

## Compensary Afforestation Scheme for double degraded area

Diversion of 0.0525 ha.RF of Forest land for Erection of 11 KV overhead electric line in forest area for electrification of 1 nos of Ag. connection At Gadkiya ness Village of Mendarda Taluka Gir Junagadh District.

Detailed scheme of Compensatory Afforestation for degraded area 01.00 ha. to be carried out in lieu of 0.0588 ha. of RF, forest land to be diverted in Junagadh district.

### 1. Details of degraded land.

Village	Sagodra
Taluka	Talala
Range	Talala
District	Gir Somnath
Division	Gir West Division, Junagadh
Block/Patal, Compartment No	Survey No.59 RF
Area to be afforested	1.00 Ha.
Working circle	-----

### 2. Description of Area.

Soil type	Black & Red Sandy
Topography	Plain
Slope	Predominantly Flat
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 as Dy.Conservator of Forest Gir West Division, Junagadh as early possible after the proposal is formally approved.
(ii)	Compensatory Afforestation will be done in 1.00 ha. area. The total afforestation cost will be about Rs.5,63,600/- (Five Lakh Sixty Three Thousand Six Hundred Only.) PGVCL Mendarda Sub Division 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>Khair</td><td>200</td><td rowspan="12">Minimum planting Height will be 100 cm. at the time of planting. However it will vary for different species.</td></tr> <tr> <td>Kadaya</td><td>100</td></tr> <tr> <td>Bael</td><td>100</td></tr> <tr> <td>Sadad</td><td>100</td></tr> <tr> <td>Salai</td><td>70</td></tr> <tr> <td>Baheda</td><td>50</td></tr> <tr> <td>Kanji</td><td>150</td></tr> <tr> <td>Arjun Sadad</td><td>70</td></tr> <tr> <td>Aonla</td><td>100</td></tr> <tr> <td>Bamboo</td><td>101</td></tr> <tr> <td>Safed Khakhro (Butea monosperma var, lutea), Anjan (Hardwickia binata), Dhauro (Anogeissus sericea var. nummularia)</td><td>70</td></tr> <tr> <td><b>Total</b></td><td><b>1111</b></td></tr> </table>	Khair	200	Minimum planting Height will be 100 cm. at the time of planting. However it will vary for different species.	Kadaya	100	Bael	100	Sadad	100	Salai	70	Baheda	50	Kanji	150	Arjun Sadad	70	Aonla	100	Bamboo	101	Safed Khakhro (Butea monosperma var, lutea), Anjan (Hardwickia binata), Dhauro (Anogeissus sericea var. nummularia)	70	<b>Total</b>	<b>1111</b>
Khair	200	Minimum planting Height will be 100 cm. at the time of planting. However it will vary for different species.																									
Kadaya	100																										
Bael	100																										
Sadad	100																										
Salai	70																										
Baheda	50																										
Kanji	150																										
Arjun Sadad	70																										
Aonla	100																										
Bamboo	101																										
Safed Khakhro (Butea monosperma var, lutea), Anjan (Hardwickia binata), Dhauro (Anogeissus sericea var. nummularia)	70																										
<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-																									
f	Plantation Method	Polypot raised plants will be planted during monsoon.																									
g	Soil & Moisture Conservation Works	<p>(i) Pucca structure like Check dam, check wall, retaining wall</p> <p>(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 &amp; Nala handing 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.</p>																									
h	Protection "French	Barbed wire fencing, Seed sowing And planting of cuttings of Ipomea/ Glarcidia along the fence																									
i	Silvicultural Operations	<p>1<sup>st</sup> year three weeding soil working, Support watering will be Provided if needed.</p> <p>2<sup>d</sup> year two weeding soil working.</p> <p>3<sup>d</sup> year one weeding soil working.</p>																									


o:\inna\r-at s\csurs\cz sthe\*newloarava.as



j	Maintenance	It is proposed to maintain the Plantation up to ten ears.
k	Subsequent silvicultural Operation	Cleanings, 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	(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 recruits of survival etc. are maintained in the plantation register on a periodical basis, which is updated at the end of the September and March each Year. (iv) The collar girth is also to be recorded at the end of each year. (v) At the end of maintenance period, the area is aimed at full stocking and pole crop girth for all the species, except bamboo. (vi) Bamboo would be of the harvestable size by the end of 4 <sup>th</sup> year. (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.
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  
Gir West Division, Junagadh

The Compensatory Afforestation scheme at the cost of Rs.5,63,600/- is technically and administratively approved by the undersigned.

  
Deputy Conservator of Forest  
Gir West Division, Junagadh

### Patrak-3

Compensatory Afforestation Scheme for double degraded area under FCA proposal Diversion of 0.2525 ha.RF of Forest land for Erection of 11 KV overhead electric line in forest area for electrification of 1 nos of Ag. connection At Gadkiya Village of Mendrada Taluka Junagadh District.

Daily wages Rs.310.40

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 1	Qty. 2	Labour 3	Material 4	Total 5
<b>0 year</b>				
Nursery				
(a) Cost of soil, ,manure, seeds, water, fertilizer, insecticides, implements, rent of lands. Shade, etc. (including 10 % for casualty replacement)	1222	0	1830	1830
(b) labour : Preparation of beds, filling and arranging of bags,showing of seeds, watering shifting, weeding etc.	1222	4478	232	4710
(c ) Seedling cost for casualty replacement in one year old (20%)	222	1415	422	1837
(d) Seedling cost for casualty replacement in two year old (10%)	111	708	210	918
<b>Total</b>		<b>6601</b>	<b>2694</b>	<b>9295</b>
<b>2. Area Development ( Land Preparation )</b>				
(a) Survey, cutback and promotion of root suckers		3365	0	3365
(b) Aligment and digging of pits 0.45 X 0.45 X 0.45	1222@6.00	9715	0	9715
<b>Total</b>		<b>13080</b>	<b>0</b>	<b>13080</b>
(a) Natural fertilizer (Neem cake/ Castor cake)	1111@ 5.00	0	9910	9910
<b>Total</b>		<b>0</b>	<b>9910</b>	<b>9910</b>
<b>3. SMC Works</b>				
(a) forest pond	L.S.	0	0	0
(b) Contour trench 2 M x 45 Cm x 30 Cm as per Rs.17.00/rmt (300 trench)	600 rmt.	9098	0	9098
<b>Total</b>		<b>9098</b>	<b>0</b>	<b>9098</b>
<b>4. Protection</b>				
(a) Barbed wire fencing	L.S.	7136	71356	78492
(b) Seed sowing and planting of cuttings of Ipomea/ Glaricidia along the fence		1110	476	1586
(c) Brush Wood	Cmt	0	0	0
<b>Total</b>		<b>8246</b>	<b>71832</b>	<b>80078</b>
<b>Total for 0 year</b>		<b>37025</b>	<b>84436</b>	<b>121461</b>
<b>1st Year</b>				
(a) Maintenance of nursery (April to June)	1222	3434	343	3777
(b) Transport of seedling for plantation	1111	1884	389	2273
(c) Planting with khamna of Min 1 m dia	1111	5792	0	5792
(d)Transport & planting of seedling for casualty replacement	111	402	44	445
(e) 3 weeding cum soil working	1111	22574	0	22574
(f) Support watering 5 times @ 3.25		14430	20706	35136
(g) Protection / tending operation		8076	0	8076
(h) Tending to natural vegetation		1168	0	1168
(i) Contingency		0	1168	1168
<b>Total for 1st year</b>		<b>57760</b>	<b>22650</b>	<b>80410</b>
<b>2nd Year</b>				



Item of work	Qty.	Labour	Material	Total
(a) 2 weeding & soil working		12537	0	12537
(b) 20 % Casually replcement, transport and planting	111+111	211	1050	1261
(c) Natural fertilizer (neem cake / caster cake ) etc.	Rs.5/ plant	0	11712	11712
(d ) Support watering 3 times @ 3.25		9377	13459	22836
(e) Protection / tending operation		9624	0	9624
<b>Total for 2nd year</b>		<b>31749</b>	<b>26221</b>	<b>57970</b>
<b>3rd Year</b>				
(a) 2 weeding & soil working		13502	0	13502
(b) 10 % Casually replcement, transport and planting	222	113	566	679
(b) Natural fertilizer, neem cake etc.	Rs.5/ plant	0	12613	12613
(c ) Support watering 1 times @ 3.25		3367	4831	8198
(d) Protection & maintenance of fencing / tending operation	L.S.	11402	0	11402
<b>Total for 3rd year</b>		<b>28384</b>	<b>18010</b>	<b>46394</b>
<b>4thYear</b>				
(a) 1 weeding & soil working		7232	0	7232
(b) Protection & Maintenance of fencing/ Tending operation	L.S.	13437	0	13437
<b>Total for 4th year</b>		<b>20669</b>	<b>0</b>	<b>20669</b>
<b>5thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	15766	0	15766
<b>Total for 5th year</b>		<b>15766</b>	<b>0</b>	<b>15766</b>
<b>6thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	18426	0	18426
<b>Total for 6th year</b>		<b>18426</b>	<b>0</b>	<b>18426</b>
<b>7thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	21461	0	21461
<b>Total for 7th year</b>		<b>21461</b>	<b>0</b>	<b>21461</b>
<b>8thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	24919	0	24919
<b>Total for 8th year</b>		<b>24919</b>	<b>0</b>	<b>24919</b>
<b>9thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	28854	0	28854
<b>Total for 9th year</b>		<b>28854</b>	<b>0</b>	<b>28854</b>
<b>10thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	33325	0	33325
<b>Total for 10th year</b>		<b>33325</b>	<b>0</b>	<b>33325</b>
<b>SubTotal</b>		<b>318338</b>	<b>151317</b>	<b>469655</b>
<b>Total cost of supervision/subsequent silvicultural operations</b>	20%	63668	30263	93931
<b>Grand Total</b>		<b>382006</b>	<b>181580</b>	<b>563586</b>
<b>Say Amount Rs.</b>				<b>563600</b>

Note :-

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

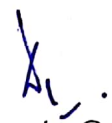
Dy. Conservator of Forests  
Gir West Division, Junagadh

Annexure - 1

Proposed area for double degradation afforestation as well as for CAMPA (CA) projects for barren degraded forest areas

S.No.	Name of FCA proposal Division	Proposed territorial divisions for double degradation afforestation	Remarks
1	2	3	4
1	Gir (West) Division, Junagadh	Gir (West) Division, Junagadh	

Date:     /     /2020  
Place: Junagadh

  
Deputy Conservator of Forests  
Gir (west) Division, Junagadh



Spacings = 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 soil, manure, seeds, water, fertilizer, insecticides, implements, rent of lands. Shade, etc. (including 10 % for casualty replacement)	1222	0	1830	1830
(b) labour : Preparation of beds, filling and arranging of bags, sowing of seeds, watering shifting, weeding etc.	1222	4478	232	4710
(c) Seedling cost for casualty replacement in one year old (20%)	222	1415	422	1837
(d) Seedling cost for casualty replacement in two year old (10%)	111	708	210	918
<b>Total</b>		<b>6601</b>	<b>2694</b>	<b>9295</b>
<b>2. Area Development ( Land Preparation )</b>				
(a) Survey, cutback and promotion of root suckers		3365	0	3365
(b) Alignment and digging of pits 0.45 X 0.45 X 0.45	1222@6.00	9715	0	9715
<b>Total</b>		<b>13080</b>	<b>0</b>	<b>13080</b>
(a) Natural fertilizer (Neem cake/ Castor cake)	1111@ 5.00	0	9910	9910
<b>Total</b>		<b>0</b>	<b>9910</b>	<b>9910</b>
<b>3. SMC Works</b>				
(a) forest pond	L.S.	0	0	0
(b) Contour trench 2 M x 45 Cm x 30 Cm as per Rs.17.00/rmt (300 trench)	600 rmt.	9098	0	9098
<b>Total</b>		<b>9098</b>	<b>0</b>	<b>9098</b>
<b>4. Protection</b>				
(a) Barbed wire fencing	L.S.	7136	71356	78492
(b) Seed sowing and planting of cuttings of Ipomea/ Glaricidia along the fence		1110	476	1586
(c) Brush Wood	CMt	0	0	0
<b>Total</b>		<b>8246</b>	<b>71832</b>	<b>80078</b>
<b>Total for 0 year</b>		<b>37025</b>	<b>84436</b>	<b>121461</b>
<b>1st Year</b>				
(a) Maintenance of nursery (April to June)	1222	3434	343	3777
(b) Transport of seedling for plantation	1111	1884	389	2273
(c) Planting with khamna of Min 1 m dia	1111	5792	0	5792
(d) Transport & planting of seedling for casualty replacement	111	402	44	446
(e) 3 weeding cum soil working	1111	22574	0	22574
(f) Support watering 5 times @ 3.25		14430	20706	35136
(g) Protection / tending operation		8076	0	8076
(h) Tending to natural vegetation		1168	0	1168
(i) Contingency		0	1168	1168
<b>Total for 1st year</b>		<b>57760</b>	<b>22650</b>	<b>80410</b>
<b>2nd Year</b>				



Item of work	Qty.	Labour	Material	Total
(a) 2 weeding & soil working		12537	0	12537
(b) 20 % Casually replcement, transport and planting	111+111	211	1050	1261
(c) Natural fertilizer (neem cake / caster cake ) etc.	Rs.5/ plant	0	11712	11712
(d ) Support watering 3 times @ 3.25		9377	13459	22836
(e) Protection / tending operation		9624	0	9624
<b>Total for 2nd year</b>		<b>31749</b>	<b>26221</b>	<b>57970</b>
<b>3rd Year</b>				
(a) 2 weeding & soil working		13502	0	13502
(b) 10 % Casually replcement, transport and planting	222	113	566	679
(b) Natural fertilizer, neem cake etc.	Rs.5/ plant	0	12613	12613
(c ) Support watering 1 times @ 3.25		3367	4831	8198
(d) Protection & maintenance of fencing / tending operation	L.S.	11402	0	11402
<b>Total for 3rd year</b>		<b>28384</b>	<b>18010</b>	<b>46394</b>
<b>4thYear</b>				
(a) 1 weeding & soil working		7232	0	7232
(b) Protection & Maintenance of fencing/ Tending operation	L.S.	13437	0	13437
<b>Total for 4th year</b>		<b>20669</b>	<b>0</b>	<b>20669</b>
<b>5thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	15766	0	15766
<b>Total for 5th year</b>		<b>15766</b>	<b>0</b>	<b>15766</b>
<b>6thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	18426	0	18426
<b>Total for 6th year</b>		<b>18426</b>	<b>0</b>	<b>18426</b>
<b>7thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	21461	0	21461
<b>Total for 7th year</b>		<b>21461</b>	<b>0</b>	<b>21461</b>
<b>8thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	24919	0	24919
<b>Total for 8th year</b>		<b>24919</b>	<b>0</b>	<b>24919</b>
<b>9thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	28854	0	28854
<b>Total for 9th year</b>		<b>28854</b>	<b>0</b>	<b>28854</b>
<b>10thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	33325	0	33325
<b>Total for 10th year</b>		<b>33325</b>	<b>0</b>	<b>33325</b>
<b>SubTotal</b>		<b>318338</b>	<b>151317</b>	<b>469655</b>
<b>Total cost of supervision/subsequent silviculture operations</b>	20%	63668	30263	93931
<b>Grand Total</b>		<b>382006</b>	<b>181580</b>	<b>563586</b>
Say Amount Rs.				<b>563600</b>

Note :-

- (1) Seed sowing along fencing towards the inner side.
- (2) Planting of cutting of ipomea//Gliricidia along the fencing towards outer side

Dy. Conservator of Forests  
Gir West Division, Junagadh



# Rate Structure for Compensatory Afforestation Scheme

Daily Wages : Rs. 310.40

Model-3 11111 Pv/Ha.

Model-3 1111 P/Ha.																	
Sr. No	Rate	Hactor	0 Year	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	8th Year	9th Year	10th Year	Total	20% Add	Grand Total	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	A	Normal Rate par 1.00 Ha.	1.00	110420	67009	44592	33138	13779	9854	10839	11923	13115	14427	15869	344965	68993	413958
	B	Increased Rate par 1.00 Ha. by 10% Year	1.00	121461	80410	57970	46394	20669	15766	18426	21461	24919	28854	33325	469655	93931	563586
2	A	Normal Rate	1.00	110420	67009	44592	33138	13779	9854	10839	11923	13115	14427	15869	344965	68993	413958
	B	Increased by 10% Year	1.00	121461	80410	57970	46394	20669	15766	18426	21461	24919	28854	33325	469655	93931	563586
Total Cost Rs.															563600		

NB:(1)

For Different Years the rate shown for B has been derived from A as Follows.

0 Year-B=A +10% of A	6 Year-B=A +70% of A
1 Year-B=A +20% of A	7 Year-B=A +80% of A
2 Year-B=A +30% of A	8 Year-B=A +90% of A
3 Year-B=A +40% of A	9 Year-B=A +100% of A
4 Year-B=A +50% of A	10 Year-B=A +110% of A
5 Year-B=A +60% of A	

NB:(2)-

In column 17 the additional 20% is towards the cost of supervision/subsequential silvicultural operations

Dy. Conservator of Forests  
Gir West Division, Junagadh

Name of works	Model No.	Area		Rate per	Amount										Total Rs.		
		H.A.	Hac.		0 Year	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	8th Year	9th Year		10th Year	20%
0 Year 70 % Adv.work.																	
1st Year Operation.	Model-3	1.00	121461	121461	0	0	0	0	0	0	0	0	0	0	0	24292	145753
1st Year 30 % Advance work			80410	0	80410	0	0	0	0	0	0	0	0	0	0	16082	96492
Current year plantation																	
2nd Year operation Maintenance of one year old plantation.			57970	0	0	57970	0	0	0	0	0	0	0	0	0	11594	69564
3rd Year operation Maintenance of 2 years old plantation.			46394	0	0	0	46394	0	0	0	0	0	0	0	0	9279	55673
4th year operation Maint.of 3 years old plantation.			20669	0	0	0	0	20669	0	0	0	0	0	0	0	4134	24803
5th year operation Maint.of 4 years old plantation.			15766	0	0	0	0	0	15766	0	0	0	0	0	0	3153	18919
6th year operation Maint.of 5 years old plantation.			18426	0	0	0	0	0	0	18426	0	0	0	0	0	3685	22111
7th year operation Maint.of 6 years old plantation.			21461	0	0	0	0	0	0	0	21461	0	0	0	0	4292	25753
8th year operation Maint.of 7 years old plantation.			24919	0	0	0	0	0	0	0	0	24919	0	0	0	4984	29903
9th year operation Maint.of 8 years old plantation.			28854	0	0	0	0	0	0	0	0	0	28854	0	0	5771	34625
10th year operation Maint.of 9 years old plantation.			33325	0	0	0	0	0	0	0	0	0	0	33325	6665	39990	
Total			469655	121461	80410	57970	46394	20669	15766	18426	21461	24919	28854	33325	93931	563586	
															Total	563600	

Dy. Conservator of Forests  
Gir West Division, Junagadh