

Annexure-19**Compensatory Afforestation Scheme for Non Forest area**

Diversion of 4.97 ha. Of Forest land for laying Irrigation underground Water Pipeline under Tapi- Karjan Link Pipeline Lift Irrigation Project.

Detailed scheme of Compensatory Afforestation for Non Forest area 5 ha. To be carried out in lieu of 4.97 ha. Of Forest land to be diverted in Tapi District.

1. Details of Non Forest land.

District	Taluka	Range	Village	Survey No.	Area(Ha)
Bhavnagar	Jesar	Jesar	Beda	231/A/1p	5
Total					5

2. Description of Area.

Soil type	Black clay
Topography	More or less flat, Hilly
Slope	Gentle
Whether the area is bearing any root stock of Vegetation	Area covered with prosopis juliflora trees and grass like sporobolus and other saline land grass species.

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 Bhavnagar Division as early as possible after the proposal is formally approved.
(ii)	Compensatory Afforestation will be done in 5 ha. Area. The total afforestation cost will be about Rs.24,39,505/- Executive Engineer, Ver-2 Yojna Vibhag, Vyara, Dist. Tapi 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 340.20 per day.		
b	Spacement	3 X 3 mtr., 1111 plants per ha.		
c	Species to be planted (No. of plants per ha.)	Species	Plants	Plants Height
		Karanj	250	75 cm
		Pilu	250	50 cm
		Desi baval	200	65 cm
		Khijado	211	65 cm
		Grass Zinjva	200	-
		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 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 Acacia and thorny 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 thorny Spp. 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, 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 4th year.</p> <p>(vii) Third party monitoring mechanism is also in the State and if the plantations in the sample selected, it will also be monitored by the third party selected for this purpose.</p>
m	Regeneration cleaning	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 Forests
Bhavnagar Forest Division
Bhavnagar

The Compensatory Afforestation scheme at the cost of Rs. 24,39,505/- is technically and administrative approved by the undersigned.

Deputy Conservator of Forests
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Bhavnagar

Compansantory Afforestation Scheme

Diversion of 4.97 ha. of Forest land for laying Irrigation underground Water Pipeline Under Tapi-Karjan Link Pipeline Lift Irrigation Project.

Daily wages Rs. 340.2

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
0 year				
Nursery				
(a) Cost of container, soil, ,manure, seeds, water, fertilizier, insecticides, implements, rent of lands. Shade, etc. (including 10 % for casualty replacement)	1222	0	2071	2071
(b) labour : Preparation of beds, filling and arranging of bags,showing of seeds, watering shifting, weeding etc.	1222	4659	0	4659
(c) Seedling cost for casualty replacement in one year old (20%)	222	2485	621	3107
(d) Seedling cost for casualty replacement in two year old (10%)	111	0	517	517
Total		7144	3209	10354
2. Area Development (Land Preparation)				
(a) Survey, cutback and promotion of root suckers		245	20	265
(b) Aligment and digging of pits 0.45 X 0.45 X 0.45	1111@ 6.00	10649	0	10649
Total		10894	20	10913
(a) Natural fertilizer (Neem cake/ Castor cake)	1111 @ 5.00	0	10862	10862
Total		0	10862	10862
3. SMC Works				
(a) Check wall/ retaining wall /checkdem (all pucca only)	L.S.	13100	26004	39103
(b) Contour trench 2 M x 45 Cm x 30 Cm as per Rs.17.00/rmt (300 trench)	600 rmt.	9971	0	9971
Total		23071	26004	49075
4. Protection				
(a) Barbed wire fencing	200 rmt	6000	54000	60000
(b) Seed sowing and planting of cuttings of Ipomea/ Glaricidia along the fence		1216	523	1738

Total		6720	50058	61738
Sub Total of 0 year		48860	90615	139475
1st Year				
(a) Maintenance of nursery (April to June)	1222	3765	375	4140
(b) Transport of seedling for plantation	1111	2065	427	2492
(c) Planting with khamna of Min 1 m dia	1111	6347	0	6347
(d) Transport of seedling for casualty replacement	111	220	50	270
(e) 3 weeding cum soil working	1111	24742	0	24742
(f) Support watering 5 times @ 3.25		15816	22694	38510
(g) Protection / tending operation		5119	0	5119
(h) Tending to natural vegetation		1280	0	1280
(i) Contingency		0	1280	1280
Total for 1st year		59354	24825	84179
2nd Year				
(a) 2 weeding & soil working		13741	0	13741
(b) 20 % Casually replcement, transport and planting	111+111	231	1150	1381
(c) Natural fertilizer (neem cake / caster cake) etc.	Rs.5/ plant	0	12837	12837
(d) Support watering 3 times @ 3.25		10277	14751	25028
(e) Protection / tending operation		5546	0	5546
Total for 2nd year		29795	28737	58533
3rd Year				
(a) 2 weeding & soil working		14799	0	14799
(b) 10 % Casually replcement, transport and planting	111	124	620	745
(c) Natural fertilizer, neem cake etc.	Rs.5/ plant	0	13823	13823
(d) Support watering 1 times @ 3.25		3690	5295	8985
(e) Protection & maintenance of fencing / tending operation	L.S.	7465	0	7465
Total for 3rd year		26078	19738	45817
4thYear				
(a) 1 weeding & soil working	250 rmt	7927	0	7927
(b) Protection & Maintenance of fencing/ Tending operation	L.S.	7998	0	7998
Total for 4th year		15926	0	15926
5thYear				
Protection & maintenance of fencing/ tending operation	L.S.	8532	0	8532
Total for 5th year		8532	0	8532
6thYear				
Protection & maintenance of fencing/ tending operation	L.S.	9065	0	9065

Total for 6th year		9065	0	9065
7thYear				
Protection & maintenance of fencing/ tending operation	L.S.	9598	0	9598
Total for 7th year		9598	0	9598
8thYear				
Protection & maintenance of fencing/ tending operation	L.S.	10131	0	10131
Total for 8th year		10131	0	10131
9thYear				
Protection & maintenance of fencing/ tending operation	L.S.	10665	0	10665
Total for 9th year		10665	0	10665
10thYear				
Protection & maintenance of fencing/ tending operation	L.S.	11198	0	11198
Total for 10th year		11198	0	11198
SUB TOTAL :		239201	163916	406585
The Cost of Supervision/subsequential silvicultureal Operations	20%	47840	32783	81317
		287041	196700	487901

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.

1 Ha cost, Rs. 487901 X 5 Ha. = Total Cost Rs. :24,39,505/-

Deputy Conservator of Forests
 Bhavnagar Forest Division
 Bhavnagar

:: CERTIFICATE::

This is to certify that Non Forest Land of Village. Beda Ta.Jesar Dist. Bhavnagar Ha.5 is selected for compensatory afforestation is in compact block and Suitable from the management and Protection point of view.

Place: Bhavnagar
Date: 28-07-2021.

(Dr. Sandeep Kumar)
Deputy Conservator of Forests
Bhavnagar Forest Division
Bhavnagar

LAND SUITABILITY CERTIFICATE

This is to certify that the Non Forest land of Village Beda, Tal.Jesar, Sr.No. 231/A/1 P, Ha.5 in lieu 4.97 Ha diverted of Forest land for laying irrigation Underground Water Pipeline is suitable for Compensatory Afforestation of Grasses, Shrubs and trees along with SMC Works.

The proposed land is Non Forest Land of above Village area is having potential to facilitate the increase vegetation cover and Lion habitat.

Place: Bhavnagar
Date: 28-07-2021.

(Dr. Sandeep Kumar)
Deputy Conservator of Forests
Bhavnagar Forest Division
Bhavnagar