

Annexure-19

Compensatory Afforestation Scheme for double degraded area

Diversion of 1.90 ha. Protected forest land on SH-113 (Kuvadva-Wankaner Road) and NH-8B(Kuvadva- Bamanbor)Road i.e.road side plantation declared as protected Forest for laying of 400 mm fia & 450 mm dia drinking water pipeline for GWSSB Kuvadva head works to wankaner Road NC-34 Tapping for work under Macchu-1 Augmentation program in Wankaner/Rajkot Taluka, District Morbi/Rajkot.in Gujrat State.
Online Proposal No.FP/GJ/WATER/47151/2020

Detailed scheme of Compensatory Afforestation for degraded area 4.00 ha. to be carried out in lieu of 1.90 ha. of Protected forest land to be diverted in Morbi /Rajkot district.

1. Details of degraded land.

Village	Sivrajpur
Taluka	Jasdal
Range	Jasdal
District	Rajkot
Division	Morbi
Block/ Patal, Compartment No.	137/p.
Area to be afforested	4.00
Working circle	Inland Planstation

2. Description of Area.

Soil type	Marramy, Stony.
Topography	Plain
Slope	Plain Area
Whether the area is bearing any root stock of Vegetation	Most of the area if degraded

3. Name of Plantation Programme:-

Compensatory Afforestation Scheme for Degraded Forest Area.

4. Schedule of Plantation Programme:-

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| (i) The Compensatory Afforestation on degraded area would be started by Deputy Conservator of Forest Morbi Forest 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.1999916/- Deputy Executive Engineer P.H.S. Sub 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 324.50 per day.																											
b	Spacement	3 X 3 mtr., 1111 plants per ha.																											
c	Species to be planted (No. of plants per ha.)	<table border="1"> <tr> <td>Kanji</td><td>200</td><td>75 cm</td></tr> <tr> <td>Kadaya</td><td>100</td><td>75 cm</td></tr> <tr> <td>Neem</td><td>200</td><td>75 cm</td></tr> <tr> <td>Gunda</td><td>150</td><td>75 cm</td></tr> <tr> <td>Gundi</td><td>111</td><td>75 cm</td></tr> <tr> <td>Ardusa</td><td>200</td><td>90 cm</td></tr> <tr> <td>Garmala</td><td>100</td><td>65 cm</td></tr> <tr> <td>Other</td><td>50</td><td>75 cm</td></tr> <tr> <td>Total</td><td>1111</td><td></td></tr> </table>	Kanji	200	75 cm	Kadaya	100	75 cm	Neem	200	75 cm	Gunda	150	75 cm	Gundi	111	75 cm	Ardusa	200	90 cm	Garmala	100	65 cm	Other	50	75 cm	Total	1111	
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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 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.

(Dr. Sandipkumar)
Dy. Conservator of Forests
Morbi Forest Division Morbi
3/10/2020

The Compensatory Afforestation scheme at the cost of Rs.1999916/- is technically and administrative approved by the undersigned.

(Dr. Sandipkumar)
Dy. Conservator of Forests
Morbi Forest Division Morbi
3/10/2020

Morbi Forest Division, Morbi

Diversion of 1.90 ha. Protected forest land on SH-113 (Kuvadva-Wankaner Road) and NH-8B(Kuvadva- Bamanbor)Road i.e.road side plantation declared as protected Forest for laying of 400 mm fia & 450 mm dia drinking water pipeline for GWSSB Kuvadva head works to wankaner Road NC-34 Tapping for work under Macchu-1 Augmentation program in Wankaner /Rajkot Taluka, District Morbi/Rajkot.in Gujrat State.
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Rate structure of forest land of village : Sivrajpur ta. Jasdal District : Rajkot 4.00 ha.
Afforestation as per Add.pri.C.C.F. land, Gujarat State, Gandhinagar's letter no.
.Campa/31/B/4769-4838/Dt. 27/11/2019

Daily wages Rs.324.50

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
0 year				
Nursery				
(a) Cost of soil, ,manure, seeds, water, fartillizer, insecticides, implements, rent of lands. Shade, etc. (including 10 % for casualty replacement)	1222	0	1914	1914
(b) labour : Preparation of beds, filling and arranging of bags,showing of seeds, watering shifting, weeding etc.	1222	4681	242	4923
(c) Seedling cost for casualty replacement in one year old (20%)	222	1478	443	1921
(d) Seedling cost for casualty replacement in two year old (10%)	111	741	220	961
Total		6900	2819	9720

2. Area Development (Land Preparation)				
(a) Survey, cutback and promotion of root suckers		3518	0	3518
(b) Aligment and digging of pits 0.45 X 0.45 X 0.45	1111@ 6.00	10157	0	10157
Total		13675	0	13675
(a) Natural fertilizer (Neem cake/ Castor cake)	1111 @ 5.00	0	10361	10361
Total		0	10361	10361
3. SMC Works				
(a) Check wall/ retaining wall /checkdem (all pucca only)	L.S.	12495	24804	37299
(b) Contour trench 2 M x 45 Cm x 30 Cm as per Rs. 17.00/rmt (300 trench)	600 rmt.	9511	0	9511
Total		22006	24804	46810
4. Protection				
(a) Barbed wire fencing	237 Rmt.	8295	74655	82950
(b) Seed sowing and planting of cuttings of Ipomea/ Glaricidia along the fence		1160	498	1658
Total		9455	75153	84608
Sub Total of 0 year		52037	113137	165174
1st Year				
(a) Maintenance of nursery (April to June)	1222	3591	358	3949
(b) Transport of seedling for plantation	1111	1970	407	2377
(c) Planting with khamna of Min 1 m dia	1111	6054	0	6054
(d) Transport of seedling for casualty replacement	111	210	47	258
(e) 3 weeding cum soil working	1111	23600	0	23600
(f) Support watering 5 times @ 3.25		15086	21647	36733
(g) Protection / tending operation		4883	0	4883
(h) Tending to natural vegetation		1221	0	1221
(i) Contingency		0	1221	1221
Total for 1st year		56615	23680	80294
2nd Year				
(a) 2 weeding & soil working		13107	0	13107
(b) 20 % Casually replcement, transport and planting	111+111	220	1097	1317

(c) Natural fertilizer (neem cake / caster cake) etc.	Rs.5/ plant	0	12244	12244
(d) Support watering 3 times @ 3.25		9803	14070	23873
(e) Protection / tending operation		5290	0	5290
Total for 2nd year		28420	27411	55831
3rd Year				
(a) 2 weeding & soil working		14116	0	14116
(b) 10 % Casually replcement, transport and planting	111	119	592	710
(c) Natural fertilizer, neem cake etc.	Rs.5/ plant	0	13185	13185
(d) Support watering 1 times @ 3.25		3520	5051	8570
(e) Protection & maintenance of fencing / tending operation	L.S.	7121	0	7121
Total for 3rd year		24875	18827	43702
4thYear				
(a) 1 weeding & soil working		7561	0	7561
(b) Protection & Maintenance of fencing/ Tending operation	L.S.	7629	0	7629
Total for 4th year		15191	0	15191
5thYear				
Protection & maintenance of fencing/ tending operation	L.S.	8138	0	8138
Total for 5th year		8138	0	8138
6thYear				
Protection & maintenance of fencing/ tending operation	L.S.	8647	0	8647
Total for 6th year		8647	0	8647
7thYear				
Protection & maintenance of fencing/ tending operation	L.S.	9155	0	9155
Total for 7th year		9155	0	9155
8thYear				
Protection & maintenance of fencing/ tending operation	L.S.	9664	0	9664
Total for 8th year		9664	0	9664
9thYear				
Protection & maintenance of fencing/ tending operation	L.S.	10172	0	10172
Total for 9th year		10172	0	10172
10thYear				
Protection & maintenance of fencing/ tending operation	L.S.	10681	0	10681

Total for 10th year		10681	0	10681
		233594	183055	416649
SUB TOTAL :				
The Cost of Supervision/subsequential silvicultureal Operations	20%	46719	36611	83330
		280313	219666	499979

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.
 The Total afforestation cost will be
 1 Ha cost, Rs. 499979 X 4 Ha. = Total Cost Rs. :1999916/-

(Dr. Sandipkumar)
 Dy. Conservator of Forests
 Morbi Forest Division Morbi

31/10/2020