

Economic impact of climate change on maize production in Northern Nigeria

ABSTRACT

In recent years, climate change has become a more serious issue than any other environmental problem. One of the main concerns is the risk it poses to food production in developing countries, due to heavy reliance on agriculture. This study examined the influence of climate change on net revenue from maize production in northern Nigeria and the role of socioeconomic factors on farm adaptation. The results are intended to inform farmers, researchers and policy makers, on the impact of climate change on net revenue from maize production in the study area. A farm survey of the respondents found that, there was a significant correlation between climate change (temperature and rainfall) and net revenue from maize production. Results of the study revealed that precipitation plays a more important role as a determinant of farm net revenue, as against temperature, particularly during the rainy season. Furthermore, socioeconomic factors were found to have a mix effect on net revenue. In conclusion the study found that climate change affects net revenue from maize production in the area and there is the need to focus attention on the greatest environmental threat of our time, an issue that previous studies have not addressed comprehensively. The policy implications of the results, if carefully evaluated are expected to serve as a framework for developing climate change adaptation and mitigation options in the study area.

Keyword: Impact; Climate change; Net revenue; Maize; Northern Nigeria