

Geographical Information Infrastructure Applications in Urban Land Management in Tanzania: A Strategy to Enhance Communities' Decision Making in Land Regularization Process in Informal Settlements

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SUMMARY

Community involvement in land regularization process as an urban land management entity in securing tenure decisions process integrations with Geographical Information System (GIS) has long been recognized and discussed in national and international fora for land administration improvement in informal settlements. The challenges emanating from the discussions among others include limited application of GIS tools to create habitable human shelter in the context of urban environmental change, ineffective use of GIS technology in decision making at local level, lack of updating the index numbers to reflect migratory trends in urban areas and inadequate recording of changes of housing ownership in informal settlements seems unmet (De soto, 1996, Alfonsin, 1997). This paper contributes to this evolving debate focusing on how local community participated in land regularization process and effectively used geographical information system in improving land development and management in their neighborhoods which was designated as hazard lands by 1978 Dar es Salaam master plan, the case of Ubungo Darajani in Dar es Salaam city. Specifically, explores policy and legislation environments potential for enhancing GIS applications in Land Regularization, explore information requirement in land regularization process and output reached, documents process involved in developing GIS Infrastructure in Land regularization process. Equally importance, explore software-enablement, data structure formulation and information collected towards enhancing GIS utility for Community decision making and establish strategy for effective use of GIS infrastructure in land regularization potential for effective land management.

The study shows that that unless land development and management activities ongoing in informal settlements are closely monitored and regulated as the settlement grow, it will be costly-socially and economically to retrofit if GIS application in coordinating, controlling and monitoring land is minimal among interested stakeholders taking decision in the process of land management.