

2 Schedule of plantation programmes

Detail of year wise break-up of requirements of funds is as under

S.No	Year	Area (in Ha.)	Rate/Ha	Total Amount
1	0th Year	0.591	186465	110201
2	1th Year	0.591	73045	43170
3	2th year	0.591	45880	27115
4	3th year	0.591	42683	25226
5	4th year	0.591	39565	23383
6	5th year	0.591	5969	3528
7	6th year	0.591	5969	3528
8	7th year	0.591	5969	3528
9	8th year	0.591	5969	3528
10	9th year	0.591	5969	3528
11	10 year	0.591	5969	3528
12	Overhead charges 5 %	0.591	21172	12515
13	Wage Enhancement charges 10 %	0.591	42376	25045
Total			487000.00	287820

Technical details:-

Technical details of Compensatory Afforestation Scheme are as follows:-

a	General Details	Planting by 591Plants
b	Spacement	1000X50X50X40 500X25mX30X20m
c	Species:-	Neem,Drek, Shisham,Kikar,etc
d	Plantation method	Degraded, Trench & Pits
e	Soil and Moisture Conservation Works	N.A
f	Protection (Fencing Watchman. People's Participation etc.)	Watch Man
g	Proposed Monitoring Mechanisum by	As per guidelines issued PCCF
h	Any other informatin	Nil

1	NPV OF area 0.23625*8.87		NPV	209555.00
2	Cost of Compensatory Afforestation =0.23625*2500=591Plants @ 487/- Rs.		CA	287820.00
			Grand Total	497375.00

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Div of 0.23625 ha. forest land for use of laying under ground water pipe line at vill. Arniwala sheikh subhan on Malout-Fazilka road between km stone 21-25 rhs distt Fazilka

Plantation Model For Standard Plantation under Compensatory Afforestation
Plants Per Hectare : 1000 Nos. **Wage Rate Rs. 328**

Land bank : AB Canal Mile no. 102-105 R/s					
Sr. No.	Name of Work	Unit	Qty.	Unit Cost (in Rs.)	Amount
	Nursery				
	Nursery cost of raising plants	1100	1100	20.00	22000.00
A	Soil Work				
1	Site / Jungle Clearance (25%)	Ha.	0.5	5367.22	2683.61
2	Alignment & Dagbaling	Ha.	1	984.00	984.00
3	Earth works in Digging of Pits 1000 x 0.5 m x 0.5 m x 0.4 m	1 M3	100	101.38	10138.00
5	Kana Stubbing 25%	Ha.	0.25	26836.00	6709.00
B	Plantation Work				
1	Refilling of Pits 1000x0.5mx0.5mx0.3	100 cum	75	2747.00	2060.25
2	Loading & Unloading of Plants (1000+10% Wastage=1100)	100 No.	1100	550.00	6050.00
3	Carriage of Plants (1000+10% wastage =1100 avg. distance upto 10 km.)	100 No.	1100	196.80	2164.80
4	i) Carriage from site to site	100 No.	1000	131.20	1312.00
	ii) Planting of Plants (1000 No. including 10% replacement)	100 No.	1000	984.00	9840.00
5	Spot Irrigation (1000 Plants)	100 No.	1000	205.00	2050.00
6	Application of Insecticide (2 Times)	100 No.	1000	41.00	410.00
7	Application of Fertilizers (2 Times)	100 No.	1000	41.00	410.00
8	Weeding & Hoeing 3 Times	100 No.	3000	357.52	10725.60
9	Hand Watering (12 Times)	100 No.	12000	205.00	24600.00
10	Replanting of Plants 10%	100 No.	100	579.11	579.11
11	Rejungle Clearance (2 Times)	Per Ha.	1	2378.00	2378.00
12	Covering (25% plants) of plants	100 No.	250	295.20	738.00
13	Uncovering of plants	100 No.	250	32.80	82.00
14	Restubbing of Kana (1 Time)		0.25	26836.30	6709.08
15	Laying out & fixing of Barbed Wire	L/s			7872.00
16	Watch & Ward for every 10 Ha. (7 Months)	Man Year	1 Man 7 Month	8528.00	5969.60
17	Material				
	i) Insecticides / Fertilizers	L/s			5000.00
	ii) POL	L/s			5000.00
	iii) Barbed Wire	L/s			50000.00
	Sub Total				186465.05
	Maintenance 1 Year				
1	Cost of raising plants for 30% replacement	1 No.	300	20.00	6000.00
2	Reopening of Pits 300 x 0.50 x 0.50 x 0.30	1 m3	21.6	59.63	1341.68
3	Refilling of pits with earth in other soils 300 x 0.50 x 0.50 x 0.30	1 m3	21.6	27.47	618.08


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4	Loading & Unloading of Plants	1 No.	300	2.46	738.00
5	Carriage of Plants (300+10% Wastage = 330 avg. distance upto 10 Km.)	100 No.	1	196.20	196.20
6	Spreading of plants pit to pit	100 No.	165	131.20	216.48
7	Re-Planting to plants	100 No.	165	329.08	542.98
8	Spot Irrigation	100 No.	165	205.00	338.25
9	Weeding & Hoeing (three)	100 No.	3000	357.52	10725.60
10	Application of Insecticide (2 Times)	100 No.	1000	41.00	410.00
11	Application of Fertilizers (2 Times)	100 No.	1000	41.00	410.00
12	Hand Watering (6 Times)	100 No.	6000	357.52	21451.20
13	Rejungle Clearance (2 Times)	Per Ha.	1	2378.00	2378.00
14	Restubbing of Kana	Per Ha.	0.25	26836.00	6709.00
15	Watch & Ward for every 10 Ha. (10 Months)	Man Year	1/10 Man Yr.	8528.00	5969.60
16	Repair of Barbed Wire	L/s			5000.00
17	POL & Machinery	L/s			5000.00
18	Material and Supply	L/s			5000.00
	Sub Total				73045.06
	2nd Year Maintenance				
1	Cost of raising plants for 15% replacement	1 No.	150	20.00	3000.00
2	Reopening of Pits 150 x 0.60 x 0.60 x 0.40	1 m3	21.6	59.63	644.00
3	Refilling of pits with earth in other soils 150x 0.60 x 0.60 x 0.40	1 m3	21.6	27.47	296.68
4	Loading & Unloading of Plants	1 No.	75	2.46	184.50
5	Carriage of Plants Wastage = 75 avg. distance upto 10 Km.)	500 No.	1	196.20	196.20
6	Spreading of plants pit to pit	100 No.	75	131.20	98.40
7	Re-Planting to plants	100 No.	75	229.09	171.82
8	Spot Irrigation	100 No.	75	205.00	153.75
9	Weeding & Hoeing (Twice)	100 No.	2000	357.52	7150.40
10	Hand Watering (5 Times)	100 No.	5000	205.00	10250.00
11	Rejungle Clearance (2 Times)	Per Ha.	1	2378.00	2378.00
12	Pruning to Plants	100 No.	100	387.61	387.61
13	Watch & Ward for every 10 Ha.	Man Year	1/10 Man Yr.	8528.00	5969.60
14	Repair of Barbed Wire	L/s			5000.00
15	POL & Machinery	L/s			5000.00
18	Material and Supply	L/s			5000.00
	Sub Total				45880.96
	3rd Year Maintenance				
1	Cost of raising plants for 10% replacement	1 No.	100	20.00	2000.00
2	Reopening of Pits 100 x 0.50 x 0.50 x 0.40	1 m3	10	5963.00	429.34
3	Refilling of pits with earth in other soils 100 x 0.50 x 0.50 x 0.30	1 m3	7.5	27.47	197.78
4	Loading & Unloading of Plants	1 No.	100	2.46	246.00


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5	Carriage of Plants 50 avg. distance upto 10 Km.)	100 No.	100	1.00	100.00
6	Spreading of plants pit to pit	100 No.	100	131.20	131.20
7	Re-Planting to plants	100 No.	100	229.09	229.09
8	Spot Irrigation	100 No.	100	205.00	205.00
9	Weeding & Hoeing (twice)	100 No.	2000	357.52	7150.40
10	Hand Watering (5 Times)	100 No.	5000	205.00	10250.00
11	Pruning to Plants 20%	100 No.	200	387.61	775.22
12	Watch & Ward for every 10 Ha.	Man Year	1/10 Man Yr.	8528.00	5969.60
13	Repair of Barbed Wire	L/s			5000.00
14	POL & Machinery	L/s			5000.00
15	Material and Supply	L/s			5000.00
	Sub Total				42683.63
	4th Year Maintenance				
1	Cost of raising plants for 5% replacement	1 No.	50	20.00	1000.00
2	Reopening of Pits 50 x 0.50 x 0.50 x 0.40	1 m3	5	5963.00	429.34
3	Refilling of pits with earth in other soils 100 x 0.50 x 0.50 x 0.30	1 m3	3.75	27.47	197.78
4	Loading & Unloading of Plants	1 No.	50	2.46	123.00
5	Carriage of Plants 50 avg. distance upto 10 Km.)	100 No.	50	1.00	50.00
6	Spreading of plants pit to pit	100 No.	50	131.20	65.60
7	Re-Planting to plants	100 No.	50	229.09	114.54
8	Spot Irrigation	100 No.	50	205.00	102.50
9	Weeding & Hoeing (twice)	100 No.	2000	357.52	7150.40
10	Hand Watering (4 Times)	100 No.	4000	205.00	8200.00
11	Pruning to Plants 30%	100 No.	300	387.61	1162.83
12	Watch & Ward for every 10 Ha.	Man Year	1/10 Man Yr.	8528.00	5969.60
13	Repair of Barbed Wire	L/s			5000.00
14	POL & Machinery	L/s			5000.00
15	Material and Supply	L/s			5000.00
	Sub Total				39565.59
	5th Year Maintenance				
1	Watch & Ward for every 10 Ha. (10 Motnts)	Man Year	1/10 Man Yr.	8528.00	5969.60
	Sub Total				5969.60
	6th Year Maintenance				
1	Watch & Ward for every 10 Ha. (10 Motnts)	Man Year	1/10 Man Yr.	8528.00	5969.60
	Sub Total				5969.60
	7th Year Maintenance				
1	Watch & Ward for every 10 Ha. (10 Motnts)	Man Year	1/10 Man Yr.	8528.00	5969.60
	Sub Total				5969.60

1	8th Year Maintenance				
	Watch & Ward for every 10 Ha. (10 Motnts)	Man Year	1/10 Man Yr.	8528.00	5969.60
	Sub Total				5969.60
	9th Year Maintenance				
1	Watch & Ward for every 10 Ha. (10 Motnts)	Man Year	1/10 Man Yr.	8528.00	5969.60
	Sub Total				5969.60
	10th Year Maintenance				
1	Watch & Ward for every 10 Ha. (10 Motnts)	Man Year	1/10 Man Yr.	8528.00	5969.60
	Sub Total				5969.60
	Total				423457.89
	Over Head expenses 5%				21172.89
	Wage Enhancement @ 10%				42345.79
	G. Total				486976.58
	Or say				486977
				Per plant	487
				NPV	209555.00
				CA	287820.00
1	NPV OF area 0.23625×8.87				
2	Cost of Compensatory Afforestation $= 0.23625 \times 2500 = 591$ Plants @ 487/- Rs.			Grand Total	497375.00


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Di.v of 0.23625 ha. forest land for use of laying under ground water pipe line at vill. Arniwala sheikh subhan on Malout-Fazilka road between km stone 21-25 rhs distt fazilka					
Land Bank AB Canal Mile no. 102-105 R/s					Rate= 328
Estimate for planting of Tall plants					
	Name of Work	Unit	Unit Cost (In Rs.)	Qty	Total Amt
	Nursery				
	Cost of Tall plants	1 No	60	550	33000.00
	Soil Works				
1	Site /Jungle Clearance (50%)	Ha.	5367.22	0.5	2683.61
2	Alignment & Dagbailing	Ha.	984	1	984.00
3	Earth Work- Digging of Pits 500x 0.6m x0.6m x0.5m Heavy Soil	1M ³	101.38	90	9124.20
4	Kana Stubbing 25%	Ha.	26836.3	0.25	6709.08
	Planting				
1	Refilling of Pits	100 cum	2747	72	1977.84
2	Loading & Unloading of Plants (500+10% Wastage=550)	100 No	246	550	1353.00
3	Carriage of Plants (500+10% Wastage=550 avg. distance upto 10 km.)500 Trolly	100 No	196.8	1	196.80
4	i) Carriage from site to site	100 No	131.2	550	721.60
	ii) Planting of Plants (500 No Including 10% replacement)	100 No	984	550	5412.00
5	Spot Irrigation (500 Plants)	100 No	205	500	1025.00
6	Application of Insecticide (2 times)	100 No	41	1000	410.00
7	Application of Fertilizers (2 times)	100 No	41	1000	410.00
8	Weeding & Hoeing 3 times	100 No	357.52	1500	5362.80
9	Hand Water 6 months x 2 times =12 times	100 No	205	6000	12300.00
10	Replanting of Plants 10%	100 No	579.11	50	289.56
11	Rejungle Clearance (2 times)	Per Ha.	2378	1	2378.00
12	Covering (25% plants) of plants	100 No	295.2	125	369.00
13	Uncovering of plants	100 No	32.8	125	41.00
14	Restubbing of Kana (1 time)	Ha.	26836.3	0.25	6709.08
15	Laying out & fixing of Barbed Wire	L/s			4200.00
16	Watch & Ward for every 10 Ha. (7 months)	Man year	8528	1Man 7 Month	5969.60
17	Material				
	i) Insecticides/Fertilizers	L/s			5000.00
	ii) POL	L/s			5000.00
				Sub Total	111626.16
Maintenance I Year					
1	Cost of plants for 30% replacement	1 No.	60	150	9000.00
2	Reopening of Pits 150 x 0.60 x 0.60 x 0.40	1 m3	59.63	21.6	1288.01
3	Refilling of pits with earth in other soils 150 x 0.60 x 0.60 x 0.40	1 m3	27.47	21.6	593.35
4	Loading & Unloading of Plants	1 No.	2.46	150	369.00

5	Carriage of Plants (150+10% Wastage=330 avg. distance upto 10 km.)	500 No	196.2	1	196.20
6	Spreading of plants pit to pit	100 No	131.2	165	216.48
7	Re-planting Tall Plants	100 No	329.08	165	542.98
8	Spot Irrigation	100 No.	205	165	338.25
9	Weeding & Hoeing (thrice)	100 No	357.52	1500	5362.80
10	App. Of Fertilizer (two times)	100 No	41	1000	410.00
11	App. Of Insecticide (two times)	100 No	41	1000	410.00
12	Hand watering 6 months x 2 times =12 times	100 No	357.52	6000	21451.20
13	Rejungle Clearance (2 times)	Ha.	2378	1	2378.00
14	Restubbing of Kana	Ha.	26836	0.25	6709.00
15	Watch & Ward for every 10 Ha. (10 months)	Man year	8528	1/10 Man yr.	8528.00
16	POL	L/s			5000.00
17	Material and supply	L/s			5000.00
				Sub Total	67793.27

Maintenance II Year

1	Cost of plants for 15% replacement	No.	60	75	4500.00
2	Reopening of Pits 75 x 0.60 x 0.60 x 0.40	1 m3	59.63	10.8	644.00
3	Refilling of pits with earth in other soils 75 x 0.60 x 0.60 x 0.40	1 m3	27.47	10.8	296.68
4	Loading & Unloading of Plants	1 No.	2.46	75	184.50
5	Carriage of Plants = 75 avg. distance upto 10 km.)	500 No	196.2	1	196.20
6	Spreading of plants pit to pit	100 No	131.2	75	98.40
7	Re-planting to tall plants	100 No	229.08	75	171.81
8	Spot Irrigation	100 No.	205	75	153.75
9	Weeding & Hoeing (twice)	100 No	357.52	1500	5362.80
10	Hand Watering 10 Times	100 No	205	5000	10250.00
11	Rejungle Clearance (2 times)	Ha.	2378	1	2378.00
12	Stubbing of Kana	Ha.	26836	0.1	2683.60
13	Pruning to plants	100 No.	387.61	100	387.61
14	Watch & Ward for every 10 Ha.	Man year	8528	1/10 Man yr.	8528.00
15	POL	L/s			5000.00
16	Material and supply	L/s			5000.00
				Sub Total	45835.35

Maintenance III Year

1	Cost of plants for 10% replacement	1 No.	60	50	3000.00
2	Reopening of Pits 50 x 0.60 x 0.60 x 0.40	1 m3	5963	7.2	429.34
3	Refilling of pits with earth in other soils 50 x 0.60 x 0.60 x 0.40	1 m3	27.47	7.2	197.78
4	Loading & Unloading of Plants	1 No.	2.46	50	123.00
5	Carriage of Plants 50 avg. distance upto 10 km.)	500 No	196.2	1	196.20
6	Spreading of plants pit to pit	100 No	131.2	50	65.60
7	Re-planting to plants	100 No	229.08	50	114.54
8	Spot Irrigation	100 No.	205	50	102.50

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9	Weeding & Hoeing (thrice)	100 No	357.52	1500	5362.80
10	Hand Watering (8 times)	100 No	205	4000	8200.00
11	Rejungle Clearance (2 times)	Ha.	2378	1	2378.00
12	Stubbing of Kana	Ha.	26836	0.1	2683.60
13	Pruning to plants 30%	100 No.	387.61	100	387.61
14	Watch & Ward for every 10 Ha.	Man year	8528	1/10 Man yr.	8528.00
15	POL	L/s			5000.00
16	Material and supply	L/s			5000.00
				Sub Total	41768.97
Maintenance IV Year					
1	Cost of plants for 5% replacement	1 No.	60	25	1500.00
2	Reopening of Pits 25 x 0.60 x 0.60 x 0.40	1 m3	59.63	3.6	214.67
3	Refilling of pits with earth in other soils 25 x 0.60 x 0.60 x 0.40	1 m3	27.47	3.6	98.89
4	Loading & Unloading of Plants	1 No.	2.46	25	61.50
5	Carriage of Plants = 25 avg. distance upto 10 km.)	500 No	196.2	1	196.20
6	Spreading of plants pit to pit	100 No	131.2	25	32.80
7	Re-planting to plants	100 No	229.08	25	57.27
8	Spot Irrigation	100 No.	205	25	51.25
9	Weeding & Hoeing (twice)	100 No	357.52	1500	5362.80
10	Rejungle Clearance (2 times)	Ha.	2378	1	2378.00
11	Pruning to plants 30%	100 No.	387.61	300	1162.83
12	Watch & Ward for every 10 Ha.	Man year	8528	1/10 Man yr.	8528.00
15	POL	L/s			5000.00
16	Material and supply	L/s			5000.00
				Sub Total	29644.21
				TOTAL	296667.96
					14833.40
	Over Head expenses 5%				26700.12
	Enhancement due to wage escalation @9%				
				G.Total	338201.47
				Or Say	338201
Note	The watch and ward in subsequent years				
	Total Cost of per plant (in Rs)	676			
	Cost of Tree Guards as per site is extra (in Rs per Tree Guard)	1800			
	Cost of Compensatory Afforestation (Tall Plants) 20*2 = 40 Tall Plants @ 676 Rs PER Tall Plants.				27040.00
	Note: (regarding revision)				
1	Cost of purchase of plants have been reduced form Rs 200 to Rs				
2	Use of barbed wire has been eliminated as this plantaiton involves				
3	Tree Guards will be used as per site requirements.				
4	The unit rates are as per the Departmentl Scheduled Rates				

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