

**Compensatory Afforestation Scheme for Non Forest area**

Diversion of 33.40 Ha. of Forest land for Laying irrigation Water Pipeline under Tapi-Karjan Link Pipeline lift irrigation Project in Tapi District & Surat District in Gujarat State.

Detailed scheme of Compensatory Afforestation for Non Forest area 34 ha. to be carried out in lieu of 33.40 ha. Of Reserve forest land to be diverted in Tapi & Surat District.

**1. Details of Non Forest land.**

District	Taluka	Range	Village	Survey No.	Area(Ha)
Bhavnagar	Jesar	Jesar	Beda	231/A/1p	34
<b>Total</b>					<b>34</b>

**2. Description of Area.**

<b>Soil type</b>	Black clay
<b>Topography</b>	More or less flat, Hilly
<b>Slope</b>	Gentle
<b>Whether the area is bearing any root stock of Vegetation</b>	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 34 ha. Area. The total afforestation cost will be about <b>Rs. 1,56,88,178/-</b> Executive Engineer, ver-2, Project Division, Vyara has given an undertaking to pay the cost of Compensatory Afforestation as per the prevailing wages (including the price escalation and supervision charges).

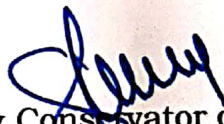
## 5. Technical Details:-

Technical details of Compensatory Afforestation are as Follows:


Sr. No.	Details	Specifications		
a	<b>General Details</b>	The C.A. will be taken under Compensatory Afforestation for double land on degraded Forest Areas. The prevailing wage rate is 310.40 per day.		
b	<b>Spacement</b>	3 X 3 mtr., 1111 plants per ha.		
c	<b>Species to be planted (No. of plants per ha.)</b>	<b>Species</b>	<b>Plants</b>	<b>Plants Height</b>
		Karanj	250	75 cm
		Pilu	250	50 cm
		Desi baval	200	65 cm
		Khijado	211	65 cm
		Grass Zinjva	200	-
		<b>Total</b>	<b>1111</b>	
d	<b>Nursery Technique</b>	Nine months old polypot raised plants will be planted at the onset of monsoon.		
e	<b>Site Preparation</b>	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	<b>Plantation Method</b>	Polypot raised plants will be planted during monsoon.		
g	<b>Soil &amp; Moisture Conservation Works</b>	(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	<b>Protection Trench</b>	Barbed wire fencing, Seed sowing And planting of cuttings of thorny Spp. along the fence.		
i	<b>Silvicultural Operations</b>	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	<b>Maintenance</b>	It is proposed to maintain the Plantation up to ten years.		
k	<b>Subsequent silvicultural Operation</b>	Cleaning, thinning etc. (as per species specific requirement) will be carried out at the age as per prescribed in the working plan.		



L	<b>Proposed monitoring mechanism</b>	<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 plantations in the sample selected, it will also be monitored by the third party selected for this purpose.</p>
m	<b>Regeneration cleaning</b>	Promotion of root suckers.
n	<b>Silviculture &amp; other activities</b>	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. 1,56,88,178/- is technically and administrative approved by the undersigned.**

  
 Deputy Conservator of Forests  
 Bhavnagar Forest Division  
 Bhavnagar

## Compansantory Afforestation Scheme

**Sub :- Diversion of 33.40 Ha. of Forest land for Laying irrigation Water Pipeline under Tapi-Karjan Link Pipeline lift irrigation Project in Tapi District & Surat District in Gujarat State**

**Daily wages Rs. 324.5**

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
<b>0 year</b>				
Nursery				
(a) Cost of container, soil, ,manure, seeds, water, fertillizer, insecticides, implements, rent of lands. Shade, etc. (including 10 % for casualty replacement)	1222	0	1975	1975
(b) labour : Preparation of beds, filling and arranging of bags, showing of seeds, watering shifting, weeding etc.	1222	4444	0	4444
(c ) Seedling cost for casualty replacement in one year old (20%)	222	2371	593	2963
(d) Seedling cost for casualty replacement in two year old (10%)	111	0	493	493
<b>Total</b>		<b>6815</b>	<b>3061</b>	<b>9876</b>
<b>2. Area Development ( Land Preparation )</b>				
(a) Survey, cutback and promotion of root suckers		234	19	253
(b) Aligment and digging of pits 0.45 X 0.45 X 0.45	1111@ 6.00	10157	0	10157
<b>Total</b>		<b>10391</b>	<b>19</b>	<b>10410</b>
(a) Natural fertilizer (Neem cake/ Castor cake)	1111 @ 5.00	0	10361	10361
<b>Total</b>		<b>0</b>	<b>10361</b>	<b>10361</b>
<b>3. SMC Works</b>				
(a) Check wall/ retaining wall /checkdem (all pucca only)	L.S.	12495	24804	37299
(b) Contour trench 2 M x 45 Cm x 30 Cm as per Rs.17.00/rmt (300 trench)	600 rmt.	9511	0	9511
<b>Total</b>		<b>22006</b>	<b>24804</b>	<b>46810</b>
<b>4. Protection</b>				
(a) Barbed wire fencing	105 rmt	5251	47249	52500
(b) Seed sowing and planting of cuttings of Ipomea/ Glaricidia along the fence		1160	498	1658




		6410	47748	54158
		46605	86433	133038
<b>Total</b>				
<b>Sub Total of 0 year</b>				
<b>1st Year</b>				
(a) Maintenance of nursery (April to June)	1222	3591	358	3949
(b) Transport of seedling for plantation	1111	1970	407	2377
(c) Planting with khamna of Min 1 m dia	1111	6054	0	6054
(d) Transport of seedling for casualty replacement	111	210	47	258
(e) 3 weeding cum soil working	1111	23600	0	23600
(f) Support watering 5 times @ 3.25		15086	21647	36733
(g) Protection / tending operation		4883	0	4883
(h) Tending to natural vegetation		1221	0	1221
(i) Contingency		0	1221	1221
<b>Total for 1st year</b>		56615	23680	80294
<b>2nd Year</b>				
(a) 2 weeding & soil working		13107	0	13107
(b) 20 % Casually replcement, transport and planting	111+111	220	1097	1317
(c) Natural fertilizer (neem cake / caster cake ) etc.	Rs.5/ plant	0	12244	12244
(d ) Support watering 3 times @ 3.25		9803	14070	23873
(e) Protection / tending operation		5290	0	5290
<b>Total for 2nd year</b>		28420	27411	55831
<b>3rd Year</b>				
(a) 2 weeding & soil working		14116	0	14116
(b) 10 % Casually replcement, transport and planting	111	119	592	710
(c) Natural fertilizer, neem cake etc.	Rs.5/ plant	0	13185	13185
(d ) Support watering 1 times @ 3.25		3520	5051	8570
(e) Protection & maintenance of fencing / tending operation	L.S.	7121	0	7121
<b>Total for 3rd year</b>		24875	18827	43702
<b>4thYear</b>				
(a) 1 weeding & soil working	250 rmt	7561	0	7561
(b) Protection & Maintenance of fencing/ Tending operation	L.S.	7629	0	7629
<b>Total for 4th year</b>		15191	0	15191
<b>5thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	8138	0	8138
<b>Total for 5th year</b>		8138	0	8138
<b>6thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	8647	0	8647

Total for 6th year		8647	0	8647
7thYear				
Protection & maintenance of fencing/ tending operation	L.S.	9155	0	9155
Total for 7th year		9155	0	9155
8thYear				
Protection & maintenance of fencing/ tending operation	L.S.	9664	0	9664
Total for 8th year		9664	0	9664
9thYear				
Protection & maintenance of fencing/ tending operation	L.S.	10172	0	10172
Total for 9th year		10172	0	10172
10thYear				
Protection & maintenance of fencing/ tending operation	L.S.	10681	0	10681
Total for 10th year		10681	0	10681
<b>SUB TOTAL :</b>		<b>228162</b>	<b>156352</b>	<b>384514</b>
The Cost of Supervision/subsequential silvicultureal Operations	20%	45632	31270	76903
		<b>273795</b>	<b>187622</b>	<b>461417</b>

**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. 461417 X 34 Ha. = Total Cost Rs. :15688178/-**

  
 Deputy Conservator of Forests  
 Bhavnagar Forest Division  
 Bhavnagar  
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## **:: CERTIFICATE ::**

This is to certify that Non Forest Land of Village. Beda Ta.Jesar Dist. Bhavnagar Ha.34 is selected for compensatory afforestation is in compact block and Suitable from the management and Protection point of view.

Place: Bhavnagar  
Date: 06-08-2020.

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