

# BIODIVERSITY ENHANCEMENT PROJECT (BEP)



## Annual Report

**2018-19**

*A project of:*

**Apollo Tyre Foundation**

*Implemented by:*

**Tropical Institute of Ecological Sciences (TIES)**

[www.ties.org.in](http://www.ties.org.in)

## **BACKGROUND OF THE PROJECT**

Biodiversity provides the basis for ecosystem and fundamental to the existence of life on earth. The importance of biodiversity was officially recognised in global level in 1992 when 153 nations signed the Convention on Biodiversity at the Earth Summit in Rio de Janeiro (University of Exeter, 2011). The Convention on Biological Diversity (CBD) defines biodiversity as “the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems”. Biodiversity enhancement programs are essential in industrial and urban areas to mitigate the negative impacts on biodiversity by conserving and improving existing biological diversity. It not only ensures greenery but also provides habitat to a number of fauna species.

As biodiversity is the major contributor of raw materials for most of the industries, it is high time that corporates take responsibility of ensuring sustainability of ecosystem and ecosystem services. By understanding it, Apollo Tyres Limited has taken the pioneering initiatives in assessing the potential of the biodiversity in their surrounding areas. A Biodiversity Impact Assessment was conducted at the Kalamassery plant of Apollo and in the surrounding communities by Tropical Institute of Ecological Sciences (TIES) in Kottayam. Based on that, a Biodiversity Enhancement Programme (BEP) is suggested in Kalamassery which will improve the status of biodiversity at the campuses and surrounding areas.

Through the implementation of the Biodiversity Enhancement Project at Apollo Tyres, the company is able to establish a way to integrate biodiversity to the business, thereby providing a mechanism for improving Apollo’s performance in relation to biodiversity and ecosystem services. It also demonstrates the company’s contribution to corporate responsibility and enhance Apollo’s image in the community. As a multi-national tyre dealer, performing business in a greener way, differentiates Apollo’s business tactics from other competitors and improves Apollo’s reputation.

## OBJECTIVES OF THE PROJECT

1. To conserve and enhance the biodiversity inside the Apollo campuses; especially to promote the enhancement of native species
2. To improve Apollo's image as a green corporate
3. Raise awareness on the importance of biodiversity, and to strengthen companies' linkages to neighbouring communities

## SIGNIFICANCE OF THE PROJECT

The ultimate strategic goal of the enhancement program is to improve the status of biodiversity inside the Apollo campus in Kalamassery and surrounding areas. Apart from enhancing ecosystem services by increasing green cover and faunal diversity in the region, it will also become an effective education tool. Moreover, it reduces atmospheric carbon level through improved carbon sequestration. By ensuring the participation of employees and community members in the implementation process, companies' linkage to the employees and community will be strengthened. Restoring biodiversity also increases the aesthetic beauty of the campus and can provide a blissful environment to the workers as well as to the visitors.

## PROJECTS IMPLEMENTED

Sl. No.	Project Title	No. of units
1	Butterfly Garden	1
2	Fruit Tree Garden	1
3	Compost Pit	1
4.	Backside slope beautification	1
5.	Green Cover Enhancement	1

## DESCRIPTION



### BUTTERFLY GARDEN

The butterfly garden has 32 species of butterflies and nectarine plants that host and attract butterflies. In the beginning, we



have observed around 27 different species of butterflies in the garden and towards the winter season, the butterfly aggregation has reduced. It has started increasing as the season progressed to spring. We assume the reasons for the reduction in butterflies to be the change in weather and other urbanization works that are happening in the city like the introduction of metro.

Replanting of the butterfly garden was conducted in June and February. Regular weeding, watering and application of organic growth promoters, pesticides, and fertilizers are being carried out regularly.

### **FRUIT TREE GARDEN**

Currently, we have around 70 - 76 fruit trees in the plant. The plants in the fruit tree garden are maintained well, and some of the trees like papaya and sapotta have already started producing. The trees have attained a reasonable height and are expected to get bigger in



the coming years. Regular organic fertilizer application is being carried out at the fruit tree garden.

### **COMPOSTING**

We are maintaining a compost unit at the plant for the proper management of wastes from the garden maintenance. It is an eco- friendly way of managing waste. The compost produced was used as a fertilizer for the plants inside the campus.

### **BEAUTIFICATION OF BACKSIDE SLOPE**

As part of making few parts of the backside slope aesthetically beautiful, creepers were planted on the slope. It has spread over a large area except in some parts because of the soil quality. The replanting of the plants in the backside slope was carried out in October. Regular maintenance of the plants in the slope is being carried out. Several attempts were



made but the project was failure due to the quality of soil. Also lot of construction waste was dumped in our project area in last four months.

### **GREEN COVER ENHANCEMENT**

Planting of the green cover enhancement unit was conducted in June 2017. About 40 Queen's Crepe Myrtle was planted in the campus. Regular care and pesticide application is being carried out.



### **CHALLENGES**

The shrinking of available area for planting is the major challenge. Besides the back side slope area has a huge deposition of carbon waste materials, hence fertile soil has to be put in good thickness. Even then the impact of underlying carbon deposits on the growth of the plants is evident.

### **CONCLUSION**

All the four projects, butterfly garden, fruit tree garden, composting, back side slope beautification and green cover enhancement have proven to be successful at the Apollo campus in Kalamassery. Butterfly garden and fruit tree garden stand out as a symbol of conservation of biodiversity inside Apollo campus. It is sure that the overall biodiversity of the campus has been significantly improved. However the shrinking of available area and increasing built ups, inside and outside the campus has severe impacts upon the green components of the campus. Composting shows eco- friendly waste management inside Apollo campus. Hence, all the projects have achieved their deliverables and are running successfully on the campus except back side slope beautification.

□