Spatial Data Infrastructures: African Experiences

Boipuso NKWAE and Dr Sue NICHOLS, Canada

ABSTRACT

There is general agreement that spatial data is a key to sustainable resource management and overall economic development of a country. It therefore follows that the development of spatial data infrastructures (SDIs) provides the underlying information for the decision-making process. While the basic concepts behind SDI might be understood by a fair majority of the people, there is still confusions as regards such terms as cadastres, geographic information systems (GIS) and spatial data infrastructures. Hence there is a need for clarification of these concepts. We need to ask ourselves whether cadastres are really part of SDIs, or whether SDIs are nothing more than some kind of improved or advanced GIS network. These terminological confusions are not helping in raising the political support and level of awareness needed for the introduction of SDIs in developing countries. Although the attributes of SDIs are well defined, and agreed, the achievement of such an ambitious concept has not been easy in Africa.

This paper will describe the concepts of spatial data infrastructures. It will also review the developments in SDI which have taken place in Africa, and assess the particular African opportunities, challenges and implementation issues. Using examples from selected African countries, SDI developments in the continent will be evaluated. The paper will then argue that even though much of the region is not prepared for a full online SDI implementation, organizational arrangements should be put in place to ensure full participation when other physical infrastructures become available.

CONTACT

Boipuso Nkwake
University of New Brunswick
Fredericton
CANADA
E-mail: boipuso@unb.ca

Dr Sue Nichols
University of New Brunswick
Fredericton
CANADA
E-mail:nichols@unb.ca