

ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACTS OF DEDURU OYA MULTIPURPOSE PROJECT

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ABSTRACT

Deduru Oya reservoir project is a remarkable achievement in Sri Lanka which was implemented by the Department of Irrigation. Although government policies are encouraged to promote socio-economic development and human welfare through the construction of dams, unexpected environmental and social problems have been arisen. Therefore, this study aimed to identify environmental and socio-economic impacts of Deduru Oya multipurpose project. Descriptive research design was applied to collect primary data using survey method, interviews and observation. Simple random sampling technique was applied to select the sample and semi structured questionnaires were provided for 37 respondents in Pothuwewa, Vilgamdematawa, Welpothuwewa and Thelahera study areas. Primary data has analyzed using descriptive statistics in SPSS statistical package. The results revealed that both positive and negative environmental and socio-economic impacts have been emerged with Deduru Oya project. Income generation, creating new employment opportunities, contribution to increase the food production, starting the inland fishing activities and women participation for them are major positive impacts. Results reveals that flood risk, soil erosion, destroying biological environment, illegal sand mining and discharge waste water into the reservoir are the major negative environmental impacts. More than 85% of the respondents stated that illegal sand mining has been adversely influenced for the sustainable environmental conservation. Loss of farm lands and houses, breakup communities, poor infrastructure facilities for resettled areas and human-elephant conflict are negative socio-economic impacts faced by the residents. Therefore, necessary policy options should be prepared for sustainable reservoir management and providing the infrastructure facilities for the resettled community.

Keywords: Deduru Oya, Environmental, Multipurpose project, Socio-economic, Sustainable management