

**Compensatory Afforestation Scheme for double degraded forest area**

Diversion of 6.75 Ha Protected Forest land for the work of widening and strengthening of Nadiad-Patlad Road, Km.0/00 to 9/00 (Chainage 3/00 to 9/00, SH No.89) Dist.Kheda, State of Gujarat.

Details scheme of Compensatory Afforestation to be carried out in lieu of 6.75 Ha Protected Forest land for the work of widening and strengthening of Nadiad-Patlad Road, Km.0/00 to 9/00 (Chainage 3/00 to 9/00, SH No.89) Dist.Kheda, State of Gujarat.

**1. Details of degraded land.**

|                             |             |
|-----------------------------|-------------|
| Village                     | Ladpur      |
| Taluka                      | Godhra      |
| Range                       | Godhra East |
| District                    | Panchmahal  |
| Division                    | Godhra      |
| Reserved Forest Survey No.. | 27          |
| Area to be afforested       | 14.00       |
| Working circle              | Production  |

**2. Description of Area.**

|  |                     |
|--|---------------------|
| Soil type  | Black & Goradu Soil |
| Topography   | Plain               |
| Slope  | Medium & Gentle     |
| Whether the area is bearing any root stock of Vegetation | Yes                 |

**3. Name of Plantation Programme:-**

Compensatory Afforestation Scheme for Degraded Area.

**Details of Year Wise Break-Up requirement of fund is as under**

Daily / Wages-Rs.310.40

| Year                    | Area (ha) | Rate /ha      | Total Amount  |
|-------------------------|-----------|---------------|---------------|
| 0 Year 70 %             | 1.00      | 127894        | 127894        |
| 1 <sup>st</sup> Year    | 1.00      | 76807         | 76807         |
| 2 <sup>nd</sup> Year    | 1.00      | 53536         | 53536         |
| 3 <sup>rd</sup> Year    | 1.00      | 43830         | 43830         |
| 4 <sup>th</sup> Year    | 1.00      | 14682         | 14682         |
| 5 <sup>th</sup> Year    | 1.00      | 7785          | 7785          |
| 6 <sup>th</sup> Year    | 1.00      | 8271          | 8271          |
| 7 <sup>th</sup> Year    | 1.00      | 8758          | 8758          |
| 8 <sup>th</sup> Year    | 1.00      | 9243          | 9243          |
| 9 <sup>th</sup> Year    | 1.00      | 9730          | 9730          |
| 10 <sup>th</sup> Year   | 1.00      | 10217         | 10217         |
| <b>Total</b>            | 1.00      | <b>370753</b> | <b>370753</b> |
| Supervision Charge 20 % |           | 74151         | 74151         |
| <b>Total</b>            | 1.00      | <b>444904</b> | <b>444904</b> |

Say

4,44,904/-

**Compensatory Afforestation will be done in 4.00 ha. Area. The total afforestation cost will be Rs.62,28,656/-**

#### 4. Schedule of Plantation Programme:-

|      |   |
|------|---|
| (v)  | The Compensatory Afforestation on degraded area would be started by Dy.Conservator of Forest Godhra Division as early as possible after the proposal is formally approved.  |
| (vi) | Compensatory Afforestation will be done in 14.00 ha. Area. The total afforestation cost will be about <b>Rs.62,28,656/-</b> Executive Engineer, R&B Division, Nadiad 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 310.40 per day.   |            |     |  |      |     |               |     |                |    |        |    |       |   |                                      |    |                                 |    |              |             |  |
| b                                    | Spacement                                     | 3 X 3 mtr., 1111 plants per ha.   |            |     |  |      |     |               |     |                |    |        |    |       |   |                                      |    |                                 |    |              |             |  |
| c                                    | Species to be planted (No. of plants per ha.) | <table> <tr> <td>Holoptelea</td><td>333</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>388</td></tr> <tr> <td>Custard Apple</td><td>166</td></tr> <tr> <td>Cassia fistula</td><td>55</td></tr> <tr> <td>Bamboo</td><td>55</td></tr> <tr> <td>kuvad</td><td>6</td></tr> <tr> <td>Vad,Pipal ,Khati ambali ,Arjun sadad</td><td>55</td></tr> <tr> <td>Limado,kothi,kadayo,Bili etc...</td><td>53</td></tr> <tr> <td><b>Total</b></td><td><b>1111</b></td><td></td></tr> </table> | Holoptelea | 333 | Minimum planting height will be 100 cm. at the time of planting. However it will vary for different species. | Teak | 388 | Custard Apple | 166 | Cassia fistula | 55 | Bamboo | 55 | kuvad | 6 | Vad,Pipal ,Khati ambali ,Arjun sadad | 55 | Limado,kothi,kadayo,Bili etc... | 53 | <b>Total</b> | <b>1111</b> |  |
| Holoptelea                           | 333   | Minimum planting height will be 100 cm. at the time of planting. However it will vary for different species.  |            |     |  |      |     |               |     |                |    |        |    |       |   |                                      |    |                                 |    |              |             |  |
| Teak                                 | 388   |   |            |     |  |      |     |               |     |                |    |        |    |       |   |                                      |    |                                 |    |              |             |  |
| Custard Apple                        | 166   |   |            |     |  |      |     |               |     |                |    |        |    |       |   |                                      |    |                                 |    |              |             |  |
| Cassia fistula                       | 55  |   |            |     |  |      |     |               |     |                |    |        |    |       |   |                                      |    |                                 |    |              |             |  |
| Bamboo                               | 55  |   |            |     |  |      |     |               |     |                |    |        |    |       |   |                                      |    |                                 |    |              |             |  |
| kuvad                                | 6   |   |            |     |  |      |     |               |     |                |    |        |    |       |   |                                      |    |                                 |    |              |             |  |
| Vad,Pipal ,Khati ambali ,Arjun sadad | 55  |   |            |     |  |      |     |               |     |                |    |        |    |       |   |                                      |    |                                 |    |              |             |  |
| Limado,kothi,kadayo,Bili etc...      | 53  |   |            |     |  |      |     |               |     |                |    |        |    |       |   |                                      |    |                                 |    |              |             |  |
| <b>Total</b>                         | <b>1111</b>                                   |   |            |     |  |      |     |               |     |                |    |        |    |       |   |                                      |    |                                 |    |              |             |  |
| 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            | <p>(vii) Pucca structure like Check dam, check wall, retaining wall</p> <p>(viii) 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 &amp; Nala Banding using The loose stone available in the area will be carried out as per requirement. Seeds</p>   |            |     |  |      |     |               |     |                |    |        |    |       |   |                                      |    |                                 |    |              |             |  |



|   |                                    |   |
|---|------------------------------------|---|
|   |                                    | of Jatropha, Agave plants ...etc. will be planted during monsoon in the upper side of nala as per suitability.<br>(ix) Van Talavadi/ Percolation tank   |
| h | Protection Trench                  | Barbed wire fencing, Seed sowing And planting of cuttings of Ipomea/ Glarcidia along the fence  |
| i | Silvicultural Operations           | 1 <sup>st</sup> year three weeding soil working, Support watering will be provided if needed.<br>2 <sup>nd</sup> year two weeding soil working.<br>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, 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      | (xv) A plantation register is to be maintained.<br>(xvi) Monitoring is to be done as per the following norms.<br>Forester – 100%<br>RFO – 100%<br>ACF – 20%<br>DCF – 10%<br>(xvii) 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.<br>(xviii) The collar girth is also to be reordered at the end of each year.<br>(xix) At the end of maintenance period, the area is aimed at full stocking and pole crop girth for all the species, except bamboo.<br>(xx) Bamboo would be of the harvestable size by the end of 4 <sup>th</sup> year.<br>(xxi) 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 | Silviculture & other activities    | Only afforestation aimed plantation will be taken up, as the area falls under degraded forest land.   |

  
**(G.S Singh)**  
**Deputy Conservator of Forest**  
**Godhra**

The Compensatory Afforestation scheme at the cost of **Rs.62,28,656/-** is technically and administrative approved by the undersigned.

  
**(G.S Singh)**  
**Deputy Conservator of Forest**  
**Godhra**

## Compensatory Afforestation Scheme for double degraded area Under FCA Proposal

Diversion of 6.75 Ha Protected Forest land for the work of widening and strengthening of Nadiad-Patlad Road, Km.0/00 to 9/00 (Chainage 3/00 to 9/00, SH No.89) Dist.Kheda, State of Gujarat.

Spacements = 3mx3m

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

Wage rate: 310.40/Day

|   | Item of Work   | Qty.      | Labour       | Material     | Totals        |
|---|--|-----------|--------------|--------------|---------------|
| <b>0 year Nursery</b>                           |  |           |              |              |               |
| (a)   | Cost of soil, manure, seeds, water, fertilizer, insecticides, implements, rent of lands. Shade. etc. (including 10 % for casualty replacement) | 1222      | 0            | 1815         | 1815          |
| (b)   | labour : Preparation of beds, filling and arranging of bags, sowing of seeds, watering, shifting, weeding etc.                                 | 1222      | 4442         | 230          | 4672          |
|   | Seedling cost for casualty replacement in one year old (20 %)  | 222       | 1404         | 419          | 1823          |
|   | Seedling cost for casualty replacement in two year old (10%)   | 111       | 703          | 209          | 912           |
|   | <b>Total</b>   |           | <b>6549</b>  | <b>2673</b>  | <b>9222</b>   |
| <b>2. Area Development ( Land Preparation )</b> |  |           |              |              |               |
| (a)   | Survey, cutback and promotion of root suckers  |           | 3337         | 0            | 3337          |
|   | Alignment and digging of pits 0.45 X 0.45 X 0.45   | 1111@8.68 | 9305         | 0            | 9305          |
|   | <b>Total</b>   |           | <b>12642</b> | <b>0</b>     | <b>12642</b>  |
| (a)   | Natural Fertilizer (Neem cake/ Castor cake)  | 1111@10   | 0            | 11110        | 11110         |
|   | <b>Total</b>   |           | <b>0</b>     | <b>11110</b> | <b>11110</b>  |
| <b>3. SMC Works</b>                             |  |           |              |              |               |
| (a)   | Check wall/ retaining wall /checkdam (all pucca only)  | LS        | 11856        | 23535        | 35391         |
| (b)   | Contour trench 2 M x 45 Cm x 30 Cm as per Rs.51.75/rmt (300 trench)  | 600rmt    | 9024         | 0            | 9024          |
| (c)   | Van Talavadi/Hill Top Tank/Percolation tank/Nala bund, Gully Plug etc.   |           | 10000        | 0            | 10000         |
|   | <b>Total</b>   |           | <b>30880</b> | <b>23535</b> | <b>54415</b>  |
| <b>4. Protection</b>                            |  |           |              |              |               |
| (a)   | Barbed wire fencing  | LS        | 3539         | 35391        | 38930         |
| (b)   | Seed sowing and planting of cuttings of Ipomea/ Glaricidia along the fence   |           | 1102         | 473          | 1575          |
|   | <b>Total</b>   |           | <b>4641</b>  | <b>35864</b> | <b>40505</b>  |
|   | <b>Total for 0 year</b>  |           | <b>54712</b> | <b>73182</b> | <b>127894</b> |
| <b>1st Year</b>                                 |  |           |              |              |               |
| (a)   | Maintenance of nursery (April to June)   | 1222      | 3407         | 340          | 3747          |
| (b)   | Transport of seedling for plantation   | 1111      | 1700         | 200          | 1900          |
| (c)   | Planting with khamna of Min. 1 m dia   | 1111      | 5744         | 0            | 5744          |
| (d)   | Transport & planting of seedling for casualty replacement  | 111       | 199          | 44           | 243           |
| (e)   | 3 weeding cum soilworking  | 1111      | 23392        | 0            | 23392         |
| (f)   | Support watering 5 times @5.30   |           | 14314        | 20539        | 34853         |
| (g)   | Protection / tending operation   |           | 4612         | 0            | 4612          |
| (h)   | Tending to natural vegetation  |           | 1158         | 0            | 1158          |
| (i)   | Contingency  |           | 0            | 1158         | 1158          |
|   | <b>Total for 1st year</b>  |           | <b>54526</b> | <b>22281</b> | <b>76807</b>  |



|     |  |                  |               |               |               |
|-----|--|------------------|---------------|---------------|---------------|
|     | <b>Total for 1st year</b>                                      |                  | <b>54526</b>  | <b>22281</b>  | <b>76807</b>  |
|     |  |                  |               |               |               |
|     | <b>2nd Year</b>  |                  |               |               |               |
| (a) | 2 weeding & soil working                                       |                  | 12567         | 0             | 12567         |
| (b) | 20 % Casually replecement, transport and Planting              | 111+111          | 209           | 1041          | 1250          |
| (c) | Natural fertilizer (neem cake / caster cake ) etc              | Rs.<br>10/plants | 0             | 12048         | 12048         |
| (d) | Support watering 3 times @ 5.30                                |                  | 9301          | 13351         | 22652         |
| (e) | Protection / tending operation                                 |                  | 5019          | 0             | 5019          |
|     | <b>Total for 2nd Year</b>                                      |                  | <b>27096</b>  | <b>26440</b>  | <b>53536</b>  |
|     |  |                  |               |               |               |
|     | <b>3rd Year</b>  |                  |               |               |               |
| (a) | 2 weeding & soil working                                       |                  | 12567         | 0             | 12567         |
| (b) | 10 % Casually Replecement, transport and                       | 111              | 222           | 555           | 777           |
| (b) | Planting, Natural fertilizer, neem cake etc.                   | Rs.<br>10/plants | 0             | 13332         | 13332         |
| (c) | Support watering 1 times @6                                    |                  | 3620          | 4120          | 7740          |
| (d) | Protection & maintenance of fencing / tending Operation        | L.S              | 9414          | 0             | 9414          |
|     | <b>Total for 3rd year</b>                                      |                  | <b>25823</b>  | <b>18007</b>  | <b>43830</b>  |
|     |  |                  |               |               |               |
|     | <b>4thYear</b>   |                  |               |               |               |
| (a) | 1 weeding & soilworking  | L.S              | 5268          | 0             | 5268          |
| (b) | Protection & Maintenance of fencing/ Tending operation         |                  | 9414          | 0             | 9414          |
|     | <b>Total for 4th Year</b>                                      |                  | <b>14682</b>  | <b>0</b>      | <b>14682</b>  |
|     |  |                  |               |               |               |
|     | <b>5thYear</b>   |                  |               |               |               |
|     | Protection & maintenance of fencing/ tending operation         | L.S              | 7785          | 0             | 7785          |
|     | <b>Total for 5th Year</b>                                      |                  | <b>7785</b>   | <b>0</b>      | <b>7785</b>   |
|     |  |                  |               |               |               |
|     | <b>6thYear</b>   |                  |               |               |               |
|     | Protection & maintenance of fencing/ tending operation         | L.S              | 8271          | 0             | 8271          |
|     | <b>Total for 6th Year</b>                                      |                  | <b>8271</b>   | <b>0</b>      | <b>8271</b>   |
|     |  |                  |               |               |               |
|     | <b>7 th Year</b>   |                  |               |               |               |
|     | Protection & maintenance of fencing/ tending operation         | L.S              | 8758          | 0             | 8758          |
|     | <b>Total for 7th Year</b>                                      |                  | <b>8758</b>   | <b>0</b>      | <b>8758</b>   |
|     |  |                  |               |               |               |
|     | <b>8 th Year</b>   |                  |               |               |               |
|     | Protection & maintenance of fencing/ tending operation         | L.S              | 9243          | 0             | 9243          |
|     | <b>Total for 8th Year</b>                                      |                  | <b>9243</b>   | <b>0</b>      | <b>9243</b>   |
|     |  |                  |               |               |               |
|     | <b>9 th Year</b>   |                  |               |               |               |
|     | Protection & maintenance of fencing/ tending operation         | L.S              | 9730          | 0             | 9730          |
|     | <b>Total for 9th Year</b>                                      |                  | <b>9730</b>   | <b>0</b>      | <b>9730</b>   |
|     |  |                  |               |               |               |
|     | <b>10 th Year</b>  |                  |               |               |               |
|     | Protection & maintenance of fencing/ tending operation         | L.S              | 10217         | 0             | 10217         |
|     | <b>Total for 10th Year</b>                                     |                  | <b>10217</b>  | <b>0</b>      | <b>10217</b>  |
|     | <b>Grand Total</b>   |                  | <b>230843</b> | <b>139910</b> | <b>370753</b> |
|     | The Cost of Supervision/Subsequential Silvicultural operations | 20%              | <b>46169</b>  | <b>27982</b>  | <b>74151</b>  |
|     |  |                  | <b>277012</b> | <b>167892</b> | <b>444904</b> |

Note :

- (1) Seed sowing along fencing toward for 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. : 4,44,904/-**

(Dr.G.S.Singh)  
Deputy Conservator of Forests,  
Godhra