

Analysis of community's coping mechanisms in relation to floods for disaster management

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Floods are perceived to be a hazard with critical impact to people's lives and properties. In many cases, floods do not come as a surprise to the people that live in the affected area because they happen frequently. The city of Naga, the Philippines is a city that experiences frequent flooding. The aim of this study is to analyze the coping mechanisms that households employ in order to live in the area and to identify those mechanisms that are useful for the local authorities for flood disaster management.

Naga City is situated within the Bicol River Basin, at the confluence of the Naga and Bicol Rivers. Both rivers can cause flooding of the city especially as a result of typhoon rains. Despite several structural and non structural measures, the people are still impacted by the flooding. Household interviews were conducted in two of the most affected parts of the city to obtain information on the socio-economic status, flood characteristics (depth and duration), perception of the flood hazard and adopted coping mechanisms. The coping mechanisms were categorized into three types: Economic, social, and physical. The economic coping mechanisms are responses that are linked on economic relationships, for example the construction of two storied houses or houses build on stilts. The social coping mechanisms focus on strengthening the social network, for example borrowing money and staying at neighbor's or relative's house. Physical coping mechanisms involve practical actions, for example putting expensive things on the second floor or mezzanine or preparing waterproof materials.

It was found that the socio-economic status, access to assistance from the local authorities and geographical location are correlated with the household's coping mechanisms. The households with higher income tend to apply more physical and economic measures than households with lower income. Lower income households tend to rely more on social coping mechanisms and seem more dependant on the assistance from the Local Government Unit. Those households that are located closer to the river bank tend to employ all three types of coping mechanisms combined.

It can be concluded that knowing the community's coping mechanisms can improve the Local Government disaster management and help to increase the community's capacity in dealing with floods. Above all, communities experiencing the adverse effects of flood should not be taken as a passive recipient of the emergency relief measures but rather they should become the main actor or take part in the planning and policy setting on flood disaster management.