

## Application of Ecosystem Approach to Management (EAM) to prepare a management plan to Anawilundawa Ramsar Sanctuary, Sri Lanka

### ABSTRACT

The Anawilundawa sanctuary was established on 11 June 1997 by the Department of Wildlife Conservation in Sri Lanka under the provisions of Fauna and Flora Protection Ordinance (FFPO), 2009 (Amended) considering its biodiversity and wetland values. This sanctuary was recognized as a wetland of international importance by the Ramsar Convention on 03 August 2001. The Anawilundawa sanctuary consists of a group of seven cascading reservoirs namely, Pinkattiya, Wellawala, Maradansole, Irakka Wela/Thairwewa, Anawilundawa, Suruwila, and Maiyawa. However, to date, no management plan has been prepared or executed. The current study therefore, propose an Ecosystem Approach to Management (EAM) based management plan for this protected area. Data were collected from the stakeholders and desk based studies. A total of 25 focused group interviews were held with a pre-tested questionnaire in the study area with the community and a total of 16 officials from government departments were interviewed. Threats and issues of the area were sorted through 2\*2 matrix analysis and stakeholders and their current relationships were analyzed by Venn diagramming. Arc GIS was used in mapping the management unit. Results indicated encroachment, unsustainable use of natural resources, no sound coordination between government agencies, the establishment and expansion of shrimp and prawn farming as the most significant and the highest impacting threats. The key stakeholders identified from the study were DWC, farmers, shrimp and irrigation Dept. The developed plan was for 5 years and the current sanctuary boundary formed the management unit. The plan consists of 3 goals 12 objectives and 18 activities. Additionally, plans were prepared for proposed constructions. A total of 16 indicators were also developed to assist monitoring and evaluation. The proposed funding to implement the project was sought from Government Treasury of Sri Lanka, Ramsar secretariat, UNDP, UNEP, SACEP, CMS secretariat. The plan also consisted of a monitoring and evaluation plan that has yearly internal monitoring and 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> year external monitoring. The communications regarding the management impacts are proposed to be

disseminated through a dedicated website, social media links, newsletter, leaflets and progress reports. The total cost of the proposed plan was 84,876,000.00.LKR. It is concluded that EAM planning is better approach to bring ecological and human wellbeing and good governance to managing protected areas with stakeholders participation.