

Principal Chief Conservator of Forests and Head of Forest Force Odisha, Bhubaneswar - 751023



PLANTATION COST NORMS – 2025

Principal Chief Conservator of Forests & Head of Forest Force, Odisha Aranya Bhawan, Chandrasekharpur, Bhubaneswar – 751 023

ସୁରେ୍ଶ ପନ୍ତ SURESH PANT



ପ୍ରଧାନ ମୁଖ୍ୟ ବନ ସଂରକ୍ଷକ ଓ ବନବାହିନୀ ମୁଖ୍ୟ, ଓଡ଼ିଶା PRINCIPAL CHIEF CONSERVATOR OF FORESTS & HEAD OF FOREST FORCE, ODISHA



FOREWORD

Afforstation plays an important role in sustainable Forest Management. In today's scenario of rapid industrialization and urban development, afforestation becomes significant both inside and outside forests. Plantation drives are the mainstay on the path to a cleaner, greener environment.

Earlier Cost Norm for different plantation modules was prepared which was being used by the field officers. In view of revision of minimum wage rate and material cost, there was a need to revisit the preexisting cost norms and practices to improve upon the deficiencies in the earlier cost norm structure. With this objective, a cost norm committee under the Chairmanship of Sri M.Yogajayanand, IFS CCF(PP&A) was constituted to study the existing cost norm and to take up revision work. The committee undertook series of deliberations including inputs from field level officers and worked out a set of cost norms for different plantation modules like Block Plantation, ANR Without Gap, ANR with gap plantation, Bald Hill Plantation, Urban Tree Plantation, Avenue Plantation, Miyawaki Plantation, Raising of 30 months old seedlings, Raising of seedlings from Stump origin etc. The Committee has standardized the labour components amongst different plantation components taking in to account the PWD Schedule of Rate as far as possible and also introduced fencing provision to be used in AR Plantation as well as ANR Plantation as per field officers input.

I convey my sincere appreciation for the contribution of all the members of the cost norm committee as well as the field officers for their inputs for revision and compilation of the Cost Norm Booklets 2025. Sri Debidutta Biswal , IFS former PCCF & HoFF , Odisha deserves special thanks to render his valuable suggestions for revision of cost norm. I hope this compilation of the revised Cost Norm comes handy as a source of reference for the field officers in the implementation of afforesation programme in the state.

(Suresh Pant)

Principal Chief Conservator of Forests & Head of Forest Force, Odisha ଏମ୍. ଯୋଗଳୟାନନ୍ଦ M. YOGAJAYANAND



ମୁଖ୍ୟ ବନ ସରଂକ୍ଷକ(ଯୋଜନା କାର୍ଯ୍ୟକ୍ରମ ଓ ବନୀକରଣ) ପ୍ରଧାନ ମୁଖ୍ୟ ବନ ସରଂକ୍ଷକଙ୍କ କାର୍ଯ୍ୟାଳୟ, ଓଡିଶା CHIEF CONSERVATOR OF FORESTS (PLAN, PROGRAMME & AFFORESTATION) O/O THE PCCF & HOFF, ODISHA



PREFACE

Forests are regarded as the lungs of our planet, essential to the preservation of all life forms. Since the dawn of civilization, mankind has relied on forests for their survival, sustenance, shelter and more. Therefore, in our ongoing efforts to conserve forests along with preserving biodiversity, maintaining ecological balance and addressing climate change, afforestation stands as a cornerstone of hope and resilience. Looking forward, as we strive towards sustainable development, the importance of quality afforestation practices is crucial. The steps we take today are not only key to conservation but also ensure enrichment of our state's green heritage.

It gives me immense pleasure to present this booklet on cost norms of plantations. This booklet aims to provide a comprehensive guide to the financial aspects of afforestation, ensuring that every initiative is not only effective but also sustainable, supporting our collective goal of a greener and healthier future.

Under the guidance of Shri. Debidutta Biswal, IFS, former PCCF & HoFF and relentless efforts of our team, the revised norms have been brought out. I take this opportunity to express my sincere gratitude to one and all including the members of the cost norm committee and field officers for their dedication and hard work, while preparing the revised cost norms for different plantation modules, nursery works, etc.

I also acknowledge the contribution of Sri A.K. Kar, IFS CCF (Nodal), Sri Karthick V., IFS CF (P & SM), Sri. V Neelannavar, IFS CF (Plan), Smt. Ashima Dash, OFS (STS), Dy CF (Affn.) for providing the team with their critical field inputs. Lastly, I would like to extend special thanks to Sri S.K. Rath, Forestry Expert, MGNREGS for providing with a systematic calculation and compilation of the cost norm.

(M. Yogajavanand) Chief Conservator of Forests

(PLAN, PROGRAMME & AFFORESTATION)

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STATE FOREST HEADQUARTERS, ODISHA OFFICE OF THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS ARANYA BHAWAN, CHANDRASEKHARPUR, BHUBANESWAR – 23 Office No.0674-2300053/2500855, Email: affn.pccfodisha@gmail.com

Office Order No. 292 / 12F (Affn.) 41/2025 Dated, Bhubaneswar, the March, 2025

In inviting a reference to the Office Order No. 1087 /12F (Affn.) 25/2018 Dated 02.11.2021, regarding approval of cost norm for different plantation models in the State, it is necessitated to revise the cost norm taking in to consideration for inclusion of components like Raising of 30 months old seedlings , Raising of Stumps (non teak) , Raising of seedlings (stumps origin) , Bamboo seedlings (layering) , Bald Hill Plantation, ANR (without gap), Miyawaki Plantation etc with some modification for enhancing the success rate of the plantation.

Accordingly, a Committee on revision of Cost Norm was constituted by this office vide O.O. No.871/12F (Affn.) 174/2024 dated 31.08.2024 to examine the issues and review the plantation cost norm. The Committee submitted its report dated 28.02.2025 suggesting changes in various item of works.

Based on the recommendation of the Cost Norm Committee and subsequent deliberations, plantation cost norm for the following models have been approved and annexed as under:

SL No.	Description of the Model	Annexure
- 1.	Raising of 1000 Seedlings 06 months old	Annexure-1
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21.	Bald Hill Plantation (BHP-1600) @ 1600 plants / ha	Annexure-21
	(18 months old seedlings)	
22.	Bamboo Plantation (BMP-400) @ 400 plants / ha	Annexure-22
	(18 months old seedlings)	
23.	Casuarina Plantation (CNP-2500) @ 2500 plants / ha	Annexure-23
	(6 months old seedlings)	
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	plants/ ha (18 months old seedlings)	

The cost norm is based on the prevailing wage rate of Rs.452/- per day. Any revision in the wage rate will require corresponding changes in the wage component,. There shall be no change in material cost. The DFOs are allowed to make required revision accordingly.

The revised cost norm shall be applicable for plantations / schemes / projects with effect from the financial year 2025-26. The O.O. No.1087/12F (Affn.) 25/2018, dated 02.11.2021 stands modified to the above extent. The revised cost norm for Compensatory Afforestation Scheme will be issued separately.

Principal Chief Conservator of Forests & Head of Forest Force, Odisha.

Memo No. 5735 dated. 12-03-2025

Copy forwarded to the Additional Chief Secretary, Govt. of Odisha, Forest, Environment and Climate Change for information and necessary action.

Chief Conservator of Forests (PP&A)

Memo No. 5736 dated. 12-03-2025

Copy forwarded to the PCCF(WL) & CWLW, Odisha / PCCF(KL), Odisha / Chairman, Biodiversity Board / Chief Executive, RPRC / PD, OFSDS / MD, OFDC Ltd for information and necessary action.

Chief Conservator of Forests (PP&A)

Memo No. 5737 dated. \2003-2025

Copy forwarded to the Additional PCCF (Nodal & FC Act) / CCF, (PP&A) / CF, (ME&IV) CEO,(CAMPA) O/O PCCF & HoFF, Odisha / CCF (T&D), Cuttack for information and necessary action.

Chief Conservator of Forests (PP&A)

Memo No. 5738 dated. 12-03-2025

Copy forwarded to all RCCFs / all DFOS (T&WL) for information and necessary action.

Chief Conservator of Forests (PP&A)

							Anne	xure - 1
	COST NORM	FOR RAISING Wage rate @ 1				MONTHS)		
Sl. No	Items of work	Preferable Period of Execution	Unit	Unit Cost	No./ Qty.	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)
	A. 1st Fi	nancial Year	L (Seedli	ngs Co	st for 3 Mon	ıths)		
1	Site preparation and fencing	Nov- Dec	MD	452	4	1808	500	2308
2	Cost for Polythene bag (9" X 5"X 200 gauge) 300 nos./Kg. = 3.33 Kg @ Rs.208/- per Kg. (including GST)	Nov- Dec	Kg	208	3.33	0	693	693
	Procurement of raw & crude Polypot Mixture							
	(i) Soil	Nov- Dec	Cft	15	22	0	330	330
3	(ii) Sand	Nov- Dec	Cft	20	11	0	220	220
	(iii) CDM/ Vermicompost /Mo khata etc	Nov- Dec	Cft	40	11	0	440	440
	(iv) Insecticide/ Bio- Pesticide	Nov- Dec	Kg	150	2	0	300	300
4	Preparation of Soil Mixture includes pulverisation, straining & mixing the ingredients properly	Nov- Dec	MD	452	3	1356	0	1356
5	Filling of polythene bags & Setting in the bed	Nov- Dec	MD	452	4	1808	0	1808
6	Collection of Seed, Grading & Treatment	Dec	MD	452	2	904	100	1004
7	Preparation of germination bed, sowing of seeds and mulching including cost of materials	Dec-Jan	MD	452	1	452	100	552
8	Dibbling of seeds / pricking out the seedlings from germintaion beds, transplanting in the poly bags and providing shade including cost of materials.	Jan	MD	452	2	904	500	1404
10	Watering for 3 months	Jan-Mar	MD	452	9	4068	0	4068
11	Contigencies (Water can, Bucket,Empty Tin, and Display Board etc.)						517	517
	Total	•			25	11300	3700	15000

	B. 2nd Financial Year April-June									
1	Cost of Insecticide / Bio - Pesticide /Jivamruta / Herbal based plant growing products	April-May				0	550	550		
2	Weeding, Sorting, Grading, Root cutting & other operations.	April-June	MD	452	3	1356	0	1356		
3	Watering for 3 months	April-June	MD	452	9	4068	0	4068		
4	Contingencies.						126	126		
	Total				12	5424	676	6100		

	ABSTRACT										
Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)						
1	1st Financial Year (3 Months)	25	11300	3700	15000						
2	2nd Financial Year (3 Months)	12	5424	676	6100						
	Total 37 16724 4376 21100										
Cos	Cost per 6 months old seedling= Rs.21100/1000= Rs. 21.10										

							Anne	exure - 2
	COST NORM FO	OR RAISING O Vage rate @ R			-	IONTHS)		
Sl. No	Items of work	Preferable Period of Execution	Unit	Unit Cost	No./ Qty.	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)
	1st Fina	ncial Year (Se	edling	s Cost 1	for 3 Month	s)		
1	Cost of Polythene bag (12" X 8" X 400 gauge) 80 nos./ kg = 12.5 Kg @ Rs.208 per Kg. (including GST)	Nov- Dec	Kg	208	12.5	0	2600	2600
	Procurement of raw & crude Polypot Mixture							
	(i) Soil	Nov- Dec	Cft	15	70	0	1050	1050
2	(ii) Sand	Nov- Dec	Cft	20	35	0	700	700
	(iii) CDM/ Vermicompost/Mo khata etc	Nov- Dec	Cft	40	35	0	1400	1400
	(iv) Insecticide/ Bio-Pesticide	Nov- Dec	Kg	150	6	0	900	900
3	Preparation of Soil Mixture includes pulverisation, straining & mixing the ingredients properly	Nov- Dec	MD	452	8	3616	0	3616
4	Filling of polythene bags & Setting in the bed	Nov- Dec	MD	452	12	5424	0	5424
5	Collection of Seed, Grading & Treatment	Dec	MD	452	2	904	100	1004
6	Preparation of germination bed, sowing of seed and mulching including cost of materials	Jan	MD	452	1	452	100	552.0
7	Dibbling of seeds / pricking out the seedlings from germintaion beds, transplanting in the poly bags and providing shade including cost of materials.	Jan	MD	452	2	904	500	1404
9	Watering for 3 months	Jan-Mar	MD	452	10	4520	0	4520
11	Contingencies (Water can, Buckets etc., Electricity charges/ Diesel charges, Maintenance of pump set and assosaries & any other.)						500	500
	Total				35	15820	7850	23670

		2nd Fir	ancial	Year				
1	Watering for 3 months	April-June	MD	452	10	4520	0.0	4520
2	Weeding, Sorting, Grading & Other operations.	April-March	MD	452	12	5424	0	5424
3	Cost of Insecticide / Bio - pesticide / Jivamruta / Herbal based plant growing products					0	550	550
4	Watering	Oct- March	MD	452	20	9040	0	9040
5	Contingencies (Electricity charges/ Diesel charges, Maintenance of pump set & assosaries & any other)					0	670	670
	Total				42	18984	1220	20204
		3rd Financia	l Year	April-J	une			
1	Watering for 3 months	April-June	MD	452	10	4520	0	4520
2	Weeding, Sorting, Grading, Root cuting and other operations	April-June	MD	452	3	1356	0	1356
3	Cost of Insecticide / Bio - pesticide / Jivamruta / Herbal based plant growing products	April-June				0	800	800
4	Contingencies (Electricity charges/ Diesel charges, Maintenance of pump set & assosaries & any other)						250	250
	Total				13	5876	1050	6926

	ABSTRACT									
Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)					
1	1st Financial Year (3 Months)	35	15820	7850	23670					
2	2nd Financial Year (12 Months)	42	18984	1220	20204					
3	3rd Financial Year (3 Months)	13	5876	1050	6926					
	Total 90 40680 10120 50800									
Cost	t per 18 months old seedling= Rs.50800/1000 = 1	Rs. 50.80								

COST NORM FOR RAISING OF 1000 SEEDLINGS (30 MONTHS) Wage rate @ Rs. 452/- per Manday

	, F									
Sl. N o	Items of work	Preferable Period of Execution	Unit	Unit Cost	No./ Qty.	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)		
	1st Financial Year (Jan-Mar)									
1	Cost of Polythene bag(12" X 8" X 400 gauge) 80nos /kg . = 12.5 Kg @ Rs.208 per Kg. (including GST)	Nov/Dec	Kg	208	15.00	0	2600	2600		
	Procurement of raw & crude Polypot Mixture									
	(i) Soil	Nov/Dec	Cft	15	70	0	1050	1050		
2	(ii) Sand	Nov/Dec	Cft	20	35	0	700	700		
	(iii) CDM/ Vermi compost/ Mo Khata etc	Nov/Dec	Cft	40	35	0	1400	1400		
	(iv) Insecticide/ Bio-Pesticide	Nov/Dec	Kg	150	6	0	900	900		
3	Preparation of Soil Mixture includes pulverisation, Straining & mixing the ingredients properly	Nov/Dec	MD	452	8	3616	0	3616		
4	Filling of polythene bags & Setting in the bed	Nov/Dec	MD	452	12	5424	0	5424		
5	Collection of Seed, Grading & Treatment	Nov/Dec	MD	452	2	904	100	1004		
6	Preparation of germination bed & sowing of seed & Mulching including cost of material	Dec	MD	452	1	452	100	552.0		
7	Dibbling of seeds / pricking out the seedlings from germintaion beds & transplanting in the poly bags and providing shade.	Jan	MD	452	2	904	500	1404		
8	Watering for 3 months	Jan-Mar	MD	452	10	4520	0	4520		
9	Contingencies (Water can, Buckets, Electricity charges/ Diesel charges/ Maintenance of pump set etc.)						500	500		
	Total				35	15820	7850	23670		
	2nc	d Financial Y	ear (Ap	ril-Mar	ch)					
1	Watering for 6 months	April-June & Oct - Dec	MD	452	20	9040		9040		
2	Weeding ,Sorting , Grading & other operation	April - Dec	MD	452	10	4520		4520		

		T	1	Т	1	1		
3	Cost of insecticide/ Bio-Pesticide, Jivamruta & Herbal based plant growing Product				0	0	500	500
4	The cost of Polythene Bag (18" x 18"x 700 gauge) 14 nos/ Kg = 72Kg @Rs.208/- per Kg (including GST)	Nov/Dec	Kg	208	72		14976	14976
	Procurement of raw & crude Polypot Mixture							
	(i) Soil	Nov/Dec	Cft	15	380	0	5700	5700
	(ii) Sand	Nov/Dec	Cft	20	120	0	2400	2400
5	(iii) CDM	Nov/Dec	Cft	40	200	0	8000	8000
	(iv) Vermi compost /Mo Khata etc	Nov/Dec	kg	20	1000		20000	20000
	(iv) Insecticide/ Bio-Pesticide	Nov/Dec	Kg	150	30	0	4500	4500
	(v) Cocopeat	Nov/Dec	Kg	30	300		9000	9000
6	Preparation of Soil Mixture includes pulverisation, Straining & mixing the ingredients properly	Oct-Nov	MD	452	35	15820	0	15820
7	Filling of polythene bags including repotting of 18 month old seedlings, Setting in beds & providing shade	January	MD	452	75	33900	1000	34900
8	Watering for 3 months	Jan- March	MD	452	45	20340	0	20340
9	Weeding, Sorting and Grading and other operation	Jan- March	MD	452	8	3616	0	3616
1 0	Contingencies (Electricity charges/ Diesel charges/ Maintenance of pump set and any other.)						1200	1200
	Total				193	87236	67276	154512
	3rd	l Financial Ye	ear (Ap	ril-Mar	ch)			
1	Watering for 3 months	April-June	MD	452	45	20340	0	20340
2	Weeding, shifting and grading & other operation	April- March	MD	452	20	9040	0	9040
3	Cost of insecticide/ Bio-Pesticide, Jivamruta & Herbal based plant growing product					0	800	800
4	Watering for 6 months	Oct-March	MD	452	90	40680		40680
5	Contingencies (Electricity charges/ Diesel charges/ Maintenance of pump set and any other .)						2500	2500
	Total				155	70060	3300	73360
	4t	h Financial Y	ear (A	pril-Jun	e)	T		
1	Watering for 3 months	April-June	MD	452	45	20340	0	20340

2	Weeding, Shifting, Grading, Root cutting and other operation	April-June	MD	452	10	4520	0	4520
3	Cost of insecticide/ Bio-Pesticide, Jivamruta & Herbal based plant growing product	April-June				0	800	800
4	Contingencies (Electricity charges/ Diesel charges/ Maintenance of pump set and any other)						798	798
	Total				55	24860	1598	26458

	ABSTRACT											
Sl. N o	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)							
1	1st Financial Year (3 Months)	35	15820	7850	23670							
2	2nd Financial Year (12 Months)	193	87236	67276	154512							
3	3rd Financial Year (12 Months)	155	70060	3300	73360							
4	4th Financial Year (3 Months)	55	24860	1598	26458							
	Total 438 197976 80024 278000											
Cos	Cost per 30 months old seedling= Rs. 278000/1000 = Rs. 278/-											

							An	nexure -
	COST NORM FOR R					RHIZOME	ORIGIN	
Sl. No.	Item of work	Wage rate @ R Preferable period of activity	Unit	Unit Cost	No/ Qty	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)
	A. 1st Fi	inancial Year (S	Seedling	s Cost f	for 3 M	onths)	<u>l</u>	
1	Preparation of raised nursery beds, Cost of CDM, Sand , Insecticide / Bio pesticide and Seeds.	January	MD	452	2	904	1000	1904
2	Sowing of seeds, Watering, Weeding & Mulching including cost of materials	Jan-March	MD	452	3	1356	100	1456
3	Contingencies						500	500
	Total				5	2260	1600	3860
	B. 2nd Fi	nancial Year (S	Seedling	s Cost f	or 12 N	Months)		
1	Watering & Weeding of mother beds	April-June & Oct-Dec	MD	452	6	2712	0	2712
2	Cost of Polythene bags(12"x 8"x 400 gauge) 80 nos / kg= 12.5 kg @ Rs.208/- per kg.	Nov-Dec	Kg	208	12.5	0	2600	2600
	Procurement of Polypot Mixture							
	(i) Soil	Nov-Dec	cft	15	70	0	1050	
3	(ii) Sand	Nov-Dec	cft	20	35	0	700	4050
3	(iii) CDM/ Vermicompost / Mo khata etc	Nov-Dec	cft	40	35	0	1400	4050
	(iv) Insecticide / Bio pesticide	Nov-Dec	Kg	150	6	0	900	
4	Preparation of soil mixture including pulverisation and straining	Nov-Dec	MD	452	8	3616	0	3616
5	Filling and setting of polythene bags	Nov-Dec	MD	452	12	5424	0	5424
6	Uprooting and dressing of rhizome, transplanting of rhizome in polypots and providing shade including cost of materials	January	MD	452	3	1356	600	1956
7	Watering of polypots	Jan-March	MD	452	10	4520	0	4520
	Tota	-	<u>I</u>	<u>I</u>	39	17628	7250	
		inancial Year (S	Seedling	rs Cost			<u>ı </u>	

1	Watering of polypots	April-June	MD	452	10	4520	0	4520
2	Weeding, Sorting, Grading & other operation	April-June	MD	452	3	1356	0	1356
3	Cost of Jivamruta / Herbal based plant growing products /Insecticide/Bio pesticide	April					786	786
	Tota	13	5876	786	6662			

	ABSTARCT											
Sl. No.	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)							
1	1st Financial Year (Seedlings Cost for 3 Months)	5	2260	1600	3860							
2	2nd Financial Year (Seedlings Cost for 12 Months)	39	17628	7250	24878							
3	3rd Financial Year (Seedlings Cost for 3 Months)	13	5876	786	6662							
	Total	57	25764	9636	35400							
	Cost per 18 months old Seedling= Rs. 35400/1000 = Rs. 35.40											

COST NORM FOR RAISING 1000 BAMBOO SEEDLINGS - LAYERING OF CULM-CUTTINGS (6 MONTHS) Wage rate @ Rs. 452/- per Manday

Sl No	Item of work	Preferable period of execution	Unit	Unit Cost	No/ Qty	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)
	A. 1st Finan	cial Year (S	Seedlin	gs Cost	for 3	Months)		
1	Site preparation and fencing	Nov- Dec	MD	452	3	1356	1359	2715
2	Preparation of beds (3 Nos) of size 40'x 4' and mix the Soil, Sand, CDM and Insecticide / Bio pesticide properly for layering of bamboo	Dec-Jan	MD	452	6	2712		2712
	Cost of Materials	Dec-Jan						
	(i) Soil	Dec-Jan	cft	15	60		900	900
3	(ii) Sand	Dec-Jan	cft	20	30		600	600
	(iii) CDM	Dec-Jan	cft	40	30		1200	1200
	(iv) Insecticide / Bio pesticide	Dec-Jan	Kg	150	2		300	300
4	Cost of 60 nos of long Bamboo including transportation	January	Nos	150	60		9000	9000
5	Cutting of Culm into single node and layering in bed at a spacing of 20 cm X 20 cm after treatment of the nodes with fungicide and Root Growth Hormone (Skill labour) @ Rs 552/per day	January	MD	552	3	1656		1656
6	Cost of Root Growth Hormone and Fungicide	January					300	300
7	Watering and Weeding for 03 months	Jan- March	MD	452	9	4068		4068
8	Contingency L.S						560	560
	Total				21	9792	14219	24011

	B. 2nd Financial Year (Seedlings Cost for 03 Months)											
1	Watering, Weeding and application of insecticide/Biopesticide and other operation	April-June	MD	452	9	4068	0	4068				
2	Cost of Insecticide / Bio -pesticide/ Jivamruta						500	500				
3	Contingency L.S						421	421				
	To	tal		9	4068	921	4989					

	ABSTARCT										
Sl No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)						
1	1st Financial Year (Seedlings Cost for 3 Months)	21	9792	14219	24011						
2	2nd Financial Year (Seedlings Cost for 3 Months)	9	4068	921	4989						
	Total 30 13860 15140 29000										
Cos	Cost per 06 months old Seedling (Layring)= Rs. 29000/1000 = Rs. 29/-										

							Anne	xure - 6
	COST NOF	RM FOR RAISIN		NOS STUI 52/- Per M	=	han Teak)		
SI. No.	Item of work	Period of execution	Unit	Unit Cost	No/ Qty.	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)
		1st Fina	ncial Ye	ar (Jan - N	/larch)			
1	Preparation of raised germination bed (40' x 4') by digging the soil, breaking the clots, mixing with CDM & insecticide/ Bio-pesticide uniformely throughout the bed.	Jan- Feb	MD	452	1	452		452
	Procurement of CDM & insecticide/ Bio-pesticide							
2	(i) CDM	Jan- Feb	cft	40	8	-	320	320
	(ii) Insectiside / Bio- pesticide	Jan- Feb	Kg	150	1	-	150	150
3	Collection of seeds , drying and grading	Jan- May					450	450
4	Seed treatment, dibbling of seeds & mulching including cost of material	Feb- May	MD	452	1	452	200	652
5	Watering	Feb- March	MD	452	2	904		904
6	Contigency (Water can, Bucket and any other)						104	104
	Total				4	1808	1224	3032
		2nd Fina	ancial Y	ear (April	-June)			
1	Watering	April - June	MD	452	3	1356		1356
2	Weeding and application of liquid mannure / Jivamruta and insecticide etc.	May - Dec	MD	452	2	904	100	1,004
3	Watering (Once in every 6 days @ 10 beds per manday)	Oct- Jan	MD	452	2	904		904
4	Uprooting, Dressing, Counting and bagging of stumps	January	MD	452	2	904		904
	•	Γotal			9	4068	100	4168

	ABSTRACT										
Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)						
1	1st Financial Year (3 Months)	4	1808	1224	3032						
2	2nd Financial Year (9 Months)	9	4068	100	4168						
	Total	13	5876	1324	7200						
	Cost of production of per stump = Rs. 7200/1000= Rs. 7. 20										

Annexure - 7 COST NORM FOR RAISING OF 1000 SEEDLINGS (From Stump Origin) Wage rate @ Rs. 452/- per Manday Preferable Labour **Material** Total Unit Items of work Unit Cost Period of No./ Qty. Cost Cost Cost **Execution** (Rs.) (Rs.) (Rs.)

Sl.

No

		Execution				(RS.)	(RS.)	(RS.)
	1st Fin	ancial Year (S	Seedlin	igs Cost	t for 3 Mont	ths)		
1	Cost for Polythene bag (12" X 8" X 400 gauge) 80 nos./Kg. = 12.5 Kg @ Rs.208/- per Kg. (including GST)	Dec-Jan	Kg	208	12.5	0	2600	2600
	Procurement of raw & crude Polypot Mixture	Dec-Jan						
	(i) Soil	Dec-Jan	Cft	15	70	0	1050	1050
2	(ii) Sand	Dec-Jan	Cft	20	35	0	700	700
	(iii) CDM/ Vermicompost / Mo khata etc	Dec-Jan	Cft	40	35	0	1400	1400
	(iv) Insecticide/ Bio- Pesticide	Dec-Jan	Kg	150	6	0	900	900
3	Preparation of Soil Mixture includes pulverisation, Straining & mixing the ingredients properly	Dec-Jan	MD	452	8	3616	0	3616
4	Filling of polythene bags & Setting in the bed	Dec-Jan	MD	452	12	5424	0	5424
5	Treatment of stumps with fungicide, application of Root Growth Hormone, transplanting of stumps in the polypots and providing shade including cost of materials.	Jan-Feb	MD	452	4	1808	800	2608
6	Weeding & sorting	March	MD	452	1	452		452
7	Watering for 3 months	Jan-Mar	MD	452	10	4520	0	4520
8	Contingencies (Water can, Bucket, Empty Tin, Cost of gunny bags & Transportation charges of stumps from silviculture nursery to destination)						974	974
	Total				35	15820	8424	24244

	2nd Financial Year (April-June)											
1	Cost of Insecticide / Bio - pesticide / Jivamruta / Herbal based plant growing products	April-May					800	800				
2	Weeding, Sorting, Grading, Root cutting & Other Operation	April-June	MD	452	3	1356		1356				
3	Watering for 3 months	April-June	MD	452	10	4520	0	4520				
4	Contingencies (Electricity charges/ Diesel charges, Maintenance of pump set & any other)						580	580				
	Total				13	5876	1380	7256				

	ABSTRACT									
Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)					
1	1st Financial Year (3 Months)	35	15820	8424	24244					
2	2nd Financial Year (3 Months)	13	5876	1380	7256					
	Total 48 21696 9804 31500									
Cost	Cost per 6 months old seedling= Rs. 31500/1000= Rs. 31.50									

COST NORM FOR RAISING 1000 CASUARINA SEEDLINGS (6 MONTHS) Wage rate @ Rs. 452/- per Manday

		wage rate @	KS. 452	2/- per	Manuay			
Sl. No	Name of the activity	Preferable period of activity	Unit	Unit Cost	No/ Qty	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)
	A. 1st Fi	nancial Year	(Seedli	ngs Co	st for 3 Mor	iths)		
1	Site preparation & Fencing	Nov-Dec	MD	452	4	1808	500	2308
2	Seed collection & Innoculation of Mycorrhiza	Nov-Dec	MD	452	2	904	0	904
3	Preparation of germination beds, treatment of seeds, Sowing, mulching & watering including cost of materials	Dec-Jan	MD	452	3	1356	200	1556
	Cost of Polypot Mixture							
	(i) Clod Soil	Jan-Feb	cft	15	22	0	330	
4	(ii) Sand	Jan-Feb	cft	20	11	0	220	1200
4	(iii) CDM/ Vermicompost/Mo khata	Jan-Feb	cft	40	11	0	440	1290
	(iv)Insecticide/Bio pesticide	Jan-Feb	Kg	2	150	0	300	
5	Polypots (Size: 9" x 5" x 200 gauge) 300 nos/kg @ Rs.208/Kg (Including GST)	Jan-Feb	Kg	3.33	208	0	693	693
6	Preparation of soil mixture including pulverisation and straining	Jan-Feb	MD	452	3	1356	0	1356
7	Filling of polypots & setting in bed	Jan-Feb	MD	452	4	1808	0	1808
8	Pricking out & transplanting in polypots, arranging in beds and providing shade including material cost	Feb	MD	452	2	904	500	1404
9	Weeding & Sorting	Feb-Mar	MD	452	1	452		452
10	Watering	Feb-Mar	MD	452	6	2712		2712
11	Contingency -Water can, Bucket, Empty Tin , Display board etc.						517	517
	Total				25	11300	3700	15000

	B. 2nd Financial Year (Seedlings Cost for 3 Months)								
1	Watering of polypots	April-June	MD	452	9	4068	0	4068	
2	Weeding, Sorting, Grading, application of Jivamruta / Herbal based plant growing products /Insecticide/Bio pesticide & other operations.	April-June	MD	452	3	1356	0	1356	
3	Cost of Insecticide / Bio - pesticide/Jivamruta / Herbal based plant growing products	April-June				0	550	550	
4	Contingency						126	126	
	Total				12	5424	676	6100	

	ABSTRACT								
Sl. No	No Year		Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)				
1	1st Financial Year (3 Months)	25	11300	3700	15000				
2	2nd Financial Year (3 Months)	12	5424	676	6100				
	Total	37	16724	4376	21100				
	Cost per seedling Rs. 21100/1000= Rs. 21.10								

Annexure - 9 COST NORM FOR RAISING 1000 MANGROVE SEEDLINGS (6 months old) on Sunken Bed Waga rate @ Rs. 452/- per Manday **Preferable** Labour Material Total Sl. Unit Period of Unit **Items of Work** Nos/Qty Cost Cost Cost No Cost **Execution** (Rs.) (Rs.) (Rs.) A. 1st Financial Year (Seedling Cost for 6 Months) Site Clearance MD 452 452 452 1 April 1 Fencing with locally 2 collected twigs / April MD 452 7 3164 3164 brushwood Digging of sunken bed of 3 April MD 452 4 1808 1808 size 36'X 4'X 1'-6" Spreading of soil in 3'-0" width between 2 beds for 3 4 April MD 452 1356 1356 inspection Cost of Polythene bag (10"X 6"X 300 gauge) 180 5 Kg 208 5.58 1160 1160 April nos./Kg = 5.58 Kg @208/-Per KG(including GST) Collection of silt & clay 6 over 71 cft for filling in April-May MD 452 5 2260 2260 polythene bags Filling of polythene bags 7 April-May MD 452 4 1808 1808 and setting in rows Collection and treatment 8 2 904 100 1004 May-June MD 452 of seeds and propagules Dibbling of seeds and transplanting of 9 propagules in polypots May-June MD 452 2 904 500 1404 and providing shed with cost of shading materials Digging and Renovation of tidal channel of about 200' 10 May-Dec MD 452 6 2712 2712 length for flooding beds with sluice Flooding of tidal water & repairing of fence 11 May-Dec MD 452 12 5424 5424 including maintenance of

	ABSTRACT									
Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)					
1	1st Financial Year (6 Months)	46	20792	2408	23200					
	Total	46	20792	2408	23200					
	Cost per seedling= Rs.23200/1000 = Rs. 23.20									

0

46

0

20792

648

2408

648

23200

nursery

12

Cost of Sign board and

Total

other contingency

COST NORM FOR MAINTENANCE OF 1000 SEEDLINGS BEYOND 18 MONTHS (MAINTENANCE FROM 18 MONTHS TO 30 MONTHS) Wage rate @ Rs. 452/- per Manday

	reage state C state state, Per state stay								
Sl. N o	Items of work	Preferable Period of Execution	Unit	Unit Cost	No./ Qty.	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)	
		3RD Financia	al Year	(July- Mar	ch)				
1	Weeding ,Grading , Root cutting and other operation	July - March	MD	452	9	4068		4068	
2	Cost of insecticide & Bio pesticide	July - March					300	300	
3	Watering for 6 months in every alternate day	Oct - March	MD		10	4520		4520	
4	Contingencies (Electricity charges/ Diesel charges/ Maintenance of pump setand any other)						750	750	
	Total				19	8588	1050	9638	
		4th Financia	al Year (April-June	e)	1			
1	Weeding ,Grading , Root cutting and other operation	April- June	MD	452	3	1356		1356	
2	Cost of insecticide & Bio pesticide	April- June					200	200	
3	Watering for 3 months	April- June	MD		10	4520		4520	
4	Contingencies (Electricity charges/ Diesel charges/ Maintenance of pump set and any other.)						286	286	
	Total				13	5876	486	6362	

	A	ABSTRACT							
Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)				
1	3rd Financial Year (9 Months)	19	8588	1050	9638				
2	4th Financial Year (3 Months)	13	5876	486	6362				
	Total 32 14464 1536 16000								
Main	Maintenance cost per seedling (12months) = Rs. 16000/1000 = Rs. 16/-								

COST NORM FOR BLOCK PLANTATION @ 1600 PLANTS PER HECTARE (18 months old seedlings) Wage Rate Rs. 452/- per Manday

	wage kate ks. 452/- per Manday									
Sl. No	Items of work	Preferable Period of Execution	No of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)				
	0th	Year (Advanc	e work)							
1	Survey, Demarcation and Pillar posting	December	2	904		904				
2	Preparation of Treatment Map (Digital Map)	December	1	452		452				
3	Site preparation (Cleaning & Jan-Feb removal of debrises)		12	5424		5424				
4	Creation of 4.00 mt wide Inspection Path Feb/Mar		1	452		452				
5	Alignment and stacking	Feb/Mar	4	1808		1808				
6	Digging of pits (45 cm x 45 cm X 45 cm) / 50 cm diameter augur hole in hard and gravelly soil	Feb/Mar	64	28928		28928				
7	Construction of Temporary Labour Shed, Drinking water facility and First Aid etc.				2000	2000				
	Total		84	37968	2000	39968				
8	Monitoring, Evaluation , Documentation & other Contingency i.e 5% of the total cost.					1998				
	Grand Total		84	37968	2000	41966				
	1st	t Year/Plantir	ng Year							
1	Fencing done by using GI Wire mesh Chain Link for an average of 250 mtr Ha @ Rs.400/- per mtr.	May/Jun			100000	100000				
2	Transportation of 18 months old seedlings by hired vehicle from the nursery including loading, unloading & stacking the same at planting site @ Rs.8/- per seedling. (1760 nos.) (Average lead of 15 Rkm)	Jul/Aug			14080	14080				
3	Watering the polypot seedlings at planting site	Jul/Aug	3	1356		1356				

Cost of Fertilizer & Insecticide (a) CDM/Vermicompost / Organic Manure as Basal Dose (b) NPK @ 50 gms/plant as basal dose (c) Insecticide/ Bio-pesticide as basal dose @ 5 gms/plant (d) Urea @ 30 gms per plant (e) Jivamruta / Herbal based plant growing product Casualty Replacement @ 10% (160 nos.) 1st Weeding & Manuring (Application of Urea in crowbar hole) 2nd Weeding, Soil working (1mt. diametre around the plants) and Manuring (Application of Jivamruta / Herbal based plant growing product) 5 Fire line tracing (3 m. wide fire line over 300 m long) including maintenance of inspection path 10	4	Conveyance of polypot seedlings from the stacking site to individual pits, mixing the dug out soil of the pits with CDM/ Vermicompost / Organic Manure, applying Insecticide/Bio pesticide, fertilizers, planting done after scooping the soil & pressing properly around the planted seedlings. (In case Organic manure is applied, Bio pesticide should be used in stead of Insecticide)	Jul/Aug	40	18080		18080
1st Weeding & Manuring Aug/Sept 1st Weeding Aug/Sept 1st Weg/Sept 1st Weeding Aug/Sept 1st Weeding Aug/Sept 1st Weg/Sept 1st Weg/	5	(a) CDM/Vermicompost / Organic Manure as Basal Dose (b) NPK @ 50 gms/plant as basal dose (c) Insecticide/ Bio-pesticide as basal dose @ 5 gms/plant (d) Urea @ 30 gms per plant (e) Jivamruta / Herbal based plant growing product	Jul - Sept			15728	15728
7 (Application of Urea in crowbar hole Aug/Sept 15 6780 6780 2nd Weeding, Soil working (1mt. diametre around the plants) and 8 Manuring (Application of Jivamruta / Herbal based plant growing product) Fire line tracing (3 m. wide fire line over 300 m long) including maintenance of inspection path Watch & Ward against grazing and other Biotic interferance Aug-Mar 24 10848 10848 Total 109 49268 129808 179076 Monitoring, Evaluation, Documentation & Contingency i.e 5% of the total cost. Grand Total 109 49268 129808 188030 Znd Year Maintenance Transportation of 160 nos of 18th months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM)	6	• •	Jul/Aug	4	1808		1808
diametre around the plants) and Manuring (Application of Jivamruta / Herbal based plant growing product) Fire line tracing (3 m. wide fire line over 300 m long) including maintenance of inspection path Watch & Ward against grazing and other Biotic interferance Total Monitoring, Evaluation, Documentation & Contingency i.e 5% of the total cost. Grand Total Transportation of 160 nos of 18th months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM) Sep/Oct 20 9040 1356 1356	7	1st Weeding & Manuring	Aug/Sept	15	6780		6780
Fire line tracing (3 m. wide fire line over 300 m long) including maintenance of inspection path Watch & Ward against grazing and other Biotic interferance Total Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost. Grand Total Total Total Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost. Transportation of 160 nos of 18th months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM) Feb/Mar 3 1356 10848 10848 10949268 129808 179076 109 49268 129808 129808 188030 1280	8	diametre around the plants) and Manuring (Application of Jivamruta / Herbal based plant growing	Sep/Oct	20	9040		9040
Total 109 49268 129808 179076 Monitoring, Evaluation, Documentation & Contingency i.e 5% of the total cost.	9	over 300 m long) including	Feb/Mar	3	1356		1356
Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost. Grand Total 109 49268 129808 188030 2nd Year Maintenance Transportation of 160 nos of 18th months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM) Jul 1280	10		Aug-Mar	24	10848		10848
11 Documentation & Contingency i.e 5% of the total cost. Grand Total 109 49268 129808 188030		Total		109	49268	129808	179076
Transportation of 160 nos of 18th months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM) 1	11	Documentation & Contingency i.e					8954
Transportation of 160 nos of 18th months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM)		Grand Total		109	49268	129808	188030
months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM) 1280 1280			d Year Mainto	enance			
2 Casualty replacement- 10% Jul 4 1808 1808	1	months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of	Jul			1280	1280
	2	Casualty replacement- 10%	Jul	4	1808		1808

	1							
3	Cost of Fertilizer & Insecticide- A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK /Urea / Herbal based plant growing product	Jul-Aug			5240	5240		
4	Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea / Herbal based plant growing product)	Sep/Oct	20	9040		9040		
5	Fire line tracing (3 m. wide fire line over 300 m long) including maintenance of inspection path	Feb/Mar	3	1356		1356		
6	(a) Watch & Ward against grazing & other Biotic interferance (b) Maintenance of fence & Temporary labour shed with material cost	Apr-Mar	36	16272	1000	17272		
	Total			28476	7520	35996		
7	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					1800		
	Grand Total		63	28476	7520	37796		
	3rd Year Maintenance							
1	Cost of Fertilizer NPK / Urea /Herbal based plant growing product	Aug/Sep			5120	5120		
2	Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK / Urea / Herbal based plant growing product)	Sep/Oct	20	9040		9040		
3	Fire line tracing (3 m. wide fire line over 300 m long) including maintenance of inspection path	Feb/Mar	3	1356		1356		
4	(a) Watch & Ward against grazing & other Biotic interferance (b) Maintenance of fence & Temporary labour shed with material cost	April-Mar	18	8136	700	8836		
	Total		41	18532	5820	24352		
5	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					1218		
	Grand Total		41	18532	5820	25570		
	4tl	h Year Mainte	enance					
1	Fire line tracing (3 m. wide fire line over 300 m long) including maintenance of inspection path	Feb/Mar	3	1356		1356		

2	(a) Watch & Ward against grazing & other Biotic interferance (b) Maintenance of fence & Temporary labour shed	Apr-Mar	18	8136		8136
	Total		21	9492	0	9492
3	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					475
	Grand Total		21	9492	0	9967

	ABSTARCT (Showing Seedling Cost Separately)										
Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	MED & Other Contingency	Seedling Cost (Rs.)	Total Cost (Rs.)				
1	0th year	84	37968	2000	1998		41966				
2	1st year	109	49268	129808	8954	89408	277438				
3	2nd year	63	28476	7520	1800	8128	45924				
4	3rd year	41	18532	5820	1218		25570				
5	4th year	21	9492	0	475		9967				
	Grand Total 318 143736 145148 14444 97536 400864										

Annexure - 12 COST NORM FOR BLOCK PLANTATION @ 1000 PLANTS PER HECTARE (18 months old seedlings) Wage Rate Rs. 452/- per Manday **Preferable** Labour Material Total Sl. No. of Items of work Period of Cost Cost Cost No **Mandays** Execution (Rs.) (Rs.) (Rs.) Oth Year (Advance work) Survey, Demarcation and Pillar posting December 2 904 904 1 Preparation of Treatment Map (Digital 2 1 December 452 452 Map) Site preparation (Cleaning & removal of 3 Jan-Feb 12 5424 5424 debrises) Creation of 4.00 mt wide Inspection 4 Feb/Mar 1 452 452 Path 5 Alignment and stacking 904 904 Feb/Mar 2 Digging of pits (45 cm x 45 cm X 45 6 cm) / 50 cm diameter augur hole in 18080 18080 Feb/Mar 40 hard & gravelly soil Construction of Temporary Labour 7 Shed, Drinking water facility and First 2000 2000 Aid etc. **Total** 58 26216 2000 28216 Monitoring, Evaluation, Documentation 8 1411 & Contingency i.e 5% of the total cost. **Grand Total** 58 26216 2000 29627 1st Year/Planting Year Fencing done by using GI Wire mesh Chain Link for an average of 250 mtr May/June 100000 100000 1 Ha @ Rs.400/- per mtr. Transportation of 18 months old seedlings by hired vehicle from the nursery including loading, unloading & 2 Jul/Aug 8800 8800 stacking the same at planting site @ Rs.8/- per seedling. (1100 nos.) (Average lead of 15 Rkm) Watering of polypot seedlings at 3 Jul/Aug 2 904 904 planting site

_		ı			1	
4	Conveyance of polypot seedlings from the stacking site to individual pits, mixing the dug out soil of the pits with CDM/ Vermicompost / Organic Manure, applying Insecticide/Bio pesticide, fertilizers, planting done after scooping the soil & pressing properly around the planted seedlings. (In case Organic manure is applied, Bio pesticide should be used in stead of Insecticide)	Jul/Aug	25	11300		11300
5	Cost of Fertilizer & Insecticide (a) CDM/Vermicompost / Organic Manure as Basal Dose (b) NPK @ 50 gms/plant as basal dose (c) Insecticide/ Bio-pesticide as basal dose @ 5 gms/plant (d) Urea @ 30 gms per plant (e) Jivamruta / Herbal based plant growing products	Jul/Aug			9830	9830
6	Casualty Replacement @ 10% (100 nos.)	Jul/Aug	2.5	1130		1130
7	1st Weeding & Manuring (Application of Urea in Crowbar hole)	Aug/Sept	12	5424		5424
8	2nd Weeding, Soil working (1mt. diametre around the plants) and Manuring (Application of Jivamruta / Herbal based plant growing product	Sep/Oct	15	6780		6780
9	Fire line tracing (3 m. wide fire line over 300 m long) including maintenance of inspection path	Feb/Mar	3	1356		1356
10	Watch & Ward against grazing and other Biotic interferance	Aug-Mar	12	5424		5424
	Total		71.5	32318	118630	150948
11	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					7547
	Grand Total		71.5	32318	118630	158495
	2nd Year Maintenance					
1	Transportation of 100 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM)	Jul			800	800
2	Casuality replacement- 10%	Jul	2.5	1130		1130
3	Cost of Fertilizer & Insecticide- A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK / Urea / Herbal based plant growing product	July/Aug			3275	3275

4	Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK / Urea / Herbal based plant growing product)	Sep/Oct	15	6780		6780
5	Fire line tracing (3 m. wide fire line over 300 m long) including maintenance of inspection path	Feb/Mar	3	1356		1356
6	(a) Watch & Ward against grazing & other Biotic interferance (b) Maintenance of fence & Temporary labour shed with material cost	Apr-Mar	18	8136	1000	9136
	Total		38.5	17402	5075	22477
7	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					1124
	Grand Total	•	38.5	17402	5075	23601
working (1mt. diametre around the plants) and Manuring (Application of NPK / Urea / Herbal based plant growing product) Fire line tracing (3 m. wide fire line over 300 m long) including maintenance of inspection path (a) Watch & Ward against grazing & other Biotic interferance (b) Maintenance of fence & Temporary labour shed with material cost Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost. Sep/Oct Sep					_	
1	NPK / Urea / Herbal based plant	Sep/Oct			3200	3200
2	working (1mt. diametre around the plants) and Manuring (Application of NPK / Urea / Herbal based plant growing product)	Sep/Oct	15	6780		6780
3	over 300 m long) including	Feb/Mar	3	1356		1356
4	other Biotic interferance (b) Maintenance of fence & Temporary	Apr-Mar	18	8136	700	8836
	Total		36	16272	3900	20172
5	· .					1009
	Grand Total		36	16272	3900	21181
	4th Y	ear Maintena	nce	•		
1	over 300 m long) including	Feb/Mar	3	1356		1356
2	(a) Watch & Ward against grazing & other Biotic interferance (b) Maintenance of fence & Temporary	Apr-Mar	18	8136		8136
	Total		21	9492	0	9492
3	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					475
	Grand Total		21	9492	0	9967
	1		1	1		1

ABSTARCT (Showing Seedling Cost Separately)								
Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	MED & Other Contingency	Seedling Cost (Rs.)	Total Cost(Rs.)	
1	0th year	58	26216	2000	1411		29627	
2	1st year	71.5	32318	118630	7547	55880	214375	
3	2nd year	38.5	17402	5075	1124	5080	28681	
4	3rd year	36	16272	3900	1009		21181	
5	4th year	21	9492	0	475		9967	
Grand Total		225	101700	129605	11565	60960	303830	

	COST NORM FOR AIDED NATURAL REG	ENERATION (s. 452 /-per m		thout gap PI		<u>ure - 13</u> E
Sl. No.	Item of Work	Preferable period of Execution	Man days	Lobour Cost (Rs.)	Material Cost (Rs.)	Total Cost in (Rs.)
	1ST YEA	AR OPERATIO	N	ı		
1	Survey, Demarcation and Pillar Posting & preparation of treatmenr map (digital map)	April	2	904		904
2	Soil & Moisture Conservation Measures (Staggered trenches of dimension 2 m X 0.5 m X 0.5 m @ 60 nos per ha or its equivalent, Drainage line treatment, LBCD and any other structure as per site requirement.	Oct/Nov	20	9040		9040
3	Silvicultural operations including Cutting of high stumps, Singling out of multiple shoots, Climber cuting, Clearance of weeds & Removal of debrises from the field to blank space	Jan/Feb	20	9040		9040
4	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Jan/Feb	3	1356		1356
5	Watch & ward against grazing and other Biotic interferance	Aug-Mar	5	2260		2260
	TOTAL		50	22600	0	22600
6	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					1130
	GRAND TOTAL		50	22600	0	23730
	2ND YE	AR OPERATIO	N			
1	Renovation and Maintenance of SMC Structures	Oct/Nov	4	1808		1808
2	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Jan/Feb	3	1356		1356
3	Watch & Ward against grazing & other Biotic interferance	Apr-Mar	7	3164		3164
	TOTAL	I	14	6328	0	6328
4	Monitoring, Evaluation, Documentation & Contingency i.e 5% of the total cost.			6000		316
	GRAND TOTAL		14	6328	0	6644
	3RD YE	AR OPERATIO	N			
1	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Jan/Feb	3	1356		1356
2	Watch & Ward against grazing & other Biotic interferance & Cultural operation	Apr-Mar	7	3164		3164
	TOTAL		10	4520	0	4520
3	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					226

	4TH YEAR OPERATION								
1	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Jan/Feb	3	1356		1356			
2	Watch & Ward against grazing, other Biotic interferance & Cultural operation	Apr-Mar	7	3164		3164			
	TOTAL		10	4520	0	4520			
3	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					226			
	GRAND TOTAL		10	4520	0	4746			

	ABSTRACT									
SL. No.	Year	No. of Mandays	Labour cost in Rs. Material cost in (Rs.)		MED & Other Contingency	Total cost in (Rs.)				
1	1st Year operation	50	22600	0	1130	23730				
2	2nd Year operation	14	6328	0	316	6644				
3	3rd Year operation	10	4520	0	226	4746				
4	4th Year operation	10	4520	0	226	4746				
	Grand Total	84	37968	0	1898	39866				

COST NORM FOR AIDED NATURAL REGENERATION (ANR) @ 200 PLANTS PER HECTARE (18 months old seedlings) Wage Rate Rs. 452/- per Manday

	wage face its. 1527 per Flanday									
Sl. No	Items of work	Preferable Period of Execution	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)				
	0th Year (Advance work)									
1	Survey, Demarcation and Pillar posting	Nov/Dec	2	904		904				
2	Preparation of Treatment Map (Digital Map)	Nov/Dec	1	452		452				
3	Site preparation	Jan- Feb	2	904		904				
4	Silvicultural operations including Cutting of high stumps, Singling out of multiple shoots, Climber cuting, Clearance of weeds & Removal of debrises from the field to blank space	Jan- Feb	15	6780		6780				
5	Alignment and stacking	Feb/Mar	0.5	226		226				
6	Digging of pits (45 cm x 45 cm X 45 cm) / 50 cm diameter augur hole in hard & gravelly soil	Feb/Mar	8	3616		3616				
	Total		28.5	12882	0	12882				
7	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					644				
	Grand Total			12882	0	13526				
	1st Ye	ear/Planting Y	ear							
1	Fencing of planted patches by using Bamboo twigs & thorns/Brushwood/ any other	June - July	5	2260	1000	3260				
2	Transportation of 18th months old seedlings by hired vehicle from the nursery including loading, unloading & stacking the same at planting site.@ Rs.8/- per seedling. (220 nos.) (Average lead of 15 Rkm)	Jul/Aug			1760	1760				
3	Watering polypot seedlings at Planting Site	Jul/Aug	0.5	226		226				
4	Conveyance of polypot seedlings from the stacking site to individual pits, mixing the dug out soil of the pits with CDM/ Vermicompost / Organic Manure & applying insecticide/Bio pesticide, fertilizers, planting done after scooping the soil & pressing properly around the planted seedlings. (In case Organic manure is applied, Bio pesticide should be used in stead of Insecticide)	Jul/Aug	5	2260		2260				

5	Cost of Fertilizer & Insecticide (a) CDM/Vermicompost / Organic Manure as Basal Dose (b) NPK @ 50 gms/plant as basal dose (c) Insecticide/ Bio-pesticide as basal dose @ 5 gms/plant (d) Urea @ 30 gms per plant	Jul/Aug			1966	1966
	(e) Jivamruta / Herbal based plant growing products					
6	Casualty Replacement @ 10% (20 nos.)	Jul/Aug	0.5	226		226
7	1st Weeding & Manuring (Application of Urea)	Aug/Sept	2	904		904
8	2nd Weeding, Soil working (1mt. diametre around the plants) and Manuring (Application of Jivamruta / Herbal based plant growing products)	Sep/Oct	3	1356		1356
9	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356
10	Watch & Ward against grazing and other Biotic interferance	Aug-Mar	8	3616		3616
	Total			12204	4726	16930
11	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					847
	Grand Total		27	12204	4726	17777
		ear Maintena	nce	1 1		
1	Transportation of 20 nos of 18th months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/per seedling (Average lead of 15 RKM)	Jul			160	160
2	Casualty replacement	Jul	0.5	226		226
3	Cost of Fertilizer & Insecticide- A) Cost of Bio pesticide / Insecticide @ 5 gms/plant B) NPK / Urea / Herbal based plant growing product	Jul			655	655
4	Weeding (Complete weeding), Soil working (1mt. dia around the plants) and Manuring (Application of NPK / Urea / Herbal based plant growing product)	Sep/Oct	4	1808		1808
6	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356
7	Watch & Ward against grazing & other Biotic interferance, Repair & maintenance of fencing	Apr-Mar	12	5424	350	5774
-	Total		19.5	8814	1165	9979
8	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					499
	Grand Total		19.5	8814	1165	10478
	3rd Y	ear Maintenai	nce	•		

1	Cost of NPK / Urea / Herbal based plant growing product	Aug-Sept			640	640
2	Weeding (Complete weeding), Soil working (1mt. diametre around the plants) & Manuring (Application of NPK / Urea / Herbal based plant growing product)	Aug/Sep	4	1808		1808
3	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356
4	Watch & Ward against grazing & other Biotic interferance, Repair & maintenance of fencing	April-Mar	12	5424	75	5499
	Total		19	8588	715	9303
5	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					465
	Grand Total		19	8588	715	9768
	4th Yo	ear Maintenar	ıce			
1	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356
2	Watch & Ward against grazing and other Biotic interferance, Repair & maintenance of fencing	April-Mar	12	5424		5424
	Total		15	6780	0	6,780
3	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					339
	Grand Total		15	6,780	0	7,119

	ABSTARCT (Showing Seedling Cost Separately)									
Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	MED & Other Contingency	Seedling Cost (Rs.)	Total Cost (Rs.)			
1	0th year	28.5	12882	0	644		13526			
2	1st year	27	12204	4726	847	11176	28953			
3	2nd year	19.5	8814	1165	499	1016	11494			
4	3rd year	19	8588	715	465		9768			
5	4th year	15	6780	0	339		7119			
	Grand Total	109	49268	6606	2794	12192	70860			

Annexure - 15 COST NORM FOR AIDED NATURAL REGENERATION (ANR) @ 400 PLANTS PER HECTARE (18 months old seedlings) Wage Rate Rs. 452/- per Manday **Preferable Material** Labour Total Sl. No. of Period of Items of work Cost Cost Cost No **Mandays** Execution (Rs.) (Rs.) (Rs.) **Oth Year (Advance work)** Survey, Demarcation and Pillar posting Nov/Dec 2 904 904 1 Preparation of Treatment Map (Digital 2 Nov/Dec 1 452 452 Map) 3 Site preparation Jan- Feb 3 1356 1356 Silvicultural operations including Cutting of high stumps, Singling out of multiple shoots. Climber cuting. 4 Jan- Feb 14 6328 6328 Clearance of weeds & Removal of debrises from the field to blank space 5 452 452 Alignment and stacking Feb/Mar 1 Digging of pits (45 cm x 45 cm X 45 cm) 6 / 50 cm diameter augur hole in hard & Feb/Mar 16 7232 7232 gravelly soil **Total** 37 16724 0 16724 Monitoring, Evaluation, Documentation 7 836 & Contingency i.e 5% of the total cost. **Grand Total** 37 16724 0 17560 1st Year/Planting Year Fencing by using Bamboo twigs & 9 1 June-July 4068 2000 6068 thorns/Brushwood/ any other Transportation of 18 months old seedlings by hired vehicle from the nursery including loading, unloading & 2 3520 Jul/Aug 3520 stacking the same at planting site @ Rs.8/- per seedling. (440 nos.) (Average lead of 15 Rkm) Watering polypot seedlings at Planting 3 Jul/Aug 1 452 452 Conveyance of polypot seedlings from the stacking site to individual pits. mixing the dug out soil of the pits with CDM/ Vermicompost / Organic Manure, applying Insecticide/Bio pesticide, 4 Jul/Aug 10 4520 4520 fertilizers, planting done after scooping the soil & pressing properly around the planted seedlings. (In case Organic

manure is applied, Bio pesticide should

be used in stead of Insecticide)

5	Cost of Fertilizer & Insecticide (a) CDM/Vermicompost / Organic Manure as Basal Dose (b) NPK @ 50 gms/plant as basal dose (c) Insecticide/ Bio-pesticide as basal dose @ 5 gms/plant (d) Urea @ 30 gms per plant (e) Jivamruta / Herbal based plant growing products	Jul/Aug			3932	3932
6	Casualty Replacement @ 10% (40 nos.)	Jul/Aug	1	452		452
7	1st Weeding & Manuring (Application of Urea)	Aug/Sept	4	1808		1808
8	2nd Weeding, Soil working (1mt. diametre around the plants) and Manuring (Application of Jivamruta / Herbal based plant growing products)	Sep/Oct	6	2712		2712
9	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356
10	Watch & Ward against grazing and other Biotic interferance	Aug-Mar	8	3616		3616
	Total		42	18984	9452	28436
11	Monitoring, Evaluation, Documentation & Contingency i.e 5% of the total cost.					1422
	Grand Total	1	42	18984	9452	29858
	2nd Ye	ice			•	
1	Transportation of 40 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM)	Jul			320	320
2	Casualty replacement (10%)	Jul	1	452		452
3	Cost of Fertilizer & Insecticide- A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK/Urea/ Herbal based plant growing product	Jul			1310	1310
4	Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea / Herbal based plant growing product)	Sep/Oct	8	3616		3616
5	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356
6	Watch & Ward against grazing & other Biotic interferance, Repair & maintenance of fencing	Apr-Mar	12	5424	700	6124
	Total		24	10848	2330	13178
7	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					659
	Grand Total		24	10848	2330	13837

	3rd Year Maintenance								
1	Cost of NPK/Urea / Herbal based plant growing product	Aug/Sept			1280	1280			
2	Weeding (Complete weeding), Soil working (1mt. diametre around the plants) & Manuring (Application of NPK/Urea / Herbal based plant growing product)	Aug/Sep	8	3616		3616			
3	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356			
4	Watch & Ward against grazing & other Biotic interferance , Repair & Maintenance of fencing	Apr-Mar	12	5424	150	5574			
	Total		23	10396	1430	11826			
5	Monitoring, Evaluation, Documentation & Contingency i.e. 5% of the total cost.					591			
	Grand Total		23	10396	1430	12417			
	4th Ye	ar Maintenan	ice						
1	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356			
2	Watch & Ward against grazing & other Biotic interferance , Repair & Maintenance of fencing	Apr-Mar	12	5424		5424			
	Total		15	6780	0	6780			
3	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					339			
	Grand Total		15	6780	0	7119			

	ABSTARCT (Showing Seedling Cost Separately)									
Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	MED & Other Contingency	Seedling Cost (Rs.)	Total Cost (Rs.)			
1	0th year	37	16724	0	836		17560			
2	1st year	42	18984	9452	1422	22352	52210			
3	2nd year	24	10848	2330	659	2032	15869			
4	3rd year	23	10396	1430	591		12417			
5	4th year	15	6780	0	339		7119			
	Grand Total 141 63732 13212 3847 24384 105175									

COST NORM FOR AIDED NATURAL REGENERATION (ANR) @ 500 PLANTS PER HECTARE (18 months old seedlings)

Wage Rate Rs	. 452/- per	Manday
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Sl. No	Items of work	Preferable Period of Execution	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)
	0th Yea	r (Advance w	ork)			
1	Survey, Demarcation and Pillar posting	Nov/Dec	2	904		904
2	Preparation of Treatment Map (Digital Map)	Nov/Dec	1	452		452
3	Site preparation	Jan- Feb	4	1808		1808
4	Silvicultural operations including Cutting of high stumps, Singling out of multiple shoots, Climber cuting, Clearance of weeds & Removal of debrises from the field to blank space	Jan- Feb	12	5424		5424
5	Alignment and stacking	Feb/Mar	1	452		452
6	Digging of pits (45 cm x 45 cm X 45 cm) / 50 cm diameter augur hole in hard & gravelly soil	Feb/Mar	20	9040		9040
	Total		40	18080	0	18080
7	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					904
	Grand Total		40	18080	0	18984
	1st Ye	ar/Planting Yo	ear	•		
1	Fencing by using Bamboo twigs & thorns/Brushwood/ any other	June- July	12	5424	2500	7924
2	Transportation of 18 months old seedlings by hired vehicle from the nursery including loading, unloading & stacking the same at planting site. @ Rs.8/- per seedling. (550 nos.) (Average lead of 15Rkm)	Jul/Aug			4400	4400
3	Watering polypot seedlings at Planting Site	Jul/Aug	1	452		452
4	Conveyance of polypot seedlings from the stacking site to individual pits, mixing the dug out soil of the pits with CDM/ Vermicompost / Organic Manure, applying Insecticide/Bio pesticide, fertilizers, planting done after scooping the soil & pressing properly around the planted seedlings. (In case Organic manure is applied, Bio pesticide should be used in stead of Insecticide)	Jul/Aug	12.5	5650		5650

	Cost of Fertilizer & Insecticide (a) CDM/Vermicompost / Organic					
5	Manure as Basal Dose (b) NPK @ 50 gms/plant as basal dose (c) Insecticide/ Bio-pesticide as basal dose @ 5 gms/plant (d) Urea @ 30 gms per plant (e) Jivamruta / Herbal based plant	Jul/Aug			4915	4915
	growing products					
6	Casualty Replacement @ 10% (50 nos.)	Jul/Aug	1.5	678		678
7	1st Weeding & Manuring (Application of Urea)	Aug/Sept	5	2260		2260
8	2nd Weeding, Soil working (1mt. diametre around the plants) and Manuring (Application of Jivamruta / Herbal based plant growing product)	Sept-Oct	8	3616		3616
9	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356
10	Watch & Ward against grazing and other		8	3616		3616
	Total		51	23052	11815	34867
11	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					1743
	Grand Total		51	23052	11815	36610
	2nd Ye	ear Maintenar	ice			
1	Transportation of 50 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM)	Jul			400	400
2	Casualty replacement (10%)	Jul	2	904		904
3	Cost of Fertilizer & Insecticide- A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK/Urea/ Herbal based plant growing product	July/Aug			1638	1638
4	Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea / Herbal based plant growing product)	Sep/Oct	10	4520		4520
5	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356
6	Watch & Ward against grazing & other Biotic interferance, Repair & maintenance of fencing	Apr-Mar	12	5424	875	6299
	Total		27	12204	2913	15117
7	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					756
	Grand Total		27	12204	2913	15873
	3rd Ye	ear Maintenar	ice	•		

1	Cost of NPK/Urea / Herbal based plant growing product	Aug/Sept			1600	1600
2	Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea / Herbal based plant growing product)	Sep/Oct	10	4520		4520
3	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356
4	Watch & Ward against grazing & other Biotic interferance, Repair & maintenance of fencing	Apr-Mar	12	5424	188	5612
	Total		25	11300	1788	13088
5	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					654
	Grand Total		25	11300	1788	13742
	4th Ye	ar Maintenan	ice			
1	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356
2	Watch & Ward against grazing and other Biotic interferance, Repair & maintenance of fencing	Apr-Mar	12	5424		5424
	Total		15	6780	0	6780
3	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					339
	Grand Total		15	6780	0	7119

	ABSTARCT (Showing Seedling Cost Separately)										
Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	MED & Other Contingency	Seedling Cost (Rs.)	Total Cost (Rs.)				
1	0th year	40	18080	0	904		18984				
2	1st year	51	23052	11815	1743	27940	64550				
3	2nd year	27	12204	2913	756	2540	18413				
4	3rd year	25	11300	1788	654		13742				
5	4th year	15	6780	0	339		7119				
	Grand Total	158	71416	16516	4397	30480	122809				

COST NORM FOR AIDED NATURAL REGENERATION (ANR) @ 600 PLANTS PER HECTARE (18 months old seedlings) Wage Rate Rs. 452/- per Manday

Sl. No	Items of work	Preferable Period of Execution	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)
	0th Yea	r (Advance w	ork)	1	1	1
1	Survey, Demarcation and Pillar posting	Nov/Dec	2	904		904
2	Preparation of Treatment Map (Digital Map)	Nov/Dec	1	452		452
3	Site preparation	Nov/Dec	5	2260		2260
4	Silvicultural operations including Cutting of high stumps, Singling out of multiple shoots, Climber cuting, Clearance of weeds & Removal of debrises from the field to blank space	Jan- Feb	10	4520		4520
5	Alignment and stacking	Feb/Mar	1.5	678		678
6	Digging of pits (45 cm x 45 cm X 45 cm) / 50 cm diameter augur hole in hard & gravelly soil	Feb/Mar	24	10848		10848
	Total	•	43.5	19662	0	19662
7	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					983
	Grand Total		43.5	19662	0	20645
	1st Yea	ar/Planting Y	ear			
1	Fencing by using Bamboo twigs & thorns/Brushwood/ any other	June/July	14	6328	3000	9328
2	Transportation of 18 months old seedlings by hired vehicle from the nursery including loading, unloading & stacking the same at planting site.@ Rs.8/- per seedling. (660 nos.) (Average lead of 15 Rkm)	Jul/Aug			5280	5280
3	Watering polypot seedlings at Planting Site	Jul/Aug	1	452		452
4	Conveyance of polypot seedlings from the stacking site to individual pits, mixing the dug out soil of the pits with CDM/ Vermicompost / Organic Manure, applying Insecticide/Bio pesticide, fertilizers, planting done after scooping the soil & pressing properly around the planted seedlings. (In case Organic manure is applied, Bio pesticide should be used in stead of Insecticide)	Jul/Aug	15	6780		6780
5	Cost of Fertilizer & Insecticide (a) CDM/Vermicompost / Organic Manure as Basal Dose (b) NPK @ 50 gms/plant as basal dose (c) Insecticide/ Bio-pesticide as basal	Jul/Aug			5898	5898

	dose @ 5 gms/plant (d) Urea @ 30 gms per plant (e) Jivamruta / Herbal based plant growing products					
6	Casualty Replacement @ 10% (20 nos.)	Jul/Aug	1.5	678		678
7	1st Weeding & Manuring (Application of Urea)	Aug/Sept	6	2712		2712
8	2nd Weeding, Soil working (1mt. diametre around the plants) and Manuring (Application of Jivamruta / Herbal based plant growing products)	Sept-Oct	9	4068		4068
9	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356
10	Watch & Ward against grazing and other Biotic interferance	Aug-Mar	8	3616		3616
	Total	T	57.5	25990	14178	40168
11	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					2008
	Grand Total		57.5	25990	14178	42176
	2nd Ye	ear Maintenar	ıce			
1	Transportation of 60 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM)	Jul			480	480
2	Casualty replacement	Jul	1	452		452
3	Cost of Fertilizer & Insecticide- A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK/Urea / Herbal based plant growing product	Jul			1965	1965
4	Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea/ Herbal based plant growing product)	Sep/Oct	10	4520		4520
5	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356
6	Watch & Ward against grazing & other Biotic interferance, Repair & maintenance of fencing	Apr-Mar	12	5424	1050	6474
	Total		26	11752	3495	15247
7	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.			0		762
	Grand Total		26	11752	3495	16009
		ear Maintenan	ice			
1	Cost of NPK/Urea / Herbal based plant growing products	July			1920	1920

2	Weeding (Complete weeding), Soil working (1mt. dia around the plants) and Manuring (Application of NPK/Urea / Herbal based plant growing product)	Sep/Oct	10	4520		4520
3	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356
4	Watch & Ward against grazing & other Biotic interferance, Repair & maintenance of fencing	Apr-Mar	12	5424	225	5649
	Total	25	11300	2145	13445	
5	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					672
	Grand Total					
	Grand Total		25	11300	2145	14117
		ear Maintenan		11300	2145	14117
1		ar Maintena n Feb/Mar		11300 1356	2145	1356
1 2	4th Ye Fire line tracing (3 m. wide fire line over		ice		2145	
	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path Watch & Ward against grazing and other Biotic interferance, Repair &	Feb/Mar	3	1356	0	1356
	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path Watch & Ward against grazing and other Biotic interferance, Repair & maintenance of fencing	Feb/Mar	3 12	1356 5424		1356

	ABSTA	RCT (Showi	ng Seedli	ng Cost Sep	parately)		
Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	MED & Other Contingency	Seedling Cost (Rs.)	Total Cost (Rs.)
1	0th year	43.5	19662	0	983		20645
2	1st year	57.5	25990	14178	2008	33528	75704
3	2nd year	26	11752	3495	762	3048	19057
4	3rd year	25	11300	2145	672		14117
5	4th year	15	6780	0	339		7119
	Grand Total	167	75484	19818	4765	36576	136643

COST NORM FOR AIDED NATURAL REGENERATION (ANR) @ 800 PLANTS PER HECTARE (18 months old seedlings) Wage Rate Rs. 452/- per Manday

	Wage R	ate Rs. 452/-	per Manday			
Sl. No	Items of work	Preferable Period of Execution Year (Advance	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)
1	Survey, Demarcation and Pillar posting	Nov/Dec	2	904		904
2	Preparation of Treatment Map (Digital Map)	Nov/Dec	1	452		452
3	Site preparation	Nov/Dec	6	2712		2712
4	Silvicultural operations including Cutting of high stumps, Singling out of multiple shoots, Climber cuting, Clearance of weeds & Removal of debrises from the field to blank space	Jan- Feb	8	3616		3616
5	Alignment and stacking	Feb/Mar	2	904		904
6	Digging of pits (45 cm x 45 cm X 45 cm) / 50 cm diameter augur hole in hard & gravelly soil	Feb/Mar	32	14464		14464
	Total		51	23052	0	23052
7	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					1153
	Grand Total		51	23052	0	24205
	1st	Year/Plantir	ig Year			
1	Fencing by using Bamboo twigs & thorns/Brushwood/ any other	June/July	19	8588	4000	12588
2	Transportation of 18 months old seedlings by hired vehicle from the nursery including loading, unloading & stacking the same at planting site.@ Rs.8/- per seedling. (880 nos.) (Average lead of 15 Rkm)	Jul/Aug			7040	7040
3	Watering polypot seedlings at Planting Site	Jul/Aug	1	452		452
4	Conveyance of polypot seedlings from the stacking site to individual pits, mixing the dug out soil of the pits with CDM/ Vermicompost / Organic Manure, applying Insecticide/Bio pesticide, fertilizers, planting done after scooping the soil & pressing properly around the planted seedlings. (In case Organic manure is applied, Bio pesticide should be used in stead of Insecticide)	Jul/Aug	20	9040		9040

Fertilizer & Insecticide (a) CDM/Cermicompost / Organic (a) CDM/Cermicompost / Organic (a) CDM/Cermicompost / Organic Manure ax Basal Dose (b) NPK @ 50 gms/plant as basal dose @ 5 gms/plant (d) Urea @ 30 gms per plant (e) livamuru 4 / Herbal based plant growing product (c) livamuru 4 / Herbal based plant growing product (asualty Replacement @ 10% (80 nos.) Jul/Aug							
1st Weeding & Manuring	5	(a) CDM/Vermicompost / Organic Manure as Basal Dose (b) NPK @ 50 gms/plant as basal dose (c) Insecticide/ Bio-pesticide as basal dose @ 5 gms/plant (d) Urea @ 30 gms per plant (e) Jivamruta / Herbal based plant	Jul/Aug			7864	7864
Capplication of Urea Aug/Sept 8 3616	6	• •	Jul/Aug	2	904		904
2nd Weeding, Soil working (1mt. diametre around the plants) and 8 Manuring (Application of Jivamruta / Herbal based plant growing products) 9 Fire line tracing (3 m. wide fire line over 300 m long) & inspection path other Biotic interferance Total 71 32092 18904 50996 11 Documentation & Contingency i.e 5% of the total cost. Transportation of 80 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM) 2 Casualty replacement Jul 2 904 904 Cost of Fertilizer & Insecticide-A) Bio pesticide / Linear (1mg) Insection of NPK/Urea / Herbal based plant growing product Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea / Herbal based plant growing product Weth & Watch & Ward against grazing & other Biotic interferance, Repair & Maintenance of fencing Aug-Mar 3 1356 1356 1356 3 1356 1356 24520 4520 4524 1400 6824 Apr-Mar 12 5424 1400 6824	7		Aug/Sept	8	3616		3616
Over 300 m long) & inspection path Peb/Mar 3 1336	8	2nd Weeding, Soil working (1mt. diametre around the plants) and Manuring (Application of Jivamruta / Herbal based plant growing	Sept-Oct	10	4520		4520
Total 71 32092 18904 50996 Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost. Grand Total 71 32092 18904 53546 Transportation of 80 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM) Cost of Fertilizer & Insecticide-A) Bio pesticide / Insecticide @ 5 gms/plant growing product Weeding (Complete weeding), Soil working (1mt. diametre around the 4 plants) and Manuring (Application of NPK/Urea/ Herbal based plant growing product) Fire line tracing (3 m. wide fire line over 300 m long) & inspection path Watch & Ward against grazing & other Biotic interferance , Repair & Maintenance of fencing	9	over 300 m long) & inspection path	Feb/Mar	3	1356		1356
Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost. Grand Total 71 32092 18904 53546 2nd Year Maintenance Transportation of 80 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM) Casualty replacement A) Bio pesticide / Insecticide A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK/Urea / Herbal based plant growing product Weeding (Complete weeding), Soil working (Imt. diametre around the plants) and Manuring (Application of NPK/Urea/ Herbal based plant growing product) Fire line tracing (3 m. wide fire line over 300 m long) & inspection path Watch & Ward against grazing & other Biotic interferance , Repair & Maintenance of fencing	10		Aug-Mar	8	3616		3616
11 Documentation & Contingency i.e 5% of the total cost. Grand Total 71 32092 18904 53546		Total		71	32092	18904	50996
Transportation of 80 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM) 2 Casualty replacement Jul 2 904 904 Cost of Fertilizer & Insecticide-A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK/Urea / Herbal based plant growing product Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea/ Herbal based plant growing product) Fire line tracing (3 m. wide fire line over 300 m long) & inspection path Watch & Ward against grazing & other Biotic interferance , Repair & Apr-Mar 12 5424 1400 6824 Maintenance of fencing	11	Documentation & Contingency i.e					2550
Transportation of 80 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM) 2 Casualty replacement Jul 2 904 904 Cost of Fertilizer & Insecticide-A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK/Urea / Herbal based plant growing product Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea/ Herbal based plant growing product) Fire line tracing (3 m. wide fire line over 300 m long) & inspection path Watch & Ward against grazing & other Biotic interferance , Repair & Apr-Mar 12 5424 1400 6824 Maintenance of fencing		Grand Total		71	32092	18904	53546
months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM) 2 Casualty replacement Jul 2 904 904 Cost of Fertilizer & Insecticide-A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK/Urea / Herbal based plant growing product Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea/ Herbal based plant growing product) Fire line tracing (3 m. wide fire line over 300 m long) & inspection path Watch & Ward against grazing & other Biotic interferance , Repair & Apr-Mar Maintenance of fencing				, _	32072	10701	33310
Cost of Fertilizer & Insecticide- A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK/Urea / Herbal based plant growing product Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea/ Herbal based plant growing product) Fire line tracing (3 m. wide fire line over 300 m long) & inspection path Watch & Ward against grazing & other Biotic interferance , Repair & Maintenance of fencing Apr-Mar 12 5420 2620 2620 2620 5424 5424 5424 5424 5424 5424 6824			d Year Mainte		32072	10701	33310
A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK/Urea / Herbal based plant growing product Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea/ Herbal based plant growing product) Sep/Oct 12 5424 5424 Fire line tracing (3 m. wide fire line over 300 m long) & inspection path Watch & Ward against grazing & other Biotic interferance , Repair & Maintenance of fencing	1	Transportation of 80 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of			32072		
working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea/ Herbal based plant growing product) 5 Fire line tracing (3 m. wide fire line over 300 m long) & inspection path Watch & Ward against grazing & other Biotic interferance, Repair & Maintenance of fencing Sep/Oct 12 5424 5424 5424 5424 1356		Transportation of 80 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM)	Jul	enance			640
over 300 m long) & inspection path Watch & Ward against grazing & Apr-Mar 12 5424 1400 6824 Maintenance of fencing	2	Transportation of 80 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM) Casualty replacement Cost of Fertilizer & Insecticide- A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK/Urea / Herbal based plant	Jul Jul	enance		640	640 904
6 other Biotic interferance, Repair & Apr-Mar 12 5424 1400 6824 Maintenance of fencing	3	Transportation of 80 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM) Casualty replacement Cost of Fertilizer & Insecticide- A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK/Urea / Herbal based plant growing product Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea/ Herbal based plant	Jul Jul Jul	enance 2	904	640	640 904 2620
Total 29 13108 4660 17768	3	Transportation of 80 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM) Casualty replacement Cost of Fertilizer & Insecticide- A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK/Urea / Herbal based plant growing product Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea/ Herbal based plant growing product) Fire line tracing (3 m. wide fire line	Jul Jul Sep/Oct	enance 2 12	904	640	640 904 2620 5424
	3 4 5	Transportation of 80 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM) Casualty replacement Cost of Fertilizer & Insecticide- A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK/Urea / Herbal based plant growing product Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea/ Herbal based plant growing product) Fire line tracing (3 m. wide fire line over 300 m long) & inspection path Watch & Ward against grazing & other Biotic interferance , Repair &	Jul Jul Sep/Oct Feb/Mar	2 12	904 5424 1356	2620	640 904 2620 5424

7	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					888
	Grand Total		29	13108	4660	18656
	3rc	d Year Mainto	enance			•
1	Cost of NPK/Urea / Herbal based plant growing products	August			2560	2560
2	Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea/ Herbal based plant growing product)	Sep/Oct	12	5424		5424
3	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356
4	Watch & Ward against grazing & other Biotic interferance, Repair & Maintenance of fencing	Apr-Mar	12	5424	300	5724
	Total		27	12204	2860	15064
4	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					753
	Grand Total		27	12,204	2,860	15,817
		n Year Mainte	enance	ľ		T
1	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356
2	Watch & Ward against grazing and other Biotic interferance , Repair & Maintenance of fencing	Apr-Mar	12	5424		5424
	Total		15	6780	0	6,780
3	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					339
	Grand Total			6,780	0	7,119

	ABSTARCT (Showing Seedling Cost Separately)											
Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	MED & Other Contingency	Seedling Cost (Rs.)	Total Cost (Rs.)					
1	0th year	51	23052	0	1153		24205					
2	1st year	71	32092	18904	2550	44704	98250					
3	2nd year	29	13108	4660	888	4064	22720					
4	3rd year	27	12204	2860	753		15817					
5	4th year	15	6780	0	339		7119					
	Grand Total	193	87236	26424	5683	48768	168111					

COST NORM FOR RAISING OF AVENUE PLANTATION (18 Months Old Seedling) (250 plants per RKM, Spacing of 4 metres between plants) Wage rate @ Rs. 452/- per Manday SI. Preferable Labour Material Total No. of No Item of work Period of Cost Cost Cost **Mandays** Execution (Rs.) (Rs.) (Rs.) A. 0th Year (Advance work) Survey, demarcation, site preparation, 1 4 1808 Feb-Mar 1808 alignment & stacking Digging of pits (45 cmX 45 cm X 45 cm) in 2 Feb-Mar 10 4520 4520 hard soil. **Total 14** 6328 0 6328 Monitoring, Evaluation, Documentation & 3 316 Contingency i.e 5% of the total cost. **Grand Total 14** 6328 0 6644 B. 1st Year / Planting Year Transportation of 18 months old seedlings by hired vehicle from the nursery including loading, unloading & 1 2200 2200 stacking at planting site @ Rs.8 per seedling (250+25=275 nos)(Average lead of 15 Rkm) Fertilizer & Insecticide (a) CDM/ Vermicompost / Organic Manure as basal dose (b) NPK @ 50 gms/plant as basal dose 2 (c) Insecticide/Bio-pesticide@5 June-July 4958 4958 gms/plant as basal dose (d) Urea @ 30 gms per plant (e) Jivamruta / Herbal based plant growing products Conveyance of polypot seedlings from the stacking site to individual pits, mixing the dug out soil of the pits with CDM/ Vermicompost / Organic Manure & applying insecticide/Bio pesticide, 3 fertilizers, planting done after scooping 2712 July-Aug 6 2712 the soil & pressing properly around the planted seedlings. (In case Organic manure is applied, Bio pesticide should be used in stead of Insecticide) 4 Casualty Replacement @ 10% July-Aug 1 452 452 1st Weeding & Manuring (Application of 5 8 Aug-Sept 3616 3616 2nd Weeding, Soil working (1mt. diametre around the plants) and Manuring (6 Sept-Oct 10 4520 4520 Application of Jivamruta / Herbal based plant growing products) Provision of soil & water conservation measures by providing circular trench in 7 Sept-Oct 3 1356 1356 flat land & half moon trench in slope area at a distance of 0.5 mt from the plant

1	W D L M L. (C.)	-				1			
3	Watering December to March (6 days per month) including labour, transportation & hire charges of tractor/tanker @ Rs.40.00 per seedling	Dec- March			10000	10000			
9	Watch & Ward against grazing and other Biotic interferance	Aug - March	60	27120		27120			
	Total		88	39776	17158	56934			
0	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					2847			
	Grand Total	•	88	39776	17158	59781			
	Additional Cost towards Fencing								
1	Gabion made up of Bamboo twigs/Agro Net /HDPE Hexagone including fitting & fixing @ Rs 285/-per plant								
2	Gabion made up of Iron Wire mesh including fitting & fixing @ Rs 1680/- per plant								
	C. 2nd Y	ear Maintenar	ıce						
1	Transportation of 25 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM)	Jul			200	200			
2	10% casualty replacement	Jul-Aug	1	452		452			
3	Cost of Fertilizer & Insecticide- A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK / Urea / Herbal based plant growing products	Jul-Aug			1600	1600			
1	Weeding (Complete weeding), Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/ Urea / Herbal based plant growing products)	Sept-Oct	15	6780		6780			
5	Watering April to June (10days per month) & December to March (5 days per month) including labour transportation, hire charges of tractor/tanker @ Rs.80.00 per seedling	April- June and Dec - March			20000	20000			
ó	Watch & Ward against grazing and other Biotic interferance, maintenance of Gabion	April-March	90	40680		40680			
	Total		106	47912	21800	69712			
7	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					3486			
	Grand Total	•	106	47912	21800	73198			
	Additional Cost towards maintenance of	Fencing				1			
1	Maintenance for Gabion made up of Bamboo	twigs/Agro No	et /HDPE He	xagone @ F	Rs 42/- per	plant			
2	Maintenance for Gabion made up of Iron Wi	re mesh @ Rs 5	52/- per plan	t	<u> </u>				
	Contingency i.e 5% of the total cost. Grand Total Additional Cost towards maintenance of					73198			
			-						

	D. 3rd Y	ear Maintenan	ice					
1	Watering April to June (10days per month) including labour transportation, hire charges of tractor/tanker @ Rs.50/per seedling	April- June			12500	12500		
2	Weeding, Soil working (1mt. diametre around the plants) & maintenance of plantation including cultural operation	Sept-Oct	10	4520		4520		
3	Watch & Ward against grazing and other Biotic interferance, maintenance of Gabion	April-March	90	40680		40680		
	Total		100	45200	12500	57700		
4	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					2885		
	Grand Total		100	45200	12500	60585		
	Additional Cost towards maintenance of	Fencing						
1	Maintenance for Gabion made up of Bamboo twigs/Agro Net /HDPE Hexagone @Rs42/- per plant							
2	Maintenance for Gabion made up of Iron Wi	re mesh @Rs.52	2/- per plan	ıt				

	ABSTARCT (Showing Seedling Cost Separately)										
Sl.No.	Year	Year No. of Mandays C		Material Cost (Rs.)	MED & Other Contingency	Seedling Cost (Rs.)	Total Cost (Rs.)				
1	0 th year	14	6328	0	316		6644				
2	1 st year	88	39776	17158	2847	13970	73751				
3	2 nd year	106	47912	21800	3486	1270	74468				
4	3 rd year	100	45200	12500	2885		60585				
	Total	308	139216	51458	9534	15240	215448				
1	Gabion Cost including maintenance for 3 years = Rs.369/- per plant extra.										
2	Gabion made of	Iron Wire Mesl	n including ma	intenance fo	or 3 year = Rs.178	4/- per plant	extra				

	Annexure - 20									
	•	AN PLANTATI oths Old Seedl Rs. 452/- per	lings)		S					
Sl. No	Items of work	Preferable Period of Execution	No. of Man days	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)				
	0th Year	r(Advanced w	ork)							
1	Survey , Demarcation ,Pillar Posting Site clearance , Allignment & stacking	Jan-Feb	15	6780		6780				
2	Digging of pits (45 cm x 45 cm X 45 cm) in hard soil	Feb/March	40	18080		18080				
3	Fencing done by using GI Wire Mesh Chain Link for an average of 250 mt / Ha @ Rs.400/- per mt.	Feb/March			100000	100000				
4	Construction of Temporary labour shed & Provision for Iron Gate of dimension 12' x 6', Conveyance for water tanker inside the plantation	Feb/March			35000	35000				
	TOTAL		55	24860	135000	159860				
5	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					7993				
	Grand Total	· · · · · · · · · · · · · · · · · · ·	55	24860	135000	167853				
		Year/ Plantin	g Year		1					
1	Transportation of 1100 nos of 18 months old seedlings by hired vehicle from the nursery including loading, unloading & stacking at planting site @ Rs.8/- per seedling. (Average lead of 15 Rkm)	Jul/Aug			8800	8800				
2	Watering polypot seedlings at stacking site of plantation	Jul/Aug	2	904		904				
3	Conveyance of polypot seedlings from the stacking site to individual pits, mixing the dug out soil of the pits with CDM/ Vermicompost / Organic Manure & applying insecticide/Bio pesticide, fertilizers, planting done after scooping the soil & pressing properly around the planted seedlings. (In case Organic manure is applied, Bio pesticide should be used in stead of Insecticide)	Jul/Aug	25	11300		11300				
4	Casualty Replacement @ 10%	Jul/Aug	2.5	1130		1130				
5	Cost of Fertilizer & Insecticide (a) CDM/Vermicompost / Organic Manure as Basal Dose (b) NPK @ 50 gms/plant as basal dose (c) Insecticide/ Bio-pesticide as basal dose @ 5 gms/plant (d) Urea @ 30 gms per plant (e) Jivamruta / Herbal based plant growing products	Jul/Aug			17830	17830				
6	1st Weeding & Manuring (Application of Urea)	Aug/Sept	20	9040		9040				

	2nd Weeding, Soil working (1mt. diametre around the plants) and					
7	Manuring (Application Jivamruta / Herbal based plant growing products)	Sept/Oct	36.5	16498		16498
	Watering for 5 months from November to March @ 6 days per month including					
8	labour, and hired charges for transportation through tractor/ tanker @ Rs 54/- per plant	Nov-Mar			54000	54000
9	Watch & Ward against grazing & other Biotic interferance	Aug - March	120	54240		54240
	Total		206	93112	80630	173742
10	Monitoring, Evaluation , Documentation					8687
	& Contingency i.e 5% of the total cost.		206	02112	00620	102420
	Grand Total	ear Maintena	206	93112	80630	182429
	Transportation of 100 nos of 18 months	ear Maintena 	nce			
1	old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 Rkm)	Jul			800	800
	Casualty replacement with application					
2	of CDM, Vermicompost and Insecticide (10%)	Jul	2.5	1130		1130
	Cost of Fertilizer & Insecticide- A) Bio pesticide / Insecticide @ 5					
3	gms/plant B) Urea @ 40 gms / plant	July			3515	3515
	C) Herbal based plant growing products					
4	1st Weeding (1.2 mt dia) & Manuring (Application of Urea)	Aug- Sept	20	9040		9040
5	2nd Weeding Soil Working, Application of Manure, Mulching to each pit with available materials	Sept - Oct	36.5	16498		16498
	Watering from April to June @10					
	days/month and November to March @	Apr-June			105000	105000
6	6 days/month including labour, hired charges for transportation through tractor/tanker @ Rs105/- per Plant	Nov-Mar			105000	105000
	(a) Watch & Ward against grazing &					
7	other Biotic interferance (b) Maintenance of fence & Temporary labour shed	Apr- Mar	180	81360	2000	83360
	Total		239	108028	111315	219343
8	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					10967
	Grand Total	239	108028	111315	230310	
	3rd Ye	ear Maintena	nce	<u>l</u>	<u> </u>	
1	Watering from April to June @10 days/ month including labour, hired charges for transportation through tractor/ tanker @ Rs52 /- per Plant	Apr-June			52000	52000

	Grand Total		200	90400	56200	153930
5	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					7330
	Total		200	90400	56200	146600
4	(a) Watch & Ward against grazing & other Biotic interferance (b) Maintenance of fence & Temporary labour shed	Apr- Mar	180	81360	1000	82360
3	Weeding, Soil working (1mt. diametre around the plants) and Manuring (Application of NPK/Urea / Herbal based plant growing products)	Sep/Oct	20	9040		9040
2	Cost of Fertilizer A. NPK/Urea / Herbal based plant growing products	Sept/Oct			3200	3200

	ABSTARCT (Showing Seedling Cost Separately)										
Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	MED & Other Contingency	Seedling Cost (Rs.)	Total Cost (Rs.)				
1	Oth Year	55	24860	135000	7993		167853				
2	1st year	206	93112	80630	8687	55880	238309				
3	2nd year	239	108028	111315	10967	5080	235390				
4	3rd year	200	90400	56200	7330		153930				
Grand Total		700	316400	383145	34977	60960	795482				

					An	nexure - 21
	COST NORM FOR BALD HIL		_		HECTARE	
Sl. No.	Item of Works	ERATE Rs. 452 Preferable period of Execution	Nos. of Mandays	Labour cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)
	0th Year (Adva	ance work) Pr	e-Planting C	peration		
1	Survey, Demarcation and Pillar posting	Nov/Dec	2	904		904
2	Preparation of Treatment Map (Digital Map)	Nov/Dec	1	452		452
3	Site preparation (Cleaning & Removal of debrises)	Nov/Dec	8	3616		3616
4	Alignment and stacking of pits	Dec/Jan	4	1808		1808
5	Digging of pits (45 cm x 45 cm X 45 cm) in Stoney earth and gravel	Dec/Jan	128	57856		57856
6	Soil and Water Conservation measures -Staggered Trenches of size 2.5 m x 0.5 m x 0.5 m along the contour @ 300 nos per ha, digging of percolation pits @ 600 per ha in lieu of staggered trenches, Gully plugging, Drainage line treatment & any other structure as per site requirement (100 MD for staggered trench/ percolation pit and 30 MD for Gully plugging, drainage line treatment and others)	Jan/Feb	130	58760		58760
7	Creation of 2.0 Rmt wide Inspection Path	Jan/Feb	1	452		452
8	Construction of Temporary Labour Shed	Jan/Feb			2000	2000
	Total		274	123848	2000	125848
9	Monitoring, Evaluation, Documentation & Contingency i.e 5% of the total cost.					6292
	Grand Total		274	123848	2000	132140
		st Year/Plant	ing Year		1	
1	Fencing done by using GI Wire Mesh Chain Link for an average of 250 mtr / Ha @ Rs.400/- per mtr.	May / June			100000	100000
2	Refilling of escavated pits with , CDM & Vermicompost/Mo khata /Organic Manure etc.	June/ July	12	5424		5424
3	Cost of Material (a) CDM @ 0.20 Cft/ pit (b) Vermicompost / Mo khata /Organic Manure @ 0.25 kg / pit	June/ July			20800	20800
4	Sowing of seeds on dug out earth of trench	July	6	2712	400	3112

5	Bamboo to be planted along the boundary line in 2.0 mtr spacing and the rest of the species to be planted at 0.5 mtr spacing in between two Bamboo plants . Thus 500 plant (125 bamboo + 375 others) to be planted to cover an average 250 mtr / Ha (Bamboo seedlings @ Rs.35.40 per seedling X 125 = Rs 4425/- , Agave seedling @ Rs.8/- per seedling X 375 =Rs. 3000/-)	July-Aug	15	6780	7425	14205
6	Transportation of 18 months old seedlings by hired vehicle from the nursery including loading, unloading & stacking the same at planting site @ Rs.8/- per Seedling. (1760 seedlings .) (Average lead of 15 Rkm)	July/ Aug			14080	14080
7	Watering polythene bag seedlings at planting site	July/Aug	3	1356	0	1356
8	Conveyance of 18 months old seedlings from the stacking site to individual dugout pits, applying Insecticide / Bio Pesticide, fertilizers, planting done after scooping the soil with other applied materials & pressing properly around the planted seedlings. (In case Organic manure is applied, Bio pesticide should be used in stead of Insecticide)	July/Aug	45	20340		20340
9	Casualty Replacement @ 10%	Jul/Aug	4	1808		1808
10	Cost of Fertilizer & Insecticide (a) NPK @ 50 gms/plant as basal dose (b) Insecticide/Bio pesticide @ 5 gms/plant (c) Urea 30 gms per plant (d) Jivamruta / Herbal based plant growing products	Jul/Aug	-		7728	7728
11	1st Weeding and Manuring (Application of Urea)	Aug/Sep	15	6780		6780
12	2nd Weeding, Soil Working (1 mt dia around the plant) and Manuring (Application of Jivamruta / Herbal based plant growing product)	Sep/Oct	20	9040		9040
13	Renovation & Maintenance of SMC Structures	Oct / Nov	13	5876		5876
14	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356
15	Watch & Ward against grazing,	Aug-Mar	24	10848		10848

	other Biotic interferance					
	Total		160	72320	150433	222753
16	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					11138
	Grand Total		160	72320	150433	233891
		nd Year Main	l .			
1	Transportation of 160 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedlings (Average lead of 15 Rkm)	Jul			1280	1280
2	Causality Replacement- 10%	Jul	4	1808		1808
3	Cost of Fertilizer & Insecticide- A) Bio pesticide / Insecticide @ 5 gms/plant B) NPK/Urea / Herbal based plant growing products	Jul/Aug			3960	3960
4	Complete Weeding, Manuring and Soil Working (1 mtr dia around plant)	Sept/ Oct	20	9040		9040
6	Maintenance of Renovetion of SMC structures	Oct/ Nov	13	5876		5876
7	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Jan-Feb	3	1356		1356
8	Watch & Ward against grazing, Maintenance of fence & Temporary labour shed	Apr-Mar	36	16272	1000	17272
	Total		76	34352	6240	40592
9	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					2030
	Grand Total		76	34352	6240	42622
	3	rd Year Main	tenance			
	Fire line tracing (3 m. wide fire					
1	line over 300 m long) & inspection path	Jan-Feb	3	1356		1356
2	Watch & Ward against grazing,		36	16272	700	16972
	Total		39	17628	700	18328
3	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					916
	Grand Total		39	17628	700	19244

4th Year Maintenance

1	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Jan-Feb	3	1356		1356
2	Watch & Ward against grazing, Maintenence of fence, Temporary labour shed, SMC Structure & plantation as required		36	16272		16272
	Total		39	17628	0	17628
3	Monitoring, Evaluation, Documentation & Contingency i.e 5% of the total cost.					881
	Grand Total		39	17628	0	18509

	Abstract										
Sl. No	Year	Nos. of Mandays	Labour cost (Rs.)	Material Cost (Rs.)	MED & Other Contingency	Cost of Seedlings	Total Cost (Rs.)				
1	0th year	274	123848	2000	6292.4		132140				
2	1st year	160	72320	150433	11138	89408	323299				
3	2nd year	76	34352	6240	2030	8128	50750				
4	3rd year	39	17628	700	916	0	19244				
5	4th year	39	17628	0	881	0	18509				
Grand Total		588	265776	159373	21257	97536	543942				

					Anne	exure - 22
	COST NORM FOR RAISING BAMBO	O PLANTATION OF THE PLANTATION		LANTS PEI	R HECTARE	
		Rs. 452/- per				
Sl. No	Items of work	Preferable Period of Execution	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)
	0th Yea	ar (Advance w	vork)			
1	Survey, Demarcation and Pillar posting	Nov/Dec	2	904		904
2	Site preparation (cleaning & removal of debrises)	Nov/Dec	2	904		904
3	Alignment and stacking of pits	Feb/Mar	2	904		904
4	Digging of pits (45 cm x 45 cm X 45 cm) / 50 cm diameter augur hole in hard & gravelly soil	Feb/Mar	16	7232		7232
	Total		22	9944	0	9944
5	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					497
	Grand Total		22	9944	0	10441
		ar/Planting \	'ear			
1	Fencing done by using GI Wire Mesh Chain Link for an average of 250 mt / Ha @ Rs.400/- per mt.				100000	100000
2	Transportation of 18 months old seedlings by hired vehicle from the nursery including loading, unloading & stacking at planting site@ Rs.8/- per seedling. (440 nos.) (Average lead of 15 Rkm)	Jul/Aug			3520	3520
3	Watering polytpot seedlings at planting site	Jul/Aug	1	452	0	452
4	Conveyance of polypot seedlings from the stacking site to individual pits, mixing the dug out soil of the pits with CDM/ Vermicompost / Organic Manure & applying insecticide/Bio pesticide, fertilizers, planting done after scooping the soil & pressing properly around the planted seedlings. (In case Organic manure is applied, Bio pesticide should be used in stead of Insecticide)	Jul/Aug	10	4520		4520
5	Cost of Fertilizer & Insecticide (a) CDM/Vermicompost / Organic Manure as Basal Dose (b) NPK @ 50 gms/plant as basal dose (c) Insecticide/ Bio-pesticide as basal dose @ 5 gms/plant (d) Urea @ 30 gms per plant (e) Jivamruta / Herbal based plant growing products	Jul/Aug			3932	3932

6	Casualty Replacement @ 10% (40 nos.)	Jul/Aug	1	452		452			
7	1st Weeding & Manuring (Application of Urea)	Aug/Sept	4	1808		1808			
8	2nd Weeding, Soil working (1mt. Diametre around the plants) and Manuring (Application of Jivamruta / Herbal based plant growing products)	Sept/Oct	6	2712		2712			
9	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356			
10	Watch & Ward against grazing & other Biotic interferance	Aug-Mar	6	2712		2712			
	Total			14012	107452	121464			
11	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					6073			
	Grand Total		31	14012	107452	127537			
2nd Year Maintenance									
1	Transportation of 40 nos of 18 months old seedlings by hired vehicle from Nursery to plantation site including loading, unloading @ Rs.8/- per seedling (Average lead of 15 RKM)	Jul			320	320			
2	Casualty replacement- 10%	Jul	1	452		452			
3	Weeding, & Soil working (1mt. diametre around the plants)	Sept/Oct	4	1808		1808			
4	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356			
5	Watch & Ward against grazing & other Biotic interferance,	Apr-Mar	6	2712		2712			
	Total		14	6328	320	6648			
8	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					332			
	Grand Total		14	6328	320	6980			
	3rd Y	ear Maintena	nce						
1	Weeding (Complete weeding), & Soil working (1mt. diametre around the plants)	Sept/Oct	4	1808		1808			
2	Fire line tracing (3 m. wide fire line over 300 m long) & inspection path	Feb/Mar	3	1356		1356			
3	Watch & Ward against grazing & other Biotic interferance,	Apr-Mar	6	2712		2712			
	Total		13	5876	0	5876			
4	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					294			
	Grand Total		13	5876	0	6170			

Abstract (Showing Seedling Cost Separately)

Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	MED & Other Contingency	Seedling Cost (Rs.)	Total Cost (Rs.)
1	0th year	22	9944	0	497		10441
2	1st year	31	14012	107452	6073	15576	143113
3	2nd year	14	6328	320	332	1416	8396
4	3rd year	13	5876	0	294		6170
	Grand Total	80	36160	107772	7197	16992	168121

COST NORM FOR RAISING CASUARINA PLANTATION PER HECTARE (Water Hole Based Watering System with spacing 2.0 mtr X 2.0 mtr) 2500 plants per ha Wage rate @ Rs. 452/- per Manday

Cl	<u>. </u>	te @ Rs. 452/	- per manua		34-4	T
Sl No.	Item of Work	Preferable Period of Execution	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)
	1st	Year / Planti	ng Year			
1	Survery and Demarcation	April	2	904		904
2	Site preparation, clearance of debrises, etc.	April	10	4520		4520
3	Alignment and Stacking	May-June	3	1356		1356
4	Creation of Palisades over 700 mts per ha in appropriate pattern based on the site condition and wind direction	May-June	44	19888	2200	22088
5	Pitting and Planting with initial watering and replacement of casualty 10%	July -Aug.	30	13560		13560
6	Digging of water holes (4 Nos) including cost of water container conical water hole size 15ft x 15 ft x 10 ft	Oct	15	6780		6780
7	Soil Working & Mulching around the plants by using dry casuarina needles and application of Herbal Based Plant Growing Product / Vermicompost & Herbal Based Water Retentive Compound	Oct-Nov	15	6780		6780
8	Cost of Fertilizer a) Herbal Based Plant Growing Product / Vermicompost b) Herbal based Water retentive compound				53750	53750
9	Watering	Oct-Mar	120	54240		54240
10	Watch and Ward including maintenance of palisades/ fence	Aug-March	24	10848		10848
11	Construction of Temporary Labour Shed, Drinking water facility and First Aid etc.	April - May			2000	2000
	Total		263	118876	57950	176826
12	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					8841
	Grand Total	263	118876	57950	185667	
		nd Year Main		407.		40=-
1	10% Casualty replacement	July -Aug.	3	1356		1356
2	Watering	April -Jun & Oct -March	180	81360		81360

3	Watch and Ward including maintenance of palisades/ fence & Temporary Labour Shed	Apr- March	36	16272		16272	
	Total		219	98988	0	98988	
4	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					4949	
	Grand Total		219	98988	0	103937	
	C. 3rd Year Maintenance						
1	Watering	Apr-June	60	27120		27120	
2	Watch and Ward including maintenance of palisades/ fence & Prunning	Apr- March	36	16272		16272	
	Total		96	43392	0	43392	
3	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.			0		2170	
	Grand Total		96	43392	0	45562	

	Abstract (Showing Seedling Cost Separately)									
Sl. No	Year	No. of Mandays Labour Cost Cost (Rs.) (Rs.)		MED & Other Contingency	Seedling Cost (Rs.)	Total Cost (Rs.)				
1	1st year	263	118876	57950	8841	58025	243692			
2	2nd year	219	98988	0	4949	5275	109212			
3	3rd year	96	43392	0	2170		45562			
	Grand Total	578	261256	57950	15960	63300	398466			

COST NORM FOR RAISING MANGROVE PLANTATION PER HECTARE (SEEDLING ORIGIN) (2500 seedlings with spacing 2.0 m x 2.0 m) Wage rate @ Rs. 452/- per Manday

Sl. No	Item of work	Preferable Period of Execution	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total Cost (Rs.)
	1st	Year / Plantin	g Year			
1	Survey & demarcation	April/ may	4	1808		1808
2	Site prepartion i.e Removal of Acanthus, Sueda & unwanted weed growth	April- may	6	2712		2712
3	Construction of Temporary Labour Shed, Drinking water facility and First Aid etc.	April - May			2000	2000
4	Clearance of obstructions for tidal inundation and live fencing along the boundary including cost of materials.	May-July	24	10848	4710	15558
5	Carriage of seedlings and distribution	July-Sept	10	4520		4520
6	Pitting & planting including casualty replacement	July-Sept	20	9040		9040
7	Watch & Ward for 8 months	Aug-Mar	24	10848		10848
	Total		88	39776	6710	46486
8	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.	Aug-Mar				2324
	Grand Total		88	39776	6710	48810
	2n	d Year Mainte	nance			
1	Casualty replacement (10%)	July-Sept	10	4520		4520
2	Watch & Ward / digging of channels for tidal inundation / collection and broadcasting of mangrove seeds & dibbling of hypocotyls	Apr-Mar	36	16272		16272
	Total		46	20792	0	20792
3	Monitoring, Evaluation , Documentation & Contingency i.e 5% of the total cost.					1040
	Grand Total		46	20792	0	21832
	3r	d Year Mainte	nance			
1	Casualty replacement (5%)	Aug-Sept	5	2260		2260
2	Watch & Ward / digging of channels for tidal inundation / collection and broadcasting of mangrove seeds & dibbling of hypocotyls	Apr-March	36	16272		16272
	Total		41	18532	0	18532
3	Monitoring, Evaluation, Learning, Documentation & any other					927

Contingency upto 5% of the total cost.				
Grand Total	41	18532	0	19459

	ABSTARCT (Showing Seedling Cost Separately)										
Sl. No	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	MED & Other Contingency	Seedling Cost (Rs.)	Total Cost (Rs.)				
2	1st Year Operation	88	39776	6710	2324	63800	112610				
3	2nd year Operation	46	20792	0	1040	5800	27632				
2	3rd Year Operation	41	18532	0	927	2900	22359				
	Grand Total	175	79100	6710	4291	72500	162601				

COST NORM FOR RAISING MANGROVE PLANTATION / PER HECT. (HYPOCOTYL ORIGIN)

(HYPOCOTYL ORIGIN)
(4445 hypocotyls with spacing 1.5m X 1.5m)
Wage rate @ Rs. 452/- per Manday

Sl	Item of work	Preferable Period of	Nos. of	Labour Cost	Material Cost	Total Cost
No.	nem of work	Execution	Mandays	(Rs.)	(Rs.)	(in Rs.)
	1st Y	ear / Planting	Year			
1	Survey & demarcation	April/ may	4	1808		1808
2	Site preparation i.e Removal of Acanthus, Sueda & unwanted weed growth	April/ may	4	1808		1808
3	Clearance of obstructions for tidal inundation	May / Jun	25	11300		11300
4	Cost of collection, transportation & planting of hypocotyl	Jun-Aug	23	10396	2500	12896
5	Watch & Ward / digging of channels for tidal inundation / collection and broadcasting of mangrove seeds & dibbling of hypocotyles	Aug-Mar	24	10848		10848
6	Construction of Temporary Labour Shed, Drinking water facility and First Aid etc.	April - May			2000	2000
7	Misc. Expenditure , Cost of fuel and Maintenance of boats and vehicles				2100	2100
	Total	T	80	36160	6600	42760
8	Monitoring, Evaluation, Documentation & Contingency 5% of the total cost.					2138
	Grand Total		80	36160	6600	44898
		Year Maintena	ance	1	T	1
1	Cost of collection & transportation of hypocotyls with Casualty replacement (10%)	Jun-July	10	4520		4520
2	Watch & Ward / digging of channels for tidal inundation / collection and broadcasting of mangrove seeds & dibbling of hypocotyles	Apr-Mar	30	13560		13560
_	Total		40	18080	0	18080
3	Monitoring, Evaluation, Learning, Documentation & any other Contingency 5% of the total cost.					904
	Grand-Total	<u> </u>	40	18080	0	18984

	3rd Year Maintenance							
1	Watch & Ward / digging of channels for tidal inundation / collection and broadcasting of mangrove seeds & dibbling of hypocotyles	Apr-Mar	30	13560		13560		
	Total		30	13560	0	13560		
2	Monitoring, Evaluation, Learning, Documentation & any other Contingency upto 5% of the total cost.					678		
	Grand-Total			13560	0	14238		

	ABSTRACT										
SI No.	Year	No. of Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	MED & Other Continge ncy	Total Cost (Rs.)					
2	1st Year	80	36160	6600	2138	44898					
3	2nd Year	40	18080	0	904	18984					
4	3rd Year	30	13560	0	678	14238					
	Grand Total	150	67800	6600	3720	78120					

Cost Norm for High Density Multi-Canopy Plantation through Miyawaki Technique for ha. Spacing 1.0 m X 1.0 m Wage Rate Rs 452/- per Manday

		Wage Rate	Rs.452/	- per Manda	y		
Sl. no	Item of Works	Preferable Period of Execution	Unit	Quantity/ Labour in MD	Labour Cost (in Rs.)	Material Cost (in Rs.)	Total Cost (in Rs.)
		0th Y	ear (Adv	anced Work)			
1	Survey & Demarcation, Layout of Plantation area (8000 sq mt), Inspection Path (2000 sq mt) & Pillar Posting	Jan/Feb	MD	4	1808	1000	2808
2	Fencing done by using GI Wire Mesh Chain Link for an average of 400 mt / Ha @ Rs.400/- per mt.	Jan/Feb	Rmt.	400		160000	160000
3	Soil Testing and Chemical Analysis (4 samples)	Jan/Feb	LS	-		2000	2000
4	Site Preparation	Jan/Feb	MD	12	5424		5424
5	Digging up continuous trench upto a depth of 0.60 mtr with the help of JCB / Excavator @ Rs.49.44/- per Cum. (100 mtr. X 80 mtr. X 0.60 mtr = 4800 Cum.)	Jan/Feb	Cum.	4800		237312	237312
	i) Cost of CDM = 220 Cum. @ Rs.1400/Cum.	Jan/Feb	Cum.	220		308000	308000
	ii) Cost of Sand = 200 Cum. @ Rs. 700/- Cum.	Jan/Feb	Cum.	200		140000	140000
	iii) Cost of Bio Insecticide @ Rs.50 per Kg.	Jan/Feb	Kg.	600		30000	30000
6	iv) Cost of Rise Husk including Transportation Cost @ Rs. 5000/- per 1 MT	Jan/Feb	МТ	20		100000	100000
	v) Labour Charge for mixing of Soil, Sand, CDM, Bio Insecticide & spreading of Rice Husk	Jan/Feb	MD	40	18080		18080
7	Marking of Planting Points in a spacing of 1 mtr. X 1mtr.	Feb/ March	MD	20	9040		9040
8	Digging up pits of size 45cmX45cmX45cm in a spacing of 1m x 1m over 8000 Nos	Feb/ March	MD	230	103960		103960
	Total			306	138312	978312	1116624

7	Monitoring, Evaluation Documentation & any other Contingency upto 5% of the total cost.						55831
	Grand Total			306	138312	978312	1172455
		1st Y	ear (Plan	tation Year)			
1	Cost of 8800 nos. of 18 months old seedlings for planting over 8000 Sq. mtr in a spacing of 1 mtr. X 1 mtr & 10 % for Causalty Replacement (8000 + 800)	July- Aug	Nos	8800 nos @ Rs 50.80/- per seedling		447040	447040
2	Transportation of 8800 nos of 18 months old seedlings from Nursary to Plantation site including loading, unloading, stacking at Plantation site with watering @ Rs 8/- per seedlings (Average lead of 15 KM)	July- Aug	Nos	8800		70400	70400
3	Watering to the Polypot seedlings at planting site	July- Aug	MD	3	1356		1356
4	Conveyance of polypot seedlings from the stacking site to individual pit, mixing the dug out soil of the pit with Vermicompost, fertilizers & planting done after scooping the soil & pressing properly around the planted seedlings (8000 nos)	July- Aug	MD	160	72320		72320
5	Cost of Fertilizer (a) Vermicompost @100 gms per plant as basal dose (b) NPK @ 50 gms per plant as basal dose (c) Organic Manure / Jivamruta / Herbal based plant growing products	July	Kg.			47200	47200
6	Casualty Replacement (10%)	Aug	MD	16	7232		7232
7	Weeding, Soil Working & Manuring (Application of Organic Manure / Jivamruta / Herbal based plant growing products)	Aug -Sept	MD	70	31640		31640

9 Fire Protection Measures Jan/Feb MD 8 3616 3616 3616 10 Watering Nov - March MD 50 22600 22600 22600 11 Watch & ward Augt-March MD 240 108480 10	8	Provision for Watering through drip irrigation with cost of borewell, Pump set and accessories with solar system	Oct				600000	600000
Nov-March MD 50 22600 22600 108480	0	•	MD	0	2(1(2(1(
11 Watch & ward								
11 Watch & Ward March MiD 240 108480 108480 108481 109481		Augt-						
12	11	Watch Xi Ward		MD	240	108480		108480
Monitoring, Evaluation, Documentation & Contingency upto 5% of the total cost. Grand Total S47 247244 1264640 158747	12	size 8'x5' , Sign Board , Improvement of Footpath	Jan/ Feb	LS			100000	100000
13 Documentation & Contingency upto 5% of the total cost.		TOTAL	·			247244	1264640	1511884
Cost of 800 nos. of Seedlings & transportation charges to the plantation Site @ Rs.58.80 per seedlings (Rs. 50.80 seedling cost + Rs. 8/- transportation) Total Seedling cost + Rs. 8/- transportation (10%) July /Aug Nos 800 47040	13	Documentation & Contingency upto 5% of						75594
Cost of 800 nos. of Seedlings & transportation charges to the plantation 1 site @ Rs.58.80 per seedlings (Rs. 50.80 seedlings (Rs. 50.80 seedlings (Rs. 50.80 seedling cost + Rs. 8/- transportation)		Grand T				247244	1264640	1587478
Seedlings & transportation charges to the plantation site @ Rs.58.80 per seedlings (Rs. 50.80 seedling cost + Rs. 8/- transportation)		Cook of OOO and C	2no	d Year M	aintenance		1	<u> </u>
2	1	Seedlings & transportation charges to the plantation site @ Rs.58.80 per seedlings (Rs. 50.80 seedling cost + Rs. 8/-	July /Aug	Nos	800		47040	47040
3 Manuring Application of NPK & Bio fertilizer) Aug/Sept MD 70 31640 31640 4 Application of NPK @ 40 gms per plant & Bio fertilizer @ 100 gms per plant Aug/Sept 25600 25600 5 Fire Protection Measures Feb MD 8 3616 3616 6 Watering April - June & MD MD 120 54240 54240 7 Maintenance of Pumpset , accessories & fence April - March 20000 20000 8 Watch & ward April - March MD 360 162720 16272 9 Monitoring, Evaluation, Documentation & Contingency upto 5% of the total cost. Total 574 259448 92640 35208	2	(10%)	July /Aug	MD	16	7232		7232
4 plant & Bio fertilizer @ 100 gms per plant Aug/Sept 25600 25600 5 Fire Protection Measures Feb MD 8 3616 3616 6 Watering April - June & MD 120 54240 54240 7 Maintenance of Pumpset accessories & fence April - March 20000 20000 8 Watch & ward April - March MD 360 162720 162720 Total 574 259448 92640 35208 9 Monitoring, Evaluation, Documentation & Contingency upto 5% of the total cost. 17604	3	Manuring (Application of NPK & Bio	Aug/Sept	MD	70	31640		31640
6 Watering April - June & MD Nov - March 54240 54240 54240 54240 54240 54240 54240 54240 54240 54240 54240 54240 54240 54240 54240 54240 54240 54240 20000 <td< td=""><td>4</td><td>plant & Bio fertilizer @</td><td>Aug/Sept</td><td></td><td></td><td></td><td>25600</td><td>25600</td></td<>	4	plant & Bio fertilizer @	Aug/Sept				25600	25600
6 Watering & MD Nov -March 120 54240 54240 7 Maintenance of Pumpset , accessories & fence April - March 20000 20000 8 Watch & ward April - March MD 360 162720 162720 9 Monitoring, Evaluation, Documentation & Contingency upto 5% of the total cost. Total 17604	5	Fire Protection Measures		MD	8	3616		3616
7 accessories & fence March 20000 20000 8 Watch & ward April - March MD 360 162720 162720 Total 574 259448 92640 35208 Monitoring, Evaluation, Documentation & Contingency upto 5% of the total cost. 17604	6	Watering	&	MD	120	54240		54240
Watch & Ward March MD 360 162720 162	7						20000	20000
9 Monitoring, Evaluation, Documentation & Contingency upto 5% of the total cost.	8			MD				162720
9 Documentation & 17604 Contingency upto 5% of the total cost.					574	259448	92640	352088
	9	Documentation & Contingency upto 5% of						17604
Grand Total 574 259448 92640 369692		Grand T	otal		574	259448	92640	369692
3rd Year Maintenance								

1	Weeding and Soil Working Aug / Sept		MD	50	22600		22600
2	Fire Protection Measures Jan/Feb		MD	8	3616		3616
3	Maintenance of Pumpset , April - accessories & fence March		MD	90	40680	20000	60680
4	Watch & ward including watering as per requirement April - March		MD	360	162720		162720
	Total			508	229616	20000	249616
5	Monitoring, Evaluation, Documentation & Contingency upto 5% of the total cost.						12481
	Grand Total			508	229616	20000	262097

ABSTRACT									
Sl. No.	Year	No. of Mandays	Labour cost (Rs.)	Material cost (Rs.)	MED & Other Contingency	Total cost (Rs.)			
1	0th Year	306	138312	978312	55831	1172455			
2	1st Year	547	247244	1264640	75594	1587478			
2	2nd Year	574	259448	92640	17604	369692			
3	3rd Year	508	229616	20000	12481	262097			
Grand Total		1935	874620	2355592	161511	3391723			
