Compensary Afforestation Scheme for double degraded area

Diversion of **36.54** ha. of protected forest land for widening and strenghtning of Advana – Raval – Kalyanpur – Bhatiya on SH-94 in Taluka Kalyanpur of district Devbhumi dwraka.

Detailed scheme of Compensatory Afforestation for degraded area 34 ha. to be carried out in lieu of 36.54 ha. of Protected forest land to be diverted in devbhumi dwaraka district.

1. Details of degraded land.

District	Taluka	Range	Village	Survey No.	Area
Jamnagar	Jam Jodhpur	Jam Jodhpur	Bamathiya	91 Pt	34.00

2. Description of Area.

Soil type	Marraimy, Hard Mormy
Topography	Plain
Slope	Gentle
Whether the area is bearing any root stock of Vegetation	Most of the area is Degreeded

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 Jamnagar Division as early as possible after the proposal is formally approved.
- (ii) Compensatory Afforestation will be done in 34.00 ha.area. The total afforestation cost will be about Rs. 14624590/- Dy. Executive Engineer, R & B, Sub Division Dwraka 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.	Details	Specifications
No.		
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.

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С	Species to be planted	Kanji	200	Minimum planting height
	(No. of plants per ha.)	Kadayo	100	will be about 65 cm. at the
		Neem		time of planting. However
			200	it will vary for different species
		Gunda	100	Species
		Gundi	111	
		Ardusa	200	
		Garmalo	100	
		Khakhra	100	
		Total	1111	
d	Nursery Technique	Nine months old polypot rais	ed plants w	ill be planted at the onset of
	C't- D	monsoon.		
e	Site Preparation	The malformed rootstock pro	esent in the	area will be cutback & the
		site will be cleaned in the digging 45 x 45 x 45 cms. v		
		Jan.	viii oc carre	od out in the month of Dec
f	Plantation Method	Polypot raised plants will be planted during monsoon.		
g	Soil & Moisture	(i) Pucca structure like Check dam, check wall, retaining wall		
	Conservation Works		x 0.45 x 0	.30, 300 Nos/ha.will be dug
			_	it soil will be heaped on the
				& 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		=2.
1.	Durate ation Transh	V-1		of nala as per suitability.
h	Protection Trench	Barbed wire fenching, Seed sowing And planting of cuttings of thorny Spp. along the fence.		
i	Silvicultural Operations		working.	Support watering will be
1	onvioustatus Operations	provided if needed.		The same of the sa
		2 nd year two weeding soil wo		
		3 rd year one weeding soil wor	king.	
j	Maintenance	It is proposed to maintain the		-
k	Subsequent			specific requirement) will be
	silvicualtural Operation	carried out at the age as per p		
1	Proposed monitoring	(i) A plantation register is t		
	mechanism	(ii) Monitoring is to be done	as per the f	following norms.
		Forester – 100% RFO – 100%		
		RFO - 100% ACF - 20%		
		DCF - 10%		
		(iii) The results of survival	etc. are n	naintained in the plantation
1 1		magister on a periodical	basis whi	ch is updated at the end of

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		September and March each year.	
		(iv) The collar girth is also to be reordered 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 th year.	
		(vii)Third party monitoring mechanism is also in the State and if the	
		plantationis in the sample selected, it will also be monitored by	
		the third party selected for this purpose.	
m	Regeneration cleaning	promotion of root suckers.	
n	Silviculture & other	Only afforestation aimed plantation will be taken up, as the area falls	
	activities	under degraded forest land.	

Dy. Conservator of Forest Jamnagar Forest Division jamnagar

The Compensatory Afforestation scheme at the cost of Rs. 14624590/- is technically and administrative approved by the undersigned.

Dy. Conservator of Forest Jamnagar Forest Division jamnagar

Sub :- Diversion of 36.54 ha. of protected forest land for widening and strenghtning of Advana – Raval – Kalyanpur – Bhatiya on SH-94 in Taluka Kalyanpur of district Devbhumi dwraka

Daily wages Rs. 310.4

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
	Q.y.			
1	2	3	4	5
0 year	_			
Nursery		*		
(a) Cost of soil, ,manure, seeds, water,	1222	0	1831	1831
fartillizer, insecticides, implements, rent of lands.				
Shade, etc. (including 10 % for casuality				
replacement)				
(b) labour: Preparation of beds, filling and arranging of	1222	4478	232	4710
bags, showing of seeds, watering shifting, weeding				
letc.				
(c) Seedling cost for casuality replacement in one year	222	1414	423	1837
old (20%)				
(d) Seedling cost for casuality replacement in two year	111	709	211	920
old (10%)	l			020
Total		6600	2697	9297
2. Area Development (Land Preparation)				
(a) Comment and promotion of root quakers		3365	0	3365
(a) Survey, cutback and promotion of root suckers		3303	٩	3305
(1) Alimont and display of pits 0 45 V 0 45 V 0 45	1111@ 6.00	9716	0	9716
(b) Aligment and digging of pits 0.45 X 0.45 X 0.45	111166 0.00	97 10	٩	97 10
		13081	0	42004
Total	1111 @ 5.00	13081		13081
(a) Natural fertilizer (Neem cake/ Castor cake)	1 1 1 1 (@ 3.00	U	9910	9910
			2212	2212
Total		. 0	9910	9910
3. SMC Works	-			
(a) Check wall/ retaining wall /checkdem (all pucca only)	L.S.	11952	23726	35678
(b) Contour trench 2 M x 45 Cm x 30 Cm as per	600 rmt.	9098	0	9098
Rs.17.00/rmt				
(300 trench)		2125		
Total		21050	23726	44776
4. Protection				
(a) Barbed wire fencing	L.S.	3568	35678	39246

(b) Seed sowing and planting of cuttings of Ipomea/		1109	477	1586
Glaricidia				
along the fence		1077	26455	40832
Total		4677 45409	36155 72488	117897
Sub Total of 0 year		45400		
1st Year	4000	3435	342	3777
(a) Maintenance of nursery (April to June)	1222	1884	389	2274
(b) Transport of seedling for plantation	1111			5791
(c) Planting with khamna of Min 1 m dia	1111	5791	0	
(d)Transport of seediling for casualty replacement	111	201	45	247
(e) 3 weeding cum soil working	1111	22575	0	22575
(f) Support watering 5 times @ 3.25		14430	20706	35137
(g) Protection / tending operation		4671	0	4671
(h) Tending to natural vegetation		1168	0	1168
(i) Contigency		0	1168	1168
Total for 1st year		54155	22651	76805
2nd Year				40500
(a) 2 weeding & soil working		12538	0	12538
(b) 20 % Casually replecement, transport and planting	111+111	211	1049	1260
(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		5060	0	5060
Total for 2nd year	-	27185	26220	53405
3rd Year				
(a) 2 weeding & soil working		13503	0	13503
(b) 10 % Casually replecement, transport and planting	111	114	566	680
(c) Natural fertilizer, neem cake etc.	Rs.5/ plant	0	12612	12612
(d) Support watering 1 times @ 3.25		3367	4831	8198
(e) Protection & maintenance of fencing / tending operation	L.S.	6811	0	6811
Total for 3rd year		23794	18009	41803
4thYear		7000	0	7233
(a) 1 weeding & soil working		7233	0	7298
(b) Protection & Maintenance of fencing/ Tending operation	L.S.	7298	0	
Total for 4th year		14531	0	14531
5thYear				7704
Protection & maintenance of fencing/ tending operation	L.S.	7784	0	7784
Total for 5th year		7784	0	7784

6thYear				
Protection & maintenance of fencing/ tending operation	L.S.	8271	0	8271
Total for 6th year		8271	0	8271
7thYear				0757
Protection & maintenance of fencing/ tending operation	L.S.	8757	0	8757
Total for 7th year		8757	0	8757
8thYear				0011
Protection & maintenance of fencing/ tending operation	L.S.	9244	0	9244
Total for 8th year		9244	0	9244
9thYear				
Protection & maintenance of fencing/ tending operation	L.S.	9730	0	9730
Total for 9th year		9730	0	9730
10thYear				40047
Protection & maintenance of fencing/ tending operation	L.S.	10217	0	10217
Total for 10th year	+	10217	0	10217
SUB TOTAL :		219077	139369	358446
SOB TOTAL.				74000
The Cost of Supervision/subsequental silvicultureal	20%	43815	27874	71689
Operations	 	262892	167242	430135

(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 Ha cost, Rs. 430135 X 34 Ha. = Total Cost Rs. :14624590/-

Dy Conservator of Forests **Jamnagar Division** Jamnagar

Compensary Afforestation Scheme for double degraded area

Diversion of 36.54 ha. of protected forest land for widening and strenghtning of Advana – Raval – Kalyanpur – Bhatiya on SH-94 in Taluka Kalyanpur of district Devbhumi dwraka.

Detailed scheme of Compensatory Afforestation for degraded area 40.00 ha. to be carried out in lieu of 36.54 ha. of Protected forest land to be diverted in devbhumi dwaraka district.

1. Details of degraded land.

District	Taluka	Range	Village	Survey No.	Area
Jamnagar	Jam Jodhpur	Jam Jodhpur	Bamathiya	91 Pt	40.00

2. Description of Area.

Soil type	Marraimy, Hard Mormy
Topography	Plain
Slope	Gentle
Whether the area is bearing any root stock of Vegetation	Most of the area is Degreeded

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 Jamnagar Division as early as possible after the proposal is formally approved.

(ii) Compensatory Afforestation will be done in 40.00 ha. area. The total afforestation cost will be about Rs. 17205400/- Dy. Executive Engineer, R & B, Sub Division Dwraka 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.

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С	Species to be planted	Kanji	200	Minimum planting height		
	(No. of plants per ha.)			will be about 65 cm. at the		
		Kadayo	100	time of planting. However		
		Neem	200	it will vary for different		
		Gunda	100	species		
		Gundi	111			
		Ardusa	200			
		Garmalo	100			
		Khakhra	100			
		Total	1111			
d	Nursery Technique	Nine months old polypot rais	ed plants w	ill be planted at the onset of		
	C'. D	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				
	digging 45 x 45 x 45 cms. will be carried out in the monty					
f	Plantation Method					
g	Soil & Moisture	Polypot raised plants will be planted during monsoon. (i) Pucca structure like Check dam, check wall retaining wall				
	Conservation Works	wan, retaining wan				
		(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				
	s					
		during monsoon in the	upper side o	of nala as per suitability.		
h	Protection Trench	Barbed wire fenching, Seed	sowing A	nd 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 wor	_			
j	Maintenance	3 rd year one weeding soil work				
k	Subsequent	It is proposed to maintain the Plantation up to ten years. Cleaning, thinning etc. (as per species specific requirement) will be				
	silvicualtural Operation	carried out at the age as per p	rescribed in	becilic requirement) will be		
1	Proposed monitoring	carried out at the age as per prescribed in the working plan. (i) A plantation register is to be maintained.				
	mechanism					
		(ii) Monitoring is to be done as per the following norms. Forester – 100%				
		RFO - 100%				
	3	ACF - 20%	- 20%			
		DCF - 10% (iii) The results of survival etc. are maintained in the plants				
		•				
		register on a periodical	basis, whic	ch is updated at the end of		

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		September and March each year.		
		(iv) The collar girth is also to be reordered at the end of each year.		
		(v) At the end of maintenance period, the area is aimed at fu		
		stocking and pole crop girth for all the species, except bamboo.		
		(vi) Bamboo would be of the harvestable size by the end of 4th year.		
		(vii)Third party monitoring mechanism is also in the State and if the		
		plantationis in the sample selected, it will also be monitored by		
		the third party selected for this purpose.		
m	Regeneration cleaning	promotion of root suckers.		
n	Silviculture & other	Only afforestation aimed plantation will be taken up, as the area falls		
	activities	under degraded forest land.		

Dy. Conservator of Forest Jamnagar Forest Division jamnagar

The Compensatory Afforestation scheme at the cost of Rs. 17205400/- is technically and administrative approved by the undersigned.

Dy. Conservator of Forest Jamnagar Forest Division jamnagar

Sub :- Diversion of 36.54 ha. of protected forest land for widening and strenghtning of Advana – Raval – Kalyanpur – Bhatiya on SH-94 in Taluka Kalyanpur of district Devbhumi dwraka

Daily wages Rs. 310.4

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	T =			
item of work	Qty.	Labour	Material	Total
1	2	3	4	5
0 year				
Nursery				
(a) Cost of soil, ,manure, seeds, water,	1222	0	1831	1831
fartillizer, insecticides, implements, rent of lands.				
Shade, etc. (including 10 % for casuality	/l			
replacement)				
(b) labour : Preparation of beds, filling and arranging of	1222	4478	232	4710
bags,showing of seeds, watering shifting, weeding	ıl İ			
etc.				
(c) Seedling cost for casuality replacement in one year	222	1414	423	1837
old (20%)			i	
(d) Seedling cost for casuality replacement in two year	111	709	211	920
old (10%)				020
T-4-1	-			
Total		6600	2697	9297
2. Area Development (Land Preparation)			r e	
(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	1111@ 6.00	9716	0	9716
(0) Alignment and digging of pits 0.45 X 0.45 X 0.45	1111@ 0.00	9710	o o	9/16
Total		13081	0	13081
(a) Natural fertilizer (Neem cake/ Castor cake)	1111 @ 5.00	0	9910	9910
Total		Ö	9910	9910
3. SMC Works				
(a) Check wall/ retaining wall /checkdem (all pucca only)	L.S.	11952	23726	35678
(b) Contour trench 2 M x 45 Cm x 30 Cm as per	600 rmt.	9098	0	9098
Rs.17.00/rmt	200		-	
(300 trench)				
Total		21050	23726	44776
4. Protection				
(a) Barbed wire fencing	L.S.	3568	35678	39246

(b) Seed sowing and planting of cuttings of Ipomea/		1109	477	1586
Glaricidia		***		
along the fence				10000
Total	-	4677 45409	36155 72488	40832 117897
Sub Total of 0 year		45409	72400	117037
1st Year	1000	3435	342	3777
(a) Maintenance of nursery (April to June)	1222	1884	389	2274
(b) Transport of seedling for plantation	1111	2 345.50		
(c) Planting with khamna of Min 1 m dia	1111	5791	0	5791
(d)Transport of seediling for casualty replacement	111	201	45	247
(e) 3 weeding cum soil working	1111	22575	0	22575
(f) Support watering 5 times @ 3.25		14430	20706	35137
(g) Protection / tending operation		4671	0	4671
(h) Tending to natural vegetation		1168	0	1168
(i) Contigency		0	1168	1168
Total for 1st year		54155	22651	76805
2nd Year				
(a) 2 weeding & soil working		12538	0	12538
(b) 20 % Casually replecement, transport and planting	111+111	211	1049	1260
(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		5060	0	5060
Total for 2nd year		27185	26220	53405
3rd Year				
(a) 2 weeding & soil working		13503	0	13503
(b) 10 % Casually replecement, transport and planting	111	114	566	680
(c) Natural fertilizer, neem cake etc.	Rs.5/ plant	0	12612	12612
(d) Support watering 1 times @ 3.25		3367	4831	8198
(e) Protection & maintenance of fencing / tending operation	L.S.	6811	0	6811
Total for 3rd year		23794	18009	41803
4thYear				7000
(a) 1 weeding & soil working		7233	0	7233
(b) Protection & Maintenance of fencing/ Tending operation	JL.S.	7298	0	7298
Total for 4th year		14531	0	14531
5thYear				
Protection & maintenance of fencing/ tending operation	L.S.	7784	0	7784
Total for 5th year		7784	0	7784

6thYear				8271
Protection & maintenance of fencing/ tending operation	L.S.	8271	0	1000 C C C C C C C C C C C C C C C C C C
Total for 6th year		8271	0	8271
7thYear				
Protection & maintenance of fencing/ tending operation	L.S.	8757	0	8757
Total for 7th year		8757	0	8757
8thYear				
Protection & maintenance of fencing/ tending operation	L.S.	9244	0	9244
Total for 8th year		9244	0	9244
9thYear				
Protection & maintenance of fencing/ tending operation	L.S.	9730	0	9730
Total for 9th year		9730	0	9730
10thYear				
Protection & maintenance of fencing/ tending operation	L.S.	10217	0	10217
Total for 10th year	-	10217	0	10217
SUB TOTAL :		219077	139369	358446
The Cost of Supervision/subsequental silvicultureal	20%	43815	27874	71689
Operations				10010-
		262892	167242	430135

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 Ha cost, Rs. 430135 X 40 Ha. = Total Cost Rs. :17205400/-

Dy Conservator of Forests

Jamnagar Division

Jamnagar