

## Tropentag, September 14-16, 2022, hybrid conference

"Can agroecological farming feed the world? Farmers' and academia's views"

## Effect of information sources on the adoption of adaptation strategies for climate change

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## Abstract

It is expected that the world's population will continue to grow in the coming years, putting additional demand and pressure on agricultural production. To meet the challenge of improving agricultural production despite the negative effects of climate change, farmers must adopt some adaptation strategies. This study aims to examine the effects of information sources on adopting climate change adaptation strategies. The study was conducted among 197 maize farmers in Oyo and Ibadan/Ibarapa Agricultural Development Zones in Oyo State, Nigeria. Findings revealed that the majority (94.4%) of the farmers believe that climate change is an issue affecting their production, and 89.8% of the farmers agree that adopting adaptation strategies for climate change will help increase their productivity and profitability. Probit regression model used to analyse the effect of information sources on the adoption of adaptation strategies revealed that extension agents have a significant positive impact on the adoption of intercropping, irrigation, cultivation of improved cultivars, and livestock rearing. Information sourced from agricultural development programmes has a significant effect on the adoption of irrigation and livestock rearing. Similarly, information sourced from the Ministry of Agriculture has a significant impact on the adoption of irrigation and livestock rearing, information from the Ministry of Environment positively affects the adoption of organic fertiliser and the cultivation of improved cultivars. Farmers' associations as information sources were significant in adopting intercropping, cultivation of improved cultivars, and agroforestry. Friends and family also positively affected the adoption of intercropping and agroforestry. The findings approved the importance of receiving information from various sources in adopting adaptation strategies to mitigate the effect of climate change. We recommend resources should be made available to extension agents, as they have the greatest influence on whether farmers will adopt adaptation strategies to help mitigate the negative effects of climate change. This would ensure that relevant information is delivered in an efficient and timely manner thereby increasing productivity and profitability.

 $\textbf{Keywords:} \ \text{Adaptation strategies, climate change, farming households, information, probit regression model}$ 

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