

## **AN ECOLOGICAL SCIENTIFIC STUDY ON THE USE OF DISASTER MANAGEMENT TO CURB ILLEGAL BANK MINING IN DEDURU OYA RESERVOIR, SRI LANKA.**

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Deduru Oya Reservoir, which is one of the main water basins in Sri Lanka, prepares the dams and carries the water to the farmlands. There is a lot of damage to the environment due to the abundance of bank mining activities around Deduru Oya, which is an area with a lot of human activities. Sand smuggling related to Deduru Oya is a strong reason for this. The main objective of this research is to study the use of disaster management to curb mining on both sides of Deduru Oya. The sub-objectives here are to observe the occurrence of environmental scientific problems due to long-term bank mining and to study people's understanding of the disaster management cycle. The research questions that the researcher was interested in are whether soil erosion is increasing due to bank excavation and how disaster management is addressing the bank erosion situation. Qualitative research methodology has been used for the study. Grounded theory was used for this. Questionnaire and interviews were used as primary data source. Research studies, books, newspapers and magazines were used as secondary data sources. As the field of study, the Pallama area belonging to the Anamaduwa Regional Council around Deduru Oya has been used because bank mining can be widely recognized. Under purposive sampling, a group of seventy people were selected from among the families living in Pallama village near Deduru Oya, one person from each family. Due to the long-term occurrence of sand smuggling and illegal bank mining in the vicinity of Deduru Oya, many low-lying areas are flooded and the environmental balance is changing. Sand smuggling is a function of political power under the capitalist class and bureaucratism. The results of this research found that the failure of the disaster management cycle of preparedness, response, recovery, and mitigation, as well as lack of proper awareness of disaster warning signs and people's lack of understanding about it, lead to the rise of this disaster situation is between. By intensifying the awareness of the public sector as well as the private sector about environmental management, measures can be taken to control the mining of the banks of Deduru Oya. It can be concluded that environmental management is timely and practical through the proper use of the disaster management cycle by banning illegal sand dumping and implementing proper environmental management policies.

**Keywords** - *Deduru Oya, bank dredging, mitigation, ecological balance, disaster management*

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