



Analysis of Vulnerability to Drought and Flooding in the Ouémé River Basin at Bétérou in Benin (West Africa)

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Abstract

In Benin, the principal risks which threaten the populations are the floods and the drought. The objective of this work is to analyze the zones vulnerable to the flood and the dryness in the catchment area of Ouémé with Bétérou. To achieve this goal, of the data climatological (height of rains day laborers and monthly) of 1965 to 2012 were collected. The vectorial data of occupation of the grounds of the zone of study are extracted from the data base of Ifn-2006 and are brought up to date starting from the images satellite. The analysis of the results shows that the zones of weak vulnerability to the flood cover 80 % of the sector of study and are met a little everywhere on the basin. The zones of moderate vulnerability to the flood occupy 15 % of the territory. The zones of strong vulnerability to the flood occupy 5 % of the territory. For the floods the zones at the weak risk cover 8 % of the territory of study, the zones at the average risk cover 87 % of the territory. The zones at the strong risk occupy 5 % of the territory and extend mainly in the Western part, in the zone of Djougou. As regards the drought, it is necessary to retain that 12, 55 % of the surface of the basin are slightly vulnerable to the drought, 49, 35 % of the basin are fairly vulnerable. The zones with strong and very strong vulnerability respectively occupy 12, 71 % and 24, 80 % of the surface of the basin.

Keywords: Bétérou; Risks of Flood; Vulnerability; Drought.