Assessing Social Vulnerability to Floods and Coping Strategies in Adamawa Catchment, Nigeria

Dupe Olayinka (Nigeria)

Key words: Geoinformation/GI; GSDI; Risk management; Spatial planning; Adamawa; Coping

strategies; Descriptive statistics; Social flood vulnerability; Flood hazard.

SUMMARY

There is increasing vulnerability of populations and infrastructure to flooding and flood related hazards in the Adamawa catchment of Nigeria. Little is known about the human dimension involved in flood vulnerability in the catchment. This study assesses social flood vulnerability to flooding and coping strategies adopted by the human dwellers in the Adamawa catchment. A structured questionnaire was used as the instrument for data collection using a stratified and systematic sampling technique. The responses were analysed using descriptive statistics (frequency counts and percentages). The results show that rural dwellers are mostly at risk of flood hazard. The effect of flood was greatest in agricultural areas through destruction of farmland and agricultural products. The vulnerability score revealed that the agricultural sector is the most vulnerable with 32.8% for both cultivated and irrigated land. Biodiversity and forests are the least vulnerable sectors with 3.3% each. Analysis of livelihood patterns of people living with flood shows evidence of the presence of natural capital (56.9%). Findings on the socio-economic impact of flood based on degree of physical and natural resources affected shows severe effect (34%). Analysis of caste differentiation show that Batchma and Mbula people are mostly impacted. The capacity to cope with floods were mainly between self-support and government support. Analysis of livelihood resources available to cope with flood impact shows that all the resources were medium availability; economic (39.5%), human capital (38.1%), and social and institutional capacity (33.2%). In conclusion, the catchment is under the threat of flood and most of the people living within lack the required human, financial and social capital to cope with the situation.

Assessing Social Vulnerability to Floods and Coping Strategies in Adamawa Catchment, Nigeria (11091) Dupe Olayinka (Nigeria)