

**GOVERNMENT OF KARNATAKA**

**FOREST DEPARTMENT**

**Common Sanctioned Schedule of Rates for Forestry Works for the year 2010-2011**

(Annexure to OM No. D-1/BUD/CR-2/2010-11 dated:10-05-2010 and D-1/BUD/CR-2/2010-11 dated:08-07-2010)

Item No.	Particulars of the work	Rate Sanctioned (in Rupees)	Unit
I	II	III	IV
<b>I</b>	<b>NURSERY WORKS (1 to 20)</b>		
<b>1</b>	<b>Clearing and Formation of Nursery Site</b>		
(a)	Clearing weeds, shrubs and small trees by cutting & uprooting the growth and transporting the cut materials to the periphery of the area in <u>thick jungle growth area</u> – for preparation of site to form new nursery.	8,559.81	Ha.
(b)	Clearing weeds, shrubs and small trees by cutting & uprooting the growth and transporting the cut materials to the periphery of the area in <u>medium growth areas</u> - for preparation of site to form new nursery.	2,801.39	Ha.
(c)	Clearing weeds, shrubs and small trees by cutting & uprooting the growth and transporting the cut materials to the periphery of the area in <u>sparse growth areas</u> – for preparation of site to form new nursery.	1,369.56	Ha.
(d)	Clearing weeds and shrubs by uprooting the growth and burning the uprooted weeds in the existing nursery which was abandoned for more than 2 years.	1,089.44	Ha.
<b>2</b>	<b>Purchase of Ingredients:</b> Purchase of farmyard manure, sand and red-earth (ingredients) required for raising seedlings inclusive of transportation, breaking of clods, sieving and heaping each ingredient separately at nursery site (Ceiling rate)		
(a)	Red-earth	187.58	Cum.
(b)	Sand	294.76	Cum.
(c)	Farmyard manure	669.90	Cum.
<b>3</b>	<b>Collection of Seeds and Seedlings</b>		
(a)	All seeds	From Silviculturist	
(b)	Where seeds are not supplied by Silviculturist		
	(i) Collection of teak seeds	18.74	Kg.
	(ii) Collection of other seeds	Local RQ	
(c)	Collection and transport of wildlings of important economic species from forest area to nursery. <b>NOTE:</b> Collection of wildlings should be avoided. Seedlings should be raised from seeds only. If collection of wildlings is inevitable it should be done under supervision of forestry staff and restricted to 50 % of the available natural regeneration.	217.02	1,000
<b>4</b>	<b>Raising of Sunken / Transplant / Seed Beds of 12 M x 1.20 M size</b>		
(a)	Formation new beds: Aligning the nursery beds, clearance of debris, digging of soil 30 cm. deep & allowing the soil for weathering, breaking of clods, mixing the ingredients, leveling and forming new nursery beds of size 12 m x 1.20 m and raising the bunds and consolidating on all the sides of the beds.	217.90	bed

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(b)	Reformation of old beds: Re-digging of old nursery beds of size 12 m x 1.20 m and to a depth of 30 cm. & forming nursery beds after mixing the ingredients including pesticides & consolidating the bunds on all sides of the bed.	70.04	bed
(c)	Application of ingredients (Manure and Sand) (Quantity of manure and sand to be prescribed by the CF by considering the fertility and sand content in the soil of the nursery bed)	7.78	bed
(d)	Sowing of seeds in beds	9.07	bed
(e)	Covering the seedbed with grass / straw including the cost of collection & transport of grass / straw to the nursery site.	14.01	bed
(f)	Pricking out the seedlings from the seed beds and transplanting the same in transplant beds	82.55	bed
(g)	Watering the beds twice a day:		
	(i) Where internal pipe lines are laid out in the nursery	1.55	bed / day
	(ii) Where internal pipe lines are not laid out in the nursery	4.68	bed / day
(h)	Weeding the seed beds / transplant beds	14.01	bed / weeding
<b>5</b>	<b>Raising of Dowga / Medri Bamboo Rhizomes in Nursery beds of 12 M x 1.20 M size</b>		
(a)	Formation new beds	Item No.4(a)above	
(b)	Reformation of old beds	Item No.4(b)above	
(c)	Application of ingredients (Manure and Sand)	Item No.4(c) above	
(d)	Uprooting of Dowga/Medri bamboo seedlings from beds	171.18	1000
(e)	Transplanting of Dowga / Medri bamboo seedlings in beds	181.58	1000
(f)	Watering the beds twice a day	Item No.4(g) above	
(g)	Weeding the seed beds / transplant beds	Item No.4(h) above	
<b>6</b>	<b>Raising of Marihal bamboo (Oxytenanthera stocksii) in Nursery beds of 12 M x 1.20 M size</b>		
(a)	Formation new beds	Item No.4(a) above	
(b)	Reformation of old beds	Item No.4(b) above	
(c)	Application of ingredients (Manure and Sand)	Item No.4(c) above	
(d)	Purchase of Marihal bamboo (Delivery at Nursery site)	Rate Quotation	
(e)	Preparation of Marihal bamboo cuttings	498.01	1000
(f)	Planting of Marihal bamboo cuttings in bed	342.38	1000
(g)	Watering the beds twice a day	Item No.4(g) above	
(h)	Weeding the seed beds / transplant beds	Item No.4(h) above	
<b>7</b>	<b>Raising of Agave Suckers in Nursery beds of 12 M x 1.20 M size</b>		
(a)	Formation new beds	Item No.4(a) above	
(b)	Reformation of old beds	Item No.4(b) above	
(c)	Application of ingredients (Manure and Sand)	Item No.4(c) above	
(d)	Transplanting of Agave seedlings / bulbils at 7.5 cm. X 7.5 cm. apart, including loosening of soil.	82.55	1,000
(e)	Collection and transportation of Agave bulbils from the field	202.53	1,000

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(f)	Flooding the beds once in a week	120.33	week / 100 beds	
(g)	Weeding the Agave beds	8.24	bed / weeding	
<b>8</b>	<b>Raising Khus grass in the Nursery beds of 12 M x 1.20 M size</b>			
(a)	Formation new beds	Item No.4(a) above		
(b)	Reformation of old beds	Item No.4(b) above		
(c)	Application of ingredients (Manure and Sand)	Item No.4(c) above		
(d)	Collection of Khus grass slips	50.62	1,000	
(e)	Transplanting of Khus grass slips in nursery beds	37.97	1,000	
(f)	Watering the beds twice a day	Item No.4(g) above		
(g)	Weeding the Agave beds	8.24	bed / weeding	
<b>9</b>	<b>Raising of Teak and other Hardwood Seedlings for producing stumps</b>			
(a)	Formation of new beds: Preparation of raised standard nursery beds of size 12 m x 1.20 m x 0.30 m, by deep digging up to 45 cm depth, including breaking of clods, leveling, etc.	202.31	Bed	
(b)	Reformation of old beds: Reformation of the old raised nursery beds of standard size of size 12 m x 1.20 m	124.50	Bed	
(c)	Uprooting of stumps of trees of above 60 cm girth existing in the nursery bed space for raising new nursery <b>(To be allowed by the CF, for raising fresh beds only in rare cases)</b>	85.59	stump	
(d)	Pre-treatment of teak seeds at the rate of 6 Kg seeds per bed - pretreatment involves soaking in cow-dung slurry for 7 days followed by drying the same for 7 days, repeating the operation thrice (total 42 days)	24.90	bed	
(e)	Sowing the seeds in beds	16.50	Bed	
(f)	Weeding in beds of Teak and other hardwood species like Matti, Nandi Honne, Burga, Rosewood etc., where stumps are to be prepared from the seedlings			
	(i)	For the first three weeding	31.14	Bed / weeding
	(ii)	For 4th and subsequent weeding	10.89	Bed / weeding
<b>10</b>	<b>Raising of Agave Seedlings in Farmers' Land by transplanting from nursery beds</b>			
(a)	Rent of farmers' best land	As fixed by the Tahasildar		
(b)	Tractor ploughing with cultivator twice	On quotation basis		
(c)	Uprooting the Agave seedlings from the transplant bed	38.91	1,000	
(d)	Transportation of Agave seedlings from the nursery site to planting site and then to planting point on head-load	119.54	1,000	
(e)	Grading of Agave seedlings into large, medium and small size seedlings for planting	107.29	1,000	
(f)	Aligning in the planting area and marking spots for planting Agave seedlings	54.47	1,000	
(g)	Digging the earth by pickaxe to the required depth, planting of Agave seedlings, and pressing the soil around the seedling.	466.90	1,000	

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(h)	Hoeing around the Agave seedling raised in the field by using the bullock-drawn country plough for loosening of soil. (i.e., intermediate cultivation)	On quotation basis	
(i)	Removal of weeds around the Agave seedlings twice	2,334.49	ha. each time
<b>11</b>	<b>Raising of Seedlings in Polythene Bags of 4"X6" Size</b>		
(a)	Purchase of 0.51 cum. of ingredients i.e. farmyard manure, sand and red earth in 1:1:2 proportion	170.78	1,000
(b)	Mixing of ingredients, filling the polythene bags and duly arranging in rows after scraping the earth	311.26	1,000
(c)	Dibbling of seeds in polythene bags	33.03	1,000
(d)	Pricking out the seedlings from seed beds and transplanting in the polythene bags	82.55	1,000
(e)	Watering to the polythene-bagged seedlings twice a day :		
	(i) Where internal pipe lines are laid out in the nursery	1.48	1,000 / day
	(ii) Where internal pipe lines are not laid out in the nursery	2.72	1,000 / day
(f)	Weeding the polythene-bagged seedlings	14.01	1,000 each time
(g)	Shifting & grading the polythene-bagged seedlings	29.71	1,000 each time
<b>12</b>	<b>Raising of Seedlings in Polythene Bags of 5" X 8" Size</b>		
(a)	Purchase of 1.08 cum. of ingredients i.e. farmyard manure, sand and red earth in 1:1:2 proportion	361.74	1,000
(b)	Mixing the ingredients, filling the polythene bags and arranging in rows after scraping the earth	466.90	1,000
(c)	Dibbling of seeds in polythene bags	33.03	1,000
(d)	Picking out the seedlings from seed beds & transplanting in the polythene bags	82.53	1,000
(e)	Planting of prepared teak / hard wood stumps in the filled polythene bags	82.53	1,000
(f)	Watering to the polythene-bagged seedlings twice a day :		
	(i) Where internal pipe lines are laid out in the nursery	2.72	1,000 / day
	(ii) Where internal pipe lines are not laid out in the nursery	4.51	1,000 / day
(g)	Weeding the polythene-bagged seedlings	23.35	1,000 each time
(h)	Shifting & grading the polythene-bagged seedlings	47.86	1,000 each time
<b>13</b>	<b>Raising of Seedlings in Polythene Bags of 6" X 9" Size</b>		
(a)	Purchase of 1.77 cum. of ingredients i.e. farmyard manure, sand and red earth in 1:1:2 proportion	592.82	1,000
(b)	Mixing the ingredients, filling the polythene bags and arranging in rows after scraping the earth	544.71	1,000
(c)	Dibbling of seeds in polythene bags	33.03	1,000
(d)	Pricking out the seedlings from seed beds & transplanting in the polythene bags	82.53	1,000
(e)	Planting of prepared teak / hard wood stumps in the filled polythene bags	82.53	1,000

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(f)	Watering to the polythene-bagged seedlings twice a day:		
	(i) Where internal pipe lines are laid out in the nursery	3.74	1,000 / day
	(ii) Where internal pipe lines are not laid-out in the nursery	5.90	1,000 / day
(g)	Weeding in polythene bags	28.01	1,000 each time
(h)	Shifting & grading the polythene-bagged seedlings	66.04	1,000 each time
<b>14</b>	<b>Raising of Seedlings in Polythene Bags of 8" X 12" Size</b>		
(a)	Purchase of 4.20 cum. of ingredients i.e. farmyard manure, sand and red earth in 1:1:2 proportion	1,406.79	1,000
(b)	Mixing the ingredients, filling the polythene bags and arranging in rows after scraping the earth	824.85	1,000
(c)	Dibbling of seeds in polythene bags	33.03	1,000
(d)	Pricking out the seedlings from seed beds & transplanting in the polythene bags	82.53	1,000
(e)	Transplanting of 4" x 6" or 5" x 8" size bagged seedlings into 8" x 12" size bags after removal of the seedlings along with the trimmed ball of earth	82.53	1,000
(f)	Watering to the polythene-bagged seedlings twice a day:		
	(i) Where internal pipe lines are laid out in the nursery	8.55	1,000 / day
	(ii) Where internal pipe lines are not laid-out in the nursery	13.22	1,000 / day
(g)	Weeding the polythene-bagged seedlings	35.80	1,000 each time
(h)	Shifting & grading the polythene-bagged seedlings	99.05	1,000 each time
<b>15</b>	<b>Raising of Seedlings in Polythene Bags of 10" X 16" Size</b>		
(a)	Purchase of 8.72 cum. of ingredients i.e. farmyard manure, sand and red earth in 1:1:2 proportion	2,920.76	1,000
(b)	Mixing the ingredients, filling the polythene bags and arranging in rows after scraping the earth	1,400.69	1,000
(c)	Dibbling of seeds in polythene bags	33.03	1,000
(d)	Pricking out the seedlings from seed beds & transplanting in the polythene bags	82.53	1,000
(e)	Transplanting of 4" x 6" or 5" x 8" size bagged seedlings into 10" x 16" size bags after removal of the seedlings along with the trimmed ball of earth	82.53	1,000
(f)	Watering the polythene-bagged seedlings twice a day:		
	(i) Where internal pipe lines are laid out in the nursery	12.45	1,000 / day
	(ii) Where internal pipe lines are not laid out in the nursery	21.79	1,000 / day
(g)	Weeding in polythene bags	42.03	1,000 each time
(h)	Shifting & grading the polythene-bagged seedlings	181.58	1,000 each time

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<b>16</b>	<b>Raising of Seedlings in Polythene Bags of 14" X 20" Size</b>		
(a)	Purchase of 21.20 cum. of ingredients i.e. 5.30 cum of farmyard manure, 5.30 cum sand and 10.60 cum of red earth in 1:1:2 proportion	7,100.95	1,000
(b)	Mixing the ingredients, filling the polythene bags and arranging in rows after scraping the earth	2,334.49	1,000
(c)	Dibbling of seeds in polythene bags	33.03	1,000
(d)	Pricking out the seedlings from seed beds & transplanting in the polythene bags	82.53	1,000
(e)	Transplanting of seedlings raised in smaller bags (i.e. 4" x 6" and 5" x 8") into bigger bags along with ball of earth, after tearing the polythene bag of smaller size	82.53	1,000
(f)	Watering the polythene-bagged seedlings twice a day:		
	(i) Where internal pipe lines are laid out in the nursery	21.79	1,000 / day
	(ii) Where internal pipe lines are not laid out in the nursery	31.14	1,000 / day
(g)	Weeding in polythene bags	54.49	1,000 each time
(h)	Shifting & grading the polythene-bagged seedlings <b>Note:</b> Wherever seedlings are already raised during previous year in 13" x 19" size bags, the rate may be allowed at 10% less than that of 14" x 20" sized bags.	247.60	1,000 each time
<b>17</b>	<b>Raising of Bamboo Seedlings in Polythene Bags of 7" x 7" Square x 12" Size</b>		
(a)	Purchase of 10.08 cum. of ingredients i.e. farmyard manure, sand and red earth in 1:1:2 proportion	3,376.30	1,000
(b)	Mixing the ingredients, filling the polythene bags and arranging in rows after scraping the earth	1,245.06	1,000
(c)	Uprooting of naked bamboo seedlings from beds	32.84	1,000
(d)	Watering the polythene-bagged seedlings twice a day:		
	(i) Where internal pipe lines are laid out in the nursery	11.67	1,000 / day
	(ii) Where internal pipe lines are not laid out in the nursery	18.68	1,000 / day
(e)	Weeding in polythene bags	38.91	1,000 each time
(f)	Shifting and grading of polythene-bagged seedlings	115.55	1,000 each time
<b>18</b>	<b>Raising Seedlings in Pots of 9" Size:</b>		
(a)	Purchase of 1.38 cum. of ingredients i.e. farmyard manure, sand and red earth in 1:1:2 proportion	462.24	1,000
(b)	Mixing of ingredients of Manure, Sand and Red-earth, cleaning and filling the same into earthen pots and keeping them in rows.	893.33	1,000
(c)	Transplanting of seedlings into pots	82.53	1,000
(d)	Watering the polythene-bagged seedlings twice a day:		
	(i) Where internal pipe lines are laid out in the nursery	31.14	1,000 / day
	(ii) Where internal pipe lines are not laid out in the nursery	43.58	1,000 / day
(e)	Weeding in the pots	20.21	1,000 / Weeding
(f)	Shifting and grading of potted seedlings	70.98	1,000 each time

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<b>19</b>	<b>Raising Seedlings in Pots of 12" Size</b>		
(a)	Purchase of 4.44 cum. of ingredients i.e. farmyard manure, sand and red earth in 1:1:2 proportion	1,487.18	1,000
(b)	Mixing of ingredients of Manure, Sand and Red-earth, cleaning and filling the same into earthen pots and keeping them in rows	1,319.75	1,000
(c)	Transplanting of seedlings into pots	82.53	1,000
(d)	Watering the polythene-bagged seedlings twice a day:		
	(i) Where internal pipe lines are laid out in the nursery	34.23	1,000 / day
	(ii) Where internal pipe lines are not laid out in the nursery	46.69	1,000 / day
(e)	Weeding in the pots	52.91	1,000 / weeding
(f)	Shifting and grading of potted seedlings	85.85	1,000 each time
<b>20</b>	<b>Other operations common to Raising of Polythene Bagged Seedlings</b>		
(a)	Purchase of polythene bags	by Tender	
(b)	Uprooting and preparation of teak / hardwood stumps from the dry nursery beds	140.08	1,000
(c)	Transportation of teak / hard wood stumps from dry beds to nursery within the Division	15.55	1,000
(d)	Application of DAP or NPK to the seedling in polythene bags @ 5 gm or so (only for tall seedlings for roadside planting)	118.28	1,000 each time
(e)	Providing overhead shade pandal to the seedlings raised in nursery beds and polythene bags, including collection and transportation of material required for pandal – Rate for 12.00 Meter X 1.20 Meter size	155.64	each
(f)	Purchase of 8-10 ft long stakes of 'chewa' or split dowga bamboos from private parties for providing vertical support to each plant including delivery at nursery site (for tall seedlings only) ceiling rate	3,904.56	1,000
(g)	Cost of collection of 8-10 ft long stakes of 'chewa' or split dowga bamboos from departmental forest / plantation site for providing vertical support to each plant including delivery at nursery site (for tall seedlings only)	2,860.43	1,000
(h)	Tying of plant to the vertical stake, and pluming of buds as it grows once in a fortnight (for tall seedlings only)	140.08	1,000 each time
(i)	Providing horizontal stakes of split bamboos to the seedlings at an height of 5 ft. from ground level to avoid falling of tall seedlings due to wind (for tall seedlings only)	On lowest quoted rates	
(j)	Pruning of taller seedlings as seedling grows	116.73	1,000
<b>II</b>	<b>PLANTATION WORKS (21 to 43)</b>		
	<b>Raising of Plantations (21 to 38)</b>		
<b>21</b>	<b>Clearance of undergrowth in thick forest areas of Western Ghat areas</b>		
(a)	Clear felling, burning, heaping and re-burning in moderate area where there is thick under growth and bushes	3,112.65	ha.
(b)	Clearance of jungle growth, scattered type low density areas, burning heaping and re-burning to make the area suitable for planting	1,867.60	ha.
(c)	For spot clearing of site at pit point in moderate area where there is thick under growth and bushes	0.46	sq. meter.
(d)	For spot clearing of site at pit point in scattered type low density areas	0.31	sq. meter.

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(e)	Clearance of weed growth of eupatorium and thorny bushes in open gaps, cutting stumps of saplings flush to the ground, singling of coppice shoots, cutting of woody climbers, carrying and heaping the debris at places where planting is not necessary, for raising plantation in areas where the canopy cover is between 0.2 to 0.4 (burning and re-burning operations not to be done)	1,677.73	Ha.
(f)	Clearance of weed growth of eupatorium and thorny bushes in open gaps, cutting stumps of saplings flush to the ground, singling of coppice shoots, cutting of woody climbers, carrying and heaping the debris at places where planting is not necessary, for raising plantation in areas where the canopy cover is between 0.4 to 0.6 (burning and re-burning operations not to be done)	1,393.85	Ha.
<b>22</b>	<b>Clearance of undergrowth in Maidan areas</b>		
(a)	Clearing the unwanted growth such lantana, eupatorium and such other thorny species over the entire area, heaping and burning the debris in areas where there is thick growth.	1,245.06	ha.
(b)	Clearing the unwanted growth such lantana, eupatorium and such other thorny species over the entire area, heaping and burning the debris in areas where there is medium undergrowth.	933.80	ha.
(c)	Clearing the unwanted growth such lantana, eupatorium and such other thorny species over the entire area, heaping and burning the debris in areas where there is sparse undergrowth.	622.54	ha.
<b>23</b>	<b>Loading &amp; unloading of Polythene Bagged Seedlings:</b> Loading of polythene-bagged seedlings into the vehicle at the nursery site and unloading at the site nearest to the planting site		
(a)	Seedlings raised in 4" x 6" size bags	77.81	1,000
(b)	Seedlings raised in 5" x 8" size bags	155.64	1,000
(c)	Seedlings raised in 6" x 9" size bags	217.88	1,000
(d)	Seedlings raised in 8" x 12" size bags	622.54	1,000
(e)	Seedlings raised in 10" x 16" size bags	1,322.87	1,000
(f)	Seedlings raised in 14" x 20" size bags	2,879.21	1,000
(g)	Seedlings raised in 7" x 7" x 12" size bags	1,556.34	1,000
<b>24</b>	<b>Transportation:</b> Transportation of polythene-bagged seedlings in hired truck from the nursery site to planting site		
(a)	<b>Seedlings raised in 4" x 6" size bags :</b>		
(i)	Distance up to 10 Km.	135.26	1,000
(ii)	Distance from 11 to 20 Km	202.87	1,000
(iii)	Distance from 21 to 30 Km	256.98	1,000
(iv)	Distance from 31 to 40 Km	311.08	1,000
(b)	<b>Seedlings raised in 5" x 8" size bags :</b>		
(i)	Distance up to 10 Km.	270.51	1,000
(ii)	Distance from 11 to 20 Km	378.72	1,000
(iii)	Distance from 21 to 30 Km	459.88	1,000
(iv)	Distance from 31 to 40 Km	541.02	1,000
(c)	<b>Seedlings raised in 6" x 9" size bags :</b>		
(i)	Distance up to 10 Km.	473.40	1,000
(ii)	Distance from 11 to 20 Km	676.28	1,000
(iii)	Distance from 21 to 30 Km	811.54	1,000
(iv)	Distance from 31 to 40 Km	1,014.42	1,000

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(d)	<b>Seedlings raised in 8" x 12" size bags :</b>		
	(i) Distance up to 10 Km.	1,014.42	1,000
	(ii) Distance from 11 to 20 Km	1,352.56	1,000
	(iii) Distance from 21 to 30 Km	1,758.34	1,000
	(iv) Distance from 31 to 40 Km	2,164.11	1,000
(e)	<b>Seedlings raised in 10" x 16" size bags :</b>		
	(i) Distance up to 10 Km.	1,623.07	1,000
	(ii) Distance from 11 to 20 Km	2,164.11	1,000
	(iii) Distance from 21 to 30 Km	2,772.75	1,000
	(iv) Distance from 31 to 40 Km	3,381.40	1,000
(f)	<b>Seedlings raised in 14" x 20" size bags :</b>		
	(i) Distance up to 10 Km.	3,381.40	1,000
	(ii) Distance from 11 to 20 Km	4,192.94	1,000
	(iii) Distance from 21 to 30 Km	5,274.98	1,000
	(iv) Distance from 31 to 40 Km	6,357.04	1,000
(g)	<b>Seedlings raised in 7" x 7" x 12" size bags :</b>		
	(i) Distance up to 10 Km.	2,705.13	1,000
	(ii) Distance from 11 to 20 Km	3,381.40	1,000
	(iii) Distance from 21 to 30 Km	4,598.70	1,000
	(iv) Distance from 31 to 40 Km	5,680.76	1,000
25	<b>Conveyance:</b> Conveyance of polythene-bagged seedlings on head load from the dumping site to planting location near each trench / pit (distance up to 3 Km.)		
(a)	4" x 6" size bagged seedlings	264.57	1,000
(b)	5" x 8" size bagged seedlings	544.71	1,000
(c)	6" x 9" size bagged seedlings	817.07	1,000
(d)	8" x 12" size bagged seedlings	1,245.06	1,000
(e)	10" x 16" size bagged seedlings	1,556.34	1,000
(f)	14" x 20" size bagged seedlings	3,112.65	1,000
(g)	7" x 7" x 12" size bagged seedlings	2,645.75	1,000
26	<b>Watering by dipping:</b> Watering polythene bagged seedlings at planting site by dipping in water, including carrying of water (Note: This should be resorted to in dry conditions)		
(a)	4" x 6" size bagged seedlings	186.77	1,000
(b)	5" x 8" and 6" x 9" size bagged seedlings	202.33	1,000
(c)	8" x 12" size bagged seedlings	264.57	1,000
(d)	10" x 16" and above size bagged seedlings	280.13	1,000
27	<b>Planting:</b> Planting of P.B. Seedlings after tearing with blade & removing the polythene bags in trenches / pits including scooping the soil to required depth, pressing the soil gently around the seedlings after planting.		
(a)	4" x 6" size bagged seedlings	330.15	1,000
(b)	5" x 8" size bagged seedlings	544.76	1,000
(c)	6" x 9" size bagged seedlings	660.33	1,000

I	II	III	IV
(d)	8" x 12" size bagged seedlings	1,155.57	1,000
(e)	10" x 16" size bagged seedlings	1,485.72	1,000
(f)	14" x 20" size bagged seedlings	3,301.60	1,000
(g)	7" x 7" x 12" size bagged seedlings	1,568.26	1,000
<b>28 Raising of Block Plantations : Trench-mound method (manual)</b>			
(a)	Aligning in the planting area along the contours & marking for trenches	389.07	1,000
(b)	Excavation of contour trenches of size 4 m x 0.5 m x 0.5 m with uncut portion of 25 cm. In between the adjacent trenches, and depositing the 1/3rd top soil on upper slopes and remaining 2/3rd excavated earth on lower slopes of the trenches in:		
	(i) Ordinary soil	42.03	cum.
	(ii) Hard soil	56.03	cum.
(c)	Refilling of trenches, cutting the edges of the excavated trench on the lower side & refilling the trench with 75% of the excavated earth duly breaking the clods & formation of uniformly sloping continuous mound all along the lower side of the trench.	5.61	cum.
(d)	Sowing of seeds on trench mound of 4 Meter in length.	1.30	trench
(e)	Weeding inside the trenches and on mounds of 4 Meter length trench	2.88	Trench
(f)	Scraping of grass and other growth around the trenches & mounds to a width of 60 cm on each side of trenches (4 meter length trench)	2.65	Trench
	(Note: Scraping is allowed only in grass infested areas)		
(g)	Soil working the trenches by digging with pickaxe to a depth of 15 cm. and to a width of 60 cm. starting from the lower edge of the trench towards the other side of the trench of 4 m length so as to loosen the soil uniformly including scraping around the plant before digging and reformation of damaged mounds during rains. (Trench mound should not be disturbed while soil working)	4.51	Trench
<b>29 Raising of Block Plantations: Pit Planting Method</b>			
(a)	Preparation and delivery of stakes to planting site	176.38	1,000
(b)	Aligning in the planting area along the contours & marking for pit (without staking)	124.50	1,000
(c)	Excavation of pits with vertically cut edges to make an uniform cube and heaping the excavated soil (1/3rd top soil on the upper side & 2/3rd on the lower side)		
	(i) Ordinary soil	56.03	cum.
	(ii) Hard Soil	65.37	cum.
	(iii) Sandy Soil (Coastal areas)	38.91	Cum.
(d)	Refilling of pits, cutting of edge of the pit on the lower side and refilling 75% or 100% of the pit as the case may be with the excavated soil, duly breaking the clods & arranging the remaining soil on the lower slope.	7.00	cum.
(e)	(i) First weeding around the plants (pits) to a radius of 60 cm.	389.07	1,000
	(ii) First weeding around the plants (pits) to a radius of 1 meter	778.16	1,000
(f)	(i) 2nd & subsequent weeding around the plants to radius of 60 cm.	311.26	1,000
	(ii) 2nd & subsequent weeding around the plants to radius of 1 meter	622.54	1,000

I	II	III	IV
(g)	Clear weeding by cutting all weeds flush to the ground, retaining seedlings of important species, not directly interfering with the main crop in areas with heavy weed growth of Eupatorium, Solanum, etc.		
	(i) First weeding	1,167.23	ha.
	(ii) Second weeding	933.80	ha.
	(iii) Third weeding	622.54	ha
(h)	Clear weeding by cutting all weeds flush to the ground, retaining seedlings of important species, not directly interfering with the main crop in areas with ordinary intensity of weed growth of Eupatorium, Solanum, etc.		
	(i) First weeding	855.97	ha.
	(ii) Second weeding	700.33	ha.
	(iii) Third weeding	466.90	ha
(i)	Scraping of grass and other weed growth around the plant (Pits) (Scraping item is allowed only in grass-infested areas)		
	(i) 30 cm. radius around the plant	280.13	1,000
	(ii) 50 cm. radius around the plant	700.33	1,000
	(iii) 60 cm. radius around the plant	964.92	1,000
	(iv) 90 cm. radius around the plant	2,178.85	1,000
(j)	Saucer Bharav: Scraping out of grass and weeds to a radius of 50 cms around the plant, earthening up of soil in the form of a semi-circular slanting saucer shape slope, loosening of boulders if any with soil by using pickaxe and arranging the loosened boulders and soil in semi-circular fashion at the lower side of the plant (Dimension 80 cms diameter and 25 cms depth at deepest point)	3,423.92	1,000
(k)	Hoeing & soil working with pickaxe around the plant to a depth of 15 cm & to a radius of 30 cm. so as to loosen the soil around the plants (pits only).	544.71	1,000
(l)	Hoeing & soil working with pickaxe around the plant to a depth of 15cm. & to a radius of 50 cm. so as to loosen the soil around the plants (pits only).	1,167.23	1,000
(m)	Hoeing & soil working with pickaxe around the plant to a depth of 15cm. & to a radius of 60 cm. so as to loosen the soil around the plants (pits only).	1,556.34	1,000
(n)	Hoeing & soil working with pickaxe around the plant to a depth of 15cm. & to a radius of 90 cm. so as to loosen the soil around the plants (pits only).	3,112.65	1,000
(o)	Karada and other pernicious grass cutting flush to the ground in highly problematic plantation areas where the grass is suppressing the plants.	1,556.34	Ha.
(p)	Excavation of ponds of 5 Mtr. top width, 3 Mtr. bottom width and 4 Mtr. depth in coastal areas for watering to the Casuarina plants at the rate of one pond per ha.	1,774.21	pond
(q)	Hand watering to the Casuarina plants in the coastal plantations	311.26	1,000
(r)	Mulching works around the Cane and MFP plants i.e. collection of available green/dry leaves and spreading it on the soil worked area uniformly around the cane plants including cutting and unwanted growth (1 Meter dia)	1,089.44	1,000

I	II	III	IV
30	<b>Raising of Block Plantation: Semi-Circular pit planting (pit-in-pit method)</b> (For low rainfall, eastern plains)		
(a)	Aligning in the planting area along the contours & marking for pit (without staking)	108.94	1,000
(b)	Excavation of semi-circular pit of 1.25 m radius and 30 cm. deep in hard soil mixed with boulders including digging of pit of size 50 cm x 50 cm x 50 cm at the centre abutting the periphery of the semi-circular pit at the deep end point & heaping the soil on the lower side in half moon shape and consolidation of mound by putting the available stone pieces & grasses on the lower side of the mound	54.47	for each semicircular pit
(c)	Refilling of pits, cutting of edge of the pit on the lower side and refilling 75% of the pit with the excavated soil, duly breaking the clods & formation of saucer shaped mound on the lower side of the pit size 50 cm. X 50 cm. X 50 cm. dug in the semi-circular pit	0.53	pit
(d)	Spot sowing of seeds on mound of the semi-circular pit	1.30	pit
(e)	Weeding in the semi-circular pits of 1.25 m. radius and on the mounds	3.12	semi-circular pit
(f)	Scraping of grass and other growth to a width of 60cm. around the semi-circular pit	3.66	semi-circular pit
(g)	Hoeing and soil-working with pickaxe around the plant to a depth of 10 cm in the entire semi-circular pit so as to loosen the soil around the plant & putting soil around the collar of the plant	5.46	semi-circular pit
31	<b>Raising of Block Plantations: Trench-mound method (by ripping with bulldozer)</b>		
(a)	<b>Bulldozing &amp; site preparation:</b> Preparing the site of felled or scrubby jungle growth by dozing and uprooting existing growth, creation of intermittent bunds across the slope and using the debris as check-dams on depressions – for raising commercial monoculture crops only (on area basis).	By tender (Item of works to be described accurately in the tender notice)	
(b)	<b>Ripping:</b> Ripping along contours at an appropriate interval to a depth of 75 cm, with a ripper attached to the bulldozer; the ripper having side flange attachment, which will rip open a trench to a width of 45 cm (on running meter basis)	By tender	
	Note: The horsepower of the bulldozer and the type of ripper and flange may vary from make to make, causing reduction or increase the depth or width of the trench. While inviting tender, the various available types of bulldozers have to be considered, and the specification should be kept flexible for enabling maximum competition.		
(c)	Mound formation in ripped area by breaking the clods, removing stones, roots, etc., from the broken-up soil, placing the soil from uphill side to downhill side, cutting and dragging the soil to make the width of the trench uniform to hold sufficient rain water by forming septa at 4 m apart to have a trench of 4 m length and also consolidation of mound by putting available stone pieces and grasses on the lower side of the mound	6.69	trench of 4 m length
32	<b>Raising of Roadside Plantations</b>		
(a)	Aligning in the planting area & marking for pit (without staking)	116.73	1,000

I	II	III	IV
(b)	Excavation of pits of size 1 m x 1 m x 1 m with vertically cut edges to make an uniform cube and heaping the excavated soil outside the pits (1/3rd top soil to be deposited on the upper side & 2/3rd on the lower side):		
	(i) In ordinary soil	56.04	pit
	(ii) In hard soil	65.37	pit
(c)	Refilling of pits, cutting of edge of the pit on the lower side and refilling 75% of the pit with the excavated soil, duly breaking the clods & formation of saucer shaped mound on the lower side of the pit	7.00	pit
(d)	Cost of collection of 2.5 to 3 meter length wooden stakes of sufficient stoutness and strength from departmental forests / plantations, application of coal tar to the stake, transportation and delivery - complete (ceiling rate)	506.81	100
(e)	Purchase of 2.5 to 3 meter length wooden stakes of sufficient stoutness and strength from private parties including application of coal tar to the stake, transportation and delivery - complete (ceiling rate)	714.55	100
(f)	Conveyance of tall seedlings raised in HDPE bags of size 14" x 20" from the dumping point to the planting site near each pit on head-load, fixing the supporting stake firmly in the pit, planting the tall seedling in the pit tying the seedling to the supporting stake at 3 points (excluding cost of supporting stake)	15.56	tall seedling
(g)	Cutting & collection of Prosopis juliflora (PJ) branches loading the same into the lorry & unloading at the planting site (10 branches per tall plant)	9.33	tall seedling
(h)	Conveyance of P. J. branches to individual pit, tying P. J. branches around the supporting stake properly covering the tall plant with P. J. thorny branches to a height of more than 2 m and tying the P. J. branches with G. I. wire at 3 places (10 P.J. branches to be used for tying the tall seedling). Alternately phoenix leaves could be used depending on availability.	10.89	tall seedling
(i)	Cutting two phoenix leaves to each plant and tying firmly around the plant and stake in a spiral way	2.49	plant
(j)	I weeding around the plants (Pits) to a radius of 60 cm.	389.07	1,000 pits
(k)	II & subsequent weeding around the plants (pit) to radius of 60 cm.	311.26	1,000 pits
(l)	Saucer Bharav: Scraping out of grass and weeds to a radius of 50 cms around the plant, earthening up of plants in the form of a semi-circular slanting saucer shape slope, loosening of boulders if any with soil with the help of pickaxe and arranging the loosened boulders and soil in semi-circular fashion at the lower side of the plant (Dimension 80 cms diameter and 25 cms depth at deepest point)	3,423.92	1,000
(m)	Hoeing & soil working with pickaxe around the plant to a depth of 15cm. & to a radius of 60 cm. so as to loosen the soil around the plants (pits only).	1,556.34	1,000
(n)	Hoeing & soil working with pickaxe around the plant to a depth of 15cm. & to a radius of 90 cm. so as to loosen the soil around the plants (pits only).	3,112.65	1,000
(o)	Scraping of grass and other growth around the plant to a radius of 1 m.	2,681.54	1,000
(p)	Watering to the seedlings along roadside and in the city limits at 50 liters/plant		

I	II	III	IV
	(i) by utilizing the departmental vehicle (ceiling rate)	4.70	Plant each time
	(ii) by hiring the private vehicle (ceiling rate)	11.66	Plant each time
<b>33</b>	<b>Planting of Bamboo Rhizomes</b>		
(a)	Digging of bamboo beds, uprooting of 1 to 2 year old bamboo Rhizomes, (without causing damage) tying in bundles and loading them into the lorry at nursery site (excluding cost of bags and fibre thread)	1,627.92	1,000
(b)	Transportation of bamboo Rhizome bundles in lorry from nursery to the plantation site and unloading – up to 10 km distance	1,471.87	1,000
(c)	Conveyance of bamboo Rhizome bundles from roadside to pits at the rate of 2 rhizomes per pit	1,089.44	1,000
(d)	Opening of pits, filling with red earth up to 30 cms and planting Rhizomes	893.33	1,000
<b>34</b>	<b>Agave Planting</b>		
(a)	Uprooting of Agave suckers from the nursery beds	92.92	1,000
(b)	Transportation of Agave suckers from nursery to planting site (including loading and unloading) and conveyance to planting spot on head load	327.05	1,000
(c)	Collection of Agave suckers of one foot and above height from field areas, and transportation to the plantation area, including loading and unloading charges, for planting in the plantation - distance up to 8 Km	723.36	1,000
(d)	Collection of Agave suckers of one foot and above height from field areas, and transportation to the plantation area, including loading and unloading charges, for planting in the plantation - distance above 8 Km	868.03	1,000
(e)	Conveyance of Agave suckers from plantation boundary to planting site on head load	155.64	1,000
(f)	Digging the earth by pickaxe to the required depth, planting of Agave seedlings in the plantation and pressing the soil around the seedling.	544.71	1,000
<b>35</b>	<b>Planting Ficus Cuttings</b> : Collection of ficus cutting of size 2 Mtr. Length and girth not less than 15 cms at the thick end, treating the cutting with root harmones by dipping the lower end (one ml. Root harmones solution to be mixed with 3 to 5 ltrs. of water) for one hour, transporting and planting in pits of 0.45 M3 size, covering the cutting with thorny material and covering exposed ends with cowdung (excluding the cost of thorny materials)	15.56	cutting
<b>36</b>	<b>Raising of Mangrove Plantations</b>		
(a)	Uprooting of mangrove wildlings carefully with the roots and conveyance to planting site – in hired boat.	587.92	1,000
(b)	Uprooting of mangrove wildlings carefully with the roots and conveyance to planting site – in departmental boat.	384.41	1,000
(c)	Aligning and staking	442.00	1,000
(d)	Digging a pit at the marked spot in the plantation site and planting the polythene-bagged or the wildlings, refilling up the soil and consolidation.	1,240.39	1,000
<b>37</b>	<b>Raising of Fodder Farm</b>		

I	II	III	IV
(a)	Tractor ploughing with cultivator twice	On quotation basis	
(b)	Formation of blocks of convenient size with bunds in the ploughed area	652.08	Ha.
(c)	Sowing of fodder seeds of african maize, hamata, fodder jowar, cowpea, horse-gram, etc. by broadcast sowing	107.29	Ha.
(d)	Sowing of seeds by line sowing or furrow sowing	171.67	Ha.
(e)	Application of fertilizer by broadcasting at prescribed quantity	73.14	Ha.
(f)	Cutting of fodder in plantation and conveyance to the roadside after bundling into convenient sizes	2,490.12	Lorry load of 28 cum
<b>38</b>	<b>Common Items of Works pertaining to Raising of Plantations</b>		
(a)	Bharav by loosening the soil to a depth of 10 cm around the plants and to a radius of 50 cm, and earthing up of the loosened soil at the collar region for natural plants	484.95	1,000
(b)	Preparation of bamboo stakes, transportation to planting site, fixing and tying to the miscellaneous plants	238.71	1,000
(c)	Carrying the water manually from the water source and watering at the rate of not less than 50 liters of water per plant for seedlings planted in MFP plots / Refractory plots with plant density not more than 100 per hectare (ceiling rate)	12.45	plant
(d)	Collection of thorny materials of 2 meters and above in length and tying the materials firmly to the stem of the plant wherever stakes are not provided	3.74	plant
(e)	Application of chemical fertilizer around the plants about 15 cm. away in a furrow duly covering with soil (excluding the cost of fertilizer)	124.50	1,000
(f)	Staking and dibbling of sandal seeds in natural bushes at the rate of 2 Kg. per ha.	99.05	ha.
(g)	Marking and selection of naturally grown Acacia auriculiformis saplings with lime at an approximate espacement of 2 M x 2 M in felled Acacia plantations, thinning out other remaining Acacia seedlings by cutting flush to the ground to allow the retained selected seedlings to grow; and carrying the debris and heaping at places where there is no growth.	1,645.05	Ha.
(h)	Providing and fixing plantation boards	On Rate quotation	
<b>MAINTENANCE OF PLANTATIONS – SECOND YEAR(39 to 43)</b>			
<b>39</b>	<b>Maintenance of Block Plantations: Trench-mound planting</b>		
(a)	Re-opening of pits of size 0.30 m x 0.30 m x 0.30 m for replacement of causalities	18.68	cum.
(b)	Weeding inside the trenches and on mounds of 4 meter length	2.32	trench
(c)	Scraping of grass and other growth around the trench of 4 m length to a width of 60 cm. on each side of the trenches	2.32	trench
(d)	Soil working the trenches by digging with pickaxe to a depth of 15 cm. and to a width of 60 cm. starting from the lower edge of the trench towards the other side of trench of 4 m. length so as to loosen the soil uniformly including scraping around the plants before digging & reformation of damaged mounds during rains	3.12	Trench
<b>40</b>	<b>Maintenance of Block Plantations: Pit Planting</b>		
(a)	Re-opening of pits of size 0.30 m x 0.30 m x 0.30 m for replacement of causalities	18.68	cum
(b)	(i) First weeding around the plants (pits) to a radius of 60 cm.	389.07	1,000

I	II	III	IV
(b)	(ii) First weeding around the plants (pits) to a radius of 1 meter	778.16	1,000
(c)	(i) 2nd & subsequent weeding around the plants to radius of 60 cm.	311.26	1,000
	(ii) 2nd & subsequent weeding around the plants to radius of 1 meter	622.54	1,000
(d)	Weeding in grassy areas and areas with heavy weed growth:		
	(i) First weeding	1,167.23	ha.
	(ii) Second weeding	778.16	ha.
(e)	Weeding in ordinary areas with ordinary weed growth:		
	(i) First weeding	855.97	ha.
	(ii) Second weeding	700.33	ha.
(f)	Scraping of grass and other growth around the plant (Pits) (Scraping item is allowed only in grass-infested areas)		
	(i) 30 cm. radius around the plant	280.13	1,000
	(ii) 50 cm. radius around the plant	700.33	1,000
	(iii) 60 cm. radius around the plant	964.92	1,000
	(iv) 90 cm. radius around the plant	2,178.85	1,000
(g)	Karada and other pernicious grass cutting flush to the ground in highly problematic plantation areas where the grass is suppressing the plants.	1,556.34	Ha.
(h)	Hoeing & soil working with pickaxe around the plant to a depth of 15 cm. & to a radius of 30 cm. so as to loosen the soil around the plants	544.71	1,000 Plants
(i)	Hoeing & soil working with pickaxe around the plant to a depth of 15cm. & to a radius of 50 cm. so as to loosen the soil around the plants	1,167.23	1,000 Plants
(j)	Hoeing & soil working with pickaxe around the plant to a depth of 15cm. & to a radius of 60 cm. so as to loosen the soil around the plants	1,556.34	1,000 Plants
(k)	Hoeing & soil working with pickaxe around the plant to a depth o 15cm. & to a radius of 90 cm. so as to loosen the soil around the plants	3,112.65	1,000 Plants
<b>41</b>	<b>Maintenance of Roadside Plantations</b>		
(a)	Re-opening of pits of size 1 m x 1 m x 1 m for replacement of casualties	18.68	cum
(b)	Refilling of pits, cutting of edge of the pit on the lower side and refilling 75% of the pit with the excavated soil duly breaking the clods & formation of saucer shaped mound on the lower side of the pit size 1m x 1m x 1m	3.12	pit
(c)	Conveyance of tall seedlings raised in HDPE bags of size 14" x 20" from the dumping point to the planting site near each pit on head load, fixing the supporting stake firmly in the pit, planting the tall seedling in the pit tying the seedling to the supporting stake at 3 points. (excluding cost of supporting stake)	15.56	for each Tall seedling
(d)	Cutting & collection of P. J. branches loading the same into the lorry & unloading at the planting site (8-10 branches per plant)	9.33	for each Tall seedling

I	II	III	IV
(e)	Conveyance of P. J. branches to individual pit, tying P. J. branches around the supporting stake properly covering the tall plant with P. J. thorny branches to a height of more than 2m. and tying the P. J. branches with G. I. wire at 3 places (10 P. J. branches to be used for tying the tall seedling)	10.89	Each tall seedling
(f)	I weeding around the plants (Pits) to a radius of 60 cm.	389.07	1,000 pits
(g)	II & subsequent weeding around the plants (Pit) to radius of 60 cm.	311.26	1,000 pits
(h)	Scraping of grass and other growth around the tall plant to a radius of 60 cm (Pits)	964.92	1,000 Plants
(i)	Hoeing & soil working with pickaxe around the plant to a depth of 15cm. & to a radius of 60 cm. so as to loosen the soil around the plants	1,556.34	1,000 Plants
(j)	Watering to the seedlings along roadside and in the city limits at 50 liters/plant (for causality replacement only)		
	(i) by utilizing the departmental vehicle (ceiling rate)	4.67	Plant each time
	(ii) by hiring the private vehicle (ceiling rate)	12.45	Plant each time
<b>42</b>	<b>Maintenance of Plantations – Third Year</b>		
(a)	(i) First weeding around the plants (pits) to a radius of 60 cm.	368.85	1,000 pits
	(ii) First weeding around the plants (pits) to a radius of 1 meter	739.25	1,000 pits
(b)	(i) 2 <sup>nd</sup> & subsequent weeding around the plants to radius of 60 cm.	295.71	1,000 pits
	(ii) 2 <sup>nd</sup> & subsequent weeding around the plants to radius of 1 meter	591.40	1,000 pits
(c)	Weeding inside the trenches and on mounds of 4 meter length	2.19	trench
(d)	Soil working the trenches by digging with pickaxe to a depth of 15 cm. and to a width of 60 cm. starting from the lower edge of the trench towards the other side of trench of 4 m. length so as to loosen the soil uniformly including scraping around the plants before digging & reformation of damaged mounds during rains	2.48	Trench
(e)	Scraping of grass and other growth around the trench of 4 m length to a width of 60 cm. on each side of the trenches	2.10	trench
(f)	Scraping of grass and other growth around the plant (Pits)		
	(i) 30 cm. radius around the plant	233.43	1,000
	(ii) 50 cm. radius around the plant	622.54	1,000
	(iii) 60 cm. radius around the plant	855.97	1,000
	(iv) 90 cm. radius around the plant	1,867.60	1,000
Note: Scraping item is allowed only in grass-infested areas			
(g)	Hoeing & soil working with pickaxe around the plant to a depth of 15 cm. & to a radius of 30 cm. so as to loosen the soil around the plants (Pits only.)	498.01	1,000 Plants
(h)	Hoeing & soil working with pickaxe around the plant to a depth of 15cm. & to a radius of 50cm. so as to loosen the soil around the plants (Pits only)	1,042.74	1,000 Plants
(i)	Hoeing & soil working with pickaxe around the plant to a depth of 15cm. & to a radius of 60cm. so as to loosen the soil around the plants (Pits only)	1,400.70	1,000 Plants
(j)	Hoeing & soil working with pickaxe around the plant to a depth of 15cm. & to a radius of 90cm. so as to loosen the soil around the plants (Pits only)	2,801.39	1,000 Plants

I	II	III	IV
(k)	Weeding in areas with heavy weed growth of Eupatorium / Lantana, etc. by cutting flush to the ground	778.16	ha.
(l)	Weeding in other areas with ordinary weed growth	700.33	ha.
(m)	Karada and other pernicious grass cutting flush to the ground in highly problematic plantation areas where the grass is suppressing the plants.	1,556.34	Ha.
<b>43</b>	<b>Cultural Operation in Older Plantations</b>		
(a)	<u>Cultural operation</u> : Clearing of unwanted growth in 4 to 10 year old plantations, climber cutting, singling of coppice growth, trimming of lower side branches and removal of Loranthus	778.16	Ha.
(b)	Cutting and clearing of eupatorium weeds in 4 to 10 year old plantations	1,400.70	ha.
(c)	<u>Tending operations</u> : Clearing of unwanted growth in 11 year old or older plantations, including climber cutting, singling out of multiple shoots and removal of Loranthus		
	(i) in heavily infested areas	1,867.60	ha.
	(ii) in ordinary areas	700.33	ha.
(d)	Loranthus cutting in Teak plantations of		
	(i) 10 to 30 years old (ceiling rate)	9.33	tree
	(ii) more than 30 years old (ceiling rate)	12.45	tree
(e)	<b>Big (Dowga) Bamboos</b>		
	(i) Decongestion of clump by removing dead / malformed clumps	117.64	Per Clump
	(ii) Soil working around the clumps at 1 m. radius from the periphery by digging 15 cm depth.		
	(iii) Application of fertilizer (rock phosphate etc.)		
(f)	<b>Small (Medri) Bamboos</b>		
	(i) Decongestion of clump by removing dead / malformed clumps	74.98	Per Clump
	(ii) Soil working around the clumps at 1 m. radius from the periphery by digging 15 cm depth.		
	(iii) Application of rock phosphate.		
<b>III</b>	<b>EXTRACTION OF FOREST PRODUCE (44 to 76)</b>		
	<b>Extraction of Teak Thinning Poles (44 to 51)</b>		
<b>44</b>	<b>Marking</b> : Marking for thinning with bands of coal-tar, paint, etc., for:		
(a)	First thinning	63.82	100
(b)	Second thinning	127.62	100
(c)	Third thinning	152.50	100
(d)	Fourth thinning	172.76	100
<b>45</b>	<b>Felling &amp; Conversion</b> : Felling, conversion, collection of thinned poles & stacking near the motorable roadside: (For I, II, III and IV thinning)		
(a)	I - a Category poles	3,054.39	100
(b)	II - a Category poles	2,094.45	100
(c)	III - a Category poles	1,745.37	100
(d)	I - b Category poles	1,396.30	100
(e)	II - b Category poles	1,309.01	100
(f)	III - b Category poles	1,134.48	100
(g)	Issus	523.62	100
<b>46</b>	<b>Loading</b> : Loading of teak thinned poles into truck:		
(a)	I - a Category poles	1,403.23	100

I	II	III	IV
(b)	II - a Category poles	990.53	100
(c)	III - a Category poles	693.36	100
(d)	I - b Category poles	577.80	100
(e)	II - b Category poles	396.20	100
(f)	III - b Category poles	231.13	100
(g)	Issus	107.30	100
<b>47</b>	<b>Transportation</b> : Transportation of teak thinned poles in plain & moderate areas for the first 10 KM distance: Flat rate:		
(a)	I - a Category poles	1,702.44	100
(b)	II - a Category poles	1,375.02	100
(c)	III - a Category poles	982.13	100
(d)	I - b Category poles	720.31	100
(e)	II - b Category poles	523.80	100
(f)	III - b Category poles	261.96	100
(g)	Issus	130.92	100
<b>48</b>	<b>Transportation in Steep Areas</b> :Transportation of teak thinned poles in steep & slopy areas for the first 10 KM distance: Flat rate:		
(a)	I - a Category poles	2,117.91	100
(b)	II - a Category poles	1,711.24	100
(c)	III - a Category poles	1,222.41	100
(d)	I - b Category poles	896.64	100
(e)	II - b Category poles	651.66	100
(f)	III - b Category poles	325.77	100
(g)	Issus	162.87	100
<b>49</b>	<b>Transportation beyond 10 km</b> : Transportation of teak thinned poles for the remaining distance : Beyond 10 KM		
(a)	I - a Category poles	101.45	100/KM
(b)	II - a Category poles	81.16	100/KM
(c)	III - a Category poles	54.10	100/KM
(d)	I - b Category poles	40.57	100/KM
(e)	II - b Category poles	27.05	100/KM
(f)	III - b Category poles	16.21	100/KM
(g)	Issus	6.76	100/KM

<b>50</b>	<b>Unloading</b> : Unloading of teak thinned poles from the truck		
(a)	I - a Category poles	412.71	100
(b)	II - a Category poles	313.67	100
(c)	III - a Category poles	214.62	100
(d)	I - b Category poles	181.59	100
(e)	II - b Category poles	132.06	100
(f)	III - b Category poles	66.02	100
(g)	Issus	29.71	100
<b>51</b>	<b>Stacking</b> : Stacking of teak thinned poles in depot:		
(a)	I - a Category poles	858.45	100
(b)	II - a Category poles	660.36	100
(c)	III - a Category poles	396.20	100
(d)	I - b Category poles	363.20	100

I	II	III	IV
(e)	II - b Category poles	231.12	100
(f)	III - b Category poles	140.32	100
(g)	Issus	66.02	100
	<b>Extraction of Acacia auriculiformis, Casuarina and Eucalyptus thinning poles from plantations (52 to 58)</b> (Classification as per Grading Rules for Jungle wood poles)		
<b>52</b>	<b>Felling &amp; Conversion:</b> Felling, conversion, collection and stacking of Acacia auriculiformis, Casuarina and Eucalyptus poles near the roadside:		
(a)	I - a Category poles	3,403.46	100
(b)	II - a Category poles	2,682.64	100
(c)	III - a Category poles	2,094.45	100
(d)	I - b Category poles	1,832.62	100
(e)	II - b Category poles	1,570.84	100
(f)	III - b Category poles	1,373.60	100
(g)	Issus	631.80	100
<b>53</b>	<b>Loading :</b> Loading of Acacia auriculiformis, Casuarina and Eucalyptus thinning poles into truck:		
(a)	I - a Category poles	1,857.22	100
(b)	II - a Category poles	1,361.96	100
(c)	III - a Category poles	803.96	100
(d)	I - b Category poles	742.88	100
(e)	II - b Category poles	531.57	100
(f)	III - b Category poles	272.39	100
(g)	Issus	123.82	100
<b>54</b>	<b>Transportation up to 10 km :</b> Transportation of Acacia auriculiformis, Casuarina and Eucalyptus thinning poles in plain & moderate areas for the first 10 KM distance: Flat rate:		
(a)	I - a Category poles	2,750.03	100
(b)	II - a Category poles	1,964.28	100
(c)	III - a Category poles	1,506.01	100
(d)	I - b Category poles	1,178.52	100
(e)	II - b Category poles	785.76	100
(f)	III - b Category poles	392.88	100
(g)	Issus	196.38	100
<b>55</b>	<b>Transportation in Steep Areas up to 10 km:</b> Transportation of Acacia auriculiformis, Casuarina and Eucalyptus thinning poles in steep & slopy areas for the first 10 KM distance: Flat rate :		
(a)	I - a Category poles	3,421.22	100
(b)	II - a Category poles	2,443.67	100
(c)	III - a Category poles	1,873.42	100
(d)	I - b Category poles	1,466.26	100
(e)	II - b Category poles	977.42	100
(f)	III - b Category poles	488.71	100
(g)	Issus	241.16	100
<b>56</b>	<b>Transportation beyond 10 km:</b> Transportation of Acacia auriculiformis, Casuarina and Eucalyptus thinning poles for the remaining distance beyond 10 KM		
(a)	I - a Category poles	94.68	100/KM

I	II	III	IV
(b)	II - a Category poles	67.62	100/KM
(c)	III - a Category poles	47.34	100/KM
(d)	I - b Category poles	33.81	100/KM
(e)	II - b Category poles	22.97	100/KM
(f)	III - b Category poles	13.52	100/KM
(g)	Issus	6.76	100/KM
<b>57</b>	<b>Unloading:</b> Unloading of Acacia auriculiformis, Casuarina and Eucalyptus thinning poles from the truck :		
(a)	I - a Category poles	660.36	100
(b)	II - a Category poles	528.29	100
(c)	III - a Category poles	379.71	100
(d)	I - b Category poles	330.17	100
(e)	II - b Category poles	231.12	100
(f)	III - b Category poles	115.55	100
(g)	Issus	52.83	100
<b>58</b>	<b>Stacking:</b> Stacking of Acacia auriculiformis poles in the Depot:		
(a)	I - a Category poles	1,320.70	100
(b)	II - a Category poles	1,073.06	100
(c)	III - a Category poles	825.44	100
(d)	I - b Category poles	660.36	100
(e)	II - b Category poles	379.70	100
(f)	III - b Category poles	198.11	100
(g)	Issus	90.79	100
	<b>Extraction of Jungle-wood thinning Poles (59 to 65)</b>		
<b>59</b>	<b>Felling &amp; Conversion :</b> Felling, conversion, collection of jungle wood poles & stacking near the motorable roadside:		
(a)	I - a Category poles	4,537.96	100
(b)	II - a Category poles	3,578.01	100
(c)	III - a Category poles	2,792.57	100
(d)	I - b Category poles	2,443.51	100
(e)	II - b Category poles	2,094.45	100
(f)	III - b Category poles	1,832.62	100
<b>60</b>	<b>Loading :</b> Loading of Jungle-wood poles into truck:		
(a)	I - a Category poles	2,476.32	100
(b)	II - a Category poles	1,815.96	100
(c)	III - a Category poles	1,073.06	100
(d)	I - b Category poles	990.53	100
(e)	II - b Category poles	709.88	100
(f)	III - b Category poles	363.20	100
<b>61</b>	<b>Transportation :</b> Transportation of Jungle-wood poles in plain & moderate areas for the first 10 KM distance: Flat rate:		
(a)	I - a Category poles	2,750.03	100
(b)	II - a Category poles	1,964.28	100
(c)	III - a Category poles	1,505.93	100

I	II	III	IV
(d)	I - b Category poles	1,178.63	100
(e)	II - b Category poles	785.76	100
(f)	III - b Category poles	392.88	100
<b>62</b>	<b>Transportation in Steep Areas</b> : Transportation of Jungle-wood poles in steep & slopy areas for the first 10 KM distance: Flat rate:		
(a)	I - a Category poles	3,421.22	100
(b)	II - a Category poles	2,443.67	100
(c)	III - a Category poles	1,873.42	100
(d)	I - b Category poles	1,466.26	100
(e)	II - b Category poles	977.42	100
(f)	III - b Category poles	488.71	100
<b>63</b>	<b>Transportation beyond 10 km</b> : Transportation of Jungle-wood poles for the remaining distance: beyond 10 KM		
(a)	I - a Category poles	162.31	100/KM
(b)	II - a Category poles	108.21	100/KM
(c)	III - a Category poles	67.62	100/KM
(d)	I - b Category poles	60.86	100/KM
(e)	II - b Category poles	43.26	100/KM
(f)	III - b Category poles	27.05	100/KM
<b>64</b>	<b>Unloading</b> : Unloading of Jungle-wood poles from the truck:		
(a)	I - a Category poles	660.36	100
(b)	II - a Category poles	528.29	100
(c)	III - a Category poles	379.71	100
(d)	I - b Category poles	330.17	100
(e)	II - b Category poles	231.13	100
(f)	III - b Category poles	115.55	100
<b>65</b>	<b>Stacking</b> : Stacking of Jungle-wood poles in the Depot:		
(a)	I - a Category poles	1,320.70	100
(b)	II - a Category poles	1,073.06	100
(c)	III - a Category poles	825.44	100
(d)	I - b Category poles	660.36	100
(e)	II - b Category poles	379.71	100
(f)	III - b Category poles	198.11	100
	Note: All poles of higher than the maximum butt-end girth specified for poles are to be considered as timber		
	<b>EXTRACTION OF TIMBER (66 to 68)</b>		
<b>66</b>	<b>Marking of trees</b> : Marking of trees in coupes and compartments and elsewhere, with bands of coal-tar / paint & chiseling the number: (cost of coal-tar / paints extra)		
(a)	In plain areas	389.07	100
(b)	In slopy areas	513.59	100

I	II	III	IV
<b>67</b>	<b>Extraction Path :</b>		
(a)	Formation of 3 m. wide new extraction path	5,291.52	KM
(b)	Maintenance of 3 m. wide existing extraction path	2,164.84	KM
<b>68</b>	<b>EXTRACTION AND DELIVERY OF TIMBER / LOGS</b>		
(a)	Felling of marked trees, cutting of main bole as well as branches and converting into logs, dressing the logs by removing knots and forks and removal of bark 30 cm. wide around the mid length of the log - complete.	281.87	cum.
(b)	Lopping branches of trees, tying wire rope to the top of the tree, felling the tree and guiding the same with the help of side ropes so as to direct the fall on land, converting into logs, dressing the logs by removing knots and forks and removal of bark 30 cm. wide around the mid length of the log complete. [Please see note below 68(p)]	1,693.00	cum.
(c)	Dressing of Rosewood logs by removing sap wood	191.98	cum.
(d)	Debarking of Kiralbogi logs soon after felling	54.45	cum.
(e)	Chiseling the numbers on the prepared timber (logs) in the forest as prescribed in the Karnataka Forest Code.	82.53	100 logs
(f)	Collection of timber and dragging to roadside in:		
	(i) Difficult areas	495.26	cum.
	(ii) Moderate areas	343.36	cum.
	(iii) Easy areas	222.85	cum.
	<u>Note:</u> If the quantity of timber extracted is less than 1.00 cubic meters per ha of logging area, 20% additional rate will be applicable.		
(g)	Collection of timber in extremely steep and extremely slopy areas and dragging to the motorable roadside with the help of 150 H.P. Winch mounted on 10 tonne capacity truck and assisted by 6 unskilled mazdoors	1,647.87	cum.
(h)	Dragging of timber through departmental elephants – tying and untying of chains to the elephant and the logs and assisting while dragging the timber by elephant	48.24	Cum.
(i)	Loading of timber into truck and tying with rope	153.55	cum.
(j)	Transport of timber up to 10 KM distance - Flat rate:		
	(i) In plain and moderate areas	248.82	cum.
	(ii) In steep & slopy areas	364.94	cum.
	(iii) In extremely steep and extremely slopy areas	548.68	Cum
	[Please see note below 68(p)]		
(k)	Transportation of timber by 4 wheel drive truck up to 10 Km. distance Flat rate	677.56	cum.
	[Please see note below 68(p)]		
(l)	Transport of timber on main road beyond 10 km and up to 50 km	8.16	cum/KM
(m)	Unloading of timber from the truck	45.88	cum
(n)	Chiseling the depot number on the logs	82.53	100 logs
(o)	Dragging of timber in the Depot		
	(i) Depots which annually handle less than 1,000 cum of timber	63.72	cum
	(ii) Depots which annually handle more than 1,000 cum of timber	107.30	cum
(p)	Stacking of timber into lots in the Depot	94.91	cum

I	II	III	IV
	Note: Item No.68 (b), 68 (g), 68(j)(iii) 68(k) 69 (d) and 69(g) are to be allowed only for extraction of Teak, Rosewood and Hardwood species from extremely steep, extremely slope and inaccessible areas after personal inspection of the spot by the Deputy Conservator of Forests and furnishing necessary certificate regarding personal inspection and justifying the rate with a sketch of the area and approval of the Conservator of Forests after personal inspection.		
<b>69</b>	<b>EXTRACTION AND DELIVERY OF FIREWOOD</b>	Stacked cum	
(a)	(i) Preparation of firewood and stacking	174.54	cum
	(ii) Preparation and stacking of RK billets	192.00	cum
(b)	Collection of prepared firewood/RK billets and carrying it to the motorable roadside on head-load and loading into truck in:		
	(i) Easy & moderate areas	57.78	cum
	(ii) Steep & slopy areas	82.53	cum
(c)	Loading of firewood/RK billets into truck (excluding collection)	24.76	cum
(d)	Collection of prepared firewood/RK billets from extremely steep, extremely slope and inaccessible areas, carrying the same to the motorable roadside and loading into truck	99.05	stacked cum
	[Please see note below 68(p)]		
(e)	Separating of selected billets of Teak, Rosewood and hardwood species in case of logging areas tagged to running of firewood depots.	77.81	stacked cum
(f)	Transport of firewood/RK billets up to 10 KM distance: Flat rate:		
	(i) In easy and moderate areas	54.99	cum
	(ii) In steep and slopy areas	78.19	cum
(g)	Transport of firewood/RK billets by 4-wheel drive truck up to 10 KM distance: Flat rate.	131.43	cum
(h)	Transport of firewood/RK billets beyond 10 Km distance		
	(i) From 11 to 30 KM distance	4.42	cum/KM
	(ii) From 31 to 50 KM distance	4.05	cum/KM
	(iii) From 51 to 80 KM distance	3.41	cum/KM
	(iv) From 81 KM and above	2.33	cum/KM
(i)	Unloading of firewood/RK billets from the truck	19.81	cum
(j)	Stacking of firewood/RK billets in the Depot	23.11	cum
(k)	Felling of Eucalyptus / Acacia auriculiformis / Casuarina trees in plantations and converting them in to 1 Mtr. long firewood billets, carting to roadside and stacking	122.17	stacked cum.
(l)	Felling of trees and preparation of billets of 4'-5' length including debarking and stacking for supply of pulpwood to paper and rayon industries:		
	(i) In respect of thinned Acacia-auriculiformis Plantations-	212.84	stacked cum
	(ii) In respect of clear felled Acacia-auriculiformis Plantations-	159.63	stacked cum
<b>70</b>	<b>Extraction of green Dowga Bamboo for supply to Medars and Others:</b>		

I	II	III	IV
	Cutting at ground level and preparation of green dowga bamboo pieces from clumps having not less than 25 culms in each clump in an inverted "V" shape on the up-hill side of the clump and stacking them near motorable road side. (The extraction should be done in such a way as to result in decongestion):		
	(i) For dowga bamboo having above 18' length	1,320.70	100
	(ii) For dowga bamboo having 12' - 18' length	990.53	100
(b)	Loading of dowga bamboos into truck in forest area and unloading the same in Depot:		
	(i) For dowga bamboos of above 18 feet length	132.06	100
	(ii) For dowga bamboos of 12 to 18 feet length	99.06	100
(c)	Loading of dowga bamboos into truck:		
	(i) For above 18 feet length	90.79	100
	(ii) For 12 to 18 feet length	69.34	100
(d)	Transportation of dowga bamboos from forest area to Depot:		
	<u>(i) For above 18 feet length</u>		
	a. Up to 15 km distance: Flat rate	270.51	100
	b. For remaining distance: beyond 15km distance: Flat rate	40.57	100
	<u>(ii) For 12 to 18 feet length</u>		
	a. Up to 15 KM distance: Flat rate	229.93	100
	b. For remaining distance: beyond 15km distance: Flat rate	33.81	100
(e)	Unloading of dowga bamboos from the truck:		
	(i) For above 18 feet length	41.27	100
	(ii) For 12 to 18 feet length	29.71	100
(f)	Stacking of dowga bamboos in the Depot:		
	(i) For dowga bamboos of above 18 feet length	82.53	100
	(ii) For dowga bamboos of 12 to 18 feet length	66.04	100

<b>71 Extraction of Medri Bamboo for supply to Medars:</b>			
(a)	Cutting at ground level and preparation of green medri bamboo pieces from clumps having not less than 25 culms in each clump in an inverted "V" shape on the up-hill side of the clump in steep slopes and stacking them near motorable roadside. (The extraction should be done in such a way as to result in decongestion)		
	(i) For medri bamboo having above 18' length	660.36	100
	(ii) For medri bamboo having 15' - 18' length	577.80	100
(b)	Cutting at ground level and preparation of green medri bamboo pieces from clumps having not less than 25 culms in each clump in an inverted "V" shape on the up-hill side of the clump in plain areas and stacking them near motorable roadside. (The extraction should be done in such a way as to result in decongestion)		
	(i) For medri bamboo having above 18' length	453.99	100
	(ii) For medri bamboo having 15' - 18' length	412.71	100

I	II	III	IV
(c)	Loading of Medri bamboos into the truck in forest area and unloading the same in Depot	33.03	100
(d)	Loading of Medri bamboos into the truck in forest area	23.11	100
(e)	Transportation of Medri bamboos from forest area to Depot:		
	(i) Up to 15 KM distance: Flat rate	124.59	100
	(ii) For the remaining distance: beyond 15 KM distance (Flat rate)	17.70	100
(f)	Unloading of Medri bamboos from the truck	9.90	100
(g)	Stacking of 20' Medri bamboos in the Depot	9.90	100
<b>72</b>	<b>Extraction of Same / Marihal bamboo (Oxytenanthera stocksii) from plantations:</b>		
(a)	Extraction of fully developed Same alias Marihal bamboo pieces of 12 to 15 feet length from plantations	280.64	100
(b)	Cutting & preparation of 8 ft. length stakes of Medri and Marihal bamboo pieces from the clumps, while decongestion, bundling and stacking near the motorable road side (lead up to 200 M)	165.09	100
<b>73</b>	<b>Extraction of Dead and Dried Bamboos (all species) of 2 M, length for supply to Paper Mills:</b>		
(a)	Removal of congestion in the clumps by cutting of dead and broken bamboos and conversion into 2 M length pieces, carrying and stacking the same near motorable road side lead upto 200 M in:		
	(i) Plain areas	222.85	cum.
	(ii) Steep and slopy areas	280.64	cum.
(b)	Loading of dead & dried bamboos of 2 M length into truck in forest area and unloading and stacking in the Depot.	19.81	cum.
(c)	Transportation of 2 M length dead and dried bamboos up to 10 KM distance: Flat rate		
	(i) In easy & moderate areas	19.64	stacked
	(ii) In steep and slopy areas	26.07	stacked
(d)	Transportation of 2 M length dead and dried bamboos beyond 10KM distance:		
	(i) From 11 to 20 KM distance	1.36	cum/KM
	(ii) From 21 to 30 KM distance	1.00	cum/KM
	(iii) From 31 to 40 KM distance	0.67	cum/KM
	(iv) From 41 KM and above	0.54	cum/KM
(e)	Cutting and preparation of 'marihal' bamboo pieces of 2 m. length from clumps for pulp purpose and stacking near the motorable roadside (lead up to 200 m.)	156.83	cum.
<b>74</b>	<b>Extraction of Canes</b>		
(a)	Extraction of canes i.e. cutting and cleaning, transportation to the nearest work site, washing, dragging end cutting, polishing and bundling of:		
	(i) Super size canes of 12 feet length and above 15 cm. girth	1,155.62	100
	(ii) Big Canes	825.44	100
	(iii) Small Canes	247.61	100
(b)	To bring the canes of 12' length on head load over a distance of 5 Km in steep slops of interior forest areas from cutting site to stacking spot near to motorable road:		
	(i) Super size canes of 12 feet length and above 15 cm. girth	311.26	100

I	II	III	IV
	(ii) Big Canes	217.88	100
	(iii) Small Canes	54.47	100
<b>75</b>	<b>Extraction of Sandalwood Trees (including stumps)</b>		
(a)	Enumeration and marking of Sandalwood trees or stumps, cleaning unwanted growth all round marked trees	457.57	100
(b)	Extraction of Sandalwood trees or stumps by excavation round the base, uprooting the Sandal trees / stumps and trimming		
	(i) below 20 cm girth at the base	31.49	Tree / stump
	(ii) 21 cm to 40 cm girth at the base	64.31	Tree / stump
	(iii) 41 cm to 60 cm girth at the base	95.82	Tree / stump
	(iv) 61 cm to 80 cm girth at the base	128.11	Tree / stump
	(v) 81 cm to 100 cm girth at the base	192.51	Tree / stump
	(vi) above 100 cm girth at the base	256.57	Tree / stump
(c)	Collection of Sandalwood pieces from different points within 200 m. by Bullock cart, including loading, tying with ropes, transporting over a distance of 800 m. forest road, untying, unloading and stacking near the lorry path	817.40	MT
(d)	Searching out fallen material and carrying to Central Depot (within a radius of 200 m.)	879.31	MT
(e)	Loading of Sandalwood into lorry	242.68	MT
(f)	Transportation of extracted Sandalwood to the nearest safe place / local depot up to 10 Km	220.59	MT
(g)	Unloading of Sandalwood at the local depot	121.18	MT
(h)	Transportation of Sandalwood to Government Sandalwood Depot:		
	(i) Up to 30 Km distance	219.11	MT
	(ii) Above 30 Km for every additional 1 Km.	10.27	MT
(i)	Weighing of sandalwood and stacking	143.30	MT
(j)	Putting tar numbers and re-measuring in the depot	228.77	MT

<b>76</b>	<b>Conversion of Sandalwood</b>		
(a)	Conversion of undressed sandalwood trees into roots, rootlets, billets and chilta classes	15,149.78	MT of heartwood & Chilta
(b)	Weighing of sandalwood billets, chilta, white chips and sawdust including transport from work site to storing depot	228.77	MT
(c)	Filling Sandalwood chilta in gunny bags	114.24	MT
(d)	Preparation of sandalwood Milva Chilta and Bosala Bukni from sapwood	3,595.46	MT
(e)	Loading of Sandalwood billets into lorry	242.68	MT
(f)	Loading of Sandalwood Chilta class and white chips to lorry	363.20	MT
<b>IV</b>	<b>TIMBER DEPOT WORKS (77 to 79)</b>		

I	II	III	IV
77	<u>Separating out selected billets:</u> Separating out solid and good firewood billets in the depot which are fit for sawing and likely to fetch much better rates (than normal firewood) in auction sale and stacking them as separate lots called "selected billet lots"	82.53	cum
78	<u>Turning, re-measuring &amp; chiseling:</u> Turning of logs, re-measuring them and chiseling depot number on the cut surface of the logs by applying paint.	3.30	log
79	<u>Clearance of vegetative growth:</u> Clearance of heavy growth of shrubs & thorny bushes and over growth and sweeping the resultant material away from the logs stacked in the Timber Depots.	778.16	Ha
<b>V</b>	<b>FIRE PROTECTION WORKS (80 to 85)</b>		
<b>80</b>	<b>Fire Protection in Timber Depots:</b>		
(a)	First weeding work i.e., clearance of undergrowth, removal of undergrowth and loose timber barks away from the lots, sweeping, heaping & burning the debris & leaves in the depot area	544.71	Ha
(b)	Second sweeping and burning	466.90	Ha
(c)	Third sweeping and burning	404.64	Ha
<b>81</b>	<b>Fire Protection in Forest areas:</b>		
(a)	<b>New Fire Lines:</b> Clearing and formation of new fire lines to a width of 3 m., heaping and burning:		
	(i) In areas having thick under growth	1,400.70	Km.
	(ii) In areas having thin/sparse growth	1,089.44	Km.
(b)	<b>Maintenance of Fire Line:</b> Cleaning existing fire lines and fire tracing to a width of 3 m. heaping and burning		
	(i) In areas having thick under growth	700.33	Km.
	(ii) In areas having thin/sparse growth	544.71	Km.
<b>82</b>	<b>Fire Protection work in Plantations: New Fire Lines:</b> Cutting of all existing weed growth to a width of 3 m. heaping, burning and re-burning in younger plantations	653.66	Km, each side
<b>83</b>	<b>Maintenance of Fire Line along Roadside, Plantation, Block and Compartment Boundaries:</b>		
(a)	Cleaning existing fire lines and fire tracing 3 M wide.	389.07	Km, each side
(b)	Re-sweeping and re-burning the above fire line.	54.47	Km, each side
<b>84</b>	<b>Clearance of Fire Lines and View Lines in National Parks and Wildlife Sanctuaries</b>		
(a)	<b>New Fire lines:</b> Cutting and clearing of original jungle growth including grass to a width of 10 meters and removing debris to a place and formation of new view lines or new fire lines including burning	4,668.99	Km
(b)	<b>Maintenance of Fire Lines:</b> Re-cutting and re-clearing weed growth including grass to a width of 10 meters for maintenance of fire lines including burning:		
	(i) In areas with thick growth	2,178.85	Km
	(ii) In areas with thin growth	1,478.51	Km
(c)	<b>Maintenance of View Lines:</b> Clearing the weed growth including grass to a width of 30 meters on the road side and stacking the cut materials as directed in eco-tourism areas	3,291.64	Km
<b>85</b>	<b>Formation and Maintenance of "D" lines</b>		

I	II	III	IV
(a)	Clearing and formation of new "D" lines to a width of 6 m and then heaping and burning all along the lines in evergreen and semi-evergreen forest areas	1,634.13	Km.
(b)	Clearing and formation of new "D" lines to a width of 4 m and then heaping and burning along the lines in deciduous forest areas	1,027.16	Km.
(c)	Re-clearing of "D" line, heaping and burning all along the line		
	(i) 6 m width in evergreen and semi-evergreen forest areas	210.08	Km.
	(ii) 4 m width in deciduous forest areas	140.08	km
<b>VI</b>	<b>OTHER PROTECTION WORKS (86 to 98)</b>		
<b>86</b>	<b>Barbed Wire Fencing (4 strands) with wooden fence posts</b>		
(a)	Preparation of fence posts, duly fashioned conical at the top, debarked and tar coated complete; 2 m length and 38 cm Girth (Wooden post material should be obtained from dead timber material already available in forest areas or by singling out of forked poles of appropriate size and not by cutting live tree)	9.33	post
(b)	Transport of fence posts up to 10 km distance including loading & unloading charges – private truck	4.33	post
(c)	Transportation of fence posts over longer distance including loading and unloading charges (total transportation cost) – private truck	5.79	post
(d)	Loading of fence posts in to Govt. Truck and unloading the same in the field	1.10	post
(e)	Fixing the fence posts after digging pits of 30 cm x 30 cm x 40 cm depth and consolidation, ensuring firm fixture	15.56	post
(f)	Unrolling and fixing barbed wire with 'U' nails in four rows, ensuring proper fixture	12.45	post
	Note: For more or less than 4 stands, the rates will be applicable on a pro-rata basis		
<b>87</b>	<b>Barbed Wire Fencing (4 Strands) with stone pillars</b>		
(a)	Excavation of pits of size 0.30 x 0.30 x 0.50 m. depth to accommodate the pillars	2.48	pit
(b)	Carrying the stone pillars from unloading point to the pits and placing them upright in the pits	15.56	post
(c)	Collection of available stones filling the soil and stones, ramming with crow bar & fixing	12.45	post
(d)	Unrolling the barbed wire, drawing the barbed wire, looping around the alternate pillar, fastening binding wire to the remaining pillars and fixing the barbed wire (including binding wire cost)	5.44	pillar
<b>88</b>	<b>Pulling out of barbed wire fencing with wooden posts</b>		
(a)	Removing 'U' nails from wooden posts	0.39	post
(b)	Digging round the base, pulling out of fence posts and stacking them near roadside	3.27	post
(c)	Pulling out the barbed wire after removing the binding wire, rolling up the barbed wire into bundles	0.77	post
(d)	Loading fence posts into the truck	0.63	post
(e)	Unloading fence posts from truck	0.39	post
<b>89</b>	<b>Pulling out barbed wire fencing and stone pillars</b>		

I	II	III	IV
(a)	Digging round the base of stone pillars, pulling them out and carrying and stacking on the roadside	23.35	post
(b)	Loading of stone pillars into truck	9.33	post
(c)	Unloading of stone pillars from truck	6.21	post
90	<b>Brushwood fencing:</b> Brushwood fencing with thorns and jungle-wood posts at every 2 m. to a height of 1.5 m. including collection of material.	15.56	Rmtr.
91	<b>Four-sided wooden-frame Tree-guards with chicken-wire mesh</b>		
(a)	Fabrication of tree guards after cutting, collecting, debarking and transportation of 4 poles of 2.5 m. length and 12 batons of 40 cms length, treating with creosote oil completely from bottom to top, fixing side batons and chicken wire mesh of 28 gauge to a height of 2m. from the top of the poles (including the cost of chicken wire mesh and creosote oil) Transportation of the tree guards and fixing the tree guards firmly over the seedlings planted in towns/cities – complete. (Poles sourced from departmental plantations)	217.88	for each Tree guard
(b)	Fabrication of tree guards of 4 poles of 2.5 m. length and 12 batons of 40 cms length, treating with creosote oil completely from bottom to top, fixing side batons and chicken wire mesh of 28 gauge to a height of 2m. from the top of the poles (including the cost of chicken wire mesh and creosote oil) Transportation of the tree guards and fixing the tree guards firmly over the seedlings planted in towns/cities – complete. (Including the cost of purchase and delivery of poles and batons)	311.26	for each Tree guard
92	<b>Bamboo Tree-guards:</b> Fabrication of bamboo tree guards of size horizontal 36" length 18 bamboo strips of 1" wide spacing 1" strip to strip put 4 holes to each strip of 7' length and knit them in the form of mat by twisting galvanized steel wire of 16 gauge of Tata make, leaving 6" wire at both the ends free for tying purposes, immersing the tree guard in 5% copper-chrome-arsenic compound solution for 7 days, drying, stacking complete (inclusive of cost of steel wire, chemicals for treatment and exclusive of cost of bamboo)	101.15	tree guard
93	<b>Tree-guard with triangular frame &amp; PJ:</b> Providing and fixing stakes of length 2.2 m. with 6 to 8 cm diameter in crow-bar holes duly applying coal-tar to the bottom of the stakes, one for the support of the plant and 3 at 45 cm. apart as to form equilateral triangle around the plant, firmly fixing by ramming the soil around the stakes, cutting and dragging P.J. thorns over a distance of 300 m. Twining horizontally in 3 bands, 30 cm. from the ground and 75 cm. each to the top vertical netting of P.J. thorns / Kalli closely three sides of 45 cm each finally horizontal twining of P.J. thorns / Kalli at 10 cm. apart to the height 1.5 m. complete (including cost of stakes and coal-tar)	45.75	plant
94	<b>Cattle-proof Trenching</b>		
(a)	Manual excavation of cattle proof trench of size top width 1.5 M. bottom 1.0 M. and vertical depth 1.0 M. with an initial lead upto 2 M. and depositing the excavated soil uniformly over the inner side of the CPT and forming conical mound of height 1.0 M.,		
	(i) Ordinary Soil	56.03	cum
	(ii) Hard Soil	65.37	cum

I	II	III	IV
(b)	Sowing of P.J. Seeds / Acacia nilotica or other thorny species on the mounds of cattle proof trench	243.82	1,000 running meters
(c)	Preparation of Duranta / Glyricidia cuttings of 3' length, conveyance on head-load up to motorable roadside, loading into truck, unloading from the truck, conveyance by head-load up to planting site and planting on cattle proof trench mound-complete.	960.88	1,000 cuttings
(d)	Transportation of Duranta / Glyricidia cuttings of 3' length (ceiling rate)	135.26	1,000 cuttings
(e)	<b>Repairs to cattle-proof trenches:</b> Digging out the fallen earth and placing it on the mound and reshaping the mound with the placed earth / silt (rate not to exceed 10% of the CPT formation cost)	38.91	cum of earth lifted
95	<b>Construction of cattle-proof dry, uncoursed rubble stone masonry wall:</b> Construction of dry rubble stone masonry wall around the forest area / plantation areas including collection of boulders up to a distance of 200 m. and construction wall of dimension:	147.85	running meter
	0.75 m. top width		
	1.00 m. bottom width		
	1.25 m. height		
	Note: For collection of boulders beyond 200 mtr. distance, tender shall be invited.		
96	<b>Elephant-proof Trench using JCB / Hitachi excavators:</b>		
(a)	Excavation of elephant-proof trench of size top width 3.0 m bottom 1.0 m and vertical depth 2.0 M. with an initial lead up to 2 M. and depositing the excavated soil uniformly over the inner side of the elephant-proof trench and forming conical mound of height 1.5 m, including manually compacting the mound by deploying JCB / Hitachi excavators	50.78	cum.
(b)	Removing the rock portion if any, to complete the elephant proof trench of prescribed dimension, after excavation in	PWD SSR to be adopted	
	(i) Ordinary rock without blasting		
	(ii) Hard rock with blasting		
97	<b>Repairs to Elephant-proof Trenches:</b> Repair of damaged elephant proof trenches of size 3.00 m top width, 1.00 m bottom width and vertical depth of 2 m, manually by excavating the filled up earth / silt and dumping on the mound along with formation of the mound, including removal of weed growth inside EPT and on the mound	49.81	cum
98	<b>Elephant-proof Uncoursed Dry Rubble Stone Wall:</b> Construction of elephant-proof dry rubble stone wall of size 2 m bottom width, 1 m top width and 2.25 m height after clearing jungle growth and leveling the ground to 2 m width all along the wall to be constructed and collecting locally available field stones and loose boulders of above 30 cm size by engaging manual labour and transportation on head load to a distance / lead upto 0.50 Km and dumping them at convenient places of the construction point	518.89	cum
VII	<b>SURVEY AND DEMARCATION WORKS (99 and 100)</b>		
99	<b>Laying of Coupes &amp; Compartments:</b> Laying out coupes or compartments by clearing rank growth to a width of 2 m. in areas with :		
	(a) Thick under growth	1,621.69	KM
	(b) Sparse under growth	648.99	Km

I	II	III	IV
100	<b>Survey &amp; Demarcation of Planting Areas</b> : Survey and demarcation of plantation boundary lines after clearing the rank growth to a width of 2 m. in the areas		
	(a) With thick under growth	846.63	KM
	(b) With sparse under growth	334.59	KM
VIII	<b>WORKING PLAN WING RELATED WORKS (101 and 102)</b>		
101	<b>Survey and Demarcation of Forest Boundaries / delineation of Block / Compartment boundaries and laying of sample plots</b>		
(a)	Survey and demarcation of Forest / block / compartment boundary including clearing of jungle growth to a width of 2 meters by engaging a gang of following persons		
	Particulars	Thin growth	Thick growth
	Head mazdoor	1	1
	Chain men	2	2
	Alignment coolies	2	2
	Peg mazdoor	1	1
	Jungle clearing	5	14
	Camp servant	1	1
	Total	12	21
	Work done per day = 40 chains i.e. 20 M x 40 = 0.8 Km.		
	(i) In areas with thin undergrowth 2 Mtr. wide clearance - Mazdoor requirement for 1 Km = $12 / 0.8 = 15$	1,977.31	Km
	(ii) In areas with thick undergrowth 3 Mtr. wide clearance - Mazdoor requirement for 1 Km = $21 / 0.8 = 26.25$	3,460.34	Km
(b)	Engaging qualified Surveyor by paying <b>Rs.147.79</b> per day @ one manday for 0.80 Km of work	184.74	km
(c)	Engaging qualified Draughtsman by paying <b>Rs.147.79</b> per day @ one manday for 0.80 Km of work	184.74	km
(d)	Fixing the reference point / bench mark on the ground with reference to the map and surveying the tie lines for measuring the accuracy of the survey work done @ 10% of the rate provided for item (a):		
	(i) In areas with thin undergrowth	197.72	Km
	(ii) In areas with thick undergrowth	263.64	Km
(e)	Formation of cairns of specified dimension using loose stones for demarcation of boundary	Tender / Rate quotation	
(f)	Purchase of stones of specified dimension and inscriptions	Tender /Rate quotation	
(g)	Transportation, loading, unloading, conveying to the spot and fixing of stones of specified dimension	Tender / Rate quotation	
(h)	Purchase of Block and Compartment Plates of specified material and dimension	Tender / Rate quotation	
(i)	Marking of boundary trees, preparing the list of such trees and fixing of Plates on compartment/block	Tender / Rate quotation	
(j)	Construction of labour shed using locally available forest material – 10 Unskilled heavy mazdoors	1,317.90	shed



I	II	III	IV
(c)	Payment of royalty to the owner of plus tree	133.97	100
(d)	Transportation of scion from plus tree to nursery	43.26	100
(e)	Preparation of scion	42.03	100
(f)	Wedge grafting	203.06	100
(g)	Cost of fungicides	3.83	100
(h)	Cost of polythene strips for tying	11.47	100
(i)	Cost of polythene tube and labeling tag	156.94	100
(j)	Shifting of grafts into poly-house	80.89	100
(k)	Watering to the grafts into poly-house	227.22	100
(l)	Removing the polythene tube	34.23	100
(m)	Shifting of grafts to the shade net	80.89	100
(n)	Watering the grafts inside the shade net	76.26	100
(o)	Shifting the grafts from shade net to open area	80.89	100
(p)	Untying the plastic strips and tagging each seedlings	60.69	100
107	Laying out block plots, sub-plots etc. as per standard design for various experiments	47.86	100 Mtr
108	<b>Removal of Eucalyptus stumps for Research plots:</b> Digging and removal of Eucalyptus stumps including collection and carrying the stumps nearer to the lorry path and stacking for stumps having girth:		
	(a)	0.25 Mtr. to 0.60 Mtr.	43.58 each
	(b)	0.61 Mtr. to 1.20 Mtr.	52.91 each
	(c)	1.21 Mtr. to 1.80 Mtr.	77.81 each
	(d)	1.80 Mtr. to 2.40 Mtr.	155.64 each
109	<b>Preparation of Vegetative Cuttings and raising them in root trainers</b>		
(a)	Purchase of IBA (Root hormone) at the rate of 0.5 gram per 1000 cuttings	On RQ	
(b)	Carrying the filled polythene bags of size 4' x 6' and properly arranging in the mist chamber	65.12	1,000
(c)	Cutting and collection of selected clonal cutting, tying identity tags and bundling	113.66	1,000
(d)	Transportation of collected clonal material to the nursery site by private vehicle	108.21	1,000
(e)	Removing side shoots, trimming leaves to half size and making plantable cuttings	199.83	1,000
(f)	Soaking the prepared cuttings in fungicides and root hormones and planting them in root trainers	173.67	1,000
(g)	Watering the bottom of the mist chamber for maintaining humidity and water level of the mist chamber for 45 days	3.49	1,000
(h)	Shifting of rooted polythene bagged seedlings from mist chambers and rearranging in the partial shade	165.09	1,000
(i)	Arranging separately the unrooted polythene bags left over after shifting of rooted seedlings	65.12	1,000
(j)	Preparing and applying liquid fertilizer to successful cuttings – twice	43.42	1,000
(k)	Providing overhead shade pandal	Item No. 20(e) above	

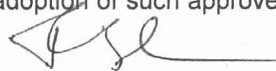
I	II	III	IV
(l)	Watering to the seedlings in the root trainers:		
	(a) For the first 2 months (60 days)	4.34	1,000/day
	(b) After 2 months (60 days)	2.90	1,000/day
(m)	Removing weeds from root trainer seedlings once in a month	12.37	1,000
110	<b>Plantation Board:</b> Providing and fixing RCC plantation boards of 2' x 1 ' size duly inscribing about experimental sample plot	833.13	board Ceiling rate
<b>X</b>	<b>TRAINING INSTITUTIONS (111 and 112)</b>		
111	Providing boarding facilities to the trainees – (Ceiling rate)		
	(i) Breakfast, lunch, dinner and tea with biscuit four times -	191.39	head / day
	(ii) Lunch and tea twice with biscuit – for one-day course	95.70	head / day
112	Providing lecture notes, files, etc (including typing, xerox copying) to the trainees for one week course	153.12	trainee / course
<b>XI</b>	<b>OTHER WORKS (113 to 119)</b>		
113	<b>Vegetative (Khus grass) Bunds:</b> Planting Khus grass or local available suitable grass on bunds with the following items of works (including transportation)		
(a)	Marking the contour lines on the area	6.21	100 Rmtr.
(b)	Formation of furrow line	32.52	100 Rmtr.
(c)	Transportation of Khus grass to planting site after uprooting the same from nursery beds	33.24	1,000 slips
(d)	Planting of Khus grass slips in plantation area at suitable spacing all along the contour of the bed and gullies	198.11	1,000 slips
114	<b>Grafting:</b> Grafting of Cashew seedlings	KCDC rates to be adopted	
115	<b>Roads, Bridges &amp; Buildings:</b> Roads, bridges, culverts and building works	SSR of PWD should be adopted	
116	<b>Dams &amp; Bunds:</b> B137Major water impounding structures like tanks, pick-up dams, nallah bunds, de-silting of tanks, earthen bunds, earthen embankments, formation of islands and stone pitching work.	SSR of Minor Irrigation Dept. should be adopted	

I	II	III	IV
117	<b>Soil Conservation Structures:</b> Other water harvesting structures and soil conservation measures : check dams, gully checks/boulder checks, rubble checks, vented dams, infiltration wells, rain water harvesting structures, contour bunds, brushwood dams		SSR of Watershed Development (Soil Conservation) Department should be adopted
118	<b>Water Supply &amp; Sanitary:</b> Bore wells, erection of pumps, laying of pipe lines, construction of overhead and ground level storage tanks and such other water supply and sanitary works.		SSR of Public Health Engineering Department (RDPR) should be adopted
119	<b>Gardening and Allied Activities:</b> Procurement of grafted and other fruit and flowering plants, formation of recreational garden, landscaping, etc.		SSR of Horticulture Department should be adopted

**Note:**

1. Based on the various items available in SSR, the concerned Circle Conservator, in consultation with the DCFs, shall prepare model estimates for his Circle, for various works. Any deviation from the model estimate will be required to be satisfactorily explained in the estimate. In case of project works like KSFMB, etc, such model estimates have to be got approved by the concerned Project Director, who shall limit the items of the model estimates to bring it within the provisions of the approved project, subject to the cost norms.

2. The terms and conditions of any tender and agreement for purchase of any items or carrying out of any work shall be as per the prescribed terms and conditions as given in the Karnataka Forest Code, duly updated. In the absence of such terms and conditions in the KFC, the tender inviting officer shall get the terms and conditions duly approved by the PCCF. This condition is mandatory in case of purchases / works involving large sums of money. The PCCF after due application of mind may permit adoption of such approved terms and conditions in similar cases elsewhere.



**Principal Chief Conservator of Forests  
(Head of Forest Force)**