

ESTIMATE FOR BARBED WIRE FENCE

7 strands (5 straight + 2 cross strands) of 2 ply barbed wire on RCC posts fixed at 2.5 mtr intervals.

Two fencing posts extra, used as struts at each corner point

Number of fence posts required per kilometer 500 nos.

Fence post size 2 mtr long; 10cm x 10cm top; 15cm x 15cm bottom

Minimum wage rate Rs. 200/- per day for unskilled labourer

Lead Statement & cost of materials							
Sl. No.	Item	Unit	Basic price	Lead in Km	Transport charge	Royalty	Total price
1	4cm hand broken granite metal	Cum	609.00	15	248.40	98.79	956.19
2	12mm H.G hand broken chips	Cum	934.00	15	248.40	98.79	1281.19
3	Screened & washed sand	Cum	59.00	25	340.40	27.44	426.84
4	M.S rod	Qntl.	4000.00	90	76.80	0.00	4076.80
5	Cement	Qntl.	651.00	90	76.80	0.00	727.80
6	Barbed wire	Kg	66.00	90	0.76	0.00	66.76
Analysis of rate							
Sl. No.	Item	Qty.	Unit	Rate	Amount		
1	Cement concrete (1:4:8) with 4 cm HG metal						
a	Materials						
	Hand broken granite stone 4 cm size	0.96	Cum	956.19	917.94		
	Sand (Screened & washed)	0.48	Cum	426.84	204.88		
	Cement	1.72	Qntl.	727.80	1251.82		
							2374.64
b	Labour						
	Mason second class	0.18	Each	240.00	43.20		
	Man mulia	1.80	Each	200.00	360.00		
	Women mulia	1.40	Each	200.00	280.00		
	Man mulia for mixing stone, sand and cement and granite water	0.70	Each	200.00	140.00		
							823.20
c	Overhead charges 7.5% of (a+b)						239.84
	Total cost per cum						3437.68
2	C.C (1:2:4) in 12 mm hand broken H,G chips including hoisting and laying per cum.						
a	Materials						
	Hand broken granite stone 12 cm size	0.96	Cum	1281.19	1229.94		
	Sand (Screened & washed)	0.45	Cum	426.84	192.08		
	Cement	3.23	Qntl.	727.80	2350.79		
							3772.81
b	Labour						
	Mason second class	0.68	Each	240.00	163.20		
	Man mulia	1.80	Each	200.00	360.00		
	Women mulia	1.40	Each	200.00	280.00		
	Man mulia for mixing stone, sand and cement and granite water	1.40	Each	200.00	280.00		
	Mason second class	0.50	Each	220.00	110.00		
							1193.20

c	Overhead charges 7.5% of (a+b)				372.45
	Total cost per cum				5338.47
3	Labour for M.S reinforcement for R.C.C work including cutting, bending and tying the grills and placing in position, including cost of binding wire (per 1 Qntl.)				
	Blacksmith (Special)	1.00	Each	260.00	260.00
	Semiskilled mulia	1.00	Each	220.00	220.00
	30% sundries, binding wires and T&P etc.				144.00
	Total charges per quintial				624.00
	Estimated cost per fence post of 2 mtr long, 15 cm x 15cm bottom and 10 cm x 10 cm top in RCC (1:2:4) with 12mm H.G chips				
	Cost for concrete 2.0 mtr x 0.01625 sq. mtr =	0.0325	Cum	5338.47	173.50
	Cost of 8 mm rod (4 x 2 mtr) + 6mm rod 0.6 mtr for rings =	3.25	Kg	40.77	132.50
	Labour for cutting, bending, binding & laying in position of rods including cost of binding wire	3.15	Kg	6.24	19.65
	Cost of staples for holding barbed wire				20.00
					345.65
	Estimated cost for fixing each fence post with C.C (1:4:8) cm metal				
1	Cost of concrete (45cm x 45 cm) + 45cm) - (15cm x 15cm x 15cm)	0.081	Cum	3437.68	278.45
	Estimated per Kilometre of Barbed wire Fencing				
Sl. No.	Work	Qty.	Unit	Rate	Amount
1	Cost of fence post RCC (1:2:4) with 12mm H.G chips 2 mtr long 15cm x 15cm bottom and 10cm x 10cm top	500.00	Each	345.65	172825.00
2	Digging of pits for fixing of fence posts	500.00	Each	20.00	10000.00
3	Fixing of fence post with C.C (1:4:8) with 4 cm H.G metal	500.00	Each	278.45	139225.00
4	Cost of 2 ply barbed wire 7 strands x 1000 mtr= 7000 mtr @ 8 mtr per kg	875.00	Kg	66.76	58415.00
5	Labour for fixing barbed wire fencing and post by means of staples and straining hooks	7000	Mtr	2.00	14000.00
6	Average expenditure needs for extra lead for transporting RCC fence posts in hill slopes manually 0.5 manday per pillar	500.00	Each	100.00	50000.00
	Total expenditure for 1 km of barbed wire fence				444465.00

Annexure-IV

COST NORM FOR BALD HILL PLANTATION @ 1600 PLANTS PER HECTARE
(Labour cost @ Rs.200/- per manday)

Sl No.	Item of Work	Preferable Period of execution	Manday	Labour cost @ Rs 200/- per day	Material cost per hectare in Rs.	Total cost per hectare in Rs.
Preparatory operation (0th year)						
1	Survey and demarcation	June	2	400	0	400
2	Pitting (1600 per ha) each pit 45 cm ³	Nov-Dec	128	25600	0	25600
3	Soil and water conservation measures (a) Staggered trench along the contour @ 300 per ha (2.5mx0.5mx0.5m) digging of percolation pits @ 600 per ha in lieu of staggered trenches gully plugging and drainage line treatment, half-moon trench on the uphill side of each planting pit (100MD for staggered trench/percolation pit and 30 MD for gully plugging, drainage line treatment and half-moon trench). (b) Site clearance-8 MD (due to heavy weed growth), alignment and staking of contour lines on ground planting pits, contour trenches/ percolation pits and check dam sites etc. 2MD	Sept-Nov	130	26000	0	26000
4	Raising of seedlings in poly bags (minimum 60 cm high) @ Rs 9.45/seedling (Rs 6.67 in 0 th year) Part (1760 saplings to be raised for one hectare from January-March @ Rs 11739/-)	October-March	44	8800	2939	11739
Total 0th year			314	62800	2939	65739
Planting Operation (1st Year)						
1	Cost of sapling (balance) from April-June/July @ Rs 2.78 per seedling for 1760 seedlings = Rs 4893/-	April-July	21.5	4300	593	4893
2	Freshening of pits-64 MD, filling with fertile soil and farm yard manure (FYM) 24 MD, application of insecticide and planting of 60cm tall saplings including carriage of plants-21 MD	June-July	109	21800	0	21800
3	Cost of fertile soil 0.25 cft @ Rs 8 per cft/FYM 0.25 cft @ Rs 15 per cft per pit		0	0	9200	9200
4	Sowing of seeds on dug out earth of trench	June	6	1200	200	1400
5	Carriage-6MD, Planting including Casualty replacement-6MD, fertilizer application- 5 MD , 1 st weeding-7 MD, 2 nd weeding-5 MD, soil working- 7 MD	July-Aug	36	7200	0	7200
6	Cost of fertilizer and insecticide (Granular insecticide @ 5 gms/plant @ Rs 80/- per kg=Rs640.00. NPK 100 gms/plant in two doses @ Rs 24 per kg=Rs3840		0	0	4480	4480
7	Maintenance of Soil and Moisture Conservation measures (20% of cost)	October-December	26	5200	0	5200
8	Closure to grazing, fire and other biotic interference by engaging watch & ward.	April-March	32	6400	0	6400
9	Fire tracing and control display board construction, painting/writing, other miscellaneous cost	Jan-Feb	10	2000	360	2360
Total (1st Year)			240.5	48100	14833	62933
Maintenance Operation (2nd Year)						
1	Casualty replacement - 6 MD including seedling cost @ Rs 9.45 per seedling and its transportation	June-July	10	2000	1512	3512
2	Soil working- 7MD, 1 st weeding-6MD, 2 nd weeding-6 MD and fertilizer application-4 MD	August-October	23	4600	0	4600
3	Cost of fertilizer @ 50 gms NPK per plant @ Rs 24/- per kg for 1600 plants = Rs.1920. Insecticide @ 5 gms per plant for 160 nos of plants @ Rs 80 per kg= Rs 64.00		0	0	1984	1984
4	Maintenance of Soil and Moisture Conservation measures (20% of cost)	August-October	26	5200	0	5200

5	Fire tracing and control and other miscellaneous cost	Feb-Mar	10	2000	0	2000
7	Closure to grazing, fire and other biotic interference by engaging watch & ward.	April-March	32	6400	0	6400
Total 2nd Year			101	20200	3496	23696
Maintenance Operation (3rd Year)						
1	SMC measures (Renovation) -21 MD and maintenance of plantation-14 MD as per requirement	April-March	35	7000	0	7000
2	Closure to grazing, fire and other biotic interference by engaging watch & ward.	April-March	32	6400	0	6400
Total 3rd Year			67	13400	0	13400
Maintenance Operation (4th Year)						
1	SMC measures – 21 MD and maintenance of plantation-14 MD	April-March	35	7000	0	7000
2	Closure to grazing, fire and other biotic interference by engaging watch and ward	April-March	32	6400	0	6400
Total 4th Year			67	13400	0	13400
Maintenance Operation (5th Year)						
1	SMC measures – 21 MD and maintenance of plantation-14 MD	April-March	35	7000	0	7000
2	Closure to grazing, fire and other biotic interference by engaging watch and ward	April-March	32	6400	0	6400
Total 5th Year			67	13400	0	13400
Maintenance Operation (6th Year)						
1	SMC measures – 21 MD and maintenance of plantation-14 MD	April-March	35	7000	0	7000
2	Closure to grazing, fire and other biotic interference by engaging watch and ward	April-March	32	6400	0	6400
Total 6th Year			67	13400	0	13400
Maintenance Operation (7th Year)						
1	SMC measures – 21 MD and maintenance of plantation-14 MD	April-March	35	7000	0	7000
2	Closure to grazing, fire and other biotic interference by engaging watch and ward	April-March	32	6400	0	6400
Total 7th Year			67	13400	0	13400
Maintenance Operation (8th Year)						
1	SMC measures – 21 MD and maintenance of plantation-14 MD	April-March	35	7000	0	7000
2	Closure to grazing, fire and other biotic interference by engaging watch and ward	April-March	32	6400	0	6400
Total 8th Year			67	13400	0	13400
Maintenance Operation (9th Year)						
1	SMC measures – 21 MD and maintenance of plantation-14 MD	April-March	35	7000	0	7000
2	Closure to grazing, fire and other biotic interference by engaging watch and ward	April-March	32	6400	0	6400
Total 9th Year			67	13400	0	13400
Maintenance Operation (10th Year)						
1	SMC measures – 21 MD and maintenance of plantation-14 MD	April-March	35	7000	0	7000
2	Closure to grazing, fire and other biotic interference by engaging watch and ward	April-March	32	6400	0	6400
Total 10th Year			67	13400	0	13400

ABSTRACT

Sl.No.	Year	Manday	Labour cost	Material cost	Total
1	0 th year	314	62800	2939	65739
2	1 st year	240.5	48100	14833	62933
3	2 nd year	101	20200	3496	23696
4	3 rd year	67	13400		13400
5	4 th year	67	13400		13400
6	5 th year	67	13400		13400
7	6 th year	67	13400		13400
8	7 th year	67	13400		13400
9	8 th year	67	13400		13400
10	9 th year	67	13400		13400
11	10 th year	67	13400		13400
Grand Total		1191.5	238300	21268	259568

Cost towards 156.771 ha of Bald Hill plantation x Rs 2, 59,568 = Rs 4, 06, 92, 734.00 (Rupees Four crore Sixty lakh tNinety-two thousand Seven hundred Sixty-eight) only.

ANNEXURE-V

TOTAL COST OF THE COMPENSATORY AFFORESTATION SCHEME

Sl. No.	Item of Work	Estimated cost in Rs.
1	Barbed wire fencing around non-forest land over 15 km @ Rs 444465/- per ha. (Annexure-III).	66, 66, 975.00
2	Bald Hill plantation over 156.771 ha of non-forest land @ Rs 259568.00 per hectare (Annexure-IV).	4, 06, 92, 734.00
Grand Total		4, 73, 59, 709.00 or say Rs 4, 73, 60, 000.00

(Rupees Four crores Seventy three lakh Sixty thousand) only


Divisional Forest Officer,
Kalahandi (South) Division.
Kalahandi : South , Division