

## Farmers' Perception of the Effects of Climate Change on Rice Production in Nasarawa State, Nigeria

**Authors :** P. O. Fatoki, R. S. Olaleye, B. O. Adeniji

**Abstract :** The study investigated farmers' perception of the effects of climate change on rice production in Nasarawa State, Nigeria. Multi-stage sampling technique was used in selecting a total of 248 rice farmers from the study area. Data for the study were collected through the use of interview schedule. The data were analysed using both descriptive and inferential statistics. Results showed that majority (71.8%) of the respondents were married and the mean age of the respondents was 44.54 years. The results also showed that most adapted strategies for mitigating the effects of climate change on rice production were change of planting and harvesting date (67.7%), movement to another site (63.7%) and increased or reduced land size (58.5%). Relationship between the roles of extension agents in mitigating climate change effects on rice production and farmers' perception were significant as revealed Chi-Square analysis from the study ; Dissemination of information ( = 2.16,  $P < 0.05$ ) and use of demonstration methods ( = 2.15,  $P < 0.05$ ). Poisson regression analysis revealed that educational status, farm size, experience and yield had significant relationship with the perception of the effects of climate change at 0.01 significance level while household size was as well significant at 0.05. It is recommended that some of the adaptive strategies and practices for mitigating the effects of climate change in rice production should be improved, while the extension outfits should be strengthened to ensure adequate dissemination of relevant information on climate change with a view to mitigate its effects on rice production.

**Keywords :** perception, rice farmers, climate change, mitigation, adaptive strategies

**Conference Title :** ICACC 2015 : International Conference on Agroforestry and Climate Change

**Conference Location :** Barcelona, Spain

**Conference Dates :** August 17-18, 2015