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औषधि योजना

कार्यालय प्रधान मुख्य वन संरक्षक, (होफ), राजस्थान, जयपुर

क्रमांक एफ 3(13)प्रमुवसं/ट्री/तक0/20–21/ 443-57 दिनांकः– 02/11/22

निमित,

1–परियोजना निदेशक, आर.एफ.बी.पी.–2 जयपुर।

2– समस्त सम्भागीय मुख्य वन संरक्षक जयपुर/अजमेर/भरतपुर/कोटा/उदयपुर/बीकानेर/जोधपुर/(वन्यजीव) जयपुर/कोटा/उदयपुर/सवाईमाधोपुर/सरिस्का/जोधपुर/विभागीय कार्य जयपुर

विषयः–नवीन मॉडल कॉस्ट नोर्म्स न्यूनतम श्रमिक दर रू. 259/- एवं सामग्री दर 2021

महोदय,

उपरोक्त विषयान्तर्गत निवेदन है कि श्रमिक दर 259/- रूपये प्रति दिन के आधार पर प्राप्त हुए वृक्षारोपण मॉडल राज्य स्तरीय मॉडल कमेटी की अनुशंषा पर प्रधान मुख्य वन संरक्षक, (हॉफ) राजस्थान, जयपुर के अनुमोदन उपरान्त संलग्न कर आवश्यक कार्यवाही हेतु प्रेषित किये जा रहे हैं:–

1-Assisted Natural Regeneration
2-Canal Side Plantation (Distributory)
3-Canal Side Plantation (Minor)
4-Block Plantation IGNP
5-Block Plantation Non-IGNP Areas
6-Sand Dunes Stabilization
7-Silvi-Pastoral Plantations in IGNP Areas
8-Silvi-Pastoral Plantations in Non-IGNP Areas
9-Reforestation of Degraded Forests-I (RDF-I)
10-Reforestation of Degraded Forests-II (RDF-II)
11-Fuel wood Plantation
12-Productivity Enhancement Operations
13-Closure for Biodiversity Conservation
14-Enrichment of Old Plantations
15-Raising of Plants in the Nursery Model-1
16-Raising of Plants in the Nursery Model-2
17-Raising of Plants in the Nursery Model-3
18-Raising of Plants in the Nursery Model-4
19-Raising of Plants in the Nursery Model-5
20-Raising of Plants in the Nursery Model-6
21-Raising of Plants in the Nursery Model-7
22-Raising of Plants in the Nursery Model-8
23-Compensatory Afforestaton on Degraded Forest Land (CA DFL)
24-Compensatory Afforestaton on Non-Forest Land (CA NFL)

घर-घर औषधि योजना

25-Regeneration of Safety Zones (FCA Related)
26-Dwarf/ Medicinal Plant raising under compensatory Afforestation below the Power Transmission Lines of 46 Mts. (FCA Related)
27-Coppice Maintainence with Gap Planting (Without fencing) IGNP Areas
28-Model Cost Estimate for Plantation Along NHAI Roads (Barbed Wire Fencing Model)
29-Model Cost Estimate for Plantation of NHAI Sites (Tree Guard Model)
30-Model Cost Estimates for Glade Development in Wildlife Areas
31- Model Cost Estimates for Savannah Development in Arid Areas

उक्त सभी मॉडल विभागीय वेबसाइट के निम्न लिंक पर उपलब्ध है।

http;//www.forest.rajasthan.gov.in/content/raj/forest/en/forest,-department/departmental-wings/forest-development/model-for-developmental activities.htm|

संलग्न–मॉडल की प्रति।

भवदीय

मुख्य वन संरक्षक (आयोजना)
राजस्थान, जयपुर।

Model Cost Norms
ANR (Assisted Natural Regeneration)
UNIT : 50 Ha
PERIMETER: 60 M/Ha.
LABOUR RATE: Rs.259. /Day
COST ESTIMATE: in Rs./Ha.

0 YEAR (ADVANCE ACTION)

S.No.	ITEMS	Unit	Qty.	Rate	LABOUR	MATERIAL	TOTAL
1	Collection of Data for Microplanning, preparation of microplan and management plan	Prorata			604.33	50.61	654.94
2	Survey of area, Layout of contour trenches/ furrows, Pits and marking of segments /plots	Prorata			473.87	50.61	524.49
3	Fencing by stone wall and or by ditch.					0.00	
	a). Stone wall fencing 1.20m high 0.80m at base & 0.60m at top(on an average 30 m/ha.)	meter	30	259.00	7770.00	0.00	7770.00
	b). Ditch fencing 1.20m deep,1.50m wide at top & 0.90m at bottom (on an average 30m/ha.)	meter	30	280.69	8420.62	0.00	8420.62
4	Cost of raising 220 seedlings	Plant no.	220	9.02	1381.20	602.20	1983.40
5	**Digging up Trenches :**					0.00	
a.	Digging up 100 rmt Staggered Contour Trenches with cross section size: 0.6x((1.05+0.45)/2) Sqmt. in area with 6-20% slop .	Meter	100	62.51	7196.59	0.00	7196.59
b.	Digging up 80 rmt Continuous Contour Trenches with cross section size: 0.6x((1.70+0.5)/2) Sqmt. in area with 3-6% slop	Meter	80	91.68	8443.66	0.00	8443.66
c.	Digging up 20 rmt Deep Continuous Contour Trenches with cross section size: 1.0x((1.50+0.5)/2) Sqmt. in area with 0-3% slop	Meter	20	138.90	3198.20	0.00	3198.20
6	Digging of 200 pits size: 0.45x(0.4+0.5/2)	no.	200	20.27	4053.50	0.00	4053.50
7	Cost of collection and purchase of grass and other seeds of indegenous trees and shrubs	per ha	1	428.00	0.00	428.00	428.00
8	In situ Soil & Moisture Conservation measures like Check dam, Percolation Tanks, Earthen Bunds etc.	per ha	1	4965.17	4965.17	0.00	4965.17
9	Construction of Thatched cattle guard hut.	Prorata			259.00	36.49	295.49
10	Purchase of tools and plants	Prorata			0.00	90.63	90.63
11	Labour amenities	Prorata			95.94	70.62	166.56
12	Cattle guard wages for 4 months	Prorata			539.10	0.00	539.10
13	Restoration of Natural regeneration by cutback cultural operation, pruning and by making crescent shaped ridges on lower side of seedling and saplings	Prorata			1295.00	0.00	1295.00
14	Misc. and unforeseen expenses including running of vehicles	Prorata			243.39	47.08	290.47
	TOTAL YEAR 0				**48939.59**	**1376.24**	**50315.82**

YEAR I (PLANTATION YEAR)

1	Maintenance of 220 seedling in nursery	Plant no.	220	2.17	376.92	100.90	477.82
2	Digging of 30cmx30cm cross section trench along inner side of stone wall fencing and seed sowing	meter	30	21.67	650.16	0.00	650.16
3	Sowing/dibbling of seeds of grass, trees and shrubs including seeds of medicinal plants on the mounds of trench/ditch fencing.	meter	230	0.58	154.63	0.00	154.63
4	Sowing of grass seeds including raking in the interspaces.	Prorata			587.07	0.00	587.07
5	Transportation of 200 plants from nursery to planting site	Plant no.	200	1.46	246.52	44.73	291.24
6	Planting of 200 seedlings including Refilling of pits	Plant no.	200	4.65	911.19	18.83	930.02
7	Purchase and application of insecticide and fertiliser in 200 plants	Plant no.	200	4.92	795.72	188.32	984.04
8	Making of 200 crescent shaped mounds below planted sapling after planting and dibbling of 3 seeds of throny tree species.	Plant no.	200	4.12	823.81	0.00	823.81
9	Weeding and Hoeing of 200 plants two times including repairing of plants mound	Plant no.	400	4.12	1647.61	0.00	1647.61
10	Weeding on contour trenches/ V-ditches and spacement / singling	Prorata	1	471.33	471.33	0.00	471.33
11	Restoration of Natural regeneration by cutback cultural operation, pruning and by making crescent shaped ridges on lower side of seedling and saplings	Prorata	1	1295.00	1295.00	0.00	1295.00
12	Raising of 10% Plants (20 plants) in Nursery for casualty replacement in year 2	Plant no.	20	9.02	125.56	54.75	180.31
13	Watch & ward charges for 12 months	Prorata			1615.41	0.00	1615.41
14	Construction of approach roads / inspection path	Prorata			441.27	0.00	441.27
15	Construction of gate and fixing of sign boards	Prorata			587.07	69.44	656.51
16	Misc. and unforeseen expences including (additional watering, fencing and frost protection measures and running of vehicles etc.)	Prorata			251.45	216.57	468.02
	TOTAL YEAR 1		**1702**	**1819.03**	**10980.71**	**693.53**	**11674.24**

उप (वन)

YEAR 2 MAINTENANCE

1	Maintenance of 20 plants in nursery	Plant no.	20	2.17	34.27	9.17	43.44
2	Repair of fencing	Prorata			259.00	0.00	259.00
3	Casualty replacement of 20 plants (10%) including re-digging of pits, transportation, planting, watering and application of insecticides	Plant no.	20	13.42	259.00	9.42	268.42
4	Weeding and Hoeing in 200 plants two times	Plant no.	400	4.12	1647.61	0.00	1647.61
5	Watch & ward charges for 12 months	Prorata			1615.41	0.00	1615.41
6	Misc. and unforeseen expences including (additional watering, fencing and frost protection measures and running of vehicles etc.)	Prorata			222.34	117.70	340.04
	TOTAL YEAR 2				4037.62	136.29	4173.91

YEAR 3 : MAINTENANCE

1	Watch & ward charges for 12 months	Prorata			1615.41	0.00	1615.41
2	Expenditure on Maintenance including (Repair of fencing/Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata			472.20	128.29	600.50
	TOTAL YEAR 3.				2087.61	128.29	2215.90
	YEAR 4 : MAINTENANCE				0.00		
1	Watch & ward charges for 12 months	Prorata			1615.41		1615.41
2	Expenditure on Maintenance including (Repair of fencing / Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata			472.20	128.29	600.50
	TOTAL YEAR 4.				2087.61	128.29	2215.90
	GRAND TOTAL				68133.14	2462.64	70595.78

Yearwise Cost Statement ANR (Assisted Natural Regeneration)

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	YEAR 0 ADVANCE ACTION				48940	1376	50316
2	YEAR 1 - PLANTING YEAR				10981	694	11674
3	YEAR 2 - MAINTENANCE I				4038	136	4174
4	YEAR 3 - MAINTENANCE II				2088	128	2216
5	YEAR - 4 MAINTENANCE III				2088	128	2216
	Grand Total				68133	2463	70596

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। डीप सीसीटी, सीसीटी एवं स्टेगर्ड कन्टूर ट्रेन्च बनाते समय क्षेत्र में विद्यमान पेडों को क्षति नही पहुंचाई जाये।

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा एवं प्रसार
राजस्थान, जयपुर

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

Model Cost Norms - Canal side Plantation (Distributory)

Labour rate Rs. 259/- per day
Unit 100 RKM (33 ha.)
Perimeter - Average 6200 RM

250 plants per RKM
Spacing 3MX4M

No.		Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
YEAR 0 ADVANCE ACTION								
1		Collection of data for microplan, preparation of microplan and management plan	RKM	1	219.63	201.44	18.19	219.63
2		Survey of area, alignment of pits for fencing posts, marking of segments/ plots, preparation of plantation card and journal.	Prorata			160.33	18.19	178.52
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	Meter	62	166.25	5112.85	5194.85	10307.70
4		Raising of 300 plants (250 for planting and 20% extra).	Plant	300	7.14	1395.50	745.49	2140.99
5		Purchase of irrigation equipments-					0.00	
	a	Purchase of 5 HP engine	Prorata			0.00	312.44	312.44
	b	Purchase of HDPE/ LGS pipe - (3 inch diameter) 2 m per RKM	Prorata			0.00	294.25	294.25
	c	Purchase of PVC pipes of 3 inch dia & 1 inch dia	Prorata			0.00	184.04	184.04
6		Purchase of Tools & plants	Prorata			37.00	96.30	133.30
7		Purchase of Insecticides, Fertilizers - DAP/ NPK/Urea/ vermi compost	Prorata			0.00	225.77	225.77
8		Sign Board including Painting and Fixing	Prorata			13.70	63.13	76.83
9		Watch and Ward for 4 months	Prorata			269.96	0.00	269.96
10		R&M of Motor Vehicles	Prorata			0.00	110.21	110.21
11		Labour Amenities	Prorata			71.26	141.24	212.50
12		Site Clearance including removal of unwanted bushes	RKM	1	366.30	338.48	27.82	366.30
13		Cattle guard hut	RKM	1	423.42	311.07	112.35	423.42
14		Mulching (to be done on active dunes in 5 Ha area)	Prorata			364.52	0.00	364.52
15		Misc. and unforeseen expenditure.	Prorata			75.37	59.92	135.29
			Total			**8351**	**7604**	**15956**

YEAR 1 - PLANTING YEAR

No.		Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1		Maintenance of 300 Plants in Nursery.	Plant	300	2.51	593.44	159.43	752.87
2		Digging of 400 RMT trench (0.4mX0.15m) in command area-for irrigation	Meter	400	2.59	1036.00	0.00	1036.00
3		Transport of 275 plants upto site including loading and unloading (upto 5 kms)	Plant	275	1.93	502.93	28.89	531.82
4		Planting					0.00	
	a	Lay out & digging of 45cmx 45cmx 45cm pits and planting of 125 seedlings including local transport and initial watering in command area.	Plant	125	15.68	1959.63	0.00	1959.63
	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.	Plant	125	17.34	2004.85	162.64	2167.49

5		Irrigation						
	a	5 times through watercourse(Khala) or syphon in command area (125 Plants).	Plant	625	2.14	1336.11	0.00 0.00	1336.11
	b	5 times through engine in uncommand area (125 Plant).	Plant	625	3.77	1551.26	802.50	2353.76
6		Treatment and sowing of seeds on trenches (400 m).	Meter	400	0.53	213.78	0.00	213.78
7		Weeding and hoeing of 250 Plants	Plant	250	3 56	890.74	0.00	890.74
8		Hoeing of 50% Plants 5 times (125 Plants)	Plant	625	2.14	1336.11	0.00	1336.11
9		Application of fertilisers and pesticides (250 plants)	Plant	250	0.59	91.81	56.71	148.52
10		Raising of 50 plants for replacement	Plant	50	7.14	232.58	124.25	356.83
11		Running & Maintenance of Vehicles	Prorata			0.00	72.76	72.76
12		Maintenance of equipments/watercourses	Prorata			0.00	72.76	72.76
13		Labour amenities	Prorata			105.52	18.19	123.71
14		Watch & ward for 12 months	Prorata			808.52	0.00	808.52
15		Misc and unforeseen expenditure	Prorata			34.26	22.47	56.73
			Total			12698	1521	14218

YEAR 2 MAINTENANCE I

No.		Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1		Maintenance of 50 Plants for casualty replacement	Plant	50	2.51	98.91	26.57	125.48
2		Transport of 50 plants from nursery to site for casualty replacement including loading and unloading	Plant	50	1.92	91.81	4.28	96.09
3		Re-digging of Pits & Planting for casualty replacement including treatment, local transport and initial watering					0.00	
	a	In command area (25 Plants)	Plant	25	11.07	276.81	0.00	276.81
	b	In uncommand area (25 Plants)	Plant	25	12.73	285.04	33.17	318.21
4		Irrigation					0.00	
	a	6 times through watercourse (Khala) or syphon in command area (125 Plants).	Plant	750	2.14	1603.33	0.00	1603.33
	b	6 times through engine in uncommand area (125 Plants).	Plant	750	3.77	1870.56	955.51	2826.07
5		Weeding and hoeing of 250 plants	Plant	250	3.56	890.74	0.00	890.74
6		Hoeing of 50% Plants 6 times (125 Plants)	Plant	750	2.14	1603.33	0.00	1603.33
7		Application of fertilisers and pesticides (250 plants)	Plant	250	0.59	91.81	56.71	148.52
8		Prunning of Plants as per requirement	Prorata			212.41	0.00	212.41
9		Purchase of PVC Pipes	Prorata			0.00	294.25	294.25
10		Watch & ward for 12 months	Prorata			808.52	0.00	808.52
11		Running & Maintenance of Vehicles/equipments	Prorata			0.00	164.78	164.78
12		Labour amenities	Prorata			79.48	38.52	118.00
13		Misc works like shifting of pipelines, engines etc. and unforeseen expenditure/watercourses repair	Prorata			79.48	38.52	118.00
			Total			7992	1612	9605

YEAR - 3 MAINTENANCE II

No.		Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1		Irrigation						
	a	6 times through watercourse(Khala) or syphon in command area (125 Plants).	Plant	750	2.14	1603.33	0.00	1603.33
	b	6 times through engine in uncommand area (125 Plants).	Plant	750	3.77	1870.56	955.51	2826.07
2		Hoeing of 50% Plants 6 times (125 plants)	Plant	750	2.14	1603.33	0.00	1603.33
3		Prunning of Plants as per requirement (125Plants)	Prorata			383.70	0.00	383.70
4		Purchase of PVC Pipe	Prorata			0.00	274.99	274.99
5		Watch & ward for 12 months	Prorata			808.52	0.00	808.52
6		Running & Maintenance of Vehicles	Prorata			0.00	72.76	72.76
7		Maintenance of equipments	Prorata			0.00	92.02	92.02
8		Labour amenities	Prorata			0.00	54.57	54.57
9		Misc works like shifting of pipelines, engines etc. and unforeseen expenditure/watercourses repair	Prorata			80.85	14.98	95.83
			Total			6350	1465	7815

YEAR - 4 MAINTENANCE III

No.		Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1		Irrigation						
	a	4 times through watercourse (Khala) or syphon in command area (125 plants).	Plant	500	2.14	1068.89	0.00	1068.89
	b	4 times through engine in uncommand area (125).	Plant	500	3.77	1247.04	636.65	1883.69
2		Hoeing of 50% Plants 4 times (125 Plants)	Plant	500	2.14	1068.89	0.00	1068.89
3		Prunning of Plants as per requirement	Prorata			682.44	0.00	682.44
4		Watch & ward for 12 months	Prorata			808.52	0.00	808.52
5		Running & Maintenance of Vehicles	Prorata			0.00	72.76	72.76
6		Maintenance of equipments	Prorata			0.00	72.76	72.76
7		Labour amenities	Prorata			26.04	7.49	33.53
8		Misc works like shifting of pipelines, engines etc. and unforeseen expenditure/watercourses repair	Prorata			53.44	29.96	83.40
			Total			4955	820	5775

YEAR - 5 MAINTENANCE IV

No.		Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1		Irrigation						
	a	2 times through watercourse(Khala) or syphon in command area (125 Plants).	Plant	250	2.14	534.44	0.00	534.44
	b	2 times through engine in uncommand area (125 Plants).	Plant	250	3.77	623.52	317.79	941.31
2		Hoeing of 50% Plants 2 times (125 Plants)	Plant	250	2.14	534.44	0.00	534.44
3		Prunning of Plants as per requirement	Prorata			676.96	0.00	676.96
4		Watch & ward for 12 months	Prorata			808.52	0.00	808.52
5		Running & Maintenance of Vehicles	Prorata			0.00	47.08	47.08
6		Maintenance of equipments	Prorata			0.00	47.08	47.08
7		Misc works like shifting of pipelines, engines etc. and unforeseen expenditure/watercourses repair	Prorata			75.37	36.38	111.75
			Total			3253	448	3702

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YEAR - 6 MAINTENANCE V

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Irrigation						
	2 times through watercourse (Khala) or syphon in command area (125 Plants).	Plant	250	2.14	534.44	0.00	534.44
2	Watch & ward for 12 months	Prorata			808.52	0.00	808.52
3	Misc works and unforeseen expenditure/watercourse repair	Prorata			76.74	34.24	110.98
		Total			1420	34	1454

YEAR - 7 MAINTENANCE VI

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch & ward for 6 months	Prorata			405.63	0.00	405.63
2	Repairing of fencing	Prorata			146.63	73.83	220.46
		TOTAL			552	74	626
	Grand Total				45572	13578	59150

Yearwise Cost Statement Canal side Plantation (Distributory)

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	YEAR 0 ADVANCE ACTION				8351	7604	15956
2	YEAR 1 - PLANTING YEAR				12698	1521	14218
3	YEAR 2 - MAINTENANCE I				7992	1612	9605
4	YEAR 3 - MAINTENANCE II				6350	1465	7815
5	YEAR - 4 MAINTENANCE III				4955	820	5775
6	YEAR - 5 MAINTENANCE IV				3253	448	3702
7	YEAR - 6 MAINTENANCE V				1420	34	1454
8	YEAR - 7 MAINTENANCE VI				552	74	626
	Grand Total				45572	13578	59150

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।

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा एवं प्रसार
राजस्थान, जयपुर

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

Model Cost Norms - Canal side Plantation (Minor)

Labour rate Rs. 259/- per day
Unit 50 RKM (16.5 Ha)
Perimeter - Average 6200 RM

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

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
YEAR 0 ADVANCE ACTION							
1	Collection of data for microplan, preparation of microplan and management plan	RKM	1	219.63	201.44	18.19	219.63
2	Survey of area, alignment of pits for fencing posts, marking of segments/ plots, preparation of plantation card and journal.	Prorata			193.22	35.31	228.53
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	Meter	124	166.11	10168.15	10429.29	20597.44
4	Raising of 300 plants (250 for planting and 20% extra).	Plant	300	7.14	1395.50	745.49	2140.99
5	Purchase of irrigation equipments					0.00	
a	Purchase of 5 HP engine	Prorata			0.00	623.81	623.81
b	Purchase of HDPE/ LGS pipe - (3 inch diameter) 3 m per RKM	Prorata			0.00	438.70	438.70
c	Purchase of PVC pipes of 3 inch dia & 1 inch dia	Prorata			0.00	363.80	363.80
6	Purchase of Tools & plants	Prorata			38.37	147.66	186.03
7	Purchase of Insecticides, Fertilizers - DAP/ NPK/Urea/ vermi compost	Prorata			0.00	224.70	224.70
8	Sign Board including Painting and Fixing	Prorata			26.04	128.40	154.44
9	Watch and Ward for 4 months	Prorata			538.56	0.00	538.56
10	R&M of Vehicles	Prorata			0.00	72.76	72.76
11	Labour Amenities	Prorata			93.19	155.15	248.34
12	Site Clearance including removal of unwanted bushes.	RKM	1	366.30	338.48	27.82	366.30
13	Cattle guard hut	RKM	1	424.49	311.07	113.42	424.49
14	Mulching (tobe done on active dunes in 2.5 Ha area)	Prorata			364.52	0.00	364.52
15	Misc. and unforeseen expenditure	Prorata			102.78	60.99	163.77
		Total			13771	13585	27357

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YEAR 1 - PLANTING YEAR							
No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Maintenance of 300 Plants in Nursery	Plant	300	1.98	593.44	0.00	593.44
2	Digging of 400 RMT trench (0.4mX0.15m) in command area-for irrigation	Meter	400	2.59	1036.00	0.00	1036.00
3	Transport of 275 plants upto site including loading and unloading (upto 5 kms)	Plant	275	1.94	502.93	31.03	533.96
4	Planting					0.00	
a	Laying out & digging of 45cmx 45cmx 45cm pit and planting of 125 seedlings including local transportation and initial watering in command area.	Plant	125	15.69	1961.00	0.00	1961.00
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.	Plant	125	17.36	2006.22	163.71	2169.93
5	Irrigation					0.00	
a	5 times through watercourses (Khala) or syphon in command area (125 Plants).	Plant	625	2.14	1336.11	0.00	1336.11
b	5 times through engine in uncommand area (125 Plants).	Plant	625	3.76	1548.52	803.57	2352.09
6	Treatment and sowing of seeds on trenches (400 m).	Meter	400	0.53	213.78	0.00	213.78
7	Weeding and hoeing of 250 Plants	Plant	250	3.56	890.74	0.00	890.74
8	Hoeing of 50% Plants 5 times (125 Plants)	Plant	625	2.14	1336.11	0.00	1336.11
9	Application of fertilisers and pesticides-250 Plants	Plant	250	0.60	93.19	55.64	148.83
10	Raising of 50 plants for replacement	Plant	50	4.65	232.58	0.00	232.58
11	Running & Maintenance of Vehicles	Prorata			0.00	71.69	71.69
12	Maintenance of equipments	Prorata			0.00	71.69	71.69
13	Labour amenities	Prorata			105.52	18.19	123.71
14	Watch & ward for 12 months	Prorata			1617.04	0.00	1617.04
15	Misc and unforeseen expenditure/repair of watercourses	Prorata			41.11	26.75	67.86
		Total			13514	1242	14757

YEAR 2 MAINTENANCE I

No.		Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1		Maintenance of 50 Plants for casualty replacement	Plant	50	1.98	98.91	0.00	98.91
2		Transportation of 50 plants from nursery to site for casuality replacement including loading and unloading	Plant	50	1.95	93.19	4.28	97.47
3		Re-digging of Pits & Planting for casualty replacement including treatment, local transport and watering					0.00	
	a	In command area (25 Plants)	Plant	25	11.07	276.81	0.00	276.81
	b	In uncommand area (25 Plants)	Plant	25	12.73	285.04	33.17	318.21
4		Irrigation					0.00	
	a	6 times through watercourses (Khala) or syphon in command area (125 Plants).	Plant	750	2.12	1593.74	0.00	1593.74
	b	6 times through engine in uncommand area (125 Plants).	Plant	750	3.78	1867.81	965.14	2832.95
5		Weeding and hoeing of 250 plants	Plant	250	3.55	888.00	0.00	888.00
6		Hoeing of 50% Plants 6 times (125 Plants)	Plant	750	2.12	1593.74	0.00	1593.74
7		Application of fertilisers and pesticides (250 plants)	Plant	250	0.60	93.19	55.64	148.83
8		Prunning of Plants as per requirement	Prorata			213.78	0.00	213.78
9		Purchase of PVC Pipes	Prorata			0.00	367.01	367.01
10		Watch & ward for 12 months	Prorata			1618.41	0.00	1618.41
11		Running & Maintenance of Vehicles/equipments	Prorata			0.00	162.64	162.64
12		Labour amenities	Prorata			0.00	55.64	55.64
13		Misc works like shifting of pipelines, engines etc. and unforeseen expenditure/repair of watercourses	Prorata			71.26	36.38	107.64
			Total			8694	1680	10374

YEAR - 3 MAINTENANCE II

No.		Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1		Irrigation						
	a	6 times through watercourses (Khala) or syphon in command area (125 Plants).	Plant	750	2.12	1593.74	0.00	1593.74
	b	6 times through engine in uncommand area (125 Plants).	Plant	750	3.78	1867.81	965.14	2832.95
2		Hoeing of 50% Plants 6 times (125 plants)	Plant	750	2.12	1593.74	0.00	1593.74
3		Prunning of Plants as per requirement	Prorata			383.70	0.00	383.70
4		Purchase of PVC Pipe	Prorata			0.00	274.99	274.99
5		Watch & ward for 12 months	Prorata			1618.41	0.00	1618.41
6		Running & Maintenance of Vehicles	Prorata			0.00	72.76	72.76
7		Maintenance of equipments	Prorata			0.00	92.02	92.02
8		Labour amenities	Prorata			0.00	55.64	55.64
9		Misc works like shifting of pipelines, engines etc. and unforeseen expenditure/repair of watercourses	Prorata			84.96	25.68	110.64
			Total			7142	1486	8629

YEAR - 4 MAINTENANCE III

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Irrigation						
a	4 times through watercourses (Khala) or syphon in command area (125 plants).	Plant	500	2.14	1068.89	0.00	1068.89
b	4 times through engine in uncommand area (125 plants).	Plant	500	3.77	1245.67	637.72	1883.39
2	Hoeing of 50% Plants 4 times (125 Plants)	Plant	500	2.14	1068.89	0.00	1068.89
3	Prunning of Plants as per requirement	Prorata			682.44	0.00	682.44
4	Watch & ward for 12 months	Prorata			1618.41	0.00	1618.41
5	Running & Maintenance of Vehicles	Prorata			0.00	72.76	72.76
6	Maintenance of equipments	Prorata			0.00	72.76	72.76
7	Labour amenities	Prorata			27.41	39.59	67.00
8	Misc works like shifting of pipelines, engines etc. and unforeseen expenditure/repair of watercourses	Prorata			57.56	27.82	85.38
		Total			5769	851	6620

YEAR - 5 MAINTENANCE IV

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Irrigation						
a	2 times through watercourses (Khala) or syphon in command area (125 Plants).	Plant	250	2.14	534.44	0.00	534.44
b	2 times through engine in uncommand area (125 Plants).	Plant	250	3.77	627.63	315.65	943.28
2	Hoeing of 50% Plants 3 times (125 Plants)	Plant	375	2.14	801.67	0.00	801.67
3	Prunning of Plants as per requirement	Prorata			678.33	0.00	678.33
4	Watch & ward for 12 months	Prorata			1618.41	0.00	1618.41
5	Running & Maintenance of Vehicles	Prorata			0.00	47.08	47.08
6	Maintenance of equipments	Prorata			0.00	70.62	70.62
7	Misc works like shifting of pipelines, engines etc. and unforeseen expenditure/repair of watercourses	Prorata			47.96	31.03	78.99
		Total			4308	464	4773

YEAR - 6 MAINTENANCE V

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Irrigation						
	2 times through watercourse (Khala) or syphon in command area (125 Plants).	Plant	250	2.14	534.44	0.00	534.44
2	Watch & ward for 12 months	Prorata			1618.41	0.00	1618.41
3	Misc works and unforeseen expenditure	Prorata			60.30	18.19	78.49
		Total			2213	18	2231

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YEAR - 7 MAINTENANCE VI							
No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch & ward for 6 months	Prorata			808.52	0.00	808.52
2	Repairing of fencing	Prorata			102.78	65.27	168.05
		TOTAL			911	65	977
	Grand Total				56324	19392	75716

Yearwise Cost Statement Canal side Plantation (Minor)

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	YEAR 0 ADVANCE ACTION				13771	13585	27357
2	YEAR 1 - PLANTING YEAR				13514	1242	14757
3	YEAR 2 - MAINTENANCE I				8694	1680	10374
4	YEAR 3 - MAINTENANCE II				7142	1486	8629
5	YEAR - 4 MAINTENANCE III				5769	851	6620
6	YEAR - 5 MAINTENANCE IV				4308	464	4773
7	YEAR - 6 MAINTENANCE V				2213	18	2231
8	YEAR - 7 MAINTENANCE VI				911	65	977
	Grand Total				56324	19392	75716

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।

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा एवं प्रसार
राजस्थान, जयपुर

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

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

Block Plantation_IGNP

No. of Plants - 800 per ha.

Spacing 3mX4M

Unit for Model calculation- per ha.

Perimeter-Average=1500 m

Perimeter/ha=120 m

Labour rate Rs. 259/- per day

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
Year-O Advance Action							
1	Collection of data for microplanning,preparation of microplan and management plan	Prorata			98.67	58.85	157.52
2	Survey of area, alignment of pits for pole fixing, division of area into segments, preparation of treatment map and plantaion card.	Prorata			431.67	100.58	532.25
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	RMT	120	165.99	9796.78	10122.20	19918.98
4	Raising of 960 plants	Plant	960	7.14	4465.60	2385.56	6851.16
5	Purchase of 8 HP Engine	Prorata			0.00	2448.16	2448.16
6	Purchase of PVC/HDPE Pipes of 3 inch dia and 1 inch dia	Prorata			0.00	2409.64	2409.64
7	Purchase of tools and plants	Prorata			49.33	335.98	385.31
8	Purchase of fertilizers and insecticides	Prorata			0.00	706.20	706.20
9	Purchase of Plantation Board including painting and fixing	Prorata			131.56	282.48	414.04
10	Watch and ward for four months	Prorata			2154.22	0.00	2154.22
11	R & M of Vehicle	Prorata			0.00	230.05	230.05
12	Labour amenities	Prorata			431.67	202.23	633.90
13	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata			67.15	119.84	186.99
		Total			17627	19402	37028

Year 1 Planting Year

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Maintenance of 960 Plants in nursery.	Plant	960	2.51	1899.00	510.17	2409.17
2	Raising of 160 Plants for casualty replacement.	Plant	160	7.14	744.27	397.59	1141.86
3	Transportation of 880 plants from Nursery to plantation site	Plant	880	1.93	1556.74	140.17	1696.91
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	Plant	400	13.99	5596.59	0.00	5596.59
b	Command area- Includes digging of pits ; local transportation, treatment of pit with pesticides and fertiliser, making of Thanwala. And initial watering 400 plants	Plant	400	15.64	5741.85	515.74	6257.59
5	Removal of unwanted bushes and ploughing	Prorata			0.00	1553.64	1553.64
6	Digging of 1250 m trench of size 0.40 cm wide and 0.15 cm deep-for irrigation	RMT	1250	2.59	3238.19	0.00	3238.19
7	Levelling of area	Prorata			2954.52	0.00	2954.52
8	Watering of plants after replacement- 6 times				0.00	0.00	
a	400 plants by pump	Plant	400	22.67	5981.67	3084.81	9066.48
b	400 plants by Khala/syphon	Plant	400	12.83	5130.67	0.00	5130.67
9	Weeding and Hoeing 800 plants two times	Plant	1600	3.56	5700.74	0.00	5700.74
10	Hoeing 800 two times	Plant	1600	2.14	3420.44	0.00	3420.44
11	Application of urea and fertilisers	Plant	800	0.59	293.26	181.90	475.16
12	Purchase of PVC pipes	Prorata			0.00	2070.45	2070.45
13	Maintenance of engine	Prorata			0.00	551.05	551.05
14	Construction of cattle guard hut	Prorata			1295.00	918.06	2213.06
15	Watch and Ward charges	Prorata			6464.04	0.00	6464.04
16	R & M of Vehicles	Prorata			0.00	551.05	551.05
17	Labour amenities	Prorata			738.63	36.38	775.01
18	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata			45.22	63.13	108.35
		Total			50801	10574	61375

Year-2 Maintenance-I

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Maintenance of 160 Plants in nursery.	Plant	160	2.51	316.50	85.03	401.53
2	Transportation of 160 plants	Plant	160	1.98	316.56	0.00	316.56
3	Re planting of 80 plants in hard soil in command area including digging of pits, treating with pesticides,fertilisers and watering	Plant	80	11.07	885.26	0.00	885.26
4	Re planting of 80 plants in sandy soil in un-command area including digging of pits, treating with pesticides,fertilisers and watering	Plant	80	12.72	908.56	109.14	1017.70
5	Watering of plants after replacement- 6 times					0.00	
a	400 plants by pump	Plant	2400	3.78	5978.93	3086.95	9065.88
b	400 plants by Khala/syphon	Plant	2400	2.14	5130.67	0.00	5130.67
6	Application of urea and fertilisers- 2 times, 800 plants	Plant	1600	0.59	586.52	363.80	950.32
7	Weeding and Hoeing- 800 plants, 2 times	Plant	1600	3.56	5700.74	0.00	5700.74
8	Hoeing 800 plants two times	Plant	1600	2.14	3420.44	0.00	3420.44
9	Khala repair and cleaning	Prorata			560.48	0.00	560.48
10	R&M of vehicles	Prorata			0.00	367.01	367.01
11	Maintenance and repair of engine	Prorata			0.00	367.01	367.01
12	Watch and Ward charges	Prorata			6464.04	0.00	6464.04
13	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata			26.04	9.63	35.67
		Total			30295	4389	34683

Year-3 Maintenace-II

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watering of plants- 5 times						
a	400 plants by pump	Plant	2000	3.78	4984.04	2571.21	7555.25
b	400 plants by Khala/syphon	Plant	2000	2.14	4275.56	0.00	4275.56
2	Hoeing 800 plants two times	Plant	1600	2.14	3420.44	0.00	3420.44
3	Khala repair and cleaning	Prorata			444.00	0.00	444.00
4	Purchase of PVC pipes	Prorata			0.00	1129.92	1129.92
5	R&M of vehicles	Prorata			0.00	282.48	282.48
6	Application of urea and fertilisers- 2 times, 800 plants	Plant	1600	0.59	586.52	363.80	950.32
7	Maintenance & repair of Engine	Prorata			0.00	423.72	423.72
8	Prunning and tending of 800 plants	Plant	800	2.14	1710.22	0.00	1710.22
9	Watch and Ward charges	Prorata			6464.04	0.00	6464.04
10	Miscellaneous expenditure (Labour, Instruments, Machine,repair of watercourse etc)	Prorata			108.26	57.78	166.04
		Total			21993	4829	26822

Year-4 - Maintenance-III

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watering of plants 4 times						
a	400 plants by pump	Plant	1600	3.78	3985.04	2058.68	6043.72
b	400 plants by Khala/syphon	Plant	1600	2.14	3420.44	0.00	3420.44
2	Hoeing 800 plants two times	Plant	1600	2.14	3420.44	0.00	3420.44
3	Pruning and tending of 800 plants (2 times	Plant	1600	2.14	3420.44	0.00	3420.44
4	R&M of vehicles	Prorata			0.00	156.22	156.22
5	Maintenance & repair of Engine	Prorata			0.00	353.10	353.10
6	Watch and Ward charges	Prorata			6464.04	0.00	6464.04
7	Miscellaneous expenditure/repair of watercourse	Prorata			153.48	95.23	248.71
		Total			20864	2663	23527

Year-5 Maintenance-IV

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watering of plants 2 times						
a	400 plants by pump	Plant	800	3.78	1992.52	1029.34	3021.86
b	400 plants by Khala/syphon	Plant	800	2.14	1710.22	0.00	1710.22
2	Pruning and tending of 500 plants	Plant	500	8.54	4268.70	0.00	4268.70
3	R&M of vehicles	Prorata			0.00	155.15	155.15
4	Maintenance & repair of Engine	Prorata			0.00	254.66	254.66
5	Watch and Ward charges	Prorata			6464.04	0.00	6464.04
6	Miscellaneous expenditure/repair of watercourse	Prorata			42.48	21.40	63.88
		Total			14478	1461	15939

Year-6 Maintenance-V

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watering of plants- 2 times						
a	400 plants by Khala/syphon	Plant	800	2.14	1710.22	0.00	1710.22
2	Pruning and tending of 450 plants	Plant	450	8.52	3835.67	0.00	3835.67
3	Watch and Ward charges	Prorata			6464.04	0.00	6464.04
4	Miscellaneous expenditure/repair of watercourse	Prorata			53.44	39.59	93.03
		Total			12063	40	12103

Year-7 Maintenance-IV

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch and Ward charges four months	Prorata			2154.22	0.00	2154.22
2	Fencing repair	Prorata			209.67	104.86	314.53
		Total			2363.89	104.86	2468.75
	Grand Total				170484	43462	213946

Yearwise Cost Statement Block Plantation_IGNP

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	YEAR 0 ADVANCE ACTION				17627	19402	37028
2	YEAR 1 - PLANTING YEAR				50801	10574	61375
3	YEAR 2 - MAINTENANCE I				30295	4389	34683
4	YEAR 3 - MAINTENANCE II				21993	4829	26822
5	YEAR - 4 MAINTENANCE III				20864	2663	23527
6	YEAR - 5 MAINTENANCE IV				14478	1461	15939
7	YEAR - 6 MAINTENANCE V				12063	40	12103
8	YEAR - 7 MAINTENANCE VI				2364	105	2469
	Grand Total				170484	43462	213946

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।

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा एवं प्रसार
राजस्थान, जयपुर

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

Block Plantation_Non IGNP (Afforestation Model I)

1 Plantation Unit -15 ha. (500 m X 300 m)
2 No. of Plants - 500 per ha.
3 Spacing 4mX5M
4 Unit for Model calculation- per ha.
5 Perimeter - 1600 Meters
6 Perimeter per ha. 107 m
7 Labour rate Rs. 259/- per day
8 Period - 8 Years

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
Year-0 Advance Action							
1	Collection of data for microplanning, Preparation of microplan and management plan	Prorata	1		98.67	58.85	157.52
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	1		431.67	101.65	533.32
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	RMT	107	166.09	8749.81	9022.24	17772.05
4	Water and Soil Conservation measures in plantation area A. Digging V- ditch 200 RM/Ha.	RMT	200	26.43	5286.89	0.00	5286.89
	B. Construction of Check Dam/Nadi	Prorata			1511.52	707.27	2218.79
5	Raising of 550 plants					0.00	
a	Shady Plants (one year old) 110 Plants	Plant	110	9.02	690.60	301.10	991.70
b	Thorny Plants(6 Months old) 440 plants	Plant	440	5.26	1331.06	982.37	2313.43
6	Digging pits for 500 plants	PIT	500	13.81	6906.67	0.00	6906.67
7	Expenditure on purchase of pesticides	Prorata			0.00	506.11	506.11
8	Purchase of Nitrogen fertilizers	Prorata			0.00	252.52	252.52
9	Purchase of seeds of grasses (sewan/ dhaman) 2.5 KG and indigenous tree species (kumut, ber, khejari, raunj,etc.) 2.5 KG	Kg.	5.00	117.93	322.14	267.50	589.64
10	Construction of one water storage tank-50,000 liters capacity	Prorata			9225.33	4405.19	13630.52
11	Construction of cattle guard hut	Prorata			431.67	202.23	633.90
12	R & M of Vehicle	Prorata			0.00	101.65	101.65
13	Plantation Board	Prorata			19.19	262.15	281.34
14	Plantation Gate	Prorata			431.67	470.80	902.47
15	watch and ward for four months	Prorata			1797.93	0.00	1797.93
16	Expenditure on purchase of Material for irrigation measures except traditional system	Prorata			0.00	184.04	184.04
17	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata			67.15	247.17	314.32
		Total			**37302**	**18073**	**55375**

Year-1 Planting Year

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Maintenance of Plants in nursery.						
a	Shady Plants 110 plants	Plant	110	2.17	188.46	50.45	238.91
b	Thorny Plants 440 plants	Plant	440	2.85	986.90	265.85	1252.76
2	Raising of Plants for casualty replacement.					0.00	
a	One year old 22 Plants	Plant	22	9.02	138.12	60.22	198.34
b	Six months old 88 Plants	Plant	88	5.26	266.21	196.47	462.69
3	Transportation of 550 plants from Nursery to plantation site	Plant	550	3.35	1477.26	364.87	1842.13
4	Planting 500 plants - Planting Activity					0.00	
	Includes digging of pits ; local transportation, treatment of pit with pesticides and fertiliser, making of Thanwala, and initial watering	Plant	500	22.93	11463.15	0.00	11463.15
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	757.56	757.56
	B. Seeds sowing in ploughed area and on V-ditches	Prorata			1619.78	0.00	1619.78
6	Seed sowing of kumtha, ber, raunj,etc. near fencing or/and planting thor (as per availability near the site)	Prorata			237.07	0.00	237.07
7	Watering-					0.00	
a	450 plants four times per year (15 ltr. Per plant) (1800-200=1600)	Plant	1600	13.30	18763.11	2520.92	21284.03
b	200 plants from rain water available in tanka/s (one time)	Plant	200	8.92	1784.22	0.00	1784.22
8	Weeding and Hoeing 450 plants after rains	Plant	450	4.60	2072.00	0.00	2072.00
9	Hoeing of 450 plants after each watering (4 times)	Plant	1800	2.85	5130.67	0.00	5130.67
10	Protection cover for 50 plants from heat/cold	Plant	50	9.02	431.67	19.26	450.93
11	Prunning of 10% plants (50 plant)	Plant	50	2.49	124.70	0.00	124.70
12	Watch and Ward charges	Prorata			5392.41	0.00	5392.41
13	R & M of Vehicle	Prorata			0.00	171.20	171.20
14	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata			32.22	211.86	294.08
		Total			**50158**	**4619**	**54777**

Year-2 Maintenance-I

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Maintenance of Plants in nursery.						
a	One year old 22 Plants	Plant	22	2.17	37.69	10.09	47.78
b	Six months old 88 Plants	Plant	88	2.85	197.38	53.17	250.55
2	Transportation of 110 plants from nursery to plantation site	Plant	110	3.34	296.00	71.69	367.69
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,	Plant	100	29.48	2785.96	161.57	2947.53
4	Watering					0.00	
a	Watering 450 plants three times per year (15 ltr./ plant) (1350-200=1150)	Plant	1150	13.34	13573.52	1767.64	15341.16
b	200 plants from rain water available in tanka/s-one time	Plant	200	8.85	1770.52	0.00	1770.52
4	Weeding and Hoeing of 450 plants after rains	Plant	450	4.60	2072.00	0.00	2072.00
5	Hoeing of 450 plants after each watering (three times	Plant	1350	2.85	3848.00	0.00	3848.00
6	Protection cover for 50 plants from heat/cold	Plant	50	9.04	431.67	20.33	452.00
7	Prunning of 70% plants (350 plant)	Plant	350	2.49	872.93	0.00	872.93
8	Repair of Fencing	Prorata			83.59	20.33	103.92
9	Expenditure of maintenance of vehicles and contract vehicles	Prorata			0.00	134.82	134.82
10	Watch and Ward charges	Prorata			5392.41	0.00	5392.41
11	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata			67.15	188.32	255.47
		Total			31429	2428	33857

Year-3 Maintenance-II

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watering -A. 50 plants once per year (15 ltr. Per plant)	Plant	50	13.38	596.11	72.76	668.87
	B. 200 plants from rain water available in tanka/s	Plant	200	8.85	1770.52	0.00	1770.52
2	Weeding and Hoeing 250 plants after rains	Plant	250	4.60	1151.11	0.00	1151.11
3	Hoeing of 250 plants (one time)	Plant	250	2.85	712.59	0.00	712.59
4	Prunning of 20% plants (100 plants)	Plant	100	2.47	246.67	0.00	246.67
5	Watch and Ward charges	Prorata			5392.41	0.00	5392.41
6	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata			154.85	50.29	205.14
		Total			10024	123	10147

Year-4 Maintenance-III

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch and Ward charges	Prorata			5392.41	0.00	5392.41
2	Fencing repair	Prorata			86.33	20.33	106.66
3	Miscellaneous expenditure	Prorata			27.41	127.33	154.74
		Total			5506.15	147.66	5653.81

Year-5 Maintenance-IV

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch and Ward charges	Prorata			5392.41	0.00	5392.41
2	Fencing repair	Prorata			86.33	20.33	106.66
3	Miscellaneous expenditure	Prorata			30.15	127.33	157.48
		Total			5508.89	147.66	5656.55

Year-6 Maintenance-V

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch and Ward charges	Prorata			5392.41	0.00	5392.41
2	Fencing repair	Prorata			86.33	20.33	106.66
3	Miscellaneous expenditure	Prorata			[illegible]	127.33	157.48
		Total			5508.89	147.66	5656.55

Year-7 Maintenance-VI

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch and Ward charges	Prorata			5392.41	0.00	5392.41
2	Fencing repair	Prorata			86.33	20.33	106.66
3	Miscellaneous expenditure	Prorata			30.15	127.33	157.48
		Total			5508.89	147.66	5656.55
	Grand Total				150946	25833	176779

Yearwise Cost Statement Block Plantation_Non IGNP (Afforestation Model I

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	YEAR 0 ADVANCE ACTION				37302	18073	55375
2	YEAR 1 - PLANTING YEAR				50158	4619	54777
3	YEAR 2 - MAINTENANCE I				31429	2428	33857
4	YEAR 3 - MAINTENANCE II				10024	123	10147
5	YEAR - 4 MAINTENANCE III				5506	148	5654
6	YEAR - 5 MAINTENANCE IV				5509	148	5657
7	YEAR - 6 MAINTENANCE V				5509	148	5657
8	YEAR - 7 MAINTENANCE VI				5509	148	5657
	Grand Total				150946	25833	176779

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।

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा एवं प्रसार
राजस्थान, जयपुर

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

Model Cost Norms Sand Dune Stabilisation

Labour rate Rs. 259/- per day

Unit - 25 Ha

Perimeter - Average 2050 RM (625 MX400M)

No. of Plants 600

Spacing 4MX5M (in interdunal Area)

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
YEAR- 0 Advance Action							
1	Collection of data for miroplanning, preparation of microplan and management plan	Prorata	1	407.94	323.41	84.53	407.94
2	Survey of area, alignment of pits for fencing posts, division of area into segments, preparation of treatment map, plantation Journal and card.	Prorata	1	533.32	431.67	101.65	533.32
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	Meter	82	165.93	6679.19	6927.18	13606.37
4	Raising of plants					0.00	
a	One year old 110 Plants	Plant	110	9.02	690.60	301.10	991.70
b	Six months old 550 Plants	Plant	550	5.26	1663.82	1227.96	2891.79
5	Purchase of pesticides, fertilisers,etc.	Prorata	1	757.56	0.00	757.56	757.56
6	Digging of 100 pits ((0.4M+0.5M)/2)^2X0.45M)	Pit	100	9.21	920.89	0.00	920.89
7	Purchase of 4 kg seeds/ ha. (khimp, tumba, sonamukhi sewan, etc.)	Kg.	4	107.00	0.00	428.00	428.00
8	Mulching on shifting dunes (on an average in 20% area) 800 m /Ha	Meter	800	12.65	10118.81	0.00	10118.81
9	Construction of water storage tanks/Water harvesting structures and other SMC works	Prorata	1	8163.62	5533.56	2630.06	8163.62
10	Construction of cattle guard hut (Jhompa)	Prorata	1	379.91	259.00	120.91	379.91
11	Running and Maintenance of Vehicles	Prorata	1	60.99	0.00	60.99	60.99
12	Purchase of plantation board, its painting and fixing on site.	Prorata	1	396.61	52.07	344.54	396.61
13	Construction of plantation gate (including purchase of material)	Prorata	1	541.48	259.00	282.48	541.48
14	Purchase of material for watering purposes.	Prorata	1	92.02	0.00	92.02	92.02
15	Watch and Ward for 2 months.	Prorata	2	269.96	539.93	0.00	539.93
16	Miscellaneous expenditure like labour amenities, tools and plants,etc.	Prorata			228.85	156.22	385.07
		Total			27701	13515	41216

YEAR 1 - PLANTING YEAR

No.		Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1		Maintenance of Plants in nursery-						
	a	One year old 110 Plants	Plant	110	2.17	188.46	50.45	238.91
	b	Six months old 550 Plants	Plant	550	2.85	1233.63	332.31	1565.95
2		Raising of Plants for casualty replacement.					0.00	
	a	One year old 32 Plants	Plant	32	9.02	200.90	87.59	288.49
	b	Six months old 100 Plants	Plant	100	5.26	302.51	223.27	525.78
3		Making and sowing of pellets / balls-					0.00	
	a	Making of pellets / balls total quantity will be 24 kg. (Ratio of seed, manure, sand & clay will be 1:1:2:2) rate	6 Kg.	4	60.08	183.63	56.71	240.34
	b	Sowing of pellets/ balls.	6 Kg.	4	259.00	1036.00	0.00	1036.00
4		Transportation of 660 plants from Nursery to Plantation site.	Plant	660	3.33	1759.56	440.84	2200.40
5		Planting in sandy soil- Planting Activity					0.00	
		Includes digging of pits ; local transportation, treatment of pit with pesticides and fertiliser, making of Thanwala. And initial watering (500 plants)	Plant	500	24.17	11330.22	756.49	12086.71
6		Plantating in interdunal area- Planting Activity					0.00	
		Includes local transportation, treatment of pit with pesticides and fertiliser, making of Thanwala and initial watering (100 Plants)	Plant	100	21.75	2035.00	140.17	2175.17
7		Watering of 540 plants, twice in a year (15 liters per watering)					0.00	
	a	on uneven sand dunes 450 Plants	Plant	900	14.23	10864.30	1946.33	12810.63
	b	on even surface (twice) 90 plants	Plant	180	13.36	2128.19	276.06	2404.25
	c	on even surface from water in tanka (once)90 plants	Plant	90	8.86	797.56	0.00	797.56
8		Weeding &Hoeing of 90 plants in inerdunal area-					0.00	
	a	Weeding &Hoeing of plants after rains	Plant	90	4.60	413.85	0.00	413.85
	b	Hoeing (three times) after every watering	Plant	270	2.84	766.04	0.00	766.04
9		Silvicultural operations (in interdunal area) like protection from heat & cold, prunning etc.	Prorata	1	1068.66	970.22	98.44	1068.66
10		Watch & ward	Prorata	1	3231.33	3231.33	0.00	3231.33
11		Running & Maintenance of Vehicles	Prorata	1	101.65	0.00	101.65	101.65
12		Miscellaneous expenditure like labour amenities, tools and plants,etc.	Prorata			68.52	201.16	269.68
			Total			37510	4711	42221

Abhishek

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YEAR 2 - Maintenance I

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Maintenance of Plants in nursery-						
a	One year old 32 Plants	Plant	32	2.17	54.83	14.68	69.50
b	Six months old 100 Plants	Plant	100	2.85	224.30	60.42	284.72
2	Transportation of 110 plants from Nursery to Plantation site.	Plant	110	3.34	293.26	73.83	367.09
3	Planting in sandy soil- Planting Activity					0.00	
	Includes digging of pits ; local transportation, treatment of pit with pesticides and fertilisers, making of Thanwala and initial watering (80 Plants)	Plant	80	24.17	1813.00	120.91	1933.91
4	Planting in interdunal area- Planting Activity					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)	Plant	20	26.66	504.30	28.89	533.19
5	Watering of 540 plants, thrice in a year (15 litres per					0.00	
a	on sand dunes (three times) 450 plants	Plant	1350	14.23	16296.44	2918.96	19215.40
b	on even surface/interdunal area (three times) 90 plants	Plant	270	13.37	3194.33	415.16	3609.49
c	on even surface from water in tanka (once)90 plants	Plant	90	8.86	797.56	0.00	797.56
6	Weeding &Hoeing of plants in inerdunal area (90 plants)					0.00	
a	Weeding &Hoeing of plants after rains	Plant	90	4.60	413.85	0.00	413.85
b	Hoeing (four times) after every watering	Plant	360	2.84	1022.30	0.00	1022.30
7	Silvicultural operations (in interdunal area) like protection from heat & cold, prunning etc.	prorata			1655.41	80.25	1735.66
8	Watch & ward	prorata			3231.33	0.00	3231.33
9	Running & Maintenance of Vehicles	prorata			0.00	80.25	80.25
10	Miscellaneous expenditure (labour amenities, Tool & plants,fencing repair, etc.	prorata			113.74	234.33	348.07
		Total			29615	4028	33642

YEAR 3 - Maintenance II

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watering of 250 plants, once in a year (15 liters per						
a	on uneven sand dunes (160 Plants)	Plant	160	14.48	2059.67	257.87	2317.54
c	on even surface from water in tanka (90 Plants)	Plant	90	8.86	797.56	0.00	797.56
2	Weeding &Hoeing of plants in interdunal area-					0.00	
	Hoeing after watering	Plant	90	2.83	254.89	0.00	254.89
3	Prunning (90 plants)	Plant	90	2.77	249.41	0.00	249.41
4	Watch & ward	prorata	1	3231.33	3231.33	0.00	3231.33
5	Miscellaneous expenditure	prorata	1	259.71	76.74	182.97	259.71
		Total			6670	441	7110

YEAR 4 - Maintenance III

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch & ward	Prorata	1	3231.33	3231.33	0.00	3231.33
2	Miscellaneous expenditure	Prorata	1	273.32	231.59	41.73	273.32
		Total			3463	42	3505

YEAR 5 - Maintenance IV

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch & ward	Prorata	1	3231.33	3231.33	0.00	3231.33
2	Miscellaneous expenditure	Prorata	1	273.32	231.59	41.73	273.32
		Total			3463	42	3505

YEAR 6 - Maintenance V

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch & ward	Prorata	1	3231.33	3231.33	0.00	3231.33
2	Miscellaneous expenditure	Prorata	1	273.32	231.59	41.73	273.32
		Total			3463	42	3505

YEAR 7 - Maintenance VI

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch & ward for 6 months	Prorata	1	1617.04	1617.04	0.00	1617.04
2	Miscellaneous expenditure	Prorata	1	97.78	50.70	47.08	97.78
		Total			1668	47	1715
	Grand Total				113551.46	22867.46	136419

Yearwise Cost Statement- Sand Dune Stabilisation

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	YEAR 0 ADVANCE ACTION				27701	13515	41216
2	YEAR 1 - PLANTING YEAR				37510	4711	42221
3	YEAR 2 - MAINTENANCE I				29615	4028	33642
4	YEAR 3 - MAINTENANCE II				6670	441	7110
5	YEAR - 4 MAINTENANCE III				3463	42	3505
6	YEAR - 5 MAINTENANCE IV				3463	42	3505
7	YEAR - 6 MAINTENANCE V				3463	42	3505
8	YEAR - 7 MAINTENANCE VI				1668	47	1715
	Grand Total				113551	22867	136419

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।

उप वन संरक्षक (प्रशा...)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा एवं प्रसार
राजस्थान, जयपुर

मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

Model Cost Norms silvi-pastoral plantation in IGNP area

Labour rate Rs. 259/- per day

Unit- 50 Ha

Perimeter - Average 3000 RM (625 MX400M)

Perimetre/ha- 60 m

No. of Plants- 200

Spacing -5MX5M

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
	YEAR- 0 Advance Action						
1	Collection of data for Microplanning,preparation of microplan and management plan	Prorata	1	203.13	160.33	42.80	203.13
2	Survey of area, alignment of pits for pole fixing, division of area into segments, preparation of treatment map and plantaion card.	Prorata	1	439.01	391.93	47.08	439.01
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	Meter	60	165.98	4897.70	5061.10	9958.80
4	Raising of 240 plants for planting including 20% extra	Plant	240	9.02	1506.77	656.94	2163.71
5	Raising of Sewan Grass slips and other indigenous plants in 10cmX15 cm bags (includes					0.00	
a	Sewan Grass 960 slips	Plant	960	2.29	1447.38	750.72	2198.10
b	Other indigenous plants like ber khejari, raunj, etc. 240 plants	Plant	240	2.29	361.85	187.68	549.53
6	Purchase of irrigation equipments				0.00	0.00	
	a. Purchase of 8 HP Engine	Prorata	1	642.00	0.00	642.00	642.00
	b. Purchase of HDPE/LGS pipe (3 inch diameter) 13.2 m per Ha	Prorata	1	1816.86	0.00	1816.86	1816.86
	c. Purchase of PVC pipes of 3 inch dia & 1 inch dia	Prorata	1	551.05	0.00	551.05	551.05
7	Purchase of tools, plants & insecticides	Prorata	1	147.66	0.00	147.66	147.66
8	Purchase of fertilizers, DAP & Urea Vermi compost, NPK	Prorata	1	353.10	0.00	353.10	353.10
9	Sign board including painting and fixing	Prorata	1	110.21	0.00	110.21	110.21
10	Purchase of seeds of Sewan grass/ Ber/Khejari and other indigenous species (6 Kg/Ha)	Prorata	6	107.00	0.00	642.00	642.00
11	Construction of Cattle guard hut	Prorata	1	707.39	518.00	189.39	707.39
12	R & M of Vehicle	Prorata	1	184.04	0.00	184.04	184.04
13	Labour amenities	Prorata	1	68.48	0.00	68.48	68.48
14	Watch & Ward for 4 months	Prorata	1	539.93	539.93	0.00	539.93
15	Misc. and unforeseen expenditure	Prorata	1	115.88	35.63	80.25	115.88
	TOTAL YEAR 0				**9860**	**11531**	**21391**

YEAR 1 - PLANTING YEAR

No.		Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1		Maintenance of 240 plants in Nursery	Plant	240	2.17	411.19	110.07	521.26
2		Maintenance of Sewan Grass and plants in					0.00	
	a	Sewan Grass (960)	Plant	960	1.37	967.21	346.75	1313.96
	b	Other indigineous plants like ber khejari, raunj ,etc. (240)	Plant	240	1.37	241.80	86.69	328.49
3		Construction of Nadi/ water storage tanks	Prorata	1	1770.02	1036.00	734.02	1770.02
4		600 m trench digging- of size 20cmX30cmX50 cm for irrigation	Meter	600	2.14	1282.67	0.00	1282.67
5		Transport of 220 plants upto site including loading and unloading (upto 5 kms.)	Plant	220	1.96	407.00	24.61	431.61
6		Transport of 800 grass slips and 200 plants raised in 10 cmX15cm bags upto site including loading and unloading (upto 5 kms.)	Plant	1000	0.89	886.63	0.00	886.63
7		Mulching on shifting sand dunes (200 m/Ha)	Meter	200	8.71	1741.74	0.00	1741.74
8		Sowing of grass seeds	Prorata	1	234.33	234.33	0.00	234.33
9		Planting-					0.00	
		a. Digging of 45cm×45cm×45 cm pit and planting of 200 plants	Pit	200	15.69	2938.07	199.02	3137.09
		b. Planting of 800 grass slips and 200 pre-germinated plants, including local transport and watering	Plant	1000	2.86	2132.30	731.88	2864.18
10		Watering of 200 plants (4 times)	Plant	800	4.13	2269.33	1035.76	3305.09
11		Watering of 1000 grass slips/plants on trenches (3 times)	Plant	3000	2.26	4592.11	2192.43	6784.54
12		Weeding and hoeing of 200 plants	Plant	200	3.56	711.22	0.00	711.22
13		Application of urea and fertilizer (200 Plants)	Plant	200	0.63	86.33	39.59	125.92
14		Raising of 40 plants for casualty replacement	Plant	40	9.02	251.13	109.49	360.62
15		Running & Maintenance of Vehicles	Prorata	1	110.21	0.00	110.21	110.21
16		Maintenance of Engine.	Prorata	1	72.76	0.00	72.76	72.76
17		Labour amenities	Prorata	1	145.52	0.00	145.52	145.52
18		Watch & Ward for 12 months	Prorata	1	1618.41	1618.41	0.00	1618.41
19		Misc. and unforeseen expenditure	Prorata	1	88.62	47.96	40.66	88.62
		TOTAL PLANTING YEAR 1				21855	5979	27835

YEAR 2 - MAINTANANCE-I

No.		Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1		Maintenance of 40 plants in Nursery	Plant	40	2.17	68.53	18.35	86.88
2		Transportation of 40 plants from nursery to site for casualty replacement including loading and unloading(upto 5km)	Plant	40	1.94	71.26	6.42	77.68
3		Planting for casualty replacement including treatment, local transport and watering 40 Plants	Plant	40	12.25	449.48	40.66	490.14
4		Irrigation -					0.00	
	a	Before casualty replacement					0.00	
	i	160 plants watering 1 time	Plant	160	4.12	452.22	206.51	658.73
	ii	750 grass slips/plants on trenches - 1 watering	Plant	750	2.24	1131.93	544.63	1676.56
	b	After casualty replacement					0.00	
	i	200 plants- 2 waterings	Plant	400	4.12	1130.56	516.81	1647.37
	ii	750 grass slips/plants on trenches - 1 watering	Plant	750	2.24	1130.56	545.70	1676.26
5		Running & Maintenance of Vehicles	Protata	1	110.21	0.00	110.21	110.21
6		Maintenance of Engine.	Protata	1	110.21	0.00	110.21	110.21
7		Labour amenities	Protata	1	184.04	0.00	184.04	184.04
8		Purchase of PVC pipes of 1 Inch dia	Protata	1	197.95	0.00	197.95	197.95
9		Watch & Ward for 12 months	Protata	1	1617.04	1617.04	0.00	1617.04
10		Miscellaneous and unforeseen expenditure	Protata	1	179.31	115.11	64.20	179.31
		Total Year 2				6167	2546	8712

YEAR 3 - MAINTENANCE-II

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch & Ward charges for 12 months	Prorata	1	1617.04	1617.04	0.00	1617.04
2	Irrigation of plants-					0.00	
	Watering - 2 times (180 plants)	Plant	360	4.12	1020.93	463.31	1484.24
3	Maintenance of Engine with oil etc.	Prorata	1	72.76	0.00	72.76	72.76
4	Miscellaneous and unforeseen expenditure	Prorata	1	70.70	58.93	11.77	70.70
	Total Year 3				2697	548	3245

YEAR 4 : MAINTENANCE-III

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch & Ward charges for 12 months	Prorata	1	1617.04	1617.04	0.00	1617.04
2	Irrigation of plants-					0.00	
	Watering - 2 times (180 plants)	Plant	360	4.12	1020.93	463.31	1484.24
3	Maintenance of Engine with oil etc.	Prorata	1	72.76	0.00	72.76	72.76
4	Miscellaneous and unforeseen expenditure	Prorata	1	70.70	58.93	11.77	70.70
	Total Year 4				2697	548	3245

YEAR 5 : MAINTENANCE-IV

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch & Ward charges for 12 months	Prorata	1	1617.04	1617.04	0.00	1617.04
2	Fencing reparing etc	Prorata	1	58.40	37.00	21.40	58.40
	Total Year 5				1654	21	1675

YEAR 6 : MAINTENANCE-V

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch & Ward charges for 12 months	Prorata	1	1617.04	1617.04	0.00	1617.04
2	Fencing reparing etc	Prorata	1	58.40	37.00	21.40	58.40
	Total Year 6				1654	21	1675

YEAR 7 : MAINTENANCE-VI

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch & Ward charges for 4 months	Prorata	1	539.93	539.93	0.00	539.93
2	Fencing reparing etc	Prorata	1	62.51	41.11	21.40	62.51
	Total Year 7				581	21	602

Yearwise Cost Statement - silvi-pastoral plantation in IGNP area

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	YEAR 0 ADVANCE ACTION				9860	11531	21391
2	YEAR 1 - PLANTING YEAR				21855	5979	27835
3	YEAR 2 - MAINTENANCE I				6167	2546	8712
4	YEAR 3 - MAINTENANCE II				2697	548	3245
5	YEAR - 4 MAINTENANCE III				2697	548	3245
6	YEAR - 5 MAINTENANCE IV				1654	21	1675
7	YEAR - 6 MAINTENANCE V				1654	21	1675
8	YEAR - 7 MAINTENANCE VI				581	21	602
	Grand Total				47165	21216	68381

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।

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा एवं प्रसार
राजस्थान, जयपुर

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

Model Cost Norms silvi-pastoral plantation in Non-IGNP area

Labour rate Rs. 259/- per day

Perimeter - Average 3000 RM (1000 MX500M)

No. of Plants- 200
Spacing - 5MX5M

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
	YEAR- 0 Advance Action						
1	Collection of data for Microplanning,preparation of microplan and management plan	Prorata	1	203.13	160.33	42.80	203.13
2	Survey of area, alignment of pits for pole fixing, division of area into segments, preparation of treatment map and plantation card.	Prorata	1	439.01	391.93	47.08	439.01
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	Meter	60	165.98	4897.70	5061.10	9958.80
4	Raising of 240 plants for planting including 20% extra	Plant	240	9.02	1506.77	656.94	2163.71
5	Raising of Sewan Grass and plants in 10cmX15					0.00	
a	Sewan Grass 960 slips	Plant	960	2.29	1447.38	750.72	2198.10
b	Other indigineous plants like ber khejari, raunj ,etc. 240 plants	Plant	240	2.29	361.85	187.68	549.53
6	Construction of water storage tanks/Water harvesting structures	Prorata	1	941.72	518.00	423.72	941.72
7	Purchase of tools, plants & insecticides	Prorata	1	147.66	0.00	147.66	147.66
8	Purchase of fertilizers, DAP & Urea Vermi compost, NPK	Prorata	1	176.55	0.00	176.55	176.55
9	Sign board including painting and fixing	Prorata	1	110.21	0.00	110.21	110.21
10	Purchase of seeds of Sewan grass/ Ber/Khejari and other indegenous species (6 Kg/Ha)	Prorata	1	642.00	0.00	642.00	642.00
11	Construction of Cattie guard hut	Prorata	1	707.39	518.00	189.39	707.39
12	R & M of Vehicle	Prorata	1	184.04	0.00	184.04	184.04
13	Labour amenities	Prorata	1	68.48	0.00	68.48	68.48
14	Watch & Ward for 4 months	Prorata	1	539.93	539.93	0.00	539.93
15	Misc. and unforeseen expenditure	Prorata	1	117.42	32.89	84.53	117.42
	TOTAL YEAR 0				10375	8773	19148

Sd/-   Sd/-

YEAR 1 - PLANTING YEAR							
No.	Item of Works	Unit	Qty.	Rate (Rs)	Labour Cost	Material Cost	Total Cost
1	Maintenance of 240 plants in Nursery	Plant	240	2.17	411.19	110.07	521.26
2	Maintenance of Sewan Grass and plants in 10cmX15 cm bags (includes 20% extra)					0.00	
a	Sewan Grass (960)	Plant	960	1.37	967.21	346.75	1313.96
b	Other indigineous plants like ber khejari, raunj, etc. (240)	Plant	240	1.37	241.80	86.69	328.49
3	600 m trench digging- of size 20cm deepX30cm at bottom and 50 cms at top- for irrigation	Meter	600	2.14	1282.67	0.00	1282.67
4	Transport of 220 plants upto site including loading and unloading (upto 5 kms.)	Plant	220	1.96	405.63	24.61	430.24
5	Transport of 800 grass slips and 200 plants raised in 10 cmX15cm bags upto site including loading and unloading (upto 5 kms.)	Plant	1000	0.89	888.00	0.00	888.00
6	Mulching on shifting sand dunes (200 m/Ha)	Meter	200	8.72	1743.11	0.00	1743.11
7	Sowing of grass seeds	Prorata	1	234.33	234.33	0.00	234.33
8	Planting					0.00	
	a. Digging of 45 cm×45 cm×45 cm pit and planting of 200 plants	Pit	200	15.69	2938.07	199.02	3137.09
	b. Planting of 800 grass slips and 200 pre-germinated plants, including local transport and watering	Plant	1000	2.86	2132.30	731.88	2864.18
9	Watering of 200 plants (4 times)	Plant	200	53.37	9448.70	1225.15	10673.85
10	Weeding and hoeing of 200 plants	Plant	200	3.56	712.59	0.00	712.59
11	Hoeing of 200 plants 3 times	Meter	600	2.14	1282.67	0.00	1282.67
12	Application of urea and fertilizer (200 Plants)	Plant	200	0.63	87.70	38.52	126.22
13	Raising of 40 plants for casualty replacement	Plant	40	9.02	251.13	109.49	360.62
14	Running & Maintenance of Vehicles	Prorata	1	110.21	0.00	110.21	110.21
15	Labour amenities	Prorata	1	147.66	0.00	147.66	147.66
16	Watch & Ward for 12 months	Prorata	1	1617.04	1617.04	0.00	1617.04
17	Misc. and unforeseen expenditure	Prorata	1	94.87	52.07	42.80	94.87
	TOTAL PLANTING YEAR 1				24696	3173	27869

YEAR 2 - MAINTANANCE-I							
No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Maintenance of 40 plants in Nursery	Plant	40	2.17	68.53	18.35	86.88
2	Transportation of 40 plants from nursery to site for casualty replacement including loading and unloading(upto 5km)	Plant	40	1.94	71.26	6.42	77.68
3	Planting for casualty replacement including treatment, local transport and watering 40 Plants	Plant	40	12.23	449.48	39.59	489.07
4	Irrigation					0.00	
	A. Before casualty replacement-					0.00	
	160 plants- watering- one time	Plant	160	13.34	1889.74	245.03	2134.77
	B. After casualty replacement-					0.00	
	200 plants -2 waterings	Plant	400	13.34	4725.04	612.04	5337.08
5	Hoeing of 200 plants 3 times	Meter	600	2.14	1282.67	0.00	1282.67
6	Running & Maintenance of Vehicles	Protata	1	110.21	0.00	110.21	110.21
7	Labour amenities	Protata	1	184.04	0.00	184.04	184.04
8	Watch & Ward for 12 months	Protata	1	1617.04	1617.04	0.00	1617.04
9	Misc. and unforeseen expenditure	Protata	1	178.71	112.37	66.34	178.71
	Total Year 2				10216	1282	11498

YEAR 3 - MAINTENANCE-II

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch & Ward charges for 12 months	Prorata	1	1617.04	1617.04	0.00	1617.04
2	Irrigation of plants						
	a. Watering - 2 times (180 plants)					0.00	
3	Hoeing of 180 plants 2 times	Plant	360	13.34	4248.15	553.19	4801.34
4	Misc. and unforeseen expenditure	Meter	360	2.18	783.85	0.00	783.85
		Prorata			56.19	8.56	64.75
	Total Year 3				6705	562	7267

YEAR 4 : MAINTENANCE-III

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch & Ward charges for 12 months	Prorata	1	1617.04	1617.04	0.00	1617.04
2	Irrigation of plants-						
	Watering - 2 times (180 plants)					0.00	
3	Hoeing of 180 plants 2 times	Plant	360	13.34	4248.15	554.26	4802.41
4	Misc. and unforeseen expenditure	Meter	360	2.18	783.85	0.00	783.85
		Prorata	1	64.75	56.19	8.56	64.75
	Total Year 4				6705	563	7268

YEAR 5 : MAINTENANCE-IV

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch & Ward charges for 12 months	Prorata	1	1617.04	1617.04	0.00	1617.04
2	Fencing reparing etc	Prorata	1	58.70	38.37	20.33	58.70
	Total Year 5				1655	20	1676

YEAR 6 : MAINTENANCE-V

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch & Ward charges for 12 months	Prorata	1	1617.04	1617.04	0.00	1617.04
2	Fencing reparing etc	Prorata	1	58.70	38.37	20.33	58.70
	Total Year 6				1655	20	1676

YEAR 7 : MAINTENANCE-VI

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch & Ward charges for 4 months	Prorata	1	539.93	539.93	0.00	539.93
2	Fencing reparing etc	Prorata	1	60.54	37.00	23.54	60.54
	Total Year 7				577	24	600
	Grand Total				62585	14417	77002

Yearwise Cost Statement - silvi-pastoral plantation in Non-IGNP area

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	YEAR 0 ADVANCE ACTION				10375	8773	19148
2	YEAR 1 - PLANTING YEAR				24696	3173	27869
3	YEAR 2 - MAINTENANCE I				10216	1282	11498
4	YEAR 3 - MAINTENANCE II				6705	562	7267
5	YEAR - 4 MAINTENANCE III				6705	563	7268
6	YEAR - 5 MAINTENANCE IV				1655	20	1676
7	YEAR - 6 MAINTENANCE V				1655	20	1676
8	YEAR - 7 MAINTENANCE VI				577	24	600
	Grand Total				62585	14417	77002

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।

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा एवं प्रसार
राजस्थान, जयपुर

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

Model Cost Norms for RDF I

Labour rate Rs. 259/- per day
Unit- 50 Ha
Perimeter - Average 3000 RM (1000 MX500M)

No. of Plants - 500
Spacing- 4MX5M

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
YEAR- 0 Advance Action							
1	Collection of data for Microplanning,preparation of microplan and management plan	Prorata			604.33	50.29	654.62
2	Survey of area, Layout of contour trenches/Furrows, Pits and marking of segments/plots	Prorata			474.15	50.29	524.44
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.)	Meter	30	259.00	7770.00	0.00	7770.00
b	Ditch fencing 1.20m deep,1.50m wide at top & 0.90m at bottom(on an average 30m/ha.)	Meter	30	280.83	8425.04	0.00	8425.04
4	Cost of raising 550 seedlings	Plant	550	9.02	3453.01	1505.49	4958.50
5	Raising of 240 plants in 10cmX15 cm bags for planting on mounds of trenches and V ditches(includes 20% extra)	Plant	240	2.29	361.85	187.68	549.53
6	**Digging up Trenches :**					0.00	
a.	Digging up 100 rmt Staggered Contour Trenches with cross section size: 0.6x((1.05+0.45)/2) Sqmt. in area with 6-20% slop .	Meter	100	62.51	7196.59	0.00	7196.59
b.	Digging up 80 rmt Continuous Contour Trenches with cross section size: 0.6x((1.70+0.5)/2) Sqmt. in area with 3-6% slop	Meter	80	91.68	8443.66	0.00	8443.66
c.	Digging up 20 rmt Deep Continuous Contour Trenches with cross section size: 1.0x((1.50+0.5)/2) Sqmt. in area with 0-3% slop	Meter	20	138.91	3198.20	0.00	3198.20
7	Digging of 300 pits size: 0.45x((0.4+0.5)/2) cum	Plant	300	20.27	6080.33	0.00	6080.33
8	Cost of collection and purchases of grass and other seeds	Prorata			0.00	284.62	284.62
9	Restoration of natural regeneration by cultural operations and making crescent shaped mounds on the lower side of seedlings	Prorata			1295.00	0.00	1295.00
10	In situ Soil & Moisture Conservation measures like Check dams, Nadis, Earthen Bunds etc.	Prorata			4964.85	0.00	4964.85
11	Construction of Thatched cattle guard hut.	Prorata			259.00	36.38	295.38
12	Purchase or construction of Water storage Tank	Prorata			0.00	60.99	60.99
13	Purchase of tools and plants	Prorata			0.00	90.95	90.95
14	Labour amenities	Prorata			94.56	70.62	165.18
15	watch and ward for 4 months	Prorata			539.93	0.00	539.93
16	Misc. and unforeseen expenses including running of vehicles	Prorata			234.33	49.22	283.55
	Total 0 year				**53395**	**2387**	**55781**

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YEAR : 1 PLANTATION YEAR

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Maint. of 550 seedling in Nursery	Plant	550	2.17	942.31	252.25	1194.56
2	Maintenance of 240 plants in 10cmX15 cm bags	Plant	240	1.37	241.80	86.69	328.49
3	Digging of 200 pits size 0.45X(0.4+.5)/2 Cum	Plant	200	20.27	4053.56	0.00	4053.56
4	Digging of 30cmx30cm cross section trench along inner side of stone wall fencing and seed sowing 30 m	Meter	30	21.39	629.00	12.84	641.84
5	Sowing/dibbling of seeds of grass/thorny Tree species on the mound of trenches and ditch fencing 230 m	Meter	230	0.67	154.63	0.00	154.63
6	Purchase of fertilizers and insecticide and its application	Prorata			2029.52	444.05	2473.57
7	Sowing of pellets of grass seeds / pieces of seed mud cakes in between rows & pits	Prorata			586.52	0.00	586.52
8	Transport of 500 seedlings from Nursery to planting site	Plant	500	1.58	775.63	14.98	790.61
9	Planting of 500 seedlings including Refilling of pits	Plant	500	4.73	2363.89	0.00	2363.89
10	Transport 200 plants raised in 10 cmX15cm bags upto site including loading and unloading (upto 5 kms.)	Plant	200	0.88	175.41	0.00	175.41
11	Planting of 200 pre-germinated plants, including local transport and watering	Plant	200	2.87	427.56	145.52	573.08
12	Restoration of natural regeneration by making crescent shaped mounds on the lower slope of 150 seedlings and saplings	Plant	150	4.73	709.85	0.00	709.85
13	Making of crescent shaped mounds below 500planted saplings after planting and dibbing of 3 seeds of throny tree species.	Plant	500	4.12	2062.41	0.00	2062.41
14	Weeding and Hoeings of 500 plants two times with repairing plants mound	Plant	1000	4.12	4124.81	0.00	4124.81
15	Weeding on contour trenches and espacement/singling	Prorata			604.33	0.00	604.33
16	Restoration of natural regeneration by cultural operations and making crescent shaped mounds on the lower side of seedlings	Prorata			1295.00	0.00	1295.00
17	Raising of 10% Plants (55) in Nursery for casualty replacement in year 2	Plant	55	9.02	345.30	150.55	495.85
18	Watch and ward charges for 12 months	Prorata			1618.41	0.00	1618.41
19	Labour hut etc	Prorata			375.48	40.66	416.14
20	Construction of approach roads/inspection path	Prorata			439.89	0.00	439.89
21	Construction of gate and fixing of sign boards	Prorata			586.52	69.55	656.07
22	Misc. and unforeseen expences including (additional watering, fencing and frost protection measures and running of vehicles etc.)	Prorata			232.96	105.93	338.89
	TOTAL YEAR 1				24775	1323	26098

YEAR 2 : MAINTENANCE-I

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Maint. of 55 plants in nursery	Plant	55	2.17	94.23	25.22	119.46
2	Repair of Fencing	Prorata			259.00	0.00	259.00
3	Casualty replacement of 50 plants (10%) including redigging of pits, transportation planting,watering and application of insecticide	Plant	50	13.44	649.56	22.47	672.03
4	Weeding and Hoeing in 500 plants two times and repairing of mounds	Plant	1000	4.12	4124.81	0.00	4124.81
5	Watch and ward charges for 12 months	Prorata			1618.41	0.00	1618.41
6	Misc. and Unforeseen expenses including (Repair of Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata			283.67	114.49	398.16
	TOTAL YEAR 2				7030	162	7192

YEAR 3 : MAINTENANCE-II

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch and ward charges for 12 Months	Prorata			1618.41	0.00	1618.41
2	Expenditure on Maintenance including (Repair of fencing/Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata			482.37	123.05	605.42
	TOTAL YEAR 3.				2101	123	2224

YEAR 4 : MAINTENANCE-III

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch and ward charges for 12 Months	Prorata			1618.41	0.00	1618.41
2	Expenditure on Maintenance including (Repair of fencing/Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata			482.37	123.05	605.42
	TOTAL YEAR 4				2101	123	2224
	Grand Total				89401	4118	93519

Yearwise Cost Statement RDF I

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	YEAR 0 ADVANCE ACTION				53395	2387	55781
2	YEAR 1 - PLANTING YEAR				24775	1323	26098
3	YEAR 2 - MAINTENANCE I				7030	162	7192
4	YEAR 3 - MAINTENANCE II				2101	123	2224
5	YEAR - 4 MAINTENANCE III				2101	123	2224
	Grand Total				89401	4118	93519

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।डीप सीसीटी, सीसीटी एवं स्टेगर्ड कन्टूर ट्रेन्च वनाते समय क्षेत्र में विद्यमान पेडों को क्षति नही पहुंचाई जाये

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा एवं प्रसार
राजस्थान, जयपुर

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

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Model Cost Norms for RDF II

Labour rate Rs. 259/- per day

Unit - 50 Ha

No. of Plants - 200

Perimeter - Average 3000 RM (1000 MX500M)

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
YEAR- 0 Advance Action							
1	Collection of data for Microplanning,preparation of microplan and management plan	Prorata			604.33	50.29	654.62
2	Survey of area, Layout of contour trenches/Furrows, Pits and marking of segments/plots	Prorata			474.15	50.29	524.44
3	Fencing by stone wall and/ or by ditch.					0.00	
a	Stone wall fencing 1.20m high 0.80m at base & 0.60 at top(on an average 30m/ha.)	Meter	30	259.00	7770.00	0.00	7770.00
b	Ditch fencing 1.20m deep,1.50m wide at top & 0.90m at bottom(on an average 30m/ha.)	Meter	30	280.83	8425.04	0.00	8425.04
4	Cost of raising 220 seedlings	Plant	220	9.02	1381.20	602.20	1983.40
5	Raising of 240 plants in 10cmX15 cm bags for planting on mounds of trenches and V ditches(includes 20% extra)	Plant	240	2.29	361.85	187.68	549.53
6	**Digging up Trenches :**					0.00	
a.	Digging up 100 rmt Staggered Contour Trenches with cross section size: 0.6x((1.05+0.45)/2) Sqmt. in area with 6-20% slop (assuming 30% area falls in this category).	Meter	100	62.51	7196.59	0.00	7196.59
b.	Digging up 80 rmt Continuous Contour Trenches with cross section size: 0.6x((1.70+0.5)/2) Sqmt. in area with 3-6% slop (assuming 40% area falls in this category).	Meter	80	91.68	8443.66	0.00	8443.66
c.	Digging up 20 rmt Deep Continuous Contour Trenches with cross section size: 1.0x((1.50+0.5)/2) Sqmt. in area with 0-3% slop (assuming 30% area falls in this category).	Meter	20	138.91	3198.20	0.00	3198.20
7	Digging of 200 pits size: 0.45x((.4+.5)/2) cum	Plant	200	20.27	4053.56	0.00	4053.56
8	Cost of collection and purchases of grass and other seeds	Prorata			0.00	428.00	428.00
9	Restoration of natural regeneration by cultural operations and making crescent shaped mounds on the lower side of seedlings	Prorata			1295.00	0.00	1295.00
10	In situ Soil & Moisture Conservation measures like Check dam, Nadis, Earthen Bunds etc.	Prorata			4964.85	0.00	4964.85
11	Construction of Thatched cattle guard hut.	Prorata			259.00	36.38	295.38
12	Purchase or construction of Water storage Tank	Prorata			0.00	60.99	60.99
13	Purchase of tools and plants	Prorata			0.00	90.95	90.95
14	Labour amenities	Prorata			94.56	70.62	165.18
15	Watch and Ward for 4 months	Prorata			539.93	0.00	539.93
16	Misc. and unforeseen expenses including running of vehicles	Prorata			245.30	47.08	292.38
	Total 0 year				**49307**	**1624**	**50932**

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
YEAR : 1 PLANTATION YEAR							
1	Maintenance of 220seedling in nursery	Plant	220	2.17	376.92	100.90	477.82
2	Maintenance of 240 plants in 10cmX15 cm bags	Plant	240	1.37	241.80	86.69	328.49
3	In situ Soil & Moisture Conservation measures like Check dam, Nadis, Earthen Bunds etc.	Prorata			2935.33	201.16	3136.49
4	Digging of 30cmx30cm cross section trench along inner side of stone wall fencing and seed sowing (30 M / Ha)	Meter	30	21.61	648.19	0.00	648.19
5	Sowing/dibbling of seeds of grass, trees and shrubs including seeds of medicinal plants on the mounds of trench/ditch fencing (230 M)	Meter	230	0.67	154.63	0.00	154.63
6	sowing of grass seeds including raking in the interspace	Prorata			586.52	0.00	586.52
7	Transportation of 200 plants from nurserty to planting site	Plant	200	1.48	249.41	47.08	296.49
8	Planting of 200 seedlings including Refilling of pits	Plant	200	4.67	911.30	22.47	933.77
9	Transport 200 plants raised in 10 cmX15cm bags upto site including loading and unloading (upto 5 kms.)	Plant	200	0.95	189.11	0.00	189.11
10	Planting of 200 pre germinated plants, including local transport and watering	Plant	200	2.87	427.56	145.52	573.08
11	Purchase and application of insecticide and fertilizer in 200 plants	Prorata			794.81	187.25	982.06
12	Making of crescent shaped mounds below planted sapling after planting and dibbing of 3 seeds of throny tree species (200 saplings).	Plant	200	4.11	822.22	0.00	822.22
13	Weeding and Hoeings of 200 plants two time repairing plants mound	Plant	400	4.11	1644.44	0.00	1644.44
14	Weeding on Contour Trench/ V ditch and espacement /singling	Prorata			533.07	0.00	533.07
15	Restoration of natural regeneration by cultural operations and making crescent shaped mounds on the lower side of seedlings	Prorata			1295.00	0.00	1295.00
16	Raising of 10% Plants (20 plants) in Nursery for casualty replacement in year 2	Plant	20	9.02	125.56	54.75	180.31
17	Watch and ward charges for 12 months	Prorata			1618.41	0.00	1618.41
18	Labour hut etc	Prorata			375.48	40.66	416.14
19	Construction of approach roads/inspection path	Prorata			439.89	0.00	439.89
20	Construction of gate and fixing of sign boards	Prorata			586.52	69.55	656.07
21	Misc. and unforeseen expences including (additional watering, fencing and frost protection measures and running of vehicles etc.)	Prorata			250.78	216.14	466.92
	TOTAL YEAR 1				15207	1172	16379

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YEAR 2 : MAINTENANCE-I

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Maintenance of 20 plants in nursery	Plant	20	2.17	34.27	9.17	43.44
2	Repair of Fencing	Prorata			259.00	0.00	259.00
3	Casualty replacement of 20 plants (10%) including redigging of pits, transportation planting,watering and application of insecticide	Plant	20	13.43	259.00	9.63	268.63
4	Weeding and Hoeing in 200 plants two times and repairing of plant mounds	Plant	400	4.11	1644.44	0.00	1644.44
5	Watch and ward charges for 12 months	Prorata			1618.41	0.00	1618.41
6	Misc. and Unforeseen expenses including (Repair of Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata			224.74	123.05	347.79
	TOTAL YEAR 2				4040	142	4182

YEAR 3 : MAINTENANCE-II

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch and ward charges for 12 Months	Prorata			1618.41	0.00	1618.41
2	Expenditure on Maintenance including (Repair of fencing/Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata			472.78	123.05	595.83
	TOTAL YEAR 3				2091	123	2214

YEAR 4 : MAINTENANCE-III

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch and ward charges for 12 Months	Prorata			1618.41	0.00	1618.41
2	Expenditure on Maintenance including (Repair of fencing/Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata			472.78	128.40	601.18
	TOTAL YEAR4				2091	128	2220
	Grand Total				72736	3190	75926

Yearwise Cost Statement RDF II

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	YEAR 0 ADVANCE ACTION				49307	1624	50932
2	YEAR 1 - PLANTING YEAR				15207	1172	16379
3	YEAR 2 - MAINTENANCE I				4040	142	4182
4	YEAR 3 - MAINTENANCE II				2091	123	2214
5	YEAR - 4 MAINTENANCE III				2091	128	2220
	Grand Total				72736	3190	75926

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।डीप सीसीटी, सीसीटी एवं स्टेगर्ड कन्टूर ट्रेन्च बनाते समय क्षेत्र में विद्यमान पेडों को क्षति नही पहुंचाई जाये।

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा एवं प्रसार
राजस्थान, जयपुर

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

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Model Cost Norms for Fuelwood plantation

Labour rate Rs. 259/- per day

Unit- 50 Ha

Perimeter - Average 3000 RM (1000 MX500M)

No. of Plants- 500

Spacing- 4MX5M

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
YEAR- 0 Advance Action							
1	Collection of data for Microplanning,preparation of microplan and management plan	Prorata	1	499.23	471.41	27.82	499.23
2	Survey of area, Layout of contour trenches/Furrows, Pits and marking of segments/plots	Prorata	1	524.44	474.15	50.29	524.44
3	Ditch fencing 1.20 m deep, 1.50m Wide at Top and 0.90 m at Bottom 90m in length	Meter	90	280.67	25260.04	0.00	25260.04
4	Digging of 300m contour trenches of 45cm x 45 cm cross section	Meter	300	32.35	9706.33	0.00	9706.33
5	Cost of raising 880 seedlings	Plant	880	7.14	4093.47	2186.76	6280.23
6	Digging of 400 Pits size 0.45 X (0.4+0.5)/2 cum	Pit	400	16.44	6577.78	0.00	6577.78
7	Cost of collection and purchase of grass and other seeds	Kg.	2.5	107.00	0.00	267.50	267.50
8	Construction of Thatched cattle guard hut	Prorata	1	732.81	585.15	147.66	732.81
9	Construction of water storage tank	Prorata	1	978.52	881.15	97.37	978.52
10	Purchase of tools and plants	Prorata	1	181.90	0.00	181.90	181.90
11	Labour amenities	Prorata	1	530.50	370.00	160.50	530.50
12	Watch and ward charges for 4 Months	Prorata	1	539.93	539.93	0.00	539.93
13	Provision for additional fencing based on actual requirement	Prorata	1	14029.85	14029.85	0.00	14029.85
14	Misc. and unforeseen expenses including running of vehicles	Prorata	1	337.64	280.93	56.71	337.64
	TOTAL 0 YEAR				**63270**	**3177**	**66447**

YEAR 1 PLANTATION YEAR

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Maint. of 880 seedlings in Nursery	Plant	880	2.51	1740.75	467.66	2208.41
2	Digging of 400 pits size 0.45x (0.4 + 0.5)/2 cum	Pit	400	16.44	6577.78	0.00	6577.78
3	Sowing/Dibbing of seeds of grass thorny bushes on trench mound V-ditch Fencing in three lines. 390 meter	Meter	390	0.58	224.74	0.00	224.74
4	Sowing of grass seeds including raking in the interspaces	Prorata	1	1215.84	1094.93	120.91	1215.84
5	Transport of 800 seedlings from Nursery to planting site	Plant	800	1.57	1225.11	33.17	1258.28
6	Planting of 800 seedlings including refilling of pits	Plant	800	4.71	3771.26	0.00	3771.26
7	Construction of crescent shaped mounds below the planting pits 800 plants	Plant	800	4.12	3299.85	0.00	3299.85
8	Weeding and Hoeing of 800 plants- Two times and repairing of mounds	Plant	1600	4.12	6599.70	0.00	6599.70
9	One hoeing of 800 plants	Plant	800	2.37	1896.59	0.00	1896.59
10	Cost of raising 88 plants in Nursery for casualty replacement in year 2	Plant	88	7.14	409.35	218.68	628.02
11	Watch and Ward charges for 12 Months	Prorata	1	1618.41	1618.41	0.00	1618.41
12	Cost of insecticide and Fertiliser & its application	Prorata	1	3994.38	3314.93	679.45	3994.38
13	Labour amenities etc.	Prorata	1	166.34	109.63	56.71	166.34
14	Weeding on contour trenches/V-ditches and espacement/singling- (407 rmt)	Meter	407	2.00	814.00	0.00	814.00
15	In situ Soil & Moisture Conservation measures like Check dams/Nadis, Earthen Bunds etc.	Prorata	1	777.00	777.00	0.00	777.00
16	Construction of approach roads/inspection path	Prorata	1	280.93	280.93	0.00	280.93
17	Construction of gate and fixing of sign boards	Prorata	1	967.06	604.33	362.73	967.06
18	Misc. and unforeseen expences including (additional watering, fencing and frost protection measures and running of vehicles etc.)	Prorata	1	243.89	175.41	68.48	243.89
	TOTAL YEAR 1				**34535**	**2008**	**36542**

YEAR 2 : MAINTENANCE-I

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Maintenance of 88 Plants in Nursery	Plant	88	2.51	174.08	46.77	220.84
2	Repair of fencing	Prorata	1	280.93	280.93	0.00	280.93
3	Casualty replacement of 80 plants including Redigging of Pits, Transportation, Planting, watering and application of insecticides	Plant	80	13.98	1118.22	0.00	1118.22
4	Two weedings and hoeings in 800 Plants and repairing of plant mounds	Plant	1600	4.12	6599.70	0.00	6599.70
5	Watch and Ward charges for 12 Months	Prorata	1	1618.41	1618.41	0.00	1618.41
6	Misc. and unforeseen expenditure including (repairing of structures, pruning and frost protection measures)	Prorata	1	288.15	191.85	96.30	288.15
	TOTAL YEAR 2				9983	143	10126

YEAR 3 : MAINTENANCE-II

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch and Ward charges for 12 Months	Prorata	1	1618.41	1618.41	0.00	1618.41
2	Misc. and Unforeseen expenses	Prorata	1	199.83	145.26	54.57	199.83
	TOTAL YEAR 3				1764	55	1818

YEAR 4 : MAINTENANCE-III

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch and Ward charges for 12 Months	Prorata	1	1618.41	1618.41	0.00	1618.41
2	Misc. and Unforeseen expenses	Prorata	1	199.83	145.26	54.57	199.83
	TOTAL YEAR 4				1764	55	1818
	Grand Total				111315	5436	116752

Yearwise Cost Statement Fuelwood plantation

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	YEAR 0 ADVANCE ACTION				63270	3177	66447
2	YEAR 1 - PLANTING YEAR				34535	2008	36542
3	YEAR 2 - MAINTENANCE I				9983	143	10126
4	YEAR 3 - MAINTENANCE II				1764	55	1818
5	YEAR - 4 MAINTENANCE III				1764	55	1818
	Grand Total				111315	5436	116752

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 ।

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा एवं प्रसार
राजस्थान, जयपुर

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

Model Cost Norms for Enrichment of Old RDF Plantations

Labour rate Rs. 259/- per day

Unit - 50 Ha

Perimeter - Average 3000 RM (1000 MX500M)

No. of Plants - 100

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
YEAR- 0 Advance Action							
1	Collection of data for Microplanning,preparation of microplan and management plan	Prorata	1	654.62	604.33	50.29	654.62
2	Survey of area, Layout of contour trenches/Furrows, Pits and marking of segments/plots	Prorata	1	524.44	474.15	50.29	524.44
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.)	Meter	30	112.50	3885.00	0.00 0.00	3885.00
b	Ditch fencing 1.20m deep,1.50m wide at top & 0.90m at bottom(on an average 30m/ha.)	Meter	30	121.98	4212.42	0.00	4212.42
4	Cost of raising 110 seedlings	Plant	110	8.17	689.15	300.39	989.53
5	**Digging up Trenches :**					0.00	
a.	Digging up 150 rmt Staggered Contour Trenches with cross section size: 0.6x((1.05+0.45)/2) Sqmt. in area with 6-20% slop (assuming 30% area falls in this category).	Meter	150	71.97	10794.76	0.00 0.00	10794.76
b.	Digging up 160 rmt Continuous Contour Trenches with cross section size: 0.6x((1.70+0.5)/2) Sqmt. in area with 3-6% slop (assuming 40% area falls in this category).	Meter	160	105.54	16886.54	0.00	16886.54
c.	Digging up 40 rmt Deep Continuous Contour Trenches with cross section size: 1.0x((1.50+0.5)/2) Sqmt. in area with 0-3% slop (assuming 30% area falls in this category).	Meter	40.0	159.91	6396.40	0.00	6396.40
6	Digging of 100 pits size: 0.45x((.4+.5)/2) cum (Preferably on the bunds of water harvesting structures)	Plant	100	20.27	2026.77	0.00	2026.77
7	Cost of collection and purchases of grass and other seeds	Prorata			0.00	428.00	428.00
8	Restoration of natural regeneration by cultural operations and making crescent shaped mounds on the lower side of seedlings	Prorata			1295.00	0.00	1295.00
9	In situ Soil & Moisture Conservation measures like Check dam, Nadis, Earthen Bunds etc.	Prorata			5481.52	0.00	5481.52
10	Construction of Thatched cattle guard hut.	Prorata			259.00	36.38	295.38
11	Purchase or construction of Water storage Tank	Prorata			0.00	60.99	60.99
12	Purchase of tools and plants	Prorata			0.00	90.95	90.95
13	Labour amenities	Prorata			94.56	70.62	165.18
14	Watch and Ward for 4 months	Prorata			539.93	0.00	539.93
15	Misc. and unforeseen expenses including running of vehicles	Prorata			245.30	47.08	292.38
	Total 0 year				53885	1135	55020

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YEAR : 1 PLANTATION YEAR							
S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Maintenance of 110seedling in nursery	Plant	110	1.92	187.32	48.72	236.04
2	In situ Soil & Moisture Conservation measures like Check dam, Nadis, Earthen Bunds etc.	Prorata			2935.33	201.16	3136.49
3	Digging of 30cmx30cm cross section trench along inner side of stone wall fencing and seed sowing (30 M / Ha)	Meter	30	21.61	648.19	0.00	648.19
4	Sowing/dibbling of seeds of grass, trees and shrubs including seeds of medicinal plants on the mounds of trench/ditch fencing (380 M)	Meter	380	0.58	255.52	0.00	255.52
5	sowing of grass seeds including raking in the interspace	Prorata			586.52	0.00	586.52
6	Restoration of natural regeneration by cultural operations and making crescent shaped mounds on the lower side of seedlings	Prorata			1295.00	0.00	1295.00
7	Transportation of 100 plants from nurserty to planting site	Plant	100	1.48	124.71	23.54	148.25
8	Planting of 100 seedlings including Refilling of pits	Plant	100	4.67	455.65	11.24	466.88
9	Purchase and application of insecticide and fertilizer in 100 plants	Plant	100	4.91	397.42	93.63	491.04
10	Making of crescent shaped mounds below planted sapling after planting and dibbing of 3 seeds of throny tree species (100 saplings).	Plant	100	4.11	411.11	0.00	411.11
11	Weeding and Hoeings of 100 plants two time repairing plants mound	Plant	200	4.11	822.23	0.00	822.23
12	Weeding on Contour Trench and espacement /singling	Prorata			533.07	0.00	533.07
13	Raising of 20% Plants (20 plants) in Nursery for casualty replacement in year 2	Plant	20	8.17	125.30	54.62	179.92
14	Watch and ward charges for 12 months	Prorata			1618.41	0.00	1618.41
15	Labour hut etc	Prorata			375.48	40.66	416.14
16	Construction of approach roads/inspection path	Prorata			439.89	0.00	439.89
17	Construction of gate and fixing of sign boards	Prorata			586.52	69.55	656.07
18	Misc. and unforeseen expences including (additional watering, fencing and frost protection measures and running of vehicles etc.)	Prorata			250.78	216.14	466.92
	TOTAL YEAR 1				12048	759	12808

YEAR 2 : MAINTENANCE-I							
S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Maintenance of 20 plants in nursery	Plant	20	1.74	34.06	8.86	42.92
2	Repair of Fencing	Prorata			259.00	0.00	259.00
3	Casualty replacement of20 plants (20%) including redigging of pits, transportation planting,watering and application of insecticide	Plant	20	13.43	259.00	9.63	268.63
4	Weeding and Hoeing in 100 plants two times and repairing of plant mounds	Plant	200	4.11	822.23	0.00	822.23
5	Watch and ward charges for 12 months	Prorata			1618.41	0.00	1618.41
6	Misc. and Unforeseen expenses including (Repair of Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata			224.74	123.05	347.79
	TOTAL YEAR 2				3217	142	3359

YEAR 3 : MAINTENANCE-II							
S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch and ward charges for 12 Months	Prorata			1618.41	0.00	1618.41
2	Expenditure on Maintenance including (Repair of fencing/Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata			472.78	123.05	595.83
	TOTAL YEAR 3				2091	123	2214

YEAR 4 : MAINTENANCE-III							
S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch and ward charges for 12 Months	Prorata			1618.41	0.00	1618.41
2	Expenditure on Maintenance including (Repair of fencing/Structures, Subsidiary silvicultural operations, Frost Protection, etc.)	Prorata			472.78	128.40	601.18
	TOTAL YEAR4				2091	128	2220
	Grand Total				73333	2287	75620

Yearwise Cost Statement

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	YEAR 0 ADVANCE ACTION				53885	1135	55020
2	YEAR 1 - PLANTING YEAR				12048	759	12808
3	YEAR 2 - MAINTENANCE I				3217	142	3359
4	YEAR 3 - MAINTENANCE II				2091	123	2214
5	YEAR - 4 MAINTENANCE III				2091	128	2220
	Grand Total				73333	2287	75620

नोट :– 1. यह मॉडल पुराने प्लान्टेशन पर लागू किया जायेगा जो कि 6 साल से पुराने हो एवं जिनमें पूर्व में दीवार / डिच फैन्सिग की गई थी। अतः इस मॉडल में स्टोन/डिच फैन्सिग के लिये रिपेयर की दर रखी गई है।

2. क्षेत्र में जो 100 पौधे लगाये जाने है उन्हें यथा संभव जल संग्रहण संरचानाओं पर लगाया जावे।

3. डीप सीसीटी, सीसीटी एवं स्टेगर्ड कन्टूर ट्रेन्च बनाते समय क्षेत्र में विद्यमान पेडों को क्षति नही पहुंचाई जाये।

4. 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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राजस्थान, जयपुर

3

Closure for Biodiversity Conservation

Unit : 50 Ha
Perimeter: 60 M/Ha
Labour rate Rs. 259/- per day
Cost Estimate: Rs. /Ha

Year- 0- Advance Action

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Collection of data for Microplanning,preparation of	Prorata	1	654.62	604.33	50.29	654.62
1	Survey of area, Layout of Pits and marking of	Prorata	1	524.44	474.15	50.29	524.4381
2	Fencing by stone wall and or by ditch.					0.00	
a	Stone wall fencing 1.20m high 0.80m at base & 0.60 at top(on an average 30m/ha.)	Meter	30	259.00	7770.00	0.00	7770.00
b	Ditch fencing 1.20m deep,1.50m wide at top & 0.90m at bottom(on an average 30m/ha.)	Meter	30	280.83	8425.04	0.00	8425.04
3	Digging up 400 rmt Staggered Contour Trenches	Meter	400	32.36	12943.15	0.00	12943.15
4	Cost of collection and purchase of seeds/cuttings of	Prorata	1	220.42	0.00	220.42	220.42
5	In situ Soil & Moisture Conservation measures like Check dam, Percolation Tanks, Earthen Bunds etc.	Prorata	1	6861.63	6579.15	282.48	6861.63
6	Purchase of tools and plants	Prorata	1	119.84	0.00	119.84	119.84
7	Labour amenities	Prorata	1	212.91	200.07	12.84	212.91
8	Watch & ward for 4 months	Prorata	1	539.93	539.93	0.00	539.93
9	Restoration of Natural regeneration by cutback, cultural operation, and by making crescent shaped ridges on lower side of seedling and saplings	Prorata	1	2590.00	2590.00	0.00	2590.00
10	Construction of approach road inspection path and walking trail	Prorata	1	1679.93	581.04	1098.89	1679.93
11	Misc. and unforeseen expenses including running of vehicles	Prorata	1	383.48	285.04	98.44	383.48
	TOTAL YEAR 0				40992	1933	42925

YEAR- I

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	In situ Soil & Moisture Conservation measures like Check dam, Nadis, Earthen Bunds etc.	Prorata	1	3368.78	3184.74	184.04	3368.78
2	Digging of 30cmx30cm cross section trench along inner side of stone wall fencing and seed sowing	Meter	30	28.18	834.56	10.70	845.26
3	Sowing/dibbling of seeds of shrubs including seeds of medicinal plants on the mounds of trench/ditch fencing- 430 m	Meter	430	0.67	289.15	0.00	289.15
4	Two times Weeding and Hoeing on trenches and V ditches	Prorata	1	1419.70	1419.70	0.00	1419.70
5	Watch & ward for 12 months	Prorata	1	1617.04	1617.04	0.00	1617.04
6	Construction of gate and fixing of sign boards	prorata	1	648.58	586.52	62.06	648.58
7	Misc. and unforeseen expences including (fencing repair, protection measures and running of vehicles etc.)	prorata	1	339.19	234.33	104.86	339.19
	TOTAL YEAR 1				8166	362	8528

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YEAR 2 MAINTENANCE

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Repair of fencing	Prorata	1	259.00	259.00	0.00	259.00
2	Weeding and Hoeing	Prorata	1	709.85	709.85	0.00	709.85
3	Watch & ward for 12 months	Prorata	1	1618.41	1618.41	0.00	1618.41
4	Misc. and unforeseen expences including (protection measures,running of vehicles etc.)	prorata	1	319.11	211.04	108.07	319.11
	TOTAL YEAR 2				2798	108	2906
	Grand Total				51956	2403	54359

Yearwise Cost Statement

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	YEAR 0 ADVANCE ACTION				40992	1933	42925
2	YEAR 1 - PLANTING YEAR				8166	362	8528
3	YEAR 2 - MAINTENANCE I				2798	108	2906
	Grand Total				51956	2403	54359

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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मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

15

MODEL COST ESTIMATES FOR PRODUCTIVITY ENHANCEMENT OPERATIONS

UNIT ; 50 Ha.
PERIMETER ; 60 M/Ha.
Labour rate Rs. 259/- per day
COST ESTIMATE IN Rs./Ha.

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
Year 0 ADVANCE ACTION							
1	Collection of data for Microplanning,preparation of microplan and management plan	Prorata	1	654.62	604.33	50.29	654.62
2	Survey and layout	Prorata	1	524.44	474.15	50.29	524.44
3	Fencing -				0.00	0.00	
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	Meter	30	259.00	7770.00	0.00	7770.00
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	Meter	30	280.83	8425.04	0.00	8425.04
4	Cultural operations in bamboo clumps and Inducing root suckers (in indegenous 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)	Plant	150	73.39	11008.19	0.00	11008.19
5	Cutback/singling of stumps and restoration of Natural regeneration of other species	Prorata	1	2158.33	2158.33	0.00	2158.33
6	Construction of loose rubble stone check dams	Prorata	1	3747.91	3645.19	102.72	3747.91
7	Construction of approach road and inspection path	Prorata	1	282.30	282.30	0.00	282.30
8	Construction of thatched cattleguard hut	Prorata	1	211.90	146.63	65.27	211.90
9	Purchase of signboard and their fixing	Prorata	1	85.69	15.07	70.62	85.69
10	Construction of gate and its fixing	Prorata	1	161.10	80.85	80.25	161.10
11	Purchase of tools and plants	Prorata	1	60.99	0.00	60.99	60.99
12	Watch and ward for 6 months	Prorata	1	808.52	808.52	0.00	808.52
13	Miscellaneous and unforeseen expenses	Prorata	1	276.55	187.74	88.81	276.55
	Total				**35606**	**569**	**36176**

YEAR-1

S. No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Repair of fencing	Prorata	1	270.77	259.00	11.77	270.77
2	Watch and ward for 12 months	Prorata	1	1618.41	1618.41	0.00	1618.41
3	Miscellaneous and unforeseen expenses	Prorata	1	125.40	64.41	60.99	125.40
	Total				**1942**	**73**	**2015**
	Grand Total				**37548**	**642**	**38190**

Yearwise Cost Statement

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	**YEAR 0 ADVANCE ACTION**				**35606**	569.24	**36176**
2	**YEAR 1 - PLANTING YEAR**				**1942**	72.76	**2015**
	Grand Total				**37548**	**642**	**38190**

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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(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना)
राजस्थान, जयपुर

पौध तैयारी – मॉडल 1

श्रम दरः– रु 259/– प्रति दिन

लागत अनुमान 1.00 लाख पौध तैयारी 7.5 सेमी X 12.5 सेमी (3 इन्च X 5 इन्च), 20 माईक्रोन पौलिथीन बैग्स
उदेश्य– इस मॉडॅल का उद्देश्य 9 इन्च उॅचाई तक के पौधे जैसे नीम, करंज, गोंदा, हवन सीताफल, इत्यादि तैयार करना है जिन्हें नोचेज, ट्रेन्चों व वी–डिचो के माउन्ड पर रोपित किया जा सकता है। जिससे की ट्रेन्चों ओर नोचेज पर भी जीवितता प्रतिशत अच्छी रहकर पौध अच्छी बढत होने से बेहतर परिणाम प्राप्त होगें। वर्षा पूर्व मदरबैड मे बीजो को बोने के बजाय विकल्प रूप में इन थैलियों में पौधे सीधे ही उगाया जा सकते है जिससे की मदरबैड से पौलिथीन बैग्स में पौध के ट्रान्सप्लान्ट करते समय पौधों में क्षति नही होगी। इन तैयार पौधों को 5 फिट से अधिक उँचाई के पौधे तैयार करने हेतु मदर बैड में निर्धारित स्थान पर रोपित किया जा सकता है। इस मॉडल में तैयार किये जाने वाले पौधों को तीन माह तक पौधशाला में संधारण किया जायेगा।
उपयुक्त प्रजातियॉ – नीम, करंज, गोंदा, हवन सीताफल, इत्यादि

क्रस	आईटम	राशि रूपयों में		
		श्रम व्यय	सामग्री व्यय	योग व्यय
1	43 किग्रा पोलीथिन थैली बनाई/खरीद आकार 7.5 X 12.5 सेमी (3 इन्च X 5 इन्च), 20 माइक्रोन दर 145.20 रू/किग्रा	0	6681.08	6681.08
2	10 मी X 1.0 मी X 0.15 मी. आकार की 25 क्यारियां तैयार कराना	3885	0	3885
3	बीज सग्रह करना/क्रय करना	2590	1002.59	3592.59
4	फार्म यार्ड मेन्यौर (गोबर–मैंगनी की खाद) 7 घमी क्रय करना दर 1434.40 रू/घमी	3383.7512	7934.05	11317.8012
5	चिकनी मिटटी की व्यवस्था करना एवं पौधाशाला में परिवहन करना 7 घमी दर 711.37 रू/घमी	811.79104	4654.5	5466.29104
6	रेत की व्यवस्था करना एवं पौधशाला में परिवहन करना 7 घमी दर 534.06 रू/घमी	612.06468	3491.41	4103.47468
7	खाद, चिकनी मिटटी, रेत का मिश्रण बनवाना, पौलीथीन थैलीयां भरवाना एवं थैलीयों को क्यारी में जमवाना	33670	0	33670
8	पौधशाला में थैलीयों में बीज बुवाइ, खाली थैलीयों में पुनः बीज बुवाई, सिचाई, निदाई, वर्मी कम्पोस्ट बनाई एवं अन्य संधारण कार्य करने हेतु एक माली एवं दो श्रमिकों की मजदूरी (3 माह)	60606	0	60606
9	कीटनाशक उर्वरक, जिप्सम एवं अन्य उपयोगी रसायन क्रय पर व्यय	0	706.2	706.2
10	उपकरण एवं औजार खरीद मय वाहन एवं मशीनों का संधारण व्यय	0	5350	5350
11	बिजली पानी पर व्यय	0	21400	21400
12	जल'सग्रह टैंक बनाना/क्रय करना मय पाईप खरीद व्यय	0	4012.5	4012.5
13	अन्य विविध व्यय	2070.7114	1524.75	3595.46144
	योग	**107629**	**56757.08**	**164386**

बिजली पानी हेतु देय राशि का उपयोग केवल इन्ही मदो पर व्यय किया जायेगा अन्यथा उक्त मद की राशि का समर्पण किया जावे। एक नर्सरी पर केवल एक चौकीदार ही रखा जावे।

उप वन संरक्षक (प्रशासन)
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पौध तैयारी – मॉडल 2

लागत अनुमान 1.00 लाख पौध तैयारी 10 सेमी X 15 सेमी (4 इन्च X 6 इन्च) 20 माइक्रोन पौलिथीन बैग्स — श्रम दरः– रु 259/– प्रति दिन

उदेश्य– इस माडॅल का उद्देश्य 15 इन्च उँचाई तक के पौधे तैयार करना है जिनमें की मुख्यतः फुटान की हुई जड़ सहित कटिंग्स (प्री–रूटेड) को मदरबैड से इन पौलिथीन बैग्स में लिया जायेगा। मॉडल में बागवानी सम्बन्धित पौधो के अतिरिक्त वानिकी पौधे तैयार किये जायेगे। <u>इस मॉडल में तैयार किये जाने वाले पौधों का 6 माह तक पौधशाला में संधारण किया जायेगा।</u>

उपयुक्त प्रजातियॉ– नीम, करंज गोदा, हवन, सीताफल, गुलाब, कनेर, शहतुत, बागनवेल इत्यादि।

क्र.स.	आईटम	प्रथम वर्ष			द्वितिय वर्ष			योग		
		श्रम	सामग्री	योग	श्रम	सामग्री	योग	श्रम	सामग्री	योग
1	67 किग्रा पोलीथिन थेली बनाई व खरीद आकर 10 X 15 सेमी, (4 इन्च X 6 इन्च), 20 माइक्रोन दर 145.20 रू किग्रा	0	10409	10409	0	0	0	0	10409	10409
2	10 मी X 1.0 मी X 0.15 मी. आकार की 35 क्यारिया तैयार कराना	7770	0	7770	0	0	0	7770	0	7770
3	बीज सग्रह करना/क्रय करना	2590	1003	3593	0	0	0	2590	1003	3593
4	फार्म यार्ड मेन्यौर (गोबर–मेगनी की खाद) 14 घमी क्रय करना दर 1434.40 रू/घमी	6766	15868	22634	0	0	0	6766	15868	22634
5	चिकनी मिटटी की व्यवस्था करना एवं पौधाशाला में परिवहन करना 14 घमी दर 711.37 रू/घमी	1622	9309	10931	0	0	0	1622	9309	10931
6	रेत की व्यवस्था करना एवं पौधशाला में परिवहन करना 14 घमी दर 534.06 रू/घमी	1227	6982	8208	0	0	0	1227	6982	8208
7	खाद, चिकनी मिटटी, रेत का मिश्रण बनवाना, पौलीथीन थैलीयां भरवाना एवं थैलीयों को क्यारी में जमवाना	46620	0	46620	0	0	0	46620	0	46620
8	मदरबेड तैयार कर उसमें बीज बुवाई,एवं कटिंग्स लगााना	18389	0	18389	0	0	0	18389	0	18389
9	मदरबेड से छोटे पौध एवं कटिंग्स निकालकर पौलिथिन थैलियों में लेना ।	18389	0	18389	0	0	0	18389	0	18389
10	नर्सरी पर एक माली व दो श्रमिको की बीज बुवाई, पुनः बीज बुवाई, निदाई, पानी पिलाई एवं वर्मी कम्पोस्ट तैयार करने की मजदूरी	38850	0	38850	77700	0	77700	116550	0	116550
11	कीटनाशक दवा, जिप्सम एवं उर्वरक खरीद पर व्यय	0	2119	2119	0	1412	1412	0	3531	3531
12	उपकरण एवं औजार खरीद मय वाहन एवं मशीनों का संधारण व्यय	0	8102	8102	0	2675	2675	0	10777	10777
13	बिजली पानी पर व्यय	0	14124	14124	0	23896	23896	0	38020	38020
14	जल सग्रह टैंक बनाना/क्रय करना मय पाईप खरीद व्यय	0	8025	8025	0	4013	4013	0	12038	12038
15	चौकीदारी पर व्यय	6734	0	6734	20202	0	20202	26936	0	26936
16	श्रमिक सुविधाओं पर व्यय	777	1412	2189	518	706	1224	1295	2119	3414
17	छायां हेतु सिरकी आदि क्रय करना	0	0	0	0	2119	2119	0	2119	2119
18	अन्य विविध व्यय	1035	847	1882	2331	1299	3630	3366	2146	5512
	Total	150769	78200	228969	1E+05	36120	136871	251520	114320	365840

बिजली पानी हेतु देय राशि का उपयोग केवल इन्ही मदो पर व्यय किया जायेगा अन्यथा उक्त मद की राशि का समर्पण किया जावे। एक नर्सरी पर केवल एक चौकीदार ही रखा जावे।

उप वन संरक्षक (प्रशासन)
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पौध तैयारी – मॉडल 3

श्रम दरः– रु 259/– प्रति दिन

लागत अनुमान 1.00 लाख पौध तैयारी 15 सेमी X 22.5 सेमी (6 इन्च X 9 इन्च) 20 माईक्रोन पैलिथीन बैग्स

उदेश्य– इस माडॅल का उद्देश्य चोडी पत्तीयों वाली प्रजातियां जो की तीव्र गति से बढती हैं के पौधे तैयार करना है। इन तैयार किये गये पौधो को 5 फिट तक के बडे पौधे तैयार करने हेतु 20X40 सेमी की पोलिथीन बैग्स में भी ट्रान्सप्लान्ट किया जायेगा। इस मॉडल में तैयार किये जाने वाले पौधो का 6 माह तक पौधशाला में संधारण किया जायेगा।

उपयुक्त प्रजातियॉ –शीशम, हवन, पीपल, बरगद, इत्यादि

क्र.स.	आईटम	प्रथम वर्ष			द्वितिय वर्ष			योग		
		श्रम	साम्गी	योग	श्रम	सामग्री	योग	श्रम	सामग्री	योग
1	147 किग्रा पौलीथिन थैली बनाई व खरीद आकार 15 X 22.5 सेमी (6 इन्च X 9 इन्च), 20 माइक्रोन दर 145.20 रू किग्रा	0	22838	22838	0	0	0	0	22838	22838
2	10 मी X 1.0 मी X 0.25 मी. आकार की 81 क्यारियॅा तैयार कराना	28490	0	28490	0	0	0	28490	0	28490
3	बीज सग्रह करना/क्रय करना	2590	1002.6	3592.6	0	0	0	2590	1003	3593
4	फार्म यार्ड मेन्यौर (गोबर–मैगनी की खाद) 48 घमी क्रय करना दर 1434.40 रू/घमी	23200	54405	77606	0	0	0	23200	54405	77606
5	चिकनी मिटटी की व्यवस्था करना एवं पौधाशाला में परिवहन करना 48 घमी दर 711.37 रू/घमी	5561	31918	37479	0	0	0	5561	31918	37479
6	रेत की व्यवस्था करना एवं पौधशाला में परिवहन करना 48 घमी दर 534.06 रू/घमी	4204.3	23938	28142	0	0	0	4204	23938	28142
7	खाद, चिकनी मिटटी, रेत का मिश्रण बनवाना, पौलीथीन थैलीयां भरवाना एवं थैलीयों को क्यारी में जमवाना	120675	0	120675	0	0	0	120675	0	120675
8	मदरबैड तैयार कर उसमें बीज बुवाइ एवं कटिग्स	18389	0	18389	0	0	0	18389	0	18389
9	मदरबैड से छोटे पौध एवं कटिग्स निकालकर पौलिथीन थैलियों में लेना ।	18389	0	18389	0	0	0	18389	0	18389
10	नर्सरी पर एक माली व दो श्रमिको की बीज बुवाई, पुनः बीज बुवाई, निदाई, पानी पिलाई एवं वर्मी कम्पोस्ट तैयार करने की मजदूरी	64750	0	64750	129500	0	129500	194250	0	194250
11	पोलिथीन थैलियों का स्थान परिवर्तन करना व बाहर निकली जडों को काटकर हटवाना, दो बार	0	0	0	51800	0	51800	51800	0	51800
12	कीटनाशक दवा एवं उर्वरक खरीद पर व्यय	0	2824.8	2824.8	0	1447.7	1447.7	0	4273	4273
13	उपकरण एवं औजार खरीद मय वाहन एवं मशीनों का संधारण व्यय	0	13910	13910	0	5350	5350	0	19260	19260
14	बिजली पानी पर व्यय	0	25680	25680	0	42800	42800	0	68480	68480
15	जल सग्रह टैंक बनाना/क्रय करना मय पाईप खरीद	0	16050	16050	0	5350	5350	0	21400	21400
16	चौकीदार पर व्यय	13468	0	13468	40404	0	40404	53872	0	53872
17	श्रमिक सुविधाओं पर व्यय	518	706.2	1224.2	777	1412.4	2189.4	1295	2119	3414
18	छायां हेतु सिरकी आदि क्रय करना	0	0	0	0	3732.2	3732.2	0	3732	3732
19	अन्य विविध व्यय	724.93	552.12	1277	1554	953.37	2507.4	2279	1505	3784
Total		**300959**	**193825**	**494784**	**224035**	**61046**	**285081**	**524994**	**254871**	**779865**

बिजली पानी हेतु देय राशि का उपयोग केवल इन्ही मदो पर व्यय किया जायेगा अन्यथा उक्त मद की राशि का समर्पण किया जावे। एक नर्सरी पर केवल एक चौकीदार ही रखा जावे।

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पौध तैयारी – मॉडल 4

श्रम दरः– रु 259/– प्रति दिन

लागत अनुमान 1.00 लाख पौध तैयारी 15 सेमी X 22.5 सेमी (6 इन्च X 9 इन्च) 40 माईक्रोन पैालिथीन बैग्स

उद्देश्य– इस माडॅल का उदेश्य चौडे पत्तों वाली प्रजातियों जिनकी सामान्यतया वृद्धि धीमी होती है, के पौधे तैयार करना है। इसी कारण से इसमें पौलिथीन बैग्स की मोटाई अधिक रखी गई है। इस मॉडल में तैयार किये जाने वाले पौधों को 12 माह तक पौधशाला में संधारण किया जायेगा।

उपयुक्त प्रजातियाँ – अमलतास, करंज, चुरेल, ईमली, सीताफल आदि

क्र.स.	आईटम	प्रथम वर्ष			द्वितिय वर्ष			योग		
		श्रम	सामग्री	योग	श्रम	सामग्री	योग	श्रम	सामग्री	योग
1	294 किग्रा पौलीथीन थैली बनाई व खरीद आकार 15 X 22.5 सेमी (6 इन्च X 9 इन्च), 40 माइक्रोन दर 145.20 रू/किग्रा	0	45677.23	45677.23	0	0	0	0	45677	45677
2	10 मी X 1.0 मी X 0.25 मी. आकार की 88 क्यारियॉ तैयार कराना	28490	0	28490	0	0	0	28490	0	28490
3	बीज सग्रह करना/क्रय करना	2590	1002.59	3592.59	0	0	0	2590	1003	3593
4	फार्म यार्ड मेन्यौर (गोबर–मैंगनी की खाद) 48 घमी क्रय करना दर 1434.40 रू/घमी	23200.4	54405.22	77606	0	0	0	23200	54405	77606
5	चिकनी मिटटी की व्यवस्था करना एवं पौधाशाला में परिवहन करना 48 घमी दर 711.37 रू/घमी	5560.96	31918.1	37479	0	0	0	5561	31918	37479
6	रेत की व्यवस्था करना एवं पौधशाला में परिवहन करना 48 घमी दर 534.06 रू/घमी	4204.3	23938.04	28142	0	0	0	4204	23938	28142
7	खाद, चिकनी मिटटी, रेत का मिश्रण बनवाना, पौलीथीन थैलीयां भरवाना एवं थैलीयों को क्यारी में जमवाना	120675	0	120674.7	0	0	0	120675	0	120675
8	मदरबैड तैयार कर उसमे बीज बुवाई ,एवं कटिंग्स लगाना	18389	0	18389	0	0	0	18389	0	18389
9	मदरबैड से छोटे पौध एवं कटिंग्स निकालकर पैलिथीन थैलियों में लेना ।	18389	0	18389	0	0	0	18389	0	18389
10	नर्सरी पर एक माली व दो श्रमिकां की बीज बुवाई, पुनः बीज बुवाई, निदाई, पानी पिलाई एवं वर्मी कम्पोस्ट तैयार करने की मजदूरी	291378	0	291378	97125	0	97125	388503	0	388503
11	पौलिथीन थैलियो का स्थान परिवर्तन करना व बाहर निकली जडों को काटकर हटवाना, दो बार	51800	0	51800	51800	0	51800	103600	0	103600
12	कीटनाशक दवा जिप्सम एवं उर्वरक खरीद पर व्यय	0	4696.23	4696.23	0	1412.4	1412.4	0	6109	6109
13	उपकरण एवं औजार खरीद मय वाहन एवं मशीनों का संधारण व्यय	0	13910	13910	0	5350	5350	0	19260	19260
14	बिजली पानी पर व्यय	0	77040	77040	0	25680	25680	0	102720	102720
15	जल सग्रह टैंक बनाना/क्रय करना मय पाईप खरीद व्यय	0	16050	16050	0	5350	5350	0	21400	21400
16	चौकीदारी पर व्यय	60606	0	60606	20202	0	20202	80808	0	80808
17	श्रमिक सुविधाओं पर व्यय	777	4078.84	4855.84	518	2703.9	3221.89	1295	6783	8078
18	छायां हेतु सिरकी आदि क्रय करना	0	0	0	0	4237.2	4237.2	0	4237	4237
19	अन्य विविध व्यय	1760.93	1010.08	2771	1684.19	1129.9	2814	3445	2140	5585
	Total	**627820**	**273726**	**901546**	**171329**	**45863**	**217193**	**799149**	**319590**	**1118739**

बिजली पानी हेतु देय राशि का उपयोग केवल इन्ही मदो पर व्यय किया जायेगा अन्यथा उक्त मद की राशि का समर्पण किया जावे। एक नर्सरी पर केवल एक चौकीदार ही रखा जावे।

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
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पौध तैयारी – मॉडल 5

श्रम दरः– रु 259/– प्रति दिन

लागत अनुमान 1.00 लाख पौध तैयारी 12.5 सेमी x 30 सेमी 40 माईक्रोन पौलिथीन बैग्स

उदेश्य– इस मार्डेल का उद्देश्य कॉटेदार शीघ्र वृद्धि वाली प्रजातियॉ व जिनकी मूसला जड़ मजबूत होती है, ऐसी प्रजातियों के पौधे तैयार करना है। इस मॉडल में तैयार किये जाने वाले पौधों को 6 माह तक पौधशाला में संधारण किया जायेगा।

उपयुक्त प्रजातियॉ – बेर, खैर, बबूल प्रजातियां, जंगल जलेबी, आंवला, हवन आदि

क्र.स.	आईटम	प्रथम वर्ष			द्वितिय वर्ष			योग		
		श्रम	सामग्री	योग	श्रम	सामग्री	योग	श्रम	सामग्री	योग
1	324 किग्रा पॉलीथीन थैली बनाई व खरीद आकर 12.5 X 30 सेमी 40 माइक्रोन दर 145.20 रू/किग्रा	0	50338	50338	0	0	0	0	50338	50338
2	10 मी X 1.0 मी X 0.30 मी. आकार की 60 क्यारियां तैयार कराना	23310	0	23310	0	0	0	23310	0	23310
3	बीज सग्रह करना/क्रय करना	2590	1002.6	3592.6	0	0	0	2590	1003	3593
4	फार्म यार्ड मेन्यौर (गोबर–मैगनी की खाद) 48 घमी क्रय करना दर 1434.40 रू/घमी	23200	54405	77606	0	0	0	23200	54405	77606
5	चिकनी मिटटी की व्यवस्था करना एवं पौधाशाला में परिवहन करना 48 घमी दर 711.37 रू/घमी	5561	31918	37479	0	0	0	5561	31918	37479
6	रेत की व्यवस्था करना एवं पौधशाला में परिवहन करना 48 घमी दर 534.06 रू/घमी	4204.3	23938	28142	0	0	0	4204	23938	28142
7	खाद, चिकनी मिटटी, रेत का मिश्रण बनवाना, पॉलीथीन थैलीयां भरवाना एवं थैलीयों को क्यारी में जमवाना	120675	0	120675	0	0	0	120675	0	120675
8	मदरबेड तैयार कर उसमें बीज बुवाइ,एवं कटिग्स लगाना	18389	0	18389	0	0	0	18389	0	18389
9	मदरबैड से छोटे पौध एवं कटिग्स निकालकर पैलिथीन थैलियों में स्थानान्तरित करना।	18389	0	18389	0	0	0	18389	0	18389
10	नर्सरी पर एक माली व दो श्रमिकों की बीज बुवाई, पुनः बीज बुवाई, निदाई, पानी पिलाई एवं वर्मी कम्पोस्ट तैयार करने की मजदूरी	64750	0	64750	129500	0	129500	194250	0	194250
11	पौलिथीन थैलियों का स्थान परिवर्तन करना व बाहर निकली जडों को कटवाना, दो बार	0	0	0	51800	0	51800	51800	0	51800
12	कीटनाशक दवा एवं उर्वरक खरीद पर व्यय	0	4696.2	4696.2	0	1447.7	1447.7	0	6144	6144
13	उपकरण एवं औजार खरीद मय वाहन एवं मशीनों का संधारण व्यय	0	13910	13910	0	5350	5350	0	19260	19260
14	बिजली पानी पर व्यय	0	25680	25680	0	42800	42800	0	68480	68480
15	जल सग्रह टैंक बनाना मय पाईप खरीद व्यय	0	16050	16050	0	5350	5350	0	21400	21400
16	चौकीदारी पर व्यय	20202	0	20202	40404	0	40404	60606	0	60606
17	श्रमिक सुविधाओं पर व्यय	518	706.2	1224.2	779.741	1412.4	2192	1298	2119	3416
18	छायां हेतु सिरकी आदि क्रय करना	0	0	0	0	2824.8	2824.8	0	2825	2825
19	अन्य विविध व्यय	724.93	621.67	1347	1813	1235.9	3048.9	2538	1858	4395
	Total	302513	223266	525780	224297	60421	284718	526810	283687	810497

बिजली पानी हेतु देय राशि का उपयोग केवल इन्ही मदो पर व्यय किया जायेगा अन्यथा उक्त मद की राशि का समर्पण किया जावे। एक नर्सरी पर केवल एक चौकीदार ही रखा जावे।

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा एवं प्रसार
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राजस्थान, जयपुर

पौध तैयारी – मॉडल 6

श्रम दरः– रु 259/– प्रति दिन

लागत अनुमान 1.00 लाख पौध तैयारी 12.5 सेमी x 30 सेमी 40 माईक्रोन पौलिथीन बैग्स

उद्देश्य– इस माडॅल-का उद्देश्य काटेदार प्रजातियों जिनकी मूसंला जड मजबूत होती है, परन्तु जिनकी सामान्यतया वृद्धि धीमी होती है, के पौधे तैयार करना है। इसी कारण से इसमें पौलिथीन बैग्स की मोटाई 40 माइक्रोन रखी गई । इस मॅाडल में तैयार किये जाने वाले पौधों को 12 माह तक पौधशाला में संधारण किया जायेगा।

उपयुक्त प्रजातियॉ – रोंन्झ रोहिडा, विष तेन्दू, टिमरू आदि

क्र.स.	आईटम	प्रथम वर्ष			द्वितिय वर्ष			योग		
		श्रम	सामग्री	योग	श्रम	सामग्री	योग	श्रम	सामग्री	योग
1	324 किग्रा पॉलीथीन थैली बनाई व खरीद आकर 12.5 X 30 सेमी X 40 माइक्रोन दर 145.20 रू/किग्रा	0	50338	50338	0	0	0	0	50338	50338
2	10 मी (ल.) X 1.0 मी (चौ.)X 0.30 मी.(ग.) आकार की 60 क्यारियां तैयार कराना	23310	0	23310	0	0	0	23310	0	23310
3	बीज सग्रह करना/क्रय करना	2590	1002.6	3592.6	0	0	0	2590	1003	3593
4	फार्म यार्ड मेन्यौर (गोबर–मैगनी की खाद) 48 घमी क्रय करना दर 1434.40 रू/घमी	23200	54405	77606	0	0	0	23200	54405	77606
5	चिकनी मिटटी की व्यवस्था करना एवं पौधाशाला में परिवहन करना 48 घमी दर 711.37 रू/घमी	5561	31918	37479	0	0	0	5561	31918	37479
6	रेत की व्यवस्था करना एवं पौधशाला में परिवहन करना 48 घमी दर 534.06 रू/घमी	4204.3	23938	28142	0	0	0	4204	23938	28142
7	खाद, चिकनी मिटटी, रेत का मिश्रण (1:1:1)बनवाना, पॉलीथीन थैलीयां भरवाना एवं थैलीयां को क्यारी में जमवाना	120675	0	120675	0	0	0	120675	0	120675
8	मदरबैड तैयार कर उसमें बीज बुवाई, एवं कटिंग्स लगाना	18389	0	18389	0	0	0	18389	0	18389
9	मदरबैड से छोटे पौध एवं कटिंग्स निकालकर पौलिथीन थैलियों में लेना ।	18389	0	18389	0	0	0	18389	0	18389
10	नर्सरी पर एक माली व दो श्रमिकों की बीज बुवाई, पुनः बीज बुवाई, निदाई, पानी पिलाई एवं वर्मी कम्पोस्ट तैयार करने की मजदूरी	291378	0	291378	97125	0	97125	388503	0	388503
11	पौलिथीन थैलियों का स्थान परिवर्तन करना व बाहर निकली जडों को कटवाना, दो बार	51800	0	51800	51800	0	51800	103600	0	103600
12	कीटनाशक दवा एवं उर्वरक खरीद पर व्यय	0	4696.2	4696.2	0	1412.4	1412.4	0	6109	6109
13	उपकरण एवं औजार खरीद मय वाहन एवं मशीनों का संधारण व्यय	0	13910	13910	0	5350	5350	0	19260	19260
14	बिजली पानी पर व्यय	0	77040	77040	0	25680	25680	0	102720	102720
15	जल सग्रह टैंक बनाना मय पाईप खरीद व्यय	0	16050	16050	0	5350	5350	0	21400	21400
16	चौकीदारी पर व्यय	60606	0	60606	20202	0	20202	80808	0	80808
17	श्रमिक सुविधाओं पर व्यय	0	3715	3715	0	1412.4	1412.4	0	5127	5127
18	छायां हेतु सिरकी आदि क्रय करना	0	3210	3210	0	4237.2	4237.2	0	7447	7447
19	अन्य विविध व्यय	1242.9	727.6	1971	1167.6	847.44	2015	2410	1575	3986
	Total	**621345**	**280951**	**902296**	**170295**	**44289**	**214584**	**791640**	**325240.4**	**1116880.1**

बिजली पानी हेतु देय राशि का उपयोग केवल इन्ही मदो पर व्यय किया जायेगा अन्यथा उक्त मद की राशि का समर्पण किया जावे। एक नर्सरी पर केवल एक चौकीदार ही रखा जावे।

उप वन संरक्षक (प्रशासन)
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पौध तैयारी – मॉडल 7

श्रम दरः– रु 259/– प्रति दिन

लागत अनुमान 1.00 लाख पौध तैयारी 20 सेमी × 40 सेमी, 50 माईक्रोन पौलिथीन बैग्स

उदेश्य– इस माडॅल का उद्देश्य खुबसुरत, फलदार व छायादार जिनकी उचाई 5 फिट तक हो ऐसी प्रजातियो के पौधे तैयार करना है। नर्सरी मॉडल सं. 4 के अनुसार तैयार 15 X 22.5 सेमी की साईज की पोलीथीन बैग्स में तैयार पौधे 20 x 40 सेमी के पौलिथीन बैग्स में ट्रान्सप्लान्ट किये जायेगे। इस मॉडल में तैयार किये जाने वाले पौधो को 24 माह तक पौधशाला में संधारण किया जायेगा।

उपयुक्त प्रजातियॉ – नीम, गुलमोहर, करंज, अमलतास, ईमली, नीमचमेली, जकरन्डा, पेलटाफार्म आदि

क्र.स.	आईटम	प्रथम वर्ष			द्वितिय वर्ष			योग		
		श्रम	सामग्री	योग	श्रम	सामग्री	योग	श्रम	सामग्री	योग
1	15 समी X 22.5 समी (6 इन्च × 9 इन्च) के पौधे 12 माह के बेडस में तैयार करने पर व्यय	846860	351549	1198408	0	0	0	846860	351549	1198408
2	860 किग्रा पौलीथीन थैलीयां बनाई व खरीद आकार 20. × 40 सेमी 50 माइक्रोन दर 145.20 रू/किग्रा	0	133613	133613	0	0	0	0	133613	133613
3	10 मी X 1.0 मी X 0.40 मी. आकार की 145 क्यारिया तैयार कराना	47771.1	0	47771	0	0	0	47771	0	47771
4	फार्म यार्ड मेन्यौर (गोबर–मैगनी की खाद) 109 घमी क्रय करना दर 1434.40 रू/घमी	52684	123545	176229	0	0	0	52684	123545	176229
5	चिकनी मिटटी की व्यवस्था करना एवं पौधाशाला में परिवहन करना 109 घमी दर 711.37 रू/घमी	12627.9	72481	85109	0	0	0	12628	72481	85109
6	रेत की व्यवस्था करना एवं पौधशाला में परिवहन करना 109 घमी दर 534.06 रू/घमी	9546.92	54359	63906	0	0	0	9547	54359	63906
7	खाद, चिकनी मिटटी, रेत का मिश्रण बनवाना, पौलीथीन थैलीयां भरवाना एवं थैलीयों को क्यारी में जमवाना	282313	0	282313	0	0	0	282313	0	282313
8	नर्सरी पर एक माली व दो श्रमिकों को बीज बुवाई, पुनः बीज बुवाई, निदाई, पानी पिलाई एवं वर्मी कम्पोस्ट तैयार करने की मजदूरी	349653	0	349653	116550	0	116550	466203	0	466203
9	पौलिथीन थैलियों का स्थान परिवर्तन करना व बाहर निकली जडों को काटकर हटाना, दो बार	85470	0	85470	85470	0	85470	170940	0	170940
10	कीटनाशक दवा एवं उर्वरक खरीद पर व्यय	0	5650	5650	0	2825	2825	0	8474	8474
11	उपकरण एवं औजार खरीद मय वाहन एवं मशीनों का संधारण व्यय	0	21605	21605	0	5401	5401	0	27007	27007
12	बिजली पानी पर व्यय	0	128400	128400	0	35666	35666	0	164066	164066
13	जल सग्रह टैंक बनाना/क्रय करना मय पाईप खरीद व्यय	0	10700	10700	0	3210	3210	0	13910	13910
14	चौकीदारी पर व्यय	58275	0	58275	19425	0	19425	77700	0	77700
15	श्रमिक सुविधाओं पर व्यय	1944.56	3178	5122	649.56	1059	1709	2594	4237	6831
16	छायां हेतु सिरकी आदि क्रय करना	0	0	0	0	3531	3531	0	3531	3531
17	अन्य विविध व्यय	1031.89	847	1879	516.63	424	940	1549	1271	2820
	Total	1748176	905927	2654104	222611	52116	274728	1970788	958044	2928831

बिजली पानी हेतु देय राशि का उपयोग केवल इन्ही मदो पर व्यय किया जायेगा अन्यथा उक्त मद की राशि का समर्पण किया जावे। एक नर्सरी पर केवल एक चौकीदार ही रखा जावे।

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा एवं प्रसार
राजस्थान, जयपुर

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

कार्यालय प्रधान मुख्य वन संरक्षक, (हॉफ), राजस्थान, जयपुर

क्रमांक एफ 3(13)प्रमुवसं / ट्री / तक0 / 21–22 / 620-34 दिनांकः– 07/12/2022

निमित,

1–परियोजना निदेशक, आर.एफ.बी.पी.–2 जयपुर।

2– समस्त सम्भागीय मुख्य वन संरक्षक जयपुर / अजमेर / भरतपुर / कोटा / उदयपुर / बीकानेर / जोधपुर / (वन्यजीव) जयपुर / कोटा / उदयपुर / सवाईमाधोपुर / सरिस्का / जोधपुर / विभागीय कार्य जयपुर

विषयः–नवीन मॉडल कॉस्ट नोर्म्स न्यूनतम श्रमिक दर रू. 259/- एवं सामग्री दर 2021

महोदय,

उपरोक्त विषयान्तर्गत निवेदन है कि श्रमिक दर 259/-रूपये प्रति दिन के आधार पर प्राप्त हुए वृक्षारोपण मॉडल राज्य स्तरीय मॉडल कमेटी की अनुशंषा पर प्रधान मुख्य वन संरक्षक, (हॉफ) राजस्थान, जयपुर के अनुमोदन उपरान्त संलग्न कर आवश्यक कार्यवाही हेतु प्रेषित किये जा रहे हैं।

(a) Nursery Model No-08

उक्त मॉडल विभागीय वेबसाइट के निम्न लिंक पर उपलब्ध है।

http;//www.forest.rajasthan.gov.in/content/raj/forest/en/forest,-department/departmental-wings/forest-development/model-for-developmental activities.htm|

संलग्न–मॉडल की प्रति।

भवदीय

मुख्य वन संरक्षक (आयोजना)
राजस्थान, जयपुर।

पौध तैयारी – मॉडल–08

श्रम दरः– रु 259/– प्रति दिन

लागत अनुमान 4000 पौध तैयारी

उद्देश्य– इस मॉडल का उद्देश्य विभाग में विभिन्न निर्माण कार्यो में प्रयुक्त होने वाली सीमेंट के खाली बैग्स में छायादार प्रजातियों के 6 से 8 फीट के बड़े पौधे तैयार करना है। ताकि खाली बैग्स का सदुपयोग किया जाकर सड़क किनारे वृक्षारोपण एवं अन्य वृक्ष कुंज में अधिक उँचाई के पौधे पौधरोपण में काम में लिए जा सके। सीमेंट बैग्स को आधा अन्दर की ओर फॉल्ड कर उँचाई में बाहर की तरफ दोनों ओर 3 ईंच की सिलाई की जाकर बैग्स की साईज **32 सेमी X 38 सेमी (8 ईंच व्यास × 15 ईंच उँचाई)** रखी जाएगी। इस मॉडल में माह फरवरी मे 10 सेमी × 15 सेमी साईज की थैलियों में बीजारोपण कर 6 माह तक संधारण किया जावेगा। इसके उपरांत वर्षाकाल माह जुलाई में तैयार पौधों को 30 सेमी × 30 सेमी के अंतराल पर मदरबेड में ट्रांसप्लॉट किये जावेगे। कम वाइबलिटी वाले बीजों यथा नीम, अशोक, मोलश्री, गुन्दा,जामुन इत्यादि का माह जुलाई–अगस्त में 12.5 सेमी × 30 सेमी आकार की थैलियों में बीजारोपण किया जाएगा एवं 12 माह पौधशाला में संधारण किया जाएगा। इस प्रकार मदरबेड एवं पॉलीथीन बैग्स में तैयार इन पौधों को अगले वर्ष जुलाई माह में प्लांट एक्सटेक्टर की सहायता से सीमेंट के खाली बैग्स में ट्रांसप्लांट किया जाएगा। सीमेंट के खाली बैग्स में ट्रांसप्लांट किये गये इन पौधों का अगले एक वर्ष तक संधारण किया जावेगा। । इस प्रकार सीमेंट के खाली बैग्स में 2 से 2.5 वर्ष में 6 से 8 फीट उंचाई के पौधे वृक्षारोपण हेतु तैयार किये जा सकेंगें।

S. No.	Items	प्रथम वर्ष			द्वितिय वर्ष			तृतीय वर्ष			चतुर्थ वर्ष			कुल		
		श्रम	सामग्री	योग	श्रम	सामग्री	योग	श्रम	सामग्री	योग	श्रम	सामग्री	योग	श्रम	सामग्री	योग
1	10 सेमी X 15 सेमी (4 इन्च X 6 इन्च) की थैलियों में 6 माह के पौधों को तैयार करने पर नर्सरी के मॉडल नं0 2 के अनुसार 2200 पौधों पर व्यय।	3317	1720	5037	2216	795	3011	0	0	0	0	0	0	5533	2515	8048
a	मदर बैड बनाना 10 मी X 1.00 मी X 0.20 मी. आकार की 20 मदर बैड तैयार कराना (40 घमी)	0	0	0	5920	0	5920	0	0	0	0	0	0	5920	0	5920
b	फार्म यार्ड मेन्यौर (गोवर मेगनी की खाद) 15 घमी क्रय करना दर 1500 रू/घमी	0	0	0	0	22500	22500	0	0	0	0	0	0	0	22500	22500

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c	चिकनी मिटटी की व्यवस्था करना (मदर बैड हेतु) एवं पौधाशाला में परिवहन करना 15 घमी दर 800 रू/घमी	0	0	0	0	12000	12000	0	0	0	0	0	0	0	12000	12000
d	चिकनी मिटटी व खाद का मिश्रण तैयार कर 20 सेमी मोटाई में 20 मदर बैड में भरना।	0	0	0	15937	0	15937	0	0	0	0	0	0	15937	0	15937
e	10 X 15 सेमी (4 इन्च X 6 इन्च) की थैलियों में 6 माह के पौधो को मदर बैड में रोपित करना 2200 पोधे	0	0	0	405	0	405	0	0	0	0	0	0	405	0	405
2	डीएपी, यूरीया किटनाशक एवं बीज क्रय पर व्यय	0	0	0	0	531	531	0	2500	2500	0	2500	2500	0	5531	5531
3	एक श्रमिक द्वारा मदर बेड में निदाई गुडाई, पानी पिलाई व कीटनाशक उपचार करना आदि के वेतन पर व्यय	0	0	0	60606	0	60606	20202	0	20202	0	0	0	80808	0	80808
4	12.5 सेमी X 30 सेमी (5 ईंच X 12 ईंच) की थैलियों में 12 माह के पौधे तैयार करने पर नर्सरी के मॉडल नं0 06 के अनुसार 2200 पौधों पर व्यय।	0	0	0	13668	6181	19849	3746	974	4720	0	0	0	17414	7155	24569

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राजस्थान, जयपुर

5	32 cm X 38 cm (12 ईंच X 15 ईंच)सेमी साईज के सीमेंट के 4000 खाली वैग्स को फोल्ड करके सिलाई कर तैयार करना @ 5 रूपये/बैग या उक्त साईज की पॉलिथिन थैली	0	0	0	0	20000	20000	0	0	0	0	0	0	0	20000	20000
6	20 पाईप 5 X 10 इन्ची के पौधो की पोटिग निकालने परिवहन हेतु क्रय करना	0	0	0	0	0	0	0	988	988	0	0	0	0	988	988
7	तृतीय वर्ष में 2000 पौधे मदर वेड से व 2000 पौधे थैलियों से पोटिंग निकालकर सीमेंट वैग्स/थैलीयों में लेना एवं वेडस में जमाना रू 19708/हजार वैग्स, अतिरिक्त मिट्टी भराई सहित	0	0	0	0	0	0	78832	8784	87616	0	0	0	87616	0	87616
8	एक श्रमिक द्वारा नर्सरी में पौधों की निदाई गुडाई, पानी पिलाई व कीटनाशक उपचार करना आदि करने के वेतन पर व्यय	0	0	0	0	0	0	60606	0	60606	20202	0	20202	80808	0	80808
9	विजली पानी पर व्यय	0	0	0	0	28533	28533	0	8560	8560	0	4000	4000	0	41093	41093
10	उपकरण, पाईप एवं औजार खरीद मय वाहन एवं मशीनों के संधारण व्यय	0	0	0	0	5350	5350	0	5350	5350	0	0	0	0	10700	10700
11	श्रमिक सुविधाओ पर व्यय	777	1271	2048	777	1271	2048	391	636	1026	0	0	0	1945	3178	5122
12	अन्य विविध व्यय	1161	412	1573	1813	508	2321	1168	494	1662	0	0	0	4141	1415	5556
	Total	5255	3403	**8658**	101342	97669	**199011**	164944	28286	**193230**	20202	6500	**26702**	291743	**135858**	**427601**

विजली पानी हेतु देय राशि का उपयोग केवल इन्ही मदो पर व्यय किया जायेगा अन्यथा उक्त मद की राशि का समर्पण किया जावे। एक नर्सरी पर केवल एक चौकीदार ही रखा जावे।

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा ...
राजस्थान, जयपुर

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

MODEL COST ESTIMATES FOR COMPENSATORY AFFORESTATION

ON ALLOTED NON FOREST LAND

UNIT : 50 Ha
PERIMETER: 60 M/Ha.
LABOUR RATE: Rs.259/Day
COST ESTIMATE: in Rs./Ha.

ADVANCE ACTION (0 YEAR)

S.No.	ITEMS	RATE (Rs,)	LABOUR COMPONENT	MATERIAL COMPONENT	TOTAL
1	Collection of Basic Datas for Microplanning and carrying out joint forest managment activities.	575 / ha	604.35	50.29	655
2	Survey of area, lay out of contour trenches, burrowpits and making of segments / plots	463/ha	475.44	50.29	526
3	Fencing by stone wall and or by ditch.		0.00	0	
	a.) Stone wall fencing 1.20m high 0.80m at base & 0.60 at top (on an average 30m/ha.)	225/rmt	7770.00	0	7770
	b.) Ditch fencing 1.20m deep,1.50m wide at top & 0.90m at bottom (on an average 30m/ha.)	245.16/rmt	8466.75	0	8467
4	Cost of raising 1210 seedlings in nursery.	3.93/- per	3492.24	1730.19	5222
5	Digging of 500 pits size: 0.45x(.4+.5/2)2	17.59/ pit	10128.97	0	10129
6	Digging up 400 rmt Staggered Contour Trenches 45x45cm cross section on middle slopes and V-ditch as per site requirement	28.28/rmt	13025.39	0	13025
7	Construction of 15 mt. long contour dykes of 30X30 cm. cross section on upper slopes and sowing of suitable thorny shrub species seeds along its innerside	30.46/.rmt.	526.51	0	527
8	Treatment of Nallas by construction series of Checkdams of dry ramdom rubble/earthan/brushwood	Prorata	755.11	0	755
9	Construction of the pillars of appropiate size and fixing of iron pipe gate with four square column	Prorata	82.69	97.37	180
10	Construction of approach road and inspection path	Prorata	285.75	0	286
11	Watch and ward @15325 per month for 4 months	Prorata	1490.77	0	1491
12	Construction of Thatched cattle guard hut.	Prorata	145.92	78.11	224
13	Cost of grass and other seeds	Prorata	0.00	242.89	243
14	Labour aminities	Prorata	94.85	85.6	180
15	Purchase of tools and plants	Prorata	0.00	110.21	110
16	Purchase or construction of water storage tank.	Prorata	81.47	48.15	130
17	Purchase of signboards and their fixing	Prorata	32.83	92.02	125
18	Misc. and unforeseen expenses including running of vehicles	Prorata	154.43	162.64	317
	TOTAL YEAR 0		47613.44	2747.76	50361
					5036
19	Administrative charges 10%				55397
	TOTAL				

Signature

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YEAP I (PLANTING YEAR)

1	Collection of datas regarding impact assesment and strengthening Joint Forest Management.	Prorata	0.00	72.76	73
2	Layout of of staggered/continuous contour trenches, V-ditches, contour dykes and pits etc. by contour survey in 1/4th area	71/ha	81.47	0	81
3	Digging of 600 pits of size 0.45 (4+5/2)*2 Cum	17.59/ pit.	12154.76	0	12155
4	Construction of silt detention dams/smal anicut/check dams, etc.	Prorata	3247.84	255.73	3504
5	Maintenance of 1210 seedling in nursery	2.11/ plant	2554.74	341.33	2896
6	Restoration of natural regeneration by making crescent shapad mounds on the lower slopes of seedling and sapling and making ring trenches around the natural trees/shrubs. (150 plant/ ha)	4.1/plant	707.69	0	708
7	Sowing of pellats of grass/pieces of seed mud cakes of grass seeds between row of pits by ploughing and furrowing.	Prorata	1011.68	62.06	1074
8	Sowing/dibbling of seeds of shurb species on the mounds of staggered/continuous contour trenches, "V" ditch and ditch fencing including pretreatment of seeds (370 rmt.)	0.59/ rmt.	238.33	11.77	250
9	Sowing of seeds of shrub spp. on 60 mt. "V" ditch	Prorata	42.56	3.21	46
10	Transportation of 1100 plants from nursery to planting site	1.41/plant	1714.51	68.48	1783
11	Planting of 1100 seedlings including Refilling of pits	3.58/plant	5189.73	0	5190
12	Making of 1100 crescent shaped mounds below planted sapling after planting and dibbling 2 or 3 seeds of shrub species on the mound.	3.16/plant	4534.32	0	4534
13	Spot watering & application of insecticides in 1100 plants in case of advance planting.	3.16/plant	4012.68	0	4013
14	Additional watering in case of long drought spell with insecticide.	3.57/plant	4012.68	0	4013
15	Weeding and hoeing of 1100 plants in 2 times.	2.03/plant	9041.90	0	9042
16	One additional hoeing of 1100 plants.	1.93/ plant	2581.49	0	2581
17	Wedding and hoeing on staggered/ continuous contour trenches and 'V' ditch including Singling/spacement in the	Prorata	813.48	0	813
18	Purchase of insecticide and Fertilizers for 1100 plants.	0.82/plant	0.00	906.29	906
19	Raising of 110 seedilings in nursery for casualty replacement in year-2 (10% of 1100)	3.93/seedling	317.37	157.29	475
20	Watch and ward @15325 per month for 12 months	prorata	4472.31	0	4472
21	Special protection of frost tender species.	Prorata	42.56	36.38	79
22	Labour aminities.	Prorata	200.63	23.54	224
23	Repairs of fencing.	193/hact.	237.11	9.63	247
24	Repairs of check dams.	Prorata	86.33	5.35	92
25	Micellaneous and unforeseen expenditure.	Prorata	160.51	117.7	278
	TOTAL YEAR 1		57456.66	**2071.52**	**59528**
26	Administrative charges 10%				5953
	TOTAL				**65481**

ABBhr.

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First Year Maintenance (year 2)

1	Collection of datas regarding impact assesment and strengthening Joint Forest Management.	Prorata	0.00	72.76	73
2	Maintenance of 110 Seedling in nursery for casualty replacement in 2nd year	2.15 /plant	232.25	31.03	263
3	Casualty replacement 110 plants including redigging of pits, transportation planting, watering	11.55/plant	1382.55	69.55	1452
4	Sowing/dibbling of seeds of shurb species on the mounds of staggered/continuous contour trenches, "V" ditch and ditch fencing including pretreatment of seeds (185 m.)	0.61/ rmt.	124.03	5.35	129
5	Weeding and Hoeing in 1100 plants in pits two times	3.57/plant	9041.90	0	9042
6	Wedding and hoeing on staggered/ continuous contour trenches and 'V' ditch including Singling/ spacement in the line sowing. (185 rmt.)	3.82/plant	814.69	0	815
7	Repair of fencing	216/-ha.	237.11	9.63	247
8	Repairing of Check dams	Prorata	165.37	11.77	177
9	Pruning of Trees species to boost up the growth	Prorata	251.70	12.84	265
10	Wages of Chowkidar @ Rs.15325/ month (only applicable to work chage employee)	prorata	4472.31	0	4472
11	Misc. and unforeseen expenditure	prorata	147.13	67.41	215
	TOTAL YEAR 2		16869.05	280	17149
12	Administrative charges 10%				1715
	TOTAL				18864
	SUBSEQUENT MAINTENANCE (YEAR 3 TO 12)				
1	Collection of datas regarding impact assesment and strengthening Joint Forest Management.	Prorata	0.00	72.76	73
2	Sowing/dibbling of seeds of shurb species on the mounds of staggered/continuous contour trenches, "V" ditch and ditch fencing including pretreatment of seeds (185 m.)	0.61/ rmt.	124.03	5.35	129
3	Repair of fencing	216/hact.	237.11	9.63	247
4	Repairing of Check dams	Prorata	8.51	6.42	15
5	Pruning of Trees species to boost up the growth	Prorata	125.24	4.28	130
6	Wages of Chowkidar @ Rs. 15325/- month (only applicable to work chage employee)	prorata	4472.31	0	4472
7	Maintenance of Vehicles	prorata	115.52	100.58	216
	TOTAL YEAR 3.		5082.72	199	5282
	Administrative charges 10%				528
				Total	5810

GRAND TOTAL	
0Year	55397
First Year	65481
Second Year	18864
Third Year	5810
Fourth Year	5810
Fifth Year	5810
Sixth Year	5810
Seventh Year	5810
Eighth year	5810
Ninth Year	5810
Tenth Year	5810
Eleventh Year	5810
Twelth Year	5810
Total	197842
Say	198000

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा एवं प्रसार

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

MODEL COST ESTIMATE FOR COMPENSATORY AFFORESTATION
ON DEGRADED FOREST LAND

UNIT :	50 Ha
PERIMETER:	60 M/Ha.
LABOUR RATE:	Rs. 259/Day
COST ESTIMATE:	in Rs./Ha.

0 YEAR (ADVANCE ACTION)

S.No.	ITEM OF WORK	RATE (Rs.)	LABOUR	MATERIAL	TOTAL
1	Collection of Basic Datas for Microplanning and carrying out joint forest managment activities.	575/ ha.	604	50	655
2	Survey of area,layout of contour trenches, burrow pits and making of segments / plots	463 / ha.	475	50	526
3	Fencing by stone wall and or by ditch.		0	0	
	a.) Stone wall fencing 1.20 m high 0.80 m at base & 0.60 at top (on an average 30 m/ha.)	225 / rmt	7770	0	7770
	b.) Ditch fencing 1.20m deep,1.50m wide at top & 0.90m at bottom (on an average 30m/ha.)	245.16 / rmt	8467	0	8467
4	Cost of raising 770 seedlings	3.93/ plant	2218	1105	3323
5	Digging up 300 rmt Staggered Contour Trenches 45x45cm cross section on middle slopes and V-ditch as per site	28.28 / rmt	9769	0	9769
6	Digging of 300 pits size: 0.45x(0.4+0.5/2)2 cum	17.6 / pit	6077	0	6077
7	Cost of collection and purchase of grass and other seeds of trees and shrubs	Prorata	0	196	196
8	Treatment of Nallas by constructing series of Checkdams of dry ramdom trubble / earthan / brushwood	Prorata	755	0	755
9	Construction of Thatched cattle guard hut	Prorata	140	78	218
10	Purchase or construction of water storage tank.	Prorata	81	48	130
11	Labour aminities	Prorata	95	86	180
12	Watch and ward for 4 months @ 15325/-	Prorata	1491	0	1491
13	Purchase of Tools and Plants		0	110	110
14	Construction of 50 mt. long contour dykes of 30X30 cm. cross section on upper slopes and sowing of suitable thorny shrub	30.46 / rmt.	1753	0	1753
15	Construction of the pillars of appropiate size for gate.	Prorata	83	97	180
16	Purchase of signboards & fixing at site	Prorata	33	92	125
17	Misc. and unforeseen expenses including POL for vehicles	Prorata	288	108	396
	TOTAL YEAR 0		40100	**2021**	**42121**
19	Administrative charges 10%				4212
				TOTAL	**46333**

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YEAR I (PLANTING YEAR)

1	Collection of datas regarding impact assesment and strengthening Joint Forest Management.	Prorata	0	73	73
2	Maintenance of 770 seedling in nursery	2.11 / plant	1721	134	1854
3	Digging of 400 pits of size 0.45 (4+5/2)*2 Cum	17.73 / pit	8103	0	8103
4	In situ soil and moisture conservation measures like check dam, nadies, earthen bunds etc.	Prorata	2944	243	3187
5	Digging of 30cmX30 cm cross section trench along inner side of stone wall fencing and seed sowing (60 mt./ ha.)	12.43 per rmt.	837	19	856
6	Sowing/dibbling of seeds of grass /thorny trees species on the mounds of contour trench and ditch fencing etc. (370 m / ha.)	0.59/m	237	13	250
7.	Purchase of insecticide and Fertilizers.	0.82/ plant	0	577	577
8	Sowing of pellats of grass/piece of seed mud cakes of grass seeds between row of pits by ploughing and furrowing.	Prorata	586	0	586
9	Transportation of 700 plants from nursery to planting site	1.41/ plant	1090	45	1134
10	Planting of 700 seedlings including Refilling of pits	4.09 / plant	3303	0	3303
11	Watering (if sufficient rains are not there) & application of insecticide in 700 plants at the time of planting.	3.16/ plant	2554	0	2554
12	Restoration of natural regeneration by making crescent shapad mounds on the lower slopes of seedling and sapling and making ring tranches around the natural trees / shrubs. (150 plants / ha)	4.1 / plant	708	0	708
13	Making of crescent shaped mounds below planted sapling after planting and dibbing of 3 seeds of throny tree species. (700 plants / ha)	3.58 / plant	2885	0	2885
14	Weeding and hoeing of 700 plants in 2 time. Repairing of plants mound	3.57/ plant	5754	0	5754
15	Weeding on contour trenches and 'V' ditches and spacement / singling.	Prorata	608	0	608
16	Raising of 70 seedilings in nursery for casualty replacement in year-2 (10% of 700)	3.94 / seedling	202	101	302
17	Watch and ward for 12 months @ Rs.15325/-- month	prorata	4472	0	4472
18	Labour aminties and hut repair.	Prorata	375	49	424
19	Construction of approach road / inspection path	Prorata	440	0	440
20	Construction of gate and fixing of sign board	Prorata	586	80	666
21	Micellaneous and unforeseen expenditure.	Prorata	179	32	211
	TOTAL YEAR 1		37582	1365	38947
22	Administrative charges 10%				3895
				TOTAL	42842

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FIRST YEAR MAINTENANCE (YEAR 2)

1	Collection of datas regarding impact assesment and strengthening Joint Forest Management.	Prorata	0	73	73
2	Maintenance of 70 Seedling in nursery for casualty replacement in year-2	2.11 / plant	147	20	167
3	Repair of fencing	Prorata	259	0	259
4	Casualty replacement 70 plants including redigging of pits, transportation planting, watering and application of insecticides	11.55/ plant	886	39	925
5	Weeding and Hoeing in 700 plants in pits two times	3.57/ Plant	5754	0	5754
6	Watch and ward for 12 months @15325/-	prorata / ha	4472	0	4472
7	Misc. and unforeseen expences including (additional watering and forest protection measures etc.	prorata	390	238	628
	TOTAL YEAR 2		11909	369	12278
8	Administrative Charges 10%				1228
	TOTAL				13506
	SUBSEQUENT MAINTENANCE (YEAR 3 TO 12)				
1	Collection of datas regarding impact assesment and strengthening Joint Forest Management.	Prorata	0	73	73
2	Watch and ward for 12 months @ 15325/-	prorata	4472	0	4472
3	Misc.and unforseen expenditure including (repairing of fencing / structures pruning etc.	prorata	798	289	1087
4	TOTAL YEAR 3		5270	362	5632
5	Administrative charges 10%				563
				Total	6195

	GRAND TOTAL	
	0Year	46333
	First Year	42842
	Second Year	13506
	Third Year	6195
	Fourth Year	6195
	Fifth Year	6195
	Sixth year	6195
	Seventh year	6195
	Eighth year	6195
	Ninth Year	6195
	Tenth Year	6195
	Eleventh Year	6195
	Twelth Year	6195
	TOTAL	164629
	Say	165000

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
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राजस्थान, जयपुर

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

MODEL COST ESTIMATE OF REGENERATION OF SAFETY ZONES

UNIT :	50 Ha
PERIMETER:	60 M/Ha.
LABOUR RATE:	Rs.259/Day
COST ESTIMATE:	in Rs./Ha.

0 YEAR (ADVANCE ACTION)

S.No.	ITEM OF WORK	RATE (Rs.)	LABOUR	MATERIAL	TOTAL
1	Survey and demarcation of area also prepration of treatment map and accordingly prepare estimate of site	60/hact	65.66	6	72
2	Raising of 1210 seedilings in nursery.	3.93/Seedling	3492.24	1730	5222
3	Digging of 500 pits size: 0.45x(.4+.5/2)2	17.54/pit	10128.97	0	10129
4	Cost of grass and other seeds of trees.	Prorata	0.00	243	243
5	Labour amenities	Prorata	178.75	24	202
6	Purchase of Tools and Plants	Prorata	0.00	19	19
7	Purchase of signboards and their fixing.	Prorata	19.46	92	111
8	Misc. and unforeseen expenditure	Prorata	948.45	435	1384
	TOTAL YEAR 0		14833.53	2550	17383
	Administrative chages 10%				1738
				TOTAL	19122

PLANTING YEAR I (YEAR 1)

S.No.	ITEM OF WORK	RATE (Rs.)	LABOUR	MATERIAL	TOTAL
1	Digging of 600 pits of size 0.45(.4+.5/2)2.	17.59/ pit	12155	0	12155
2	Maintenance of 1210 seedling in nursery	2.13/seedling	2555	341	2896
3	Restoration of natural regeneration by making crescent	635/ha	731	0	731
4	Transportation of 1100 plants from nursery to planting site	1.41/ plant	1715	68	1783
5	Application of insecticides and fertilizers in dug up 1100 pits.	0.40/seedling	508	0	508
6	Planting of 1100 seedlings including Refilling of pits	4.09/plant	5190	0	5190
7	Construction of 1100 crescent shaped mounds below planted sapling after planting and dibbling of 3 seeds of shrub species. on the mound.	3.58/plant	4534	0	4534
8	Spot watering & application of insecticides in 1100 plants in case of advance planting.	3.16/plant	4013	0	4013
9	Additional watering in case of long drought spell	3.16/plant	4013	0	4013
10	Weeding and hoeing of 1100 plants in 2 times.	3.57/plant	9042	0	9042
11	One additional hoeing of 1100 plants.	2.03/plant	2581	0	2581
12	Purchase of insecticide and Fertilizers.	0.82/plant	0	906	906
13	Labour amenties.	Prorata	168	35	203
14	Maintenance of Vehicles	Prorata	0	621	621
15	Misc. and unforeseen expenditure.	Prorata	1211	296	1507
	TOTAL		48415	2268	50683
16	Administrative charges 10%			-	5068
				Total	55751
			Grand Total		74873
			Say		75000

Note - Casualty replacement and subsequent maintenance will be done by the lessee at his own cost.

COST ESTIMATE FOR FENCING OF SAFETY ZONE (Rate Rs./100m length)

S.No..	ITEM OF WORK	RATE (Rs.)	Labour	Material	TOTAL
1	INNER FENCING	23709/100mt	13564	11783	25347
2	Administrative charges on grand total	10%		-	2535
				Total	27881
				Say	**28000**
1	OUTER FENCING	30173/100rmt	31011	0	31011
2	Administrative charges on grand total	10%		-	3101
				Total	34112
				Say	**34200**

I. Inner fencing : 3 stand barbed wire fencing with 1.5 m high, 50X50X6 at 5m distance

II. Outer fencing : Ramdom rubble loose stone wall fancing of size 0.80 m at base, 0.60m at top and 1.20m high.

उप वन संरक्षक (प्रशासन)
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राजस्थान, जयपुर

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

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DWARF/MEDICINAL PLANTATION MODEL UNDER COMPENSATORY AFFORESTATION PROJECT FOR HIGH VOLTAGE TRANSMISSION POWER LINE OF 46 METER WIDTH

1	UNIT-5 (1.1Km length of Transmission Line)		5	Wage Rate-259 Per day
2	No. of Plants/Ha.-625 Dwarf Plants& 1375 Medicinal Plants		6	Period- 0 year +11 years
3	Spacing-4x4 Mt. Dwarf Plants& 2x2 Mt. Medicinal Plants		7	Model Cost per Ha. Rs 530000
4	Unit for Model Calculation-1 Ha.			

S.N.	Item of Work	BSR Item. No.	Qty.	Unit	Rate in Rs.	Labour Rs.	Material Rs.	Total Rs.
	Year 0 ADVANCE WORK							
1	Survey, demarcation and layout	2.1.1C10:C20	1	Ha.	125	144.70	0	144.70
2	Dividing area in subplots, their marking on ground & preparation of map		1	Ha.	203	234.68	0	234.6807512
3	Layout for excavation of pits	2.1.3	2000	Nos.	0.79	1921.22	0	1921.220657
4	Digging of pits					0.00		
	(i) 0.45x0.45x0.45 cm. Hard Soil upto 10% boulders	4.1.3	625	Nos.	13.15	9461.40	0	9461.403756
	(ii) 0.30x0.30x0.30 cm.Hard Soil upto 10% boulders	4.1.3	1375	Nos.	4.20	6653.75	0	6653.746479
5	Construction of loose stone check dam in nallahs lead upto 200 m.	3.5.1	50	Cum	255.78	14721.66	0	14721.65728
6	Construction of thatched cattle guard hut (one time L.S.)	-	Prorata	-	-	0.00	8025	8025
7	Purchase of tools & plants (one time L.S.)	-	Prorata	-	-	0.00	1070	1070
8	Purchase of water storage tank (one time L. S.)	-	Prorata	-	-	0.00	5350	5350
9	Purchase of sign board and its fixing (one time L. S.)	-	Prorata	-	-	0.00	535	535
10	Miscellaneous & unforeseen exp.	-		-	-	0.00	3826.32	3826.32
	TOTAL					33137.4	18806.3	51943.7

S.N.	Details of Activities	1st Year Operation (Planting year)						
			Qty.	Unit	Rate	Labour	Materiral	Amount
1	Purchase of medicinal/dwarf plants and transportation upto planting site		2200	Nos.	21.4	0.00	47080	47080
2	Treatment of pit soil with insecticide	8.4.1	2000	Nos.	0.47	1094.37	0	1094.366197
3	Local transport and planting of Plants (in bags size15x22.5) with treatment & initial watering.	8.4.3.2.2 + 8.5.1.3 + water charges	2000	Nos.	16.11	37111.17	0	37111.17371
4	Making of crescent shaped thanwala, having 45 cm radius, around planted palnts in stony hilly areas	8.4.4.3	2000	Nos.	8.12	18701.50	0	18701.50235
5	Fertilizer application urea dose 2 time	8.4.4.5	4000 (2000x2)	Nos.	0.47	2188.73	0	2188.732394
6	Purchase of fertilizer for plants	-	Prorata	-	-	0.00	2140	2140
7	Weeding and Hoeing of plants in plantations (in 45 cm radius and 15 cm depth) hard and bouldary soils 2 times	8.6.1.2	4000 (2000x2)	Nos.	4.59	21157.75	0	21157.74648
8	Watering 3 times except rainy season 30 lit. per plants	8.5.1.3	6000 (2000x3)	Nos.	5.42	37500.28	0	37500.28169
9	Purchase of water @ 300/tanker of 3000 lit.	-	30	Tanker	32.1	0.00	9630	9630
10	Hoeing of plants after every watering	8.6.2	6000 (2000x3)	Nos.	2.46	16999.15	0	16999.15493
11	Purchase of Insecticide	-	Prorata	-	-	0.00	3210	3210
12	Watch & Ward for 12 month @ 5538/month (one C.G. for 5 ha.)	-	12 month	Month	1169.91	16161.36	0	16161.35681
13	Miscellaneous exp.	-		-	-	0.00	9030.8	9030.80
	TOTAL					150914.3	**71090.8**	222005.1

S.N.	Details of Activities	2nd Year Operation (Ist year Maintenance)						
			Qty.	Unit	Rate	Labour	Material	Amount
1	Casualty replacement-20%					0.00	0	
	(a) Cost of Plants	-	440	Nos.	21.40	0.00	9416	9416
	(b) Redigging of pits					0.00	0	0
	(i) 0.45x0.45x0.45 Mt.	-	125	Nos.	6.88	991.01	0	991.0093897
	(ii)0.30x0.30x0.30 Mt.	-	275	Nos.	2.07	655.40	0	655.4037559
	(c) Local transport and planting of plants (in bags size 15x22.5) with treatment & initial watering.	8.4.3.2.2 + 8.5.1.3 + water charges	400	Nos.	16.11	7422.23	0	7422.234742
	(d) soil treatment	8.4.1	400	Nos.	0.47	218.87	0	218.8732394
2	Weeding and Hoeing of plants in 2 times	8.6.1.2	4000 (2000x2)	Nos.	4.59	21157.75	0	21157.74648
3	Watering of Plants 4 times	8.5.1.3	8000	Nos.	5.42	50000.38	0	50000.37559
4	Hoeing of plants after each watering (4 times)	8.6.2	8000 (2000x4)	Nos.	2.46	22665.54	0	22665.53991
5	Repair of Thanwla	8.4.4.4	2000	Nos.	1.45	3356.06	0	3356.056338
6	Cost of water @ 300/tanker of 3000 ltr.	-	40	Tanker	3.21	0.00	12840	12840
7	Watch & ward (1/5) for 12 months @ 1045x12 month	-	12	month	1169.9	16161.36	0	16161.35681
8	Misc. & unforseen exp.	-	-	-	-	0.00	4872.78	4872.78
	TOTAL					122628.6	27128.8	149757.4

S.N.	Details of Activities	3rd Year Operation (IInd year Maintenance)						
			Qty.	Unit	Rate	Labour	Material	Amount
1	Watering of plants 3 times	8.5.1.3	6000	Nos.	5.42	37500.28	0	37500.28169
2	Hoeing of plants after each watering	8.6.2	6000 (2000x3)	Nos.	2.46	16999.15	0	16999.15493
3	Repair of Thanwla once	8.4.4.4	2000	Nos.	1.45	3356.06	0	3356.056338
4	Cost of water @ 300/tanker of 3000 ltr.	-	30	Tanker	321	0.00	9630	9630
5	Watch & ward (1/5) for 12 months @ 5538/5 = 1107.6x12	-	12	Month	1169.91	16161.36	0	16161.35681
6	Misc. & unforseen exp.	-	-	LS	-	0.00	4879.2	4879.2
	TOTAL					74016.85	14509.2	88526.05

S.N.	Details of Activities	4th Year Operation (3rd year Maintenance)						
			Qty.	Unit	Rate	Labour	Material	Total
1	Watch & ward for 12 months 5538/5 = 1107.6x12	-	12	Month	1169.9	16161.357	0	16161.35681
2	Misc. & unforseen exp.	-	-	-	-	0	1562.2	1562.2
	TOTAL					16161.4	1562.2	17723.6

S.N.	Details of Activities	5th Year Operation (4th year Maintenance)						
			Qty.	Unit	Rate	Labour	Material	Total
1	Watch & ward for 12 months 5538/5 = 1107.6x12	-	12	Month	1169.9	16161.357	0	16161.35681
2	Misc. & unforseen exp.	-	-	-	-	0	1562.2	1562.2
	TOTAL					16161.357	1562.2	17723.55681

S.N.	Details of Activities	6th Year Operation (5th year Maintenance)						
			Qty.	Unit	Rate	Labour	Material	Total
1	Watch & ward for 12 months 5538/5 = 1107.6x12	-	12	Month	1169.9	16161.357	0	16161.35681
2	Misc. & unforseen exp.	-	-	-	-	0	1562.2	1562.2
	TOTAL					16161.4	1562.2	17723.6

S.N.	Details of Activities	7th Year Operation (6th year Maintenance)						
			Qty.	Unit	Rate	Labour	Material	Total
1	Watch & ward for 12 months 5538/5 = 1107.6x12	-	12	Month	1169.91	16161.357	0	16161.35681
2	Misc. & unforseen exp.	-	-	-	-	0	1562.2	1562.2
	TOTAL					16161.4	1562.2	17723.6

S.N.	Details of Activities	8th Year Operation (7th year Maintenance)						
			Qty.	Unit	Rate	Labour	Material	Total
1	Watch & ward for 12 months 5538/5 = 1107.6x12	-	12	Month	1169.91	16161.357	0	16161.35681
2	Misc. & unforseen exp.	-	-	-	-	0	1562.2	1562.2
	TOTAL					16161.4	1562.2	17723.6

S.N.	Details of Activities	9th Year Operation (8th year Maintenance)						
			Qty.	Unit	Rate	Labour	Material	Total
1	Watch & ward for 12 months 5538/5 = 1107.6x12	-	12	Month	1169.9	16161.357	0	16161.35681
2	Misc. & unforseen exp.	-	-	-	-	0	1562.2	1562.2
	TOTAL					16161.4	1562.2	17723.6

S.N.	Details of Activities	10th Year Operation (9th year Maintenance)						
			Qty.	Unit	Rate	Labour	Material	Total
1	Watch & ward for 12 months 5538/5 = 1107.6x12	-	12	Month	1169.9	16161.357	0	16161.35681
2	Misc. & unforseen exp.	-	-	-	-	0	1562.2	1562.2
	TOTAL					16161.4	1562.2	17723.6

S.N.	Details of Activities	11th Year Operation (10th year Maintenance)						
			Qty.	Unit	Rate	Labour	Material	Total
1	Watch & ward for 12 months 5538/5 = 1107.6x12	-	12	Month	1169.9	16161.357	0	16161.35681
2	Misc. & unforseen exp.	-	-	-	-	0	1562.2	1562.2
	TOTAL					16161.4	1562.2	17723.6

ABSTRACT OF YEARWISE MODEL COST

S.No	Year	Labour	Material	Total
1	0 Year (Advance Work)	33137.41	18806.32	51943.72845
2	Planting Year	150914.31	71090.8	222005.1146
3	I Year Maintenace	122628.60	27128.78	149757.3762
4	II Year Maintenance	74016.85	14509.2	88526.04977
5	III Year Maintenace	16161.357	1562.2	17723.55681
6	IV Year Maintenance	16161.357	1562.2	17723.55681
7	V Year Maintenace	16161.357	1562.2	17723.55681
8	VI Year Maintenance	16161.4	1562.2	17723.55681
9	VII Year Maintenace	16161.357	1562.2	17723.55681
10	VIII Year Maintenance	16161.357	1562.2	17723.55681
11	IX Year Maintenace	16161.357	1562.2	17723.55681
12	X Year Maintenance	16161.357	1562.2	17723.55681
	TOTAL	509988.02	144032.7	654020.7235

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
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उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा एवं प्रसार
राजस्थान, जयपुर

COPPICE MAINTENANCE AND GAP PLANTING WITHOUT FENCING

Plantation Unit - 5 ha (1000 m X 50 m) — **Perimeter-Average = 2100 m**

No. of Plants - 200 per ha. — **Perimeter/ha = 420 m**

Labour rate Rs. 259 per day

Unit for Model calculation- per ha.

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
Year-O Advance Action							
1	Collection of data for microplanning,preparation of microplan and management plan	Prorata			98.98	55.00	153.98
2	Survey and demarkation control of area, division of area into segments, preparation of treatment map and plantaion card.	Prorata			431.67	94.00	525.67
3	Raising of 240 plants	Plant	240	8.15	1561.30	600.00	2161.30
4	Singling of Coppice	Plants	520	16.78	1005.60	0.00	1005.60
5	Purchase of PVC/HDPE Pipes of 3 inch dia and 1 inch dia	Prorata			0.00	2252.00	2252.00
6	Purchase of tools and plants	Prorata			46.56	314.00	360.56
7	Purchase of fertilizers and insecticides	Prorata			0.00	350.00	350.00
8	Purchase of Plantation Board including painting and fixing	Prorata			124.15	264.00	388.15
9	Watch and ward for three months	Prorata			4040.64	0.00	4040.64
10	R & M of Vehicle	Prorata			0.00	100.00	100.00
11	Labour amenities	Prorata			60.80	50.00	110.80
12	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata			63.36	112.00	175.36
		Total			7433.06	**4191**	**11624**

Year 1 Planting Year

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Maintenance of 240 Plants in nursery.	Plant	240	1.80	385.22	98.40	483.62
2	Raising of 48 Plants for casualty replacement.	Plant	48	7.85	387.65	60.00	447.65
3	Transportation of 210 plants from Nursery to plantation site	Plant	220	1.52	381.81	20.00	401.81
4	Singling of Coppice	Plants	520	1.68	1005.60	0.00	1005.60
5	Plantating 200 plants - Planting Activity				0.00		0.00
a	Command area- Includes digging of pits; local transportation, treatment of pit with pesticides and fertiliser, making of Thanwala. And initial watering 100 plants	Plant	100	13.62	1568.59	0.00	1568.59
b	Un-command area- Includes digging of pits ; local transportation, treatment of pit with pesticides and fertiliser, making of Thanwala. And initial watering 100 plants	Plant	100	15.21	1580.75	148.00	1728.75
6	Watering of plants 5 times				0.00		0.00
a	100 plants by pump	Plant	100	3.45	1410.52	500.00	1910.52
b	100 plants by Khala/syphon	Plant	100	9.29	1070.05	0.00	1070.05
7	Weeding and Hoeing 200 plants	Plant	200	3.09	712.55	0.00	712.55
8	Hoeing 200 five times	Plant	1000	18.59	2140.09	0.00	2140.09
9	Application of urea and fertilisers	Plant	200	0.61	92.41	30.00	122.41
10	Purchase of PVC pipes	Prorata			0.00	500.00	500.00
11	Maintenance of engine	Prorata			0.00	100.00	100.00
12	Construction of cattle guard hut	Prorata			1222.04	858.00	2080.04
13	Watch and Ward charges	Prorata			4040.64	0.00	4040.64
14	R & M of Vehicles	Prorata			0.00	700.00	700.00
15	Labour amenities	Prorata			243.19	34.00	277.19
16	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata			42.68	59.00	101.68
		Total			16283.80	**3107**	19391.20

Year-2 Maintenance-I

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Maintenance of 48 Plants in nursery.	Plant	48	1.73	77.04	19.68	96.72
2	Transportation of 44 plants	Plant	44	1.61	72.96	10.00	82.96
3	Re planting of 20 plants in hard soil in command area including digging of pits, treating with pesticides,fertilisers and watering	Plant	20	9.61	221.31	0.00	221.31
4	Re planting of 20 plants in sandy soil in un-command area including digging of pits, treating with pesticides,fertilisers and watering	Plant	20	11.20	223.49	30.00	253.49
5	Watering of plants after replacement- 6 times				0.00		0.00
a	100 plants by pump	Plant	600	3.44	1661.00	626.00	2287.00
b	100 plants by Khala/syphon	Plant	600	1.85	1284.06	0.00	1284.06
6	Application of urea and fertilisers- 2 times, 200 plants	Plant	400	0.54	136.19	100.00	236.19
7	Weeding and Hoeing- 200 plants, 2 times	Plant	400	3.09	1425.11	0.00	1425.11
8	Hoeing 200 plants six times	Plant	1200	1.85	2568.11	0.00	2568.11
9	R&M of vehicles	Prorata			0.00	100.00	100.00
10	Maintenance and repair of old engine	Prorata			0.00	343.00	343.00
11	Watch and Ward charges	Prorata			4040.64	0.00	4040.64
12	Miscellaneous expenditure (Labour, Instruments, Machine etc)	Prorata			24.57	9.00	33.57
		Total			11734.49	1238	12972.17

Year-3 Maintenace-II

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watering of plants- 5 times						
a	100 plants by pump	Plant	500	3.45	1410.52	500.00	1910.52
b	100 plants by Khala/syphon	Plant	500	1.85	1070.05	0.00	1070.05
2	Hoeing 200 plants five times	Plant	1000	2.14	2140.09	0.00	2140.09
3	Purchase of PVC pipes	Prorata			0.00	500.00	500.00
4	R&M of vehicles	Prorata			0.00	264.00	264.00
5	Application of urea and fertilisers- 2 times, 200 plants	Plant	400	0.53	136.19	100.00	236.19
6	Maintenance & repair of old engine	Prorata			0.00	100.00	100.00
7	Prunning and tending of 200 plants	Plant	200	1.85	428.02	0.00	428.02
8	Watch and Ward charges	Prorata			4040.64	0.00	4040.64
9	Miscellaneous expenditure (Labour, Instruments, Machine,repair of watercourse etc)	Prorata			102.17	54.00	156.17
		Total			9327.67	1518	10846

Year-4 - Maitenance-III

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watering of plants 4 times						
a	100 plants by pump	Plant	400	3.47	1308.38	252.00	1560.38
b	100 plants by Khala/syphon	Plant	400	1.85	856.04	0.00	856.04
2	Hoeing 200 plants four times	Plant	800	1.85	1712.08	0.00	1712.08
3	Pruning and tending of 200 plants	Plant	200	7.40	1704.78	0.00	1704.78
4	R&M of vehicles	Prorata			0.00	146.00	146.00
5	Maintenance & repair of Engine	Prorata			0.00	110.00	110.00
6	Watch and Ward charges	Prorata			4040.64	0.00	4040.64
7	Miscellaneous expenditure/repair of watercourse	Prorata			144.83	89.00	233.83
		Total			9766.74	597	10364

Year-5 Maintenance-IV

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watering of plants 2 times						
a	100 plants by pump	Plant	200	3.47	685.80	100.00	785.80
b	100 plants by Khala/syphon	Plant	200	1.85	428.02	0.00	428.02
2	Pruning and tending of 100 plants	Plant	100	7.40	852.39	0.00	852.39
3	R&M of vehicles	Prorata			0.00	145.00	145.00
4	Maintenance & repair of Engine	Prorata			0.00	110.00	110.00
5	Watch and Ward charges	Prorata			4040.64	0.00	4040.64
6	Miscellaneous expenditure/repair of watercourse	Prorata			40.09	20.00	60.09
		Total			6046.94	375	6422

Year-6 Maintenance-V

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watering of plants- 2 times						
a	100 plants by pump	Plant	200	3.47	685.80	100.00	785.80
b	100 plants by Khala/syphon	Plant	200	1.85	428.02	0.00	428.02
2	Pruning and tending of 100 plants	Plant	100	7.40	852.39	0.00	852.39
3	Watch and Ward charges	Prorata			3813.26	0.00	3813.26
4	Miscellaneous expenditure/repair of watercourse	Prorata			50.44	37.00	87.44
		Total			5829.91	137	5967

Year-7 Maintenance-IV

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	Watch and Ward charges three months	Prorata			4040.64	0.00	4040.64
		Total			4040.64	0.00	4040.64
	Grand Total				70463	11163	81626

Yearwise Cost Statement

No.	Item of Works	Unit	Qty.	Rate (Rs.)	Labour Cost	Material Cost	Total Cost
1	YEAR 0 ADVANCE ACTION				7433	4191	11624
2	YEAR 1 - PLANTING YEAR				16284	3107	19391
3	YEAR 2 - MAINTENANCE I				11734	1238	12972
4	YEAR 3 - MAINTENANCE II				9328	1518	10846
5	YEAR - 4 MAINTENANCE III				9767	597	10364
6	YEAR - 5 MAINTENANCE IV				6047	375	6422
7	YEAR - 6 MAINTENANCE V				5830	137	5967
8	YEAR - 7 MAINTENANCE VI				4041	0	4041
	Grand Total				70463	11163	81626

1. The Models just advisory guidelines and works are to be carriedout on the basis of site specific estimates.
2. This Model is to be implemented in areas which have been felled by the Department Operations Division.
3. Since the proposed area is not being fenced, suitable markers on the ground are to be essentially erected /created to delineate the areas.
4. Division taking up a proposed area for treatment as per this Model, will essentially draw a KML of the area and upload the same on the egreen watch website before commencing the Plantation activity.

उप वन संरक्षक (प्रशासन)
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(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

MODEL COST ESTIMATE FOR PLANTION ALONG NHAI ROADS (BARBED WIRE FENCING MOUDLE)

Labour Rate @259/- per day

For Sites having more than 50% length withTwo or more Rows

Particular	Length in KM			No. of Plants in LHS				No. of Plants in LHS				Total Plants
	LHS	RHS	Total	1st Row	Intermediate Rows	Last Row	Total	1st Row	Intermidiate Rows	Last Row	Total	
2 row planting with Barbed wire fencing	7		14	2333	1167	0	3500	2333	1167		3500	7000
3 or more row planting with barbed wire fencing	2	2	4	667	333	167	1167	667	333	167	1167	2334
1 row planting with Tree Guard fencing	1	1	2	167	0	0	167	167	0	0	167	334
Land Parcel			0				0				0	0
Total	10	10	20	3167	1500	167	4834	3167	1500	167	4834	9668
Existing Trees in Tree Guard Section							0				0	0
Existing Trees in Barbed Wire Section							100				50	150
Net Planting Target							4734				4784	9518
Length of Fencing in Mts	18180	18180	36360									
No. of Tree Guards	167	167	334									

1st Row	Plant to Plant distance 3 Mts	333 plants/KM	Small to Medium height ornamental Trees like Kachnar, Amaltas, Jakranda, Peltoform, Tabebuia spp, etc.
2nd & Intermidiate Rows	Plant to Plant distance 6 Mts	167 plants/KM/Row	Shady & Fruit Bearing Trees like Neem,Shisham, Arjun, Siris, Jamun, Bakain, Mango, Paras Pipal etc.
3rd/Last Row	Plant to Plant distance 12 Mts	83 plants/KM	Large size Shady Trees like Baniyan, Pipal, Gular, Imali. Pilkhan etc.
Single Row with Tree Guards	Plant to Plant distance 6 Mts	167 plants/KM	Shady & Fruit Bearing Trees like Neem,Shisham, Arjun, Siris, Jamun, Bakain, Mango, Paras Pipal etc.
Distance between 2 Rows	3 Mts		
Labour Rate	Rs. 259/day		

YEAR 1 : ADVANCE ACTION & PLANTING

S.N	ITEM OF WORK	Unit	Qnty.	Rate Labour	Rate Material	Amount Labour	Amount Material	Amount Total
1	2	3	4	5	6	7	8	9
1	Collection of data for preparation of DPR, micro planning and Management plan and Surveys of area etc	KM	20	57.56	150	1151.2	3000	4151.2
2	Tree Guard Fencing with 4 RCC pannels of 45 cm width and 1.8 Mt height each, including cost of material, transportation, fixing etc	No.	334	230.22	1400	76893.48	467600	544493.48
3	Fencing with RCC Post of size 2.10 m x(0.10+0.15) x1/2 x 0.10 (5 m apart) with 5 strand barbed wire of 12 gauge with 2 cross wire or 3 strand barbed wire of 12 gauge supported with 5 feet high weldmess of 4" *4" including cost of material, fixing, etc	RMT	36360	49.5	210	1799820	7635600	9435420
4	Purchase of tools & equipment	KM	20	0	350	0	7000	7000
5	Sign board including painting and fixing	KM	20	57.56	450	1151	9000	10151
6	Watch & Ward for 9 months one watch man for every 4 km each side	Man Months	45	6734	0	303030	0	303030
7	Labour Amenities	KM	20	28.78	75	576	1500	2076
8	Site clearance including removal of unwanted bushes, leveling of the site wherever required.	KM	20	345.33	700	6907	14000	20907
9	Construction of temporary cattle guard hut for watch and Ward One at 10 kilometers.	KM	20	287.78	500	5756	10000	15756
10	Digging of pits of Size 0.60 x 0.60 x 0.60 m including lay out, marking, dressing, etc.	No.	9518	40.29	0	383480	0	383480
11	Planting in pit size 0.60 x 0.60 x 0.60 m including local transportation of plants at site, submerging the polypots in	No.	9518	0	0	0	0	0
12	(A) 20 x 40 cm bag	No.	7614	27.35	0	208243	0	208243
13	(B) 30 x 40 cm bag	No.	1904	34.83	0	66316	0	66316
14	Weeding and hoeing of plants after planting and in rains (2 times)	No.	19036	4.02	0	76525	0	76525
15	Procurement of Plants for 3rd/last row with 2 mts or more height with good health and growth in 30x40 cm Poly bags with	No.	2285	11.51	90	26300	205650	231950
16	Procurement of Plants with 1.5 mts or more height with good health and growth in 20x40 cm Poly bags, with 20% Extra for plants required for casulty replacement including transportation	No.	9137	11.51	40	105167	365480	470647
17	Adding the farm yard manure/vermi compost/DAP/insecticide etc to each pit including cost of material	No.	9518	2.3	8	21891	76144	98035
18	Irrigation (watering) of plants (watering will be as per the weather conditions) by tractor tanker, total 10 watering	No.	95180	3.45	5.29	328371	503502	831873
19	Hoeing of plants after each watering	No.	95180	2.86	0	272215	0	272215
20	Singling, pruning and other silvicultural operatipons for the existing trees/plants	No.	150	46.04	0	6906	0	6906
21	Consolidation of JFM and participatory programs	KM	20	0	500	0	10000	10000
22	Miscellaneous and unforeseen works and Expenditures (Including mainantainance of vehicles and vehicle on rent for inspection & monitoring)	KM	20	3453.33	9000	69067	180000	249067
	TOTAL YEAR-1					3759765	9488476	13248241

YEAR-2 : MAINTENANCE

S.N	ITEM OF WORK	Unit	Qnty.	Rate Labour	Rate Material	Amount Labour	Amount Material	Amount Total
1	2	3	4	5	6	7	8	9
1	Planting for casualty replacement including redigging and treatment of pit and plant with insecticides, local transport, making crescent shape Thanwla and watering with cost of water and transport	Nos.	952	44.92	0	42764	0	42764
2	Irrigation (watering) of plants from April. to March 12 months (watering will be as per the weather conditions) by tractor tanker, total 16 watering	No.	152288	3.45	5.29	525394	805604	1330997
3	Weeding and hoeing of plants after planting and in rains 2 times	No.	19036	4.02	0	76525	0	76525
4	Hoeing of plants after each watering	No.	152288	2.86	0	435544	0	435544
5	Treatment with nsecticide and fertilizer including cost of matersl	No.	9518	0.58	1.5	5520	14277	19797
6	Fencing repair as per requirement	KM	20	460.44	100	9209	2000	11209
7	Pruning of Plants	No.	1904	2.31	0	4398	0	4398
8	Singling, pruning and other silvicultural operatipons for the existing trees/plants	No.	150	46.04	0	6906	0	6906
9	Watch & Ward for 12 months One watch man for every 4 km, each side	Man Months	60	6734	0	404040	0	404040
10	Labour amenities	KM	20	28.78	75	576	1500	2076
11	Consolidation of JFM and participatory programs	KM	20	0	250	0	5000	5000
12	Miscellaneous and unforeseen works and Expenditures (Including mainantainance of vehicles and vehicle on rent for inspection & monitoring)	KM	20	575.56	1500	11511	30000	41511
	TOTAL YEAR- 2					1522386	858381	2380767

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YEAR-3 : MAINTENANCE

S.N	ITEM OF WORK	Unit	Qnty.	Rate Labour	Rate Material	Amount Labour	Amount Material	Amount Total
1	2	3	4	5	6	7	8	9
1	Irrigation (watering) of plants from April to March 12 months (watering will be as per the weather conditions) by tractor tankar, total 12 watering	No	114216	3.45	5.29	394045	604203	998248
2	Weeding and hoeing of plants after planting and in rains	No	9518	4.02	0	38262	0	38262
3	Hoeing of plants after each watering	No.	114216	2.86	0	326658	0	326658
4	Treatment with insecticide and fertilizer including cost of material	No.	9518	2.3	0	21891	0	21891
5	Fencing repair as per requirement	KM	20	1151.11	0	23022	0	23022
6	Pruning of Plants	No.	2855	2.31	0	6595	0	6595
7	Watch & Ward for 12 months: One watch man for every 4 km each side.	Man Months	60	6734	0	404040	0	404040
8	Labour amenities	KM	20.0	28.78	75	576	1500	2076
9	Consolidation of JFM and participatory programs.	KM	20	0	250	0	5000	5000
10	Miscellaneous and unforeseen works and Expenditures. (Including mainantainance of vehicles and vehicle on rent for inspection & monitoring)	KM	20	460.44	1200	9209	24000	33209
	TOTAL YEAR-3					1224298	634703	1859001

YEAR-4 : MAINTENANCE

S.N	ITEM OF WORK	Unit	Qnty.	Rate Labour	Rate Material	Amount Labour	Amount Material	Amount Total
1	2	3	4	5	6	7	8	9
1	Irrigation (watering) of plants from April. to March 12 months (watering will be as per the weather conditions) by tractor tankar, total 8 watering	No.	76144	3.45	5.29	262697	402802	665499
2	Weeding and hoeing of plants after planting and in rains	No.	9518	4.02	0	38262	0	38262
3	Hoeing of plants after each watering	No.	76144	2.86	0	217772	0	217772
4	Fencing repair as per requirement	KM	20	863.33	0	17267	0	17267
5	Pruning of Plants	No.	3807	2.31	0	8794	0	8794
6	Watch & Ward for 12 months: One watch man for every 4 km.	Man Months	60	6734	0	404040	0	404040
7	Labour amenities	KM	20	28.78	75	576	1500	2076
8	Consolidation of JFM and participatory programs.	KM	20	0	250	0	5000	5000
9	Miscellaneous and unforeseen works and Expenditures. (Including mainantainance of vehicles and vehicle on rent for inspection & monitoring)	KM	20	345.33	900	6907	18000	24907
	TOTAL YEAR-4					956314	427302	1383616

YEAR-5 : MAINTENANCE

S.N	ITEM OF WORK	Unit	Qnty.	Rate Labour	Rate Material	Amount Labour	Amount Material	Amount Total
1	2	3	4	5	6	7	8	9
1	Irrigation (watering) of plants from April. to March 12 months (watering will be as per the weather conditions) by tractor tankar, total 4 watering	No.	38072	3.45	5.29	131348	201401	332749
2	Weeding and hoeing of plants after planting and in rains	No.	9518	4.02	0	38262	0	38262
3	Hoeing of plants after each watering	No.	38072	2.86	0	108886	0	108886
5	Fencing repair as per requirement	KM	20	863.33	0	17267	0	17267
6	Pruning of Plants	No.	3807	2.31	0	8794	0	8794
7	Watch & Ward for 12 months One watch man for every 4 km.	Man Months	60	6734	0	404040	0	404040
9	Labour amenities	KM	20.0	28.78	75	576	1500	2076
10	Consolidation of JFM and participatory programs.	KM	20.0	0	250	0	5000	5000
11	Miscellaneous and unforeseen works and Expenditures. (Including mainantainance of vehicles and vehicle on rent for inspection & monitoring)	KM	20.0	230.22	600	4604	12000	16604
	TOTAL YEAR- 5					713777	219901	933678

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ABSTRACT OF TOTAL COST FOR 5 YEARS

S.NO.	ITEM OF WORK	YEAR	AMOUNT		
			Labour	Material	Total
1	2	3	4	5	6
1	ADVANCE ACTION AND PLANTING	YEAR 1	3,759,765	9,488,476	13,248,241
2	MAINTENANCE	YEAR 2	1,522,386	858,381	2,380,767
3	MAINTENANCE	YEAR 3	1,224,298	634,703	1,859,001
4	MAINTENANCE	YEAR 4	956,314	427,302	1,383,616
5	MAINTENANCE	YEAR 5	713,777	219,901	933,678
	Total cost of 5 years		8,176,541	11,628,762	19,805,303
	Cost per Plant				2,081

Note:	
1	Above is the model cost estimation prepared for **10 KM** length and different widths taking as a sample only, actual cost estimation will be prepared as per actual space available for plantation.
2	NHAI will provide information of chainagewise available width for plantation, number of rows, number of existing trees, number of plants to be planted etc.. Based upon this information, the cost estimation will be prepared and the same will be submitted to NHAI.
3	If any deviation is required in the proposal, the same will be approved by the concern CCF.
4	Items and BSR rate are considerd on average basis for the purpose of preparation of DPR. Actual estimate can be prepared as per required items and applicablel BSR at the time of implementation.

उप वन संरक्षक (प्रशासन)
प्रधान मुख्य वन संरक्षक
प्रशिक्षण, अनुसंधान, शिक्षा एवं प्रसार
राजस्थान, जयपुर

(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

MODEL COST ESTIMATE FOR PLANTION OF NHAI SITES (TREE GUARD MOUDLE)

Labour Rate Rs. 259/- Per Day

For Sites having more than 50% length with single Row

Particular	Length in KM			No. of Plants in LHS				No. of Plants in LHS				Total Plants
	LHS	RHS	Total	1st Row	Intermediate Rows	Last Row	Total	1st Row	Intermidiate Rows	Last Row	Total	
2 row planting with Barbed wire fencing	2	2	4	667	333	0	1000	667	333		1000	2000
3 or more row planting with Barbed wire fencing	0	0	0	0	0	0	0	0	0	0	0	0
1 row planting with Tree Guard fencing	8	8	16	1333	0	0	1333	1333	0	0	1333	2666
Land Parcel			0				0				0	0
Total	10	10	20	2000	333	0	2333	2000	333	0	2333	4666
Existing Trees in Tree Guard Section							100				50	150
Existing Trees in Barbed WireSection												
Net Plantin							2233				2283	4516
Length of Fencing in Mts	4040	4040	8080									
No. of Tree Guards	1233	1283	2516									

1st Row	Plant to Plant distance 3 Mts	333 plants/KM	Small to Medium height ornamental Trees like Kachnar, Amaltas, Jakranda, Peltoform, Tabebuia spp, etc.
2nd & Intermidiate Rows	Plant to Plant distance 6 Mts	167 plants/KM/Row	Shady & Fruit Bearing Trees like Neem,Shisham, Arjun, Siris, Jamun, Bakain, Mango, Paras Pipal etc.
3rd/Last Row	Plant to Plant distance 12 Mts	83 plants/KM	Large size Shady Trees like Baniyan, Pipal, Gular, Imali. Pilkhan etc.
Single Row with Tree Guards	Plant to Plant distance 6 Mts	167 plants/KM	Shady & Fruit Bearing Trees like Neem,Shisham, Arjun, Siris, Jamun, Bakain, Mango, Paras Pipal etc.
Distance between 2 Rows	3 Mts		
Labour Rate	Rs. 259/day		

YEAR 1 : ADVANCE ACTION & PLANTING

S.N	ITEM OF WORK	Unit	Qnty.	Rate		Amount		
				Labour	Material	Labour	Material	Total
1	2	3	4	5	6	7	8	9
1	Collection of data for preparation of DPR, micro planning and Management plan and Surveys of area etc	No.	4516	0.29	0.75	1309.64	3387.00	4697
2	Tree Guard Fencing with 4 RCC pannels of 45 cm width and 1.8 Mt height each, including cost of material, transportation, fixing etc.	No.	2516	230.22	1400.00	579233.52	3522400.00	4101634
3	Fencing with RCC Post of size 2.10 m x(0.10 0.15) x1/2 x 0.10 (5 m apart) with 5 strand barbed wire of 12 gauge with 2 cross wire or 3 strand barbed wire of 12 gauge supported with 5 feet high weldmess of 4" *4" including cost of material, fixing, etc.	RMT	8080	49.5	210.00	399960	1696800.00	2096760
4	Purchase of tools & equipment.	No.	4516	0	1.00	0	4516.00	4516
5	Sign board including painting and fixing.	No.	4516	0.23	1.80	1038.68	8128.80	9167
6	Watch &Ward for 9 months: one watch man for every 4 km.each side	Man	23	6734	0.00	151515	0.00	151515
7	Labour Amenities.	No.	4516	0.29	0.75	1309.64	3387.00	4697
8	Site clearance including removal of unwanted bushes, leveling of the site wherever required.	No.	4516	0.69	1.40	3116.04	6322.40	9438
9	Construction of temporary cattle guard hut for watch and Ward. One at 10 kilometers.	No.	4516	0.81	1.30	3657.96	5870.80	9529
10	Digging of pits of Size 0.60 x 0.60 x 0.60 m including lay out, marking, dressing, etc.	No.	4516	40.29	0.00	181949.64	0.00	181950
11	Planting in pit size 0.60 x 0.60 x 0.60 m including local transportation of plants at site, submerging the polypots in insecticide treated water, cutting and removing the polythene bag, refilling the pit after removing stones and pressing the soil around plant including construction of thanwla and initial watering	No.	4516	0	0.00	0	0.00	0
12	(A) 20 x 40 cm bag	No.	3613	27.35	0.00	98815.55	0.00	98816
13	(B) 30 x 40 cm bag	No.	903	34.83	0.00	31451.49	0.00	31451
14	Weeding and hoeing of plants after planting and in rains (2 times)	No.	9032	4.02	0.00	36308.64	0.00	36309
15	Procurement of Plants for 3rd/last row with 2 mts or more height with good health and growth in 30x40 cm Poly bags with 20% Extra for plants required for casulty replacement includind transportation.	No.	1084	11.51	90.00	12476.84	97560.00	110037
16	Procurement of Plants with 1.5 mts or more height with good health and growth in 20x40 cm Poly bags, with 20% Extra for plants required for casulty replacement including transportation.	No.	4336	11.51	40.00	49902.756	173424.00	223327
17	Adding the farm yard manure/vermi compost/DAP/insecticide etc to each pit including cost of material	No.	4516	2.3	8.00	10386.8	36128.00	46515
18	Irrigation (watering) of plants (watering will be as per the weather conditions) by tractor tanker, total 10 watering.	No.	45160	3.45	5.29	155802	238896.40	394698
19	Hoeing of plants after each watering.	No.	45160	2.85	0.00	128706	0.00	128706
20	Singling, pruning and other silvicultural operatipons for the existing trees/plants	No.	150	46.04	0.00	6906	0.00	6906
21	Consolidation of JFM and participatory programs.	No.	4516	0	1.00	0	4516.00	4516
22	Miscellaneous and unforeseen works and Expenditures. (Including mainantainance of vehicles and vehicle on rent for inspection & monitoring)	No.	4516	9.78	25.50	44166.48	115158.00	159324
	TOTAL YEAR-1					1898013	5916494	7814507

YEAR-2 : MAINTENANCE

S.N	ITEM OF WORK	Unit	Qnty.	Rate		Amount		
				Labour	Material	Labour	Material	Total
1	2	3	4	5	6	7	8	9
1	Planting for casualty replacement including redigging and treatment of pit and plant with insecticides, local transport, making crescent shape Thanwla and watering with cost of water and transport	Nos.	452	44.93	0.00	20308.36	0.00	20308
2	Irrigation (watering) of plants from April. to March 12 months (watering will be as per the weather conditions) by tractor tanker, total 16 watering	No.	72256	3.45	5.29	249283.2	382234.24	631517
3	Weeding and hoeing of plants after planting and in rains 2 times	No.	9032	4.02	0.00	36308.64	0.00	36309
4	Hoeing of plants after each watering	No.	72256	2.85	0.00	205929.6	0.00	205930
5	Treatment with insecticide and fertilizer including cost of materisl	No.	9032	0.58	1.50	5238.56	13548.00	18787
6	Fencing repair as per requirement	No.	9032	4.6	1.00	41547.2	9032.00	50579
7	Pruning of Plants	No.	452	2.31	0.00	1044.12	0.00	1044
8	Singling, pruning and other silvicultural operatipons for the existing trees/plants	No.	150	46.04	0.00	6906	0.00	6906
9	Watch &Ward for 12 months One watch man for every 4 km, each side.	Man Months	30	6734	0.00	202020	0.00	202020
10	Labour amenities	No.	9032	0.14	0.38	1264.48	3432.16	4697
11	Consolidation of JFM and participatory programs.	No.	9032	0	0.50	0	4516.00	4516
12	Miscellaneous and unforeseen works and Expenditures. (Including mainantainance of vehicles and vehicle on rent for inspection & monitoring)	No.	9032	0.81	1.80	7315.92	16257.60	23574
	TOTAL YEAR- 2					777166	429020	1206186

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YEAR-3 : MAINTENANCE

S.N	ITEM OF WORK	Unit	Qnty.	Rate Labour	Rate Material	Amount Labour	Amount Material	Amount Total
1	2	3	4	5	6	7	8	9
1	Irrigation (watering) of plants from April. to March 12 months (watering will be as per the weather conditions) by tractor tankar, total 12 watering	No.	54192	3.45	5.29	186962.4	286675.68	473638
2	Weeding and hoeing of plants after planting and in rains	No.	4516	4.02	0.00	18154.32	0.00	18154
3	Hoeing of plants after each watering	No.	54192	2.85	0.00	154447.2	0.00	154447
4	Treatment with insecticide and fertilizer including cost of material	No.	4516	2.3	0.00	10386.8	0.00	10387
5	Fencing repair as per requirement	No.	54192	2.3	0.00	124641.6	0.00	124642
6	Pruning of Plants	No.	452	2.31	0.00	1044.12	0.00	1044
7	Watch & Ward for 12 months: One watch man for every 4 km each side.	Man	30	6734	0.00	202020	0.00	202020
9	Labour amenities	No.	54192	0.07	0.19	3793.44	10296.48	14090
10	Consolidation of JFM and participatory programs.	No.	54192	0	0.50	0	27096.00	27096
11	Miscellaneous and unforeseen works and Expenditures. (Including mainantainance of vehicles and vehicle on rent for inspection & monitoring)	No.	54192	1.15	3.00	62320.8	162576.00	224897
	TOTAL YEAR-3					763771	486644	1250415

YEAR-4 : MAINTENANCE

S.N	ITEM OF WORK	Unit	Qnty.	Rate Labour	Rate Material	Amount Labour	Amount Material	Amount Total
1	2	3	4	5	6	7	8	9
1	Irrigation (watering) of plants from April. to March 12 months (watering will be as per the weather conditions) by tractor tankar, total 8 watering	No.	36128	3.45	5.29	124641.6	191117.12	315759
2	Weeding and hoeing of plants after planting and in rains	No.	4516	4.02	0.00	18154.32	0.00	18154
3	Hoeing of plants after each watering	No.	36128	2.85	0.00	102964.8	0.00	102965
5	Fencing repair as per requirement	No.	4516	2.3	0.00	10386.8	0.00	10387
6	Pruning of Plants	No.	452	2.31	0.00	1044.12	0.00	1044
7	Watch & Ward for 12 months: One watch man for every 4 km.	Man	30	6734	0.00	202020	0.00	202020
9	Labour amenities	No.	4516	0.07	0.19	316.12	858.04	1174
10	Consolidation of JFM and participatory programs.	No.	4516	0	0.50	0	2258.00	2258
11	Miscellaneous and unforeseen works and Expenditures. (Including mainantainance of vehicles and vehicle on rent for inspection & monitoring)	No.	4516	0.69	1.90	3116.04	8580.40	11696
	TOTAL YEAR-4					462644	202814	665457

YEAR-5 : MAINTENANCE

S.N	ITEM OF WORK	Unit	Qnty.	Rate Labour	Rate Material	Amount Labour	Amount Material	Amount Total
1	2	3	4	5	6	7	8	9
1	Irrigation (watering) of plants from April. to March 12 months (watering will be as per the weather conditions) by tractor tankar, total 4 watering	No.	18064	3.45	5.29	62320.8	95558.56	157879
2	Weeding and hoeing of plants after planting and in rains	No.	4516	4.02	0.00	18154.32	0.00	18154
3	Hoeing of plants after each watering	No.	18064	2.85	0.00	51482.4	0.00	51482
5	Fencing repair as per requirement	No.	4516	1.73	0.00	7812.68	0.00	7813
6	Pruning of Plants	No.	452	2.31	0.00	1044.12	0.00	1044
7	Watch & Ward for 12 months: One watch man for every 4 km.	Man	30	6734	0.00	202020	0.00	202020
9	Labour amenities	No.	4516	0.07	0.19	316.12	858.04	1174
10	Consolidation of JFM and participatory programs.	No.	4516	0	0.50	0	2258.00	2258
11	Miscellaneous and unforeseen works and Expenditures. (Including mainantainance of vehicles and vehicle on rent for inspection & monitoring)	No.	4516	0.58	1.50	2619.28	6774.00	9393
	TOTAL YEAR- 5					345770	105449	451218

ABSTRACT OF TOTAL COST FOR 5 YEARS

S.NO.	ITEM OF WORK	YEAR	AMOUNT		
			LABOUR	MATERIAL	TOTAL
1	2	3		4	
1	ADVANCE ACTION AND PLANTING	YEAR 1	1,898,013	5,916,494	7,814,507
2	MAINTENANCE	YEAR 2	777,166	429,020	1,206,186
3	MAINTENANCE	YEAR 3	763,771	486,644	1,250,415
4	MAINTENANCE	YEAR 4	462,644	202,814	665,457
5	MAINTENANCE	YEAR 5	345,770	105,449	451,218
	Total cost of 5 years		4,247,363	7,140,421	11,387,784
	Cost per Plant				2,522

Note:	
1	Above is the model cost estimation prepared for 10 KM length and different widths taking as a sample only, actual cost estimation will be prepared as per actual space available for plantation.
2	NHAI will provide information of chainagewise available width for plantation, number of rows, number of existing trees, number of plants to be planted etc.. Based upon this information, the cost estimation will be prepared and the same will be submitted to NHAI.
3	If any deviation is required in the proposal, the same will be approved by the concern CCF.
4	Items and BSR rate are considerd on average basis for the purpose of preparation of DPR. Actual estimate can be prepared as per required items and applicablel BSR at the time of implementation.

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Model Cost Estimates for Glade Development in Wildlife Area (Labour Cost @ Rs. 259 Per day, Unit 3 ha., Estimated Cost is in Rs./ha.)

0 year (Advance action)

S.N.	Items	Rate	Labour Cost	Material Cost	Total Cost
1	Collection of data, preparation of microplan	Prorata	604 29	50 61	638 61
2	Survey and layout	Prorata	473 84	50 61	511 68
3	Removal of invasive species (Lantana camera, Prosopis juliflora ... etc)	31830 56/ha	11217 63	5000 00	15915 28
4	Fencening 250 meter per hectare (total fence length is about 750 meter)	317 52 /R M	81578 83	0 00	79380 00
5	Purchase and collection of grass and other trees spp seeds	Prorata	234 32	200 00	428 00
6	Restoration of natural regeneration by cultural operation	Prorata	2312 33	0.00	2250 00
7	Cultural operations in bamboo culmps and enducing root suckers in Tendu, Salar, Shyonak r adar Etc. 150 plant per ha. to be treated	71.40/Clump or Plant	11006 67	0.00	10710.00
8	Watch and ward 4 month	6552/Month	8977.99	0.00	8736.00
9	Tool and plants	Prorata	0.00	2000.00	2000.00
10	Misc. and unforeseen expenses including running of vehicles	Prorata	2569 25	2000 00	4500.00
	Total 0 year (Advance action)		**118975.13**	**9301.22**	**125069.57**

Ist year (Plantation Year)

S.N.	Items	Rate	Labour Cost	Material Cost	Total
1	Removal of invasive species (Lantana camera, Prosopis juliflora .. etc) follow up in whole area for seedling	31830.56/ha	22435.27	10000.00	31830.56
2	Maintenance of fencing 25 Mt	158.76 /R M	4078.94	0.00	3969 00
5	Construction of approach road/inspection path	prorata	1441.86	0.00	1403 00
6	Construction of gate and fixing of sign board.	prorata	1181.86	9521.90	10671.90
8	Purchase and application of insecticides and fertilizer	4 81/pp	397.82	93 90	481 00
9	Sowing of 2000 grass pellets in reclaimed area	985 60/p100	14502.90	5600 00	19712 00
10	Planting of 2500 grass slips in protected area. per ha	4356 80/ p100	49452 92	5964 00	54084 00
11	Restoration of natural regeneration by cultural operation	Prorata	2312 33	0 00	2250 00
12	Purchase and collection of seeds	LS	102 77	200 00	300 00
13	Watch and ward 12 month	6552/Month	26748 98	0 00	26028 00
14	Misc and unforeseen expenses including running of vehicles		102 77	300.00	400 00
	Total Ist year (Plantation Year)		**122758.4**	**31679.8**	**151129.46**

IInd year (Maintenance Ist Year)

S.N.	Items	Rate	Labour Cost	Material Cost	Total
1	Removal of invasive species (Lantana camera, Prosopis juliflora .. etc) follow up	31830.56/ha.	2243.52	1000.00	3183.05
2	Maintenance of fencing 25 Mt	158.76 /R M	4078.94	0.00	3969.00
3	Sowing of 1000 grass pellets in reclaimed area.	985.60/p100	7251.45	2800.00	9856.00
4	Re-planting of 1250 grass slips in protected area	4356.80/ p100	24726.46	2982.00	27042.00
5	Restoration of natural regeneration by cultural operation	Prorata	1156.16	0.00	1125.00
6	Watch and ward 12 month	6552/Month	26748.98	0.00	26028.00
7	Misc. and unforeseen expenses including running of vehicles		1027.70	4000.00	5000.00
	Total IInd year (Maintenance Ist Year)		**67233.21**	**10782.00**	**76203.05**

IIIrd year (Maintenance IInd Year)

S.N.	Items	Rate	Labour Cost	Material Cost	Total
1	Maintenance of fencing 25 Mt	158.76 /R M	4078.94	0.00	3969.00
2	Sowing of 500 grass pellets in reclaimed area	985 60/p100	3625.73	1400.00	4928 00
3	Re-planting of 625 grass slips in protected area per ha	4356.80/ p100	12363.23	1491 25	13521.25
4	Restoration of natural regeneration by cultural operation	Prorata	1156 16	0.00	1125.00
5	Watch and ward 12 month	6552/Month	26933.96	0.00	26208.00
6	Misc. and unforeseen expenses including running of vehicles		513 85	2000.00	2500 00
	Total IIIrd year (Maintenance IInd Year)		**48671.87**	**4891.25**	**52251.25**

IVth year (Maintenance IIIrd Year)

S.N.	Items	Rate	Labour Cost	Material Cost	Total
1	Restoration of natural regeneration by cultural operation including maintenance	Prorata	1156.16	0.00	1125.00
2	Watch and ward 12 month	6552/Month	26933.96	0.00	26208.00
3	Misc and unforeseen expenses including running of vehicles		513.85	2000.00	2500.00
	Total IVth year (Maintenance IIIrd Year)		**28603.97**	**2000.00**	**29833.00**
	Grand Total		**386242.61**	**58654.27**	**434486.33**

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(अमर सिंह गोठवाल)
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर

50 ha. Model Cost Estimates for Savannah Development in Arid Areas (Labour Cost @ Rs. 259 Per day, Unit 50 ha., Estimated Cost is in Rs./ha.)

0 year (Advance action)

S.N.	Items	Rate	Labour Cost	Material Cost	Total Cost
1	Collection of data for microplanning, preparation of micro plan	Prorata (cost/ha.)	604.2876	50.61	638.61
2	Survey and layout	Prorata (cost/ha.)	473.841639	50.61	511.68
3	Removal of invasive species (Lantana camera, Prosopis juliflora .. etc) (as per requirement) (Here only 50 % area is having invasive species infestation has been assumed)	31830.56/ha.	11217.63326	5000	15915.28
4	Fencing (barbed wire and angle/cement pole with chain link of 6 ft) 70 meter per hectare (total fence length is about 3500 meter in 50 ha.)	267.44 /R M	1923.8544	16848.8	18720.8
5	Kaccha inspection path 60 m/ha. (total length 3000 m)	3.06/RM	188.68572	0	183.6
6	Raising of total 1000 plants of fog, kheep, jhadber,kejadi, rohida, jaal, nanwli ..etc.	Prorata	2055.4	300	2300
7	Raising of 3000 plants of sewan and other relevant grass spp.	Prorata (cost/ha.)	5711.9566	792	6350
8	Watch and ward 4 month	Rs. 6552/month	8977.9872	0	8736
9	Purchase of tool, plants, pipes ..etc	Prorata	0	350	350
10	Signboard including painting and fixing	Prorata	0	100	100
11	Construction of cattleguard hut	Prorata	0	388.76	388.76
12	Misc. and unforeseen expenses including running of vehicles	Prorata	0	350	350
	Total 0 year (Advance action)		31153.64642	24230.78	54544.73

Ist year (Plantation Year)

S.N.	Items	Rate	Labour Cost	Material Cost	Total
1	Removal of invasive species (Lantana camera, Prosopis juliflora .. etc) follow up (Here only 50 % area is having invasive species infestation has been assumed)	31830.56/ha.	11217.3455	5000	15915
2	Construction of gate	prorata	0	423.66	423.66
3	Preparation of seed ball of grass seeds, manure, sand and clay in a ratio of 1:1:2:2 (400kg in 50 ha)	40.08 Rs/kg	329.521728	0	320.64
4	Seed ball sowing in notches through dibbling in sandy soil (8000 notches in 50 ha)	0.37/notch	60.83984	0	59.2
5	Planting of local grass tufts in a pit of 15 cms including local transporation and initial watering, (tufts 750 no./ha.)	2.62/slip	2019.4305	0	1965
6	Watering of grass tufts once (of 80 percent)	8.47/slip	3504.457	1672	5082
7	Application of insecticides and fertilizer	4.81/pp	397.82267	93.9	481
8	Maintenance of fencing 7 m/ha.	158.76 /R M	1027.7	111.32	1111.32
9	Furrowing using tractors (700 RM/ha.) (35,000 RM in 50 ha)	2.9/m	0	2030	2030
10	Seed sowing of matira, kachari..etc in furrows at a gap of 20 cms (1000 RM/ha)	0.19/RM	195.263	0	190
11	Maintaining of total 1000 plants of fog, kheep, jhadber, kejadi, rohida, jaal, nanwli ..etc.	2.26/plant	46.523979	0	45.27
12	Planting of sapling (20/ha.i.e. total 1000 plants) after digging 45X45X45 cm pit including local transportation of plants upto pits and insecticide treatment (planting in cluster is prefered for creation of thickets amidst grassland)	29.22/plant	600.505664	0	584.32
13	Watering of small plants once (20/ha.)	8.47/slip	173.88684	0	169.2
14	Making of thanwala (20/ha.)	4.128/plant	84.846912	0	82.56
15	Weeding and hoeing once (20/ha.)	5.39/plant	110.827168	0	107.84
16	Local collection of clay and manure	Prorata	0	250	250

17	Purchase and collection of seeds of grasses, matira, akchar...etc	LS	0	100	100
18	Purchase of fertilisers (Urea, DAP, NPK, Vermicompost ...etc) and growth agents	Prorata	0	300	300
19	Watch and ward 12 month	6552/Month	1616.037696	0	1572.48
20	Misc. and unforeseen expenses including running of vehicles		0	400	400
	Total Ist year (Plantation Year)		21385.0085	10380.88	31189.49

Note- Planting must be done in cluster to create thickets.

IInd year (Maintenance Ist Year)

S.N.	Items	Rate	Labour Cost	Material Cost	Total
1	Removal of invasive species (Lantana camera, Prosopis juliflora .. etc) follow up (Here only 50 % area is having invasive species infestation has been assumed)	31830.56/ha.	2243.4691	1000.05	3183.05
2	Maintenance of fencing 7 m/ha.	158.76 /R M	1027.7	111.32	1111.32
3	Planting of local grass tuft in a pit of 15 cms including local transporation and initial watering. 250/ha. (as a follow up in blank patches)	2.62/slip	673.1435	0	655
4	Casuality replacement of sapling (2/ha.) after digging 45X45X45 cm pit including local transportation of plants upto pits and insecticide treatment (planting in cluster is prefered for creation of thickets amidst grassland)	29.22/plant	60.058788	0	58.44
5	Watering of grass tuft once (of 80 percent planted this year)	8.47/slip	1168.4949	557	1694
6	Watch and ward 12 month	6552/Month	1616.037696	0	1572.48
7	Misc. and unforeseen expenses including running of vehicles	LS	0	500	500
	Total IInd year (Maintenance Ist Year)		6788.903984	2168.37	8774.29

IIIrd year (Maintenance IInd Year)

S.N.	Items	Rate	Labour Cost	Material Cost	Total
1	Maintenance of fencing 7 m/ha.	158.76 /R M	1027.7	111.32	1111.32
2	Watch and ward 12 month	6552/Month	1616.037696	0	1572.48
3	Misc. and unforeseen expenses including running of vehicles	LS	0	500	500
	Total IIIrd year (Maintenance IInd Year)		2643.737696	611.32	3183.8
	Grand Total		61971.2966	37391.3500	97692.3100

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