

Challenges for Implementing an Integrated Environmental Management for Sustainable Development in Attanagalu Oya River Basin

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Attanagalu Oya River Basin can be recognized as an area with a number of environmental issues since the distant past. Such as environmental pollution, resource depletion, deforestation, disasters (floods and drought), land use and land cover changes, and geomorphological landform changes. The previous research that has been done regarding this area explained the weakness of the existing management strategies as the main reason for not managing this situation and importance of effective environmental management. The concept of integrated environmental management (IEM) is a new concept that can be used for an effective environmental management and sustainable development. This research is mainly based on secondary data that was obtained from research papers, reports, and institutional documents. To explore key challenges and solutions to establish an IEM framework in Attanagalu oya river basin a literature review was performed. The finding of the study was interpreted using analytical diagrams and flow charts. According to the findings, there are eight key challenges were identified. Such as [1] problems in identifying environmental legislation, [2] communication issues, [3] lack of awareness of cost-effective methods, [4] process disruption, [5] prevailing socio-economic and political climate, [6] challenges associated with population growth, [7] globalized environmental issues, and [8] achieving national sustainable development goals (NSDGs). Further, it investigates the appropriate solutions that were made in order to overcome those identified challenges. Rising the awareness, environmental education, enhancing communication through new technologies, Cost Benefit Analysis (CBA), Environmental Impact Assessment (EIA), conducting new research, increasing community-based responsibilities and solutions, and proper NSDGs achieving techniques were identified as solutions for those challenges. There are many challenges in establishing an IEM framework for this area. But it is possible to propose solutions for these challenges by examining the factors influencing the emergence of these challenges. This theoretical study will help to enhance the understanding of the challenges in implementing the IEM framework for sustainable development in the Attanagalu Oya River Basin Area. It will create a better pathway for sustainable development in the river basin.

Keywords: Environmental management, Sustainable development, Integrated environmental management, Environmental impact assessment, Cost benefit analysis