SPSS ver.17.0 was employed for the statistical analysis of the quantitative data. Qualitative data was also incorporated in to the research report. Results indicated that the social and economic impacts of flooding on the Batticaloa Municipal Council area are high and devastating. Immediate impacts of flooding include loss of human life, injury, damage to properties, destruction of crops, loss of lives, shelter, livestock, and non-functioning of infrastructure facilities. Also, deterioration of health condition owing to waterborne diseases were observed to be very high. Structural measures, such as, construction of gabion walls, dredging of the Batticaloa lagoon, widening the river outfalls, opening of Palameenmadu and Kallar sand bar mouths and improving drainage system were identified as vital for mitigating flood. The fight against damage due to flooding can be strengthened by providing non-structural measures such as, establishing early warning systems, improving flood warning and evacuation systems. Community capacity development activities along with awareness programs were identified as very important steps to be adopted.