

Intergrated catchment management : a case of Ndembera Sub-Catchment of Great Ruaha river in the Rufiji basin, Tanzania

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Master of Intergrated Environmental Management (MIEM)

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Effectiveness and sustainable natural resources management is necessary when there is a need to ensure sustainable development of the catchments. However, efforts of managing natural resources that are found within sub-catchments seem to demonstrate inappropriate practices especially when considering the issues of natural resources use. This has led to environmental degradation in most of Tanzania catchments. This study therefore investigated the available natural resources, natural resources use and its environmental impact as well as the relationship between appropriate knowledge and skills on resources use, community participation, Acts /Policies and Regulations, and means of interaction which together, can address the issue of developing improved management strategy and sustainable utilization of the natural resources in sub -catchments. The study focused on three target communities in the Ndembera sub - catchment, namely Udumka, Lugoda Lutale and Tambalang'ombe, and it involved documentary review, questionnaire administration, interviews and observation. The study has shown that natural resources (land, water and forest resources) are available and play a critical role in the lives of people living around Ndembera sub-catchment. Moreover, environmental degradation which seem to persist (e.g. soil erosion, reduction of water in sources and depletion of soil fertility), has been caused by the people in these communities who lack resources conservation knowledge and skills as well as lack of suitable enforcement measures, of natural resources conservation policies and legislations. This study has therefore developed an integrated catchment management model as management tool which if applied may address the environmental problems being faced by the catchment.