

Compensary Afforestation Scheme for Double Degraded Area

Subject: Diversion of 1.6321 Hect. of Widening of Existing Road From Gabbar Taleti to Gabbar Circle Road Km 166/520 to 169/015, SH-54

Detailed scheme of Compensatory Afforestation for Double degraded Area 4.00 ha. to be carried out in lieu of 1.6321 ha. of Forest land to be diverted in Social Forestry Division Banaskantha district.

1. Details of degraded land.

Village	Navavas
Taluka	Danta
Range	Danta-West
District	Banaskantha
Division	Banaskantha
Block/ Patal, Compartment No., Survey No	183/pt
Area to be afforested	4.00 ha.
Working circle	Reboishment and watershed development working cricle

2. Description of Area.

Soil type	Sandy/Muram
Topography	Medium
Slope	Medium
Whether the area is bearing any root stock of Vegetation	Yes

3. Name of Plantation Programme:-

Compensatory Afforestation Scheme for Double degraded area

4. Schedule of Plantation Programme:-

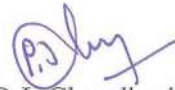
(i)	The Compensatory Afforestation on Double degraded Area would be started by Dy.Conservator of Forest Banaskantha Division as early as possible after the proposal is formally approved.
(ii)	Compensatory Afforestation will be done in 4.00 ha. area. The total afforestation cost will be about Rs.23,25,677/- Executive Engineer R & B Division, State Palanpur Dist. Banaskantha 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 degraded area. The prevailing wage rates 355.30 per day.			
b	Spacement	3 X 3 mtr., 1111 plants per ha.			
c	Species to be planted (No. of plants per ha.)	Speaces	Number of Plants	Minimum planting height (in cm.)	Minimum planting collar growth (in cm.)
		Babul	100	65	Minimum planting collar growth 1c.m. diameter at the time of planting.
		Kanji	200	75	
		Bordi	250	65	
		Neem	50	75	
		Gunda	50	75	
		Gundi	50	50	
		Bamboo	25	65	
		Ardusa	125	90	
		RagatRoyado	50	50	
		Garmalo	100	65	
		Khakhro (Buteamonospermavar, lutea),Dudhkudi (Wrightiatinctoria), Aval, Kada	111	50	
		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 and percolation tank 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.			
h	Protection Trench	Barbed wire fencing, Seed sowing And planting of cuttings of Ipomea/Glarcidia 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 working. 3 rd 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	<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 4th year.</p> <p>(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.</p>
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.


 (P.J. Chaudhari)
 Dy. Conservator of Forest
 Banaskantha, Palanpur

The Compensatory Afforestation scheme at the cost of **Rs.23,25,677/-** is technically and administrative approved by the undersigned.


 (P.J. Chaudhari)
 Dy. Conservator of Forest
 Banaskantha, Palanpur

Model No - 3

Compensatory Afforestation Scheme for Dubble degraded area


Daily wages Rs.355.30

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
0 year				
Nursery				
(a) Cost of soil, manure, seeds, water, fertilizer, insecticides, implements, rent of lands. Shade, etc. (including 10 % for casualty replacement)	1222	0	2096	2096
(b) labour : Preparation of beds, filling and arranging of bags, sowing of seeds, watering shifting, weeding etc.	1222	5125	265	5390
(c) Seedling cost for casualty replacement in one year old (20%)	222	1619	484	2103
(d) Seedling cost for casualty replacement in two year old (10%)	111	811	241	1052
Total		7555	3086	10641
2. Area Development (Land Preparation)				
(a) Survey, cutback and promotion of root suckers		3851	0	3851
(b) Alignment and digging of pits 0.45 X 0.45 X 0.45	1111 @ 6.00	11121	0	11121
Total		14972	0	14972
(a) Natural fertilizer (Neem cake/ Castor cake)	1111 @ 5.00	0	11343	11343
Total		0	11343	11343
3. SMC Works				
(a) Check wall/ retaining wall /checkdam (all pucca only)	L.S.	13681	27158	40839
(b) Contour trench 2 M x 45 Cm x 30 Cm as per Rs.17.00/rmt (300 trench)	600 rmt.	10414	0	10414
Total		24095	27158	51253
4. Protection				
(a) Barbed wire fencing per 1 rmt. 457/- Rs.	237 rmt.	47656	71484	119140
(b) Seed sowing and planting of cuttings of Ipomoea/ Gliricidia along the fence		1271	546	1817
Total		48927	72030	120957
Total for 0 year		95549	113617	209166
1st Year				
(a) Maintenance of nursery (April to June)	1222	3931	394	4325
(b) Transport of seedling for plantation	1111	2158	445	2603
(c) Planting with khamra of Min 1 m dia	1111	6630	0	6630
(d) Transport & planting of seedling for casualty replacement	111	230	50	280
(e) 3 weeding cum soil working	1111	25841	0	25841
(f) Support watering 5 times @ 3.25		16518	23701	40219
(g) Protection / tending operation		5346	0	5346
(h) Tending to natural vegetation		1337	0	1337
(i) Contingency		0	1337	1337
Total for 1st year		61991	25927	87918

Item of work	Qty.	Labour	Material	Total
2nd Year				
(a) 2 weeding & soil working		14352	0	14352
(b) 20 % Casually replcement, transport and planting	111+111	242	1201	1443
(c) Natural fertilizer (neem cake / caster cake) etc.	Rs.5/ plant	0	13406	13406
(d) Support watering 3 times @ 3.25		10734	15406	26140
(e) Protection / tending operation		5792	0	5792
Total for 2nd year		31120	30013	61133
3rd Year				
(a) 2 weeding & soil working		15456	0	15456
(b) 10 % Casually replcement, transport and planting	111	130	647	777
(b) Natural fertilizer, neem cake etc.	Rs.5/ plant	0	14437	14437
(c) Support watering 1 times @ 3.25		3854	5530	9384
(d) Protection & maintenance of fencing / tending operation	L.S.	7797	0	7797
Total for 3rd year		27237	20614	47851
4thYear				
(a) 1 weeding & soil working		8279	0	8279
(b) Protection & Maintenance of fencing/ Tending operation	L.S.	8354	0	8354
Total for 4th year		16633	0	16633
5thYear				
Protection & maintenance of fencing/ tending operation	L.S.	8910	0	8910
Total for 5th year		8910	0	8910
6thYear				
Protection & maintenance of fencing/ tending operation	L.S.	9467	0	9467
Total for 6th year		9467	0	9467
7thYear				
Protection & maintenance of fencing/ tending operation	L.S.	10024	0	10024
Total for 7th year		10024	0	10024
8thYear				
Protection & maintenance of fencing/ tending operation	L.S.	10581	0	10581
Total for 8th year		10581	0	10581
9thYear				
Protection & maintenance of fencing/ tending operation	L.S.	11138	0	11138
Total for 9th year		11138	0	11138
10thYear				
Protection & maintenance of fencing/ tending operation	L.S.	11695	0	11695
Total for 10th year		11695	0	11695
Sub Total		294345	190171	484516
Total cost of supervision/subsequent silvicultural operations	20%	58869	38034	96903
Grand Total		353214	228205	581419

Note :-

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


 (P.J. Chaudhari)
 Dy. Conservator of Forests
 Banaskantha, Palanpur


Rate Structure for Compensatory Afforestation Scheme

Model-3 1111 Pt/Ha.


Daily Wages : Rs. 355.30

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	190*49	73265	47025	34179	11088	5569	5569	5569	5569	5569	5569	389120	77824	466944
	B	Increased Rate par 1.00 Ha .by 10% Year	1.00	209*66	37918	51133	47851	16633	8910	9467	10024	10581	11138	11695	484516	96903	581419
2	A	Normal Rate	4.0000	750596	293060	188100	136716	44352	22276	22276	22276	22276	22276	22276	1556480	311296	1867776
	B	Increased by 10% Year	4.0000	836664	351672	244532	191404	66532	35640	37868	40096	42324	44552	46780	1938064	387613	2325677
																Total Cost Rs.	2325677

NB:(1)	
For Different Years the rate shown for B has been derived from A as Follows.	
0 Year-B=A +10% of A	5 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/subsequent silvicultural operations	


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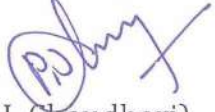
Name of works	Model No.	Area	Rate per	Amount												
		H.A.	Hac.	0 Year	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	8th Year	9th Year	10th Year	20%	Total Rs.
0 Year 70 % Adv.work. 1st Year Operation.	Model-3	4.0000	209166	836664	0	0	0	0	0	0	0	0	0	0	167333	1003997
1st Year 30 % Advance work Current year plantation			87918	0	351672	0	0	0	0	0	0	0	0	0	70334	422006
2nd Year operation Maintanance of one year old plantation.			61133	0	0	244532	0	0	0	0	0	0	0	0	48906	293438
3rd Year operation Maintanance of 2 years old plantation.			47851	0	0	0	191404	0	0	0	0	0	0	0	38281	229685
4th year operation Maint.of 3 years old plantation.			16633	0	0	0	0	66532	0	0	0	0	0	0	13306	79838
5th year operation Maint.of 4 years old plantation.			8910	0	0	0	0	0	35540	0	0	0	0	0	7128	42768
6th year operation Maint.of 5 years old plantation.			9467	0	0	0	0	0	0	37868	0	0	0	0	7574	45442
7th year operation Maint.of 6 years old plantation.			10624	0	0	0	0	0	0	0	40096	0	0	0	8019	48115
8th year operation Maint.of 7 years old plantation.			10581	0	0	0	0	0	0	0	0	42324	0	0	8465	50789
9th year operation Maint.of 8 years old plantation.			11138	0	0	0	0	0	0	0	0	0	44552	0	8910	53462
10th year operation Maint.of 9 years old plantation.			11695	0	0	0	0	0	0	0	0	0	0	46780	9356	56136
Total			484516	836664	351672	244532	191404	66532	35540	37868	40096	42324	44552	46780	387612.8	2325677


(P.J. Chaudhari)
Dy. Conservator of Forests
Banaskantha, Palanpur

CERTIFICATE

This is to certify that the compensatory afforestation scheme attached herewith for 4.00 ha in Navavas Village, Ta. Danta, Survey No. 183pt. in lieu Diversion of 1.6321 Hect. of Widening of Existing Road From Gabbar Taleti to Gabbar Circle Road Km 166/520 to 169/015, SH-54 with the guidelines issued vide additional Principal Chief Conservator of Forests, Land Gujarat State Gandhinagar Letter No. land/31/b/147-216/2016-17, Dated.06/04/2016 and same is here by approved technically.

Palanpur
Date: 03/12/2022


(P.J. Chaudhari)
Dy.Conservator of Forests,
Banaskantha-Palanpur