

Offsetting Carbon Footprints in Southern Rajasthan

Quarter 4 Report

Oct ~ Dec 2020



Executive Summary

MakeMyTrip Foundation is supporting Seva Mandir to undertake afforestation activities and offset carbon footprints. During this year, 40,000 saplings will be planted in the rural and tribal areas in Udaipur and Rajsamand districts of southern Rajasthan.

Context

Southern Rajasthan is semi-arid region with a hilly terrain, having an erratic weather pattern making the region vulnerable to climatic variation. The region receives average rainfall of 640 mm annually during the monsoons. Due to erratic monsoon and undulating terrain, water harvesting is poor and has high soil erosion.

Common land such as pastures, forest and revenue land constitutes 72% of the total land area in our work area. Nearly 80-100% of rural poor depend on common lands for food, fuel and fodder. However due to anthropogenic pressure, encroachments have been happening on common lands of forests and village pastures. The private wastelands are also degraded, although in better conditions than commons, as families do not have expertise and resources to protect, restore and manage them.

The degradation of lands result in the loss of soil and water regime in the downstream areas lowering the net groundwater availability to critical category. A lack of trees and supporting fauna affects the local ecology. Degradation has led to low availability of fodder, fuel, wood and other forest produces affecting the livestock productivity and income and food security. And importantly, the interest of people to maintain them is lowering with time.

The work of afforestation therefore becomes crucial not only from the point of view of ecological restoration but also from providing sustainable livelihoods for the community and making them interested towards conservation of those lands.

Progress so far

Status of Plantation Sites:

There are nine common pastureland sites for the plantation that have been selected for the target plantation of 40,000 saplings at village commons and individual farmer's land. The respective Gram Panchayat and Gram Vikas Samooh have been involved in planning and implementation of plantation activities.

The loose-stone protection wall is constructed/repared as gap fillings along with putting over thorny bushes for strengthening the protection of all the selected sites. Total 181 ha area of common pastureland has been protected for plantation activities. Apart from these common pasturelands, there are individual pastureland/farmland of 148 farmers that have been selected for the plantation under the project. The native species of multi-purpose uses has been selected for plantation for which a proper landscape plan was made and followed at each selected site for ecological plantation. Thus, a total of 37,290 saplings have been planted. The target was affected due to the Covid-19 situation. The re-plantation of 3,400 saplings at common pastureland was also undertaken. Besides these, there are some associated vegetative measures were also undertaken like direct seeding, planting branch/stump cuttings, etc. to increase vegetative cover at the sites.

New sites were also selected covering an area of 91 ha for next year plantation. The site protection works is under progress. The site-wise details are given in the below tables.

Table 1: Plantation completed at the pastureland

S. No.	Name of Block	Name of sites	Area (in ha)	Plantation completed	Activities completed / Remarks, if any
1	Badgaon	Bhewadiya	29	3000	<ul style="list-style-type: none"> - Gap filling of 9,405 feet loose-stone fencing wall completed for the protection of the site. - Plantation and soil-water conservation work completed. - About 180 <i>jatropha</i> cuttings planted as bio-fencing vegetation at the site. - Weeding-hoeing completed of planted saplings.
2		Kachba	7	5000	<ul style="list-style-type: none"> - Gap filling and construction of 7,374 feet loose-stone fencing wall completed for the protection of the site. - Plantation and soil-water conservation work completed. - Direct seeding done and 2,000 <i>jatropha</i> cuttings planted as bio-fencing vegetation at the site.
3		Naron ka kheda	62	3000	<ul style="list-style-type: none"> - Gap filling of 867 feet loose-stone fencing wall completed for the protection of the site. - Plantation and soil-water conservation work completed. - About 400 <i>jatropha</i> cuttings planted as bio-fencing vegetation at the site. - Weeding-hoeing completed of planted saplings.

4	Girwa	Borikuwa	12	3500	<ul style="list-style-type: none"> - Gap filling and construction of 3,011 feet loose-stone fencing wall completed for the protection of the site. - Plantation and soil-water conservation work completed. - Direct seeding done and 225 <i>jatropha</i> cuttings planted as bio-fencing vegetation at the site.
5	Kherwara	Lambapanwa	10	6500	<ul style="list-style-type: none"> - Gap filling and construction of 3,000 feet loose-stone fencing wall completed for the protection of the site. - Plantation and soil-water conservation work completed. - Direct seeding and <i>Salar/Jatropha</i> stump/branch cutting plantation (2,250) done at the site. - Weeding-hoeing completed of planted saplings.
6		NichlaTalab	7	4000	<ul style="list-style-type: none"> - Gap filling and construction of 3,000 feet loose-stone fencing wall completed for the protection of the site. - Plantation and weeding-hoeing completed. - Direct seeding done and 500 <i>jatropha</i> cuttings planted as bio-fencing vegetation at the site. - Weeding-hoeing completed of planted saplings.
7	Kumbhalgrah	Aamliyar	30	4000	<ul style="list-style-type: none"> - Gap filling and construction of loose-stone fencing wall completed for the protection of the site. - Plantation and weeding-hoeing completed. - Associated vegetative measures like direct seeding done at the site.
8	Jhadol	Ranjitpura	19	5000	<ul style="list-style-type: none"> - Gap filling and construction of 500 feet loose-stone fencing wall completed for the protection of the site. - Plantation and weeding-hoeing completed. - Direct seeding done and 300 <i>jatropha</i> cuttings planted as bio-fencing vegetation at the site.
		Vanpura	5	1000	<ul style="list-style-type: none"> - Gap filling and construction of 3,100 feet loose-stone fencing wall completed for the protection of the site. - Plantation and weeding-hoeing completed. - Direct seeding done and 550 <i>jatropha</i> cuttings planted as bio-fencing vegetation at the site.
		Individual Land	-	2290	<ul style="list-style-type: none"> - Plantation done at 148 individual farmer's pastureland/farmland. - Soil-moisture conservation measures completed.
Total			181	37,290	



Weeding-Hoeing activity



Weeding-Hoeing activity

Table 2: Selected new sites for next year plantation

S. No.	Name of sites	Area (in ha)	Activities ongoing / Remarks, if any
1	Bhopa Sagar	22	Primary survey of the site and community meeting has been conducted for planning and implementation of physical activities.
2	Gorana	21	About 4,000 feet loose-stone protection wall is completed which is under progress.
3	Jagat	48	Primary survey of the site and community meeting has been conducted for planning and implementation of physical activities.
	Total	91	



Common pastureland – Bhopa Sagar



Common pastureland – Jagat

Soil-Moisture and Soil-Water Conservation Initiatives:

As the supporting activity of plantation, soil-moisture and soil-water conservation initiatives have been implemented during the period. The activities like *Thanwla* repairing (10121), etc. were completed for better growth of planted saplings and to retain soil-moisture. During the period, soil-water conservation activities like loose stone check dam, gully plugs, etc. has been completed to check run-off and to protect bank erosion in drainage line of plantation site.



Soil-moisture conservation initiatives



Soil-water conservation initiatives

Protection of the Sites:

The plantation sites are protected by mainly loose-stone protection wall (30,257 feet) which covers around 180 hectare area. Such wall needs time-to-time repairing and maintenance which has been completed during the period. We put over thorny bushes on the wall at some sites for strengthening protection of plantation sites. Local community contributed by doing Shramdaan for repairing of protection wall at some plantation sites. The Gram Vikas Samooh regularly monitors the protection of plantation sites and applies appropriate social fencing system.



Loose-stone protection wall repairing- Shramdaan



Protection of the site

Harvesting of Grass fodder:

After the protection of the plantation sites of pastureland, the regeneration of existing vegetation has increased. Mainly the grasses and herbs regenerated which are important as fodder for domestic animals reared by local community. The Gram Vikas Samooh decided to harvest Grass fodder during the scheduled period, equally benefitting all households who are depended for the fodder. There are about 13,500 Grass bundles (each bundle 1-2 kg weight) have been harvested from pastureland. The estimated value of the harvested grass fodder is Rs.1,50,000 - 2,00,000 (varies cost of Rs.10-15 each bundle).



Capacity Building Events:

To enhance the capacity and orientation of the community and the field teams, different programmes of trainings, meetings, etc. were conducted at the field level, following all the social distancing norms. The details of capacity building sessions are as below.

S. No.	Date	Place	Details of Programme	No. of participants
1.	12/10/2020	Aamliyaar	<ul style="list-style-type: none"> Planning for soil-water conservation initiatives e.g. check dam, gully plugs, etc. Harvesting and distribution of grass fodder. 	48
2.	28/12/2020	Kag Mandada	<ul style="list-style-type: none"> Exposure visit of Gram Vikas Samooh, Bhopa Sagar for orientation protection and management of plantation site of common pastureland. 	26



Exposure visit



Community meeting

Key Point Indicators – 4th Quarter:

S.N.	Key Project Indicators	Unit	2020		
			Achieved 1st-4th Quarter	Planning 1 th Quarter 2021	2020 Overall Target
1	Survey & site selection	Hectares	181	130	190
2	Area of sites protected	Hectares	181	-	190
3	Soil – water conservation work	Hectares	181	-	190
4	No. of saplings planted	Numbers	37,290	-	40,000
5	No. of capacity building programmes conducted	Numbers	13	1	4

Plan for Jan-Mar 2021:

- Technical Survey and identification of new sites for next year plantation.
- Physical work at selected sites.
- Field trainings and regular meetings with local community, village groups, PRIs and field team on protection and management of the common pastureland /plantation sites.