

## Annexure-18

### Compensary Afforestation Scheme for double degraded area

Proposal for Diversion of Protected Forest land for the project of Four lanning of Vadodara-Padra-Jambusar Road Km. 44/00 to 52/575 Dist.Bharuch, State Gujarat.

Detailed scheme of Compensatory Afforestation for degraded area 14.00 ha. to be carried out in lieu of **6.86 ha.** of Protected forest land to be diverted in Bharuch District.

#### 1. **Details of degraded land.**

Village	Yal
Taluka	Netrang
Range	Netrang
District	Bharuch
Division	Sub Division Bharuch
Block/ Haldari, Compt No.	365(64)
Area to be afforested	14.00 Ha.
Working circle	Plantation

#### 2. **Description of Area.**

Soil type	Black & Starey
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 Asst.Conservator of Forest, Sub Division Bharuch as early as possible after the proposal is formally approved.   |
| (ii) | Compensatory Afforestation will be done in <b>14.00</b> ha. area. The total afforestation cost will be about <b>Rs.84,40,600/-</b> <b>Executive Engineer (R &amp; B) Division Bharuch</b> 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 <b>340.20</b> 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>70cm</td></tr> <tr> <td>Teak</td><td>300</td><td>90cm</td></tr> <tr> <td>Bamboo</td><td>100</td><td>65cm</td></tr> <tr> <td>Bahedo, Herde, Aritha</td><td>100</td><td>90cm</td></tr> <tr> <td>Haldu, Sadad, Arjun Sadad</td><td>100</td><td>90cm</td></tr> <tr> <td>Bhilamo, Kadayo, Sadad, Tandol etc.</td><td>100</td><td>75cm</td></tr> <tr> <td>Albizzia, Ficus, Jamun, Anjan, Neem, etc.</td><td>100</td><td>75cm</td></tr> <tr> <td>Bordi, Karanj, Khakhro &amp; others</td><td>111</td><td>75cm</td></tr> <tr> <td><b>Total</b></td><td><b>1111</b></td><td></td></tr> </table>	Khair	200	70cm	Teak	300	90cm	Bamboo	100	65cm	Bahedo, Herde, Aritha	100	90cm	Haldu, Sadad, Arjun Sadad	100	90cm	Bhilamo, Kadayo, Sadad, Tandol etc.	100	75cm	Albizzia, Ficus, Jamun, Anjan, Neem, etc.	100	75cm	Bordi, Karanj, Khakhro & others	111	75cm	<b>Total</b>	<b>1111</b>	
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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	(i) Pucca structure like Check dam, check wall, retaining wall (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.																											
h	Protection Trench	Barbed wire fencing, Seed sowing And planting of cuttings of Ipomea/ Glarcidia along the fence																											

i	Silvicultural Operations	1 <sup>st</sup> year three weeding soil working, Support watering will be provided if needed. 2 <sup>nd</sup> year two weeding soil working. 3 <sup>rd</sup> 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 <sup>th</sup> 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.



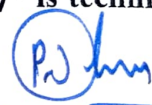
(P. J. Chaudhari)

Asst. Conservator of Forest  
Sub Division, Bharuch

**The Compensatory Afforestation scheme at the cost of Rs. 84,40,600/- is technically and administrative approved by the undersigned.**

Place:-Bharuch

Date:- 09/09/2021



(P. J. Chaudhari)

Asst. Conservator of Forest  
Sub Division, Bharuch

# Model No - 3

# Annexure-19

## Annexure-4 (1)

Compensatory Afforestation Scheme for double degradation areas & Non Forest

Daily wages Rs.340.20

acements = 3 m x 3 m

1 seedling / Ha

year replacement 10 % = 111 seedling /ha

year replacement 20 % = 111+111 seedling /ha

year replacement 10 % = 111 seedling /ha

tal Seedlings = 1333 seedling /ha

ypot size : 15 cm x 25 cm x 200

Item of work	Qty.	Labour	Material	Total
1	2	3	4	5
year				
rsery				
) Cost of soil, ,manure, seeds, water, fertilizer, insecticides, implements, rent of lands. Shade, etc. (including 10 % for casualty placement)	1222	0	2006	2006
) labour : Preparation of beds, filling and arranging of bags,showing of seeds, watering shifting, weeding	1222	4907	254	5161
c.				
) Seedling cost for casualty replacement in one year d (20%)	222	1552	463	2015
d) Seedling cost for casualty replacement in two year d (10%)	111	777	231	1008
total		7236	2954	10190
. Area Development ( Land Preparation )				
a) Survey, cutback and promotion of root suckers		3687	0	3517
b) Aligment and digging of pits 0.45 X 0.45 X 0.45	1111@ 6.00	10648	0	10648
Total		14335	0	12974
(a) Natural fertilizer (Neem cake/ Castor cake)	1111 @ 5.00	0	10861	10861
Total		0	10861	10861
3. SMC Works				
(a) Check wall/ retaining wall /checkdem (all pucca only)	L.S.	13100	26004	39104
(b) Contour trench 2 M x 45 Cm x 30 Cm as per Rs.17.00/rmt (300 trench)	600 rmt.	9971	0	9971
Total		23071	26004	49075

<b>Protection</b>				
Barbed wire fencing	L.S.	3910	39104	43014
Seed sowing and planting of cuttings of Ipomea/ericidia along the fence		1216	523	1739
<b>Total</b>		<b>5126</b>	<b>39627</b>	<b>44753</b>
<b>Total of 0 year</b>		<b>49768</b>	<b>79446</b>	<b>129214</b>
<b>1st Year</b>				
Maintenance of nursery (April to June)	1222	3689	375	4064
Transport of seedling for plantation	1111	20378	427	20805
Planting with khamna of Min 1 m dia	1111	6347	0	6347
Transport of seedling for casualty replacement	111	220	48	268
3 weeding cum soil working	1111	25847	0	25847
Support watering 5 times @ 3.25		15816	22693	38509
Protection / tending operation		5096	0	5096
Tending to natural vegetation		1279	0	1279
Contingency		0	1279	1279
Barbed Wire fencing (410/- Per Meter)	205 RM	35247	52870	84050
<b>Total for 1st year</b>		<b>113919</b>	<b>77692</b>	<b>187544</b>
<b>2nd Year</b>				
2 weeding & soil working		13886	0	13886
20 % Casually replcement, transport and planting	111+111	231	1150	1381
Natural fertilizer (neem cake / caster cake ) etc.	Rs.5/ plant	0	12835	12835
Support watering 3 times @ 3.25		10276	14752	25028
Protection / tending operation		5546	0	5546
<b>Total for 2nd year</b>		<b>29939</b>	<b>28737</b>	<b>58676</b>
<b>3rd Year</b>				
2 weeding & soil working		14655	0	14655
10 % Casually replcement, transport and planting	111	124	620	744
Natural fertilizer, neem cake etc.	Rs.5/ plant	0	14071	14071
Support watering 1 times @ 3.25		3690	5294	8984
Protection & maintenance of fencing / tending operation	L.S.	9583	0	9583
<b>Total for 3rd year</b>		<b>28052</b>	<b>19985</b>	<b>48037</b>

4th Year				
1 weeding & soil working		8094	0	8094
Protection & Maintenance of fencing/ Tending operation	L.S.	7998	0	7998
<b>Total for 4th year</b>		<b>16092</b>	<b>0</b>	<b>16092</b>
5th Year				
Protection & maintenance of fencing/ tending operation	L.S.	8532	0	8532
<b>Total for 5th year</b>		<b>8532</b>	<b>0</b>	<b>8532</b>
6th Year				
Protection & maintenance of fencing/ tending operation	L.S.	9064	0	9064
<b>Total for 6th year</b>		<b>8646</b>	<b>0</b>	<b>9064</b>
7th Year				
Protection & maintenance of fencing/ tending operation	L.S.	9598	0	9598
<b>Total for 7th year</b>		<b>9598</b>	<b>0</b>	<b>9598</b>
8th Year				
Protection & maintenance of fencing/ tending operation	L.S.	10131	0	10131
<b>Total for 8th year</b>		<b>10131</b>	<b>0</b>	<b>10131</b>
9th Year				
Protection & maintenance of fencing/ tending operation	L.S.	10664	0	10664
<b>Total for 9th year</b>		<b>10664</b>	<b>0</b>	<b>10664</b>
10th Year				
Protection & maintenance of fencing/ tending operation	L.S.	11198	0	11198
<b>Total for 10th year</b>		<b>11198</b>	<b>0</b>	<b>11198</b>
<b>SUB TOTAL :</b>		<b>296539</b>	<b>205860</b>	<b>502399</b>
Cost of Supervision/subsequential silvicultural operations	20%	59308	41172	100480
		<b>355847</b>	<b>247032</b>	<b>602879</b>
		<b>SAY</b>		<b>602900</b>

Note :-  
 1) Seed sowing along fencing towards the inner side, and also in the plot.  
 2) Planting of cutting of ipomea//Glaricidia along the fencing towards outer side.  
**1.00 ha afforestation cost will be Rs. 6,02,900/-**  
**Compensatory afforestation will be done in 14.00 ha. Area.**  
**The Total afforestation cost will be Rs. 84,40,600/-**

**Total Cost Rs. : 84,40,600/-**



(P. J. Chaudhari)  
 Asst. Conservator of Forest  
 Sub Division, Bharuch