

## **Sustainable Environment & Ecological Development (SEED)**

### **Establishing Bio-shield**

at

**Devla Village, Jambusar Taluka, Bharuch District, Gujarat**

### **Make My Trip Foundation**

19<sup>th</sup> Floor, Tower B, Building 5, DLF Cyber City, DLF Phase 2, Sector 24, Gurugram,  
Haryana, 122002, India

Under CER

**April to June 2024**



Project Implemented by

**VIKAS**

Centre for Development

**ISHAVASYAM,**

Opp. Lajpatnagar Society, Eeshita Towers Road, Navjeevan, Navrangpura, Ahmedabad 380014

Tel: 079 - 49232612, Email: [vikascfd@gmail.com](mailto:vikascfd@gmail.com), Website: [www.vikas-cfd.org](http://www.vikas-cfd.org)

## Background:

VIKAS Centre for Development is implementing a Mangrove Plantation Project funded by Make My Trip Foundation, on the coastal belt of Devla village of Jambusar taluka of Bharuch district.

The plantation of mangroves aims to preserve the environment by reducing soil erosion and absorb CO<sub>2</sub> as well as provide employment to *Rathods* an under privileged community in this coastal village. The plantation would be carried out in 65 Hectare area in which a total of 1,62,500 mangrove seedlings will be planted. The plantation will increase the marine life in the area through the growth of fishes and crabs in the plantation area. During the summer, the animals of the village will get green fodder through systematic cutting of the mangrove leaves.

Finally plantation will help create a Green Wall along the coastal belt which will provide protection against calamities like cyclones and tsunamis.

## Devla Site Mangrove Plantation Area Map:



GPS Points  
of  
Project Site



Devla-65 Ha			
No	Point No.	N	E
1	D-1592	21°59'3.10"N	72°30'19.60"E
2	D-1593	21°59'0.00"N	72°30'8.40"E
3	D-1594	21°58'39.30"N	72°30'1.50"E
4	D-1595	21°58'36.90"N	72°30'15.20"E
5	D-1596	21°58'27.50"N	72°29'58.50"E
6	D-1597	21°58'2.20"N	72°29'52.10"E
7	D-1598	21°58'0.90"N	72°30'5.80"E
8	D-1599	21°58'24.60"N	72°30'10.10"E
9	D-17	21°58'49.80"N	72°30'5.20"E
10	D-18	21°58'48.53"N	72°30'16.46"E
11	D-19	21°58'58.37"N	72°30'19.41"E

## Overall objective of the program:

- Plantation of 1,62,500 mangrove plants in a total of 65 hectares along the sea coast of Malpur and Devla villages.
- Plantation will lead to establishment of a Green Wall on the coast of Devla village.
- This will provide protection to local people against natural calamities like cyclone and tsunami as well as sea salt winds. It will also curb soil erosion and

enhance marine ecosystem. There will be more fish in the area, thereby increasing livelihood of fishermen.

- Further, animal husbandry will get support through supply of green fodder from the mangrove plantation area during the summers.
- The plantation activity would generate wage employment for local people.

### **Over view of the Quarter: (April – June 2024)**

This is a brief report for the period between April and June 2024. Normally this quarter is low in field activities compare to other three quarters. This period is immediately after the completion of plantation for the previous year.

During this period, counting of survived plants is carried out and yearly soil and water tests are done. In the month of June preparation for the next quarter is carried out which includes carrying out baseline survey and updating KYC of labourers.

During this period apart from routine activities two major events happened. Rajneesh & Hemant from Make My Trip visited the project in the beginning of June and this was followed by a in person meeting with Mr. Deep Kalra, Chairman MMT & Mr. Yuvraj Sing, Rajneesh, Anisha & Hemant took place in New Delhi.

Both, the meetings were very significant and productive in terms of creating a shared understanding of environmental issues and need for appropriate interventions. The team of VIKAS CFD was encouraged and enthused by the interactions. We are looking forward to more joint initiatives to address the concerns of Climate Change & Communities facing the impact.

### **Plantation Details at Devla Mangrove Plantation Project Site:**

Total Plantation area (ha.)	Total Plantation to be done (Plants)	Plantation through Direct dibbling (Plants)	Total plantation done through nursery plants	Total Plantation done in 2023-24	Living plants at the end of April 2024	Gap filling to be done in 2024-25	Nursery to be prepared for 2024-25
65	1,62,500	40,000	1,33,227	1,73,227	1,25,125	37,375	52,325

As shown in the above table during 2023-24, plantation was carried out in 65 hectares of land. Totally 1,73,227 saplings were planted of which at the end of April 2024 1,25,125 plants have survived. In the coming year (2024-25) 37,375 plants would be establish for which nursery of about 53,000 would be established.

### **The Process of measuring survival of plants**

<b>Calculation of living plants - April 2024</b>				
Sr.	Area	No of seedlings planted	No of Living plants	% of survival
1	10×10 meter	25	19	76%
2	10×10 meter	25	21	84%
3	10×10 meter	25	18	72%
Total		75	58	77.33%

Out of the total plot of 65 hectare of land, three blocks measuring 10 mts X 10 mts were demarcated. It is expected that in each block 25 plants should be alive. Against this the surviving plants were calculated. This was extrapolated for the entire plot of 65 hectares of land. Based on this exercise it is assumed that 1,25,125 plants are currently surviving.

**Present status of plantation:**

Sr.	Activity	Planned activity	Work Completed
1	Social Processes	<ul style="list-style-type: none"> <li>To carry out baseline survey</li> </ul>	<ul style="list-style-type: none"> <li>Under the project, the baseline survey was carried out. The basic focus was to observe the impact of the project on the life and living of the local people, particularly the labourers who are engaged in plantation activity.</li> </ul>
		<ul style="list-style-type: none"> <li>To organise meetings with supervisor.</li> </ul>	<ul style="list-style-type: none"> <li>At the meetings held with site supervisors, the following was discussed:                             <ul style="list-style-type: none"> <li>Determining how to count surviving mangrove plants.</li> <li>Planning the required equipment and number of personnel needed to carry out the survey.</li> <li>Scheduling the process</li> </ul> </li> </ul>
2	Physical	<ul style="list-style-type: none"> <li>Counting of surviving plants</li> </ul>	<ul style="list-style-type: none"> <li>Three blocks measuring 10mts x10mts at three locations were identified. In each block the surviving plants were calculated.</li> <li>Based on the exercise it is estimated that 1,25,125 plants currently are surviving. This is 77.33% of the total plantation established so far.</li> </ul>
		<ul style="list-style-type: none"> <li>Field visit by MMTF team members.</li> </ul>	<ul style="list-style-type: none"> <li>MMTF team members visited the mangrove plantation site in which the following observations were made.                             <ul style="list-style-type: none"> <li>Changes have occurred on site after plantation.</li> <li>The growth in height of the plants was observed.</li> <li>Naturally grown mangrove plants around the site were observed.</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>To take water and soil samples from the project site and send them for laboratory testing.</li> </ul>	<ul style="list-style-type: none"> <li>Soil and water samples were taken from the project site and its testing was done.</li> <li>Prepared soil and water samples were sent to laboratory at GNFC Bharuch for testing.</li> </ul>

## **Preparation of calculating living plants in nursery**



## **Observed the changes happening on the Sea Site at Devla(Nada)**



## **MMTF Team members' Site Visit**



## **Testing of soil and water samples**





## **Meeting with Mr. Deep Kalra, Chairman -MMTF**

