

**GENDER, ENVIRONMENTAL MANAGEMENT AND THE WATER QUALITY IN  
THE SAKUMO CATCHMENT**

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**ABSTRACT**

The Sakumo Lagoon is located three km west of Tema. Diverse economic activities such as estate housing development, fishing, fish processing, agriculture, fuelwood harvesting and sand and gravel mining occur in the catchment; activities which are both a source of livelihood for the people and a potential source of catchment degradation if not undertaken on a sustainable basis. The major streams that feed the lagoon, which are, the Onukpawahe, Mamahuma and Dzorwulu are major conduits of pollution to the lagoon. Nowadays, there is some recognition of the fact that women, as consumers of resources, are the first victims of environmental crisis. The literature on environment and development has particularly stressed that women's work is often linked to the environment and that much of this work is made harder through environmental degradation. This study was therefore conducted to investigate the quality of water in the Sakumo catchment, to determine the role of gender in environmental management and also to identify sensitive land use activities that impact negatively on the environment. Water and sediment samples were collected from eight selected sites over a period of six months. The water was analysed for cations, anions, nutrients and trace metals. The sediment samples were mainly analysed for nutrients and trace metals. Benthic and zooplankton samples were also taken to determine the effects of pollutants on the faunal composition at these sites. A social survey was conducted in some of the major communities in the catchment, by way of questionnaire administration, observations and interviews, to determine gender equity in resource use, perceptions and knowledge of environmental issues. The major pollutants into the Sakumo Lagoon were identified to be, organic waste as well as coliform bacteria. The sediment load in the catchment was also very high. The faunal composition of the water courses is linked to the quality of water. The entry points of pollutants have been identified as mainly by surface runoff into the tributaries and the tributary most implicated was Dzorwulu. Sewage and refuse disposal facilities in the catchment were highly inadequate. As a result of this, water and land in the Sakumo catchment are used as waste disposal sites and the tributaries practically serve as gutters and sewers for the towns and villages through which they pass and this has impaired their quality so that they are no longer usable in some instances, for the people's needs and

purposes. It was evident from the study that the educational and income levels of male respondents were generally higher than those of the females. The major resources obtained from the catchment were identified by the respondents as being fish followed by fuelwood. Both the males and females identified indiscriminate sewage disposal as being the major environmental threat. Sediment generating land use categories were identified as being the domain of the males while the refuse disposal and fuelwood harvesting were linked to the females. There were no major conflicts in gender roles empowerment. From the study it was recommended that there should be regular monitoring of the water quality of the Sakumo Lagoon and its tributaries especially the Dzorwulu tributary which seems to be the tributary that contributes the most pollution to the lagoon. Planners ought to give priority attention to waste management and women's education as this study indicates that environmental awareness among the women is relatively low.

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