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## 22nd SYMPOSIUM ON SPACE ACTIVITY AND SOCIETY (E5) Verifying and Validating the Impact of Technology Transferred from Space (2)

Author: Mr. Taslim Alade National Space Research and Development Agency (NASRDA), Nigeria

Dr. Matthew Adepoju National Space Research and Development Agency (NASRDA), Nigeria

## DEVELOPING A LAND INFORMATION SYSTEM FOR POVERTY ALLEVIATION THROUGH GEOGRAPHICAL INFORMATION SYSTEM AND COMMUNITY REMOTE SENSING

## Abstract

Poverty is a livelihood condition estimated to affect more than 1.2 billion people around the globe. Amongst those suffering, approximately 75 per cent are people living and working in rural areas (International Fund for Agricultural Development (IFAD, 2001). The progress of developing countries and poverty problems are exacerbated by the alarming rate of population expansion, especially in the urban slum, the exploitation and degradation of land and natural resources, health epidemics, and sustained political instability. The inability of the world's poor to gain formal recognition of their property rights is a major stumbling block to alleviating poverty. Almost everywhere in the world the poor have one asset in common, which is the land they occupy. Unfortunately in Nigeria, very few of these people have ever received any type of legal recognition that the land they occupy is theirs, especially in situations where the ownership is informal or based on customary forms of tenure. This research utilised land information system with community remote sensing to establish a land administration framework for leading to government recognition and issuance of right of occupancy which enables owners to approach financial institutions for soft loans to aid business activities thereby increasing the economic status of the poor in the study area. Community remote sensing is a new field that combines remote sensing with citizen science, social networks, and crowd-sourcing to enhance the data obtained from traditional sources. It includes the collection, calibration, analysis, communication, or application of remotely sensed information by these community means. Effective and efficient land administration provides a central framework for a country's capacity to deliver economic growth and sustainable development for poverty alleviation. Secure land tenure is important for economic, social and environmental development and is central to secure shelter, easy access to investment and credit opportunities. This research clearly shows the importance of space applications as the alternative path to poverty reduction in rural and urban areas in Nigeria.