

Annexure-XIX

Compensatory Afforestation Scheme for Non Forest land

Details scheme of Compensatory Afforestation against the proposal for diversion of 38.87 (39.00) ha. of Forest land for tank farm and allied facilities proposal of Reliance Industries Limited at Hajira, Ta.Choryasi, District-Surat.

1. Details of degraded land.

Village	Velavadar
Taluka	Bhavnagar
Range	Velavadar
District	Bhavnagar
Division	Sub-division, Velavadar
Survey No.	152 p/9-p1
Areato be afforested	1000 Plants on the boundary of 38.87 ha. land
Working circle	-- --

2. Description of Area.

Soil type	Murmy, Saline
Topography	Plain Flat Land
Slope	Flat Land with Gentle Slope
Whether the area is bearing any root stock of Vegetation	Yes

Details of Year Wise Break-Up requirement of fund is as under

Daily / Wages-Rs.340.20

Year	Area (ha)	Rate /ha.	Total Amount
0 Year 70 %	1	207710	207710
1 st Year	1	68557	68557
2 nd Year	1	27208	27208
3 rd Year	1	28854	28854
4 th Year	1	56306	56306
5 th Year	1	42169	42169
6 th Year	1	30231	30231
7 th Year	1	32641	32641
8 th Year	1	35291	35291
9 th Year	1	72848	72848
10 th Year	1	41414	41414
Total	1	643230	643230
Supervision Charge 20 %	1	128646	128646
Total	1	771876	771876

Say

7,71,876/-

Compensatory Afforestation will be done in 38.87 (39.00) ha. Area. The total afforestation cost will be Rs.3,01,63,176/-

3. Name of Plantation Programme:-

Compensatory Afforestation Scheme for Non Forest Land

4. Schedule of Plantation Programme:-

(i)	The Compensatory Afforestation on non-forest land would be started by Assistant Conservator of Forest, Blackbuck National Park, Velavadar, Sub-division, Bhavnagar as early as possible after the proposal is formally approved.
(ii)	Compensatory Afforestation will be done in 1 ha. Area. The total afforestation cost will be about Rs.7,71,876/- has given an undertaking to pay the cost of Compensatory Afforestation as per the prevailing wages (including the price escalation and supervision charges).

5. Technical Details:-

Technical details of Compensatory Afforestation are as Follows:

Sr. No.	Details	Specifications
a	General Details	The C.A. will be taken under Compensatory Afforestation for non-forest land. The prevailing wage rate is 340.20 per day.
b	Spacement	1000 nos. plants will be planted along the boundary of 38.87 ha. land at distance of 2.0 mt. from plant-to-plant
c	Species to be planted (Total 1000 nos. of plants will be planted on boundary of 38.87 (39.00) ha. land)	<i>Salvadora spp.</i> 700 50 cm
		<i>Acacia spp.</i> 300 50 cm
		Total 1000
d	Nursery Technique	Nine months old polypot raised plants will be planted at the onset of monsoon.
e	Site Preparation	The malformed rootstock present in the area will be cutback & the site will be cleaned in the month of Nov-Dec. Alignment & pit digging 45 x 45 x 45 cms. will be carried out in the month of Dec-Jan.
f	Plantation Method	Polypot raised plants will be planted during monsoon.
g	Soil & Moisture Conservation Works	As per requirement
h	Protection Trench	As per requirement
i	Silvicultural Operations	1 st year three weeding soil working, Support watering will be provided if needed. 2 nd year two weeding soil working. 3 rd year one weeding soil working.
j	Maintenance	It is proposed to maintain the Plantation up to ten years.

k	Subsequent silvicultural Operation	Cleaning, cutbacks, thinning etc. (as per species specific requirement) will be carried out at the age as per prescribed in silvicultural operation.
l	Proposed monitoring mechanism	(i) A plantation register is to be maintained. (ii) Monitoring is to be done as per the following norms. Forester – 100% RFO – 100% ACF – 20% DCF – 10% (iii) The results of survival etc. are maintained in the plantation register on a periodical basis, which is updated at the end of September and March each year. (iv) The collar girth is also to be reordered at the end of each year. (v) At the end of maintenance period, the area is aimed at full stocking and pole crop girth for all the species, except bamboo. (vi) Bamboo would be of the harvestable size by the end of 4th year. (vii) Third party monitoring mechanism is also in the State and if the plantation is in the sample selected, it will also be monitored by the third party selected for this purpose.
m	Silviculture & other activities	Only afforestation aimed plantation will be taken up, as the area falls under non-forest land.


Assistant Conservator of Forests
Blackbuck National Park, Velavadar,
Bhavnagar.

The Compensatory Afforestation scheme at the cost of **Rs.3,01,63,176/-** is technically approved by the undersigned.


Assistant Conservator of Forests
Blackbuck National Park, Velavadar,
Bhavnagar.

Annexure-II

Compensatory Afforestation Plan - 38.87 ha. (39.00 ha.)

(Specially designed model for Blackbuck National Park, Velavadar)

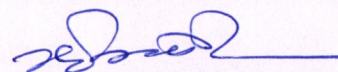
Daily wages Rs.340.20

Item of Work		Unit	Qty.	Unit Rate (Rs.)	Labour (Rs.)	Material (Rs.)	Total	Per Hactar	Total Expenditure *39.00 Ha.
1	2	3	4	5	6	7	8	9	10
1	0 Year								
a.	Uprooting of invasive species (P. juliflora) etc.	Ha.	39	4000	4000	0	156000	4000	156000
b.	Ploughing of the area to improve quality and growth of grass.	Ha.	39	9000	9000	0	351000	9000	351000
c.	Digging of pit size 45cm X 45cm X45cm along the boundry line with distance of 2M from plant to plant	Nos.	1000	15	15	0	15000	384.62	15000
	Total							13385	522000
	Protection								
d.	Chainlink fencing with Iron angle	Rmt	2000	3500	500	3000	7000000	179487.2	7000000
e.	Raised platforms for wild animals	Nos.	2	L/s.	L/s.	L/s.	250000	L/s.	250000
f.	Protection Watchers	Nos.	5	8845	8845	0	530700	13607.69	530700
g.	Boundry Pillars	Nos.	16	3000	1000	2000	48000	1230.8	48000
	Total							194326	7828700
	Grand Total 0 Year							207710	8350700
2	1 Year								
	Area Development								
a.	Uprooting of invasive species (P. juliflora) etc.	Ha.	39	1000	1000	0	39000	1000	39000
b.	Ploughing of the area to improve quality and growth of grass.	Ha.	39	9000	9000	0	351000	9000	351000
c.	Grass Seed sowing	Kg.	1000	500	50	450	500000	12820.5	500000
d.	Planting of Salvadora Indica Shrubs with tree guard (Plant Height must be 2 to 3 ft in Big Size Of Bag) including transportation & 5 weeding soil working and 5 watering	Nos.	1000	1000	300	700	1000000	25641.03	1000000
	Total							48462	1890000
	Protection & Up keep the area								
e.	Miscellaneous vehicle maintainance and fuel charges	Lumsum	12 Months	200000	0	200000	200000	5128.2	200000
f.	Protection Watchers	Nos.	5	9729	9729	0	583740	14967.69	583740
	Total							20096	783740
	Grand Total 1 Year							68557	2673740

Item of Work		Unit	Qty.	Unit Rate (Rs.)	Labour (Rs.)	Material (Rs.)	Total	Per Hactar	Total Expenditure *39.00 Ha.
1	2	3	4	5	6	7	8	9	10
3	2 Year								
	Protection & Up keep the area								
a.	Uprooting of invasive species (P. juliflora) etc.small shrubs	Ha.	39	1	1000	0	39000	1000	39000
b.	Mortality Replacement of Plants	Nos.	As per Mortaliy	100	30	70	80000	2051.3	80000
c.	Watering and weeding in Plantation	Nos.	1000	100	20	80	100000	2564.10	100000
d.	Miscellaneous vehicle maintainance and fuel charges	Lumsum	12 Months	200000	0	200000	200000	5128.2	200000
e.	Protection Watchers	Nos.	5	10702	10702	0	642120	16464.62	642120
	Total							27208	1061120
4	3 Year								
	Protection & Up keep the area								
a.	Uprooting of invasive species (P. juliflora) etc.small shrubs	Ha.	39	1	1000	0	39000	1000	39000
b.	Mortality Replacement of Plants	Nos.	As per Mortaliy	100	30	70	80000	2051.3	80000
c.	Watering and weeding in Plantation	Nos.	1000	100	20	80	100000	2564.10	100000
d.	Miscellaneous vehicle maintainance and fuel charges	Lumsum	12 Months	200000	0	200000	200000	5128.2	200000
e.	Protection Watchers	Nos.	5	11772	11772	0	706320	18110.77	706320
	Total							28854	1125320
5	4 Year								
	Protection & Up keep the area								
a.	Uprooting of invasive species (P. juliflora) etc.small shrubs	Ha.	39	1	1000	0	39000	1000	39000
b.	Mortality Replacement of Plants	Nos.	As per Mortaliy	100	30	70	80000	2051.3	80000
c.	Watering and weeding in Plantation	Nos.	1000	100	20	80	100000	2564.10	100000
d.	Miscellaneous vehicle maintainance and fuel charges	Lumsum	12 Months	200000	0	200000	200000	5128.2	200000
e.	Protection Watchers	Nos.	5	12949	12949	0	776940	19921.54	776940
f.	Maintanance of Chainlink Fencing	Rmt.	1000	1000	200	800	1000000	25641.03	800000
	Total							56306	1995940

Item of Work		Unit	Qty.	Unit Rate (Rs.)	Labour (Rs.)	Material (Rs.)	Total	Per Hactar	Total Expenditure *39.00 Ha.
1	2	3	4	5	6	7	8	9	10
6	5 Year								
	Protection & Up keep the area								
a.	Uprooting of invasive species (P. juliflora) etc.small	Ha.	39	1	1000	0	39000	1000	39000
b.	Ploughing of the area to improve quality and growth of grass.	Ha.	39	9000	9000	0	351000	9000	351000
c.	Grass Seed Sowing (If Requiered)	Kg.	400	500	50	450	200000	5128.21	200000
d.	Miscellaneous vehicle maintainance and fuel charges	Lumsum	12 Months	200000	0	200000	200000	5128.2	200000
e.	Protection Watchers	Nos.	5	14243	14243	0	854580	21912.31	854580
	Total							42169	1644580
7	6 Year								
	Protection & Up keep the area								
a.	Uprooting of invasive species (P. juliflora) etc.small	Ha.	39	1	1000	0	39000	1000	39000
c.	Miscellaneous vehicle maintained and fuel chages	Lumsum	12 Months	200000	0	200000	200000	5128.2	200000
d.	Protection Watchers	Nos.	5	15667	15667	0	940020	24103.08	940020
	Total							30231	1179020
8	7 Year								
	Protection & Up keep the area								
a.	Uprooting of invasive species (P. juliflora) etc.small	Ha.	39	1	1000	0	39000	1000	39000
b.	Miscellaneous vehicle maintainance and fuel charges	Lumsum	12 Months	200000	0	200000	200000	5128.2	200000
c.	Protection Watchers	Nos.	5	17233	17233	0	1033980	26512.31	1033980
	Total							32641	1272980
9	8 Year								
	Protection & Up keep the area								
a.	Uprooting of invasive species (P. juliflora) etc.small	Ha.	39	1	1000	0	39000	1000	39000
b.	Miscellaneous vehicle maintainance and fuel charges	Lumsum	12 Months	200000	0	200000	200000	5128.2	200000
c.	Protection Watchers	Nos.	5	18956	18956	0	1137360	29163.08	1137360
	Total							35291	1376360
10	9 Year								
	Protection & Up keep the area								
a.	Uprooting of invasive species (P. juliflora) etc.small	Ha.	39	1	1000	0	39000	1000	39000
b.	Ploughing of the area to improve quality and growth of grass.	Ha.	39	9000	9000	0	351000	9000	351000
c.	Miscellaneous vehicle maintainance and fuel charges	Lumsum	12 Months	200000	0	200000	200000	5128.2	200000
d.	Protection Watchers	Nos.	5	20851	20851	0	1251060	32078.46	1251060
e.	Maintanance of Chainlink Fencing	Rmt.	1000	1000	200	800	1000000	25641.03	1000000
	Total							72848	2841060

Item of Work		Unit	Qty.	Unit Rate (Rs.)	Labour (Rs.)	Material (Rs.)	Total	Per Hactar	Total Expenditure *39.00 Ha.
1	2	3	4	5	6	7	8	9	10
11	10 Year								
	Protection & Up keep the area								
a.	Uprooting of invasive species (P. juliflora) etc.small	Ha.	39	1	1000	0	39000	1000	39000
b.	Miscellaneous vehicle maintainance and fuel charges	Lumsum	12 Months	200000	0	200000	200000	5128.2	200000
c.	Protection Watchers	Nos.	5	22936	22936	0	1376160	35286.15	1376160
	Total							41414	1615160
	Grand Total							643230	25135980
	Supervision charge @20%...							128646.1	5027196
	Grand Total...							771876	30163176


Assistant Conservator of Forests
Blackbuck National Park, Velavadar,
Bhavnagar.