Paper 24
Innovative Methods for Micro Catchment Conservation of Community Water Supply Schemes - A Case Study from Kandy District

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HIGHLIGHTS

- Degradation at micro-catchments leads to degradation of water quality and quantity of the existing water supply schemes.
- The demarcations of micro-catchments have been completed and existing threats and risks were identified.
- Some of major issues were addressed by conducting awareness programs,field inspections and training.

INTRODUCTION

Degradation of micro-catchments of Mahawali river basin in central hills of the country is one of the main issues identified by water supply authorities at present. This issue leads to degradation of water quality and quantity of water intakes of the existing water supply schemes. Among the water supply organizations , Community Based Organizations (CBOs) are the most vulnerable to face these issues with their lack of capacities, knowledge, resources etc., These situations have been identified during the Jalavahini programs conducted in Peradeniya and Kundasale in January 2013. During the Jalavahini program National Water Supply and Drainage Board (NWSDB) and Central Environmental Authority (CEA) Central province, joined to implement an action oriented catchment conservation program through selected CBOs in Kandy district with the assistance of Sri Lanka Water Partnership. The main objective of the program was to stabilize sustainable operation and management system of community water supply schemes by implementing catchment management programs in the Central Province.

METHODOLOGY

One day training program on catchment preservation for CBO leaders was conducted and six micro catchments were selected for preparation and implementation of catchment conservation program in Kandy district.

The target CBOs were selected from six micro-catchments of Mahaweli river basin on cluster basis. This selection strategy helps for easy operations for governing authorities as well as for CBOs for implementing and monitoring the catchment preservation activities. Also it has given choice to represent men and woman CBO leader from each CBOs to maintain gender balance of the participants.

In addition to the CBO leaders, the CEA School Environment protection teams also were invited to participate in planning activities of micro catchments in their Mahawali catchments. Two schools were selected to participate and they represent medal winners for environment protection. Alawathugoda National School and Dippitiya Maha Vidyalaya. Totally 26 students participated representing the second generation to identify issues and planning activities of the above micro-catchments with CBO leaders of the older generation.

RESULTS

The process will be implemented step by step by CBOs with guidance and monitoring by key stakeholder agencies mainly NWSDB, CEA, LA, DS and CBO Federation. After the first training program held in Kandy, all relevant CBO leaders and stakeholders agreed to meet by-monthly to discuss about the progress of the assigned work for the last two months and activities planned for the next two months. The demarcations have been completed for all micro catchments. During the program, existing threats and risks were identified and some of the major issues were addressed by conducting awareness programs with relevant stakeholders, field inspections and conducting relevant training programs.

CONCLUSION

Implementation of catchment conservation program is highly effective in order to stabilize sustainable operation and management of community based water supply schemes. Major activities planned to be conducted in future are awareness program, Participatory Training program, Water quality monitoring, Preparation and implementation of land use plans and preparation and implementation of Water Safety Plans,

It is also planned to introduce surface water retention methods and groundwater recharge mechanisms, climate change adaptation mechanisms, build up strong stakeholder partnership and assistance programs, a community forestry program, water conservation methods etc.

This pilot program is planned to be completed within one year. However, depending on the response and results, the program may extend. After compilation of this pilot project, it is planned to expand this program to other CBOs using the lessons and best practices learned and addressing the short comings which have been identified in this first program.