

Compensatory Afforestation Scheme for double degraded forest area

Diversion of 22.6756 Ha Protected Forest land of road side for widening and strengthening up to Four lanning of Kheda-Dholka Road Km.36/600 to 53/200 in Kheda District, Gujarat State.

Details scheme of Compensatory Afforestation to be carried out in lieu of 22.6756 Ha Protected Forest land of road side for widening and strengthening up to Four lanning of Kheda-Dholka Road Km.36/600 to 53/200 in Kheda District, Gujarat State.

1 Details of degraded land.

Village	Vansiya
Taluka	Godhra
Range	Godhra East
District	Panchmahal
Division	Godhra
Reserved Forest Survey No..	30 & 94 to 100
Area to be afforested	46.00
Working circle	Production

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

3. Name of Plantation Programme:-

Compensatory Afforestation Scheme for Degraded Area.

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

Daily / Wages-Rs.310.40

Year	Area (ha)	Rate /ha	Total Amount
0 Year 70 %	1.00	127894	127894
1 st Year	1.00	76807	76807
2 nd Year	1.00	53536	53536
3 rd Year	1.00	43830	43830
4 th Year	1.00	14682	14682
5 th Year	1.00	7785	7785
6 th Year	1.00	8271	8271
7 th Year	1.00	8758	8758
8 th Year	1.00	9243	9243
9 th Year	1.00	9730	9730
10 th Year	1.00	10217	10217
Total	1.00	370753	370753
Supervision Charge 20 %		74151	74151
Total	1.00	444904	444904

Say 4,44,904/-

Compensatory Afforestation will be done in 4.00 ha. Area. The total afforestation cost will be Rs.2,04,65,584/-

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 46.00 ha. Area. The total afforestation cost will be about Rs.2,04,65,584/- Executive Engineer, R&B Division, Nadiad 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 310.40 per day.																				
b	Spacement	3 X 3 mtr., 1111 plants per ha.																				
c	Species to be planted (No. of plants per ha.)	<table> <tr> <td>Holoptelea</td><td>333</td><td rowspan="8">Minimum planting height will be 100 cm. at the time of planting. However it will vary for different species.</td></tr> <tr> <td>Teak</td><td>388</td></tr> <tr> <td>Custard Apple</td><td>166</td></tr> <tr> <td>Cassia fistula</td><td>55</td></tr> <tr> <td>Bamboo</td><td>55</td></tr> <tr> <td>kuvad</td><td>6</td></tr> <tr> <td>Vad,Pipal ,Khati ambali ,Arjun sadad</td><td>55</td></tr> <tr> <td>Limado,kothi,kadayo,Bili etc...</td><td>53</td></tr> <tr> <td>Total</td><td>1111</td><td></td></tr> </table>	Holoptelea	333	Minimum planting height will be 100 cm. at the time of planting. However it will vary for different species.	Teak	388	Custard Apple	166	Cassia fistula	55	Bamboo	55	kuvad	6	Vad,Pipal ,Khati ambali ,Arjun sadad	55	Limado,kothi,kadayo,Bili etc...	53	Total	1111	
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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>(xiii) Pucca structure like Check dam, check wall, retaining wall</p> <p>(xiv) 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. Seeds of Jatropa, Agave plants ...etc. will be planted during monsoon in the upper side of nala as per suitability.</p> <p>(xv) Van Talavadi/ Percolation tank</p>																				

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	(xxix) A plantation register is to be maintained. (xxx) Monitoring is to be done as per the following norms. Forester – 100% RFO – 100% ACF – 20% DCF – 10% (xxxi) 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. (xxxii) The collar girth is also to be reordered at the end of each year. (xxxiii) At the end of maintenance period, the area is aimed at full stocking and pole crop girth for all the species, except bamboo. (xxxiv) Bamboo would be of the harvestable size by the end of 4 th year. (xxxv) 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.


 (G.S Singh)
 Deputy Conservator of Forest
 Godhra

The Compensatory Afforestation scheme at the cost of **Rs.2,04,65,584/-** is technically and administrative approved by the undersigned.


 (G.S Singh)
 Deputy Conservator of Forest
 Godhra

Annexure-19

Compensatory Afforestation Scheme for double degraded area Under FCA Proposal

Diversion of 22.6756 Ha Protected Forest land of road side for widening and strengthening up to Four lanning of Kheda-Dholka Road Km.36/600 to 53/200 in Kheda District, 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: 310.40/Day

	Item of Work	Qty.	Labour	Material	Totals
0 year Nursery					
(a)	Cost of soil, manure, seeds, water, fertilizer, insecticides, implements, rent of lands. Shade. etc. (including 10 % for casualty replacement)	1222	0	1815	1815
(b)	labour : Preparation of beds, filling and arranging of bags, showing of seeds, watering shifting, weeding etc.	1222	4442	230	4672
	Seedling cost for casualty replacement in one year old (20 %)	222	1404	419	1823
	Seedling cost for casualty replacement in two year old (10%)	111	703	209	912
	Total		6549	2673	9222
2. Area Development (Land Preparation)					
(a)	Survey, cutback and promotion of root suckers		3337	0	3337
	Aligment and digging of pits 0.45 X 0.45 X 0.45	1111@8.68	9305	0	9305
	Total		12642	0	12642
(a)	Natural Fertilizer (Neem cake/ Castor cake)	1111@10	0	11110	11110
	Total		0	11110	11110
3. SMC Works					
(a)	Check wall/ retaining wall /checkdem (all pucca only)	LS	11856	23535	35391
(b)	Contour trench 2 M x 45 Cm x 30 Cm as per Rs.51.75/rmt (300 trench)	600rmt	9024	0	9024
(c)	Van Talavadi/Hill Top Tank/Percolation tank/Nala bund, Gully Plug etc.		10000	0	10000
	Total		30880	23535	54415
4. Protection					
(a)	Barbed wire fencing	LS	3539	35391	38930
(b)	Seed sowing and planting of cuttings of Ipomea/ Glaricidia along the fence		1102	473	1575
	Total		4641	35864	40505
	Total for 0 year		54712	73182	127894
1st Year					
(a)	Maintenance of nursery (April to June)	1222	3407	340	3747
(b)	Transport of seedling for plantation	1111	1700	200	1900
(c)	Planting with khamna of Min. 1 m dia	1111	5744	0	5744
(d)	Transport & planting of seedling for casualty replacement	111	199	44	243
(e)	3 weeding cum soilworking	1111	23392	0	23392
(f)	Support watering 5 times @5.30		14314	20539	34853
(g)	Protection / tending operation		4612	0	4612
(h)	Tending to natural vegetation		1158	0	1158
(i)	Contingency		0	1158	1158
	Total for 1st year		54526	22281	76807

2nd Year					
(a)	2 weeding & soil working		12567	0	12567
(b)	20 % Casually replecement, transport and Planting	111+111	209	1041	1250
(c)	Natural fertilizer (neem cake / caster cake) etc	Rs. 10/plants	0	12048	12048
(d)	Support watering 3 times @ 5.30		9301	13351	22652
(e)	Protection / tending operation		5019	0	5019
Total for 2nd Year			27096	26440	53536
3rd Year					
(a)	2 weeding & soil working		12567	0	12567
(b)	10 % Casually Replecement, transport and	111	222	555	777
(b)	Planting, Natural fertilizer, neem cake etc.	Rs. 10/plants	0	13332	13332
(c)	Support watering 1 times @6		3620	4120	7740
(d)	Protection & maintenance of fencing/ tending Operation	L.S	9414	0	9414
Total for 3rd year			25823	18007	43830
4th Year					
(a)	1 weeding & soilworking	L.S	5268	0	5268
(b)	Protection & Maintenance of fencing/ Tending operation		9414	0	9414
Total for 4th Year			14682	0	14682
5th Year					
	Protection & maintenance of fencing/ tending operation	L.S	7785	0	7785
Total for 5th Year			7785	0	7785
6th Year					
	Protection & maintenance of fencing/ tending operation	L.S	8271	0	8271
Total for 6th Year			8271	0	8271
7 th Year					
	Protection & maintenance of fencing/ tending operation	L.S	8758	0	8758
Total for 7th Year			8758	0	8758
8 th Year					
	Protection & maintenance of fencing/ tending operation	L.S	9243	0	9243
Total for 8th Year			9243	0	9243
9 th Year					
	Protection & maintenance of fencing/ tending operation	L.S	9730	0	9730
Total for 9th Year			9730	0	9730
10 th Year					
	Protection & maintenance of fencing/ tending operation	L.S	10217	0	10217
Total for 10th Year			10217	0	10217
Grand Total			230843	139910	370753
The Cost of Supervision/Subsequential Silvicultural operations		20%	46169	27982	74151
			277012	167892	444904

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 1.00 Ha Area

Total Cost Rs. : 4,44,904/-


(Dr.G.S.Singh)
Deputy Conservator of Forests,
Godhra