

ASSESSMENT OF PUBLIC PERCEPTION OF CARBON CAPTURE AND GEOLOGIC STORAGE TECHNOLOGY AS A MEANS OF CLIMATE CHANGE MITIGATION IN NIGERIA

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Abstract

The rising concentrations of carbon dioxide (CO₂) in the earth's atmosphere are enhancing the natural greenhouse effect, leading to global climatic change. The need to address this climate change has gained momentum in recent times, and as a result emerging climatic change-mitigation technologies are being identified. Carbon Capture and (Geologic) Storage (CCS) is a technology that is seen as being feasible for the mitigation of CO₂ emissions. However, public acceptability is widely recognized as an important element in determining the fate of new technologies and CCS is not an exception, therefore, the purpose of this study includes collection of information about public understanding of global warming; levels of public attitudes toward climate change-mitigation technologies; and awareness of CCS. This assessment was completed using conventional survey technique applied amid 2000 laypeople in Ilorin metropolis, Nigeria. The results show moderate (36.9%), very low (3.1%) and extremely low (0.05%) levels of awareness, recognition or understanding of global warming, existing climate change-mitigation technologies and CCS respectively. The results are a first-effort to elicit public views and will need to be extended to other cities and repeated at regular intervals with larger sampling size. Since the understanding of public attitudes on global warming in general and preferences and knowledge on technologies and systems to mitigate anthropogenic emissions of greenhouse gases is important, this study would aid decision makers developing mitigation and adaptation strategies and enhance communication with the public in the context of Science and Technology Policy and Sustainable Development in Nigeria.

Keywords: Greenhouse Effect, Climatic Change, Mitigation, Carbon Capture and Geologic Storage