

## Annexure-19

### Compensatory Afforestation Scheme for double degraded area

Diversion of 31.692 ha. Protected Forest land for Vallabhipur (km 0-900) to rangola(km27+532) SH-39 proposed for strengthening and rehabilitation of existing 2 lane with paved shoulders . Hard Shoulders Construction of Road side drain, Re-construction and rehabilitation of cross orange structure construction of bus stop with bus bys under second in favour of executive engineer project implementatin unit R&B Department in Bhavnagar (Botad) District of gujarat.

Detailedscheme of Compensatory Afforestationfor degraded area 64 ha. to be carried out in lieu of 31.692 ha. of Protected forest land to be diverted in Bhavnagar (Botad) district.

#### 1. Details of degraded land.

Village	Dighadiya
Taluka	Halvad
Range	Morbi Range
District	Morbi
Division	Morbi
Block/ Patal, Compartment No.	204/p-2
Areato be afforested	64.00
Working circle	Production

#### 2. Description of Area.

Soil type	Marramy, Stony.
Topography	Plain
Slope	Plain Area
Whether the area is bearing any root stock of Vegetation	Most of the area if degrreded

#### 3. Name of Plantation Programme:-

Compensatory Afforestation Scheme for Degraded Forest Area.

#### 4. Schedule of Plantation Programme:-

(i) The Compensatory Afforestation on degraded area would be started by Deputy Conservator of Forest Morbi Forest Division as early as possible after the proposal is formally approved.
(ii) Compensatory Afforestation will be done in 64 ha.area. The total afforestation cost will be aboutRs.2,75,28,115/- Executive engineer project implementatin unit R&B Department in Bhavnagar (Botad) District.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 border="1"> <tr> <td>Kanji</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>Kadaya</td><td>100</td></tr> <tr> <td>Neem</td><td>200</td></tr> <tr> <td>Gunda</td><td>150</td></tr> <tr> <td>Gundi</td><td>111</td></tr> <tr> <td>Ardusa</td><td>200</td></tr> <tr> <td>Garmala</td><td>100</td></tr> <tr> <td>Other</td><td>50</td></tr> <tr> <td><b>Total</b></td><td><b>1111</b></td><td></td></tr> </table>	Kanji	200	Minimum planting height will be 100 cm. at the time of planting. However it will vary for different species.	Kadaya	100	Neem	200	Gunda	150	Gundi	111	Ardusa	200	Garmala	100	Other	50	<b>Total</b>	<b>1111</b>	
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Other	50																					
<b>Total</b>	<b>1111</b>																					
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	<p>(i) A plantation register is to be maintained.</p> <p>(ii) Monitoring is to be done as per the following norms. Forester – 100% RFO – 100% ACF – 20% 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 4<sup>th</sup> 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.

**Deputy. Conservator of Forest**  
**Morbi Forest Division, Morbi**

The Compensatory Afforestation scheme at the cost of **Rs.2,75,28,115/-** is technically and administrative approved by the undersigned.

**(Smt. Raj Sandee)**  
**Deputy Conservator Of Forest**  
**Social Forestry Division**  
**Botad.**

**Chief Conservator of Forests**  
**Junagadh Circle, Junagadh**


### **Checklist No. 19-B**

Rate structure of forestland of village : Dighaliya ta. Halvad District : Morbi  
64.00 ha. Afforestation as per Add.pri.C.C.F. land, Gujarat State, Gandhinagar's letter no.  
Campa/31/B/4769-4838/Dt. 27/11/2019.

Details of year wise Break-up of requirement of fund is as under :- rate 310.40

year	ha.	rate / ha. at the daily wage per	Total Amount
0 Year	64	117895	7545280
1st Year	64	76803	4915392
2nd Year	64	53405	3417920
3rd Year	64	41802	2675328
4th Year	64	14530	929920
5th Year	64	7785	498240
6th Year	64	8271	529344
7th Year	64	8758	560512
8th Year	64	9243	591552
9th Year	64	9730	622720
10th Year	64	10217	653888
<b>Total</b>		358439	22940096
20% Supervision charge		71688	4588019
<b>Total</b>		430127	27528115

The User Agency has given an undertaking to pay the cost of Compensatory Afforestation as per the Prevailing wages (including the price escalation and supervision charge)

  
**(Smt. Raj Sandee)**  
Deputy Conservator Of Forests  
Social Forestry Division  
Botad.

  
Dy. Conservator of Forests  
Morbi Forest Division Morbi



### Morbi Forest Division, Morbi

**Diversion of 31.692 ha. Protected Forest land for Vallabhipur (km 0-900) to rangola(km27+532) SH-39 proposed for strengthening and rehabilitation of existing 2 lane with paved shoulders . Hard Shoulders Construction of Road side drain, Re-construction and rehabilitation of cross orange structure construction of bus stop with bus bys under second in favour of executive engineer project implementatin unit R&B Department in Bhavnagar (Botad) District of gujarat.**

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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
<b>0 year</b>				
Nursery				
(a) Cost of soil, ,manure, seeds, water, fertillizer, insecticides, implements, rent of lands. Shade, etc. (including 10 % for casualty 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 casualty replacement in one year old (20%)	222	1415	422	1838
(d) Seedling cost for casualty replacement in two year old (10%)	111	709	211	919
<b>Total</b>		<b>6602</b>	<b>2695</b>	<b>9297</b>
<b>2. Area Development ( Land Preparation )</b>				
(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
<b>Total</b>		<b>13079</b>	<b>0</b>	<b>13079</b>
(a) Natural fertilizer (Neem cake/ Castor cake)	1111 @ 5.00	0	9910	9910
<b>Total</b>		<b>0</b>	<b>9910</b>	<b>9910</b>
<b>3. SMC Works</b>				
(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
<b>Total</b>		<b>21050</b>	<b>23726</b>	<b>44776</b>



<b>4. Protection</b>				
(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
<b>Total</b>		<b>4678</b>	<b>36155</b>	<b>40833</b>
<b>Sub Total of 0 year</b>		<b>45409</b>	<b>72486</b>	<b>117895</b>
<b>1st Year</b>				
(a) Maintenance of nursery (April to June)	1222	3435	343	3777
(b) Transport of seedling for plantation	1111	1884	389	2273
(c) Planting with khamna of Min 1 m dia	1111	5791	0	5791
(d) Transport of seedling for casualty replacement	111	201	44	245
(e) 3 weeding cum soil working	1111	22575	0	22575
(f) Support watering 5 times @ 3.25		14430	20706	35136
(g) Protection / tending operation		4671	0	4671
(h) Tending to natural vegetation		1167	0	1167
(i) Contingency		0	1167	1167
<b>Total for 1st year</b>		<b>54153</b>	<b>22649</b>	<b>76803</b>
<b>2nd Year</b>				
(a) 2 weeding & soil working		12538	0	12538
(b) 20 % Casually replcement, transport and planting	111+111	211	1049	1260
(c) Natural fertilizer (neem cake / caster cake ) etc.	Rs.5/ plant	0	11711	11711
(d ) Support watering 3 times @ 3.25		9377	13459	22836
(e) Protection / tending operation		5060	0	5060
<b>Total for 2nd year</b>		<b>27185</b>	<b>26220</b>	<b>53405</b>
<b>3rd Year</b>				
(a) 2 weeding & soil working		13502	0	13502
(b) 10 % Casually replcement, transport and planting	111	113	566	678
(c) Natural fertilizer, neem cake etc.	Rs.5/	0	12613	12613
(d ) Support watering 1 times @ 3.25		3367	4831	8198
(e) Protection & maintenance of fencing / tending operation	L.S.	6811	0	6811
<b>Total for 3rd year</b>		<b>23793</b>	<b>18009</b>	<b>41802</b>
<b>4thYear</b>				
(a) 1 weeding & soil working		7232	0	7232
(b) Protection & Maintenance of fencing/ Tending operation	L.S.	7298	0	7298
<b>Total for 4th year</b>		<b>14530</b>	<b>0</b>	<b>14530</b>
<b>5thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	7785	0	7785
<b>Total for 5th year</b>		<b>7785</b>	<b>0</b>	<b>7785</b>
<b>6thYear</b>				



Protection & maintenance of fencing/ tending operation	L.S.	8271	0	8271
<b>Total for 6th year</b>		<b>8271</b>	<b>0</b>	<b>8271</b>
<b>7thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	8758	0	8758
<b>Total for 7th year</b>		<b>8758</b>	<b>0</b>	<b>8758</b>
<b>8thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	9243	0	9243
<b>Total for 8th year</b>		<b>9243</b>	<b>0</b>	<b>9243</b>
<b>9thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	9730	0	9730
<b>Total for 9th year</b>		<b>9730</b>	<b>0</b>	<b>9730</b>
<b>10thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	10217	0	10217
<b>Total for 10th year</b>		<b>10217</b>	<b>0</b>	<b>10217</b>
<b>SUB TOTAL :</b>		<b>219073</b>	<b>139365</b>	<b>358438</b>
The Cost of Supervision/subsequential silvicultureal Operations	20%	43815	27873	71688
		<b>262888</b>	<b>167237</b>	<b>430126</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.

Compensatory afforestation will be done in 1.00 ha. Area.

**Total Cost Rs. :4,30,126/-**

  
**Deputy Conservator of Forest**  
**Morbi Forest Division-Morbi**

  
**(Smt. Raj Sandeep)**  
**Deputy Conservator Of Forest**  
**Social Forestry Division**  
**Botad.**



**Morbi Forest Division, Morbi**  
**Diversion of 31.692 ha. Protected Forest land for Vallabhipur**  
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*[Signature]*  
**Deputy Conservator of Forest**  
**Morbi Forest Division-Morbi**

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