

-611-

Compensatory Afforestation Scheme for 10.00 Ha double degraded Forest Land at Compt.No.4, Manuguru (S) Beat of Rathanagutta Forest Block of Ashwapuram Range of Paloncha Division

Introduction :

The Prl. Chief Conservator of Forests, T.S., Hyderabad while communicating the proposals for Diversion of forest land under F© Act, 1980 to an extent of 37.7154 Ha for erection n of 400 KV QMDC line from the proposed 4x270MW Bhadradhri TPP near Manugoor to the proposed 400/220 KV SS at Padamati Narsapuram (V), Julurupadu(M) in Khammam District in which (1) 19.2096 Ha of forest land of Chantakonda RF Block of Kothagudem Forest Division, (2) 4.9358 Ha of forest land in Chintriyala RF & Ratangutta (Pamulapalli) RF of Paloncha Forest Division and (3) 13.57 Ha of Forest Land in Chatakonda & Punkula RF in Paloncha Wild Life Forest Division vide his Lr.No. 17743/2015/FCA-3, dt. 27-07-2016 and requested to process the proposals. The Principal Chief Conservator of Forests, TS, Hyderabad has also issued instruction to identify double the degraded forest land and to prepare the CA Scheme in double degraded forest including maintenance from 7 to 10 years in light of recent MoEF directions vide F.No.11-146/2015-FC, Dt:22-06-2015. Accordingly instructions were issued by Divisional Forest Officer, Paloncha to the Forest Range Officer, Ashwapuram to identify the degraded forest land in lieu of diversion of forest land in Chintriyala RF & Rathanagutta (Pamulapalli) RF of Paloncha Forest Division for construction of 400 KV QMDC. Accordingly, the Forest Range Officer, Ashwapuram was identified the following degraded forest area on . The details are as follows.

Sl. No.	Range	Block	Section	Beat	Compt. No.	Area available (in Ha)
1	Ashwapuram	Ratnagutta	Manuguru	Manuguru(S)	4	10.00
					Total :	10.00

-613-

Description :

In order to improve of Natural Forests in degraded patches, 10.00 Ha area was identified in compt.No.4 of Manuguru(S) Beat of Ashwapuram Range. The following activities have to be taken up to improve the degraded forests under Assisted Natural Regeneration (ANR).

1. **Digging of continuous contour trenches (CCTs) :** It is proposed for digging of continuous contour trenches along the Rathngutta (hill lock) in Kondapuram RF.
2. **Removal of unwanted weed and clearance of bush growth:** It is proposed for removal of unwanted weeds and clearance of bush growth in 10.00 Ha compt.No.4 in Manuguru (S) Beat. The following operations will be taken up. Surveying the area with GPS and Preparation of site by clearing thorny unsaleable, unusable jungle growth, creepers, bushes etc. spreading the cut material all over the site and burning the same.
3. **Preferential treatment for important NTFP species :**
 - a. Circular weeding (1m radius) and deep soil working (0.5 m radius) of each plant.
4. **Tending the coppice growth of desirable species:** It is proposed for Tending the coppice growth of desirable species upto 500 stumps / Ha.
5. **Construction of Rock Fill Dams:** It is proposed to construct (5 Nos) Rock Fill Dams across the gullies to prevent soil erosion and moisture conservation.
6. **Digging of staggered trenches** in 10 Ha area, where ANR operations are proposed not exceeding 50 cmt earth work per Ha.
7. **Creation of fire lines** (3 mt wide) around the 10 Ha area and Horizontal and Vertical lines to prevent any fire incidences in the ANR area.
8. **Watch and ward:** To protect the 10 Ha area ANR area from any Biotic Pressures.
9. **Planting Agave suckers:** It is proposed to plant agave suckers (1000 Nos.) along the sides of the proposed Transmission Line at an interval of 2 mtrs.
10. **Maintenance of Agave suckers:** It is proposed to maintain the agave suckers from 1st year to 3rd year.

- 615 -

11. Re-clearance of Miscellaneous unwanted weed growth thorny bushes and climbers cutting and facilitate removal by dragging.

12. Digging of Cattle proof trench of size 1.5 mt top width 1 mt bottom width and 1 mt Height to protect the ANR area from cattle.

It is proposed to take up the above activities in compt.No.4, Manuguru(S) Beat of Ashwapuram Range of Paloncha Division with an outlay of Rs. **13.103** Lacs. The details are furnished hereunder.

Sl. No.	Item of work	Amount (Rs.in Lakhs)
1	Digging of continuous contour trenches (CCTs) along the Ratnagutta (hillock) in Kondapuram RF	2.47*
2	Removal of unwanted weed and clearance of bush growth in 10 Ha.	0.672
3	Preferential treatment for important NTFP species Circular weeding (1m radius) and deep soil working (0.5 m radius) of each plant.	0.360
4	Tending the coppice growth of desirable species	0.521
5	Construction of Rock Fill Dams across the gullies of prevent soil erosion.	0.60
6	Digging of staggered trenches in 10 Ha area	1.235
7	Creation of fire lines (3 mt wide)	2.94
8	Watch and ward for protection 10 Ha	1.655
9	Planting agave suckers	0.726
10	Re clearance of Misc. unwanted weed growth thorny bushes climbers cutting and facilitate removal by dragging.	0.788.
11	Digging of Cattle proof trench of size 1.5 mt top width 1 mt bottom width and 1 mt Height	0.513
	Sub Total :	12.479
	5% Administrative cost	0.624
	Grand Total:	13.103

Project Period :

It is proposed to implement the scheme from 2016-17 to 2019-20 over a period of (4) years.

-617-

Funding Agency :

The total financial out lay met by the user agency i.e., Chief Engineer, TRANSCO, Vidyut Soudha, Hyderabad who will deposit the funds with the Forest Department.

Project implementing Agency :

The Divisional Forest Officer, Paloncha will be the implementing agency for this scheme.

Cost Structure :

Basic rates proposed as per FSR of 2015-16 and 10% price escalation is proposed every year over the basic rates of FSR of 2015-16.

Cost of the (Scheme) Project :

Total cost of the project works out to Rs. 13.103 Lakhs.

Employment Generation:

The project is located in Manuguru Mandal Agency Area. The local labour mostly Tribal and SCs will be benefited by implementation of this project. The employment generation expected to be created is 4368 Man-days during the project period from 2016-17 to 2019-2020.

Sd/- C.Saravanan,
Divisional Forest Officer,
Paloncha.

//t.c.b.o//

Superintendent
23/5/16

Improvement of natural degraded forest area (10.00 Ha) in Compt. No.4 in Manugur (S) Beat of Aswapuram Range of Paloncha Division

S. No	Description of work	2016-17			2017-18			2018-19			2019-20			Total :					
		Phy	Rate	Fin	Phy	Rate	Fin	Phy	Rate	Fin	Phy	Rate	Fin	Phy	Fin				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
1	Digging of continuous contour trenches (CCTs) along the Ratna gutta (hillock) in Kondapuram RF	1000	Cmt	0.0025	2.470	0	0	0	0	0	0	0	0	0	1000	2.470			
2	Removal of unwanted weed and clearance of bush growth in 10 Ha.	10	Ha	0.0672	0.672	0	0	0	0	0	0	0	0	0	10	0.672			
3	Preferential treatment for important NTFP species Circular weeding (1m radius) and deep soil working (0.5 m radius) of each plant.	10	Ha	0.036	0.36	0	0	0	0	0	0	0	0	0	10	0.360			
4	Tending the coppice growth of desirable species																		
	a) upto 500 stumps per Ha	10	Ha	0.02481	0.2481	10	Ha	0.02728	0.2728	0	0	0	0	0	20	0.521			
5	Construction of Rock Fill Dams across the gullies of prevent soil erosion.	50	Cmt	0.012	0.600	0	0	0	0	0	0	0	0	0	50	0.600			
6	Digging of staggered trenches in 10 Ha area	500	Cmt	0.0025	1.235	0	0	0	0	0	0	0	0	0	500	1.235			
	Creation of fire lines (3 mt wide)	10000	Rmt	0.000064	0.64	10000	Rmt	0.000070	0.70	10000	Rmt	0.000076	0.76	10000	Rmt	0.000084	0.84	40000	2.940
	Watch and ward for protection 10 Ha	10	Ha	0.0357	0.357	10	Ha	0.0392	0.392	10	Ha	0.04312	0.4312	10	Ha	0.04743	0.4743	40	1.655
	Planting agave suckers (1000 Nos) along the transmission line (two sides)																		
	a) Creation	1000	No	0.00048	0.48	0	0	0	0	0	0	0	0	0	1000	0.480			
	b) 1st Yr maintenance	0	0	0	0	1000	No	0.00013	0.13	0	0	0	0	0	1000	0.130			
	c) 2nd Yr maintenance	0	0	0	0	0	0	0	0	1000	No	0.0000551	0.0551	0	0	1000	0.055		
	d) 3rd Yr maintenance	0	0	0	0	0	0	0	0	0	0	0	0	1000	No	0.0000606	0.0606	1000	0.061
9	Reclerance of Misc. unwanted weed growth thorny bushes climbers cutting and facilitate removal by dragging.					10	Ha	0.0238	0.238	10	Ha	0.0262	0.262	10	Ha	0.0288	0.288	30	0.788
	Digging of Cattle proof trench of size 1.5 mt top width 1 mt bottom width and 1 mt Height	1100	Cmt	0.0004664	0.51304	0	0	0	0	0	0	0	0	0	1100	0.513			
	Sub total :				7.575				1.733				1.508				1.663		12.479
	5% Administrative cost				0.379				0.087				0.075				0.083	0	0.624
	Grand Total:				7.954				1.819				1.584				1.746		13.103

//t.c.b.o//

Sd/- C.Saravanan,
Divisional Forest Officer,
Paloncha

Superintendent

-621-

Unit Cost for Digging of continious contour trenches (CCTs) during the year 2016-17

Scheme :: CA

Sl. No.	FSR Code No.	Item of work	Qty	Rate (In Rs.)	25% Agency Allowance	Per	Per Cmt
1	2	3	4	5	6	7	8
1	05.05.08	Digging of continious contour trenches (CCTs)	1 Cmt	179.800	224.75	1 Cmt	224.750
		Unit Rate as per FSR 2015-16					224.75
		Add 10% escalation					22.48
		Rate for 2016-17					247.23
				Cost per Cmt:			247.00

Sd/- C.Saravanan,
Divisional Forest Officer,
Paloncha

//t.c.b.o//

Superintendent
23/5/16 45/10/16

-623-

Unit Cost for Removal of unwanted weed growth during 2016-17

Scheme :: CA

Sl. No.	FSR Code No.	Item of work	Qty	Rate (In Rs.)	25% Agency Allowance	Per	Amount
1	2	3	4	5	6	7	8
1	02.07.01	Survey with GPS (Only staff to carry out) (Staff to carryout GPS Survey. One manday is allowed for assistance)	1 No	180.00	180.00	1 No	180.00
		Preparation of site for planting by clearing thorny unsaleable, unusable jungle growth, creepers, bushes etc. spreading the cut material allover the site and burning the same.					
	05.04.03	Light Jungle growth (>20% and upto 30% ground area covered with Jungle growth)	1 Ha	4743.500	5929.375	1 Ha	5929.38
		Unit Rate as per FSR 2015-16					6109.38
		Add 10% escalation					610.94
		Rate for 2016-17					6720.31
					Cost perHa::		6720.00

Sd/- C.Saravanan,
Divisional Forest Officer,
Paloncha

//t.c.b.o//

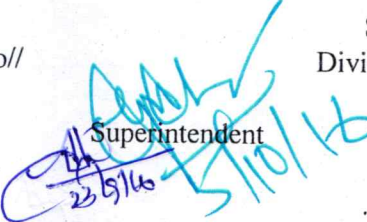
Superintendent
23/9/16
5/10/16

-625

Unit Cost for Tending the coppice growth of desirable species for the year 2017-18

Sl. No.	FSR Code No.	Item of work	Qty	Rate (In Rs.)	25% Agency Allowance	Per	Amount
1	2	3	4	5	7	6	7
2		Tending the coppice growth of desirable species					
	05.04.09	a) upto 500 stumps/Ha	1 Ha	1804.10	2255.125	1 Ha.	2255.00
		Unit Rate as per FSR 2015-16					2255.00
		Add 10% escalation					225.50
		Rate for 2016-17					2480.50
		Add 10% escalation					248.05
		Rate for 2017-18					2728.55

//t.c.b.o//


 Superintendent
 23/5/16

Sd/-C.Saravanan,
Divisional Forest Officer,
Paloncha

-62A-

NAME OF THE WORK:- CONSTRUCTION OF ROCK FILL DAMS .

Superintendent

- 629 -

Unit Cost for Digging of staggered trenches during the year 2016-17

Scheme :: CA

Sl. No.	FSR Code No.	Item of work	Qty	Rate (In Rs.)	25% Agency Allowance	Per	Per Cmt
1	2	3	4	5	6	7	8
		<u>PRIMARY BED NURSERY</u>					
1		Digging of staggered trenches (STs)	1 Cmt	179.800	224.75	1 Cmt	224.750
		Unit Rate as per FSR 2015-16					224.75
		Add 10% escalation					22.48
		Rate for 2016-17					247.23
				Cost per Cmt:			247.00

Sd/- C.Saravanan,
Divisional Forest Officer,
Paloncha

//t.c.b.o//


 Superintendent
 23/5/16

-631-

Unit Cost for Creation of fire lines for the year 2019-20

Scheme :: CA

Sl. No.	FSR Code No.	Item of work	Qty	Rate (In Rs.)	25% Agency Allowance	Per	Rate Per Ha.
1	2	3	4	5	7	6	7
1	02.08.11	Creation of firelines 3 mtrs wide	1 Rmt	4.60	5.75	1 Rmt	5.75
Unit Rate as per FSR 2015-16							5.75
Add 10% escalation							0.58
Rate for 2016-17							6.325
Add 10% escalation							0.63
Rate for 2017-18							6.958
Add 10% escalation							0.70
Rate for 2018-19							7.653
Add 10% escalation							0.77
Rate for 2019-20							8.42

//t.c.b.o//

Superintendent
23/9/16
5/10/16

Sd/- C.Saravanan,
Divisional Forest Officer,
Paloncha

633

Unit Cost for Watch and ward for protection for (4) years

Scheme :: CA

Sl. No.	FSR Code No.	Item of work	Qty	Rate (In Rs.)	25% Agency Allowance	Per	Rate Per Ha.
1	2	3	4	5	7	6	7
1	02.04.01	Watch and ward (30*180*12 =64800/20=3240)	1 Ha	3240.00	3240.00	1 Ha.	3240.00
		Unit Rate as per FSR 2015-16					3240.00
		Add 10% escalation					324.00
		Rate for 2016-17					3564.00
		Add 10% escalation					356.40
		Rate for 2017-18					3920.40
		Add 10% escalation					392.04
		Rate for 2018-19					4312.44
		Add 10% escalation					431.24
		Rate for 2019-20					4743.68

Sd/- C.Saravanan,
Divisional Forest Officer,
Paloncha

//t.c.b.o//

Superintendent
23/9/16
5/10/16

635

Unit Cost for Planting agave suckers in the year 2016-17

Sl. No.	FSR Code No.	Item of work	Qty	Rate (In Rs.)	25% Agency Allowance	Per	Amount
1	2	3	4	5	6	7	8
1	02.07.26	Alignment and staking including laying base line for Misc species with espacement	1000 Nos	63.30	79.13	100 Nos	791.25
2	02.07.28	Cost of 0.45 m stack preparation to transportation to site	1000 Nos	44.90	44.90	100 Nos	449.00
3	02.01.16	Digging of 45 Cm cube pits	1000 Nos	13.90	17.38	1 No	17375.00
4		Transport of Bag plants / Root trainer plants from nursery site to plantation site including loading and unloading upto 20 Km lead					
	02.07.33 02.07.38	15X30cm (6"X12") bag plants	1000 Nos	107.30	107.30	100 No	1073.00
5		Internal transport of bag plants/root trainers to planting points on head loads.					
	02.07.43	15X30cm (6"X12") bag plants	1000 Nos	69.40	86.75	100 No	867.50
8		Planting bag plants					
	02.07.47	45cmX45cmX45 cm pits	1000 Nos	331.00	413.75	100 No	4137.50
	02.07.49	1st Circular weeding to a radius of 0.5 M around the plant during raising year	1000 Nos	94.50	118.13	100 No	1181.25
9	02.07.50	Circular Weeding cum deep soil working to a radius of 0.5 m. and to a depth of 15 cm around the plant to be done with pick axes for the plants planted in pits without disturbing the soil around the plant to 10cm wide but weeding that part of area by hand and formation of saucer in ordinary soils.	1000 Nos	331.00	413.75	100 No	4137.50
10		Replacement of Casualties 20% during Raising & 25% in 1st year (In case of Eucalyptus 10% during raising and no casualty replacement for further maintenance)					
a)	02.07.30	Digging of 45 Cm cube pits	200 Nos	6.80	1.70	1 No.	340.00
b)		Transport of Bag plants / Root trainer plants from nursery site to plantation site including loading and unloading upto 20 Km lead					
	02.07.33	15X30cm (6"X12") bag plants (20 Km)	200 Nos	107.30	107.30	100 No	214.60

-632-

Sl. No.	FSR Code No.	Item of work	Qty	Rate (In Rs.)	25% Agency Allowance	Per	Amount
1	2	3	4	5	6	7	8
d)		Internal transport of bag plants/root trainers to planting points on head loads.					
	02.07.43	15X30cm (6"X12") bag plants	200 Nos	69.40	86.75	100 No	173.50
11		Application of Fertilizers					
	02.07.58	Cost of Chemical fertilisers (50grm SSP for basal dressing, 20 grm DAP after planting for 30 cm ³ & 45 cm ³ pits).	1000 Nos		A/a		600.00
12	02.07.59	Application of fertilizer after planting by making 3 holes of 10 cmts depth with crow bar . 10 cmts away from plant amd putting fertilizers and closing	1000 Nos	29.70	37.13	100 No	371.25
4		Cost of seedlings	1200 Plant	10.00	10.00	1 Plant	12000
		Unit Rate as per FSR 2015-16					43711.35
		Add 10% escalation					4371.14
		Rate for 2016-17					48082.49
		Rate for plant					48.08

//t.c.b.o//

Sd/-C.Saravanan,
Divisional Forest Officer,
Paloncha

Superintendent

25/9/16

45/10/16

659

Unit Cost for 1st year maintenance of Misc., Plantation during 2017-18

Scheme :: CA

Sl. No.	FSR Code No.	Item of work	Qty	Rate (In Rs.)	25% Agency Allowance	Per	Rate Per Ha.
1	2	3	4	5	7	6	7
1	02.08.01	1st Circular weeding to a radius of 0.5 M around the plant during raising year	1000 Nos	94.50	118.13	100 No	1181.25
2	02.08.02	Circular Weeding cum deep soil working to a radius of 0.5 m. and to a depth of 15 cm around the plant to be done with pick axes for the plants planted in pits without disturbing the soil around the plant to 10cm wide but weeding that part of area by hand and formation of saucer in ordinary soils.	1000 Nos	331.00	413.75	100 Nos	4137.50
3	02.08.04	Replacement of Casualties 20% during Raising & 25% in 1st year (In case of Eucalyptus 10% during raising and no casualty replacement for further maintenance)					
a)	02.07.30	Digging of 45 Cm cube pits	250 Nos	6.80	8.50	1 No	2125.00
b)		Transport of Bag plants / Root trainer plants from nursery site to plantation site including loading and unloading upto 5 Km lead (Transportation of seedlings from nursery to plantation site 20 KM lead)					
	02.07.33	15X30cm (6"X12") bag plants	250 Nos	211.70	211.70	100 No	529.25
d)		Internal transport of bag plants/root trainers to planting points on head loads.					
	02.07.43	15X30cm (6"X12") bag plants	250 Nos	69.40	86.75	100 No	216.88
4		Cost of seedlings	250 Nos	10.00	10.00	1 No	2500.00
Unit Rate as per FSR 2015-16							10689.88
Add 10% escalation							1068.99
Rate for 2016-17							11758.86
Add 10% escalation							1175.89
Rate for 2017-18							12934.75
Rate for plant							12.935

Sd/-C.Saravanan,
Divisional Forest Officer,
Paloncha

//Lc.b.o//

Superintendent

641

Unit Cost

Unit Cost for 2nd year maintenance of Misc., Plantation during 2018-19

Sl. No.	FSR Code No.	Item of work	Qty	Rate (In Rs.)	25% Agency Allowance	Per	Amount
1	2	3	4	5	7	6	7
1	02.09.01	Circular Weeding cum deep soil working to a radius of 0.5 m. and to a depth of 15 cm around the plant to be done with pick axes for the plants planted in pits without disturbing the soil around the plant to 10cm wide but weeding that part of area by hand and formation of saucer in ordinary soils.	1000 Nos	331.00	413.75	100 Nos	4137.50
		Unit Rate as per FSR 2015-16					4137.50
		Add 10% escalation					413.75
		Rate for 2016-17					4551.25
		Add 10% escalation					455.13
		Rate for 2017-18					5006.38
		Add 10% escalation					500.64
		Rate for 2018-19					5507.01

Rate for plant 5.51

Sd/-C.Saravanan,
Divisional Forest Officer,
Paloncha

//t.c.b.o//

Superintendent
23/5/16 5/10/16

Unit Cost for 3rd year maintenance of Misc., Plantation during 2019-20

Sl. No.	FSR Code No.	Item of work	Qty	Rate (In Rs.)	25% Agency Allowance	Per	Amount
1	02.10.01	Circular Weeding cum deep soil working to a radius of 0.5 m. and to a depth of 15 cm around the plant to be done with pick axes for the plants planted in pits without disturbing the soil around the plant to 10cm wide but weeding that part of area by hand and formation of saucer in ordinary soils.	1000 Nos	331.00	413.75	100 Nos	4137.50
		Unit Rate as per FSR 2015-16					4137.50
		Add 10% escalation					413.75
		Rate for 2016-17					4551.25
		Add 10% escalation					455.13
		Rate for 2017-18					5006.38
		Add 10% escalation					500.64
		Rate for 2018-19					5507.01
		Add 10% escalation					550.70
		Rate for 2019-20					6057.71

Rate for plant 6.06

Sd/-C.Saravanan,
Divisional Forest Officer,
Paloncha

//t.c.b.o//

Superintendent
23/8/16 5/10/16

Unit Cost for Digging of cattle proof trench in the year 2018-19

-648-

Sl. No.	FSR Code No.	Item of work	Qty	Rate (In Rs.)	25% Agency Allowance	Per	Amount
1	2	3	4	5	6	7	8
1	05.08.13	Digging of cattle proof trench of size 1.5 M top width 1 M.bottom width and 1 M height (2000 RMT)	1100 CMT	42.40	42.40	1 Cmt	46640.00
		Unit Rate as per FSR 2015-16					46640.00
		Add 10% escalation					4664.00
		Rate for 2016-17					51304.00
		Rate Per Cmt					46.64

Sd/-C.Saravanan,
Divisional Forest Officer,
Paloncha

//t.c.b.o//

Superintendent

[Handwritten Signature]
23/5/16 5/10/16

647

Unit Cost for Reclerance of Misc. unwanted weed growth for the year 2019-20

Sl. No.	FSR Code No.	Item of work	Qty	Rate (In Rs.)	25% Agency Allowance	Per	Amount
1	2	3	4	5	7	6	7
1	05.05.01	Reclerance of Misc. unwanted weed growth thorney bushes climbers cutting and facilitate removal by dragging.	1 Ha	1574.70	1968.375	1 Ha.	1968.00
Unit Rate as per FSR 2015-16							1968.00
Add 10% escalation							196.80
Rate for 2016-17							2164.80
Add 10% escalation							216.48
Rate for 2017-18							2381.28
Add 10% escalation							238.13
Rate for 2018-19							2619.41
Add 10% escalation							261.94
Rate for 2019-20							2881.35

Sd/-C.Saravanan,
Divisional Forest Officer,
Paloncha

//t.c.b.o//

Superintendent

-649-

CERTIFICATE

This is to certify that 10.00 Ha degraded Forest Land was identified at Compt.No.4, Manuguru (S) Beat, Manuguru Section of Rathanagutta Forest Block of Ashwapuram Range of Paloncha Division towards raising afforestation activities in the double the area of degraded forests..



Forest Range Officer
Ashwapuram

// counter signed//



Divisional Forest Officer,
Paloncha

