

MakeMyTrip Foundation

TREES FOR BIODIVERSITY

140,000 TREES

2019-20 Social Impact Report



PROJECT SITE

4 projects in 4 locations



TREES FINANCED

140,000



CARBON SEQUESTRATION

~2.8 million kg per year



BENEFICIARIES

~11,460 workdays

SUMMARY

The tree-planting projects are initiated at 4 different locations on community-owned lands, to reclaim degraded and deforested lands as primary forests, strengthen forest-based livelihood opportunities for local communities, recover the loss due to Cyclone-Fani, uplift rural communities and rejuvenate water bodies in the region. Local communities are participating in every process of the plantation activities and over 8,100 workdays would be generated to implement the projects on-time.



PROJECTS ADOPTED:

- **Trees for Ecotourism** - Sikkim, India
- **Trees for Villagers** - Nainital, Uttarakhand
- **Trees for Villagers** – Kheda, Gujarat
- **Trees for Cyclone Fani-Affected Area** – in the periphery of Balukhanda Wildlife Sanctuary, Odisha



TREES FOR ECOTOURISM, SIKKIM, INDIA – 50,000 trees

KEY OBJECTIVES:

- To reclaim degraded forest land in order to promote community-based ecotourism
- To mitigate deforestation and forest degradation and encourage more carbon sequestration
- To safeguard biodiversity habitat of the region
- To strengthen forest-based livelihood and energy sources for local communities, ensuring sustainable development
- To conserve the habitat of endemic flora and fauna

ACTIVITY PROGRESS:

- **Convergence:** Local stakeholder consultations conducted to select appropriate project location and identify suitable plant species
- **Permission:** Requisite permissions to implement the project obtained from the concerned authorities.
- **Nursery:** A large-scale nursery set up at Sikkim.
- **Plantation:** Plantation has been successfully completed with support from local communities.
- **Way Forward:** Maintenance of trees to ensure high survival rate.

SOCIAL IMPACT

- Over 4,000 workdays generated for the local community members, majorly women.
- The tree plantation activity will help in promoting sustainable eco-tourism and wildlife tourism by improving the overall ecological health and enhancing wildlife habitat in the chosen regions.
- Through trees, the local communities will be able to attain sustainable income sources in the form of timber-based produce and non-timber-based produce.
- Planting of trees will ensure that the rain droplets sink into the soil rather than flowing above the ground, thus, increasing the groundwater table through water recharge.
- These trees will further help in conserving the local flora and fauna by providing adequate food and natural habitat sources.

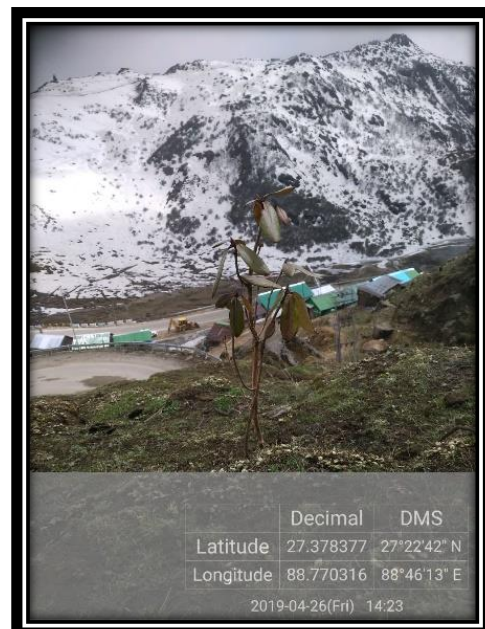
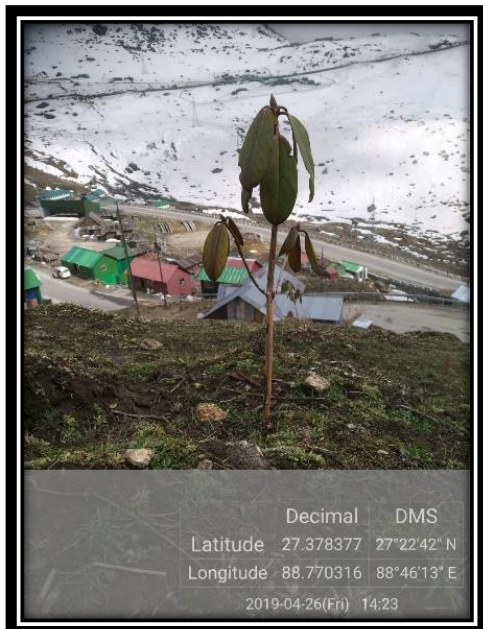
Why Trees at Sikkim?

- The Sikkim Human Development Report 2014 recognised tourism as one of the potential sectors for growth and livelihood creation. The tourism sector has emerged as the vital industry of Sikkim in recent decades, providing direct employment to at least 40,000 people. Plantation of trees at the forest ranges and in their surrounding villages will help in the ecological and wildlife restoration, and in improving the quality of life of the local communities, making them more self-sustained.
- India has two out of the eighteen biodiversity hot-spots in the world, located in the Western Ghats and the Eastern Himalayas. As per the Sikkim ENVIS Report, Sikkim covers only 0.2% geographical area of the country landmass and has been identified as one of the hot-spot in the Eastern Himalayas. The Himalayas are continuously under global pressure of climate change, which is adversely impacting its fragile ecosystems, rich biodiversity, and sensitive local livelihoods. Forests and climate change are intimately intertwined. According to the United Nations Environment Programme, the forests capture atmospheric carbon dioxide at a rate equivalent to about one-third the amount released annually by burning fossil fuels. Stopping deforestation and regenerating forests, therefore, could provide up to 30 per cent of the climate solution.



LOCATIONS CHOSEN FOR PLANTATION:

S.N.	LOCATION	NO. OF PLANTS
1.	Tsomgo Lake Catchment	15,000
2.	Chandaney Forest	19,800
3.	Mudalay Forest	13,200
4.	Lailakha Forest	1,000
5.	Bewsha Forest	1,000
	TOTAL	50,000



HEALTHY SAPLINGS AT THE PLANTATION SITE

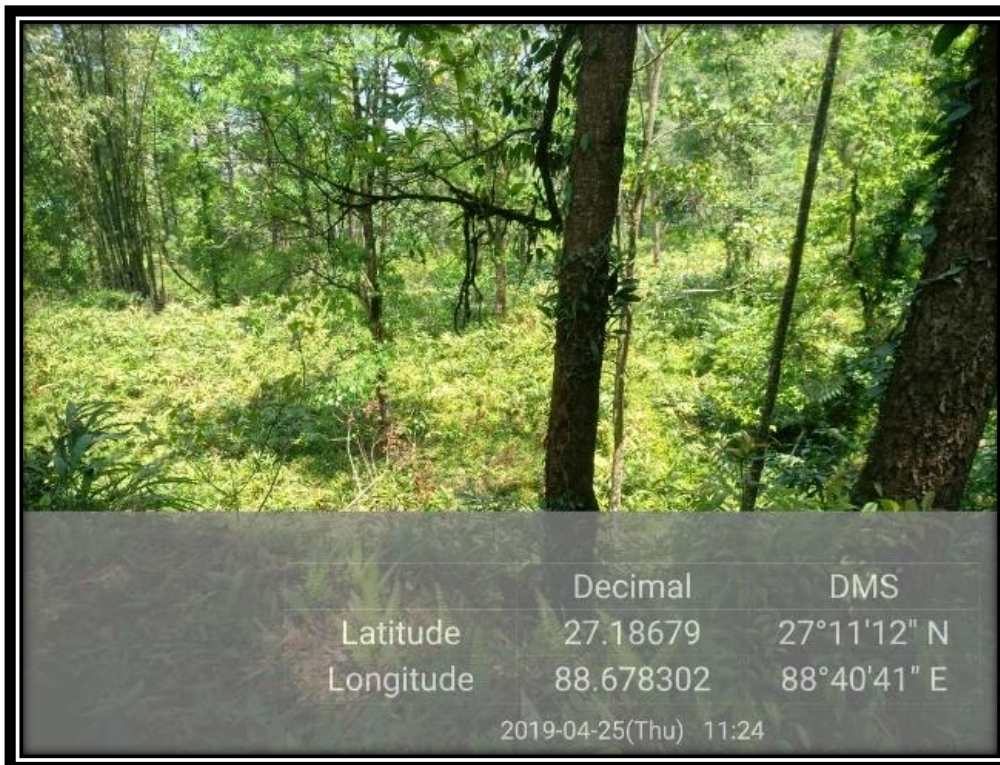


PLANT SPECIES CHOSEN FOR PLANTATION:

S.N.	Plant Species	Number of Plants
1	Rhododendron	5,700
2	Salix	5,000
3	Silver Fir	5,000
4	Lakhuri	2,000
5	Local Chandan	5,500
6	Chinday	700
7	Khanakpa	1,500
8	Kafal	1,500
9	Asarey	1,500
10	Faladho	1,500
11	Kaijal	2,000
12	Titey Chaap	1,500
13	Lokta	2,500
14	Kharaney	6,500
15	Peepli	1,300
16	Lake Chilaunay	1,500
17	Mushuray Katush	1,000
18	Pani Sajh	1,800
19	Tuni	1,500
20	Paarang (Bamboo)	500

NOTE: The plantation has been successfully completed.

POST-PLANTATION VIEW OF THE PLANTATION SITE:





TREES FOR VILLAGERS, NAINITAL, UTTARAKHAND, INDIA – 50,000 trees

KEY OBJECTIVES:

- To strengthen the community forest management system for sustainable development
- To mitigate deforestation and forest degradation and encourage carbon sequestration through the promotion of primary forests
- To safeguard biodiversity habitat of the region
- To strengthen forest-based livelihood options and energy sources to local communities
- To support the Himalayan tourism industry by beautification

ACTIVITY PROGRESS (April to June, 2019):

- **Convergence:** Local stakeholder consultations conducted to select appropriate project location and identify suitable plant species
- **Permission:** Requisite permissions to implement the project obtained from the concerned authorities.
- **Nursery:** A large-scale nursery set up at Nainital.
- **Plantation:** The plantation has been successfully completed with support from rural communities.
- **Way Forward:** Maintenance of trees to ensure high survival rate.

SOCIAL IMPACT

- The plantation will encourage participatory approach with direct community involvement in conservation action, simultaneously generating local employment of over 4,000 workdays via project implementation and monitoring which will support the sensitive rural economy.
- This will primarily strengthen the unique 'Van Panchayat' governance for sustainable natural resource management.
- The selected native species will be planted in the identified areas to reclaim forest lands in order to improve wildlife habitat, control topsoil erosion, check surface water run-off and aid ecosystem services to overall support benefit-cost ratio to the locals.
- The project is implemented with the promotion of multipurpose native trees with the focus on raising oak species because of its multiple socio-environmental benefits.

Why Trees at Sikkim?

- Uttarakhand is situated in the northern part of India surrounded by the mighty Indian Himalayas. The Himalayas are continuously facing stresses from the global climatic scenario which are consequently impacting its fragile ecosystems, rich biodiversity and sensitive local livelihoods.
- The forest resource management in the state is administered by the autonomous local institution which has been in existence since 1921 –the ‘Van Panchayats’ or Forest Councils. 20 to 30 per cent of the local households in the selected villages are living below the poverty line with a very high dependency on forest resources for their day-to-day requirements, primarily for firewood and livestock fodder.
- This Himalayan state earns most of its revenue from the tourism sector. Frequent disasters like landslides and cloudbursts have led to various obstructions in the tourism sector. The state faces various threats in the development of the tourism and agriculture sector, major being impending disaster. A study by TERI University mentions the importance of forests in hydrological services, carbon sequestration and storage, pollination services for agriculture and also the overuse of the resources for livelihood requirements of the local community, making plantation of valued native trees extremely important for the local community and the ecology of the area.



MAKEMYTRIP BRANDING BOARD AT THE PLANTATION SITE

LOCATIONS CHOSEN FOR PLANTATION:

S.N.	LOCATION	NO. OF PLANTS
1.	Banola	7,000
2.	Pargadi	12,000
3.	Bhasiydhar	6,000
	TOTAL	25,000

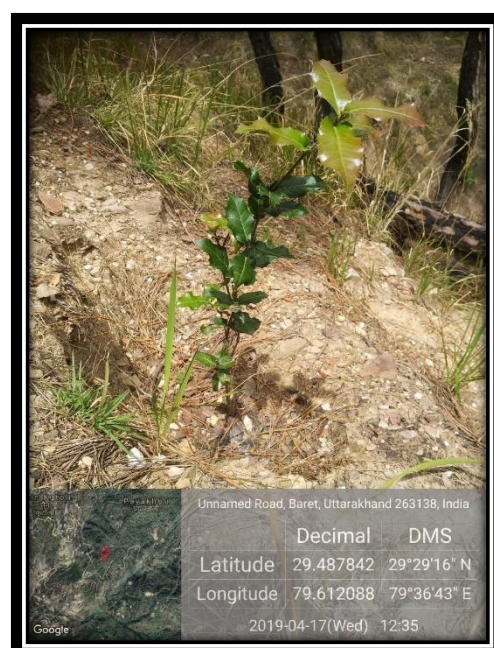
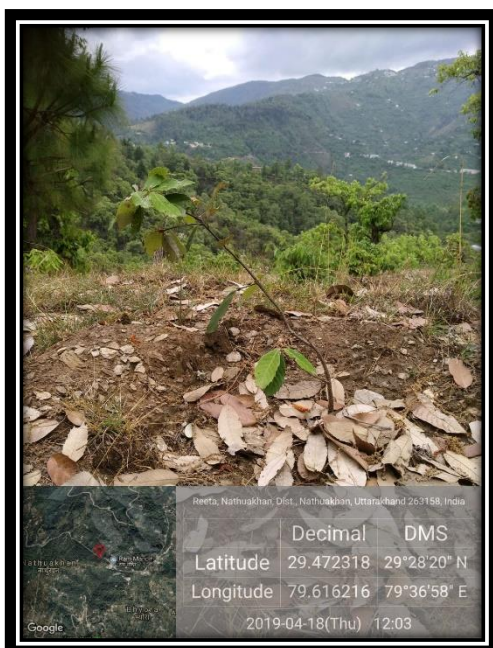


LOCAL WOMEN PARTICIPATING IN THE PLANTATION ACTIVITIES

PLANT SPECIES CHOSEN FOR PLANTATION:

S.N.	Plant Species	Plant Species
1	Aonla	<i>Phytolacca emblica</i>
2	Banj	<i>Quercus leucotrichophora</i>
3	Bhatula	<i>Desmodium tiliaefolium</i>
4	Bakain	<i>Melia azedarach</i>
5	Kanol	<i>Bauhinia purpurea</i>
6	Utees	<i>Alnus nepalensis</i>
7	Falyat	<i>Quercus glauca</i>
8	Tilonj	<i>Quercus lanuginosa</i>
9	Padam	<i>Prunus cerasoides</i>

NOTE: The plantation has been successfully completed





PIT-DIGGING AND CLEARING ACTIVITY FOR SITE PREPARATION



SAPLINGS BEING PLANTED AT THE PLANTATION SITE



PLANTED SAPLINGS AT THE PLANTATION SITE

TREES FOR VILLAGERS, KHEDA, GUJARAT, INDIA – 20,000 trees

KEY OBJECTIVES:

- To prevent soil erosion and surface run-off of water along the 75-mile long river bank.
- To generate and revive livelihood opportunities for the communities.
- To improve soil fertility and recharge the groundwater, improving agricultural conditions.
- To recoup the green cover and preserve the local flora and wildlife habitat of the region.
- To increase awareness among the communities about the importance of trees for their sustenance.

ACTIVITY PROGRESS (2019 to 2020):

- **Convergence:** Local stakeholder consultations conducted to select appropriate project location and identify suitable plant species
- **Permission:** Requisite permissions to implement the project obtained from the concerned authorities
- **Nursery:** Saplings were sourced from the local nurseries.
- **Plantation:** Plantation has been successfully completed along with support from community members
- **Way Forward:** Maintain the trees for a healthy survival rate



BIRD'S EYE VIEW OF THE PLANTATION SITE

SOCIAL IMPACT

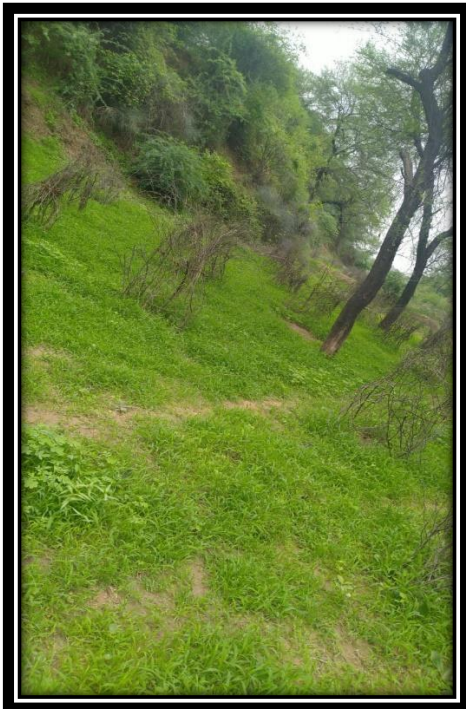
- The trees planted will improve the local environment by conserving the soil against the severe erosion, eventually leading to an increase in the ground-water table.
- An improvisation in the soil conditions with the help of trees shall contribute to better agricultural conditions, leading to a larger output.
- The trees will hold the soil, preventing rapid flow of water, thus, checking the erosional process, controlling the formation of ravines, preventing siltation in the river and protecting the water bodies. This will help in mitigating natural disasters and calamities in the region that lead to losses for the farmers and other villagers.
- The local tree species planted with consultation from specialists and the rural communities will provide Non-Timber Forest Products (NTFPs) and generate long-term livelihood opportunities for the communities residing in the region.
- Alongside the community, the rich biodiversity of the area will also benefit from the conservation of the soil, water and the natural habitat of the area.



NATURAL GUARDS BUILT AROUND THE SAPLINGS FOR PROTECTION

Why Trees at Kheda?

- The banks of the river Mahi experience massive flooding and soil erosion. This results in immobility, crop loss and renders the land uncultivable, according to the Foundation for Ecological Security. The water results in the formation of deep ravines, thus, making the cropland infertile. The organisation also mentions the importance of trees in checking the problem. The trees are planted to hold the soil together, preventing it from being washed away and increase the water holding capacity of the soil, mentions the World Agroforestry Centre.
- The project area is endowed with an enormous variety of bird species, reptiles, fish species, amphibians and tree species. The 9th May, 2016 article in the Times of India, '36 animal, plant species endangered in Gujarat', mentions the International Union of Conservation of Nature (IUCN) list of endangered species in Gujarat, including the black mahseer, golden mahseer, leatherback sea turtle, Indian white-backed vulture, long-billed vulture, red-headed vulture, steppe eagle, greater adjutant- stork, great Indian bastard, lesser florican, sociable lapwing, spotted greenshank, forest spotted owlet, dhole, caracal, blue whale, fin whale and Indian wild ass. The local trees planted will assist in improving the natural habitat of these species, rebuilding a safe zone for them.



PLANTED SAPPLINGS AT THE PLANTATION SITE

PLANT SPECIES CHOSEN FOR PLANTATION:

S.N.	Common Name	Scientific Name
1.	Tamarind	<i>Tamarindus indica</i>
2.	Kala Bhalia	<i>Semecarpus anacardium</i>
3.	Panasa	<i>Artocarpus heterophyllus</i>
4.	Amla	<i>Emblica officinalis</i>
5.	Bahada	<i>Terminalia bellirica</i>
6.	Karanj	<i>Pongamia pinnata</i>
7.	Jafra	<i>Bixa Orellana</i>
8.	Mango	<i>Mangifera indica</i>
9.	Koilari	<i>Bauhinia purpurea</i>
10.	Sunari	<i>Cassia fistula</i>
11.	Subabul	<i>Leucaena leucocephala</i>

NOTE: Plantation activity has been successfully completed.





PIT-DIGGING AND CLEARING ACTIVITY FOR SITE PREPARATION



SAPLINGS BEING PLANTED AT THE PLANTATION SITE



PLANTED SAPLINGS AT THE PLANTATION SITE

TREES FOR CYCLONE FANI-AFFECTED AREA, BALUKHANDA WILDLIFE SANCTUARY, ODISHA – 20,000 trees

KEY OBJECTIVES:

- To recoup the green cover loss in Puri, Odisha that was witnessed due to the cyclone-Fani
- To support the sweet water reservoirs beneath the ground, which are the major source of water to the city
- To maintain and increase the underground water level to enhance sustainable supply of water
- To rebuild the wildlife habitat for deer and other wildlife prominent in the Balukhanda Wildlife Sanctuary
- To aid in the mitigation of future natural disasters

ACTIVITY PROGRESS (2019 to 2020):

- **Convergence:** Local stakeholder consultations conducted to select appropriate project location and identify suitable plant species
- **Permission:** Requisite permissions to implement the project obtained from the concerned authorities
- **Nursery:** Saplings were sourced from the nearby nurseries.
- **Plantation:** Plantation has been successfully completed along with support from community members
- **Way Forward:** Maintain the trees for a healthy survival rate



HEALTHY SAPLINGS AT THE PLANTATION SITE



SOCIAL IMPACT

- The project will aid in the restoration of vegetation that was lost due to Cyclone Fani in the periphery of the Balukhanda Wildlife Sanctuary.
- The plantation will help in groundwater recharge, improving wildlife habitat and reducing soil erosion. This will further secure the sweet water reservoirs that are the source of fresh water to the city.
- One of the tree species, Karanj, which is also a medicinal plant, will not only produce organic litter by leaf shedding but will also act as a source of pollen and nectar for the production of dark honey. It is increasingly used for oil production due to its use in biodiesel.
- The project also aims to rebuild the wildlife habitat to accommodate sufficient natural resources for the survival of the wildlife of the sanctuary.
- Furthermore, the project will generate approximately 1,637 workdays of employment for the rural communities.

Why Trees at Odisha?

- Cyclone Fani, with a wind speed of about 175 kilometres per hour, was the second-most powerful cyclone to have hit Odisha in early May 2019. According to an article published in India Today, More than 10 million trees were uprooted with an equal number of trees damaged in the extremely severe cyclone. Principal Chief Conservator of Forest Sandip Tripathy told The Express that around 50 percent trees have been uprooted while the crown of the remaining half damaged in Balukhanda sanctuary. The sanctuary was home to around 90 lakh trees.
- In an interview with the Grow-Trees team, Mr. Harshabardhan Udgata, Divisional Forest Officer (DFO), Puri said, "We need rapid restoration of the vegetation and help from everyone. This is a site which is very important for the Puri town, because it is called the 'Sweet Water Zone'. Entire drinking water is tapped from the groundwater available here and supplied to the town. An initiative by Grow-Trees, to plant 250,000 saplings in the gap areas will create the top canopy on maturity and all these broken plants will act as the middle canopy."
- Even though around 4,000 deer were found safe in the Balukhanda Wildlife Sanctuary, their habitat has been completely destroyed. In order to bring back the harmony in the city and assure protection of wildlife, it is imperative to take immediate actions and initiate re-plantation of the loss at the earliest.

PLANT SPECIES CHOSEN FOR PLANTATION:

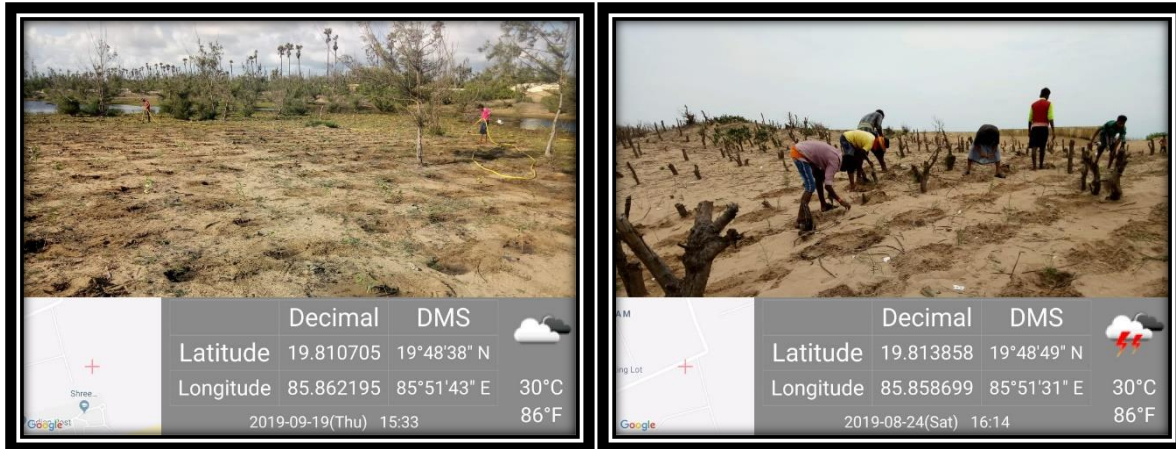
S.N.	Common Name	Scientific Name
1.	Casuarina	<i>Casuarina equisetifolia</i>
2.	Karanj	<i>Pongamia pinnata</i>
3.	Earleaf Acacia	<i>Acacia auriculiformis</i>

NOTE: Plantation activity has been successfully completed.



FLORA AND FAUNA:

- The state of Odisha houses very rare species of flora, comprising of orchids and mangroves. These forests are mainly classified into tropical dry deciduous and tropical moist deciduous forests.
- The forests also nurture a wide variety of fauna from the Royal Bengal Tigers to the Asiatic Elephants.
- The state is home to 18 wildlife sanctuaries, 3 national parks and 3 wildlife reserves.
- These forests serve as an abode for Leopards, Lion-tailed Macaque, Barking Deer, Giant Squirrel, Indian Pangolin, Mouse Deer, Chowsinghas, Flying Cat, Sloth Bear, Sambar, and Wild Dogs. It is also the habitat to reptiles such as Cobra, Python, Gharial, etc.



PIT-DIGGING AND CLEARING ACTIVITY FOR SITE PREPARATION



SAPLINGS BEING PLANTED AT THE PLANTATION SITE



8 PUMP-BASED BORING SYSTEM FOR SUFFICIENT WATER SUPPLY FOR THE PLANTS



CONCLUSION

We appreciate the contribution made by MakeMyTrip Foundation to support our initiative of rebuilding and enhancing the natural wildlife habitat at the Balukhanda Wildlife Sanctuary and enhancing the living conditions of the rural communities. With your support, we have been able to support ecotourism in Sikkim, generate rural employment, uplifting their socio-economic status and rejuvenate water bodies, recharging groundwater. We hope that these trees bring harmony in the lives of the wildlife as well as the villagers. The plantation works will be audited by a third party independent auditor in October/November 2020 and the report will be shared with you. However, any changes in the timeline due to COVID-19 will be duly informed to the team.