

## **Issues related to the Land use and Water Resource Management in Sri Lanka (A case study of Mi Oya River basin in Kurunegala District)**

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### **Abstract**

The radial network of rivers begins in Central highlands in Sri Lanka. About 103 distinct river basins are covering 90 percent of the island. The Southwest quarter of the island has seven major basins including Kelani Ganga, Kalu Ganga, Maha oya, Attanagalu oya, Gin Ganga, Nilwala Ganga, and Bentota Ganga. Accordingly, river basins are the most significant ecosystem in biodiversity at present. As well as the problems of managing water efficiency and equitably have become an urgent policy and research issue in recent years for Sri Lanka. Due to river basins are more efficient in rural development of the country, it is very important to have a proper management procedure in order to address the issues of land use and water resource practices in Sri Lanka. This study aims to identify the issues related to land use and water resource management for the proper land and water utilization practices in Mi Oya river basin while research questions seek the answers for issues regarding land use and water resource management. Both quantitative and qualitative data collection methods used through the questionnaires, observations, structural, and semi-structured interviews. Among the descriptive and statistical data analytical methods, statistical analysis is highly used for the data analysis and discussion. The results revealed that paddy cultivation is the major land use practice and livelihood method in this area based on Mi Oya. But due to the lack of enough water condition and brackish water, paddy cultivation has to do only one season among the Yala, Maha and Intermediate season and it's become non-profitable also. Therefore, the identification of additional water resources and water purifying can be identified as effective solutions for the recognized issues in this case study.

**Keywords:** *Land use, River Basin, Issues, solutions, Water Resource Management.*

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