Nexus of Geospatial Problems, Emerging Geospatial Technologies, Applications and Sustainable Survey Practice in Nigeria

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SUMMARY

The practice of Surveying and Geoinformatics in Nigeria had been confined to a limited scope of practice by the practitioners, thus not making themselves entirely relevant to the geospatial information needs for the development of the nation. Such practice cannot be sustainable over time and can lead to the diminishing role of surveyors in society. This discourse serves as a springboard to providing sustainable survey practice in Nigeria. The prevailing increase in development problems in Nigeria is initiated by stress in the land, air, and water due to the rapid increase in population growth and lack of proper management of the natural and human resources of the country. These problems are geospatial in nature and require the use of geoinformation as a critical input in the development decision process, especially in the implementation and achievement of Sustainable Development Goals. Surveying practice in many parts of the country is characterized by a limiting scope that is not unconnected with insufficient knowledge capacity and geospatial skills. Many private practicing surveyors engaged majorly in the cadastral aspect of surveying practice and plan production. The statutory offices/ units are struggling with core datasets production due to a lack of development concepts, inappropriate methodologies, and a slow process of map production. The present public and private sectors have the greatest and most effective roles to play considering the importance of their need in securing a better future for surveying in the country and changing the narrative of the present limited scope of survey practice. The sustainability of Surveying and Geoinformatics practice in Nigeria requires the capacity of surveying practice for continuance into the long-term future as a contribution to the implementation and achievements of Sustainable Development Goals. This can in turn enhance a sustainable survey practice by enlarging the scope of practice thus increasing the breadth and diversity of the practice. In order to protect our environment and sustainably manage our resources, surveyors need a good grasp of geospatial technology applications and spatial thinking/ reasoning to overcome the traditional mapping concept still so often found in the definition of products. Geomatics education

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needs to be tailored through the review of the curriculum to accommodate the needed change. There should also be a review of the nature of the prevailing surveying practice and the laws and regulations guiding such practice to create an enabling environment that will widen the scope of surveying practice in Nigeria.
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