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Vulnerability and Sensitivity of Women and the Aged to Hydrological Extremes in Rural Communities of South Eastern Nigeria

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Annual rainfall total of Southeastern Nigeria varies widely from year to year and across the seasons. Southeastern Nigeria is marked with two distinctive seasons, namely: the rainy season (occurs March through November) and the dry season (December through February). Highest daily rainfall of this area occurs in the months of July through September. Climate change has brought about either prolonged rainy or dry season in this region. Flash floods are common features in Southeastern Nigeria during the rainy (wet) season, but the unprecedented floods of 2012 represent the worst with 21 million people displaced, 597,476 houses destroyed or damaged, over 363 people killed and an estimated loss of USD 19.6 billion. Hydrological extremes such as these affect men and women differently because of the different roles socio-culturally assigned to them. Women are more vulnerable and sensitive to floods and drought because of their conventional gender responsibilities. This study assesses how women and the elderly of rural communities of Southeastern Nigeria are affected by hydrological extremes, their vulnerability to the effects as well as risk reduction approaches to cope with and/or adapt to the impacts of climate change. In the study area, women are predominantly the providers of food, water and fuel, and climate change has adverse impacts on all three. Women in these rural communities practice subsistence farming during the rainy season. Their farm lands are submerged during flood events destroying their crops and they are helpless during prolonged dry seasons. Inadequacy of hydrological data makes it difficult to predict and forecast hydrological extremes in the region. Several other factors exacerbate vulnerability of women and the aged to the impacts of hydrological extremes, such as rural poverty, limited livelihood options, education, lack of basic services, and socio-cultural norms. The poverty level affects their resilience and recovery from any flood disaster. It is proposed to reduce the risks associated with hydrological extremes in this region by providing a master plan for flood control and relief measures for potential victims; floods mitigation through land use regulation and watershed management; building institutional capacity for flood prediction and creating public awareness, as well as minimize the impact of floods and droughts through the provision and maintenance of appropriate engineering structures.