ABSTRACT

The paper was presented at a workshop concerning the establishment of a project to develop simulation models of natural resources use in the Mount Kenya region of Kenya, in order to: assess the effects of land use change on the water and soil resources; identify the potential for conservation and management techniques; and assist in planning for sustainable use of water, soil and vegetation resources. The model is planned to be developed with a number of interchangeable elements, which cover three different scales: single plot, small catchment and river basin. The first phase of the project concentrates on the Mt Kenya-Laikipia area with joint research being carried out by the Universities of Bern and Nairobi. The model developed at Mt Kenya will be applied to other African mountain systems as a tool to aid sustainable management. The project examines the limited use of computers in developing countries and highlights the potential of geographical information systems in combination with computer simulation models. The strengthening of links between Northern and Southern research facilities is considered a highly beneficial outcome of the project.