

Abstract

Centred on occurrences of pipeline explosion and oil spills in a host community; a supervised classification technique, of land use/land cover variation detection was carried-out, with Landsat imageries of three time intervals, to determine the percentage of variation between the time intervals. Also carried-out, was a random sampling of questionnaires; dispatch to acquire respondents' feedback. It addressed respondents' demographic and social-economic composition of the sample population, the perception on the cause and the impact, and the effect of the oil spill and finally considered the possible solutions. Information was subjected to descriptive analysis and an F-test statistical analysis in a 95% confidence interval. Reports showed that land use/land cover classification had undergone series of percentage variation within the time interval considered, indicating 'remarks' of a rise or a decline. While, the measure of insecurity (of about 36.7%) is a prevailing element to the unceasing attack on oil pipelines and only a sustaining security measure (of about 40.8%) will evidently pave a way-out. Wherefore advocating for community based policing, and a comprehensive technological sensor system, for monitoring of oil pipelines/facilities across the Nation.

Keywords

land use/land cover variation; respondents' feedback; test hypothesis.