

Annexure-18

Compensary Afforestation Scheme for double degraded area

Proposal for Diversion of 0.0575 ha. Protected Forest land for the Project of constructing approach road to connect karunasagar petroleum on SH-175 (Valia-Zankhvav) Road near Kundha village of Valia-taluka dist. Bharuch in Gujarat State.

Detailed scheme of Compensatory Afforestation for degraded area 1.00 ha. to be carried out in lieu of 0.0575 ha. of Protected forest land to be diverted in Bharuch district.

1. Details of degraded land.

Village	Pada
Taluka	Zaghadia
Range	Zaghadia
District	Bharuch
Division	Sub Division Bharuch
Block/ Survey No/Compartment No.	New 9 (old 126)
Area to be afforested	1.00 Ha.

2. Description of Area.

Soil type	Black & Storey
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.

4. Schedule of Plantation Programme:-


(i)	The Compensatory Afforestation on degraded area would be started by Dy.Conservator of Forest Bharuch Division as early as possible after the proposal is formally approved.
(ii)	Compensatory Afforestation will be done in 1.00 ha. area. The total afforestation cost will be about Rs.4,54,200/- Executive Engineer, Bharuch Urban Development Authority, Bharuch 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 310.4 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>Khair</td><td>200</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>300</td></tr> <tr> <td>Bamboo</td><td>100</td></tr> <tr> <td>Bahedo, Herde, Aritha</td><td>100</td></tr> <tr> <td>Haldu, Sadad, Arjun Sadad</td><td>100</td></tr> <tr> <td>Bhilamo, Kadayo, Sadad, Tandol etc.</td><td>100</td></tr> <tr> <td>Albizia, Ficus, Jamun, Anjan, Neem, etc.</td><td>100</td></tr> <tr> <td>Bordi, Karanj, Khakhro & others</td><td>111</td></tr> <tr> <td>Total</td><td>1111</td><td></td></tr> </table>	Khair	200	Minimum planting height will be 100 cm. at the time of planting. However it will vary for different species.	Teak	300	Bamboo	100	Bahedo, Herde, Aritha	100	Haldu, Sadad, Arjun Sadad	100	Bhilamo, Kadayo, Sadad, Tandol etc.	100	Albizia, Ficus, Jamun, Anjan, Neem, etc.	100	Bordi, Karanj, Khakhro & others	111	Total	1111	
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d	Nursery Technique	Nine months old poly pot 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. Seeds of Jatropha, Agave plants ...etc. will be planted during monsoon in the upper side of nala as per suitability.</p>																				
h	Protection Trench	Barbed wire fencing, Seed sowing And planting of cuttings of Ipomeas/ Glarcidia along the fence																				
i	Silvicultural Operations	1st year three weeding soil working, Support watering will be																				

		3rd 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	<p>(i) A plantation register is to be maintained.</p> <p>(ii) Monitoring is to be done as per the following norms.</p> <p>Forester – 100%</p> <p>RFO – 100%</p> <p>ACF – 20%</p> <p>DCF – 10%</p> <p>(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.</p> <p>(iv) The collar girth is also to be reordered at the end of each year.</p> <p>(v) At the end of maintenance period, the area is aimed at full stocking and pole crop girth for all the species, except bamboo.</p> <p>(vi) Bamboo would be of the harvestable size by the end of 4th year.</p> <p>(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.</p>
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.


 Asstt. Conservator of Forest
 Normal Forest Sub Division
 Bharuch

The Compensatory Afforestation scheme at the cost of Rs.4,54,200/- is technically and administrative approved by the undersigned.


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Annexure-19

Compensatory Afforestation Scheme for double degraded area under FCA proposal Proposal for grant of permission for diversion of protected forest land for constructing approach road to connect karunasagar petroleum on SH-175 (Valia-Zankhvav) Raod near rundha village of Valia-taluka of Bharuch.(Protected Area: 0.0575 Ha.)

Model No - 3

Annexure-4(1)

Compensatory Afforestation Scheme for double degradation area & Non Forest area acquired Under FCA Proposal

Daily wages Rs.310.40

Spacemnts = 3 m x 3 m

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


Item of work		Qty.	Labour	Material	Total
1		2	3	4	5
0 year					
Nursery					
(a)	Cost of Soil, manure, seeds, wtaer, Fertilizer, insecticides, iplements, rent of lands, shade, etc. (including 10% for casuality replacement)	1222	0	1830	1830
(b)	labour : Preparation of beds, filling and arranging of bags,showing of seeds, watering shifting, weeding etc.	1222	4478	232	4710
(c)	Seedling cost for casuality replacement in one year old (20%)	222	1415	422	1837
(d)	Seedling cost for casuality replacement in two year old (10%)	111	709	211	920
Total			6602	2695	9297
2. Area Development (Land Preparation)					
(a)	Survey, cutback and promotion of root suckers		3364	0	3364
(b)	Aligment and digging of pits 0.45 X 0.45 X 0.45	1111@ 6.00	9715	0	9715
Total			13079	0	13079
(a)	Natural fertilizer (Neem cake/ Castor cake)	1111 @ 5.00	0	9910	9910
Total			0	9910	9910
3. SMC Works					
(a)	Check wall/ retaining wall /checkdem (all pucca only)	L.S.	11952	23726	35678
(b)	Contour trench 2 M x 45 Cm x 30 Cm as per Rs.17.00/rmt (300 trench)	600 rmt.	9097	0	9097
Total			21049	23726	44775
4. Protection					
(a)	Barbed wire fencing	L.S.	3568	35678	39246
(b)	Seed sowing and planting of cuttings of Ipomea/ Glaricidia along the fence		1110	477	1587
Total			4678	36155	40833

Sub Total of 0 year				
1st Year				
		45408	72486	117894
(a)	Maintenance of nursery (April to June)			
(b)	Transport of seedling for plantation	1222		
(c)	Planting with khamna of Min 1 m dia	1111	3435	343
(d)	Transport of seedling for casualty replacement	1111	18594	389
(e)	3 weeding cum soil working	111	5791	0
(f)	Support watering 5 times @ 3.25	1111	201	44
(g)	Protection / tending operation		23583	0
(h)	Tending to natural vegetation		14430	20706
(i)	Contingency		4649	0
			1167	0
			0	1167
Total for 1st year			71850	22649
2nd Year				
(a)	2 weeding & soil working		12669	0
(b)	20 % Casually replcement, transport and planting	111+111	211	1049
(c)	Natural fertilizer (neem cake / caster cake) etc.	Rs.5/ plant	0	11711
(d)	Support watering 3 times @ 3.25		9377	13459
(e)	Protection / tending operation		5060	0
Total for 2nd year			27317	26219
3rd Year				
(a)	2 weeding & soil working		13372	0
(b)	10 % Casually replcement, transport and planting	111	113	566
(c)	Natural fertilizer, neem cake etc	Rs.5/ plant	0	12838
(d)	Support watering 1 times @ 3.25		3367	4831
(e)	Protection & maintenance of fencing / tending operation	L.S.	8743	0
Total for 3rd year			25595	18235
4thYear				
(a)	1 weeding & soil working		7384	0
(b)	Protection & Maintenance of fencing/ Tending operation	L.S.	7298	0
Total for 4th year			14682	0
5thYear				
(a)	Protection & maintenance of fencing/ tending operation	L.S.	7785	0
Total for 5th year			7785	0
6thYear				
(a)	Protection & maintenance of fencing/ tending operation	L.S.	8271	0
Total for 6th year			8271	0
7thYear				
(a)	Protection & maintenance of fencing/ tending operation	L.S.	8758	0
Total for 7th year			8758	0

8thYear					
(a)	Protection & maintenance of fencing/ tending operation	L.S.	9243	0	9243
Total for 8th year			9243	0	9243
9thYear					
(a)	Protection & maintenance of fencing/ tending operation	L.S.	9730	0	9730
Total for 9th year			9730	0	9730
10thYear					
(a)	Protection & maintenance of fencing/ tending operation	L.S.	10217	0	10217
Total for 10th year			10217	0	10217
SUB TOTAL :			238856	139589	378445
(a)	The Cost of Supervision/subsequential silvicultureal Operations	20%	47771	27918	75689
TOTAL with 20% Charge :			286627	167507	454134
			Say		454200

Note :-

- (1) Seed sowing along fencing towards the inner side, and also in the plot.
- (2) Planting of cutting of ipomea//Glarcidia along the fencing towards outer side.


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