

Compensary Afforestation Scheme for double degraded area

Proposal for Diversion of **3.76** ha. Protected Forest Land for the Project of Widening and Strengthening of Waghai-Vasda Road by Navasari R&B Division, K.M 53/400 to Km.59/600 Dist.Navasari in Gujarat State .

Detailed scheme of Compensatory Afforestation for degraded area 8.00 ha. to be carried out in lieu of 3.76.00 ha. of Protected forest land to be diverted in Navasari district.

1. Details of degraded land.

Village	Murambi
Taluka	Waghai
Range	Shamgahan
District	Dang
Division	South Dang Forest Division Ahwa
Block/ Patal, Compartment No.	R.F.Comptt.No.282
Area to be afforested	8.00 Ha.

2. Description of Area.

Soil type	Brown & murom
Topography	Hilly
Slope	Medium & High
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 Deputy Conservator of Forest South Dang Division Ahwa as early as possible after the proposal is formally approved.
(ii)	Compensatory Afforestation will be done in 8.00 ha. area. The total afforestation cost will be about Rs. 37,79,600/- Executive Engineer, Navasari R&B Division, Navasari 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 307.90 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>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>Teak</td><td>300</td></tr> <tr> <td>Bamboo</td><td>100</td></tr> <tr> <td>Bahedo, Herde, Aritha</td><td>100</td></tr> <tr> <td>Haldu, Sadad, Arjun Sadad</td><td>100</td></tr> <tr> <td>Bhilamo, Kadayo, Sadad, Tandol etc.</td><td>100</td></tr> <tr> <td>Albizzia, Ficus, Jamun, Anjan, Neem, etc.</td><td>100</td></tr> <tr> <td>Bordi, Karanj, Khakhro & others</td><td>111</td></tr> <tr> <td>Total</td><td>1111</td><td></td></tr> </table>	Khair	200	Minimum planting height will be 100 cm. at the time of planting. However it will vary for different species.	Teak	300	Bamboo	100	Bahedo, Herde, Aritha	100	Haldu, Sadad, Arjun Sadad	100	Bhilamo, Kadayo, Sadad, Tandol etc.	100	Albizzia, Ficus, Jamun, Anjan, Neem, etc.	100	Bordi, Karanj, Khakhro & others	111	Total	1111	
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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 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	<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%</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 4th 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
South Dang Division Ahwa

The Compensatory Afforestation scheme at the cost of **Rs.37,79,600/-** is technically and administrative approved by the undersigned.


Deputy Conservator of Forest
South Dang Division Ahwa

**Compensatory Afforestation Scheme for double degraded area under FCA
proposal Diversion of 3.76 ha. PF land for Diversion of flexible payment for four
lane of Bilimora Chikhali Vansada-Waghal Road Km. 53/400 to Km. 59/600) in
Navasari R&B Divison, Navasari area in Navasari dist. Of Gujarat State.**

Daily wages Rs.307.90

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 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
0 year				
Nursery				
(a) Cost of soil, ,manure, seeds, water, fertillizer, insecticides, implements, rent of lands. Shade, etc. (including 10 % for casualty	1222	0	1815	1815
(b) labour : Preparation of beds, filling and arranging of bags,showing of seeds, watering shifting,	1222	4442	230	4672
(c) Seedling cost for casualty replacement in one year old (20%)	222	1404	419	1823
(d) Seedling cost for casualty replacement in two year old (10%)	111	703	209	912
Total		6549	2673	9222
2. Area Development (Land Preparation)				
(a) Survey, cutback and promotion of root suckers		3337	0	3337
(b) Aligment and digging of pits 0.45 X 0.45 X 0.45	1111@ 6.00	9637	0	9637
Total		12974	0	11794
(a) Natural fertilizer (Neem cake/ Castor cake)	1111 @ 5.00	0	9830	9830
Total		0	9830	9830
3. SMC Works				
(a) Check wall/ retaining wall /checkdem (all pucca only)	L.S.	11856	23535	35391
(b) Contour trench 2 M x 45 Cm x 30 Cm as per Rs.17.00/rmt (300 trench)	600 rmt.	9024	0	9024
Total		20880	23535	44415
4. Protection				
(a) Barbed wire fencing	L.S.	3539	35391	38930

(b) Seed sowing and planting of cuttings of Ipomea/ Glaricidia along the fence		1101	473	1574
Total		4640	35864	40504
Sub Total of 0 year		45043	71901	116944
1st Year				
(a) Maintenance of nursery (April to June)	1222	3407	340	3747
(b) Transport of seedling for plantation	1111	18444	386	18830
(c) Planting with khamna of Min 1 m dia	1111	5744	0	5744
(d)Transport of seediling for casualty replacement	111	199	44	243
(e) 3 weeding cum soil working	1111	23393	0	23393
(f) Support watering 5 times @ 3.25		14314	20539	34853
(g) Protection / tending operation		4612	0	4612
(h) Tending to natural vegetation		1158	0	1158
(i) Contingency		0	1158	1158
Total for 1st year		53718	22470	76188
2nd Year				
(a) 2 weeding & soil working		12567	0	12567
(b) 20 % Casually replcement, transport and planting	111+111	209	1041	1250
(c) Natural fertilizer (neem cake / caster cake) etc.	Rs.5/	0	11617	11617
(d) Support watering 3 times @ 3.25		9301	13351	22652
(e) Protection / tending operation		5019	0	5019
Total for 2nd year		27096	26009	53105
3rd Year				
(a) 2 weeding & soil working		13264	0	13264
(b) 10 % Casually replcement, transport and planting	111	112	561	673
(c) Natural fertilizer, neem cake etc.	Rs.5/	0	12735	12735
(d) Support watering 1 times @ 3.25		3340	4792	8132
(e) Protection & maintenance of fencing / tending operation	L.S.	8673	0	8673
Total for 3rd year		25389	18088	43477
4thYear				
(a) 1 weeding & soil working		7325	0	7325
(b) Protection & Maintenance of fencing/ Tending operation	L.S.	7239	0	7239
Total for 4th year		14564	0	14564
5thYear				
Protection & maintenance of fencing/ tending operation	L.S.	7722	0	7722

Total for 5th year		7722	0	7722
6thYear				
Protection & maintenance of fencing/ tending operation	L.S.	8204	0	8204
Total for 6th year		8204	0	8204
7thYear				
Protection & maintenance of fencing/ tending operation	L.S.	8687	0	8687
Total for 7th year		8687	0	8687
8thYear				
Protection & maintenance of fencing/ tending operation	L.S.	9169	0	9169
Total for 8th year		9169	0	9169
9thYear				
Protection & maintenance of fencing/ tending operation	L.S.	9652	0	9652
Total for 9th year		9652	0	9652
10thYear				
Protection & maintenance of fencing/ tending operation	L.S.	10135	0	10135
Total for 10th year		10135	0	10135
SUB TOTAL :		291379	138468	357847
The Cost of Supervision/subsequential silvicultureal Operations	20%	58276	27694	71569
		349655	166162	429416


Note :-

- (1) Seed sowing along fencing towards the inner side, and also in the plot.
- (2) Planting of cutting of ipomea//Glarcidia along the fencing towards outer side.

Compensatory afforestation will be done in 1.00 ha. Area.

Total Cost Rs. :4,29,500/-

Compensatory	429,500
10%	42950
With 10%	472,450
Total Cost of CA. in 8.00 Ha.	8.00 3779600


 Deputy Conservator of Forest
 South Dang Division Ahwa