

ABSTRACT

This study is an attempt to exemplify the possible application of Geoinformation technology for identifying vulnerable settlements within crude oil pipeline corridor in Nigeria. Selected communities had been affected by conflagration from burst pipelines earlier in the decade. Data used for the study were derived from Landsat ETM+ (2002) and 1:25,000 topographic map of the Amuwo-Odofin Local Government area in Lagos State. The data were processed and analysed in Erdas Imagine (version 9.2) and ArcGIS (version 9.0) software. The study showed that the oil pipeline in the study area is exposed, hence its vulnerability to vandals, whose activities resulted to the conflagration. It also revealed that a number of settlements exist within the oil pipeline corridor that probably increased the casualties in the previous disaster. The study concluded that remote sensing and Geoinformation techniques are efficient for providing for the management of pipeline corridors.

Keywords: Oil pipeline corridor; Geoinformation; Vulnerability mapping and Disaster management