

**Human-wildlife interactions and their implications on sustainability of
wetland ecosystem in Kilombero valley, Tanzania**

Magdalena Raymond

Master of Science in Natural Resources Assessment and Management

University of Dar es Salaam, Institute of Resource Assessment , 2015

This study assessed human—wildlife interactions and their implications on the sustainability of wetland ecosystem in Kilombero Valley. The objective was to analyse uses of the wetland ecosystem amongst human and wildlife species in Kilombero Valley, examine human-wildlife interactions in the valley, and analyse the level of human-wildlife interactions and their impacts upon wetland sustainability in the Kilombero valley. Participatory Rural Appraisal (PRA) methods, questionnaire survey and Geographic Information Systems (GIS) were used to provide information on human—wildlife interactions, trend in ecological changes and their implications on the sustainability of the wetland ecosystem. Findings from this study revealed that there had been negative changes in natural wildlife habitats in the wetland ecosystem between 1975 and 2010 in the study area. It was found that human-wildlife interactions, which cause degradation of wildlife habitats in the wetland, were associated with human activities in the wetland. Local communities were blaming conservation activities for denying people's access to traditional and legitimate rights on wetland resources. As a result, they were encroaching wetland in search of virgin land for agriculture and pastureland for grazing. These activities resulted into the overall change of wetland resources and increasing human-wildlife interactions. Sustainable mitigation measures such as integrated wetland management system for addressing human wildlife interactions in wetland resources are recommended by this study for effective and sustainable management of wetland resources. Some of these measures include; alternative sources of domestic heating and cooking energy for adjacent communities, improvement of agricultural productivity to reduce shifting cultivation, proper allocation of land for livestock keeping including grazing areas, improve

communities participation in wildlife resources conservation and management, and improving awareness of communities on the importance of wildlife resources conservation and management.