



Ghan-Van Greenbelt Initiative

Location: Jhagadia, Bharuch, Gujarat

Updated: October 2022

Summary

EsKay Iodine Pvt. Ltd. (EIPL) has set up an environmental greenbelt initiative, named “*Ghan-Van*,” which directly translates to “Dense Forest,” as part of its goal to go beyond business and take a step towards carbon neutrality. The area spans 12,000 square meters, all of which is converted into a micro-forest consisting of over 8000 trees. Nearly 30 different native species of trees and plants, both flower and fruit bearing, have been identified as most suitable for the area and these plants will also attract fauna like butterflies, squirrels, rabbits and more to further enrich and strengthen the eco-system.

Sustainability

The development of the entire micro-forest has been done strategically, such that it becomes an environment in which a variety of plant species can not only survive but also thrive. It has been designed using an adaptation of *Miyawaki*, a Japanese technique for faster growing and significantly denser forests.

The adaptation of Miyawaki takes into account the local conditions of the area and modifies it to optimise the growth and survival of plants in the Indian sub-continent, specifically Gujarat. In this adaptation of the Miyawaki method, we have planted multiple trees within close proximity of each other, with a single pocket for water at the center, thereby encouraging the plants to reach out for nutrition and simultaneously create a very solid network of roots under the soil. Initially, these trenches will need to be filled with water and manure manually, but will eventually be replenished by rainfall and natural fertilisers. This will allow the eco-system to become self-sustaining after the first 3-5 years of nurture and maintenance.

This type of dense forestry also offers additional benefits - First, due to the large number of trees concentrated in the area, there will be a naturally occurring oxygen-rich zone. Secondly, due to the lack of sunlight that penetrates through the layers of trees, the forest will witness a drop in temperatures by up to 4°C compared to the areas outside its boundaries.

Timeline

The land was handed over to EIPL by the Jhagadia Industrial Association (local governing body) in mid-2021, and work began soon after. Estimates suggest that the micro-forest will experience the growth it requires to become a self-sufficient eco-system by the year 2025. In the mean time, existing plantation will be constantly monitored and nurtured to ensure healthy growth and the appropriate development of the eco-system.

