## Towards the Development of Land Information Management for Sustainable Development in Delta State, Nigeria

Angela Kesiena Etuonovbe Etuonovbe and Francis I. Okeke (Nigeria)

**Key words:** Cadastre; Land management; Spatial planning; Land Administration, Database

## **SUMMARY**

The world is becoming a global village with the use of modern information technology; it will seem that people should be more civilized and better informed especially as it relates to land. Land is a key resource without which humankind cannot survive and is an essential component for the creation of wealth. Delta State is one of the Oil Producing States in Nigeria and is endowed with many resources, land inclusive. It will suffice to note that the Ministry responsible for land management has an ineffective cadastral information system, as it still operate with analogue maps, causing information processing to be slow, inefficient, duplicated, or even loss of information. Monitoring of land information is difficult within the Ministry as it is redundant and distributed in different offices. It is against the above background that this study was conducted in other to have accurate and up-to-date land information that can be used for planning and management in the State. This will allow effective use of the information and facilitate the decision making process. The study was carried out in two Phases. First, a Needs Analysis was conducted in the six (6) Ministries that make use of land information, and secondly, a geometric data was captured and creation of digital data base. For the Needs Analysis, in order to facilitate easy administration and collection of questionnaires, a total number of 72 respondents were chosen. 12 for each Ministry and the stratified random sampling technique were employed to determine the sample size, which were 60. From the result, it was observed that all the Ministries use paper copies of existing data or maps in keeping land records, they were in support of a digital database and would want to be trained. The second phases was geometric data capture by ground surveying method and creation of digital database using geometric and attribute data. Queries were done for; parcel ownership, buildings, commercial facilities, parcels with certificate of occupancy, existing roads, liable to flood, with farmland and undeveloped plots. From the results obtained, ease and speed of data manipulation, it became obvious that there is need for a digital up-to-date map in the State. Hence the study achieved its purpose of promoting good land management system that will enhance

Towards the Development of Land Information Management for Sustainable Development in Delta State, Nigeria (11803)

Angela Kesiena Etuonovbe Etuonovbe and Francis I. Okeke (Nigeria)

decisions for proper land allocation for good use, thus improving the elimination of data redundancy among departments, resulting in decreased operating costs and increased operating efficiencies.
Towards the Development of Land Information Management for Sustainable Development in Delta State, Nigeria (11803)  Angela Kesiena Etuonovbe Etuonovbe and Francis I. Okeke (Nigeria)

FIG Working Week 2023 Protecting Our World, Conquering New Frontiers Orlando, Florida, USA, 28 May–1 June 2023