

**Adaptation to climate change impacts in the agricultural sector in Cameroon: the case of people in the Sudano-Sahelian region.**Nkoma Marcel<sup>†</sup>;<sup>†</sup> MINEPAT, CameroonLeading author: [nkoma\\_fr@yahoo.fr](mailto:nkoma_fr@yahoo.fr)

Climate change remains a major challenge for humanity. It threatens the human security of most vulnerable populations who depend on ecosystem services as the main source of income. Despite its marginal contribution to emissions of greenhouse gases, Africa is now recognized as the most vulnerable continent to the impacts of climate changes. Climate variability continues to weaken its economy and threatens the human security of the poorest Africans who suffer the impacts of many extreme weather events. Climate variability and climate change are phenomena of concern, mainly because in some African countries with Sahel regions like Cameroon, agricultural productivity is strongly linked to rainfall. Given these risks, vulnerable populations have no choice but to adapt. It is in this context that we find the present communication, whose main objective is to analyze the strategies of population responses in the field of agriculture and livestock to climate change in the Sudano-Sahelian region of Cameroon. This region is located beyond the 10th degree of north latitude. It is characterized by low rainfall with an annual average of 700 mm, divided into two seasons with dry seasons that span half of the year. The average annual temperature is 29° C. This is the semi-arid fragile ecology of Cameroon. Rainfall decreases remarkably from south to north (from 1200 to 1500 mm in Garoua, less than 400 to 900 mm in Kousseri). This is an area dominated by savannas and grasslands. The scarcity of water in this region has much negative impact on agriculture, livestock, fisheries and other biodiversities. To limit the damage caused by weather, people adopt different attitudes in their agricultural behavior and manage somehow to keep going from one season to another. In this study, we selected seven major response strategies: (i) the predisposition to suffer losses (fatalism attitude for most farmers; accustomed as they are in missing some campaigns); they are psychologically prepared to face the worst; (ii) the constitution of security stocks; (iii) cropping practices; (iv) changing cropping patterns; (v) the use of new plots; (vi) the change of date for some transactions (when sowing) and (vii) culturing cons - season, lowland and irrigated crops (such as the Mouskouari). The methodology used in this paper results from the combination of different aspects of empirical observations. Unable to gather accurate statistical data for the study, we have resorted at times to extrapolation techniques. After an analysis of various response strategies by people linked to climate change, we respond to certain constraints on the responsiveness of these populations.