

Annexure-19

Compensatory Afforestation Scheme for double degraded area

Proposal for seeking prior approval for acquiring forest land for Diversion of 68.0884 Ha. Protected Forest land for four laning of existing section of Malvan-Patadi-jenabad-Dasada road SH-19 in Surendranagar District. (43/00 Km to 77/00 Km)

Detailed scheme of Compensatory Afforestation for degraded area 137.00 ha. to be carried out in lieu of 68.0884 Ha. of forest land to be diverted in sabarkantha district.

1. Details of degraded land.

Village	Khedasan	Adepur	Chandap	Naroda	Nankhi
Taluka	Vijaynagar	Vijaynagar	Idar	Himatnagar	Himatnagar
Range	Dholwani	Dholwani	Vadali	Raigadh	Raigadh
District	Sabarkantha				
Division	Sabarkantha Normal				
Block/ Patal, Compartment No./Survey no.	19	65, 55/P	499	126	35/P
Area to be afforested	30.00 Ha.	30.00 Ha.	30.00 Ha.	30.00 Ha.	17.00 Ha.
Area to be afforested Total	137.00 Ha.				
Working circle	EPWC	EPWC	---	REWC	REWC
Coupe No	3	2	---	10	8
Felling Series	XXV	XXXI	---	LXXX	LXXX

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.

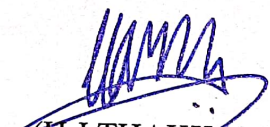
4. Schedule of Plantation Programme:-

- The Compensatory Afforestation on degraded area would be started by Dy.Conservator of Forest Sabarkantha Division Himmatnagar as early as possible after the proposal is formally approved.
- Compensatory Afforestation will be done in 137.00 Ha.area. The total afforestation cost will be about **Rs.9,12,21,122/-** Dy Executive Engineer Road and Building Division Surendranagar 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:

Technical details of Compensatory Afforestation		Specifications																									
Sr. No.	Details																										
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><tr><td>Khair</td><td>250</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>Total</td><td>1111</td></tr></table>	Khair	250	Kanji	150	Kadaya	101	Salai	70	Gunda	70	Bael	100	Bamboo	70	Ardusa	75	Ragat Royado	100	Garmalo	75	kakhro,Dudh Kadi	50	Total	1111	Minimum planting height will be 100 cm. at the time of planting. However it will vary for different species.
Khair	250																										
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Ardusa	75																										
Ragat Royado	100																										
Garmalo	75																										
kakhro,Dudh Kadi	50																										
Total	1111																										
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 Jatropha, Agave plants ...etc. will be planted during monsoon in the upper side of nala as per suitability.																									
h	Protection Trench	Barbed wire fenching, 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	(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 4th 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.


(H.J. THAKKAR)

Dy. Conservator of Forest
Sabarkantha, Himatnagar

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Name of works	Model No.	Area		Rate per	Amount											Daily wages Rs.441.00	
		H.A.	Hac.		0 Year	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	8th Year	9th Year	10th Year	20%	Total Rs.
0 Year 70 % Adv. work.																	
1st Year Operation.	Model-3	137.00	213117	29197029	0	0	0	0	0	0	0	0	0	0	0	5839406	35036435
1st Year 30 % Advance work																	
Current year plantation			109121	0 14949577	0	0	0	0	0	0	0	0	0	0	0	2989915	17939492
2nd Year operation Maintanance																	
of one year old plantation.			75877	0	0	0	10395149	0	0	0	0	0	0	0	0	2079030	12474179
3rd Year operation Maintanance																	
of 2 years old plantation.			59392	0	0	0	0	8136704	0	0	0	0	0	0	0	1627341	9764045
4th year operation Maint. of 3																	
years old plantation.			20643	0	0	0	0	0	2828091	0	0	0	0	0	0	565618	3393709
5th year operation Maint. of 4																	
years old plantation.			11059	0	0	0	0	0	0	1515083	0	0	0	0	0	303017	1818100
6th year operation Maint. of 5																	
years old plantation.			11750	0	0	0	0	0	0	0	1609750	0	0	0	0	321950	1931700
7th year operation Maint. of 6																	
years old plantation.			12442	0	0	0	0	0	0	0	0	1704554	0	0	0	340911	2045465
8th year operation Maint. of 7																	
years old plantation.			13133	0	0	0	0	0	0	0	0	0	1799221	0	0	359844	2159065
9th year operation Maint. of 8																	
years old plantation.			13824	0	0	0	0	0	0	0	0	0	0	1893888	0	378778	2272666
10th year operation Maint. of 9																	
years old plantation.			14515	0	0	0	0	0	0	0	0	0	0	0	0	1988555	2386266
Total			554873	29197029	14949577	10395149	8136704	2828091	1515083	1609750	1704554	1799221	1893888	1988555	15203521	91221122	

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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	Khedasan	Vijaynagar	Sabarkantha	19	344.85	2.00	30.00	312.85
2	Adepur	Vijaynagar	Sabarkantha	63, 55/P	97.85	0.00	30.00	67.85
3	Chandap	Idar	Sabarkantha	499	117.38	0.00	30.00	87.38
4	Naroda	Himatnagar	Sabarkantha	126	345.11	0.00	30.00	315.11
5	Nankhi	Himatnagar	Sabarkantha	35/P	17.02	0.00	17.00	0.02


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Sabarkantha, Himatnagar

Model No - 3

Compensatory Afforestation Scheme for double degraded area under FCA Proposal
 Proposal for seeking prior approval for acquiring forest land for Diversion of 68.0884 Ha. Protected Forest land for four laning of existing section of Malvan-Patadi-jenabad-Dasada road SH-19 in Surendranagar District. (43/00 Km to 77/00 Km)

Daily wages Rs 441.00

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. 2	Labour 3	Material 4	Total 5
1				
0 year				
Nursery	1222	0	2600	2600
(a) Cost of soil, manure, seeds, water, fertilizers, insecticides, implements, rent of lands.	1222	6361	330	6691
(b) labour : Preparation of beds, filling and arranging of	222	2010	601	2611
(c) Seedling cost for casualty replacement in one year old (20%)	111	1007	299	1306
(d) Seedling cost for casualty replacement in two year old (10%)		9378	3830	13208
Total				
2. Area Development (Land Preparation)				
(a) Survey, cutback and promotion of root suckers		4780	0	4780
(b) Aligment and digging of pits 0.45 X 0.45 X 0.45	1111 @ 6.00	13803	0	13803
Total		18583	0	18583
(a) Natural fertilizer (Neem cake/ Castor cake)	1111 @ 5.00	0	14079	14079
Total		0	14079	14079
3. SMC Works				
(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
Total		29907	33708	63615
4. Protection				
(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
Total		47196	56436	103632
Total for 0 year		105064	108053	213117
1st Year				
(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	1111	32074	0	32074
(f) Support watering 5 times @ 3.25		20502	29418	49920
(g) Protection / tending operation		6636	0	6636
(h) Tending to natural vegetation		1658	0	1658
(i) Contingency		0	1658	1658
Total for 1st year		76942	32179	109121
2nd Year				
(a) 2 weeding & soil working		17813	0	17813
(b) 20 % Casually replcement, transport and planting	111+111	299	1491	1790
(c) Natural fertilizer (neem cake / caster cake) etc.	Rs.5/ plant	0	16639	16639
(d) Support watering 3 times @ 3.25		13324	19122	32446
(e) Protection / tending operation		7189	0	7189
Total for 2nd year		38625	37252	75877
3rd Year				
(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
Total for 3rd year		33805	25587	59392
4thYear				
(a) 1 weeding & soil working		10275	0	10275
(b) Protection & Maintenance of fencing/ Tending operation	L.S.	10368	0	10368
Total for 4th year		20643	0	20643
5thYear				
Protection & maintenace of fencing/ tending operation	L.S.	11059	0	11059
Total for 5th year		11059	0	11059
6thYear				
Protection & maintenance of fencing/ tending operation	L.S.	11750	0	11750
Total for 6th year		11750	0	11750
7thYear				
Protection & maintenance of fencing/ tending operation	L.S.	12442	0	12442
Total for 7th year		12442	0	12442
8thYear				
Protection & maintenance of fencing/ tending operation	L.S.	13133	0	13133
Total for 8th year		13133	0	13133
9thYear				
Protection & maintenance of fencing/ tending operation	L.S.	13824	0	13824
Total for 9th year		13824	0	13824
10thYear				
Protection & maintenance of fencing/ tending operation	L.S.	14515	0	14515

Total for 10th year		14515	0	14515
Sub Total		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/Claricidia along the fencing towards outer side


 (H.L. THAKKAR)
 Dy. Conservator of Forests
 Sabarkantha Himatnagar