

# MakeMyTrip Foundation



## PROGRESS REPORT Oct-Dec '19



## **Project Progress Brief**

### **Pilot Plantation:**

In October-December quarter, our focus was on the groundwork for the plantation planned in the coming spring and continuing the work in the Nursery compound. The major activity this quarter has been the re-mulching with native plants to maintain a cover over the soil to protect from winter chills.

#### Pilot Plantation Survival:

Since most of the plants have gone into dormancy (going into autumn & winters), we did not conduct a survival count this quarter as results would not be accurate. We maintain an expectation of an overall survival of ~55-60% in the forest with many individual plants likely to bounce back and show growth in Spring 2020.

### **Other Plantations & Works:**

Preparations for the next year's plantation are ongoing and we have been working on a slew of activities to make sure that we are able to plant on a much larger scale next year.

#### Tools & Infrastructure:

- The 3 functional nurseries will be used for planting seeds in Spring 2020 to produce saplings for further plantation works (see figure 7). They are currently used for storing materials & saplings.
- Six trenches in which seeds had been planted have started to see germinations (see figures 5 & 6). We expect the saplings to be ready next year.
- The first Greenhouse construction is complete. We will plant seeds in Jan-Mar to produce saplings for next year (see figures 4 & 5).
- Procurement for non-consumables like tools and equipment for the hundreds of volunteers required for next year's plantation, is underway. We have procured the majority of the tools and these have already been used for autumn plantations in upper valleys.

#### Plantation site preparation:

- Procurement for leaves, clay, mulching material & farmyard manure for next year's plantation has been completed.
- Site marking & soil preparation for next year's plantation is done. We have utilized the dry leaves, clay & farmyard manure mixed with the site soil for preparing the ground.
- Saplings procurement will be a major part of our planting material and will happen in Feb-Mar 2020. We are already tying up with various local suppliers for the same.

#### Other plantation work:

- Soil work for the expansion of Apple Orchard in spring 2020 has been done.
- SPV greenhouse - We have utilised this space in part for the germination of native seeds as well as an area to grow some winter vegetables to be consumed by staff.
- A watering system utilizing the greywater from campus buildings has been installed for the Apple-Apricot orchard.
- We have augmented our team with additional people to handle the increased workload for 2020.

#### **Challenges:**

This October-December quarter, we have faced challenges due to early snowfall/onset of winters & closure in Kashmir.

- Borewell digging – Borewell digging is still stuck due to union issues in Leh and the increased cost of work due to this. As for now, the current borewell which serves the need of construction team & staff living on the campus is being used to provide for water needed for the Forestation team.
- Connectivity to Srinagar – Saplings & tools/equipment procurement was severely delayed due to current lockdown in Kashmir which is the main source of material for us.

## Financial Update for Quarter 4 - October to December 2019

### Cost head-wise expenditure for Q4

Cost head	Total
Facility - Moveable	26,13,085
Material - Consumables	12,66,355
Material-Tools and Equipment	3,60,238
One Time Procurement - Facilities	16,69,982
Permanent Staff	3,68,750
<b>Total</b>	<b>62,78,410</b>

### Project-wise expenditure for Q4

Cost head	Total
Apple Orchard	11,675
Miyawaki Pilot Plantation	33,860
Miyawaki 2020 Plantation	26,44,660
Nursery	15,25,955
SPV Greenhouse	1,660
Commons (incl fencing & staff)	20,60,100
<b>Total</b>	<b>62,78,410</b>

### Activity-wise budgeted & utilised in Q4

Activity	Budgeted	Utilised	Variance	Comment
Organic inputs for Plantation (Materials-consumables)	31,04,000	11,47,000	-63.05%	For the spring plantation alone, manure was purchased from nomadic herders. Clay was sourced locally & biomass, in the form of dry leaves, was freely collected in Phyang village. Saplings have not yet been procured & there remains a need for more leaves & manure to be purchased in Q1'20.
Earthworks, Labour & Transportation for	2,44,500	13,49,100	451.78%	Includes three-quarters of earthworks for spring plantation preparation & transportation of materials consumables

Plantation (Facilities- moveable)				(manure & clay) as well as labour costs for collecting dry leaves. We had anticipated doing more Earthworks in Q1'20 but moved this work forward. Earthworks involved soil loosening, removal of rocks & incorporation of materials consumable (listed above) with an excavator. Many more hours were required as large rocks & boulders needed to be extracted.
Greenhouse & Trench construction (Materials- consumables, One Time Procurement - Facilities & Facilities - moveable)	6,60,000	15,14,455	129.46%	Including greenhouse construction contract, metal fabrication, stone foundation & walls & polycarbonate sheet cover including transportation. It was anticipated to make the greenhouse in Q3'19 with only some final works continuing into Q4'19, but the whole work was instead executed in Q4'19.
Fencing of perimeter (One Time Procurement - Facilities & Facilities - moveable)	20,00,000	16,89,270	-15.54%	Fencing of the whole site commenced in Q4'19 and will be completed in early Q1'20. A local contractor has managed this work which will secure all present and future plantations. This figure includes all materials & labour costs.
Pilot Plantation Maintenance (Material - Tools & Equipments)	25,000	23,860	-4.56%	New water pump was purchased as the previous one's capacity was limited & proper servicing of that model was not possible in Leh. Some other small items to improved the irrigation system were also purchased.
Tools & equipment for Plantation (Material - Tools & Equipment)	4,95,000	1,55,570	-68.57%	This includes tools & equipment for connected projects Nursery & Miyawaki 2020. Soil preparation equipment, water storage units were some of the items purchased for the Nursery project. Whilst gloves, digging tools & water buckets were purchased & used for a large plantation that took place in upper Leh valley and will be used again during the massive spring Miyawaki 2020 plantation on HIAL campus which will require hundreds of volunteers. Still more equipment needs to be purchased in Q1 '20.
Staff costs (Permanent staff)	3,30,000	3,68,750	11.74%	Another field assistant & a project manager has been hired this quarter and we will be requiring one more permanent field staff to be hired in the coming Q1.

## The year 2019 in view

### Cost head with Quarterly expenditure breakdown for 2019

Cost head	Total Q1	Total Q2	Total Q3	Total Q4	Total 2019
Facility - Moveable	16,850	3,68,931	2,90,762	26,13,085	32,89,628
Material - Consumables	16,814	2,09,992	1,65,039	12,66,355	16,58,200
Material-Tools and Equipment	830	65,112	51,040	3,60,238	4,77,220
One Time Procurement - Facilities	8,286	10,24,838	3,99,372	16,69,982	31,02,478
Permanent Staff	1,93,500	2,38,800	330,000	3,68,750	11,31,050
<b>Total</b>	<b>2,36,280</b>	<b>19,07,673</b>	<b>12,36,214</b>	<b>62,78,410</b>	<b>96,58,576</b>

### Cost head-wise total budgeted, disbursed & utilised in 2019

Cost head	Budgeted (for life of project)	Disbursed (since commencement)	Utilised (in 2019)	Variance
Facility - Moveable	46,79,800	---	32,89,628	-29.71%
Material - Consumables	2,32,76,880	---	16,58,200	-92.88%
Material-Tools and Equipment	20,10,000	---	4,77,220	-76.26%
One Time Procurement - Facilities	79,00,000	---	31,02,478	-60.73%
Permanent Staff	19,80,000	---	11,31,050	-42.88%
<b>Total</b>	<b>3,98,46,680</b>	<b>1,06,02,100</b>	<b>96,58,576</b>	<b>-75.8%</b> (of budgeted) <b>-8.9%</b> (of disbursed)

## **Remarks:**

Facility-moveable spendings here already represents the majority of 2020 earthworks required. The remaining greenhouses, which largely come under this cost head, are planned for the first and second quarters of 2020.

The variance seen in the Material consumables cost head is largely due to the procurement of plant saplings and organic inputs, such as leaves and mulch at lower costs since we have collected low quantities till now. More inputs will be procured throughout the year for the expanding number of forest greening projects.

The quantities of tools to be procured has been reduced from that budgeted as some have been deemed unnecessary. For example, during the Pilot Plantation establishment, dustbins will be replaced for sacks, and helmets had been found on loan. We will also be doing the plantation over 2-3 days, therefore resources can be shared across volunteer groups. During the first quarter of 2020 more tools will be procured for the plantation and for nursery irrigation systems.

One Time Procurement - Facilities is also showing a high variance, primarily given that two of the three greenhouses planned have not yet commenced. Additionally, the borewell will add to reducing this variance in the coming quarter.

Permanent staff costs are expected to increase slightly in the coming quarter as our newest team members will be present for their first whole quarter. We will also be expanding our team to include a field supervisor role which will form a key link between team members responsibilities. In 2019 there were some constraints in finding ideal team members and so staff costs remained low.

## **Plans for the next quarter - January to March 2020**

The following activities are planned for Jan-Mar, quarter 1 2020.

- Greenhouse 1 soil preparation & plantation – Feb-Mar
- Greenhouse 2 construction - Feb-Mar
- Saplings collection – Feb-Mar
- Spring plantation 2020 – Mar

The Greenhouse & nurseries will be used to grow saplings for the Autumn 2020 & Spring 2021 plantation. For this internal irrigation systems are to be set up and labour is required to prepare planting beds.

Along with this, we will also be working on a few more greening projects in the next quarter:

1. Apple orchards – We intend to plant new plants in the Apple orchard in spring. We are going to plant more cold-resistant varieties to improve the survival rates. For this we need to procure manure & have labourers & machines improve the soil of orchard rows. Plantation of trees will occur during Quarter 2 (after roads open to Srinagar).
2. Borewell - work will commence on a second borewell on site of which Forestation team will be using to a large degree. This will make a significant difference to the ease of daily operations for plantation team staff as it will distribute the competition of this resource amongst myriad site activities.

- Fencing - fencing work of the whole site is coming to completion this quarter. It will protect plantations from potential damage, particularly from animals. This site-wide fencing will be more efficient than individually fencing each individual plantation (see Figure 11).

### Cost head-wise budget for Q1

Cost head	Total
Facility - Moveable	14,40,861
Material - Consumables	6,45,712
Material -Tools and Equipment	1,80,080
One Time Procurement - Facilities	10,00,000
Permanent Staff	3,55,930
<b>Total</b>	<b>36,22,584</b>

### Project-wise budget for Q1

Cost head	Total
Apple Orchard	2,87,140
Miyawaki 2020 Plantation	8,56,553
Nursery	11,22,961
Commons (incl borewell & staff)	13,55,930
<b>Total</b>	<b>36,22,584</b>

### Team:

- Stanzin Angmo – Forestation & Agriculture faculty & Project manager, has joined us in December & will lead the academic work & projects from Jan-Mar quarter onwards
- Clare Harrison – Agricultural Research & Project Officer, looks after the research work for Forestation team, Agriculture & Afforestation curriculum development for next year's Fellowship & coordinates the site work for all plantation projects
- Tsering Chozsom – Plantation Maintenance Officer, for watering the plants & handling other grounds-based work including labourer supervision
- Mohammed Hussain – Plantation Maintenance Officer, will handle procurement & site work for the projects
- Wage labourers – Physical work for Forestation site infrastructure

Stanzin will be leading all the forestation projects from this quarter onwards. With all this, we intend on having a robust platform to make this forestation project a big success.



## Pictorial updates of the projects

### Miyawaki Plantation



Figure 1. Miyawaki Pilot Plantation on December 25<sup>th</sup>.



Figure 2. Miyawaki Pilot Plantation on December 31<sup>st</sup>.



Figure 3. Sample Miyawaki plantation on a 10 sqm plot (showcase)

## Greenhouse



Figure 4. First Greenhouse with Nursery 1 in the background – The plantation inside will start by January-end.



Figures 5 & 6. Covered trench which is planted with native seeds and greenhouse in the background. Germinations of native seeds in one of the trenches.

## Nursery



Figure 7. Nursery 1 with shade net installed in early October.

## Apple Orchards



Figures 8 & 9. Apple orchard current plantation (left) and expansion planting trench preparation (right).



Figure 10. Apple-Apricot orchard with the grey water irrigation system in the foreground



Figure 11. Boundary fence under construction.