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"Global food security and food safety:
The role of universities"

## Assessment of Adaptation Strategies to Climate Change and Fish Farmers Production in South-West Nigeria

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## Abstract

Fish is a major source of animal protein and it is a very important aspect of agriculture. Food security is when a household has physical and economic access to all classes of food stuff needed by every member of that household. Animal protein is needed by various categories of members of a household in various quantities. Talking about food security and safety, importance of fish as a source of animal protein cannot be over emphasized. Climate change is a major problem which has led to low fish production to fish farmers in the study area. Fish farmers must have developed some adaptation strategies to climate change challenge in the study area. The study was designed to examine the socio-economic characteristics of the fish farmers, identify various adaptation strategies to climate change by fish farmers, examine the perception of farmers to climate change and assess the productivity of fish farmers as a means of achieving food security in the study area. The study was carried out in the southwest region of Nigeria. A purposive sampling procedure was used to select Ondo and Ogun States and 160 respondents were purposively selected due to their involvement in fishing activities in the region. Data was analysed with descriptive and regression analyses. Male farmers dominate the respondents, most are single and majority are Christian. It was also revealed that main purposes of production are household consumption, commercial and as hobby. Most of them engage in both catfish and tilapia production. Result reveals that adaptation strategies employed by fish farmers in the study area are construction of barriers, improving water source and conservation of fish species. Moreover, regression analysis result showed significant relationships between educational level and productivity at 10% level of significance. It was recommended that government at all levels should give incentives and information on climate change and its adaptation strategies to fish farmers to enhance their production and thereby ascertain food security. Universities should make the results of their research available in form of technological package which should be made available to farmers through their extension service delivery to enhance food security.

**Keywords:** Adaptation strategies, climate change, productivity and food security