

Compensatory Afforestation Scheme for Non Forest area

proposal for diversion of protected forest land for the project of widening & strengthening four lane of bilimora, chikhale, vansda, waghai road Km.53/400 to 56/600 (only for side of the road) & Km. 56/600 to 59/600 (for both side of the road) Dist. Navsari state Gujarat.

Detailed scheme of Compensatory Afforestation for Non Forest area 3.76 ha. To be carried out in lieu of 3.76 ha. Of Non Forest land to be diverted in Navsari District.

1 Details of degraded land

Village	:	Jamanpada
Taluka	:	Khergam
Range	:	Chikhali
District	:	Navsari
Division	:	Valsad North Division
Survey No	:	659 Re survey 682 (Block)
Area to be afforested	:	3.76 ha.
Working Circle	:	-

2 Description of Area.

Soil type	Brown-Murom
Topography	Hilly
Slope	Medium
Whether the area is bearing any root stock of Vegetation	Blank

3 Name of Plantation programme:-

Compensatory Afforestation Scheme for degraded area

4 Schedule of Plantation programme:-

- (i) The Compensatory Afforestation on Non Forest area would be started by Dupety Conservator of Forest Valsad North Division as early as a possible after the proposal is formally approved.
- (ii) Compensatory Afforestation will be done in 3.76 ha. Area. The total afforestation cost will be about **Rs.25,38,000/-** Road and Building Executive Engineer Navsari 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	Specofications		
(a)	General Details	The C.A. will be taken under compensatory Afforestation for Non Forest Areas. The prevailing wage rate is 340.20 per day.		
(b)	Spacement	3 X 3 mtr., 1111 plants per ha.		
(c)	Species to be planted (No. Of plants per ha.)	Khair	100	65 cm.
		Kadaya	30	75 cm.
		Bael	40	65 cm.
		Bamboo	100	65 cm.
		Harde	50	75 cm.
		Sadad	80	90 cm.
		Baheda	50	90 cm.
		Arjun Sadad	70	90 cm.
		Haldu	70	75 cm.
		Sisam	100	65 cm.
		Kalam	70	75 cm.
		Kilai	70	90 cm.
		Mahuda	70	75 cm.
		Bhilamo, Davlo, Tetu, Biyo.	61	65 cm.
		Teak	150	Stump of minimum 6 cm. Girth
		Total:		1111
(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 45X 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) Coutour 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. Gukky plugging & nala banding using the loose stone available in the area will be carried out as per requirement. seeds of jatropa, Agava 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	1st year three weeding soil working, support watering will be provided if needed. 2nd year two weeding soil working. 3rd year one weeding soil working.
(j)	Maintenance	It is proposed to maintain the Plantation up to ten years.
(k)	Subsequent Silvicultural Operaation	Cleaning, cutback, 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 result 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)	Silvicultural & other activities	Only afforestation aimed plantation will be taken up, as the area falls under degraded forest land.



Deputy Conservator of Forest
Valsad North Division
Valsad

The Compensatory Afforestation scheme at the cost of **Rs. 25,38,000/-** is technically and administrative approved by the undersigned.



Deputy Conservator of Forest
Valsad North Division

Model No - 3
Annexure -4 (1)

Compensatory Afforestation Scheme for Non Forest Area under FCA proposals

Dally wages Rs. 304.20

Spacements = 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 seedling =1333 seedling/ha.				
polypot size : 15 cm X 25 cm X 200				
Item of work	Qty.	labour	Matrial	Total
1	2	3	4	5
0 Year				
Nursery				
Cost of soil, manure, seeds, water, fartilliser, (a) insecticides, implements, rent of land. Shade, etc. (including 10 % for casualty replacement)	1222	0	1794	1794
labour: Preparation of beds, filling and (b) arranging of bags, showing of seeds, watering shifting, weeding etc.	1222	4388	227	4615
(c) seedling cost for casualty replacement in one year old (20%)	222	1386	414	1801
(d) seedling cost for casualty replacement in two year old (10%)	111	694	206	900
Total		6469	2642	9110
2. Area Development (Land Preparation)				
(a) Survey, Cutback and promotion of root suckers		6701	0	6701
(b) Aligment and digging of pits 0.45 X 0.45 X 0.45	1111 @ 18.00	34962	0	34962
Total		41663	0	41663
(a) Natural fertilizer (Neem cake/castor cake)	1111 @ 8.00	0	9712	9712
Total		0	9712	9712
3.SMC Works				
(a) Check wall/ retainingwall/ checkdem/ (all pucca only)	L.S	11713	23252	34966
(b) Contour trench 2 M. X 45 Cm. X 30 Cm. As per Rs.57.00/rmt (300 trench)	600 rmt.	59791	0	59791
Total		71504	23252	94757
4.Protection				
(a) Birber wire fencing	1.00 ha= 350 rmt.	0	154000	154000
(b) Seed sowing and planting of cuttings of Ipomea/ Glaricidia along the fence		1087	467	1554

Item of work	Qty.	labour	Matrial	Total
Total for 0 year		120724	190072	310796
1st Year				
(a) Maintenance of nursery (April to june)	1222	3366	336	3702
(b) Transport of seedlinf o plantation	1111	7629	1907	9536
(c) Planting with khamna of min 1 m. Doa	1111	7152	0	7152
(d) Transport & planting of seeding for casualty replacement	111	1621	410	2031
(e) 3 weeding cum soil working	1111	22124	0	22124
(f) Support watering 5 times @ 3.25		14142	20293	34435
(g) Protection /tending operation		4577	0	4577
(h) Tending to natural vegetation		1144	0	1144
(i) Contigency		0	1144	1144
Total for 1st year		61755	24090	85845
2nd Year				
(a) 2 Weeding & soil working		12287	0	12287
(b) 20% Casually replecement, transport and planting	111+111	878	3512	4391
(c) Natural fertilizer (Neem cake/castor cake) etc.	Rs.5/Plant	0	11477	11477
(d) Support watering 5 times @ 3.25		9190	13190	22380
(e) Protection /tending operation		4959	0	4959
Total for 2nd year		27314	28180	55495
3rd Year				
(a) 2 Weeding & soil working		13233	0	13233
(b) 10% Casually replecement, transport and planting	111	478	1891	2370
(c) Natural fertilizer Neem cake etc.	Rs.5/Plant	0	12360	12360
(d) Support watering 5 times @ 3.25		3300	4735	8035
(e) Protection & maintenance of fancing / tanding operation	L.S	6675	0	6675
Total for 3rd year		23686	18987	42673
4th Year				
(a) 1 Weeding & soil working		7088	0	7088
(b) Protection & maintenance of fancing / tanding operation	L.S	7152	0	7152
Total for 4th year		14240	0	14240
5th Year				
Protection & maintenance of fancing / tanding operation	L.S	7629	0	7629
Total for 5th year		7629	0	7629
6th Year				

Item of work	Qty.	labour	Matrial	Total
Total for 6th year		8106	0	8106
7th Year				
Protection & maintenance of fancing / tanding operation	L.S	8582	0	8582
Total for 7th year		8582	0	8582
8th Year				
Protection & maintenance of fancing / tanding operation	L.S	9059	0	9059
Total for 8th year		9059	0	9059
9th Year				
Protection & maintenance of fancing / tanding operation	L.S	9536	0	9536
Total for 9th year		9536	0	9536
10th Year				
Protection & maintenance of fancing / tanding operation	L.S	10013	0	10013
Total for 10th year		10013	0	10013
Sub Total:		300644	261329	561973
The cost of supervision / subsequental silvicultureal operations	20%	60129	52266	112395
Grand Total:		360773	313595	674368

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. 675000/-

Compensatory Afforestation for degraded area 1.00 ha.	Total Ha.	1.00 Ha. Rs.	Total Rs.
	3.76	675000	2538000

Compensatory Afforestation Total cost Rs. 25,38,000/-


 Deputy Conservator of Forest
 Valsad North Division
 Valsad