Statement No.15

Scheme of Compensatory Afforestation

Eco-restoration Plan for 39.00 hectare of Velavadar village (Shrubland and Grassland) Ta.Bhavnagar, District-Bhavnagar, Blackbuck National Park, Velavadar, Bhavnagar. Special designed model for Blackbuck National Park

1000 nos. of Salvadora sp. and Acacia Spp. plantation along the

Shrubland 1.

boundary of 39.00 ha.

land at distance of 2.0 mtr. from plant to plant.

2. Grassland 37.00 ha. of grass like; Dichanthium annulatum, Sporobolus

madraspatensis, Chloris virgata, etc. will be raised.

Open patch 3.

02.00 ha. (in this patch, whatever natural growth is occurring should be

left as it is but invasive species like P. Juliflora etc. should be removed

regularly).

Type

Water supply required for shrubland, grassland and open patch can be

maintained on rain.

Design & technique

:

:

Thorough survey of the area will be conducted. 1.

2. Flora & Fauna of the area will be noted down.

3. Depending on the existing diversity / elevation / location; Blackbuck friendly floral species will be selected.

Depending on the site, Blackbuck friendly vegetation will be 4. kept in as it is condition.

Species composition

Salvadora sp., Acacia nilotica sp.

Area development

Removal of unwanted species likd P. juliflora etc.

2. Ploughing for grassland (max.15 cm. deep) will be done prior to

monsoon

3. For shrubland saplings should be planted in the pit (1 ft) after

the first rainfall and if required fresh water should be supplied

for a year to ensure the growth.

Providing waterhole

One saucer-shaped waterhole having max depth of 1 ft. at the

centre will be made with cement.

Seed sowing

:

1.

Seed sowing will be done at the distance of 50 cm. x 50 cm.

Protection

1. Erection of chainlink fencing and wall along the outer side

boundary will be done.

2. Fence should be made in such a way that wild mammals can roam in, but, population and movements of feral dogs will be

controlled.

Planting

Seed sowing will be done at the distance of 50 cm. x 50 cm.

Up keep of the area

Newly germinated invasive species of weeds will be removed in

the first year and after that at certain interval. Regular water supply to the newly planted saplings and waterhole will be

ensured.

Date : ____/02/2024 Place: Bhavnagar.

Assistant Conservator of Forests Black buck National Park, Velavadar, Bhavnagar.

Compensatory Afforestation Scheme for Non Forest area

Diversion of 38.8633 Ha of land for Tank Farm and Storage Associated Facility for Reliance Industries LTD. Hajira Manufacturing Division in Surat District of Gujarat.

Detailed scheme of Compensatory Afforestation for Non forest land area 39 ha. To be carried out in lieu of 38.87 ha. Of Reserve forest land to be diverted in Surat District.

1. Details of Non Forest land.

District	Taluka	Range	37211	ο	
Bhavnagar			Village	Survey No.	Area(Ha)
Bilavilagai	Dilavnagar	Velavadar	Velavadar	152p/9-p1	39
Descript	ion of Area	Total		•	39

2. Description of Area.

Soil type	Marmore California
Topography	Murmy, Saline
	Plain flat land
Slope	Flat land with gentle slope
Whether the area is bearing any root stock of	Area covered with prosopis
Vegetation	juliflora.

Name of Plantation Programme:-Compensatory Afforestation Scheme for Non 3. Forest land Area.

Details of Year Wis	se Break-Up ro	equirement of fur	nd is as under.
			Daily Wages-Rs.462
Year	Area (Ha)	Rate/Ha.	Total Amount
0 Year 70%	1	326749	326749
1 st year	1	73916	73916
2 nd year	1	33103	33103
3 rd year	1	35338	35338
4 th year	1	63439	63439
5 th year	1	50014	50014
6 th year	1	38861	38861
7 th year	1	42133	42133
8 th year	1	45732	45732
9 th year	1	84333	84333
10 th year	1	54048	54048
Total	1	847665	847665
Supervision Charge 20 %	1	169533	
Total	1	1017198	169533 1017198

Compensatory Afforestation will be done in 38.87 (39.00) ha. Area. The total afforestation cost will be Rs. 3,94,30,723/-

4. Schedule of Plantation Programme:-

- (i) The Compensatory Afforestation on degraded area would be started by Assistant Conservator of Forests, Blackbuck National Park, Velavadar 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. 10,17,198**/- 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.		•		Specifications
No.				- P
а	General Details	The C.A. will I Non Forest lan	oe taken d. The pr	under Compensatory Afforestation for evailing wage rate is 462.00 per day.
b	Spacement	1000 nos. plan	its will be	e planted along the boundary of 38.87 2.0 mt. from plant-to-plant.
С	Species to be	Species	Plants	
	planted	Salvadora	700	50 cm
	(total plants)	spp.		
		Acacia Spp.	300	50 cm
		Total	1000	
d	Nursery Technique	Nine months o	ld poly p	pot raised plants will be planted at the
		onset of monso	on.	process will be planted at the
е	Site Preparation	The malformed	rootstoc	k 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	5 cms. will be carried out in the month
		of Dec-Jan.		month.
f	Plantation Method	Poly pot raised	plants w	rill be planted during monsoon.
g	Soil & Moisture Conservation Works	As per requirer	nent	1
h	Protection Trench	As per requirer	nent	
i	Silvicultural	1styear three w	eeding s	soil working, Support watering will be
	Operations	provided if need	ded.	Ci II sa
		2nd year two we	eding so	il working.
		3rdyear one wee	eding soil	working.
j	Maintenance	It is proposed t	o mainta	in the Plantation up to ten years.
k	Subsequent	Cleaning, thins	ning etc.	(as per species specific requirement)
	silvicultural	will be carried	out at th	e age as per prescribed in silvicultural
	Operation	operation.		0 1 1
L	Proposed	(i) A plantatio	n registe	er is to be maintained.
	monitoring	(ii) Monitoring	is to be	done as per the following norms.
	mechanism	Forester – 100%	6	associate per the following norms.
		RFO - 100%	7	
		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) Third party monitoring mechanism is also in the State and if the plantations in the sample selected, it will also be monitored by the third party selected for this year.
m	Silviculture & other	monitored by the third party selected for this purpose. Only afforestation aimed plantation will be taken up, as the
	activities	area falls under non-forest land.

The Compensatory Afforestation scheme at the cost of **Rs. 3,94,30,723/**is technically sanctioned by the undersigned.

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

	Annexure-II	Annexure-II	II an - 38.87 ha.	(39.00 ha.)					
	eds)	for Blackb	uck National	Park, Velava	dar)				
Dai	Daily wages Rs. 462.00 Item of Work	Unit	Qty.	Unit Rate (Rs.)	Labour (Rs.)	Material (Rs.)	Total	Per Hactar	Total Expenditurs *39.00 Ha.
1	2	æ	4	2	9	7	∞	6	10
н,		Ha	39	5432	5432	0	5432	5432	211848
ė ė	. Uprobling of the area to improve quality and growth of grass.	Fa.	39	12222	12222	0	12222	12222	476658
ن		Nos.	1000	20	20	0	20000	20000	780000
1	of ZM from plant to plant							37654	1468506
	Protection								
Ö		Rmt	2000	4753	753	4000	9506000	243744	9506000
ą		Nos.	2	L/s.	L/s.	r/s.	107077	18480	720704
÷	1	Nos.	2	12011	8845	0 000	48000	1231	48000
ø	Boundry Pillars	Nos.	16	4074	1000	2000	48000	289095	11274704
	Total							326749	12743210
7	1 Year								
. ,		<u> </u>	36	1358	1000	0	39000	1000	39000
ė .	Uprooting of invasive species (F. Jullifold) etc.	£	39	12222	0006	0	351000	0006	351000
i		Ko	1000	629	20	450	200000	12821	200000
ان خ		Nos.	1000	1358	300	700	1000000	25641	1000000
	watering							48462	1890000
	Missell and the protection & Up keep the area	Lumsum	12 Months	271605	0	200000	200000	5128	200000
<u>ب</u> اند	-	Nos.	2	13212	9729	0	792733	20326	792733
-								25455	992733
	Grand Total 1 Year							73916	2882733
, w									
		E H	39	1	1000	0	39000	1000	39000
ف ا	Mortality Replacement of Plants	Nos.	As per Mortaliv	136	30	70	80000	2051	80000
,		Nos.	1000	136	20	80	100000	2564	100000
Ö		Lumsum	12 Months	271605	0	200000	200000	5128	200000
ė		Nos.	S	14534	10702	0	872015	22359	1291015
	Total							20100	

Ţ.		:				Labour	Material	Total		
,	Item of Work	Onit		Qty.	Rate (Rs.)	(Rs.)	(Rs.)	- 0.0	Per Hactar	Expenditure
-	2	8		4	S	9	7	∞	6	10
4	3 Year									
	Protection & Up keep the area									
ë	Uprooting of invasive species (P. juliflora) etc.small shrubs	На		39	1	1000	0	39000	1000	39000
<u>-</u>	Mortality Replacement of Plants	Nos.		As per Mortaliy	136	30	70	80000	2051	80000
ن	Watering and weeding in Plantation	Nos.		1000	136	20	80	100000	2564	100000
ť	Miscellaneous vehicle maintainance and fuel charges	Lumsum		12 Months	271605	0	200000	200000	5128	200000
نه	Protection Watchers	Nos.		2	15987	11772	0	959200	24595	959200
		Total							35338	1378200
n	4 Year									
	Protection & Up keep the area									
ë	Uprooting of invasive species (P. juliflora) etc.small shrubs	Ha.		39	1	1000	0	39000	1000	39000
ف	Mortality Replacement of Plants	Nos.		As per Mortaliy	136	30	70	80000	2051	30000
ن	Watering and weeding in Plantation	Nos.	_	1000	136	20	80	100000	2564	100000
ö	Miscellaneous vehicle maintainance and fuel charges	Lumsum		12 Months	271605	0	200000	200000	5128	200000
	Protection Watchers	Nos.		2	17585	17585	0	1055104	27054	1055104
<u>~</u>	Maintanance of Chainlink Fencing	Rmt.		1000	1358	200	800	1000000	25641	300000
		Total	-						63439	2274104
9	5 Year									
	Protection & Up keep the area									
a,	Uprooting of invasive species (P. juliflora) etc.small	Ha.		39	1	1000	0	39000	1000	39000
ف	Ploughing of the area to improve quality and growth of grass.	Ha.		39	12222	0006	0	351000	9000	351000
	Grass Seed Sowing (If Regiered)	Kg.		400	629	20	450	200000	5128	200000
ΰ	Miscellaneous vehicle maintainance and fuel charges	Lumsum		12 Months	271605	0	200000	200000	5128	200000
e e	Protection Watchers	Nos.		2	19342	19342	0	1160541	29757	1160541
		Total							50014	1950541
			-							

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1 Protection Watchers Protection & Up weight a read Pr		Item of Work	Cult	Qty.	Rate (Rs.)	(Rs.)	(Rs.)	Total	Per Hactar	Expenditure *39.00 Ha.
Protection & Up Keep the area Ha	-	2	m	4	2	9	7	00	6	10
Protection Watchers Protection & by keep the area Ha. 100	^	6 Year					The state of the s			
University of Invasive species (P. julifical) et.c.nail University of		Protection & Up keep the area					ī,			-
Moscellaneous vehicle maintainanced and fuel chages Norman Total Nos.	ė	Uprooting of invasive species (P. juliflora) etc.small	Ę.	39	-	1000	0	39000	1000	39000
Total Control Watchers Total Control Contr	ن	Miscellaneous vehicle maintainanced and fuel chages	Lumsum	12 Months	271605	0	200000	200000	5128	200000
Protection & Uprocetting of Invasive species (P. julifico) rectand by the get the area Total Protection & Uprocetting of Invasive species (P. julifico) rectand for changes Total Protection white maintainance and fuel changes Total Protection white waintainance and fuel changes Total Protection white waintainance and fuel changes Total Protection white waintainance and fuel changes Total Protection watchers Total Protection watcher	Ü	Protection Watchers	Nos.	S	21276	21276	0	1276570	32733	1276570
Protection & Department of the part of t		Total	_						38861	1515570
Protection Watchers Protection & Protect	œ	7 Year	2	-				1		
Discosing of invasive species (P. julifora) etc.small Ha. Total Total Ha. Total Total Ha. Total Ha. Total Total Total Ha. Total Total Total Ha. Total Total Ha. Total Total Total Ha. Total Total Total Total Ha. Total	•	Protection & Up keep the area			-			10.00	4.7	
No. 1962 1969 1		Uprooting of invasive species (P. Iuliflora) etc.small	Ŧ	39	-	1000	C	39000	1000	39000
Protection Watchers	ف	Miscellaneous vehicle maintainance and fuel charges	Lumsum	12 Months	271605	0	20000	200000	5128	200000
Protection & Up keep the area Ha. 39 1 1000 39000 1	ن	Protection Watchers	Nos.	S	23403	23403	0	1404170	36004	1404170
Protection & Up keep the area Ha. 39 1 1000 0 39000 1000		Total							42133	1643170
Protection & Up keep the area Ha. Ha	0	8 Year		÷	:					
Designation of the state of the charges Hamilton of the charges Lumisum Hamilton of the charges Lumisum 12 Months 271605 0 200000 200000 21282 25743 25743 25743 20000 200000 2500000 250000 250000 250000 250000 250000 250000 2500000 250000 250000 250000 250000 250000 250000 2500000 250000 250000 250000 250000 250000 250000 2500000 250000 250000 250000 250000 250000 250000 2500000 250000 250000 250000 250000 250000 250000 2500000 250000 250000 250000 250000 250000 250000 2500000 250000 250000 250000 250000 250000 250000 2500000 250000 250000 250000 250000 250000 250000 2500000 250000 250000 250000 250000 250000 250000 2500000 250000 250000 250000 250000 250000 250000 2500000 250000 250000 250000 250000 250000 250000 2500000 250000 250000 250000 250000 250000 250000 2500000 250000 250000 250000 250000 250000 250000 2500000 250000 250000 250000 250000 250000 250000 2500000 2500000 250000 2500000 2500000 2500000 2500000		Protection & Up keep the area								
Miscellaneous vehicle maintainance and fuel charges Lumisum 12 Months 271655 0 200000 200000 5128 25 25 25 25 25 25 25	æ	Uprooting of invasive species (P. juliflora) etc.small	Ha.	39	1	1000	0	39000	1000	39000
Protection Watchers		Miscellaneous vehicle maintainance and fuel charges	Lumsum	12 Months	271605	0	200000	200000	5128	200000
Protection & Up keep the area Up keep the		Protection Watchers	Nos.	S	25743	25743	0	1544563	39604	1544563
Protection & Up keep the area Ha. 39 1222 9000 0 35000 1000 35000		Total	_						45732	1783563
Protection & Up keep the area Ha. 39 1 1000 0 39000 1000	2	9 Year	-				1			1
Unrocuting of invasive species (P. juilifora) etc.smail Ha. 39 11222 9000 0 351000 3		Protection & Up keep the area	77.7		1			Ť		
Protection Watchers		Uprooting of invasive species (P. juliflora) etc.small	Ha.	39	1	1000	0	39000	1000	39000
Miscellaneous vehicle maintainance and fuel charges Nos. 12 Months 12 Months 12 Months 12 Months 12 Months 12 Months 13 Months 13 Months 13 Months 13 Months 100000 10000 100000 100000 10000 100000 10000 10000 100000 100000 10000 100000 100000 100000 100000 100000 100000 100000 100000 100000		Ploughing of the area to improve quality and growth of grass.	Ha.	39	12222	0006	0	351000	0006	351000
Protection Watchers	1	Miscellaneous vehicle maintainance and fuel charges	Lumsum	12 Months	271605	0	200000	200000	5128	200000
Maintanance of Chainlink Fencing Total		Protection Watchers	Nos.	2	28316	28316	0	1698970	43563	1698970
10 Year 10 Year 10 Protection & Up keep the area 10 Year		Maintanance of Chainlink Fencing	Rmt.	1000	1358	200	800	1000000	25641	1000000
Divided to the area Protection & Up keep the area Protection & Up keep the area Protection & Up keep the area Uprooting of invasive species (P. Julifora) etc.small Ha. 39 1 1000 0 39000 1000 5128		Total							84333	3288970
Protection & Up keep the area Ha. 39 1 1000 0 39000 1000	11	10 Year	-				i	,		
Uprooting of invasive species (P. juliflora) etc.small		Protection & Up keep the area				Townstee a country of	delice of the state of			
Miscellaneous vehicle maintainance and fuel charges Lumsum 12 Months 271605 0 200000 5128 Protection Watchers Protection Watchers Total Nos. 5 31148 0 1868859 47919 1 Grand Total Grand Total Supervision charge @20% Grand Total 1017198 39		Uprooting of invasive species (P. juliflora) etc.small	Ha.	39	1	1000	0	39000	1000	39000
Protection Watchers Total Nos. 5 31148 31148 0 1868859 47919 1868859 47919 1868859 47919 1868859 47919 1868859 47919 1868859 47919 1868859 18688		Miscellaneous vehicle maintainance and fuel charges	Lumsum	12 Months	271605	0	200000	200000	5128	200000
Sade		Protection Watchers	Nos.	S	31148	31148	0	1868859	47919	1868859
169533 1		Total							54048	2107859
Assistant Conservator of Forests		Grand Total							847665	32858936
Assistant Conservator of Forests	7	Supervision charge @20%							169533	6571787
Assistant Conservator of Forests Blackbuck National Park Velavadar		Grand Total							1017198	39430723
Assistant Conservator of Forests Blackbuck National Park Velavadar							•	To the second		
							Assistant (Conservator ational Park	of Forests Velavadar,	