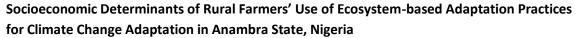
Insights in Aquaculture and Biotechnology



Umunakwe*, P.C.,Ozor ** Nicholas, Aja*, O.O., Ibeh*, M.A. & Chukwu-Okonya*, C.R.

- *Department of Agricultural Extension, Federal University of Technology, P.M.B. 1526, Owerri, Nigeria
- **African Technology Policy Studies Network, 8th Floor, Chancery Building, Valley Road, P.O. Box 10081 00100, Nairobi, Kenya



ABSTRACT:

The study analysed socioeconomic determinants of farmers' use of ecosystem-based adaptation practices for climate change adaptation among rural farmers in Anambra State, Nigeria. A sample of 150 rural farmers participated in the study. Data were collected using structured questionnaire and analysed using mean, percentages and bar charts. It was found that about 93% of the farmers was aware of ecosystem-based adaptation practices; intercropping (96%), crop diversification (95%), manual weeding (88%), mulching (83%) and contour cropping across hills (83%) constituted the dominant ecosystem-based adaptation practices used. The practices were mainly effective in reducing loss of soil fertility (\bar{X} = 2.5), reducing soil degradation (\bar{X} = 2.5), reducing pest attack (\bar{X} = 2.4), increasing crop yields ($\bar{X} = 2.3$), reducing rate of evapotranspiration (\bar{X} = 2.3) and reducing rate of spoilage of agricultural produce (\bar{X} = 2.2). Multiple regression analysis result showed that at p-value < 0.05, R^2 = 44 and F-value = 6.816, age (p-value = 0.000) and monthly income (p-value = 0.001) determined the farmers' use of ecosystem-based practices for climate change adaptation in the state. The use of the practices was constrained by poor extension coverage (\bar{X} = 4.9), inadequate capital (\bar{X} = 4.8), poor government policies (\bar{X} = 4.4) and limited information on ecosystem adaptation (\bar{X} = 3.9). The use of innovative strategies for agricultural extension delivery was recommended.



Biography:

Polycarp Chika Umunakwe is currently pursuing his PhD at the University of Nigeria, Nsukka. He has a Master of Science Degree in Agricultural Extension Administrationfrom the University of Nigeria, Nsukka and is a tutorial staff in Department of Agricultural Extension, Federal University of Technology, Owerri, Nigeria. He has published over 20 papers in reputable journals.

- 1. Applications of Materials Science and Engineering in the Pharmaceutical Industry; a Short Review and the Current State in Nigeria
- 2. Properties Evaluation Of Interior Decorative Emulsion Paints Produced Using Local Extenders Obtained From Akure, Ondo State, Nigeria
- 3. Mechanical properties and microstructure of hybrid vulcanized natural rubber filled with carbon black and Nano-CaCO3 from achatina shells
- 4. Evaluating the Extender Characteristics of Some Local Materials in Akure, Ondo State, Nigeria for Applications in the Paints Industry
- 5. Evaluating the properties of nanoparticles of calcium carbonate obtained from the shells of african giant land snails (Achatina achatina) via in situ deposition technique

14th International Conference on Agriculture & Plant Science, Webinar, June 22-23,2020

<u>Umunakwe*</u>, P.C.,Ozor ** Nicholas, Aja*, O.O., Ibeh*, M.A. & Chukwu-Okonya*, C.R, <u>Socioeconomic Determinants of Rural Farmers' Use of Ecosystem-based Adaptation Practices for Climate Change Adaptation in Anambra State, Nigeria, agrisummit2020,14th International Conference on Agriculture & Plant Science, Webinar, June 22-23, 2020, pp.</u>