

Interfacing ICT and Indigenous Knowledge Systems for Sustainable Environmental Management in South Africa

Joyce Myeza and Hassan O. Kaya

University of KwaZulu-Natal, South Africa
E-mail: kaya@ukzn.ac.za

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ABSTRACT The paper uses a survey of cases from South Africa to interrogate the prospects and challenges of using Information and Communication Technologies (ICT) in Indigenous Knowledge Systems (IKS) for sustainable environmental management. The examples demonstrate the practical application of ICTs in collecting, storing and disseminating indigenous knowledge for culturally specific environmental issues. The paper advances the view that community-based ICT centres could be useful tools for facilitating the transmission of culturally specific environmental information and the promotion of interface between indigenous and other knowledge systems for community-based environmental management. This implies that ICT services should be designed to enhance these processes and community needs. This will make ICT more relevant, cost effective hence locally manageable and sustainable. Moreover, since most of the IKS in local communities are orally transmitted, the focus should be made on technologies that promote oral interaction such as audio-visual technologies and text to speech.