

कार्यालय—प्रधान मुख्य वन संरक्षक, राजस्थान, जयपुर

क्रमांक— एफ () मॉडल्स/प्रमुखसं/ट्री/2013/ 1588-15

दिनांक:— 20-7-15

निमित्त,

1. परियोजना निदेशक, RFBP-II, राजस्थान, जयपुर
2. मुख्य वन संरक्षक, अजमेर/जयपुर/जोधपुर/बीकानेर/कोटा/उदयपुर/भरतपुर।

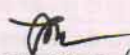
विषय:— मॉडल अनुमोदन बाबत।

महोदय,

उपरोक्त विषयान्तर्गत निवेदन है कि श्रमिक दर 189/- रुपये प्रतिदिन के आधार पर प्राप्त हुए वृक्षारोपण मॉडल राज्य स्तरीय मॉडल्स कमेटी की अनुशंसा पर प्रधान मुख्य वन संरक्षक (HoFF) राजस्थान, जयपुर के अनुमोदन उपरान्त संलग्न कर आवश्यक कार्यवाही हेतु प्रेषित किये जा रहे हैं।

1. CANAL SIDE PLANTATION (DISTRIBUTORY)
2. CANAL SIDE PLANTATION (MINOR)
3. Block Pantation-IGNP
4. Block Pantation Non-IGNP
5. SAND Dune Stabilisation
6. Silvi Pastoral Plantation-IGNP
7. Silvi Pastoral Plantation Non-IGNP
8. RDF-I
9. RDF-II
10. Fuel Wood Plantation
11. Productivity Enhancement Oprations.
12. Closure for Biodiversity Conservation.
13. Assisted Natural Regeneration.

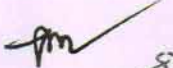
भवदीय


मुख्य वन संरक्षक (आयोजना)
राजस्थान, जयपुर

Year 1 Planting Year					
1	Maintenance of 960 Plants in nursery.	1.63/ plant	1324.00	241.00	1565.00
2	Raising of 160 Plants for casualty replacement.	4.87/ plant	525.00	254.00	779.00
3	Transportation of 880 plants from Nursery to plantation site	1.44/ Plant	1136.00	131.00	1267.00
4	Plantating 800 plants - Planting Activity		0.00		
a	Un-command area- Includes digging of pits ; local transportation, treatment of pit with pesticides and fertiliser, making of Thanwala. And initial watering 400 plants	10.21/ Plant	4084.00	0.00	4084.00
b	Command area- Includes digging of pits ; local transportation, treatment of pit with pesticides and fertiliser, making of Thanwala. And initial watering 400 plants	11.68/ Plant	4190.00	482.00	4672.00
5	Removal of unwanted bushes and ploughing	Prorata	0.00	1452.00	1452.00
6	Digging of 1250 m trench of size 0.40 cm wide and 0.15 cm deep-for irrigation	1.89/ RM	2363.00	0.00	2363.00
7	Levelling of area	Prorata	2156.00	0.00	2156.00
8	Watering of plants after replacement- 6 times		0.00		
a	400 plants by pump	3.02/ Plant	4365.00	2883.00	7248.00
b	400 plants by Khala/syphon	1.56/ Plant	3744.00	0.00	3744.00
9	Weeding and Hoeing 800 plants two times	2.60/ plant	4160.00	0.00	4160.00
10	Hoeing 800 two times	1.56/ Plant	2496.00	0.00	2496.00
11	Application of urea and fertilisers	0.48/ plant	214.00	170.00	384.00
12	Purchase of PVC pipes	Prorata	0.00	1935.00	1935.00
13	Maintenance of engine	Prorata	0.00	515.00	515.00
14	Construction of cattle guard hut	Prorata	945.00	858.00	1803.00
15	Watch and Ward charges	Prorata	4717.00	0.00	4717.00
16	R & M of Vehicles	Prorata	0.00	515.00	515.00
17	Labour amenities	Prorata	539.00	34.00	573.00
18	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata	33.00	59.00	92.00
Total			36991.00	9529.00	46520.00
Year-2 Maintenance-I					
1	Maintenance of 160 Plants in nursery.	1.63/ plant	221.00	40.00	261.00
2	Transportation of 160 plants	1.44/ Plant	231.00	0.00	231.00
3	Re planting of 80 plants in hard soil in command area including digging of pits, treating with pesticides,fertilisers and watering	8.08/ Plant	646.00	0.00	646.00
4	Re planting of 80 plants in sandy soil in un-command area including digging of pits, treating with pesticides,fertilisers and watering	9.56/ Plant	663.00	102.00	765.00
5	Watering of plants after replacement- 6 times		0.00		
a	400 plants by pump	3.02/ Plant	4363.00	2885.00	7248.00
b	400 plants by Khala/syphon	1.56/ Plant	3744.00	0.00	3744.00
6	Application of urea and fertilisers- 2 times, 800 plants	0.48/ plant	428.00	340.00	768.00
7	Weeding and Hoeing- 800 plants, 2 times	2.60/ plant	4160.00	0.00	4160.00
8	Hoeing 800 plants two times	1.56/plant	2496.00	0.00	2496.00
9	Khala repair and cleaning	Prorata	409.00	0.00	409.00
10	R&M of vehicles	Prorata	0.00	343.00	343.00
11	Maintenance and repair of engine	Prorata	0.00	343.00	343.00
12	Watch and Ward charges	Prorata	4717.00	0.00	4717.00
13	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata	19.00	9.00	28.00
Total			22097.00	4062.00	26159.00

14	Weeding on contour trenches/V-ditches and espacement/singling- (407 rmt)	1.46/m	594.00	0.00	594.00
15	In situ Soil & Moisture Conservation measures like Check dams/Nadis, Earthen Bunds etc.	Prorata	567.00	0.00	567.00
16	Construction of approach roads/inspection path	Prorata	205.00	0.00	205.00
17	Construction of gate and fixing of sign boards	Prorata	441.00	339.00	780.00
18	Misc. and unforeseen expences including (additional watering, fencing and frost protection measures and running of vehicles etc.)	Prorata	128.00	64.00	192.00
TOTAL YEAR 1			25142.00	1598.00	26740.00
YEAR 2 : MAINTENANCE-I					
1	Maintenance of 88 Plants in Nursery	1.64/Plant	122.00	22.00	144.00
2	Repair of fencing	Prorata	205.00	0.00	205.00
3	Casualty replacement of 80 plants including Redigging of Pits, Transportation, Planting, watering and application of insecticides	Rs. 10.2/plant	816.00	0.00	816.00
4	Two weedings and hoeings in 800 Plants and repairing of plant mounds	Rs. 3.01/ Plant	4816.00	0.00	4816.00
5	Watch and Ward charges for 12 Months	Prorata	1181.00	0.00	1181.00
6	Misc. and unforeseen expenditure including (repairing of structures, pruning and frost protection measures)	Prorata	140.00	90.00	230.00
TOTAL YEAR 2			7280.00	112.00	7392.00
YEAR 3 : MAINTENANCE-II					
1	Watch and Ward charges for 12 Months	Prorata	1181.00	0.00	1181.00
2	Misc. and Unforeseen expenses	Prorata	106.00	51.00	157.00
TOTAL YEAR 3			1287.00	51.00	1338.00
YEAR 4 : MAINTENANCE-III					
1	Watch and Ward charges for 12 Months	Prorata	1181.00	0.00	1181.00
2	Misc. and Unforeseen expenses	Prorata	106.00	51.00	157.00
TOTAL YEAR 4			1287.00	51.00	1338.00
Grand Total			81067.00	4043.00	85110.00

नोट :- मॉडल्स कार्यस्थल विशेष पर कार्य सम्पादित कराने के लिये प्राक्कलन नहीं है वरन केवल मार्गदर्शक है। कार्यस्थल पर कार्य सम्पादित कराने के लिए कार्य स्थल की विशेषताओं/परिस्थितियों के अनुसार प्राक्कलन के आधार पर कार्य कराये जावें।


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(आयोजना) राजस्थान
जयपुर

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Model Cost Norms
ANR (Assisted Natural Regeneration) - I

UNIT : 50 Ha
PERIMETER: 60 M/Ha.
LABOUR RATE: Rs.189. /Day
COST ESTIMATE: in Rs./Ha.

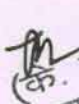
0 YEAR (ADVANCE ACTION)

S. NO.	Item of Works	Unit / Rate	Labour Cost	Material Cost	Total
1	Collection of Data for Microplanning, preparation of microplan and management plan	Prorata	441.00	47.30	488.30
2	Survey of area, Layout of contour trenches/ furrows, Pits and marking of segments /plots	Prorata	345.80	47.30	393.10
3	Fencing by stone wall and or by ditch.		0.00		0.00
	a). Stone wall fencing 1.20m high 0.80m at base & 0.60m at top(on an average 30 m/ha.)	Rs.166 /m	5670.00		5670.00
	b). Ditch fencing 1.20m deep, 1.50m wide at top & 0.90m at bottom (on an average 30m/ha.)	Rs 179.90/m	6144.78		6144.78
4	Cost of raising 220 seedlings	Rs 5.59 / plant	980.07	405.90	1385.97
5	Digging up 400 rmt Staggered Contour Trenches 45x45cm cross section on middle slopes and V-ditch as per site requirement	Rs 20.74	9445.45		9445.45
6	Digging of 200 pits size: 0.45x(0.4+0.5/2)	Rs 12.99 / plant	2957.96		2957.96
7	Cost of collection and purchase of grass and other seeds of indigenous trees and shrubs		0.00	226.60	226.60
8	In situ Soil & Moisture Conservation measures like Check dam, Percolation Tanks, Earthen Bunds etc.	Prorata	3623.23		3623.23
9	Construction of Thatched cattle guard hut.	Prorata	189.00	34.10	223.10
10	Purchase of tools and plants	Prorata	0.00	84.70	84.70
11	Labour amenities	Prorata	70.01	66.00	136.01
12	Cattle guard wages for 4 months	Prorata	393.40		393.40
13	Restoration of Natural regeneration by cutback cultural operation, pruning and by making crescent shaped ridges on lower	Prorata	1890.00		1890.00
14	Misc. and unforeseen expenses including running of vehicles	Prorata	177.61	44.00	221.61

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	TOTAL YEAR 0		32328.31	955.90	33284.21
YEAR I (PLANTATION YEAR):					
1	Maintenance of 220 seedling in nursery	Rs 1.29 / plant	275.30	46.20	321.50
2	Digging of 30cmx30cm cross section trench along inner side of stone wall fencing and seed	Rs 13.89 / m	474.44		474.44
3	Sowing/dibbling of seeds of grass, trees and shrubs including seeds of medicinal plants on the mounds of trench/ditch fencing.	Rs 0.43 / m	210.63		210.63
4	Sowing of grass seeds including raking in the interspaces.	Prorata	428.40		428.40
5	Transportation of 200 plants from nursery to planting site	Rs 0.98 / plant	179.89	41.80	221.69
6	Planting of 200 seedlings including Refilling of pits	Rs 3.00 / plant	664.92	17.60	682.52
7	Purchase and application of insecticide and fertiliser in 200 plants	3.35	580.66	176.00	756.66
8	Making of 200 crescent shaped mounds below planted sapling after planting and dibbling of 3 seeds of thorny tree species.	Rs 2.64 / plant	601.16		601.16
9	Weeding and Hoeing of 200 plants two times including repairing of plants mound	Rs 2.64 / plant	1202.31		1202.31
10	Weeding on contour trenches/ V-ditches and spacemen / singling	Prorata	389.20		389.20
11	Raising of 10% Plants (20 plants) in Nursery for casualty replacement in year 2	Rs 5.59 / plant	89.72	36.30	126.02
12	Watch & ward charges for 12 months	Prorata	1178.81		1178.81
13	Construction of approach roads / inspection path	Prorata	322.01		322.01
14	Construction of gate and fixing of sign boards	Prorata	428.40	64.90	493.30
15	Misc. and unforeseen expences including (additional watering, fencing and frost protection measures and running of vehicles etc.)	Prorata	183.49	202.40	385.89
	TOTAL YEAR 1		7209.33	585.20	7794.53

YEAR 2 MAINTENANCE					
1	Maintenance of 20 plants in nursery	Rs 1.18 / plant	25.20	4.40	29.60
2	Repair of fencing	Prorata	189.00		189.00
3	Casualty replacement of 20 plants (10%) including re-digging of pits, transportation, planting, watering and application of insecticides	Rs 8.70 / plant	189.00	8.80	197.80
4	Weeding and Hoeing in 200 plants two times	Rs 2.64 / plant	1202.31		1202.31


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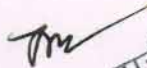
5	Watch & ward charges for 12 months	Prorata	1178.81		1178.81
6	Misc. and unforeseen expences including (additional watering, fencing and frost protection measures and running of vehicles etc.)	Prorata	162.26	110.00	272.26
	TOTAL YEAR 2		2946.57	123.20	3069.77

YEAR 3 : MAINTENANCE

1	Watch & ward charges for 12 months	Prorata	1178.81		1178.81
2	Expenditure on Maintenance including (Repair of fencing/Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata	344.58	119.90	464.48
	TOTAL YEAR 3.		1523.39	119.90	1643.29

YEAR 4 : MAINTENANCE

1	Watch & ward charges for 12 months	Prorata	1178.81		1178.81
2	Expenditure on Maintenance including (Repair of fencing / Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata	344.58	119.90	464.48
	TOTAL YEAR 4.		1523.39	119.90	1643.29
	GRAND TOTAL		45530.99	1904.10	47435.09


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Model Cost Norms - Canal side Plantation (Distributory)_RFBP Phase II

Labour rate Rs. 189 per day

Unit 100 RKM (33 ha.)

Perimeter - Average 6200 RM

250 plants per RKM

Spacing 3MX4M

No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
YEAR 0 ADVANCE ACTION					
1	Collection of data for microplan, preparation of microplan and management plan	164/RKM	147.00	17.00	164.00
2	Survey of area, alignment of pits for fencing posts, marking of segments/ plots, preparation of plantation card and journal.	Prorata	117.00	17.00	134.00
3	Fencing on both sides of canal with Cement / Angle iron posts (1.5 mt high, 6 m apart having 4 strand barbed wire)- 62 meters	138.48/M	3731.00	4855.00	8586.00
4	Raising of 300 plants (250 for planting and 20% extra).	4.87/Plant	984.00	477.00	1461.00
5	Purchase of irrigation equipments-				
a	Purchase of 5 HP engine	Prorata	0.00	292.00	292.00
b	Purchase of HDPE/ LGS pipe - (3 inch diameter) 2 m per RKM	Prorata	0.00	275.00	275.00
c	Purchase of PVC pipes of 3 inch dia & 1 inch dia	Prorata	0.00	172.00	172.00
6	Purchase of Tools & plants	Prorata	27.00	90.00	117.00
7	Purchase of Insecticides, Fertilizers - DAP/ NPK/Urea/ vermi compost	Prorata	0.00	211.00	211.00
8	Sign Board including Painting and Fixing	Prorata	10.00	59.00	69.00
9	Watch and Ward for 4 months	Prorata	197.00	0.00	197.00
10	R&M of Motor Vehicles	Prorata	0.00	103.00	103.00
11	Labour Amenities	Prorata	52.00	132.00	184.00
12	Site Clearance including removal of unwanted bushes	273/RKM	247.00	26.00	273.00
13	Cattle guard hut	332/RKM	227.00	105.00	332.00
14	Mulching (to be done on active dunes in 5 Ha area)	Prorata	266.00	0.00	266.00
15	Misc. and unforeseen expenditure.	Prorata	55.00	56.00	111.00
Total			6060.00	6887.00	12947.00
YEAR 1 - PLANTING YEAR					
No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
1	Maintenance of 300 Plants in Nursery.	1.63/Plant	413.00	76.00	489.00
2	Digging of 400 RMT trench (0.4mX0.15m) in command area-for irrigation	1.89/Meter	756.00	0.00	756.00
3	Transport of 275 plants upto site including loading and unloading (upto 5 kms)	1.43/Plant	367.00	27.00	394.00
4	Planting				
a	Lay out & digging of 45cmx 45cmx 45cm pits and planting of 125 seedlings including local transport and initial watering in command area.	11.44/ Plant	1430.00	0.00	1430.00
b	Lay out & digging of 45cmx 45cmx45 cm pits and planting of 125 seedlings including local transport and initial watering with engine in uncommand area.	12.92/Plant	1463.00	152.00	1615.00
5	Irrigation				
a	5 times through watercourse(Khala) or syphon in command area (125 Plants).	1.56/ Plant	975.00	0.00	975.00
b	5 times through engine in uncommand area (125 Plant).	3.01/Plant	1132.00	750.00	1882.00

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6	Treatment and sowing of seeds on trenches (400 m).	0.39/Meter	156.00	0.00	156.00
7	Weeding and hoeing of 250 Plants	2.60/Plant	650.00	0.00	650.00
8	Hoeing of 50% Plants 5 times (125 Plants)	1.56/Plant	975.00	0.00	975.00
9	Application of fertilisers and pesticides (250 plants)	0.48/plant	67.00	53.00	120.00
10	Raising of 50 plants for replacement	Rs 4.88/ Plant	165.00	79.00	244.00
11	Running & Maintenance of Vehicles	Prorata	0.00	68.00	68.00
12	Maintenance of equipments/watercourses	Prorata	0.00	68.00	68.00
13	Labour amenities	Prorata	77.00	17.00	94.00
14	Watch & ward for 12 months	Prorata	590.00	0.00	590.00
15	Misc and unforeseen expenditure	Prorata	25.00	21.00	46.00
Total			9241.00	1311.00	10552.00

YEAR 2 MAINTENANCE I

No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
1	Maintenance of 50 Plants for casualty replacement	1.63/Plant	69.00	12.00	81.00
2	Transport of 50 plants from nursery to site for casualty replacement including loading and unloading	1.42/Plant	67.00	4.00	71.00
3	Re-digging of Pits & Planting for casualty replacement including treatment, local transport and initial watering				
a	In command area (25 Plants)	8.08/Plant	202.00	0.00	202.00
b	In uncommand area (25 Plants)	9.56/Plant	208.00	31.00	239.00
4	Irrigation				
a	6 times through watercourse (Khala) or syphon in command area (125 Plants).	1.56/Plant	1170.00	0.00	1170.00
b	6 times through engine in uncommand area (125 Plants).	3.01/Plant	1365.00	893.00	2258.00
5	Weeding and hoeing of 250 plants	2.60/Plant	650.00	0.00	650.00
6	Hoeing of 50% Plants 6 times (125 Plants)	1.56/Plant	1170.00	0.00	1170.00
7	Application of fertilisers and pesticides (250 plants)	0.48/Plants	67.00	53.00	120.00
8	Prunning of Plants as per requirement	Prorata	155.00	0.00	155.00
9	Purchase of PVC Pipes	Prorata	0.00	275.00	275.00
10	Watch & ward for 12 months	Prorata	590.00	0.00	590.00
11	Running & Maintenance of Vehicles/equipments	Prorata	0.00	154.00	154.00
12	Labour amenities	Prorata	58.00	36.00	94.00
13	Misc works like shifting of pipelines, engines etc. and unforeseen expenditure/watercourses repair	Prorata	58.00	36.00	94.00
Total			5829.00	1494.00	7323.00

YEAR - 3 MAINTENANCE II

No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
1	Irrigation				
a	6 times through watercourse(Khala) or syphon in command area (125 Plants).	1.56/Plant	1170.00	0.00	1170.00
b	6 times through engine in uncommand area (125 Plants).	3.01/Plant	1365.00	893.00	2258.00
2	Hoeing of 50% Plants 6 times (125 plants)	1.56/Plant	1170.00	0.00	1170.00
3	Prunning of Plants as per requirement (125Plants)	Prorata	280.00	0.00	280.00
4	Purchase of PVC Pipe	Prorata	0.00	257.00	257.00
5	Watch & ward for 12 months	Prorata	590.00	0.00	590.00
6	Running & Maintenance of Vehicles	Prorata	0.00	68.00	68.00
7	Maintenance of equipments	Prorata	0.00	86.00	86.00
8	Labour amenities	Prorata	0.00	51.00	51.00
9	Misc works like shifting of pipelines, engines etc. and unforeseen expenditure/watercourses repair	Prorata	59.00	14.00	73.00
Total			4634.00	1369.00	6003.00

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मुख्य वन संरक्षक
(आयोज. II) राजस्थान
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YEAR - 4 MAINTENANCE III

No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
1	Irrigation				
a	4 times through watercourse (Khala) or syphon in command area (125 plants).	1.56/Plant	780.00	0.00	780.00
b	4 times through engine in uncommand area (125).	3.01/Plant	910.00	595.00	1505.00
2	Hoeing of 50% Plants 4 times (125 Plants)	1.56/Plant	780.00	0.00	780.00
3	Prunning of Plants as per requirement	Prorata	498.00	0.00	498.00
4	Watch & ward for 12 months	Prorata	590.00	0.00	590.00
5	Running & Maintenance of Vehicles	Prorata	0.00	68.00	68.00
6	Maintenance of equipments	Prorata	0.00	68.00	68.00
7	Labour amenities	Prorata	19.00	7.00	26.00
8	Misc works like shifting of pipelines, engines etc. and unforeseen expenditure/watercourses repair	Prorata	39.00	28.00	67.00
Total			3616.00	766.00	4382.00

YEAR - 5 MAINTENANCE IV

No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
1	Irrigation				
a	2 times through watercourse(Khala) or syphon in command area (125 Plants).	1.56/Plant	390.00	0.00	390.00
b	2 times through engine in uncommand area (125 Plants).	3.01/Plant	455.00	297.00	752.00
2	Hoeing of 50% Plants 2 times (125 Plants)	1.56/Plant	390.00	0.00	390.00
3	Prunning of Plants as per requirement	Prorata	494.00	0.00	494.00
4	Watch & ward for 12 months	Prorata	590.00	0.00	590.00
5	Running & Maintenance of Vehicles	Prorata	0.00	44.00	44.00
6	Maintenance of equipments	Prorata	0.00	44.00	44.00
7	Misc works like shifting of pipelines, engines etc. and unforeseen expenditure/watercourses repair	Prorata	55.00	34.00	89.00
Total			2374.00	419.00	2793.00

YEAR - 6 MAINTENANCE V

No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
1	Irrigation				
	2 times through watercourse (Khala) or syphon in command area (125 Plants).	1.56/Plant	390.00	0.00	390.00
2	Watch & ward for 12 months	Prorata	590.00	0.00	590.00
3	Misc works and unforeseen expenditure/watercourse repair	Prorata	56.00	32.00	88.00
Total			1036.00	32.00	1068.00

YEAR - 7 MAINTENANCE VI

No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
1	Watch & ward for 6 months	Prorata	296.00	0.00	296.00
2	Repairing of fencing	Prorata	107.00	69.00	176.00
TOTAL			403.00	69.00	472.00
Grand Total			33193.00	12347.00	45540.00

नोट :- मॉडल्स कार्यस्थल विशेष पर कार्य सम्पादित कराने के लिये प्राक्कलन नहीं है वरन केवल मार्गदर्शक है। कार्यस्थल पर कार्य सम्पादित कराने के लिए कार्य स्थल की विशेषताओं/परिस्थितियों के अनुसार प्राक्कलन के आधार पर कार्य कराये जावें।


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Model Cost Norms - Canal side Plantation (Minor)_RFBP Phase II

Labour rate Rs. 189 per day
Unit 50 RKM (16.5 Ha)
Perimeter - Average 6200 RM

Average Perimeter=124m/ha
250 plants per RKM
Spacing 3MX4M

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No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
YEAR 0 ADVANCE ACTION					
1	Collection of data for microplan, preparation of microplan and management plan	164/RKM	147.00	17.00	164.00
2	Survey of area, alignment of pits for fencing posts, marking of segments/ plots, preparation of plantation card and journal.	Prorata	141.00	33.00	174.00
3	Fencing on both sides of canal with Cement / Angle iron posts (1.5 mt high, 6 m apart having 4 strand barbed wire)- 124 meters	138.44/M	7420.00	9747.00	17167.00
4	Raising of 300 plants (250 for planting and 20% extra).	4.87/Plant	984.00	477.00	1461.00
5	Purchase of irrigation equipments				
a	Purchase of 5 HP engine	Prorata	0.00	583.00	583.00
b	Purchase of HDPE/ LGS pipe - (3 inch diameter) 3 m per RKM	Prorata	0.00	410.00	410.00
c	Purchase of PVC pipes of 3 inch dia & 1 inch dia	Prorata	0.00	340.00	340.00
6	Purchase of Tools & plants	Prorata	28.00	138.00	166.00
7	Purchase of Insecticides, Fertilizers - DAP/ NPK/Urea/ vermi compost	Prorata	0.00	210.00	210.00
8	Sign Board including Painting and Fixing	Prorata	19.00	120.00	139.00
9	Watch and Ward for 4 months	Prorata	393.00	0.00	393.00
10	R&M of Vehicles	Prorata	0.00	68.00	68.00
11	Labour Amenities	Prorata	68.00	145.00	213.00
12	Site Clearance including removal of unwanted bushes.	273/RKM	247.00	26.00	273.00
13	Cattle guard hut	333/RKM	227.00	106.00	333.00
14	Mulching (tobe done on active dunes in 2.5 Ha area)	Prorata	266.00	0.00	266.00
15	Misc. and unforeseen expenditure	Prorata	75.00	57.00	132.00
Total			10015.00	12477.00	22492.00
YEAR 1 - PLANTING YEAR					
No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
1	Maintenance of 300 Plants in Nursery	1.63/Plant	414.00	75.00	489.00
2	Digging of 400 RMT trench (0.4mX0.15m) in command area-for irrigation	1.89/Meter	756.00	0.00	756.00
3	Transport of 275 plants upto site including loading and unloading (upto 5 kms)	1.44/Plant	367.00	29.00	396.00
4	Planting				
a	Laying out & digging of 45cmx 45cmx 45cm pit and planting of 125 seedlings including local transportation and initial watering in command area.	11.45/ Plant	1431.00	0.00	1431.00
b	Laying out & digging of 45cmx 45cmx45 cm pit and planting of 125 seedlings including local transportation and initial watering with engine in uncommand area.	12.94/Plant	1464.00	153.00	1617.00
5	Irrigation				
a	5 times through watercourses (Khala) or syphon in command area (125 Plants).	1.56/ Plant	975.00	0.00	975.00
b	5 times through engine in uncommand area (125 Plants).	3.01/Plant	1130.00	751.00	1881.00
6	Treatment and sowing of seeds on trenches (400 m).	0.39/Meter	156.00	0.00	156.00

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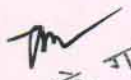
7	Weeding and hoeing of 250 Plants	2.60/Plant	650.00	0.00	650.00
8	Hoeing of 50% Plants 5 times (125 Plants)	1.56/Plant	975.00	0.00	975.00
9	Application of fertilisers and pesticides-250 Plants	0.48/plant	68.00	52.00	120.00
10	Raising of 50 plants for replacement	Rs 4.88/ Plant	165.00	79.00	244.00
11	Running & Maintenance of Vehicles	Prorata	0.00	67.00	67.00
12	Maintenance of equipments	Prorata	0.00	67.00	67.00
13	Labour amenities	Prorata	77.00	17.00	94.00
14	Watch & ward for 12 months	Prorata	1180.00	0.00	1180.00
15	Misc and unforeseen expenditure/repair of watercourses	Prorata	30.00	25.00	55.00
Total			9838.00	1315.00	11153.00

YEAR 2 MAINTENANCE I

No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
1	Maintenance of 50 Plants for casualty replacement	1.62/Plant	69.00	12.00	81.00
2	Transportation of 50 plants from nursery to site for casualty replacement including loading and unloading	1.44/Plant	68.00	4.00	72.00
3	Re-digging of Pits & Planting for casualty replacement including treatment, local transport and watering				
a	In command area (25 Plants)	8.08/Plant	202.00	0.00	202.00
b	In uncommand area (25 Plants)	9.56/Plant	208.00	31.00	239.00
4	Irrigation				
a	6 times through watercourses (Khala) or syphon in command area (125 Plants)	1.55/Plant	1163.00	0.00	1163.00
b	6 times through engine in uncommand area (125 Plants)	3.02/Plant	1363.00	902.00	2265.00
5	Weeding and hoeing of 250 plants	2.59/Plant	648.00	0.00	648.00
6	Hoeing of 50% Plants 6 times (125 Plants)	1.55/Plant	1163.00	0.00	1163.00
7	Application of fertilisers and pesticides (250 plants)	0.48/Plants	68.00	52.00	120.00
8	Pruning of Plants as per requirement	Prorata	156.00	0.00	156.00
9	Purchase of PVC Pipes	Prorata	0.00	343.00	343.00
10	Watch & ward for 12 months	Prorata	1181.00	0.00	1181.00
11	Running & Maintenance of Vehicles/equipments	Prorata	0.00	152.00	152.00
12	Labour amenities	Prorata	0.00	52.00	52.00
13	Misc works like shifting of pipelines, engines etc. and unforeseen expenditure/repair of watercourses	Prorata	52.00	34.00	86.00
Total			6341.00	1582.00	7923.00

YEAR - 3 MAINTENANCE II

No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
1	Irrigation				
a	6 times through watercourses (Khala) or syphon in command area (125 Plants)	1.55/Plant	1163.00	0.00	1163.00
b	6 times through engine in uncommand area (125 Plants)	3.02/Plant	1363.00	902.00	2265.00
2	Hoeing of 50% Plants 6 times (125 plants)	1.55/Plant	1163.00	0.00	1163.00
3	Pruning of Plants as per requirement	Prorata	280.00	0.00	280.00
4	Purchase of PVC Pipe	Prorata	0.00	257.00	257.00
5	Watch & ward for 12 months	Prorata	1181.00	0.00	1181.00
6	Running & Maintenance of Vehicles	Prorata	0.00	68.00	68.00
7	Maintenance of equipments	Prorata	0.00	86.00	86.00
8	Labour amenities	Prorata	0.00	52.00	52.00
9	Misc works like shifting of pipelines, engines etc. and unforeseen expenditure/repair of watercourses	Prorata	62.00	24.00	86.00
Total			5212.00	1389.00	6601.00


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YEAR - 4 MAINTENANCE III					
No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
1	Irrigation				
a	4 times through watercourses (Khala) or syphon in command area (125 plants).	1.56/Plant	780.00	0.00	780.00
b	4 times through engine in uncommand area (125 plants).	3.01/Plant	909.00	596.00	1505.00
2	Hoeing of 50% Plants 4 times (125 Plants)	1.56/Plant	780.00	0.00	780.00
3	Prunning of Plants as per requirement	Prorata	498.00	0.00	498.00
4	Watch & ward for 12 months	Prorata	1181.00	0.00	1181.00
5	Running & Maintenance of Vehicles	Prorata	0.00	68.00	68.00
6	Maintenance of equipments	Prorata	0.00	68.00	68.00
7	Labour amenities	Prorata	20.00	37.00	57.00
8	Misc works like shifting of pipelines, engines etc. and unforeseen expenditure/repair of watercourses	Prorata	42.00	26.00	68.00
Total			4210.00	795.00	5005.00
YEAR - 5 MAINTENANCE IV					
No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
1	Irrigation				
a	2 times through watercourses (Khala) or syphon in command area (125 Plants).	1.56/Plant	390.00	0.00	390.00
b	2 times through engine in uncommand area (125 Plants).	3.01/Plant	458.00	295.00	753.00
2	Hoeing of 50% Plants 3 times (125 Plants)	1.56/Plant	585.00	0.00	585.00
3	Prunning of Plants as per requirement	Prorata	495.00	0.00	495.00
4	Watch & ward for 12 months	Prorata	1181.00	0.00	1181.00
5	Running & Maintenance of Vehicles	Prorata	0.00	44.00	44.00
6	Maintenance of equipments	Prorata	0.00	66.00	66.00
7	Misc works like shifting of pipelines, engines etc. and unforeseen expenditure/repair of watercourses	Prorata	35.00	29.00	64.00
Total			3144.00	434.00	3578.00
YEAR - 6 MAINTENANCE V					
No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
1	Irrigation				
	2 times through watercourse (Khala) or syphon in command area (125 Plants).	1.56/Plant	390.00	0.00	390.00
2	Watch & ward for 12 months	Prorata	1181.00	0.00	1181.00
3	Misc works and unforeseen expenditure	Prorata	44.00	17.00	61.00
Total			1615.00	17.00	1632.00
YEAR - 7 MAINTENANCE VI					
No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
1	Watch & ward for 6 months	Prorata	590.00	0.00	590.00
2	Repairing of fencing	Prorata	75.00	61.00	136.00
TOTAL			665.00	61.00	726.00
Grand Total			41040.00	18070.00	59110.00

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Block Plantation_IGNP

Plantation Unit -12.5 ha (500 m X 250 m)

Perimeter-Average=1500 m

No. of Plants - 800 per ha.

Perimeter/ha=120 m

Spacing 3mX4M

Labour rate Rs. 189 per day

Unit for Model calculation- per ha.

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No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
Year-O Advance Action					
1	Collection of data for microplanning, preparation of microplan and management plan	Prorata	72.00	55.00	127.00
2	Survey of area, alignment of pits for pole fixing, division of area into segments, preparation of treatment map and plantaion card.	Prorata	315.00	94.00	409.00
3	Fencing of plantation area with 1.5 mt. high Angle iron / RCC Post and 4 strand barbed wire / local thorny material or 1.50 m angle iron post and two lines of wire and 1.2 M broad welded wiremesh (details given at annexure "A" for Angle Iron, annexure "B" for RCC Post, C for wire mesh) 120 M	138.41/ RM	7149.00	9460.00	16609.00
4	Raising of 960 plants	4.87 plant	3148.00	1527.00	4675.00
5	Purchase of 8 HP Engine	Prorata	0.00	2288.00	2288.00
6	Purchase of PVC/HDPE Pipes of 3 inch dia and 1 inch dia	Prorata	0.00	2252.00	2252.00
7	Purchase of tools and plants	Prorata	36.00	314.00	350.00
8	Purchase of fertilizers and insecticides	Prorata	0.00	660.00	660.00
9	Purchase of Plantation Board including painting and fixing	Prorata	96.00	264.00	360.00
10	Watch and ward for four months	Prorata	1572.00	0.00	1572.00
11	R & M of Vehicle	Prorata	0.00	215.00	215.00
12	Labour amenities	Prorata	315.00	189.00	504.00
13	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata	49.00	112.00	161.00
Total			12752.00	17430.00	30182.00
Year 1 Planting Year					
1	Maintenance of 960 Plants in nursery.	1.63/ plant	1324.00	241.00	1565.00
2	Raising of 160 Plants for casualty replacement	4.87/ plant	525.00	254.00	779.00
3	Transportation of 880 plants from Nursery to plantation site	1.44/ Plant	1136.00	131.00	1267.00
4	Plantating 800 plants - Planting Activity		0.00		
a	Un-command area- Includes digging of pits ; local transportation, treatment of pit with pesticides and fertiliser, making of Thanwala. And initial watering 400 plants	10.21/ Plant	4084.00	0.00	4084.00
b	Command area- Includes digging of pits ; local transportation, treatment of pit with pesticides and fertiliser, making of Thanwala. And initial watering 400 plants	11.68/ Plant	4190.00	482.00	4672.00
5	Removal of unwanted bushes and ploughing	Prorata	0.00	1452.00	1452.00
6	Digging of 1250 m trench of size 0.40 cm wide and 0.15 cm deep-for irrigation	1.89/ RM	2363.00	0.00	2363.00
7	Levelling of area	Prorata	2156.00	0.00	2156.00
8	Watering of plants after replacement- 6 times		0.00		
a	400 plants by pump	3.02/ Plant	4365.00	2883.00	7248.00
b	400 plants by Khala/syphon	1.56/ Plant	3744.00	0.00	3744.00
9	Weeding and Hoeing 800 plants two times	2.60/ plant	4160.00	0.00	4160.00
10	Hoeing 800 two times	1.56/ Plant	2496.00	0.00	2496.00
11	Application of urea and fertilisers	0.48/ plant	214.00	170.00	384.00
12	Purchase of PVC pipes	Prorata	0.00	1935.00	1935.00
13	Maintenance of engine	Prorata	0.00	515.00	515.00

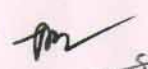
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14	Construction of cattle guard hut	Prorata	945.00	858.00	1803.00
15	Watch and Ward charges	Prorata	4717.00	0.00	4717.00
16	R & M of Vehicles	Prorata	0.00	515.00	515.00
17	Labour amenities	Prorata	539.00	34.00	573.00
18	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata	33.00	59.00	92.00
Total			36991.00	9529.00	46520.00
Year-2 Maintenance-I					
1	Maintenance of 160 Plants in nursery.	1.63/ plant	221.00	40.00	261.00
2	Transportation of 160 plants	1.44/ Plant	231.00	0.00	231.00
3	Re planting of 80 plants in hard soil in command area including digging of pits, treating with pesticides, fertilisers and watering	8.08/ Plant	646.00	0.00	646.00
4	Re planting of 80 plants in sandy soil in un-command area including digging of pits, treating with pesticides, fertilisers and watering	9.56/ Plant	663.00	102.00	765.00
5	Watering of plants after replacement- 6 times		0.00		
a	400 plants by pump	3.02/ Plant	4363.00	2885.00	7248.00
b	400 plants by Khala/syphon	1.56/ Plant	3744.00	0.00	3744.00
6	Application of urea and fertilisers- 2 times, 800 plants	0.48/ plant	428.00	340.00	768.00
7	Weeding and Hoeing- 800 plants, 2 times	2.60/ plant	4160.00	0.00	4160.00
8	Hoeing 800 plants two times	1.56/plant	2496.00	0.00	2496.00
9	Khala repair and cleaning	Prorata	409.00	0.00	409.00
10	R&M of vehicles	Prorata	0.00	343.00	343.00
11	Maintenance and repair of engine	Prorata	0.00	343.00	343.00
12	Watch and Ward charges	Prorata	4717.00	0.00	4717.00
13	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata	19.00	9.00	28.00
Total			22097.00	4062.00	26159.00
Year-3 Maintenance-II					
1	Watering of plants- 5 times				
a	400 plants by pump	3.02/Plant	3637.00	2403.00	6040.00
b	400 plants by Khala/syphon	1.56/Plant	3120.00	0.00	3120.00
2	Hoeing 800 plants two times	1.56/Plant	2496.00	0.00	2496.00
3	Khala repair and cleaning	Prorata	324.00	0.00	324.00
4	Purchase of PVC pipes	Prorata	0.00	1056.00	1056.00
5	R&M of vehicles	Prorata	0.00	264.00	264.00
6	Application of urea and fertilisers- 2 times, 800 plants	0.48/ plant	428.00	340.00	768.00
7	Maintenance & repair of Engine	Prorata	0.00	396.00	396.00
8	Pruning and tending of 800 plants	1.56/ Plant	1248.00	0.00	1248.00
9	Watch and Ward charges	Prorata	4717.00	0.00	4717.00
10	Miscellaneous expenditure (Labour, Instruments, Machine, repair of watercourse etc)	Prorata	79.00	54.00	133.00
Total			16049.00	4513.00	20562.00
Year-4 - Maintenance-III					
1	Watering of plants 4 times				
a	400 plants by pump	3.02/Plant	2908.00	1924.00	4832.00
b	400 plants by Khala/syphon	1.56/Plant	2496.00	0.00	2496.00
2	Hoeing 800 plants two times	1.56/Plant	2496.00	0.00	2496.00
3	Pruning and tending of 800 plants (2 times)	1.56/Plant	2496.00	0.00	2496.00
4	R&M of vehicles	Prorata	0.00	146.00	146.00
5	Maintenance & repair of Engine	Prorata	0.00	330.00	330.00
6	Watch and Ward charges	Prorata	4717.00	0.00	4717.00
7	Miscellaneous expenditure/repair of watercourse	Prorata	112.00	89.00	201.00
Total			15225.00	2489.00	17714.00


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Year-5 Maintenance-IV					
1	Watering of plants 2 times				
a	400 plants by pump	3.02/Plant	1454.00	962.00	2416.00
b	400 plants by Khala/syphon	1.56/Plant	1248.00	0.00	1248.00
2	Pruning and tending of 500 plants	6.23/ Plant	3115.00	0.00	3115.00
3	R&M of vehicles	Prorata	0.00	145.00	145.00
4	Maintenance & repair of Engine	Prorata	0.00	238.00	238.00
5	Watch and Ward charges	Prorata	4717.00	0.00	4717.00
6	Miscellaneous expenditure/repair of watercourse	Prorata	31.00	20.00	51.00
Total			10565.00	1365.00	11930.00
Year-6 Maintenance-V					
1	Watering of plants- 2 times				
a	400 plants by Khala/syphon	1.56/Plant	1248.00	0.00	1248.00
2	Pruning and tending of 450 plants	6.22/ Plant	2799.00	0.00	2799.00
3	Watch and Ward charges	Prorata	4717.00	0.00	4717.00
4	Miscellaneous expenditure/repair of watercourse	Prorata	39.00	37.00	76.00
Total			8803.00	37.00	8840.00
Year-7 Maintenance-VI					
1	Watch and Ward charges four months	Prorata	1572.00	0.00	1572.00
2	Fencing repair	Prorata	153.00	98.00	251.00
Total			1725.00	98.00	1823.00
Grand Total			124207.00	39523.00	163730.00

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कार्यस्थल पर कार्य सम्पादित कराने के लिए कार्य स्थल की विशेषताओं/परिस्थितियों के अनुसार प्राक्कलन के आधार पर कार्य कराये जावें।


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10

Block Plantation_Non IGNP (Afforestation Model I)

- | | | | |
|---|---|---|-------------------------|
| 1 | Plantation Unit -15 ha. (500 m X 300 m) | 5 | Perimeter - 1600 Meters |
| 2 | No. of Plants - 500 per ha. | 6 | Perimeter per ha. 107 m |
| 3 | Spacing 4mX5M | 7 | rate Rs. 189 per day |
| 4 | Unit for Model calculation- per ha. | 8 | period - 8 Years |

No.	Item of Works	Rate/ Unit (Rs.)	Labour Cost	Material Cost	Total
Year-0 Advance Action					
1	Collection of data for microplanning, Preparation of microplan and management plan	Prorata	72.00	55.00	127.00
2	Survey of area, alignment of pits for pole fixing, division of area into segments, preparation of treatment map, plantation card and making of inspection path	Prorata	315.00	95.00	410.00
3	Fencing of plantation area with 1.5 mt. high Angle iron / RCC Post and 4 strand barbed wire / local thorny material or 1.50 m angle iron post and two lines of wire and 1.2 M broad welded wiremesh (details given at annexure "A" for Angle Iron, annexure "B" for RCC Post, C for wire mesh)107 M	138.48/ RM	6385.00	8432.00	14817.00
4	Water and Soil Conservation measures in plantation area A. Digging V- ditch 200 RM/Ha.	19.29/RM	3858.00	0.00	3858.00
	B. Construction of Check Dam/Nadi	Prorata	1103.00	661.00	1764.00
5	Raising of 550 plants		0.00		
a	Shady Plants (one year old) 110 Plants	6.31/plant	490.00	204.00	694.00
b	Thorny Plants (6 Months old) 440 plants	3.43/plant	917.00	592.00	1509.00
6	Digging pits for 500 plants	10.08/pit	5040.00	0.00	5040.00
7	Expenditure on purchase of pesticides	Prorata	0.00	473.00	473.00
8	Purchase of Nitrogen fertilizers	Prorata	0.00	236.00	236.00
9	Purchase of seeds of grasses (sewan/ dhaman) 2.5 KG and indigenous tree species (kumut, ber, khejari, raunj, etc.) 2.5 KG	Prorata	158.00	189.00	347.00
10	Construction of one water storage tank-50,000 liters capacity	Prorata	6732.00	4117.00	10849.00
11	Construction of cattle guard hut	Prorata	315.00	189.00	504.00
12	R & M of Vehicle	Prorata	0.00	95.00	95.00
13	Plantation Board	Prorata	14.00	245.00	259.00
14	Plantation Gate	Prorata	315.00	440.00	755.00
15	watch and ward for four months	Prorata	1312.00	0.00	1312.00
16	Expenditure on purchase of Material for irrigation measures except traditional system	Prorata	0.00	172.00	172.00
17	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata	49.00	231.00	280.00
Total			27075.00	16426.00	43501.00
Year-1 Planting Year					
1	Maintenance of Plants in nursery				
a	Shady Plants 110 plants	1.46/plant	138.00	23.00	161.00
b	Thorny Plants 440 plants	1.79/plant	674.00	113.00	787.00
2	Raising of Plants for casualty replacement		0.00		
a	One year old 22 Plants	6.32/plant	98.00	41.00	139.00
b	Six months old 88 Plants	3.4/plant	180.00	119.00	299.00
3	Transportation of 550 plants from Nursery to plantation site	2.58/plant	1078.00	341.00	1419.00
4	Planting 500 plants - Planting Activity @ 4.70 & Initial Watering @ 8.31		0.00		
	Includes digging of pits, local transportation, treatment of pit with pesticides and fertiliser, making of Thanwala, and initial watering	16.73/plant	8365.00	0.00	8365.00

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5	Ploughing with tractor disc-plough in rows of 5 meter distance and sowing of seeds on trenches and in ploughed area- A. Ploughing with tractor in between plant rows	Prorata	0.00	708.00	708.00
	B. Seeds sowing in ploughed area and on V-ditches	Prorata	1182.00	0.00	1182.00
6	Seed sowing of kumtha, ber, raunj, etc. near fencing or/and planting thor (as per availability near the site)	Prorata	173.00	0.00	173.00
7	Watering-		0.00		
a	450 plants four times per year (15 ltr. Per plant) (1800-200=1600)	10.03/plant	13692.00	2356.00	16048.00
b	200 plants from rain water available in tanka/s (one time)	6.51/plant	1302.00	0.00	1302.00
8	Weeding and Hoeing 450 plants after rains	3.36/plant	1512.00	0.00	1512.00
9	Hoeing of 450 plants after each watering (4 times)	2.08/plant	3744.00	0.00	3744.00
10	Protection cover for 50 plants from heat/cold	6.66/plant	315.00	18.00	333.00
11	Pruning of 10% plants (50 plant)	1.82/plant	91.00	0.00	91.00
12	Watch and Ward charges	Prorata	3935.00	0.00	3935.00
13	R & M of Vehicle	Prorata	0.00	160.00	160.00
14	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata	60.00	198.00	258.00
Total			36539.00	4077.00	40616.00
Year-2 Maintenance-I					
1	Maintenance of Plants in nursery-				
a	One year old 22 Plants	1.45/plant	28.00	4.00	32.00
b	Six months old 88 Plants	1.79/plant	135.00	23.00	158.00
2	Transportation of 110 plants from nursery to plantation site	2.57/plant	216.00	67.00	283.00
3	Planting of 100 plants after re-digging of pits, treating with pesticides, using chemical fertilizers and watering with local transportation and making of thanwlas, making thanwlas and planting, @ Rs 10.08, initial watering, Rs 9.29, Total =19.37	21.84/plant	2033.00	151.00	2184.00
4	Watering		0.00		
a	Watering 450 plants three times per year (15 ltr./ plant) (1350-200=1150)	10.05/plant	9905.00	1652.00	11557.00
b	200 plants from rain water available in tanka/s-one time	6.46/plant	1292.00	0.00	1292.00
4	Weeding and Hoeing of 450 plants after rains	3.36/plant	1512.00	0.00	1512.00
5	Hoeing of 450 plants after each watering (three times)	2.08/plant	2808.00	0.00	2808.00
6	Protection cover for 50 plants from heat/cold	6.68/plant	315.00	19.00	334.00
7	Pruning of 70% plants (350 plant)	1.82/plant	637.00	0.00	637.00
8	Repair of Fencing	Prorata	61.00	19.00	80.00
9	Expenditure of maintenance of vehicles and contract vehicles	Prorata	0.00	126.00	126.00
10	Watch and Ward charges	Prorata	3935.00	0.00	3935.00
11	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata	49.00	176.00	225.00
Total			22926.00	2237.00	25163.00
Year-3 Maintenance-II					
1	Watering -A. 50 plants once per year (15 ltr. Per plant)	10.06/plant	435.00	68.00	503.00
	B. 200 plants from rain water available in tanka/s	6.46/plant	1292.00	0.00	1292.00
2	Weeding and Hoeing 250 plants after rains	3.36/plant	840.00	0.00	840.00
3	Hoeing of 250 plants (one time)	2.08/plant	520.00	0.00	520.00
4	Pruning of 20% plants (100 plants)	1.82/plant	180.00	0.00	180.00
5	Watch and Ward charges	Prorata	3935.00	0.00	3935.00
6	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata	113.00	47.00	160.00
Total			7315.00	115.00	7430.00

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Year-4 Maintenance-III					
1	Watch and Ward charges	Prorata	3935.00	0.00	3935.00
2	Fencing repair	Prorata	63.00	19.00	82.00
3	Miscellaneous expenditure	Prorata	20.00	119.00	139.00
Total			4018.00	138.00	4156.00
Year-5 Maintenance-IV					
1	Watch and Ward charges	Prorata	3935.00	0.00	3935.00
2	Fencing repair	Prorata	63.00	19.00	82.00
3	Miscellaneous expenditure	Prorata	22.00	119.00	141.00
Total			4020.00	138.00	4158.00
Year-6 Maintenance-V					
1	Watch and Ward charges	Prorata	3935.00	0.00	3935.00
2	Fencing repair	Prorata	63.00	19.00	82.00
3	Miscellaneous expenditure	Prorata	22.00	119.00	141.00
Total			4020.00	138.00	4158.00
Year-7 Maintenance-VI					
1	Watch and Ward charges	Prorata	3935.00	0.00	3935.00
2	Fencing repair	Prorata	63.00	19.00	82.00
3	Miscellaneous expenditure	Prorata	22.00	119.00	141.00
Total			4020.00	138.00	4158.00
Grand Total			109933.00	23407.00	133340.00

नोट :- मॉडल्स कार्यस्थल विशेष पर कार्य सम्पादित कराने के लिये प्राक्कलन नहीं है वरन केवल मार्गदर्शक है।
कार्यस्थल पर कार्य सम्पादित कराने के लिए कार्य स्थल की विशेषताओं/परिस्थितियों के अनुसार प्राक्कलन के आधार पर कार्य कराये जावें।


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Model Cost Norms Sand Dune Stabilisation RFBP Phase II

Labour rate Rs. 189 per day

Unit - 25 Ha

Perimeter - Average 2050 RM (625 MX400M)

No. of Plants 600

Spacing 4MX5M (in interdunal Area)

No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
YEAR- 0 Advance Action					
1	Collection of data for miroplanning, preparation of microplan and management plan	Prorata	236.00	79.00	315.00
2	Survey of area, alignment of pits for fencing posts, division of area into segments, preparation of treatment map, plantation Journal and card.	Prorata	315.00	95.00	410.00
3	Fencing of plantation area with 1.5 mt. high Angle iron / RCC Post and 4 strand barbed wire / local thorny material or 1.50 m angle iron post and two lines of wire and 1.2 M broad welded wiremesh (details given at annexure "A" for Angle Iron, annexure "B" for RCC Post, C for wire mesh) 82 M	138.39/ Meter	4874.00	6474.00	11348.00
4	Raising of plants				
a	One year old 110 Plants	6.30/ Plant	489.00	204.00	693.00
b	Six months old 550 Plants	3.43/ Plant	1149.00	737.00	1886.00
5	Purchase of pesticides, fertilisers, etc.	Prorata	0.00	708.00	708.00
6	Digging of 100 pits ((0.4M+0.5M)/2)^2X0.45M)	6.72/ pit	672.00	0.00	672.00
7	Purchase of 4 kg seeds/ ha. (khimp, tumba, sonamukhi sewan, etc.)	Prorata	0.00	132.00	132.00
8	Mulching on shifting dunes (on an average in 20% area) 800 m /Ha	9.23/ M	7384.00	0.00	7384.00
9	Construction of water storage tanks/Water harvesting structures and other SMC works	Prorata	4038.00	2458.00	6496.00
10	Construction of cattle guard hut (Jhumpa)	Prorata	189.00	113.00	302.00
11	Running and Maintenance of Vehicles	Prorata	0.00	57.00	57.00
12	Purchase of plantation board, its painting and fixing on site.	Prorata	38.00	322.00	360.00
13	Construction of plantation gate (including purchase of material)	Prorata	189.00	264.00	453.00
14	Purchase of material for watering purposes.	Prorata	0.00	86.00	86.00
15	Watch and Ward for 2 months.	Prorata	394.00	0.00	394.00
16	Miscellaneous expenditure like labour amenities, tools and plants, etc.	Prorata	167.00	146.00	313.00
Total			20134.00	11875.00	32009.00
YEAR 1 - PLANTING YEAR					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Maintenance of Plants in nursery-				
a	One year old 110 Plants	1.46/plant	139.00	22.00	161.00
b	Six months old 550 Plants	1.78/plant	821.00	158.00	979.00
2	Raising of Plants for casualty replacement.				
a	One year old 32 Plants	6.28/ Plant	142.00	59.00	201.00
b	Six months old 100 Plants	3.43/ Plant	209.00	134.00	343.00
3	Making and sowing of pellets / balls-				
a	Making of pellets / balls total quantity will be 24 kg. (Ratio of seed, manure, sand & clay will be 1:1:2:2) rate Rs. 42.84/ 6 kg.	46.75/6 kg	134.00	53.00	187.00
	Sowing of pellets/ balls.	189/6 kg	756.00	0.00	756.00

4	Transportation of 660 plants from Nursery to Plantation site.	2.57/ plant	1284.00	412.00	1696.00
5	Planting in sandy soil- Planting Activity @ 5.88 & Initial Watering @ 10.06				
	Includes digging of pits ; local transportation, treatment of pit with pesticides and fertiliser, making of Thanwala. And initial watering (500 plants)	17.95/ Plant	8268.00	707.00	8975.00
6	Planting in interdunal area- Planting Activity @ 5.25 & Initial Watering @ 9.10				
	Includes local transportation, treatment of pit with pesticides and fertiliser, making of Thanwala and initial watering (100 Plants)	16.16/ Plant	1485.00	131.00	1616.00
7	Watering of 540 plants, twice in a year (15 liters per watering)				
a	on uneven sand dunes 450 Plants	10.83/ plant	7928.00	1819.00	9747.00
b	on even surface (twice) 90 plants	10.06/ plant	1553.00	258.00	1811.00
c	on even surface from water in tanka (once)90 plants	6.46/ Plant	582.00	0.00	582.00
8	Weeding & Hoeing of 90 plants in interdunal area-				
a	Weeding & Hoeing of plants after rains	3.35/ plant	302.00	0.00	302.00
b	Hoeing (three times) after every watering	2.07/ plant	559.00	0.00	559.00
9	Silvicultural operations (in interdunal area) like protection from heat & cold, pruning etc.	Prorata	708.00	92.00	800.00
10	Watch & ward	Prorata	2358.00	0.00	2358.00
11	Running & Maintenance of Vehicles	Prorata	0.00	95.00	95.00
12	Miscellaneous expenditure like labour amenities, tools and plants, etc.	Prorata	50.00	188.00	238.00
Total			27278.00	4128.00	31406.00

YEAR 2 - Maintenance I

No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Maintenance of Plants in nursery-				
a	One year old 32 Plants	1.46/plant	40.00	7.00	47.00
b	Six months old 100 Plants	1.79/plant	153.00	26.00	179.00
2	Transportation of 110 plants from Nursery to Plantation site.	2.57/ plant	214.00	69.00	283.00
3	Planting in sandy soil- Planting Activity @ 5.88 & Initial Watering @ 10.06				
	Includes digging of pits ; local transportation, treatment of pit with pesticides and fertilisers, making of Thanwala and initial watering (80 Plants)	17.95/ Plant	1323.00	113.00	1436.00
4	Planting in interdunal area- Planting Activity @ 8.25 & Initial Watering @ 9.25		0.00		
	Includes re-digging of pits in interdunal area-; local transportation, treatment of pit with pesticides and fertilisers, making of Thanwala and initial watering (20 plants)	19.75/ Plant	368.00	27.00	395.00
5	Watering of 540 plants, thrice in a year (15 litres per		0.00		
a	on sand dunes (three times) 450 plants	10.83/ plant	11892.00	2728.00	14620.00
b	on even surface/interdunal area (three times) 90 plants	10.07/ plant	2331.00	388.00	2719.00
c	on even surface from water in tanka (once)90 plants	6.46/ Plant	582.00	0.00	582.00
6	Weeding & Hoeing of plants in interdunal area (90 plants)		0.00		
a	Weeding & Hoeing of plants after rains	3.35/ plant	302.00	0.00	302.00
b	Hoeing (four times) after every watering	2.07/ plant	746.00	0.00	746.00

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7	Silvicultural operations (in interdunal area) like protection from heat & cold, pruning etc.	prorata	1208.00	75.00	1283.00
8	Watch & ward	prorata	2358.00	0.00	2358.00
9	Running & Maintenance of Vehicles	prorata	0.00	75.00	75.00
10	Miscellaneous expenditure (labour amenities, Tool & plants, fencing repair, etc.	prorata	83.00	219.00	302.00
Total			21600.00	3727.00	25327.00
YEAR 3 - Maintenance II					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Watering of 250 plants, once in a year (15 liters per				
a	on uneven sand dunes (160 Plants)	10.9/ plant	1503.00	241.00	1744.00
c	on even surface from water in tanka (90 Plants)	6.46/ Plant	582.00	0.00	582.00
2	Weeding & Hoeing of plants in interdunal area-		0.00		
	Hoeing after watering	2.06/ plant	186.00	0.00	186.00
3	Pruning (90 plants)	2.02/ plant	182.00	0.00	182.00
4	Watch & ward	prorata	2358.00	0.00	2358.00
5	Miscellaneous expenditure	prorata	56.00	171.00	227.00
Total			4867.00	412.00	5279.00
YEAR 4 - Maintenance III					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Watch & ward	Prorata	2358.00	0.00	2358.00
2	Miscellaneous expenditure	Prorata	169.00	39.00	208.00
Total			2527.00	39.00	2566.00
YEAR 5 - Maintenance IV					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Watch & ward	Prorata	2358.00	0.00	2358.00
2	Miscellaneous expenditure	Prorata	169.00	39.00	208.00
Total			2527.00	39.00	2566.00
YEAR 6 - Maintenance V					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Watch & ward	Prorata	2358.00	0.00	2358.00
2	Miscellaneous expenditure	Prorata	169.00	39.00	208.00
Total			2527.00	39.00	2566.00
YEAR 7 - Maintenance VI					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Watch & ward for 6 months	Prorata	1180.00	0.00	1180.00
2	Miscellaneous expenditure	Prorata	37.00	44.00	81.00
Total			1217.00	44.00	1261.00
Grand Total			82677.00	20303.00	102980.00

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Model Cost Norms silvi-pastoral plantation in IGNP area RFBP Phase II

Labour rate Rs. 189 per day

Perimetre/ha- 60 m

Unit- 50 Ha

No. of Plants- 200

Perimeter - Average 3000 RM (625 MX400M)

Spacing -5MX5M

12

No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
YEAR- 0 Advance Action					
1	Collection of data for Microplanning, preparation of microplan and management plan	Prorata	117.00	40.00	157.00
2	Survey of area, alignment of pits for pole fixing, division of area into segments, preparation of treatment map and plantation card.	Prorata	286.00	44.00	330.00
3	Fencing of plantation area with 1.5 mt. high Angle iron / RCC Post and 4 strand barbed wire / local thorny material or 1.50 m angle iron post and two lines of wire and 1.2 M broad welded wiremesh (details given at annexure "A" for Angle Iron, annexure "B" for RCC Post, C for wire mesh) 60 M	138.40/ Metre	3574.00	4730.00	8304.00
4	Raising of 240 plants for planting including 20% extra	6.32/ Plant	1073.00	443.00	1516.00
5	Raising of Sewan Grass slips and other indigenous		0.00		
a	Sewan Grass 960 slips	1.60/ plant	1057.00	483.00	1540.00
b	Other indigenous plants like ber khejari, raunj ,etc. 240 plants	1.60/ plant	264.00	121.00	385.00
6	Purchase of irrigation equipments		0.00		
a.	Purchase of 8 HP Engine	Prorata	0.00	600.00	600.00
b.	Purchase of HDPE/LGS pipe (3 inch diameter) 13.2 m per Ha	Prorata	0.00	1698.00	1698.00
c.	Purchase of PVC pipes of 3 inch dia & 1 inch dia	Prorata	0.00	515.00	515.00
7	Purchase of tools, plants & insecticides	Prorata	0.00	138.00	138.00
8	Purchase of fertilizers, DAP & Urea Vermi compost, NPK	Prorata	0.00	330.00	330.00
9	Sign board including painting and fixing	Prorata	0.00	103.00	103.00
10	Purchase of seeds of Sewan grass/ Ber/Khejari and other indigenous species (6 Kg/Ha)	Prorata	0.00	309.00	309.00
11	Construction of Cattle guard hut	Prorata	378.00	177.00	555.00
12	R & M of Vehicle	Prorata	0.00	172.00	172.00
13	Labour amenities	Prorata	0.00	64.00	64.00
14	Watch & Ward for 4 months	Prorata	394.00	0.00	394.00
15	Misc. and unforeseen expenditure	Prorata	26.00	75.00	101.00
TOTAL YEAR 0			7169.00	10042.00	17211.00
YEAR 1 - PLANTING YEAR					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Maintenance of 240 plants in Nursery	1.46/plant	295.00	55.00	350.00
2	Maintenance of Sewan Grass and plants in		0.00		
a	Sewan Grass (960)	0.84/ plant	648.00	161.00	809.00
b	Other indigineous plants like ber khejari, raunj ,etc. (240)	0.84/ plant	162.00	40.00	202.00
3	Construction of Nadi/ water storage tanks	Prorata	756.00	686.00	1442.00
4	600 m trench digging- of size 20cmX30cmX50 cm for irrigation	1.56/M	936.00	0.00	936.00
5	Transport of 220 plants upto site including loading and unloading (upto 5 kms.)	1.45/plant	297.00	23.00	320.00

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6	Transport of 800 grass slips and 200 plants raised in 10 cmX15cm bags upto site including loading and unloading (upto 5 kms.)	0.81/plant	647.00	0.00	647.00
7	Mulching on shifting sand dunes (200 m/Ha)	6.35/m	1271.00	0.00	1271.00
8	Sowing of grass seeds	Prorata	171.00	0.00	171.00
9	Planting-		0.00		
	a. Digging of 45cm×45cm×45 cm pit and planting of 200 plants	11.65/pit	2144.00	186.00	2330.00
	b. Planting of 800 grass slips and 200 pre-germinated plants, including local transport and watering	2.80/plant	1556.00	684.00	2240.00
10	Watering of 200 plants (4 times)	3.28/plant	1656.00	968.00	2624.00
11	Watering of 1000 grass slips/plants on trenches (3 times)	1.80/plant	3351.00	2049.00	5400.00
12	Weeding and hoeing of 200 plants	2.60/plant	519.00	0.00	519.00
13	Application of urea and fertilizer (200 Plants)	0.5/plant	63.00	37.00	100.00
14	Raising of 40 plants for casualty replacement	6.33/Plant	179.00	74.00	253.00
15	Running & Maintenance of Vehicles	Prorata	0.00	103.00	103.00
16	Maintenance of Engine.	Prorata	0.00	68.00	68.00
17	Labour amenities	Prorata	0.00	136.00	136.00
18	Watch & Ward for 12 months	Prorata	1181.00	0.00	1181.00
19	Misc. and unforeseen expenditure	Prorata	35.00	38.00	73.00
TOTAL PLANTING YEAR 1			15867.00	5308.00	21175.00

YEAR 2 - MAINTANANCE-I

No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Maintenance of 40 plants in Nursery	1.45/plant	49.00	9.00	58.00
2	Transportation of 40 plants from nursery to site for casualty replacement including loading and unloading(upto 5km)	1.45/plant	52.00	6.00	58.00
3	Planting for casualty replacement including treatment, local transport and watering 40 Plants	9.15/plant	328.00	38.00	366.00
4	Irrigation -		0.00		
a	Before casualty replacement		0.00		
i	160 plants watering 1 time	3.27/plant	330.00	193.00	523.00
ii	750 grass slips/plants on trenches - 1 watering	1.78/plant	826.00	509.00	1335.00
b	After casualty replacement				
i	200 plants- 2 waterings	3.27/plant	825.00	483.00	1308.00
ii	750 grass slips/plants on trenches - 1 watering	1.78/plant	825.00	510.00	1335.00
5	Running & Maintenance of Vehicles	Protata	0.00	103.00	103.00
6	Maintenance of Engine.	Protata	0.00	103.00	103.00
7	Labour amenities	Protata	0.00	172.00	172.00
8	Purchase of PVC pipes of 1 Inch dia	Protata	0.00	185.00	185.00
9	Watch & Ward for 12 months	Protata	1180.00	0.00	1180.00
10	Miscellaneous and unforeseen expenditure	Protata	84.00	60.00	144.00
Total Year 2			4499.00	2371.00	6870.00

YEAR 3 - MAINTENANCE-II

No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Watch & Ward charges for 12 months	Prorata	1180.00	0.00	1180.00
2	Irrigation of plants-		0.00		
	Watering - 2 times (180 plants)	3.27/plant	745.00	433.00	1178.00
3	Maintenance of Engine with oil etc.	Prorata	0.00	68.00	68.00
4	Miscellaneous and unforeseen expenditure	Prorata	43.00	11.00	54.00
Total Year 3			1968.00	512.00	2480.00


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YEAR 4 : MAINTENANCE-III					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Watch & Ward charges for 12 months	Prorata	1180.00	0.00	1180.00
2	Irrigation of plants-		0.00		
	Watering - 2 times (180 plants)	3.27/plant	745.00	433.00	1178.00
3	Maintenance of Engine with oil etc.	Prorata	0.00	68.00	68.00
4	Miscellaneous and unforeseen expenditure	Prorata	43.00	11.00	54.00
Total Year 4			1968.00	512.00	2480.00
YEAR 5 : MAINTENANCE-IV					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Watch & Ward charges for 12 months	Prorata	1180.00	0.00	1180.00
2	Fencing repairing etc	Prorata	27.00	20.00	47.00
Total Year 5			1207.00	20.00	1227.00
YEAR 6 : MAINTENANCE-V					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Watch & Ward charges for 12 months	Prorata	1180.00	0.00	1180.00
2	Fencing repairing etc	Prorata	27.00	20.00	47.00
Total Year 6			1207.00	20.00	1227.00
YEAR 7 : MAINTENANCE-VI					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Watch & Ward charges for 4 months	Prorata	394.00	0.00	394.00
2	Fencing repairing etc	Prorata	30.00	20.00	50.00
Total Year 7			424.00	20.00	444.00
Grand Total			34309.00	18805.00	53114.00

नोट :- मॉडल्स कार्यस्थल विशेष पर कार्य सम्पादित कराने के लिये प्राक्कलन नहीं है वरन केवल मार्गदर्शक है।
कार्यस्थल पर कार्य सम्पादित कराने के लिए कार्य स्थल की विशेषताओं/ परिस्थितियों के अनुसार प्राक्कलन के आधार पर कार्य कराये जावें।


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Model Cost Norms silvi-pastoral plantation in Non-IGNP area RFBP Phase II

Labour rate Rs. 189 per day

Unit- 50 Ha

Perimeter - Average 3000 RM (1000 MX500M)

No. of Plants- 200

Spacing - 5MX5M

No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
YEAR- 0 Advance Action					
1	Collection of data for Microplanning, preparation of microplan and management plan	Prorata	117.00	40.00	157.00
2	Survey of area, alignment of pits for pole fixing, division of area into segments, preparation of treatment map and plantation card.	Prorata	286.00	44.00	330.00
3	Fencing of plantation area with 1.5 mt. high Angle iron / RCC Post and 4 strand barbed wire / local thorny material or 1.50 m angle iron post and two lines of wire and 1.2 M broad welded wiremesh (details given at annexure "A" for Angle Iron, annexure "B" for RCC Post, C for wire mesh) 60 M	138.40/ Metre	3574.00	4730.00	8304.00
4	Raising of 240 plants for planting including 20% extra	6.32/ Plant	1073.00	443.00	1516.00
5	Raising of Sewan Grass and plants in 10cmX15		0.00		
a	Sewan Grass 960 slips	1.60/ plant	1053.00	483.00	1536.00
b	Other indigineous plants like ber khejari, raunj ,etc. 240 plants	1.60/ plant	263.00	121.00	384.00
6	Construction of water storage tanks/Water harvesting structures	Prorata	378.00	396.00	774.00
7	Purchase of tools, plants & insecticides	Prorata	0.00	138.00	138.00
8	Purchase of fertilizers, DAP & Urea Vermi compost, NPK	Prorata	0.00	165.00	165.00
9	Sign board including painting and fixing	Prorata	0.00	103.00	103.00
10	Purchase of seeds of Sewan grass/ Ber/Khejari and other indegenous species (6 Kg/Ha)	Prorata	0.00	309.00	309.00
11	Construction of Cattle guard hut	Prorata	378.00	177.00	555.00
12	R & M of Vehicle	Prorata	0.00	172.00	172.00
13	Labour amenities	Prorata	0.00	64.00	64.00
14	Watch & Ward for 4 months	Prorata	394.00	0.00	394.00
15	Misc. and unforeseen expenditure	Prorata	24.00	79.00	103.00
TOTAL YEAR 0			7540.00	7464.00	15004.00
YEAR 1 - PLANTING YEAR					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Maintenance of 240 plants in Nursery	1.45/plant	295.00	55.00	350.00
2	Maintenance of Sewan Grass and plants in				
a	Sewan Grass (960)	0.84/ plant	645.00	161.00	806.00
b	Other indigineous plants like ber khejari, raunj ,etc. (240)	0.84/ plant	162.00	40.00	202.00
3	600 m trench digging- of size 20cm deepX30cm at bottom and 50 cms at top- for irrigation	1.56/M	936.00	0.00	936.00
4	Transport of 220 plants upto site including loading and unloading (upto 5 kms.)	1.45/plant	296.00	23.00	319.00

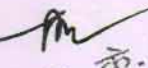

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5	Transport of 800 grass slips and 200 plants raised in 10 cmX15cm bags upto site including loading and unloading (upto 5 kms.)	0.81/plant	648.00	0.00	648.00
6	Mulching on shifting sand dunes (200 m/Ha)	6.36/m	1272.00	0.00	1272.00
7	Sowing of grass seeds	Prorata	171.00	0.00	171.00
8	Planting		0.00		
	a. Digging of 45 cm×45 cm×45 cm pit and planting of 200 plants	11.65/pit	2144.00	186.00	2330.00
	b. Planting of 800 grass slips and 200 pre-germinated plants, including local transport and watering	2.8/plant	1556.00	684.00	2240.00
9	Watering of 200 plants (4 times)	10.05/plant	6895.00	1145.00	8040.00
10	Weeding and hoeing of 200 plants	2.60/plant	520.00	0.00	520.00
11	Hoeing of 200 plants 3 times	1.56/M	936.00	0.00	936.00
12	Application of urea and fertilizer (200 Plants)	0.5/plant	64.00	36.00	100.00
13	Raising of 40 plants for casualty replacement	6.33/ Plant	179.00	74.00	253.00
14	Running & Maintenance of Vehicles	Prorata	0.00	103.00	103.00
15	Labour amenities	Prorata	0.00	138.00	138.00
16	Watch & Ward for 12 months	Prorata	1180.00	0.00	1180.00
17	Misc. and unforeseen expenditure	Prorata	38.00	40.00	78.00
TOTAL PLANTING YEAR 1			17937.00	2685.00	20622.00
YEAR 2 - MAINTANANCE-I					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Maintenance of 40 plants in Nursery	1.45/plant	49.00	9.00	58.00
2	Transportation of 40 plants from nursery to site for casualty replacement including loading and unloading(upto 5km)	1.45/plant	52.00	6.00	58.00
3	Planting for casualty replacement including treatment, local transport and watering 40 Plants	9.13/plant	328.00	37.00	365.00
4	Irrigation		0.00		
	A. Before casualty replacement-		0.00		
	160 plants- watering- one time	10.05/plant	1379.00	229.00	1608.00
	B. After casualty replacement-		0.00		
	200 plants -2 waterings	10.05/plant	3448.00	572.00	4020.00
5	Hoeing of 200 plants 3 times	1.56/M	936.00	0.00	936.00
6	Running & Maintenance of Vehicles	Protata	0.00	103.00	103.00
7	Labour amenities	Protata	0.00	172.00	172.00
8	Watch & Ward for 12 months	Protata	1180.00	0.00	1180.00
9	Misc. and unforeseen expenditure	Protata	82.00	62.00	144.00
Total Year 2			7454.00	1190.00	8644.00
YEAR 3 - MAINTENANCE-II					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Watch & Ward charges for 12 months	Prorata	1180.00	0.00	1180.00
2	Irrigation of plants		0.00		
	a. Watering - 2 times (180 plants)	10.05/plant	3100.00	517.00	3617.00
3	Hoeing of 180 plants 2 times	1.59/M	572.00	0.00	572.00
4	Misc. and unforeseen expenditure	Prorata	41.00	8.00	49.00
Total Year 3			4893.00	525.00	5418.00

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YEAR 4 : MAINTENANCE-III					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Watch & Ward charges for 12 months	Prorata	1180.00	0.00	1180.00
2	Irrigation of plants-		0.00		
	Watering - 2 times (180 plants)	10.05/plant	3100.00	518.00	3618.00
3	Hoeing of 180 plants 2 times	1.59/M	572.00	0.00	572.00
4	Misc. and unforeseen expenditure	Prorata	41.00	8.00	49.00
Total Year 4			4893.00	526.00	5419.00
YEAR 5 : MAINTENANCE-IV					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Watch & Ward charges for 12 months	Prorata	1180.00	0.00	1180.00
2	Fencing repairing etc	Prorata	28.00	19.00	47.00
Total Year 5			1208.00	19.00	1227.00
YEAR 6 : MAINTENANCE-V					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Watch & Ward charges for 12 months	Prorata	1180.00	0.00	1180.00
2	Fencing repairing etc	Prorata	28.00	19.00	47.00
Total Year 6			1208.00	19.00	1227.00
YEAR 7 : MAINTENANCE-VI					
No.	Item of Works	Rate/unit (Rs.)	Labour Cost	Material Cost	Total
1	Watch & Ward charges for 4 months	Prorata	394.00	0.00	394.00
2	Fencing repairing etc	Prorata	27.00	22.00	49.00
Total Year 7			421.00	22.00	443.00
Grand Total			45554.00	12450.00	58004.00

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Model Cost Norms for RDF I

14

Labour rate Rs. 189 per day

Unit- 50 Ha

Perimeter - Average 3000 RM (1000 MX500M)

No. of Plants - 500

Spacing- 4MX5M

S. No.	Item of Works	Rate	Labour Cost	Material Cost	Total
YEAR- 0 Advance Action					
1	Collection of data for Microplanning, preparation of microplan and management plan	Prorata	441.00	47.00	488.00
2	Survey of area, Layout of contour trenches/Furrows, Pits and marking of segments/plots	Prorata	346.00	47.00	393.00
3	Fencing by stone wall and or by ditch.				
a	Stone wall fencing 1.20m high 0.80m at base & 0.60 at top (on an average 30m/ha.)	Rs. 189/m	5670.00	0.00	5670.00
b	Ditch fencing 1.20m deep, 1.50m wide at top & 0.90m at bottom (on an average 30m/ha.)	Rs. 204.93/m	6148.00	0.00	6148.00
4	Cost of raising 550 seedlings	Rs. 6.31/ Plant	2454.00	1016.00	3470.00
5	Raising of 240 plants in 10cmX15 cm bags for planting on mounds of trenches and V ditches (includes 20% extra)	Rs. 1.60/ plant	265.00	121	386.00
6	Digging up 300 rmt Staggered Contour Trenches 45x45cm cross section on middle slopes and V-ditch as per site requirement	Rs. 23.62/M	7086.00	0.00	7086.00
7	Digging of 300 pits size: $0.45 \times ((0.4+0.5)/2)$ cum	Rs. 14.79/ Plant	4437.00	0.00	4437.00
8	Cost of collection and purchases of grass and other seeds	Prorata	0.00	151.00	151.00
9	Restoration of natural regeneration by cultural operations and making crescent shaped mounds on the lower side of seedlings	Prorata	1890.00	0.00	1890.00
10	In situ Soil & Moisture Conservation measures like Check dams, Nadis, Earthen Bunds etc.	Prorata	3623.00	0.00	3623.00
11	Construction of Thatched cattle guard hut.	Prorata	189.00	34.00	223.00
12	Purchase or construction of Water storage Tank	Prorata	0.00	57.00	57.00
13	Purchase of tools and plants	Prorata	0.00	85.00	85.00
14	Labour amenities	Prorata	69.00	66.00	135.00
15	watch and ward for 4 months	Prorata	394.00	0.00	394.00
16	Misc. and unforeseen expenses including running of vehicles	Prorata	171.00	46.00	217.00
Total 0 year			33183.00	1670.00	34853.00
YEAR 1					
1	Maint. of 550 seedling in Nursery	Rs. 1.46/plant	692.00	111.00	803.00
2	Maintenance of 240 plants in 10cmX15 cm bags	Rs. 0.85/ plant	162.00	42	204.00
2	Digging of 200 pits size $0.45 \times ((0.4+0.5)/2)$ Cum	Rs. 14.79/ Plant	2958.00	0.00	2958.00
3	Digging up 100 rmt Staggered Contour Trenches 45x45cm cross section on middle slopes and v-ditch as per site requirement	Rs. 23.63/M	2363.00	0.00	2363.00
4	Digging of 30cmx30cm cross section trench along inner side of stone wall fencing and seed sowing 30 m	Rs. 15.7/M	459.00	12.00	471.00
5	Sowing/dibbling of seeds of grass/thorny Tree species on the mound of trenches and ditch fencing 430 m	Rs. 0.49/M	211.00	0.00	211.00

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6	Purchase of fertilizers and insecticide and its application	Prorata	1481.00	415.00	1896.00
7	Sowing of pellets of grass seeds / pieces of seed mud cakes in between rows & pits	Prorata	428.00	0.00	428.00
8	Transport of 500 seedlings from Nursery to planting site	Rs. 1.16/ Plant	566.00	14.00	580.00
9	Planting of 500 seedlings including Refilling of pits	Rs. 3.45/ Plant	1725.00	0.00	1725.00
10	Transport 200 plants raised in 10 cmX15cm bags upto site including loading and unloading (upto 5 kms.)	Rs. 0.64/plant	128.00	0.00	128.00
11	Planting of 200 pre germinated plants, including local transport and watering	Rs 2.24/plant	312.00	136.00	448.00
12	Restoration of natural regeneration by making crescent shaped mounds on the lower slope of 150 seedlings and saplings	Rs. 3.45/ Plant	518.00	0.00	518.00
13	Making of crescent shaped mounds below 500planted saplings after planting and dibbing of 3 seeds of thorny tree species.	Rs. 3.01/ Plant	1505.00	0.00	1505.00
14	Weeding and Hoeings of 500 plants two times with repairing plants mound	Rs. 3.01/ Plant	3010.00	0.00	3010.00
15	Weeding on contour trenches/V-ditches and espacement/singling	Prorata	441.00	0.00	441.00
16	Raising of 10% Plants (55) in Nursery for casualty replacement in year 2	Rs. 6.31/ Plant	246.00	101.00	347.00
17	Watch and ward charges for 12 months	Prorata	1181.00	0.00	1181.00
18	Labour hut etc	Prorata	274.00	38.00	312.00
19	Construction of approach roads/inspection path	Prorata	321.00	0.00	321.00
20	Construction of gate and fixing of sign boards	Prorata	428.00	65.00	493.00
21	Misc. and unforeseen expences including (additional watering, fencing and frost protection measures and running of vehicles etc.)	Prorata	170.00	99.00	269.00
TOTAL YEAR 1			19579.00	1033.00	20612.00
YEAR 2					
1	Maint. of 55 plants in nursery	Rs. 1.45/plant	68.00	12.00	80.00
2	Repair of Fencing	Prorata	189.00	0.00	189.00
3	Casualty replacement of 50 plants (10%) including redigging of pits, transportation planting, watering and application of insecticide	Rs. 9.9/plant	474.00	21.00	495.00
4	Weeding and Hoeing in 500 plants two times and repairing of mounds	Rs. 3.01/plant	3010.00	0.00	3010.00
5	Watch and ward charges for 12 months	Prorata	1181.00	0.00	1181.00
6	Misc. and Unforeseen expenses including (Repair of Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata	207.00	107.00	314.00
TOTAL YEAR 2			5129.00	140.00	5269.00
YEAR 3					
1	Watch and ward charges for 12 Months	Prorata	1181.00	0.00	1181.00
2	Expenditure on Maintenance including (Repair of fencing/Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata	352.00	115.00	467.00
TOTAL YEAR 3.			1533.00	115.00	1648.00

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YEAR					
1	Watch and ward charges for 12 Months	Prorata	1181.00	0.00	1181.00
2	Expenditure on Maintenance including (Repair of fencing/Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata	352.00	115.00	467.00
TOTAL YEAR 4			1533.00	115.00	1648.00
Grand Total			60957.00	3073.00	64030.00

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Model Cost Norms for RDF II

Labour rate Rs. 189 per day

Unit - 50 Ha

Perimeter - Average 3000 RM (1000 MX500M)

No. of Plants - 200

S. No.	Item of Works	Rate	Labour Cost	Material Cost	Total
YEAR- 0 Advance Action					
1	Collection of data for Microplanning, preparation of microplan and management plan	Prorata	441.00	47.00	488.00
2	Survey of area, Layout of contour trenches/Furrows, Pits and marking of segments/plots	Prorata	346.00	47.00	393.00
3	Fencing by stone wall and/ or by ditch.				
a	Stone wall fencing 1.20m high 0.80m at base & 0.60 at top(on an average 30m/ha.)	Rs. 189/m	5670.00	0.00	5670.00
b	Ditch fencing 1.20m deep, 1.50m wide at top & 0.90m at bottom(on an average 30m/ha.)	Rs. 204.93/m	6148.00	0.00	6148.00
4	Cost of raising 220 seedlings	Rs. 6.31/ Plant	983.00	406.00	1389.00
5	Raising of 240 plants in 10cmX15 cm bags for planting on mounds of trenches and V ditches(includes 20% extra)	Rs. 1.60/ plant	264.00	121	385.00
6	Digging up 400 rmt Staggered Contour Trenches 45x45cm cross section on middle slopes and v-ditch as per site requirement	Rs. 23.63/M	9452.00	0.00	9452.00
7	Digging of 200 pits size: 0.45x((.4+.5)/2) cum	Rs. 14.79/ Plant	2958.00	0.00	2958.00
8	Cost of collection and purchases of grass and other seeds	Prorata	0.00	227.00	227.00
9	Restoration of natural regeneration by cultural operations and making crescent shaped mounds on the lower side of seedlings	Prorata	1890.00	0.00	1890.00
10	In situ Soil & Moisture Conservation measures like Check dam, Nadis, Earthen Bunds etc.	Prorata	3623.00	0.00	3623.00
11	Construction of Thatched cattle guard hut.	Prorata	189.00	34.00	223.00
12	Purchase or construction of Water storage Tank	Prorata	0.00	57.00	57.00
13	Purchase of tools and plants	Prorata	0.00	85.00	85.00
14	Labour amenities	Prorata	69.00	66.00	135.00
15	Watch and Ward for 4 months	Prorata	394.00	0.00	394.00
16	Misc. and unforeseen expenses including running of vehicles	Prorata	179.00	44.00	223.00
Total 0 year			32606.00	1134.00	33740.00
YEAR : 1 PLANTATION YEAR					
1	Maintenance of 220 seedling in nursery	Rs. 1.46/plant	274.00	47.00	321.00
2	Maintenance of 240 plants in 10cmX15 cm bags	Rs. 0.85/ plant	161.00	43	204.00
3	In situ Soil & Moisture Conservation measures like Check dam, Nadis, Earthen Bunds etc.	Prorata	2142.00	188.00	2330.00
4	Digging of 30cmx30cm cross section trench along inner side of stone wall fencing and seed sowing (30 M / Ha)	Rs. 15.77/M	473.00	0.00	473.00
5	Sowing/dibbling of seeds of grass, trees and shrubs including seeds of medicinal plants on the mounds of trench/ditch fencing (430 M)	Rs. 0.49/M	211.00	0.00	211.00
6	sowing of grass seeds including raking in the inter space	Prorata	428.00	0.00	428.00

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7	Transportation of 200 plants from nursery to planting site	Rs. 1.13/ Plant	182.00	44.00	226.00
8	Planting of 200 seedlings including Refilling of pits	Rs. 3.43/ Plant	665.00	21.00	686.00
9	Transport 200 plants raised in 10 cmX15cm bags upto site including loading and unloading (upto 5 kms.)	Rs. 0.69/plant	138.00	0.00	138.00
10	Planting of 200 pre germinated plants, including local transport and watering	Rs 2.24/plant	312.00	136.00	448.00
11	Purchase and application of insecticide and fertilised in 200 plants	Prorata	580.00	175.00	755.00
12	Making of crescent shaped mounds below planted sapling after planting and dibbing of 3 seeds of thorny tree species (200 saplings).	Rs. 3.00/ Plant	600.00	0.00	600.00
13	Weeding and Hoeings of 200 plants two time repairing plants mound	Rs. 3.00/ Plant	1200.00	0.00	1200.00
14	Weeding on Contour Trench/ V ditch and espacement /singling	Prorata	389.00	0.00	389.00
15	Raising of 10% Plants (20 plants) in Nursery for casualty replacement in year 2	Rs. 6.3/ Plant	90.00	36.00	126.00
16	Watch and ward charges for 12 months	Prorata	1181.00	0.00	1181.00
17	Labour hut etc	Prorata	274.00	38.00	312.00
18	Construction of approach roads/inspection path	Prorata	321.00	0.00	321.00
19	Construction of gate and fixing of sign boards	Prorata	428.00	65.00	493.00
20	Misc. and unforeseen expences including (additional watering, fencing and frost protection measures and running of vehicles etc.)	Prorata	183.00	202.00	385.00
TOTAL YEAR 1			10232.00	995.00	11227.00
YEAR 2 : MAINTENANCE-I					
1	Maintenance of 20 plants in nursery	Rs. 1.45/plant	25.00	4.00	29.00
2	Repair of Fencing	Prorata	189.00	0.00	189.00
3	Casualty replacement of 20 plants (10%) including redigging of pits, transportation planting,watering and application of insecticide	Rs. 9.9/plant	189.00	9.00	198.00
4	Weeding and Hoeing in 200 plants two times and repairing of plant mounds	Rs. 3.00/plant	1200.00	0.00	1200.00
5	Watch and ward charges for 12 months	Prorata	1181.00	0.00	1181.00
6	Misc. and Unforeseen expenses including (Repair of Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata	164.00	115.00	279.00
TOTAL YEAR 2			2948.00	128.00	3076.00
YEAR 3 : MAINTENANCE-II					
1	Watch and ward charges for 12 Months	Prorata	1181.00	0.00	1181.00
2	Expenditure on Maintenance including (Repair of fencing/Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata	345.00	115.00	460.00
TOTAL YEAR 3			1526.00	115.00	1641.00
YEAR 4 : MAINTENANCE-III					
1	Watch and ward charges for 12 Months	Prorata	1181.00	0.00	1181.00
2	Expenditure on Maintenance including (Repair of fencing/Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata	345.00	120.00	465.00
TOTAL YEAR4			1526.00	120.00	1646.00
Grand Total			48838.00	2492.00	51330.00

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Model Cost Norms for Fuelwood plantation

Labour rate Rs. 189 per day

Unit- 50 Ha

Perimeter - Average 3000 RM (1000 MX500M)

No. of Plants- 500

Spacing- 4MX5M

S. No.	Item of Works	Rate	Labour Cost	Material Cost	Total
YEAR- 0 Advance Action					
1	Collection of data for Microplanning, preparation of microplan and management plan	Prorata	344.00	26.00	370.00
2	Survey of area, Layout of contour trenches/Furrows, Pits and marking of segments/plots	Prorata	346.00	47.00	393.00
3	Ditch fencing 1.20 m deep, 1.50m Wide at Top and 0.90 m at Bottom 90m in length	Rs. 204.81/m	18433.00	0.00	18433.00
4	Digging of 300m contour trenches of 45cm x 45 cm cross section	Rs. 23.61/M	7083.00	0.00	7083.00
5	Cost of raising 880 seedlings	4.88/Plant	2888.00	1406.00	4294.00
6	Digging of 400 Pits size 0.45 X (0.4+0.5)/2 cum	12.00/pit	4800.00	0.00	4800.00
7	Cost of collection and purchase of grass and other seeds	Prorata	0.00	150.00	150.00
8	Construction of Thatched cattle guard hut	Prorata	427.00	138.00	565.00
9	Construction of water storage tank	Prorata	643.00	91.00	734.00
10	Purchase of tools and plants	Prorata	0.00	170.00	170.00
11	Labour amenities	Prorata	270.00	150.00	420.00
12	Watch and ward charges for 4 Months	Prorata	394.00	0.00	394.00
13	Provision for additional fencing based on actual requirement	Prorata	10238.00	0.00	10238.00
14	Misc. and unforeseen expenses including running of vehicles	Prorata	205.00	53.00	258.00
TOTAL 0 YEAR			46071.00	2231.00	48302.00
YEAR 1 PLANTATION YEAR					
1	Maint. of 880 seedlings in Nursery	1.64/Plant	1221.00	223.00	1444.00
2	Digging of 400 pits size 0.45x (0.4 + 0.5)/2 cum	12.00/pit	4800.00	0.00	4800.00
3	Sowing/Dibbing of seeds of grass thorny bushes on trench mound V-ditch Fencing in three lines. 390 meter	Rs. 0.42/m	164.00	0.00	164.00
4	Sowing of grass seeds including raking in the interspaces	Prorata	799.00	113.00	912.00
5	Transport of 800 seedlings from Nursery to planting site	Rs. 1.16/ Plant	894.00	31.00	925.00
6	Planting of 800 seedlings including refilling of pits	3.44/plant	2752.00	0.00	2752.00
7	Construction of crescent shaped mounds below the planting pits 800 plants	Rs. 3.01/ Plant	2408.00	0.00	2408.00
8	Weeding and Hoeing of 800 plants- Two times and repairing of mounds	Rs. 3.01/ Plant	4816.00	0.00	4816.00
9	One hoeing of 800 plants	1.73/plant	1384.00	0.00	1384.00
10	Cost of raising 88 plants in Nursery for casualty replacement in year 2	4.87/Plant	289.00	140.00	429.00
11	Watch and Ward charges for 12 Months	Prorata	1181.00	0.00	1181.00
12	Cost of insecticide and Fertiliser & its application	Prorata	2419.00	635.00	3054.00
13	Labour amenities etc.	Prorata	80.00	53.00	133.00

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MODEL COST ESTIMATES FOR PRODUCTIVITY ENHANCEMENT OPERATIONS

UNIT : 50 Ha.

PERIMETER : 60 M/Ha.

Labour rate Rs. 189 per day

COST ESTIMATE IN Rs./Ha.

S. No.	Item of Works	Rate	Labour Cost	Material Cost	Total
Year 0 ADVANCE ACTION					
1	Collection of data for Microplanning, preparation of microplan and management plan	Prorata	441.00	47.00	488.00
2	Survey and layout	Prorata	346.00	47.00	393.00
3	Fencing -				
a	Dry random rubble stone wall fencing 1.20 metre Height, 0.80 metre wide at base and 0.60 metre wide at Top (0.84 cubic metre for one running metre)-on an Average 30 metre per Ha	Rs. 189/m	5670.00	0.00	5670.00
b	Ditch fencing 1.20 metre deep, 1.50 metre wide at top and 0.80 metre at bottom-on an average 30 metre per Ha	Rs. 204.93/m	6148.00	0.00	6148.00
4	Cultural operations in bamboo clumps and inducing root suckers (in indigenous plants like tendu, salar, shyonak, padal, etc.) by making 10 m long trenches of 20 cmX20 cm on downward slope (in all 150 plants to be treated)	Rs 53.55/clump or plant	8033.00	0.00	8033.00
5	Cutback/singling of stumps and restoration of Natural regeneration of other species	Prorata	1575.00	0.00	1575.00
6	Construction of loose rubble stone check dams	Prorata	2660.00	96.00	2756.00
7	Construction of approach road and inspection path	Prorata	206.00	0.00	206.00
8	Construction of thatched cattleguard hut	Prorata	107.00	61.00	168.00
9	Purchase of signboard and their fixing	Prorata	11.00	66.00	77.00
10	Construction of gate and its fixing	Prorata	59.00	75.00	134.00
11	Purchase of tools and plants	Prorata	0.00	57.00	57.00
12	Watch and ward for 6 months	Prorata	590.00	0.00	590.00
13	Miscellaneous and unforeseen expenses	Prorata	137.00	83.00	220.00
Total			25983.00	532.00	26515.00
YEAR-1					
1	Repair of fencing	Prorata	189.00	11.00	200.00
2	Watch and ward for 12 months	Prorata	1181.00	0.00	1181.00
3	Miscellaneous and unforeseen expenses	Prorata	47.00	57.00	104.00
Total			1417.00	68.00	1485.00
Grand Total			27400.00	600.00	28000.00

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Closure for Biodiversity Conservation

Unit : 50 Ha
Perimeter: 60 M/Ha
Labour rate Rs. 189 per day
Cost Estimate: Rs. /Ha

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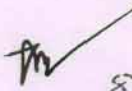
Year- 0- Advance Action

S. No.	Item of Works	Rate	Labour Cost	Material Cost	Total
1	Collection of data for Microplanning, preparation of microplan and management plan	Prorata	441.00	47.00	488.00
1	Survey of area, Layout of Pits and marking of segments/plots	Prorata	346.00	47.00	393
2	Fencing by stone wall and or by ditch.				
a	Stone wall fencing 1.20m high 0.80m at base & 0.60 at top (on an average 30m/ha.)	Rs. 189/m	5670.00	0.00	5670.00
b	Ditch fencing 1.20m deep, 1.50m wide at top & 0.90m at bottom (on an average 30m/ha.)	Rs. 204.93/m	6148.00	0.00	6148.00
3	Digging up 400 rmt Staggered Contour Trenches 45x45cm cross section on middle slopes and V-ditch as per site requirement	Rs. 23.61/rmt	9445.00	0.00	9445.00
4	Cost of collection and purchase of seeds/cuttings of shrubs and medicinal plants	Prorata	0.00	206.00	206.00
5	In situ Soil & Moisture Conservation measures like Check dam, Percolation Tanks, Earthen Bunds etc.	Prorata	4801.00	264.00	5065.00
6	Purchase of tools and plants	Prorata	0.00	112.00	112.00
7	Labour amenities	Prorata	146.00	12.00	158.00
8	Watch & ward for 4 months	Prorata	394.00	0.00	394.00
9	Restoration of Natural regeneration by cutback, cultural operation, and by making crescent shaped ridges on lower side of seedling and saplings	Prorata	1890.00	0.00	1890.00
10	Construction of approach road inspection path and walking trail	Prorata	424.00	1027.00	1451.00
11	Misc. and unforeseen expenses including running of vehicles	Prorata	208.00	92.00	300.00
TOTAL YEAR 0			29913.00	1807.00	31720.00
YEAR- I					
1	In situ Soil & Moisture Conservation measures like Check dam, Nadis, Earthen Bunds etc.	Prorata	2324.00	172.00	2496.00
2	Digging of 30cmx30cm cross section trench along inner side of stone wall fencing and seed sowing	Rs. 10.31/rmt	609.00	10.00	619.00
3	Sowing/dibbling of seeds of shrubs including seeds of medicinal plants on the mounds of trench/ditch fencing- 430 m	Rs. 0.49/m	211.00	0.00	211.00
4	Two times Weeding and Hoeing on trenches and V ditches	Prorata	1036.00	0.00	1036.00
5	Watch & ward for 12 months	Prorata	1180.00	0.00	1180.00
6	Construction of gate and fixing of sign boards	prorata	428.00	58.00	486.00
7	Misc. and unforeseen expences including (fencing repair, protection measures and running of vehicles etc.)	prorata	171.00	98.00	269.00
TOTAL YEAR 1			5959.00	338.00	6297.00


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YEAR 2 MAINTENANCE					
1	Repair of fencing	Prorata	189.00	0.00	189.00
2	Weeding and Hoeing	Prorata	518.00	0.00	518.00
3	Watch & ward for 12 months	Prorata	1181.00	0.00	1181.00
4	Misc. and unforeseen expences including (protection measures, running of vehicles etc.)	prorata	154.00	101.00	255.00
TOTAL YEAR 2			2042.00	101.00	2143.00
Grand Total			37914.00	2246.00	40160.00

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