

LOCAL AND STANDARD VOLUME TABLES FOR MAPLE (*ACER CAESIUM*) OF AZAD KASHMIR AND N.W.F.P.

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Introduction

Maple (*Acer caesium*) is a useful broad leaved tree and grows naturally along with other broad leaved trees in the conifer forests of N.W.F.P., Punjab and Azad Kashmir. Its timber is used in furniture, wood articles, carving and especially for bobbins of textile industry.

Data from some trees were collected from different localities of N.W.F.P. which were insufficient for the preparation of volume tables of the species. After supplementing the above data from Azad Kashmir the present volume tables have been prepared.

Basic Data

The volume tables are based on data collected from 233 trees ranging from 5 inches (13 cms) to 49 inches (124 cms) diameter at breast height (51 from NWFP and 182 from A. Kashmir). A graph was drawn between timber volumes and $\frac{D^2 H}{100}$ for scrutiny of data 38 abnormal trees were rejected. Finally 194 trees upto maximum dbh 43 inches (109 cm) were taken for the preparation of these volume tables.

Method and Procedure

51 trees from NWFP forests were measured as per standard procedure for measurement of sample tree (5). Volume upto 2 inch (5 cm) diameter overbark at thin end of the stem (including branches) was taken as total volume of the tree. Data on 182 trees from different localities of Azad Kashmir were measured by Forest Research Division of Azad Kashmir upto 8 inch thin end of the stem and branch wood. Total volume of timber and smallwood of different logs of a tree were calculated using Huber/Smalian formulae and were summed to get volume of timber and smallwood separately for each tree. The estimates of heights and volume (timber and smallwood separately) against dbh classes were obtained through regression equation.

Following models were used for these estimations.

- (i) Models for total height.

$$H = a + b \log D$$

$$H = a + b D + c D^2$$

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(ii) Models for timber volume.

$$V_{(tim)} = a + b \frac{D^2 H}{100}$$

$$V_{(tim)} = a + b \frac{D^2 H}{100}$$

$$V_{(tim)} = a + b D + c H$$

(iii) Model for smallwood volume.

$$V(S/W) = a + b \frac{D^2 H}{100}$$

Where H stands for total height in feet.

D stands for diameter at breast height in inches.

$V_{(tim)}$ stands for total timber volume.

$V(S/W)$ stands for total smallwood volume.

log stands for common logarithms (to the base 10).

The developed equations are given in APPENDIX I alongwith their measures of precision.

Height estimation:

Regression equations for height estimation are presented in APPENDIX I from serial No. 1 to 2. The measures of precision for both equations are not so strong due to great variation in heights of different sized trees. However, these measures i.e. correlation coefficient and SE of estimates are better in case of equation 1. i.e., $H = 8.296412 + 59.833510 \log D$.

The above equation was therefore used for the estimation of heights against dbh classes (Appendix II). Estimated values were rounded to whole numbers.

Over bark timber volume estimation

On the basis of better measures of precision, regression equation number 3 of APPENDIX I, i.e. $V_{(tim)} = 0.342872 + 0.002203 D^2 H$ was used for estimation of timber (o.b.) volume. (APPENDICES II and IV).

Smallwood estimation

Combined variable equation number 6 of APPENDIX I i.e. $V(S/W) = 4.030635 + 0.000171 D^2 H$ was used to estimate the smallwood volume against different diameter classes. Estimations are given in APPENDICES II and IV. These APPENDICES show total volume.

Conversion to Metric units

Finally selected equations for volume tables in the British units were converted to metric units. Volume tables in metric units were prepared using diameter breast height in centimetres and heights in metres. The converted equations in metric units are:

$$\begin{aligned}H &= -9.911797 + 18.237253 \log D \\V(\text{tim}) &= 0.009709 + 0.0000317 D^2 H \\V(S/W) &= 0.114135 + 0.00000246 D^2 H\end{aligned}$$

The estimations are given in Appendices III and V.

Local volume Tables

Volume tables were prepared by one inch diameter classes in the British units and two centimetre class intervals in metric units. These are produced in Appendices II and III respectively.

Standard Volume Tables

Volume tables given in Appendices IV and V were prepared by one inch/2 centimetre diameter classes and 5 feet/1.5 metres height classes in the British and metric units respectively. For example 60 feet height class includes trees having total height ranging from 58 to 62 feet in the British units. In metric units, 21 metres height class includes trees with total height from 20.26 to 21.75 metres. Figures in brackets are adjusted figures calculated proportionately on the bases of local volume table.

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APPENDIX I

MAPLES (*Acer caesium*) HEIGHT AND VOLUME EQUATIONS WITH PRECISION MEASURES

S.No.	Regression Equations	R	SE	No. of observations
1.	$H = -8.296412 + 59.833510 \log D$	0.6615	11.99	194
2.	$H = 50.153549 + 0.618466 D + 0.011259 D^2$	0.6128	12.66	194
3.	$V(\text{tim}) = 0.342872 + 0.002203 D^2 H$	0.9811	16.47	194
4.	$V(\text{tim}) = -321,043401 + 169.914867 \log \frac{D^2 H}{100}$	0.87777	40.84	194
5.	$V(\text{tim}) = -141.740377 + 8.746551 D + 0.624006 H$	0.9479	27.22	194
6.	$V(S/W) = 4.030635 + 0.000171 D^2 H$	0.7226	5.03	48 *

* Data of N.W.F.P. were utilized for the development of S/W regression equation as data on S/W were not available from Azad Kashmir.

APPENDIX - II

Local volume table of Maple (*Acer caesium*) for Azad Kashmir and N.W.F.P. (British Units).

Diameter class (o.b) (inches)	Estimated height (feet)	Estimated timber volume (o.b) (cft)	Estimated small- wood volume (o.b) (cft)	Estimated total volume (o.b) (cft)
5	34	—	(2.50)	(2.50)
6	38	—	(3.10)	(3.10)
7	42	—	4.38	4.38
8	46	(3.50)	4.53	8.03
9	49	(7.30)	4.71	12.0
10	52	11.8	4.92	16.7
11	54	14.7	5.15	19.8
12	56	18.1	5.41	23.5
13	58	21.9	5.71	27.6
14	60	26.3	6.04	32.3
15	62	31.1	6.42	37.5
16	64	36.4	6.83	43.2
17	65	41.7	7.24	48.9
18	67	48.2	7.74	55.9
19	68	54.4	8.23	62.6
20	70	62.0	8.82	70.8
21	71	69.3	9.38	78.7
22	72	77.1	9.99	87.1
23	73	85.4	10.6	96.0
24	74	94.2	11.3	106
25	75	104	12.0	116
26	76	114	12.8	127
27	77	124	13.6	138
28	78	135	14.5	150
29	79	147	15.4	162
30	80	159	16.3	175
31	81	172	17.3	189
32	82	185	18.4	203
33	83	199	19.5	219
34	83	212	20.4	232
35	84	227	21.6	249
36	85	243	22.9	266
37	86	260	24.2	284

Diameter class (o.b) (inches)	Estimated height (feet)	Estimated timber volume (o.b) (cft)	Estimated small- wood volume (o.b) (cft)	Estimated total volume (o.b) (cft)
38	86	274	25.3	299
39	87	292	26.7	319
40	88	310	28.1	338
41	88	326	29.3	355
42	89	346	30.9	377
43	89	363	32.2	395
44	90	384	33.8	418
45	91	406	35.5	442
46	91	425	37.0	462
47	92	448	38.8	487
48	92	467	40.3	507
49	93	492	42.2	534
50	93	513	43.8	557

APPENDIX III

Local volume table of Maple (*Acer caesium*) for Azad Kashmir and N.W.F.P. (Metric units)

Diameter class (o.b.) (cms)	Estimated height (ms)	Estimated timber volume (o.b.) (m ³)	Estimated small-wood volume (o.b.) (m ³)	Estimated total volume (o.b.) (m ³)
12	9.77	—	(0.0672)	(0.0672)
14	10.99	—	(0.0806)	(0.0806)
16	12.05	—	(0.1070)	(0.1070)
18	12.98	—	0.1245	0.1245
20	13.82	(0.0975)	0.1277	0.2252
22	14.57	(0.1989)	0.1315	0.3304
24	15.26	0.2883	0.1358	0.4241
26	15.89	0.3502	0.1406	0.4908
28	16.48	0.4192	0.1459	0.5651
30	17.03	0.4956	0.1518	0.6474
32	17.54	0.5791	0.1583	0.7374
34	18.02	0.6701	0.1654	0.8355
36	18.47	0.7685	0.1730	0.9415
38	18.90	0.8749	0.1813	1.056
40	19.31	0.9891	0.1901	1.179
42	19.69	1.111	0.1996	1.311
44	20.06	1.241	0.2097	1.451
46	20.41	1.379	0.2204	1.599
48	20.75	1.525	0.2317	1.757
50	21.07	1.680	0.2437	1.924
52	21.38	1.842	0.2564	2.098
54	21.68	2.014	0.2659	2.284
56	21.97	2.194	0.2836	2.478
58	22.25	2.382	0.2983	2.680
60	22.52	2.580	0.3136	2.894
62	22.78	2.786	0.3296	3.116
64	23.03	3.000	0.3462	3.346
66	23.27	3.223	0.3655	3.589
68	23.51	3.456	0.3816	3.838
70	23.74	3.697	0.4003	4.097
72	23.96	3.947	0.4197	4.367
74	24.18	4.207	0.4399	4.647
76	24.39	4.475	0.4607	4.936
78	24.59	4.752	0.4822	5.234

Diameter class (o.b.) (cms)	Estimated height (ms)	Estimated timber volume (o.b.) (m ³)	Estimated small-wood volume (o.b.) (m ³)	Estimated total volume (o.b.) (m ³)
80	24.80	5.041	0.5046	5.546
82	24.99	5.336	0.5275	5.864
84	25.18	5.642	0.5512	6.193
86	25.37	5.958	0.5757	6.534
88	25.55	6.282	0.6009	6.883
90	25.73	6.617	0.6268	7.244
92	25.90	6.959	0.6534	7.612
94	26.07	7.312	0.6808	7.993
96	26.24	7.676	0.7090	8.385
98	26.40	8.047	0.7379	8.785
100	26.56	8.429	0.7675	9.197
102	26.72	8.822	0.7980	9.620
104	26.87	9.223	0.8291	10.05
106	27.02	9.634	0.8610	10.49
108	27.17	10.06	0.8937	10.95
110	27.32	10.49	0.9273	11.42
112	27.46	10.93	0.9615	11.89
114	27.60	11.38	0.9965	12.38
116	27.74	11.84	1.032	12.87
118	27.87	12.31	1.069	13.38
120	28.01	12.80	1.110	13.91
122	28.14	13.29	1.144	14.43
124	28.27	13.79	1.183	14.97
126	28.39	14.30	1.223	15.52
128	28.52	14.82	1.264	16.08
130	28.64	15.35	1.305	16.65

APPENDIX

Standard volume table of Maple (*Acer caesium*)

Dia class (inches)	Form of volume	HEIGHTS							
		20	25	30	35	40	45	50	55 60
(VOLUMES IN									
5	Timber	—	—	—					
	smallwood	(1.47)	(1.84)	(2.21)	(2.57)				
	Total	(1.47)	(1.84)	(2.21)	(2.57)				
6	Timber	—	—	—	—				
	smallwood	(1.63)	(2.04)	(2.45)	(2.86)				
	Total	(1.63)	(2.04)	(2.45)	(2.86)				
7	Timber		—	—					
	smallwood		(2.4)	(4.28)	(4.32)	(4.37)	(4.41)		
	Total		(4.24)	(4.28)	(4.32)	(4.37)	(4.41)		
8	Timber		(1.90)	(2.28)	(2.66)	(3.04)	(3.42)	(3.80)	(4.18)
	smallwood		4.30	4.36	4.41	4.47	4.52	4.58	4.63
	Total		6.20	6.64	7.07	7.51	7.94	8.38	8.81
9	Timber			(4.47)	(5.21)	(5.96)	(6.70)	(7.45)	(8.19)
	smallwood			4.45	4.51	4.58	4.56	4.72	4.79
	Total			8.92	9.72	10.5	11.3	12.2	13.0
10	Timber				8.05	9.15	10.3	11.4	12.6
	smallwood				8.63	4.71	4.80	4.90	4.97
	Total				12.7	13.9	15.1	16.2	17.4
11	Timber				9.67	11.0	12.3	13.7	15.0
	smallwood				4.75	4.86	4.96	5.07	5.17
	Total				14.4	15.9	17.3	18.7	20.2
12	Timber				11.4	13.0	14.6	16.2	17.8
	smallwood				4.89	5.01	5.14	5.26	5.38
	Total				16.3	18.0	19.8	21.5	23.2
13	Timber				13.4	15.2	17.1	19.0	20.8
	smallwood				5.04	5.19	5.33	5.48	5.62
	Total				18.4	20.4	22.4	24.4	26.4
14	Timber					17.6	19.8	21.9	24.1
	Smallwood					5.37	5.54	5.71	5.87
	Total					23.0	25.3	27.6	30.0
15	Timber					20.2	22.7	25.1	27.6
	Smallwood					5.57	5.76	5.95	6.15
	Total					25.7	28.4	31.1	33.7

IV

for Azad Kashmir and N.W.F.P. in British units

IN FEET

65 70 75 80 85 90 95 100 105 110 115 120

CUBIC FEET)

(4.95)

4.74

9.69

(9.68)

4.93 5.00

14.6 17.8

14.7	15.8	16.9	18.0	19.1	20.2	21.3
5.14	5.23	5.31	5.40	5.48	5.57	5.65
19.8	21.0	22.2	23.4	24.5	25.7	26.9

17.7	19.0	20.3	21.7	23.0	24.3	25.7
5.38	5.48	5.58	5.69	5.79	5.89	6.00
23.0	24.5	25.9	27.3	28.8	30.2	31.7

21.0	22.5	24.1	25.7	27.3	28.9	30.5
5.63	5.75	5.88	6.00	6.12	6.25	6.37
26.6	28.3	30.0	31.7	33.4	35.1	36.8

24.5	26.4	28.3	30.1	32.0	33.8	35.7
5.91	6.05	6.20	6.34	6.49	6.63	6.78
30.4	32.5	34.5	36.5	38.5	40.5	42.5

28.4	30.6	32.7	34.9	37.0	39.2	41.4
6.21	6.34	6.54	6.71	6.88	7.05	7.21
34.6	36.9	39.3	41.6	43.9	46.2	48.6

32.6	35.0	37.5	40.0	42.5	44.9	47.4
6.53	6.72	6.92	7.11	7.30	7.49	7.69
39.1	41.8	44.4	47.1	49.8	52.4	55.1

Dia class (inches)	Form of volume	HEIGHTS								
		20	25	30	35	40	45	50	55	60
(VOLUMES IN										
16	Timber					22.9	25.7	28.5	31.4	34.2
	Smallwood					5.78	6.00	6.22	6.44	6.66
	Total					28.7	31.7	34.8	37.8	40.8
17	Timber						29.0	32.2	35.4	38.5
	Smallwood						6.25	6.50	6.74	7.00
	Total						35.2	38.7	42.1	45.5
18	Timber						32.5	36.0	39.6	43.2
	Smallwood						6.52	6.80	7.08	7.35
	Total						39.0	42.8	46.7	50.5
19	Timber						36.1	40.1	44.1	48.1
	Smallwood						6.81	7.12	7.43	7.73
	Total						42.9	47.2	51.5	55.8
20	Timber						40.0	44.4	48.8	53.2
	Smallwood						7.11	7.45	7.79	8.13
	Total						47.1	51.8	56.6	61.3
21	Timber						44.1	48.9	53.8	58.6
	Smallwood						7.42	7.80	8.18	8.55
	Total						51.5	56.6	62.0	67.2
22	Timber						48.3	53.7	59.0	64.3
	Smallwood						7.75	8.17	8.58	9.00
	Total						56.1	61.8	67.6	73.3
23	Timber						52.8	58.6	64.4	70.3
	Smallwood						8.10	8.55	9.01	9.46
	Total						60.9	67.2	73.4	79.7
24	Timber						57.4	63.8	70.1	76.5
	Smallwood						8.46	8.95	9.45	9.94
	Total						65.9	72.7	79.6	86.4
25	Timber						62.3	69.2	76.1	82.9
	Smallwood						8.84	9.37	9.91	10.4
	Total						71.1	78.6	86.0	93.4
26	Timber						67.4	74.8	82.2	89.7
	Smallwood						9.23	9.81	10.4	11.0
	Total						76.6	84.6	92.6	101
27	Timber							80.6	88.7	96.7
	Smallwood							10.3	10.9	11.5
	Total							90.9	99.6	108

IN FEET											
65	70	75	80	85	90	95	100	105	110	115	120
CUBIC FEET)											
37.0	39.8	42.6	45.5	48.3	51.1	53.9					
6.88	7.09	7.31	7.53	7.75	7.97	8.19					
43.9	46.9	49.9	53.0	56.0	59.1	62.1					
41.7	44.9	48.1	51.3	54.5	57.6	60.8					
7.24	7.49	7.74	7.98	8.23	8.48	8.72					
49.0	52.4	55.8	59.3	62.7	66.1	69.5					
46.7	50.3	53.9	57.4	61.0	64.6	68.1					
7.63	7.91	8.19	8.46	8.74	9.02	9.29					
54.4	58.2	62.1	65.9	69.7	73.6	77.4					
52.0	56.0	60.0	64.0	67.9	71.9	75.9					
8.04	8.35	8.66	8.97	9.28	9.59	9.89					
60.1	64.4	68.6	70.3	77.2	81.5	85.8					
57.6	62.0	66.4	70.8	75.2	79.6	84.1					
8.48	8.82	9.16	9.50	9.85	10.9	10.5					
66.1	70.8	75.6	80.3	85.1	89.8	94.6					
63.5	68.3	73.2	78.1	82.9	87.8	92.6					
8.93	9.31	9.69	10.1	10.4	10.8	11.2					
72.4	77.7	82.9	88.1	93.4	98.6	104					
69.6	75.0	80.3	85.6	91.0	96.3	102					
9.41	9.82	10.2	10.6	11.1	11.5	11.9					
79.10	84.8	90.15	96.12	102	108	114					
76.1	81.9	87.7	93.6	99.4	105	111					
9.91	10.4	10.8	11.3	11.7	12.2	12.6					
86.0	92.3	98.6	105	111	117	124					
82.8	89.2	95.5	102	108	115	121	127				
10.4	10.9	11.4	11.9	12.4	12.9	13.4	13.9				
93.2	100	107	114	121	127	134	141				
89.8	96.7	104	110	117	124	131	138				
10.98	11.5	12.0	12.6	13.1	13.6	14.2	14.7				
101	108	116	123	131	138	145	153				
97.1	105	112	120	127	134	142	149	157			
11.5	12.1	12.7	13.3	13.9	14.4	15.0	15.6	16.2			
109	117	125	133	141	148	157	165	173			
105	113	121	129	137	145	153	161	169			
12.1	12.8	13.4	14.0	14.6	15.2	15.9	16.5	17.1			
117	126	134	143	152	160	169	177	186			

Dia class (inches)	Form of volume	HEIGHTS								
		20	25	30	35	40	45	50	55	60
(VOLUMES IN										
28	Timber								95.3	104
	Smallwood								11.4	12.1
	Total								107	116
29	Timber								102	111
	Smallwood								11.9	12.7
	Total								114	124
30	Timber									119
	Smallwood									13.3
	Total									132
31	Timber									127
	Smallwood									13.9
	Total									141
32	Timber									136
	Smallwood									14.5
	Total									150
33	Timber									144
	Smallwood									15.2
	Total									159
34	Timber									153
	Smallwood									15.9
	Total									169
35	Timber									162
	Smallwood									16.6
	Total									179
36	Timber									
	Smallwood									
	Total									
37	Timber									
	Smallwood									
	Total									
38	Timber									
	Smallwood									
	Total									

IN FEET										120
65	70	75	80	85	90	95	100	105	110	115
CUBIC FEET)										
113	121	130	138	147	156	164	173	182		
12.7	13.4	14.1	14.8	15.4	16.1	16.8	17.4	18.1		
126	134	144	153	162	172	186	190	200		
121	130	139	149	158	167	176	186	195		
13.4	14.1	14.8	15.5	16.2	17.0	17.7	18.4	19.1		
134	144	154	164	174	184	194	204	214		
129	139	149	159	169	179	189	199	208		
14.0	14.8	15.6	16.3	17.1	17.9	18.6	19.4	20.2		
143	154	165	175	186	197	208	218	228		
138	148	159	170	180	191	201	212	223		
14.7	15.5	16.4	17.2	18.0	18.8	19.6	20.5	21.3		
153	164	175	187	198	210	221	232	244		
147	158	169	181	192	203	215	226	237		
15.4	16.3	17.2	18.0	18.9	19.8	20.7	21.5	22.4		
162	174	186	199	211	223	236	247	259		
156	168	180	192	204	216	228	240	252		
16.1	17.1	18.0	18.9	19.9	20.8	21.7	22.6	23.6		
172	185	198	211	224	237	250	263	276		
166	179	191	204	217	229	242	255	268		
16.9	17.9	18.9	19.8	20.8	21.8	22.8	23.8	24.8		
183	197	210	224	238	251	265	279	293		
176	189	203	216	230	243	257	270	284		
17.6	18.7	19.7	20.8	21.8	22.9	23.9	25.0	26.0		
194	208	223	237	252	266	281	295	310		
186	200	214	229	243	257	272	286	300	314	
18.4	19.5	20.7	21.8	22.9	24.0	25.1	26.2	27.3	28.4	
204	220	235	251	266	281	297	312	327	342	
196	211	226	242	257	272	287	302	317	332	
19.2	20.4	21.6	22.8	23.9	25.1	26.3	27.4	28.6	29.8	
216	231	248	265	281	297	313	329	346	362	
	223	239	255	271	287	303	318	334	350	
	21.3	22.5	23.8	25.0	26.2	27.5	28.7	30.0	31.2	
	244	261	279	296	313	330	347	364	381	

		HEIGHTS								
Dia class (inches)	Form of volume	20	25	30	35	40	45	50	55	60
(VOLUMES IN										
39	Timber									
	Smallwood									
	Total									
40	Timber									
	Smallwood									
	Total									
41	Timber									
	Smallwood									
	Total									
42	Timber									
	Smallwood									
	Total									
43	Timber									
	Smallwood									
	Total									
44	Timber									
	Smallwood									
	Total									
45	Timber									
	Smallwood									
	Total									
46	Timber									
	Smallwood									
	Total									
47	Timber									
	Smallwood									
	Total									
48	Timber									
	Smallwood									
	Total									
49	Timber									
	Smallwood									
	Total									
50	Timber									
	Smallwood									
	Total									

IN FEET											
65	70	75	80	85	90	95	100	105	110	115	120
CUBIC FEET											
235	252	268	285	302	319	335	352	369	386		
22.2	23.5	24.8	26.1	27.4	28.7	30.0	31.3	32.6	33.9		
257	275	293	311	329	347	365	383	402	420		
	265	282	300	318	335	352	370	388	406		
	24.5	25.9	27.3	28.7	30.0	31.4	32.8	34.1	35.5		
	289	308	327	347	365	384	403	422	441		
	278	297	315	334	352	371	389	408	426		
	25.6	27.0	28.5	29.9	31.3	32.8	34.2	35.6	37.1		
	304	324	344	364	383	404	423	444	463		
	292	311	331	350	369	389	408	428	447		
	26.6	28.2	29.7	31.2	32.7	34.2	35.7	37.2	38.7		
	319	339	361	381	402	423	444	465	486		
	306	326	347	367	387	408	428	448	469		
	27.8	29.3	30.9	32.5	34.1	35.6	37.2	38.8	40.4		
	334	355	378	399	421	444	465	487	509		
	320	341	363	384	405	426	448	469	491		
	28.9	30.5	32.2	33.8	35.5	37.1	38.8	40.4	42.1		
	349	372	395	418	441	463	487	509	533		
	335	357	379	402	424	446	469	491	513		
	30.0	31.7	33.5	35.2	36.9	38.7	40.4	42.1	43.8		
	365	389	413	437	461	485	509	533	557		
		373	397	420	443	466	490	513	536	560	
		33.0	34.8	36.6	38.4	40.2	42.0	43.8	45.6	47.4	
		406	432	457	481	506	532	557	582	607	
		390	414	438	463	487	511	536	560	584	
		34.2	36.1	38.0	39.9	41.8	43.7	45.6	47.5	49.4	
		424	450	476	503	529	555	582	607	633	
		406	432	457	482	508	533	559	584	609	
		35.5	37.5	39.5	41.5	43.4	45.4	47.4	49.3	51.3	
		442	469	497	524	551	578	606	633	660	
		423	450	476	503	529	556	582	609	635	
		36.9	38.9	41.0	43.0	45.1	47.1	49.2	51.2	53.3	
		460	489	517	546	574	603	631	660	688	
		441	468	496	524	551	579	606	634	661	
		38.2	40.4	42.5	44.6	46.8	48.9	51.1	53.2	55.3	
		479	508	538	569	598	628	657	687	716	

APPENDIX

Standard volume table of Maple (*Acer caesium*)

Dia class (cms)	Form of volume	HEIGHTS								
		6.0	7.5	9.0	10.5	12.0	13.5	15.0	16.5	18.0
(VOLUMES IN										
12	Timber	—	—	—	—					
	S/wood	0.1163	0.1168	0.1173	0.1179					
	Total	0.1163	0.1168	0.1173	0.1179					
14	Timber	—	—	—	—					
	S/wood	0.1170	0.1178	0.1185	0.1192					
	Total	0.1170	0.1178	0.1185	0.1192					
16	Timber	—	—	—	—					
	S/wood	0.1179	0.1189	0.1198	0.1207					
	Total	0.1179	0.1189	0.1198	0.1207					
18	Timber		—	—	—					
	S/wood		0.1201	0.1213	0.1225	0.1237	0.1249			
	Total		0.1201	0.1213	0.1225	0.1237	0.1249			
20	Timber		0.1048	0.1238	0.1428	0.1619	0.1809	0.1999	0.2189	0.2379
	S/wood		0.1215	0.1230	0.1245	0.1259	0.1274	0.1289	0.1304	0.1318
	Total		0.2263	0.2468	0.2673	0.2878	0.3083	0.3288	0.3493	0.3697
22	Timber			0.1478	0.1708	0.1938	0.2168	0.2399	0.2629	0.2859
	S/wood			0.1249	0.1266	0.1284	0.1302	0.1320	0.1338	0.1356
	Total			0.2727	0.2974	0.3222	0.3270	0.3719	0.3967	0.4215
24	Timber			0.1740	0.2014	0.2288	0.2562	0.2836	0.3110	0.3384
	S/wood			0.1269	0.1290	0.1311	0.1333	0.1354	0.1375	0.1396
	Total			0.3009	0.3404	0.3599	0.3859	0.4190	0.4485	0.4780
26	Timber			0.2026	0.2347	0.2669	0.2990	0.3311	0.3633	0.3954
	S/wood			0.1291	0.1316	0.1341	0.1366	0.1391	0.1416	0.1441
	Total			0.3317	0.3663	0.4010	0.3356	0.4702	0.5049	0.5395
28	Timber				0.2707	0.3079	0.3452	0.3825	0.4198	0.4571
	S/wood				0.1344	0.1373	0.1402	0.1431	0.1460	0.1489
	Total				0.4051	0.4452	0.4854	0.5256	0.5658	0.6060
30	Timber				0.3093	0.3521	0.3949	0.4377	0.4805	0.5232
	S/wood				0.1374	0.1407	0.1440	0.1473	0.1507	0.1540
	Total				0.4467	0.4928	0.5389	0.5850	0.6312	0.6772
32	Timber				0.3505	0.3992	0.4479	0.4966	0.5453	0.5940
	S/wood				0.1406	0.1444	0.1481	0.1519	0.1557	0.1595
	Total				0.4911	0.5436	0.5960	0.6485	0.7010	0.7535

- V

for Azad Kashmir and NWFP in Metric units.

IN METRES												
19.5	21.0	22.5	24.0	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	37.5
CUBIC METRES)												
0.2570												
0.1333												
0.3903												
0.3089	0.3319											
0.1374	0.1319											
0.4463	0.4710											
0.3658	0.3932											
0.1418	0.1439											
0.5076	0.5371											
0.4276	0.4597	0.4919	0.5240	0.5562	0.5883	0.6204						
0.1466	0.1491	0.1516	0.1540	0.1565	0.1590	0.1615						
0.5742	0.6088	0.6435	0.6780	0.7127	0.7473	0.7819						
0.4943	0.5316	0.5689	0.6062	0.6435	0.6807	0.7180						
0.1517	0.1546	0.1575	0.1604	0.1633	0.1662	0.1691						
0.6460	0.6862	0.7264	0.7666	0.8068	0.8469	0.8871						
0.5660	0.6088	0.6516	0.6944	0.7372	0.7800	0.8228						
0.1573	0.1606	0.1640	0.1673	0.1706	0.1739	0.1772						
0.7233	0.7694	0.8156	0.8617	0.9078	0.9539	1.000						
0.6427	0.6914	0.7401	0.7888	0.8375	0.8862	0.9348						
0.1633	0.1670	0.1708	0.1746	0.1784	0.1821	0.1859						
0.8060	0.8584	0.9109	0.9634	1.016	1.068	1.121						

Dia class (cms)	Form of volume	HEIGHTS									
		6.0	7.5	9.0	10.5	12.0	13.5	15.0	16.5	18.0	
(VOLUMES IN											
34	Timber					0.3945	0.4495	0.5044	0.5594	0.6144	0.6693
	S/wood					0.1440	0.1483	0.1525	0.1568	0.1611	0.1653
	Total					0.5385	0.5978	0.6569	0.7162	0.7755	0.8346
36	Timber						0.5027	0.5643	0.6260	0.6876	0.7492
	S/wood						0.1524	0.1572	0.1620	0.1667	0.1715
	Total						0.6551	0.7215	0.7880	0.8543	0.9207
38	Timber						0.5590	0.6277	0.6963	0.7650	0.8337
	S/wood						0.1568	0.1621	0.1674	0.1727	0.1781
	Total						0.7158	0.7898	0.8637	0.9377	1.012
40	Timber						0.6183	0.6944	0.7705	0.8466	0.9227
	S/wood						0.1614	0.1673	0.1732	0.1791	0.1850
	Total						0.7797	0.8617	0.9437	1.026	1.108
42	Timber						0.6807	0.7646	0.8485	0.9324	1.016
	S/wood						0.1662	0.1727	0.1792	0.1857	0.1922
	Total						0.8469	0.9373	1.028	1.118	1.208
44	Timber							0.8382	0.9303	1.022	1.114
	S/wood							0.1784	0.1856	0.1927	0.1999
	Total							1.017	1.116	1.215	1.314
46	Timber							0.9152	1.016	1.117	1.217
	S/wood							0.1844	0.1922	0.2000	0.2078
	Total							1.100	1.208	1.317	1.425
48	Timber							0.9957	1.105	1.215	1.324
	S/wood							0.1907	0.1992	0.2077	0.2162
	Total							1.186	1.304	1.423	1.540
50	Timber							1.080	1.199	1.317	1.436
	S/wood							0.1972	0.2064	0.2156	0.2248
	Total							1.277	1.405	1.533	1.661
52	Timber							1.167	1.295	1.424	1.553
	S/wood							0.2039	0.2139	0.2239	0.2339
	Total							1.371	1.509	1.648	1.787
54	Timber							1.258	1.396	1.535	1.674
	S/wood							0.2110	0.2217	0.2325	0.2433
	Total							1.469	1.618	1.768	2.217
56	Timber							1.352	1.501	1.650	1.799
	S/wood							0.2183	0.2398	0.2414	0.2530
	Total							1.570	1.741	1.891	2.052

IN METRES												
19.5	21.0	22.5	24.0	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	37.5
CUBIC METRES)												
0.7243	0.7793	0.8342	0.8892	0.9442	0.9991	1.054						
0.1696	0.1739	0.1781	0.1824	0.1867	0.1909	0.1952						
0.8939	0.9532	1.012	1.072	1.131	1.190	1.249						
0.8108	0.8725	0.9341	0.9957	1.057	1.119	1.181						
0.1763	0.1811	0.1859	0.1907	0.1954	0.2002	0.2050						
0.9871	1.054	1.123	1.186	1.252	1.319	1.386						
0.9023	0.9710	1.040	1.108	1.177	1.246	1.314						
0.1834	0.1887	0.1941	1.1994	0.2047	0.2100	0.2154						
1.086	1.160	1.234	2.307	1.382	1.456	1.529						
0.9987	1.075	1.151	1.227	1.303	1.379	1.455						
0.1909	0.1968	0.2027	0.2086	0.2145	0.2204	0.2263						
1.190	1.272	1.354	1.436	1.517	1.599	1.681						
1.100	1.184	1.268	1.352	1.436	1.519	1.603						
0.1988	0.2053	0.2118	0.2183	0.2248	0.2313	0.2378						
1.299	1.389	1.480	1.570	1.661	1.750	1.841						
1.206	1.298	1.391	1.483	1.575	1.667	1.759						
0.2070	0.2141	0.2213	0.2284	0.2356	0.2427	0.2499						
1.413	1.512	1.612	1.711	1.811	1.910	2.009						
1.318	1.418	1.519	1.620	1.720	1.821	1.921						
0.2156	0.2234	0.2313	0.2319	0.2469	0.2547	0.2625						
1.534	1.641	1.750	1.859	1.967	2.076	2.184						
1.434	1.543	1.653	1.763	1.872	1.982	2.091						
0.2247	0.2332	0.2417	0.2502	0.2587	0.2672	0.2757						
1.659	1.776	1.895	2.013	2.131	2.249	2.367						
1.555	1.674	1.793	1.912	2.031	2.149	2.268						
0.2341	0.2433	0.2525	0.2716	0.2710	0.2802	0.2894						
1.789	1.917	2.046	2.174	2.302	2.429	2.557						
1.681	1.810	1.938	2.067	2.195	2.324	2.453						
0.2438	0.2538	0.2638	0.2738	0.2838	0.2937	0.3037						
1.925	2.064	2.202	2.341	2.479	2.618	2.757						
1.812	1.951	2.090	2.228	2.367	2.506	2.644						
0.2540	0.2648	0.2755	0.2863	0.2971	0.3078	0.3186						
2.066	2.216	2.366	2.514	2.664	2.814	2.963						
1.948	2.097	2.246	2.495	2.545	2.694	2.843						
0.2646	0.2761	0.2877	0.2993	0.3109	0.3224	0.3340						
2.213	2.373	2.534	2.794	2.856	3.016	3.177						

Dia class (cms)	Form of volume	HEIGHTS								
		6.0	7.5	9.0	10.5	12.0	13.5	15.0	16.5	18.0
(VOLUMES IN										
58	Timber						1.449	1.609	1.769	1.929
	S/wood						0.2258	0.2383	0.2507	0.2631
	Total						1.675	1.847	2.020	2.192
60	Timber						1.550	1.722	1.893	2.064
	S/wood						0.2337	0.2470	0.2603	0.2735
	Total						1.784	1.969	2.153	2.338
62	Timber						1.655	1.838	2.020	2.203
	S/wood						0.2418	0.2560	0.2702	0.2843
	Total						1.897	2.094	2.290	2.487
64	Timber						1.763	1.957	2.152	2.347
	S/wood						0.2502	0.2653	0.2804	0.2955
	Total						2.013	2.222	2.432	2.643
66	Timber							2.081	2.288	2.495
	S/wood							0.2749	0.2909	0.3070
	Total							2.356	2.579	2.802
68	Timber							2.208	4.428	2.648
	S/wood							0.2848	0.3018	0.3189
	Total							2.493	4.730	2.967
70	Timber							2.340	2.573	2.806
	S/wood							0.2949	0.3130	0.3311
	Total							2.635	2.886	3.137
72	Timber								2.721	2.968
	S/wood								0.3246	0.3437
	Total								3.046	3.312
74	Timber								2.874	3.134
	S/wood								0.3364	0.3566
	Total								3.210	3.491
76	Timber									3.305
	S/wood									0.3699
	Total									3.675
78	Timber									3.481
	S/wood									0.3835
	Total									3.865

IN METRES

19.5	21.0	22.5	24.0	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	37.5
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CUBIC METRES)

2.089	2.249	2.409	2.569	2.729	2.889	3.049						
0.2755	0.2879	0.3003	0.3127	0.3252	0.3376	0.3500						
2.365	2.537	2.709	2.882	3.054	3.227	3.399						
2.235	2.406	2.577	2.749	2.920	3.091	3.262	3.433					
0.2868	0.3001	0.3134	0.3267	0.3400	0.3532	0.3665	0.3798					
2.522	2.706	2.890	3.076	3.260	3.444	3.629	3.813					
2.386	2.569	2.751	2.934	3.117	3.300	3.483	3.665					
0.2985	0.3127	0.3269	0.3411	0.3553	0.3694	0.3836	0.3978					
2.685	2.882	3.078	3.275	3.472	3.669	3.867	4.063					
2.542	2.736	2.931	3.126	3.321	3.515	3.710	3.905					
0.3106	0.3257	0.3408	0.3560	0.3711	0.3862	0.4013	0.4164					
2.853	3.062	3.272	3.482	3.692	3.901	4.111	4.321					
2.702	2.909	3.117	3.324	3.531	3.738	3.945	4.152	4.359				
0.3231	0.3392	0.3552	0.3713	0.3874	0.4035	0.4195	0.4356	0.4517				
3.025	3.248	3.472	3.695	3.918	4.142	4.365	4.588	4.811				
2.868	3.088	3.308	3.528	3.748	3.967	4.187	4.407	4.627				
0.3359	0.3530	0.3701	0.3871	0.4042	0.4213	0.4383	0.4554	0.4724				
3.204	3.441	3.678	3.915	4.152	4.388	4.625	4.862	5.099				
3.039	3.272	3.505	3.738	3.971	4.204	4.437	4.670	4.903				
0.3492	0.3673	0.3854	0.4034	0.4215	0.4396	0.4577	0.4758	0.4938				
3.388	3.639	3.890	4.141	4.393	4.644	4.895	5.146	5.397				
3.214	3.461	3.707	3.954	4.200	4.447	4.693	4.940	5.186				
0.3628	0.3819	0.4011	0.4202	0.4393	0.4585	0.4776	0.4967	0.5158				
3.577	3.843	4.108	4.374	4.639	4.906	5.171	5.437	5.702				
3.395	3.655	3.915	4.176	4.434	4.697	4.957	5.217	5.478				
0.3768	0.3970	0.4172	0.4374	0.4576	0.4778	0.4981	0.5183	0.5385				
3.772	4.052	4.332	4.613	4.894	5.175	5.455	5.735	6.017				
3.580	3.855	4.129	4.404	4.679	4.953	5.228	5.503	5.777				
0.3912	0.4125	0.4338	0.4551	0.4765	0.4978	0.5191	0.5404	0.5617				
3.971	4.268	4.563	4.859	5.156	5.451	5.747	6.043	6.339				
3.771	4.060	4.349	4.638	4.928	5.217	5.506	5.796	6.085				
0.4060	0.4284	0.4509	0.4733	0.4958	0.5182	0.5407	0.5631	0.5856				
4.177	4.488	4.800	5.111	5.424	5.735	6.047	6.359	6.671				

Dia class (cms)	Form of volume	HEIGHTS								
		6.0	7.5	9.0	10.5	12.0	13.5	15.0	16.5	18.0
(VOLUMES IN										
80	Timber S/wood Total			040.8 0032.0 003.2	088.8 0372.0 037.2	092.8 0422.0 042.2	088.8 0412.0 041.2	009.8 0008.0 000.8	004.8 0002.0 000.2	3.662 0.397 4.060
82	Timber S/wood Total		017.8 0078.0 007.8	080.8 0308.0 030.8	100.8 0388.0 038.8	080.8 0328.0 032.8	072.8 0258.0 025.8	000.8 0000.0 000.0	000.8 0000.0 000.0	3.846 0.411 4.258
84	Timber S/wood Total		008.8 0038.0 003.8	084.8 0338.0 033.8	080.8 0338.0 033.8	072.8 0258.0 025.8	064.8 0218.0 021.8	000.8 0000.0 000.0	000.8 0000.0 000.0	4.036 0.426 4.463
86	Timber S/wood Total		008.8 0038.0 003.8	084.8 0338.0 033.8	080.8 0338.0 033.8	072.8 0258.0 025.8	064.8 0218.0 021.8	000.8 0000.0 000.0	000.8 0000.0 000.0	4.230 0.441 4.672
88	Timber S/wood Total	008.8 0038.0 003.8	021.8 0088.0 008.8	080.8 0338.0 033.8	080.8 0338.0 033.8	072.8 0258.0 025.8	064.8 0218.0 021.8	000.8 0000.0 000.0	000.8 0000.0 000.0	4.428 0.457 4.885
90	Timber S/wood Total	008.8 0038.0 003.8	008.8 0038.0 003.8	080.8 0338.0 033.8	080.8 0338.0 033.8	072.8 0258.0 025.8	064.8 0218.0 021.8	000.8 0000.0 000.0	000.8 0000.0 000.0	4.632 0.472 5.105
92	Timber S/wood Total	008.8 0038.0 003.8	008.8 0038.0 003.8	080.8 0338.0 033.8	080.8 0338.0 033.8	072.8 0258.0 025.8	064.8 0218.0 021.8	000.8 0000.0 000.0	000.8 0000.0 000.0	
94	Timber S/wood Total	008.8 0038.0 003.8	008.8 0038.0 003.8	080.8 0338.0 033.8	080.8 0338.0 033.8	072.8 0258.0 025.8	064.8 0218.0 021.8	000.8 0000.0 000.0	000.8 0000.0 000.0	
96	Timber S/wood Total	008.8 0038.0 003.8	008.8 0038.0 003.8	080.8 0338.0 033.8	080.8 0338.0 033.8	072.8 0258.0 025.8	064.8 0218.0 021.8	000.8 0000.0 000.0	000.8 0000.0 000.0	
98	Timber S/wood Total	008.8 0038.0 003.8	008.8 0038.0 003.8	080.8 0338.0 033.8	080.8 0338.0 033.8	072.8 0258.0 025.8	064.8 0218.0 021.8	000.8 0000.0 000.0	000.8 0000.0 000.0	
100	Timber S/wood Total	008.8 0038.0 003.8	008.8 0038.0 003.8	080.8 0338.0 033.8	080.8 0338.0 033.8	072.8 0258.0 025.8	064.8 0218.0 021.8	000.8 0000.0 000.0	000.8 0000.0 000.0	

IN METRES

19.5	21.0	22.5	24.0	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	37.5
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CUBIC METRES)

3.966	4.270	4.575	4.879	5.183	5.487	5.792	6.096	6.400				
0.4211	0.4448	0.4684	0.4920	0.5156	0.5392	0.5628	0.5865	0.6101				
4.387	4.715	5.043	5.371	5.699	6.026	6.355	6.683	7.010				
4.166	4.486	4.806	5.125	5.445	5.765	6.085	6.404	6.724				
0.4367	0.4615	0.4863	0.5111	0.5359	0.5607	0.5856	0.6104	0.6352				
4.603	4.948	5.292	5.636	5.981	6.326	6.671	7.014	7.359				
4.371	4.707	5.042	5.378	5.713	6.049	6.384	6.720	7.055				
0.4526	0.4786	0.5047	0.5307	0.5568	0.5828	0.6088	0.6349	0.6609				
4.824	5.186	5.547	5.909	6.270	6.632	6.993	7.355	7.716				
4.582	4.933	5.285	5.637	5.988	6.340	6.692	7.395	7.395				
0.4689	0.4962	0.5235	0.5508	0.5781	0.6054	0.6327	0.6600	0.6872				
5.051	5.429	5.809	6.188	6.566	6.945	7.325	8.055	8.082				
4.797	5.165	5.533	5.901	6.270	6.638	7.006	7.374	7.742				
0.4856	0.5142	0.5428	0.5713	0.5999	0.6285	0.6571	0.6856	0.7142				
5.283	5.679	6.076	6.472	6.870	7.267	7.663	8.060	8.456				
5.017	5.402	5.787	6.172	6.557	6.942	7.328	7.713	8.098				
0.5027	0.5326	0.5625	0.5924	0.6222	0.6521	0.6820	0.7119	0.7418				
5.520	5.935	6.350	6.764	7.179	7.594	8.010	8.425	8.840				
5.242	5.644	6.047	6.449	6.852	7.254	7.657	8.059	8.461	8.864			
0.5201	0.5514	0.5826	0.6138	0.6451	0.6763	0.7075	0.7388	0.7700	0.8012			
5.762	6.195	6.630	7.063	7.497	7.930	8.365	8.798	9.231	9.665			
5.472	5.892	6.312	6.732	7.152	7.572	7.993	8.413	8.833	9.253			
0.5380	0.5706	0.6032	0.6358	0.6684	0.7010	0.7336	0.7662	0.7988	0.8314			
6.010	6.463	6.915	7.368	7.820	8.273	8.727	9.179	9.632	10.08			
	6.145	6.583	7.021	7.459	7.898	8.336	8.774	9.212	9.651			
	0.5902	0.6242	0.6582	0.6923	0.7263	0.7603	0.7943	0.8283	0.8623			
	6.735	7.207	7.679	8.151	8.624	9.096	9.568	10.04	10.51			
	6.403	6.860	7.316	7.773	8.230	8.686	9.143	9.600	10.06	10.51		
	0.6103	0.6457	0.6812	0.7166	0.7520	0.7875	0.8229	0.8583	0.8938	0.9292		
	7.013	7.506	7.997	8.490	8.982	9.474	9.966	10.46	10.95	11.44		
	6.667	7.142	7.618	8.093	8.569	9.044	9.520	9.995	10.47	10.79		
	0.6307	0.6676	0.7045	0.7414	0.7783	0.8152	0.8521	0.8890	0.9259	0.9628		
	7.298	7.810	8.323	8.834	9.347	9.859	10.37	10.88	11.40	11.75		

Dia class (cms)	Form of volume	HEIGHTS								
		6.0	7.5	9.0	10.5	12.0	13.5	15.0	16.5	18.0
(VOLUMES IN										
102	Timber S/wood Total	1010.0 0.000 0.010	800.0 0.000 0.000	500.0 0.000 0.000	200.0 0.000 0.000	100.0 0.000 0.000	50.0 0.000 0.000	25.0 0.000 0.000	12.5 0.000 0.000	6.25 0.000 0.000
104	Timber S/wood Total	1010.0 0.000 0.010	800.0 0.000 0.000	500.0 0.000 0.000	200.0 0.000 0.000	100.0 0.000 0.000	50.0 0.000 0.000	25.0 0.000 0.000	12.5 0.000 0.000	6.25 0.000 0.000
106	Timber S/wood Total	1010.0 0.000 0.010	800.0 0.000 0.000	500.0 0.000 0.000	200.0 0.000 0.000	100.0 0.000 0.000	50.0 0.000 0.000	25.0 0.000 0.000	12.5 0.000 0.000	6.25 0.000 0.000
108	Timber S/wood Total	1010.0 0.000 0.010	800.0 0.000 0.000	500.0 0.000 0.000	200.0 0.000 0.000	100.0 0.000 0.000	50.0 0.000 0.000	25.0 0.000 0.000	12.5 0.000 0.000	6.25 0.000 0.000
110	Timber S/wood Total	1010.0 0.000 0.010	800.0 0.000 0.000	500.0 0.000 0.000	200.0 0.000 0.000	100.0 0.000 0.000	50.0 0.000 0.000	25.0 0.000 0.000	12.5 0.000 0.000	6.25 0.000 0.000
112	Timber S/wood Total	1010.0 0.000 0.010	800.0 0.000 0.000	500.0 0.000 0.000	200.0 0.000 0.000	100.0 0.000 0.000	50.0 0.000 0.000	25.0 0.000 0.000	12.5 0.000 0.000	6.25 0.000 0.000
114	Timber S/wood Total	1010.0 0.000 0.010	800.0 0.000 0.000	500.0 0.000 0.000	200.0 0.000 0.000	100.0 0.000 0.000	50.0 0.000 0.000	25.0 0.000 0.000	12.5 0.000 0.000	6.25 0.000 0.000
116	Timber S/wood Total	1010.0 0.000 0.010	800.0 0.000 0.000	500.0 0.000 0.000	200.0 0.000 0.000	100.0 0.000 0.000	50.0 0.000 0.000	25.0 0.000 0.000	12.5 0.000 0.000	6.25 0.000 0.000
118	Timber S/wood Total	1010.0 0.000 0.010	800.0 0.000 0.000	500.0 0.000 0.000	200.0 0.000 0.000	100.0 0.000 0.000	50.0 0.000 0.000	25.0 0.000 0.000	12.5 0.000 0.000	6.25 0.000 0.000
120	Timber S/wood Total	1010.0 0.000 0.010	800.0 0.000 0.000	500.0 0.000 0.000	200.0 0.000 0.000	100.0 0.000 0.000	50.0 0.000 0.000	25.0 0.000 0.000	12.5 0.000 0.000	6.25 0.000 0.000
122	Timber S/wood Total	1010.0 0.000 0.010	800.0 0.000 0.000	500.0 0.000 0.000	200.0 0.000 0.000	100.0 0.000 0.000	50.0 0.000 0.000	25.0 0.000 0.000	12.5 0.000 0.000	6.25 0.000 0.000

IN METRES

19.5	21.0	22.5	24.0	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	37.5
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CUBIC METRES)

7.430	7.925	8.420	8.914	9.409	9.904	10.40	10.89	11.39				
0.6900	0.7284	0.7668	0.8052	0.8436	0.8819	0.9203	0.9587	0.9971				
8.120	8.653	9.187	9.719	10.25	10.79	11.32	11.85	12.39				
7.724	8.239	8.753	9.267	9.781	10.30	10.81	11.32	11.84				
0.7128	0.7527	0.7926	0.8325	0.8724	0.9124	0.9523	0.9922	1.032				
8.437	9.032	9.546	10.10	10.65	11.21	11.76	12.31	12.87				
8.024	8.558	9.092	9.627	10.16	10.70	11.23	11.76	12.30				
0.7360	0.7775	0.8190	0.8604	0.9019	0.9433	0.9848	1.026	1.068				
8.760	9.336	9.911	10.49	11.06	11.67	12.21	12.79	13.37				
8.329	8.884	9.438	9.993	10.55	11.10	11.66	12.21	12.77				
0.7597	0.8028	0.8458	0.8889	0.9319	0.9749	1.018	1.061	1.104				
9.089	9.687	10.28	10.88	11.48	12.07	12.68	13.27	13.87				
8.640	9.215	9.791	10.37	10.94	11.52	12.09	12.67	13.24				
0.7839	0.8285	0.8732	0.9178	0.9625	1.007	1.052	1.096	1.141				
9.42	10.04	10.66	11.29	11.90	12.53	13.14	13.77	14.65				
8.957	9.553	10.15	10.75	11.34	11.94	12.54	13.13	13.73				
0.8084	0.8547	0.9010	0.9773	0.9936	1.040	1.086	1.132	1.179				
9.77	10.41	11.05	11.73	12.33	12.98	13.63	14.26	14.91				
9.279	9.897	10.51	11.13	11.75	12.37	12.99	13.60	14.22				
0.8335	0.8814	0.9294	0.9773	1.025	1.073	1.121	1.169	1.217				
10.11	10.87	11.44	12.11	12.77	13.44	14.11	14.77	15.44				
	10.25	10.89	11.53	12.17	12.81	13.45	14.09	14.73	15.37			
	0.9086	0.9582	1.008	1.058	1.107	1.157	1.206	1.256	1.306			
	11.16	11.85	12.54	13.23	13.92	14.61	15.30	15.99	16.68			
	10.60	11.26	11.93	12.59	13.25	13.91	14.58	15.24	15.90			
	0.9362	0.9876	1.039	1.090	1.142	1.193	1.244	1.296	1.347			
	11.54	12.25	12.97	13.68	14.39	15.10	15.82	16.54	17.25			
	10.96	11.65	12.33	13.02	13.70	14.39	15.07	15.76	16.44			
	0.9643	1.017	1.071	1.124	1.177	1.230	1.283	1.336	1.39			
	11.92	12.67	13.40	14.14	14.88	15.62	16.35	17.10	17.83			
	11.33	12.04	12.75	13.46	14.16	14.87	15.58	16.29	16.99			
	0.9929	1.048	1.103	1.158	1.213	1.267	1.322	1.377	1.432			
	12.32	13.09	13.85	14.62	15.37	16.14	16.90	17.67	18.42			

		HEIGHTS								
		6.0	7.5	9.0	10.5	12.0	13.5	15.0	16.5	18.0
		(VOLUMES IN								
Dia class (cms)	Form of volume									
124	Timber S/wood Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
126	Timber S/wood Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
128	Timber S/wood Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
130	Timber S/wood Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

IN METRES

19.5	21.0	22.5	24.0	25.5	27.0	28.5	30.0	31.5	33.0	34.5	36.0	37.5
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CUBIC METRES)

11.71	12.44	13.17	13.90	14.63	15.36	16.09	16.83	17.56				
1.022	1.079	1.135	1.192	1.249	1.306	1.362	1.419	1.476				
12.73	13.52	14.30	15.09	15.88	16.67	17.45	18.25	19.04				
12.09	12.84	13.60	14.35	15.11	15.86	16.62	17.37	18.13	18.88			
1.051	1.110	1.169	1.227	1.286	1.344	1.403	1.462	1.520	1.579			
13.14	13.95	14.77	15.58	16.40	17.20	18.02	18.83	19.65	20.46			
12.47	13.25	14.03	14.81	15.59	16.37	17.15	17.93	18.71	19.49			
1.081	1.142	1.202	1.263	1.323	1.384	1.444	1.505	1.565	1.626			
13.55	14.39	15.23	16.07	16.91	17.75	18.59	19.44	20.28	21.12			
12.87	13.67	14.47	15.28	16.08	16.89	17.69	18.49	19.30	20.10			
1.112	1.174	1.237	1.299	1.361	1.424	1.486	1.548	1.611	1.673			
13.98	14.84	15.71	16.58	17.44	18.31	19.18	20.04	20.91	21.77			