

## Compensatory Afforestation Scheme for double degraded area (Model-3)

Construction of Six lane with paved shoulder of the existing chotila bypass left out section of NH-47 (old NH-8A) from existing km 165+925 to 172+275 on EPC mode (10.08 ha.).

Detailed scheme of Compensatory Afforestation for degraded area 21.00 ha to be carried out in lieu of 10.08 ha. of PF land to be diverted in Surendranagar district.

### 1. Details of degraded land.

District	Taluka	Range	Village	Survey No.	Area
Surendranagar	Chuda	Wadhawan	Samdhiyala	174 pt	21.00
Total					21.00

### 2. Description of Area.

Soil type	Marraimy
Topography	Plain
Slope	Gentle
Whether the area is bearing any root stock of Vegetation	Most of the area is Degraded

### 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 Dy.Conservator of Forest Surendranagar Division as early as possible after the proposal is formally approved.
(ii)	Compensatory Afforestation will be done in 21.00 ha area. The total afforestation cost will be about <b>Rs. 10082751/-</b> Executive Engineer, National highway Division, Rajkot 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 351.30 per day.		
b	Spacement	3 X 3 mtr., 1111 plants per ha.		
c	Species to be planted	Kher	200	65 cm

	(No. of plants per ha.)	Garmalo	150	65 cm
		Harmo	150	65 cm
		Desi Bavali	150	65 cm
		Khakharo	150	75 cm
		Pilu	100	50 cm.
		Gundi	100	50 cm.
		Bordi	61	65 cm.
		Pipar	25	90 cm.
		Vad	25	90 cm.
		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 <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	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	(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		

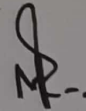


		<p>register on a periodical basis, which is updated at the end of September and March each year.</p> <p>(iv) The collar girth is also to be reordered at the end of each year.</p> <p>(v) At the end of maintenance period, the area is aimed at full stocking and pole crop girth for all the species, except 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	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.



(N.J. Parmar)  
Dy. Conservator of Forest  
Surendranagar

The Compensatory Afforestation scheme at the cost of Rs. 10082751/- is technically and administrative approved by the undersigned.



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Surendranagar

Sub:- Construction of six lane with paved shoulder of the existing chotila bypass left out section of NH-47 (old NH-8A) from existing km 165+925 to 172+275 on EPC mode (10.08 ha.)

Daily wages Rs. 351.30

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
<b>0 year</b>				
<b>Nursery</b>				
(a) Cost of soil, ,manure, seeds, water, fertillizer, insecticides, implements, rent of lands. Shade, etc. (including 10 % for casualty replacement)	1222	0	2072	2072
(b) labour : Preparation of beds, filling and arranging of bags,showing of seeds, watering shifting, weeding etc.	1222	5068	262	5330
(c ) Seedling cost for casualty replacement in one year old (20%)	222	1600	479	2080
(d) Seedling cost for casualty replacement in two year old (10%)	111	802	239	1041
<b>Total</b>		<b>7470</b>	<b>3052</b>	<b>10522</b>
<b>2. Area Development ( Land Preparation )</b>				
(a) Survey, cutback and promotion of root suckers		3809	0	3809
(b) Aligment and digging of pits 0.45 X 0.45 X 0.45	1111@ 6.00	10996	0	10996
<b>Total</b>		<b>14805</b>	<b>0</b>	<b>14805</b>
(a) Natural fertilizer (Neem cake/ Castor cake)	1111 @ 5.00	0	11216	11216
<b>Total</b>		<b>0</b>	<b>11216</b>	<b>11216</b>
<b>3. SMC Works</b>				
(a) Check wall/ retaining wall /checkdem (all pucca only)	L.S.	13527	26852	40379
(b) Contour trench 2 M x 45 Cm x 30 Cm as per Rs.17.00/rmt (300 trench)	600 rmt.	10297	0	10297
<b>Total</b>		<b>23824</b>	<b>26852</b>	<b>50676</b>
<b>4. Protection</b>				
(a) Barbed wire fencing	111 rmt	3886	34965	38850



(b) Seed sowing and planting of cuttings of Ipomea/ Glaricidia along the fence		1255	540	1795
<b>Total</b>		<b>5141</b>	<b>35504</b>	<b>40645</b>
<b>Sub Total of 0 year</b>		<b>51240</b>	<b>76625</b>	<b>127865</b>
<b>1st Year</b>				
(a) Maintenance of nursery (April to June)	1222	3887	387	4275
(b) Transport of seedling for plantation	1111	2133	441	2573
(c) Planting with khamna of Min 1 m dia	1111	6554	0	6554
(d) Transport of seedling for casualty replacement	111	228	51	279
(e) 3 weeding cum soil working	1111	25549	0	25549
(f) Support watering 5 times @ 3.25		16332	23435	39766
(g) Protection / tending operation		5286	0	5286
(h) Tending to natural vegetation		1322	0	1322
(i) Contingency		0	1322	1322
<b>Total for 1st year</b>		<b>61290</b>	<b>25635</b>	<b>86926</b>
<b>2nd Year</b>				
(a) 2 weeding & soil working		14190	0	14190
(b) 20 % Casually replcement, transport and planting	111+111	239	1188	1426
(c) Natural fertilizer (neem cake / caster cake ) etc.	Rs.5/ plant	0	13255	13255
(d ) Support watering 3 times @ 3.25		10612	15232	25845
(e) Protection / tending operation		5727	0	5727
<b>Total for 2nd year</b>		<b>30767</b>	<b>29675</b>	<b>60442</b>
<b>3rd Year</b>				
(a) 2 weeding & soil working		15282	0	15282
(b) 10 % Casually replcement, transport and planting	111	128	641	769
(c) Natural fertilizer, neem cake etc.	Rs.5/ plant	0	14274	14274
(d ) Support watering 1 times @ 3.25		3810	5468	9278
(e) Protection & maintenance of fencing / tending operation	L.S.	7709	0	7709
<b>Total for 3rd year</b>		<b>26929</b>	<b>20382</b>	<b>47312</b>
<b>4thYear</b>				
(a) 1 weeding & soil working		8186	0	8186
(b) Protection & Maintenance of fencing/ Tending operation	L.S.	8259	0	8259
<b>Total for 4th year</b>		<b>16445</b>	<b>0</b>	<b>16445</b>
<b>5thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	8810	0	8810
<b>Total for 5th year</b>		<b>8810</b>	<b>0</b>	<b>8810</b>

<b>6thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	9361	0	9361
<b>Total for 6th year</b>		<b>9361</b>	<b>0</b>	<b>9361</b>
<b>7thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	9911	0	9911
<b>Total for 7th year</b>		<b>9911</b>	<b>0</b>	<b>9911</b>
<b>8thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	10462	0	10462
<b>Total for 8th year</b>		<b>10462</b>	<b>0</b>	<b>10462</b>
<b>9thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	11013	0	11013
<b>Total for 9th year</b>		<b>11013</b>	<b>0</b>	<b>11013</b>
<b>10thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	11563	0	11563
<b>Total for 10th year</b>		<b>11563</b>	<b>0</b>	<b>11563</b>
<b>SUB TOTAL :</b>		<b>247791</b>	<b>152318</b>	<b>400109</b>
The Cost of Supervision/subsequential silvicultureal Operations	20%	49558	30464	80022
		<b>297350</b>	<b>182782</b>	<b>480131</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.

Compensatory afforestation will be done in 1.00 ha. Area.

$$1 \text{ Ha cost, Rs. } 480131 \times 21.00 \text{ Ha.} = \text{Total Cost Rs.:- } 10082751/-$$

*N.J.*

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