

# RESTORATION OF KALLAMKULAM POND, KODAKARA



## Annual Report 2017-18

*Submitted to:*

**Apollo Tyre Foundation**

*Implemented by:*

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## INTRODUCTION

Conservation of ponds is by now an acknowledged solution to the water scarcity and ground water depletion. In the past, ponds were a part of everyone's daily lives because uses of ponds are many. It conserves water, supports agriculture and other water needs, provides a viable condition for local wildlife such as birds, butterflies, dragonflies, damselflies, frogs, crabs *etc.*. Ponds are ideal habitat for lots of organisms. Ponds also support their breeding.

Water scarcity has emerged as one of the most prominent issues faced in the world. Though Kerala is known for its water bodies, there are many people struggling to meet their water needs and left agriculture due to water scarcity. On one hand, a large number of people are thriving for water, on the other hand a large number of water resources are ruined. Conserving the ponds can definitely help us with the rise in water demand.

Ponds are also able to provide sustainable solution to pollution and water management issues. Ponds are identified as good sources for denitrification, sedimentation, removal of phosphorous, nitrogen and sediments from surface water. Besides, ponds support the ground water table too, which may benefit the community and nature especially during summer seasons. It is found that a pond of 500 m<sup>2</sup> is able to sequester 1000 kg of carbon which is equal to the amount of carbon produced by a car at the same time (Cereghino et al. 2). Pollution is a major threat to most of the ponds, especially while they are in an abandoned condition. Many of the ponds are left uncleaned mainly due to management issues.

Kallankulam is a public pond located at 11<sup>th</sup> ward of Kodakara Grama Panchayat. Considering the ecological and cultural significance of Kallankulam pond, which is located close to Apollo, its conservation and restoration is one of the interested areas of Apollo's biodiversity conservation.

## OBJECTIVE

- To propose a detailed project for rejuvenation and maintenance of the pond with management and governance plan
- To conduct a land survey of the Kallankulam pond and its surrounding area (only public land) and to generate geographical data of the Pond
- To study the quantity and quality of water in the pond and also of the fauna and flora (in and around)
- To Conserve Kallankulam pond as a perennial surface water resource and make its community use more stronger and sustainable.
- To aware the community on the importance of conservation of surface water resources through experiencing ecosystem services of the Kallankulam pond

- To provide potable water to maximum number of households, who are experiencing severe water problem in the nearby locality
- To sustain the quantity and quality of the water through proper maintenance and community management practices (participatory approach)

## **DESCRIPTION**

A pre-project study was conducted to measure the scope of the restoration of pond for the betterment of the community. The study revealed that Kallamkulam is of significant importance for the neighboring community, in terms of the water supply. About 100 households in the area totally depends on the pond for their daily water needs. Considering this, Apollo has decided to restore and conserve the pond to enhance its support to the community.

In order to retain the water level in the pond for the continuous supply of water to the neighborhood, a canal was constructed connecting a distributor canal of Chalakkudy River passing through the area. Also, a retaining wall and hand rails were constructed. The total construction was completed on February 27, 2018. The pond was handed over to the community for its sustainable maintenance.

## **CONCLUSION**

Kallankulam pond rejuvenation programme was highly significant because it offers a chance to demonstrate the sustainable conservation and use of a pond with community participation. This will be an inspiration to the entire state to utilize neglected community ponds as a source of water for their daily use.

