

Annexure-XIX

Compensatory Afforestation Scheme for double degraded forest area

Details Scheme of Compensatory Afforestation for Diversion of 10.7445 Ha Protected forest land for strengthening and widening of Nasvadi-Bhakha-Kavat Road Km.0/00 to 38/400 km in Favour of Executive Engineer, R & B Division, Chhotaudepur Taluka in SF Division Vadodara in Vadodara in Gujarat State.

1. Details of degraded land.

Village	Palanpur
Taluka	Halol
Range	Halol
District	Panchmahal
Division	Godhra
Reserved Forest Survey No..	58
Area to be afforested	22 Ha
Working circle	Production Working Circle

2. Description of Area.

Soil type	Black & Goradu Soil
Topography	Plain
Slope	Medium & Gentle
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.324.20

Year	Area (ha)	Rate /ha	Total Amount
0 Year 70 %	22	175876	3869271
1 st Year	22	89699	1973373
2 nd Year	22	58267	1281873
3 rd Year	22	46456	1022025
4 th Year	22	16028	352619
5 th Year	22	8532	187704
6 th Year	22	9750	214500
7 th Year	22	10150	223300
8 th Year	22	10620	233640
9 th Year	22	10820	238040
10 th Year	22	10965	241230
Total	22	447162	9837575
Supervision Charge 20 %	22	89432	1967515
Total	22	536595	11805090

Say

1,18,05,090/-

Compensatory Afforestation will be done in 22.00 ha. Area. The total afforestation cost will be Rs.1,18,05,090/-

3. Name of Plantation Programme:-
Compensatory Afforestation Scheme for Degraded Area.

4. Schedule of Plantation Programme:-

(i)	The Compensatory Afforestation on degraded area would be started by Dy.Conservator of Forest Godhra Division as early as possible after the proposal is formally approved.
(ii)	Compensatory Afforestation will be done in 22 ha. Area. The total afforestation cost will be about Rs. 1,18,05,090/- Executive Engineer , R & B Division, Chhotaudepur 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 double land on degraded Forest Areas. The prevailing wage rate is 340.20 per day.																														
b	Spacement	3 X 3 mtr. 111 plants per ha.																														
c	Species to be planted (No. of plants per ha.)	<table> <tr> <td>Holoptelea</td><td>340</td><td>65 cm</td></tr> <tr> <td>Teak</td><td>370</td><td>50 cm</td></tr> <tr> <td>Custard Apple</td><td>160</td><td>50 cm</td></tr> <tr> <td>Cassia fistula</td><td>60</td><td>50 cm</td></tr> <tr> <td>Bamboo</td><td>50</td><td>50 cm</td></tr> <tr> <td>Mahuda</td><td>10</td><td>50 cm</td></tr> <tr> <td>Khair</td><td>10</td><td>50 cm</td></tr> <tr> <td>Vad,Pipal ,Khatimbali ,Arjun sadad</td><td>55</td><td>65 cm</td></tr> <tr> <td>Limado,kothi,kadayo,Bili etc...</td><td>56</td><td>50 cm</td></tr> <tr> <td>Total</td><td>1111</td><td></td></tr> </table>	Holoptelea	340	65 cm	Teak	370	50 cm	Custard Apple	160	50 cm	Cassia fistula	60	50 cm	Bamboo	50	50 cm	Mahuda	10	50 cm	Khair	10	50 cm	Vad,Pipal ,Khatimbali ,Arjun sadad	55	65 cm	Limado,kothi,kadayo,Bili etc...	56	50 cm	Total	1111	
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Total	1111																															
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	<p>(i) Pucca structure like Check dam, check wall, retaining wall</p> <p>(ii) Contour trenches 2.00 x 0.45 x 0.30, 300 Nos/ha. will be dug along the contour line. the dug out soil will be heaped on the down ward side. Gully plugging & Nala Banding using The loose stone available in the area will be carried out as per requirement.</p>																														

		Seeds of Jatropha, Agave plants ...etc. will be planted during monsoon in the upper side of nala as per suitability. (iii) Van Talavadi/ Percolation tank
h	Protection Trench	Barbed wire fencing, Seed sowing And planting of cuttings of Ipomea/ Glarcidia along the fence
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 the working plan.
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 4 th 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	Regeneration cleaning	Cut-back and promotion of root suckers.
n	Silviculture & other activities	Only afforestation aimed plantation will be taken up, as the area falls under degraded forest land.


Deputy Conservator of Forest
Godhra

The Compensatory Afforestation scheme at the cost of **Rs. 1,18,05,090/-** is technically and administrative approved by the undersigned.


Deputy Conservator of Forest
Godhra

Compensatory Afforestation Scheme for Non- Forest land Under FCA Proposal

Details Scheme of Compensatory Afforestation for Diversion of 10.7445 Ha Protected forest land for strengthening and widening of Nasvadi-Bhakha-Kavat Road Km.0/00 to 38/400 km in Favour of Executive Engineer, R & B Division, Chhotaudepur Taluka in SF Division Vadodara in Vadodara in Gujarat State.

Spacemnts = 3mx3m

1111 seedling / ha

1st year replacement 10 % = 111 seedling / ha

2nd year replacement 20 % = 111+111 seedling / ha

3rd year replacement 10 % = 111 seedling / ha

Total Seedlings = 1333 seedling / ha

Polypot size : 15 cm X 25 cm X 200

Wage rate: 340.20/Day

	Plau ground	Qty.	Labour	Material	Totals
0 year Nursery					
(a)	Cost of soil .manure, seeds, water,fartillizer, insecticides, implements, rent of lands. Shade. etc. (including '10 % for casuality replacement)	1222	0	1815	1815
(b)	labour : Preparation of beds, filling and arranging of bags,showing of seeds, watering shifting, weeding etc.	1222	4868	230	5098
	Seedling cost for casuality replacement in one year old (20 %)	222	1538	419	1957
	Seedling cost for casuality replacement in two year old (10%)	111	770	209	979
	Total		7177	2673	9850
2. Area Development (Land Preparation)					
(a)	Survey, cutback and promotion of root suckers		3657	0	3657
	Aligment and digging of pits 0.45 X 0.45 X 0.45	1111@8.84	10199	0	10199
	Total		13856	0	13856
(a)	Fertilizer (Neem cake/ Castor cake)/Vermicompost etc.	1111@10	0	11110	11110
	Total		0	11110	11110
3. SMC Works					
(a)	Check wall/ retaining wall /checkdem (all pucca only)	L.S	13685	23535	37220
(b)	Contour trench 2 M x 45 Cm x 30 Cm as per Rs.51.75/rmt (300 trench)/Trench/Stone dykes (45 cm ht.and 1 m inward sloped width)	600rmt	10160	0	10160
(c)	Van Talavadi/Hill Top Tank/Percolation tank/Nala bund,Gully Plug etc.		10484	0	10000
	Total		34329	23535	57380
4. Protection					
(a)	Barbed wire fencing (205 rmt/ Ha. , Rs. 400/- per Rmt) or Protection Trench	L.S	7339	75000	82000
(b)	Seed sowing and planting of cuttings of Ipomea/ Glaricidia along the fence		1208	473	1681
	Total		8547	75473	83681
	Total for 0 year		63908	112791	175876
1st Year					
(a)	Maintenance of nursery (April to June)	1222	4460	340	4800
(b)	Transport of seedling for plantation@3.50/Plants	1111	3500	389	3889
(c)	Unloding and Head load Transportation (15 cm x 25 cm)	1111	1511	0	1511
(d)	Planting with khamna of Min. 1 m dia	1111	6985	0	6985
(e)	Transport & Digging of Pit and then plantaion (Casuality Replacement) @ 8.50 Per Plant	111	847	97	944
(f)	3 weeding cum soilworking	1111	25638	0	25638
(g)	Support watering 5 times @5.30		17560	20539	38099
(h)	Protection / tending operation		5370	0	5370
(i)	Tending to natural vegetation		1305	0	1305
(i)	Contingency		0	1158	1158
	Total for 1st year		67176	22523	89699

2nd Year					
(a)	2 weeding & soil working		13774	0	13774
(b)	20 % Casually replcement, transport & Digging of Pit and then plantaion (Casuality Replacement) @ 8.50 Per Plant	111+111	487	1400	1887
(c)	Fertilizer (Neem cake/ Castor cake)/Vermicompost etc.	Rs. 10/plants	0	13560	13560
(d)	Support watering 3 times @ 5.30		10194	13351	23545
(e)	Protection / tending operation		5501	0	5501
Total for 2nd Year			29956	28311	58267
3rd Year					
(a)	2 weeding & soil working		13774	0	13774
(b)	10 % Casually Replcement, transport & Digging of Pit and then plantaion (Casuality Replacement) @ 8.50 Per Plant	111	847	97	944
(c)	Fertilizer (Neem cake/ Castor cake)/Vermicompost etc.	Rs. 10/plants	0	13332	13332
(d)	Support watering 1 times @6		3968	4120	8088
(e)	Protection & maintenance of fencing / tending Operation	L.S	10318	0	10318
Total for 3rd year			28907	17549	46456
4thYear					
(a)	1 weeding & soilworking	L.S	5710	0	5710
(b)	Protection & Maintenance of fencing/ Tending operation		10318	0	10318
Total for 4th Year			16028	0	16028
5thYear					
	Protection & maintenance of fencing/ tending operation	L.S	8532	0	8532
Total for 5th Year			8532	0	8532
6thYear					
	Protection & maintenance of fencing/ tending operation	L.S	9750	0	9750
Total for 6th Year			9750	0	9750
7 th Year					
	Protection & maintenance of fencing/ tending operation	L.S	10150	0	10150
Total for 7th Year			10150	0	10150
8 th Year					
	Protection & maintenance of fencing/ tending operation	L.S	10620	0	10620
Total for 8th Year			10620	0	10620
9 th Year					
	Protection & maintenance of fencing/ tending operation	L.S	10820	0	10820
Total for 9th Year			10820	0	10820
10 th Year					
	Protection & maintenance of fencing/ tending operation	L.S	10965	0	10965
Total for 10th Year			10965	0	10965
Grand Total			266811	181174	447162
The Cost of Supervision/Subsequential Silvicultural operations		20%	53362	36235	89432
			320174	217409	536595

Note :

- (1) Seed sowing along fencing toward for inner side, and also in the plot
 - (2) Planting of cutting of ipomea/Glaricidia along the fencing towards outer side
- Compensatory afforestation will be done in 22.00 Ha Area**

Total Cost Rs. : 1,18,05,090/-


Deputy Conservator of Forests,
Godhra