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Capacitating local governments for the digital earth vision: Lessons learnt from the role of municipalities in the South African spatial data infrastructure

Cooper Antony K
Council for Scientific and Industrial Research
Pretoria, 0001, South Africa
acooper@csir.co.za

Abstract

The Digital Earth vision foresees the availability and accessibility of geospatial information to achieve the goals of sustainable development, economic growth and social well-being. In the case of urban areas, upto-date geospatial information is essential for managing a city towards achieving these goals. The rapid shift from rural to urban areas globally puts pressure on local governments and they often struggle to find and organise the resources required to collect and maintain geospatial information that can help to address urban growth challenges. A spatial data infrastructure (SDI) can facilitate the availability and accessibility of geospatial information towards addressing national objectives, however, the involvement of local governments in an SDI can be a challenge. In this paper, we critique the role of municipalities against the backdrop of the developments of the South African SDI (SASDI) to date. The critique identifies five high-level shortcomings of the SASDI that have led to the limited participation of municipalities. Based on the shortcomings, we provide recommendations for capacitating municipalities through SASDI so that the Digital Earth vision can also be achieved for municipalities. These recommendations are aimed at involving the local sphere of government in a national SDI and are equally applicable to other countries.