

## Annexure-19

### Compensatory Afforestation Scheme for double degraded area

Proposal for diversion of forest land (Area 39.547 Ha.) for non forest purpose in Protected Forest land for Road widening of NH-58 from Khokhara Gujarat Border Vijaynagar-Antarsumba-Mathasur Road in Taluka Vijaynagar of District: Sabarkantha.

Detailed scheme of Compensatory Afforestation for degraded area 80.00 ha. to be carried out in lieu of 39.547 Ha. of forest land to be diverted in sabarkantha district.

#### 1. Details of degraded land.

Village	Chandap	Changod	Navamota	Kalvan
Taluka	Idar	Khedbrahma	Khedbrahma,	Vijaynagar
Range	Vadali	RDF Khedbrahma	RDF Khedbrahma	Dholwani
District	Sabarkantha			
Division	Sabarkantha Normal			
Block/ Patal, Compartment No./Survey no.	499	78	146/P	47/p
Area to be afforested	20.00 Ha.	20.00 Ha.	20.00 Ha.	20.00 Ha.
Area to be afforested Total	80.00 Ha.			
Working circle	---	REWC	REWC	REWC
Coupe No	---	10	7	1pt, 2
Felling Series	---	XXXI	XXXII	XI

#### 2. Description of Area.

Soil type	Black & Shoney
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 double Degraded Area.

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

- |      |  |
|------|--|
| (i)  | The Compensatory Afforestation on double degraded area would be started by Dy.Conservator of Forest Sabarkantha Division Himmatnagar as early as possible after the proposal is formally approved.   |
| (ii) | Compensatory Afforestation will be done in 80.00 Ha.area. The total afforestation cost will be about <b>Rs.5,32,67,808/-</b> Dy Executive Engineer, National Highway Division Amdavad 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 on degraded Forest Areas. The prevailing wage rate is 441.00 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>Khair</td> <td>250</td> <td rowspan="12">Minimum planting height will be 100 cm. at the time of planting. However it will vary for different species.</td> </tr> <tr> <td>Kanji</td> <td>150</td> </tr> <tr> <td>Kadaya</td> <td>101</td> </tr> <tr> <td>Salai</td> <td>70</td> </tr> <tr> <td>Gunda</td> <td>70</td> </tr> <tr> <td>Bael</td> <td>100</td> </tr> <tr> <td>Bamboo</td> <td>70</td> </tr> <tr> <td>Ardusa</td> <td>75</td> </tr> <tr> <td>Ragat Royado</td> <td>100</td> </tr> <tr> <td>Garmalo</td> <td>75</td> </tr> <tr> <td>kakhro,Dudh Kadi</td> <td>50</td> </tr> <tr> <td><b>Total</b></td> <td><b>1111</b></td> </tr> </table>	Khair	250	Minimum planting height will be 100 cm. at the time of planting. However it will vary for different species.	Kanji	150	Kadaya	101	Salai	70	Gunda	70	Bael	100	Bamboo	70	Ardusa	75	Ragat Royado	100	Garmalo	75	kakhro,Dudh Kadi	50	<b>Total</b>	<b>1111</b>
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d	Nursery Technique	Nine months old polypot raised plants will be planted at the on set 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,small Chekdem, Van Talavadi 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.																									
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.

(H.J. THAKKAR)

Dy. Conservator of Forest  
Sabarkantha, Himatnagar

(S. D. Patel)  
Dy. Conservator of Forests  
Extension Sabarkantha  
S. K., Himatnagar

Name of works	Model No.	Area H.A.	Rate per Hac.	Amount										Total Rs.					
				0 Year	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	8th Year	9th Year		10th Year	20%			
0 Year 70 % Adv. work. 1st Year Operation.	Model-3	80.00	213117	17049360	0	0	0	0	0	0	0	0	0	0	0	0	0	3409872	20459232
1st Year 30 % Advance work Current year plantation			109121	8729680	0	0	0	0	0	0	0	0	0	0	0	0	0	1745936	10475616
2nd Year operation Maintenance of one year old plantation.			75877	0	6070160	0	0	0	0	0	0	0	0	0	0	0	0	1214032	7284192
3rd Year operation Maintenance of 2 years old plantation.			59392	0	0	0	4751360	0	0	0	0	0	0	0	0	0	0	950272	5701632
4th year operation Maint. of 3 years old plantation.			20643	0	0	0	1651440	0	0	0	0	0	0	0	0	0	0	330288	1981728
5th year operation Maint. of 4 years old plantation.			11059	0	0	0	0	884720	0	0	0	0	0	0	0	0	0	176944	1061664
6th year operation Maint. of 5 years old plantation.			11750	0	0	0	0	0	940000	0	0	0	0	0	0	0	0	188000	1128000
7th year operation Maint. of 6 years old plantation.			12442	0	0	0	0	0	0	995360	0	0	0	0	0	0	0	199072	1194432
8th year operation Maint. of 7 years old plantation.			13133	0	0	0	0	0	0	0	1050640	0	0	0	0	0	0	210128	1260768
9th year operation Maint. of 8 years old plantation.			13824	0	0	0	0	0	0	0	0	1105920	0	0	0	0	0	221184	1327104
10th year operation Maint. of 9 years old plantation.			14515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	232240	1393440
Total			554873	17049360	8729680	6070160	4751360	1651440	884720	940000	995360	1050640	1105920	1161200	1161200	887968		53267808	

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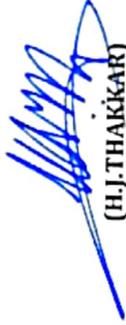
Dy. Conservator of Forests  
Sabarkantha Himmatnagar

(S. D. Patel)

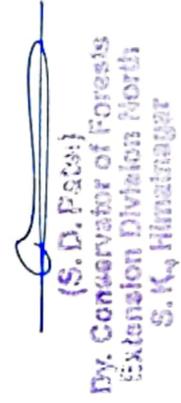
Dy. Conservator of Forests  
Extension Division Nodda  
S. K. Himmatnagar

**Sabarkantha Normal Division, Himatnagar**

Sr.No.	Name of Village	Taluka	District	Forest Survey No.	Total area. (Ha.)	Area Carried out of C.A. ha.	C.A. Area to be carried out for this proposal ha.	Balance area for C.A. in ha.
1	Chandap	Idar	Sabarkantha	499	117.38	30.00	20.00	67.38
2	Changod	Khedbrahma	Sabarkantha	78	45.81	0.00	20.00	25.81
3	Navamota	Khedbrahma	Sabarkantha	146/P	36.20	0.00	20.00	16.2
3	Kalvan	Vijaynagar	Sabarkantha	47/p	281.98	0.00	20.00	261.98

  
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Sabarkantha, Himatnagar

  
(S. K. Himatnagar)  
Dy. Conservator of Forests  
Extension Division North  
S. K., Himatnagar

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### Compensatory Afforestation Scheme for double degraded area under FCA Proposal

Proposal for diversion of forest land (Area 39.547 Ha.) for non forest purpose in Protected Forest land for Road widening of NH-58 from Khokhara Gujarat Border Vijaynagar-Antarsumba-Mathasur Road in Taluka Vijaynagar of District: Sabarkantha. (C.A area-80.00 Ha.)

Daily wages Rs 441.00

Spacings = 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, fertilizer, insecticides, implements, rent of lands.	1222	0	2600	2600
(b) labour : Preparation of beds, filling and arranging of	1222	6361	330	6691
(c) Seedling cost for casualty replacement in one year old (20%)	222	2010	601	2611
(d) Seedling cost for casualty replacement in two year old (10%)	111	1007	299	1306
<b>Total</b>		<b>9378</b>	<b>3830</b>	<b>13208</b>
<b>2. Area Development ( Land Preparation )</b>				
(a) Survey, cutback and promotion of root suckers		4780	0	4780
(b) Alignment and digging of pits 0.45 X 0.45 X 0.45	1111 @ 6.00	13803	0	13803
<b>Total</b>		<b>18583</b>	<b>0</b>	<b>18583</b>
(a) Natural fertilizer (Neem cake/ Castor cake)	1111 @ 5.00	0	14079	14079
<b>Total</b>		<b>0</b>	<b>14079</b>	<b>14079</b>
<b>3. SMC Works</b>				
(a) Check wall/ retaining wall /checkdem (all pucca only)	L.S.	16981	33708	50689
(b) Contour trench 2 M x 45 Cm x 30 Cm as per Rs.17.00/rmt (300 trench)	600 rmt.	12926	0	12926
<b>Total</b>		<b>29907</b>	<b>33708</b>	<b>63615</b>
<b>4. Protection</b>				
(a) Barbed wire fencing ( par Ha Rmt)	100	45620	55759	101379
(b) Seed sowing and planting of cuttings of Ipomea/ Glaricidia along the		1576	677	2253
<b>Total</b>		<b>47196</b>	<b>56436</b>	<b>103632</b>
<b>Total for 0 year</b>		<b>105064</b>	<b>108053</b>	<b>213117</b>
<b>1st Year</b>				
(a) Maintenance of nursery (April to June)	1222	4879	488	5367
(b) Transport of seedling for plantation	1111	2677	553	3230
(c) Planting with khamna of Min 1 m dia	1111	8230	0	8230
(d) Transport & planting of seedling for casualty replacement	111	286	62	348

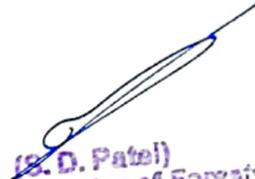
(e) 3 weeding cum soil working				
(f) Support watering 5 times @ 3.25	1111	32074	0	32074
(g) Protection / tending operation		20502	29418	49920
(h) Tending to natural vegetation		6636	0	6636
(i) Contingency		1658	0	1658
<b>Total for 1st year</b>		0	1658	1658
<b>2nd Year</b>		<b>76942</b>	<b>32179</b>	<b>109121</b>
(a) 2 weeding & soil working				
(b) 20 % Casually replcement, transport and planting		17813	0	17813
(c) Natural fertilizer (neem cake / caster cake ) etc.	111+111	299	1491	1790
(d ) Support watering 3 times @ 3.25	Rs.5/ plant	0	16639	16639
e) Protection / tending operation		13324	19122	32446
		7189	0	7189
<b>Total for 2nd year</b>		<b>38625</b>	<b>37252</b>	<b>75877</b>
<b>3rd Year</b>				
(a) 2 weeding & soil working		19183	0	19183
(b) 10 % Casually replcement, transport and planting	111	161	804	965
(b) Natural fertilizer, neem cake etc.	Rs.5/ plant	0	17919	17919
(c ) Support watering 1 times @ 3.25		4784	6864	11648
(d) Protection & maintenance of fencing / tending operation	L.S.	9677	0	9677
<b>Total for 3rd year</b>		<b>33805</b>	<b>25587</b>	<b>59392</b>
<b>4thYear</b>				
(a) 1 weeding & soil working		10275	0	10275
(b) Protection & Maintenance of fencing/ Tending operation	L.S.	10368	0	10368
<b>Total for 4th year</b>		<b>20643</b>	<b>0</b>	<b>20643</b>
<b>5thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	11059	0	11059
<b>Total for 5th year</b>		<b>11059</b>	<b>0</b>	<b>11059</b>
<b>6thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	11750	0	11750
<b>Total for 6th year</b>		<b>11750</b>	<b>0</b>	<b>11750</b>
<b>7thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	12442	0	12442
<b>Total for 7th year</b>		<b>12442</b>	<b>0</b>	<b>12442</b>
<b>8thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	13133	0	13133
<b>Total for 8th year</b>		<b>13133</b>	<b>0</b>	<b>13133</b>
<b>9thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	13824	0	13824
<b>Total for 9th year</b>		<b>13824</b>	<b>0</b>	<b>13824</b>
<b>10thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	14515	0	14515

Total for 10th year		14515	0	14515
SubTotal		351802	203071	554873
Total cost of supervision/subsequent silvicultural operations	20%	70360	40614	110975
Grand Total		422162	243685	665848

Note :-

- (1) Seed sowing along fencing towards the inner side.
- (2) Planting of cutting of ipomea//Glaricidia along the fencing towards outer side

  
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