

Understanding Informal Settlements: The Role of Geo-Information Tools

Authors : Musyimi Mbathi

Abstract : Information regarding social, political, demographic, economic and other attributes of human settlement is important for decision makers at all levels of planning, as they have to grapple with dynamic environments often associated with settlements. At the local level, it is particularly important for both communities and urban managers to have accurate and reliable information regarding all planning attributes. Settlement mapping, in particular, informal settlements mapping in Kenya, has over the past few years been carried out using modern tools like Geographic information systems (GIS) and remote sensing for spatial data analysis and planning. GIS tools offer a platform for integration of spatial and non-spatial data as well as visualisation of the settlements. The capabilities offered by these tools have enabled communities to participate especially in the planning and management of new infrastructure as well as settlement upgrading. Land tenure based projects within informal settlements have also relied on GIS and related tools with considerable success. Additionally, the adoption of participatory approaches and use of geo-information tools helped to provide a basis for all inclusive planning thus promoting accountability, transparency, legitimacy, and other dimensions of governance within human settlement planning. The paper examines the context and application of geo-information tools for planning within low-income settlements of Kenya. A case study of Kiambiu settlement will be used to demonstrate how the tools have been applied for planning and decision-making purposes.

Keywords : informal settlements, GIS, governance, modern tools

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