VOLUME TABLES OF *Tectona grandis* (TEAK) FOR VARIOUS DIVISIONS OF MADHYA PRADESH

INTRODUCTION

Teak *(Tectona grandis),* the paragon of timbers, is finding immense use and its demand is ever increasing. The utilization percent of a teak tree has increased substantially and even its small wood, which was, hitherto considered as useless, has now been finding increasing demand in the markets. Therefore, assessment of estimates of the quantity of timber available from a teak tree in any of the specified girth-height class, within permissible reliance limits, is the paramount need in an efficient, systematic and scientific management of the forest.

Wide variations in the estimated quantity of timber for standing crop and the actual quantity produced after felling in the coupes, is a common experience. This variation contributes to one of the major causes for significant gaps between the estimated price and the final bid offered in auctions.

In the meeting with the Additional Principal Chief Conservator of Forests (Production) Madhya Pradesh, held on 2.8.2004, it was decided that the form factors of teak species be revised for various divisions. For this purpose, the data to be used was that available from the registers of production coupes and that there would not be any necessity for taking measurements of trees separately. The data required for the analysis will be provided to the State Forest Research Institute (SFRI), Jabalpur, by various divisions. The volume tables will be prepared by SFRI, for various girths and site qualities based on the data provided by respective divisions.

To prepare the local volume tables for different site qualities, the local volume equations based upon only one parameter, i.e. girth at breast height (GBH), have been taken into consideration. These volume tables based on one independent variable i.e. dbh or gbh, are derived from the measurements of trees growing in a restricted geographical area or locality, or more or less uniform crop. These are, therefore, applicable to such restricted range of locality or geographical areas, only where the assumption that the trees of the same diameter will have almost the same height, holds good.

2. METHODOLOGY

The different steps for calculating girth class-wise volume table for various divisions are being described as under.

2.1. Source of data

The data of Teak species for different divisions for different site qualities were provided by the concerned divisions. The analysis for volume calculations of timber and fuel content for sound, half sound and unsound trees was carried out on the available data.

2.2 Regression equations used:

a) For estimation of timber content

The following types of regression equations were tried to obtain timber content in sound, half sound and unsound trees. These are local volume equations (Volume equation for forest of India, Nepal and Bhutan. Forest Survey of India, 1996) with only one independent variable, i.e. girth at breast height (GBH).

(i) $V = a + bG^2$

(ii) $V = a + bG + cG^2$

(iii) $V = a + bG + cG^2 + dG^3$

(iv) $V = a + b\sqrt{G} + cG^2$

(v) $\sqrt{V} = a + bG$

(vi) $\sqrt{V} = a + bG + c\sqrt{G}$

(vii) $\text{Log}_e V = a + b\text{Log}_e G$

Where

V = Under bark volume (cmt) of timber

G = Over-bark girth of standing tree at breast height (cm)

And **a, b, c** and **d** are statistical constants.

The best-fit regression equation was used to estimate the volume.

b) For estimation of fuel content

The following curve estimation models were tried for estimation of fuel content in sound, half sound and unsound trees on the basis of the curve estimation models given in SPSS software.

(i) $F = a + bG$ **(Linear)**

(ii) $F = a + b\text{Log}_e G$ **(Logarithmic)**

(iii) $F = a + b/G$ **(Inverse)**

(iv) $F = a + bG + cG^2$ **(Quadratic)**

(v) $\mathbf{F = a + bG + cG^2 + dG^3}$ **(Cubic)**

(vi) **F = EXP (a + b/G)** **(S-curve)**

(vii) **F = EXP (a + bG)** **(Growth)**

Where

F = Fuel content (cmt)

G = Over-bark girth of standing tree at breast height (cm)

And **a, b, c** and **d** are statistical constants.

The best-fit regression equation was used to estimate the fuel content.

As per the instructions received from the APCCF (Production), mean value for girth classes with class interval of 10cms have been worked out and given in Table 1 to 22 **.** However, it may be noted that the error is likely to increase if these mean values are used instead of the exact girths of the trees. The total volume for a coupe will be correctly calculated only when all the girths are uniformly distributed over the whole girth-class, otherwise with skewed distribution of girths of individual trees in a girth-class, we are likely to underestimate or overestimate the volume. Estimated timber is liable to fall within the range of ±5% error using these tables. Estimated fuel content is liable to fall within the range of ±10% error using these tables.

3. Results and discussion

1. To estimate timber volume of sound, half sound and unsound trees, it was observed that most of the site qualities follow the same local volume equation $\mathbf{V = a + bG^2}$ where **V** is the Under-bark volume (cmt) of timber, **G** = Over-bark girth of standing trees at breast height (cm) and **a** and **b** are constants. Therefore, only equation $\mathbf{V = a + bG^2}$ was tried to estimate timber volume with the least possible error. While comparing the volume versus girth curves for various site qualities it was found, in some cases that lower site quality shows higher volume content than higher site quality for the same girth. This does not reflect the natural trend of volume variation with site-quality. This type of unnatural behaviour may be due to many reasons such as human error in the assessment of tree condition, mistakes in volume calculation, mixing data of full-sized trees and pollards and erroneous assessment of site –quality. During estimation of timber volume for sound timber, the efforts were made to minimize the error in total

estimated volume. However, there still remains some error that has already been described in division wise report. The possible reasons for this difference are listed as below:

i. The data, from statistical analysis point of view, for many girth classes are insufficient to establish significant correlation between volume and girth for that particular girth class

ii. The observed volume content in the field shows significant variations for the same girth and the same site quality of a tree. These variations may occur due to human errors, e.g. measurement error, writing error and volume estimating error etc. in the field.

iii. In some cases, it was also observed that the trees of higher girth show lesser timber volume content as compared to the timber volume of trees of lower girth within the same site quality, which may be possible due to faulty classification of the condition of the tree. In nature, sometimes it is observed that the hollowness starts to develop within the tree, as it grows older. If there is hollowness within the trunk of the tree but it appears sound from outside, then its status is liable to wrong classification.

iv. The actual volume of a tree depends upon the girth, height and the tapering of the tree. But in the present case, the volume estimation is based only upon a single parameter, i.e. girth.

2. As per the instructions received from the APCCF (Production), mean values for girth classes with class interval of 10cms have been worked out. However, it may be noted that the error is likely to increase if these mean values are used instead of the exact girths of the trees. The total volume for a coupe can be correctly calculated only when all the girths are uniformly distributed over the whole girth-class, otherwise with skewed distribution of girths of individual trees in a girth-class there is possibility of underestimation or overestimation in the volume.

Table 1 : Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Balaghat division

Girth Class (cm)	Site Quality IIIa								
	Sound			Half sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
41-50	0.028	0.005	0.033	0.024	0.006	0.030	0.009	0.012	0.021
51-60	0.086	0.016	0.102	0.077	0.018	0.095	0.030	0.033	0.063
61-70	0.154	0.035	0.189	0.140	0.038	0.178	0.056	0.065	0.121
71-80	0.235	0.063	0.298	0.214	0.067	0.281	0.085	0.107	0.192
81-90	0.326	0.099	0.425	0.298	0.105	0.403	0.119	0.157	0.276
91-100	0.429	0.141	0.570	0.393	0.148	0.541	0.158	0.214	0.372
101-110	0.543	0.187	0.730	0.499	0.197	0.696	0.200	0.274	0.474
111-120	0.669	0.238	0.907	0.614	0.248	0.862	0.247	0.336	0.583
121-130	0.806	0.290	1.096	0.741	0.302	1.043	0.298	0.399	0.697
131-140	0.955	0.344	1.299	0.878	0.357	1.235	0.353	0.463	0.816
141-150	1.114	0.399	1.513	1.025	0.413	1.438	0.412	0.525	0.937
151-160	1.286	0.454	1.740	1.182	0.468	1.650	0.475	0.587	1.062
161-170	1.468	0.508	1.976	1.351	0.523	1.874	0.543	0.646	1.189
171-180	1.662	0.561	2.223	1.529	0.577	2.106	0.615	0.705	1.320
181-190	1.867	0.613	2.480	1.719	0.630	2.349	*	*	*
191-200	2.084	0.664	2.748	1.918	0.682	2.600	*	*	*
201-210	2.312	0.714	3.026	2.128	0.732	2.860	*	*	*
211-220	2.552	0.762	3.314	2.349	0.780	3.129	*	*	*
221-230	2.802	0.809	3.611	2.580	0.827	3.407	*	*	*
231-240	3.064	0.855	3.919	*	*	*	*	*	*

Girth Class (cm)	Site Quality IIIa								
	Sound			Half sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
241-250	3.338	0.899	4.237	*	*	*	*	*	*
251-260	3.623	0.941	4.564	*	*	*	*	*	*
261-270	3.919	0.982	4.901	*	*	*	*	*	*
271-280	4.227	1.022	5.249	*	*	*	*	*	*

Table 2: Site quality and girthclass-wise volume (cmt) of timber in Betul division

Girth Class (cm)	Site quality III		Site quality IVa		Site quality IVb	
	Sound	Half Sound	Sound	Half Sound	Sound	Half Sound
	Timber	Timber	Timber	Timber	Timber	Timber
21-30	0.022	0.011	0.015	0.008	0.013	0.006
31-40	0.051	0.026	0.038	0.019	0.034	0.017
41-50	0.089	0.045	0.068	0.034	0.063	0.031
51-60	0.137	0.069	0.105	0.052	0.098	0.049
61-70	0.194	0.097	0.149	0.075	0.140	0.070
71-80	0.261	0.131	0.201	0.101	0.189	0.095
81-90	0.337	0.169	0.261	0.130	0.245	0.123
91-100	0.423	0.211	0.327	0.164	0.309	0.154
101-110	0.518	0.259	0.401	0.201	0.379	0.189
111-120	0.622	0.311	0.483	0.241	0.456	0.228
121-130	0.736	0.368	0.572	0.286	0.540	0.270
131-140	0.860	0.430	0.668	0.334	0.631	0.316
141-150	0.993	0.496	0.771	0.386	0.729	0.365
151-160	1.135	0.568	0.882	0.441	0.834	0.417
161-170	1.287	0.643	1.001	0.500	0.946	0.473
171-180	1.448	0.724	1.126	0.563	1.065	0.533
181-190	1.619	0.809	1.259	0.630	1.191	0.596
191-200	1.799	0.900	1.400	0.700	1.324	0.662

Table 3 : Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Chhatarpur division

Girth Class (cm)	Site Quality IVb								
	Sound			Half sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
21-30	0.0140	0.0009	0.0149	0.0134	0.0010	0.0144	0.0064	0.0017	0.0081
31-40	0.0258	0.0060	0.0318	0.0247	0.0067	0.0314	0.0112	0.0100	0.0212
41-50	0.0415	0.0187	0.0602	0.0397	0.0203	0.0600	0.0177	0.0277	0.0454
51-60	0.0611	0.0389	0.1000	0.0583	0.0417	0.1000	0.0258	0.0539	0.0797
61-70	0.0846	0.0651	0.1497	0.0807	0.0691	0.1498	0.0355	0.0858	0.1213
71-80	0.1119	0.0951	0.2070	0.1068	0.1002	0.2070	0.0468	0.1209	0.1677
81-90	0.1432	0.1273	0.2705	0.1366	0.1332	0.2698	0.0596	0.1573	0.2169
91-100	0.1783	0.1603	0.3386	0.1701	0.1670	0.3371	0.0741	0.1938	0.2679
101-110	0.2173	0.1933	0.4106	0.2073	0.2005	0.4078	0.0902	0.2294	0.3196
111-120	0.2602	0.2256	0.4858	0.2481	0.2333	0.4814	0.1079	0.2637	0.3716
121-130	0.3069	0.2569	0.5638	0.2927	0.2650	0.5577	0.1272	0.2966	0.4238
131-140	0.3575	0.2870	0.6445	0.3410	0.2954	0.6364	0.1480	0.3278	0.4758
141-150	0.4121	0.3158	0.7279	0.3930	0.3244	0.7174	0.1705	0.3573	0.5278
151-160	0.4705	0.3432	0.8137	0.4487	0.3519	0.8006	*	*	*
161-170	0.5327	0.3693	0.9020	0.5081	0.3781	0.8862	*	*	*
171-180	0.5989	0.3941	0.9930	0.5712	0.4029	0.9741	*	*	*
181-190	0.6689	0.4176	1.0865	*	*	*	*	*	*
191-200	0.7428	0.4399	1.1827	*	*	*	*	*	*

Table 4 (a): Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Chhindwara division

Girth Class (cm)	Site quality III					Site quality IVa				
	Sound		Half Sound		Unsound	Sound		Half Sound		Unsound
	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel
21-30	0.0117	0.0017	0.0058	0.0076	0.0134	0.0095	0.0016	0.0048	0.0063	0.0111
31-40	0.0243	0.0037	0.0122	0.0158	0.0280	0.0212	0.0034	0.0106	0.0140	0.0246
41-50	0.0488	0.0073	0.0244	0.0317	0.0561	0.0443	0.0070	0.0221	0.0292	0.0513
51-60	0.0842	0.0127	0.0421	0.0548	0.0969	0.0780	0.0125	0.0390	0.0515	0.0905
61-70	0.1304	0.0195	0.0652	0.0847	0.1499	0.1221	0.0195	0.0610	0.0806	0.1416
71-80	0.1869	0.0280	0.0934	0.1215	0.2149	0.1762	0.0282	0.0881	0.1163	0.2044
81-90	0.2536	0.0380	0.1268	0.1648	0.2916	0.2402	0.0385	0.1201	0.1586	0.2787
91-100	0.3305	0.0495	0.1652	0.2148	0.3800	0.3140	0.0503	0.1570	0.2073	0.3643
101-110	0.4173	0.0626	0.2087	0.2712	0.4799	0.3975	0.0636	0.1988	0.2623	0.4611
111-120	0.5142	0.0771	0.2571	0.3342	0.5913	0.4906	0.0785	0.2453	0.3238	0.5691
121-130	0.6209	0.0931	0.3104	0.4036	0.7140	0.5933	0.0949	0.2966	0.3916	0.6882
131-140	0.7375	0.1106	0.3687	0.4794	0.8481	0.7054	0.1129	0.3527	0.4656	0.8183
141-150	0.8639	0.1296	0.4319	0.5616	0.9935	0.8271	0.1323	0.4135	0.5459	0.9594
151-160	1.0001	0.1500	0.5000	0.6501	1.1501	0.9582	0.1533	0.4791	0.6324	1.1115
161-170	1.1461	0.1719	0.5730	0.7450	1.3180	1.0988	0.1758	0.5494	0.7252	1.2746
171-180	1.3018	0.1953	0.6509	0.8462	1.4971	1.2487	0.1998	0.6244	0.8241	1.4485
181-190	1.4673	0.2201	0.7336	0.9538	1.6874	1.4081	0.2253	0.7041	0.9293	1.6334
191-200	1.6424	0.2464	0.8212	1.0676	1.8888	1.5768	0.2523	0.7884	1.0407	1.8291

Girth Class (cm)	Site quality IVb					Site quality Va				
	Sound		Half Sound		Un Sound	Sound		Half Sound		Un Sound
	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel
21-30	0.0082	0.0015	0.0041	0.0056	0.0097	*	*	*	*	*
31-40	0.0187	0.0033	0.0093	0.0127	0.0220	0.0113	0.0028	0.0057	0.0084	0.0141
41-50	0.0401	0.0072	0.0200	0.0273	0.0473	0.0309	0.0074	0.0155	0.0228	0.0383
51-60	0.0718	0.0130	0.0359	0.0489	0.0848	0.0604	0.0145	0.0302	0.0447	0.0749
61-70	0.1135	0.0204	0.0567	0.0772	0.1339	0.0995	0.0238	0.0497	0.0736	0.1233
71-80	0.1648	0.0297	0.0824	0.1121	0.1945	0.1478	0.0355	0.0739	0.1094	0.1833
81-90	0.2256	0.0406	0.1128	0.1534	0.2662	0.2052	0.0492	0.1026	0.1518	0.2544
91-100	0.2958	0.0532	0.1479	0.2011	0.3490	0.2716	0.0652	0.1358	0.2010	0.3368
101-110	0.3752	0.0676	0.1876	0.2552	0.4428	0.3469	0.0832	0.1734	0.2567	0.4301
111-120	0.4639	0.0835	0.2320	0.3154	0.5474	0.4310	0.1034	0.2155	0.3189	0.5344
121-130	0.5617	0.1012	0.2809	0.3820	0.6629	0.5239	0.1257	0.2619	0.3877	0.6496
131-140	0.6687	0.1204	0.3343	0.4548	0.7891	0.6255	0.1501	0.3127	0.4629	0.7756
141-150	0.7847	0.1413	0.3924	0.5336	0.9260	0.7358	0.1766	0.3679	0.5445	0.9124
151-160	0.9098	0.1638	0.4549	0.6187	1.0736	0.8547	0.2052	0.4274	0.6325	1.0599
161-170	1.0440	0.1879	0.5220	0.7099	1.2319	0.9823	0.2358	0.4912	0.7269	1.2181
171-180	1.1871	0.2137	0.5936	0.8072	1.4008	1.1185	0.2685	0.5593	0.8277	1.3870
181-190	1.3393	0.2410	0.6696	0.9107	1.5803	1.2633	0.3032	0.6317	0.9348	1.5665
191-200	1.5004	0.2701	0.7502	1.0203	1.7705	1.4167	0.3400	0.7084	1.0483	1.7567

Table 5(a): Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Dewas division

Girth Class (cm)	Site quality IVa					Site quality IVb				
	Sound		Half Sound		Unsound	Sound		Half Sound		Unsound
	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel
21-30	0.021	0.001	0.010	0.012	0.022	0.019	0.002	0.010	0.011	0.021
31-40	0.041	0.003	0.020	0.024	0.044	0.037	0.004	0.019	0.022	0.041
41-50	0.068	0.006	0.034	0.040	0.074	0.061	0.007	0.031	0.037	0.068
51-60	0.101	0.011	0.050	0.062	0.112	0.091	0.011	0.045	0.057	0.102
61-70	0.141	0.017	0.070	0.088	0.158	0.126	0.018	0.063	0.081	0.144
71-80	0.187	0.025	0.094	0.118	0.212	0.168	0.026	0.084	0.110	0.194
81-90	0.241	0.033	0.120	0.154	0.274	0.215	0.036	0.107	0.144	0.251
91-100	0.300	0.045	0.150	0.195	0.345	0.268	0.049	0.134	0.183	0.317
101-110	0.367	0.058	0.183	0.242	0.425	0.327	0.063	0.164	0.226	0.390
111-120	0.440	0.074	0.220	0.294	0.514	0.392	0.080	0.196	0.276	0.472
121-130	0.519	0.091	0.260	0.350	0.610	0.463	0.099	0.231	0.331	0.562
131-140	0.605	0.111	0.303	0.413	0.716	0.539	0.121	0.270	0.390	0.660
141-150	0.698	0.133	0.349	0.482	0.831	0.622	0.145	0.311	0.456	0.767
151-160	0.797	0.157	0.399	0.555	0.954	0.710	0.172	0.355	0.527	0.882
161-170	0.903	0.182	0.452	0.633	1.085	0.804	0.200	0.402	0.602	1.004
171-180	1.016	0.209	0.508	0.717	1.225	0.905	0.231	0.452	0.684	1.135
181-190	1.135	0.239	0.567	0.807	1.374	1.011	0.263	0.505	0.769	1.274
191-200	1.261	0.270	0.630	0.901	1.531	1.122	0.298	0.561	0.859	1.420

Table 5(b): Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Dewas division

Girth (cm)	Site quality Va					Site quality Vb				
	Sound Tree		Half Sound		Unsound	Sound		Half Sound		Unsounnd
	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel
21-30	0.017	0.001	0.008	0.010	0.018	0.009	0.001	0.004	0.006	0.010
31-40	0.034	0.004	0.017	0.021	0.038	0.025	0.003	0.013	0.015	0.028
41-50	0.057	0.007	0.028	0.036	0.064	0.047	0.006	0.024	0.029	0.053
51-60	0.085	0.013	0.043	0.055	0.098	0.074	0.011	0.037	0.048	0.085
61-70	0.119	0.019	0.060	0.078	0.138	0.107	0.018	0.054	0.071	0.125
71-80	0.159	0.028	0.079	0.108	0.187	0.145	0.027	0.073	0.099	0.172
81-90	0.204	0.037	0.102	0.141	0.243	0.189	0.037	0.094	0.132	0.226
91-100	0.255	0.052	0.128	0.179	0.307	0.237	0.051	0.119	0.169	0.288
101-110	0.312	0.066	0.156	0.222	0.378	0.292	0.066	0.146	0.212	0.358
111-120	0.374	0.083	0.187	0.270	0.457	0.351	0.085	0.176	0.260	0.436
121-130	0.442	0.102	0.221	0.323	0.544	*	*	*	*	*
131-140	0.516	0.123	0.258	0.381	0.639	*	*	*	*	*
141-150	0.595	0.147	0.298	0.444	0.742	*	*	*	*	*
151-160	0.680	0.172	0.340	0.512	0.852	*	*	*	*	*
161-170	0.771	0.198	0.385	0.584	0.969	*	*	*	*	*
171-180	0.867	0.227	0.433	0.661	1.094	*	*	*	*	*
181-190	0.969	0.256	0.484	0.741	1.225	*	*	*	*	*
191-200	1.076	0.287	0.538	0.825	1.363	*	*	*	*	*

Table 6: Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Harda division

Girth class (cm)	Site quality III					Site quality III/IVa					Site quality IVa				
	Sound		Half Sound		Unsound	Sound		Half Sound		Unsound	Sound		Half Sound		Unsound
	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel
21-30	0.024	0.003	0.012	0.015	0.027	0.022	0.003	0.011	0.014	0.025	0.018	0.003	0.009	0.012	0.021
31-40	0.050	0.005	0.025	0.030	0.055	0.048	0.006	0.024	0.030	0.054	0.042	0.007	0.021	0.028	0.049
41-50	0.084	0.009	0.042	0.051	0.093	0.081	0.011	0.041	0.051	0.092	0.073	0.012	0.037	0.048	0.085
51-60	0.127	0.013	0.064	0.076	0.140	0.123	0.016	0.062	0.077	0.139	0.112	0.018	0.056	0.074	0.130
61-70	0.178	0.018	0.089	0.107	0.196	0.173	0.023	0.087	0.109	0.196	0.158	0.026	0.079	0.105	0.184
71-80	0.238	0.024	0.119	0.143	0.262	0.232	0.030	0.116	0.146	0.262	0.213	0.034	0.106	0.141	0.247
81-90	0.306	0.031	0.153	0.184	0.337	0.298	0.039	0.149	0.188	0.337	0.275	0.044	0.137	0.182	0.319
91-100	0.383	0.038	0.191	0.230	0.421	0.373	0.049	0.187	0.235	0.422	0.344	0.055	0.172	0.227	0.399
101-110	0.468	0.047	0.234	0.281	0.514	0.457	0.059	0.228	0.288	0.516	0.422	0.067	0.211	0.278	0.489
111-120	0.561	0.056	0.281	0.336	0.617	0.548	0.072	0.274	0.346	0.620	0.507	0.081	0.253	0.335	0.588
121-130	0.663	0.066	0.332	0.397	0.729	0.648	0.084	0.324	0.408	0.732	0.600	0.096	0.300	0.396	0.696
131-140	0.773	0.078	0.387	0.464	0.851	0.757	0.098	0.378	0.477	0.855	0.700	0.112	0.350	0.462	0.812
141-150	0.892	0.089	0.446	0.535	0.981	0.873	0.114	0.437	0.550	0.987	0.808	0.130	0.404	0.534	0.938
151-160	1.020	0.102	0.510	0.612	1.122	0.998	0.130	0.499	0.629	1.128	0.924	0.148	0.462	0.610	1.072
151-160	1.020	0.102	0.510	0.612	1.122	0.998	0.130	0.499	0.629	1.128	0.924	0.148	0.462	0.610	1.072

Girth class (cm)	Site quality III					Site quality III/IVa					Site quality IVa				
	Sound		Half Sound		Unsound	Sound		Half Sound		Unsound	Sound		Half Sound		Unsound
151-160	1.020	0.102	0.510	0.612	1.122	0.998	0.130	0.499	0.629	1.128	0.924	0.148	0.462	0.610	1.072
161-170	1.155	0.116	0.578	0.693	1.271	1.131	0.147	0.565	0.713	1.278	1.048	0.168	0.524	0.692	1.216
171-180	1.300	0.130	0.650	0.780	1.430	1.272	0.166	0.636	0.802	1.438	1.179	0.189	0.590	0.778	1.368
181-190	1.452	0.145	0.726	0.871	1.597	1.422	0.185	0.711	0.896	1.607	1.318	0.211	0.659	0.870	1.529
191-200	1.614	0.161	0.807	0.968	1.775	1.580	0.205	0.790	0.995	1.785	1.465	0.234	0.732	0.967	1.699
201-210	1.783	0.179	0.892	1.070	1.962	1.746	0.227	0.873	1.100	1.973	1.619	0.259	0.810	1.068	1.878
211-220	1.961	0.196	0.981	1.176	2.157	1.921	0.249	0.960	1.210	2.170	1.781	0.285	0.891	1.175	2.066

Table 7: Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Hoshangabad division

Girth class (cm)	Site quality III					Site quality IVa					Site quality IVb				
	Sound Trees		Half Sound		Unsound	Sound		Half Sound		Unsound	Sound		Half Sound		Unsound
	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel
21-30	0.029	0.005	0.014	0.020	0.034	0.026	0.005	0.013	0.018	0.031	0.012	0.003	0.006	0.009	0.015
31-40	0.052	0.009	0.026	0.035	0.061	0.046	0.009	0.023	0.032	0.055	0.027	0.007	0.014	0.020	0.034
41-50	0.082	0.015	0.041	0.056	0.097	0.072	0.014	0.036	0.050	0.086	0.048	0.012	0.024	0.036	0.060
51-60	0.120	0.022	0.060	0.082	0.142	0.105	0.021	0.052	0.074	0.126	0.074	0.018	0.037	0.055	0.092
61-70	0.166	0.030	0.083	0.113	0.196	0.144	0.029	0.072	0.101	0.173	0.105	0.026	0.052	0.079	0.131
71-80	0.219	0.039	0.109	0.149	0.258	0.189	0.038	0.095	0.132	0.227	0.141	0.035	0.070	0.106	0.176
81-90	0.279	0.050	0.140	0.189	0.329	0.241	0.049	0.121	0.169	0.290	0.182	0.045	0.091	0.136	0.227
91-100	0.347	0.063	0.174	0.236	0.410	0.300	0.060	0.150	0.210	0.360	0.228	0.057	0.114	0.171	0.285
101-110	0.423	0.076	0.211	0.288	0.499	0.365	0.073	0.182	0.256	0.438	0.279	0.070	0.140	0.209	0.349
111-120	0.506	0.091	0.253	0.344	0.597	0.436	0.087	0.218	0.305	0.523	0.335	0.084	0.168	0.251	0.419
121-130	0.596	0.108	0.298	0.406	0.704	0.514	0.103	0.257	0.360	0.617	0.397	0.099	0.198	0.298	0.496
131-140	0.694	0.125	0.347	0.472	0.819	0.598	0.120	0.299	0.419	0.718	0.463	0.116	0.232	0.347	0.579
141-150	0.800	0.144	0.400	0.544	0.944	0.689	0.138	0.345	0.482	0.827	0.535	0.134	0.268	0.401	0.669
151-160	0.913	0.165	0.457	0.621	1.078	0.786	0.157	0.393	0.550	0.943	0.612	0.153	0.306	0.459	0.765

Girth class (cm)	Site quality III					Site quality IVa					Site quality IVb				
	Sound		Half Sound		Un sound	Sound		Half Sound		Un sound	Sound		Half Sound		Un sound
	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel
161-170	1.034	0.186	0.517	0.703	1.220	0.890	0.178	0.445	0.623	1.068	0.694	0.173	0.347	0.520	0.867
171-180	1.162	0.209	0.581	0.790	1.371	1.000	0.200	0.500	0.700	1.200	0.781	0.195	0.390	0.586	0.976
181-190	1.298	0.233	0.649	0.882	1.531	1.117	0.223	0.558	0.782	1.340	0.873	0.218	0.436	0.655	1.091
191-200	1.441	0.259	0.721	0.979	1.700	1.240	0.248	0.620	0.868	1.488	0.970	0.242	0.485	0.727	1.212
201-210	1.592	0.286	0.796	1.082	1.878	1.369	0.274	0.685	0.958	1.643	1.072	0.268	0.536	0.804	1.340
211-220	1.750	0.315	0.875	1.190	2.065	1.505	0.301	0.753	1.053	1.806	*	*	*	*	*

Table 8: Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Jabalpur division

Girth Class (cm)	Site Quality III								
	Sound			Hal fsound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
21-30	0.0219	0.0030	0.0249	0.0139	0.0039	0.0178	0.0042	0.0053	0.0095
31-40	0.0514	0.0149	0.0663	0.0360	0.0181	0.0541	0.0155	0.0231	0.0386
41-50	0.0906	0.0382	0.1288	0.0654	0.0444	0.1098	0.0305	0.0543	0.0848
51-60	0.1395	0.0703	0.2098	0.1021	0.0794	0.1815	0.0491	0.0944	0.1435
61-70	0.1980	0.1075	0.3055	0.1460	0.1193	0.2653	0.0715	0.1389	0.2104
71-80	0.2663	0.1472	0.4135	0.1972	0.1610	0.3582	0.0976	0.1847	0.2823
81-90	0.3442	0.1872	0.5314	0.2557	0.2027	0.4584	0.1274	0.2298	0.3572
91-100	0.4318	0.2264	0.6582	0.3214	0.2431	0.5645	0.1609	0.2732	0.4341
101-110	0.5291	0.2642	0.7933	0.3943	0.2817	0.6760	0.1981	0.3142	0.5123
111-120	0.6361	0.3002	0.9363	0.4746	0.3183	0.7929	0.2389	0.3528	0.5917
121-130	0.7527	0.3341	1.0868	0.5620	0.3527	0.9147	0.2835	0.3889	0.6724
131-140	0.8790	0.3661	1.2451	0.6568	0.3849	1.0417	*	*	*
141-150	1.0150	0.3962	1.4112	0.7588	0.4150	1.1738	*	*	*
151-160	1.1607	0.4244	1.5851	0.8680	0.4432	1.3112	*	*	*
161-170	1.3161	0.4508	1.7669	0.9846	0.4695	1.4541	*	*	*
171-180	1.4811	0.4756	1.9567	1.1083	0.4942	1.6025	*	*	*
181-190	1.6559	0.4989	2.1548	1.2394	0.5173	1.7567	*	*	*
191-200	1.8403	0.5208	2.3611	1.3777	0.5389	1.9166	*	*	*

Table 9: Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Katni division

Girth Class (cm)	Site Quality IVa								
	Sound			Half sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
21-30	0.013	0.002	0.015	0.011	0.002	0.013	0.005	0.005	0.010
31-40	0.031	0.012	0.043	0.027	0.013	0.040	0.012	0.023	0.035
41-50	0.053	0.033	0.086	0.047	0.034	0.081	0.022	0.054	0.076
51-60	0.081	0.062	0.143	0.072	0.064	0.136	0.034	0.094	0.128
61-70	0.115	0.097	0.212	0.102	0.099	0.201	0.049	0.139	0.188
71-80	0.155	0.134	0.289	0.138	0.137	0.275	0.066	0.185	0.251
81-90	0.200	0.172	0.372	0.178	0.176	0.354	0.085	0.230	0.315
91-100	0.251	0.210	0.461	0.223	0.214	0.437	0.107	0.273	0.380
101-110	0.307	0.247	0.554	0.273	0.251	0.524	*	*	*
111-120	0.369	0.283	0.652	*	*	*	*	*	*
121-130	0.436	0.316	0.752	*	*	*	*	*	*
131-140	0.509	0.348	0.857	*	*	*	*	*	*
141-150	0.588	0.378	0.966	*	*	*	*	*	*

Table 10: Site quality and girthclass-wise volume (cmt) of timber in Khandwa division

Girth Class (cm)	Site quality IVa		Site quality Vb	
	Sound	Half Sound	Sound	Half Sound
	Timber	Timber	Timber	Timber
21-30	0.016	0.008	0.007	0.004
31-40	0.034	0.017	0.023	0.011
41-50	0.057	0.029	0.043	0.021
51-60	0.087	0.043	0.068	0.034
61-70	0.122	0.061	0.098	0.049
71-80	0.163	0.081	0.133	0.066
81-90	0.210	0.105	0.173	0.086
91-100	0.262	0.131	0.218	0.109
101-110	0.320	0.160	0.268	0.134
111-120	0.385	0.192	0.323	0.161
121-130	0.455	0.227	0.382	0.191
131-140	0.530	0.265	0.447	0.224
141-150	0.612	0.306	0.517	0.259
151-160	0.699	0.350	0.592	0.296
161-170	0.793	0.396	0.672	0.336
171-180	0.892	0.446	0.756	0.378
181-190	0.997	0.498	0.846	0.423
191-200	1.107	0.554	*	*

Table 11(a) : Site quality and girthclass-wise volume (cmt) of timber and Fuel wood in Mandla division

Girth Class (cm)	Site Quality III								
	Sound			Half sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
21-30	0.0135	0.0005	0.0140	0.0073	0.0008	0.0081	0.0033	0.0052	0.0085
31-40	0.0444	0.0035	0.0479	0.0308	0.0041	0.0349	0.0147	0.0149	0.0296
41-50	0.0856	0.0117	0.0973	0.0665	0.0133	0.0798	0.0350	0.0366	0.0716
51-60	0.1369	0.0256	0.1625	0.1109	0.0285	0.1394	0.0602	0.0657	0.1259
61-70	0.1984	0.0443	0.2427	0.1641	0.0485	0.2126	0.0905	0.0987	0.1892
71-80	0.2700	0.0664	0.3364	0.2262	0.0720	0.2982	0.1257	0.1333	0.2590
81-90	0.3518	0.0906	0.4424	0.2970	0.0974	0.3944	*	*	*
91-100	0.4437	0.1159	0.5596	0.3767	0.1237	0.5004	*	*	*
101-110	0.5458	0.1416	0.6874	0.4651	0.1502	0.6153	*	*	*
111-120	0.6581	0.1670	0.8251	0.5623	0.1763	0.7386	*	*	*
121-130	0.7805	0.1918	0.9723	0.6684	0.2018	0.8702	*	*	*
131-140	0.9131	0.2159	1.1290	0.7832	0.2264	1.0096	*	*	*
141-150	1.0559	0.2391	1.2950	0.9069	0.2500	1.1569	*	*	*
151-160	1.2088	0.2614	1.4702	1.0393	0.2726	1.3119	*	*	*
161-170	1.3718	0.2827	1.6545	1.1805	0.2941	1.4746	*	*	*
171-180	1.5451	0.3029	1.8480	1.3306	0.3146	1.6452	*	*	*
181-190	1.7285	0.3223	2.0508	1.4894	0.3341	1.8235	*	*	*

Girth Class (cm)	Site Quality III								
	Sound			Half sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
191-200	1.9220	0.3407	2.2627	1.6571	0.3526	2.0097	*	*	*
201-210	2.1257	0.3582	2.4839	*	*	*	*	*	*
211-220	2.3396	0.3748	2.7144	*	*	*	*	*	*
221-230	2.5636	0.3907	2.9543	*	*	*	*	*	*
231-240	2.7978	0.4058	3.2036	*	*	*	*	*	*
241-250	3.0421	0.4201	3.4622	*	*	*	*	*	*

Table11(b): Site quality and girthclass-wise volume (cmt) of timber and fuel wood in Mandla division

Girth Class (cm)	Site Quality IVa								
	Sound			Half sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
21-30	0.0103	0.0005	0.0108	0.0040	0.0012	0.0052	*	*	*
31-40	0.0384	0.0036	0.0420	0.0230	0.0048	0.0278	0.0116	0.0153	0.0269
41-50	0.0756	0.0119	0.0875	0.0568	0.0149	0.0717	0.0318	0.0375	0.0693
51-60	0.1221	0.0260	0.1481	0.0989	0.0314	0.1303	0.0569	0.0670	0.1239
61-70	0.1777	0.0450	0.2227	0.1495	0.0529	0.2024	0.0870	0.1004	0.1874
71-80	0.2426	0.0673	0.3099	0.2083	0.0776	0.2859	0.1221	0.1354	0.2575
81-90	0.3167	0.0918	0.4085	0.2755	0.1042	0.3797	0.1622	0.1702	0.3324
91-100	0.3999	0.1173	0.5172	0.3511	0.1316	0.4827	0.2073	0.2040	0.4113
101-110	0.4924	0.1431	0.6355	0.4350	0.1590	0.5940	0.2391	0.2252	0.4643
111-120	0.5940	0.1687	0.7627	0.5273	0.1859	0.7132	*	*	*
121-130	0.7049	0.1937	0.8986	0.6279	0.2120	0.8399	*	*	*
131-140	0.8250	0.2180	1.0430	0.7369	0.2372	0.9741	*	*	*
141-150	0.9542	0.2413	1.1955	0.8542	0.2613	1.1155	*	*	*
151-160	1.0927	0.2637	1.3564	0.9799	0.2843	1.2642	*	*	*
161-170	1.2403	0.2850	1.5253	1.1139	0.3061	1.4200	*	*	*
171-180	1.3972	0.3054	1.7026	1.2563	0.3269	1.5832	*	*	*
181-190	1.5633	0.3248	1.8881	1.4070	0.3466	1.7536	*	*	*

Girth Class (cm)	Site Quality IVa								
	Sound			Half Sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
191-200	1.7385	0.3433	2.0818	1.5660	0.3653	1.9313	*	*	*
201-210	1.9230	0.3609	2.2839	*	*	*	*	*	*
211-220	2.1166	0.3776	2.4942	*	*	*	*	*	*
221-230	2.3195	0.3935	2.7130	*	*	*	*	*	*
231-240	2.5316	0.4086	2.9402	*	*	*	*	*	*
241-250	2.7528	0.4230	3.1758	*	*	*	*	*	*

Table 12: Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Narsinghpur division

Girth Class (cm)	Site quality IVa					Site quality IVb				
	Sound		Half Sound		Un sound	Sound		Half Sound		Unsound
	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel
21-30	0.013	0.003	0.007	0.009	0.016	0.009	0.002	0.004	0.007	0.011
31-40	0.031	0.008	0.016	0.023	0.039	0.023	0.006	0.012	0.017	0.029
41-50	0.055	0.013	0.028	0.040	0.068	0.043	0.010	0.021	0.032	0.053
51-60	0.085	0.019	0.042	0.062	0.104	0.067	0.016	0.034	0.049	0.083
61-70	0.120	0.028	0.060	0.088	0.148	0.096	0.023	0.048	0.071	0.119
71-80	0.162	0.037	0.081	0.118	0.199	0.130	0.031	0.065	0.096	0.161
81-90	0.209	0.049	0.105	0.153	0.258	0.169	0.040	0.084	0.125	0.209
91-100	0.262	0.061	0.131	0.192	0.323	0.212	0.050	0.106	0.156	0.262
101-110	0.321	0.075	0.161	0.235	0.396	0.260	0.062	0.130	0.192	0.322
111-120	0.386	0.090	0.193	0.283	0.476	0.313	0.075	0.157	0.231	0.388
121-130	0.457	0.106	0.229	0.334	0.563	0.371	0.088	0.186	0.273	0.459
131-140	0.534	0.123	0.267	0.390	0.657	0.434	0.103	0.217	0.320	0.537
141-150	0.617	0.142	0.308	0.451	0.759	0.501	0.119	0.251	0.369	0.620
151-160	0.705	0.163	0.353	0.515	0.868	0.574	0.136	0.287	0.423	0.710
161-170	0.800	0.185	0.400	0.585	0.985	0.651	0.154	0.325	0.480	0.805

Girth Class (cm)	Site quality IVa					Site quality IVb				
	Sound		Half Sound		Unsound	Sound		Half Sound		Unsound
	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel
171-180	0.900	0.208	0.450	0.658	1.108	0.732	0.174	0.366	0.540	0.906
181-190	1.006	0.232	0.503	0.735	1.238	0.819	0.194	0.410	0.603	1.013
191-200	1.118	0.258	0.559	0.817	1.376	0.910	0.216	0.455	0.671	1.126

Table 13(a) : Site quality and girthclass-wise volume (cmt) of timber and fuelwood in North Panna division

Girth Class (cm)	Site Quality Va								
	Sound			Half Sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
21-30	0.0188	0.0008	0.0196	0.0132	0.0010	0.0142	0.0089	0.0013	0.0102
31-40	0.0340	0.0054	0.0394	0.0236	0.0064	0.0300	0.0144	0.0083	0.0227
41-50	0.0543	0.0165	0.0708	0.0373	0.0190	0.0563	0.0217	0.0243	0.0460
51-60	0.0795	0.0344	0.1139	0.0545	0.0386	0.0931	0.0308	0.0487	0.0795
61-70	0.1098	0.0573	0.1671	0.0751	0.0633	0.1384	0.0417	0.0792	0.1209
71-80	0.1450	0.0836	0.2286	0.0990	0.0911	0.1901	0.0544	0.1134	0.1678
81-90	0.1853	0.1118	0.2971	0.1264	0.1206	0.2470	0.0689	0.1494	0.2183
91-100	0.2305	0.1406	0.3711	0.1572	0.1505	0.3077	0.0852	0.1858	0.2710
101-110	0.2808	0.1693	0.4501	0.1914	0.1800	0.3714	0.1032	0.2217	0.3249
111-120	0.3360	0.1974	0.5334	0.2289	0.2089	0.4378	0.1231	0.2567	0.3798
121-130	0.3963	0.2247	0.6210	0.2699	0.2366	0.5065	0.1448	0.2902	0.4350
131-140	0.4615	0.2509	0.7124	0.3143	0.2632	0.5775	0.1683	0.3223	0.4906
141-150	0.5318	0.2759	0.8077	0.3620	0.2885	0.6505	0.1936	0.3528	0.5464
151-160	0.6070	0.2998	0.9068	*	*	*	*	*	*
161-170	0.6873	0.3224	1.0097	*	*	*	*	*	*
171-180	0.7725	0.3439	1.1164	*	*	*	*	*	*
181-190	0.8628	0.3643	1.2271	*	*	*	*	*	*
191-200	0.9580	0.3836	1.3416	*	*	*	*	*	*

Table 13(b) : Site quality and girthclass-wise volume (cmt) of timber and fuelwood in North Panna division

Girth Class (cm)	Site Quality Vb								
	Sound			Half Sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
21-30	0.0181	0.0008	0.0189	0.0125	0.0009	0.0134	0.0080	0.0013	0.0093
31-40	0.0327	0.0052	0.0379	0.0222	0.0059	0.0281	0.0123	0.0081	0.0204
41-50	0.0522	0.0162	0.0684	0.0350	0.0178	0.0528	0.0179	0.0237	0.0416
51-60	0.0764	0.0338	0.1102	0.0511	0.0366	0.0877	0.0250	0.0478	0.0728
61-70	0.1055	0.0565	0.1620	0.0703	0.0605	0.1308	0.0335	0.0780	0.1115
71-80	0.1393	0.0825	0.2218	0.0928	0.0876	0.1804	0.0434	0.1119	0.1553
81-90	0.1779	0.1105	0.2884	0.1184	0.1164	0.2348	0.0546	0.1477	0.2023
91-100	0.2214	0.1391	0.3605	0.1471	0.1458	0.2929	0.0673	0.1839	0.2512
101-110	0.2696	0.1677	0.4373	0.1791	0.1750	0.3541	0.0814	0.2196	0.3010
111-120	0.3227	0.1957	0.5184	0.2142	0.2035	0.4177	0.0968	0.2544	0.3512
121-130	0.3805	0.2229	0.6034	0.2526	0.2311	0.4837	0.1137	0.2879	0.4016
131-140	0.4431	0.2490	0.6921	0.2941	0.2575	0.5516	0.1320	0.3199	0.4519
141-150	0.5106	0.2740	0.7846	0.3387	0.2826	0.6213	0.1516	0.3504	0.5020

Table 14: Site quality and girthclass-wise volume (cmt) of timber and fuelwood in North Sagar division

Girth Class (cm)	Site Quality IVb	
	Sound	Half Sound
	Timber	Timber
21-30	0.009	0.004
31-40	0.025	0.013
41-50	0.047	0.023
51-60	0.074	0.037
61-70	0.107	0.053
71-80	0.145	0.072
81-90	0.188	0.094
91-100	0.237	0.118
101-110	0.291	0.146
111-120	0.351	0.175
121-130	0.416	0.208
131-140	0.486	0.243
141-150	0.562	0.281

Table 15(a): Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Raisen division

Girth class (cm)	Site quality III					Site quality IVa					Site quality IVb				
	Sound		Half Sound		Fuel	Sound		Half Sound		Fuel	Sound		Half Sound		Fuel
	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel
21-30	0.048	0.010	0.024	0.034	0.058	0.039	0.009	0.020	0.028	0.048	0.022	0.005	0.011	0.016	0.027
31-40	0.068	0.014	0.034	0.048	0.082	0.054	0.012	0.027	0.039	0.066	0.037	0.008	0.019	0.026	0.045
41-50	0.094	0.020	0.047	0.067	0.114	0.074	0.016	0.037	0.053	0.090	0.057	0.013	0.029	0.041	0.070
51-60	0.127	0.026	0.064	0.089	0.153	0.099	0.022	0.050	0.071	0.121	0.082	0.018	0.041	0.059	0.100
61-70	0.166	0.034	0.083	0.117	0.200	0.129	0.028	0.064	0.093	0.157	0.112	0.025	0.056	0.081	0.137
71-80	0.212	0.044	0.106	0.150	0.256	0.164	0.036	0.082	0.118	0.200	0.147	0.032	0.073	0.106	0.179
81-90	0.264	0.055	0.132	0.187	0.319	0.203	0.045	0.102	0.146	0.248	0.186	0.041	0.093	0.134	0.227
91-100	0.323	0.067	0.162	0.228	0.390	0.248	0.055	0.124	0.179	0.303	0.231	0.051	0.115	0.167	0.282
101-110	0.388	0.080	0.194	0.274	0.468	0.298	0.065	0.149	0.214	0.363	0.280	0.062	0.140	0.202	0.342

Girth class (cm)	Site quality III					Site quality IVa					Site quality IVb				
	Sound		Half Sound		Un Sound	Sound		Half Sound		Un sound	Sound		Half Sound		UnSound
	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel
111-120	0.460	0.095	0.230	0.325	0.555	0.352	0.077	0.176	0.253	0.429	0.335	0.073	0.167	0.241	0.408
121-130	0.538	0.111	0.269	0.380	0.649	0.411	0.091	0.206	0.296	0.502	0.394	0.087	0.197	0.284	0.481
131-140	0.623	0.128	0.311	0.440	0.751	0.476	0.105	0.238	0.343	0.581	0.458	0.101	0.229	0.330	0.559
141-150	0.714	0.147	0.357	0.504	0.861	0.545	0.120	0.273	0.392	0.665	0.528	0.116	0.264	0.380	0.644
151-160	0.811	0.168	0.406	0.573	0.979	0.619	0.136	0.310	0.445	0.755	0.602	0.132	0.301	0.433	0.734
161-170	0.916	0.188	0.458	0.646	1.104	0.698	0.154	0.349	0.503	0.852	0.681	0.150	0.340	0.491	0.831
171-180	*	*	*	*	*	0.782	0.172	0.391	0.563	0.954	0.765	0.168	0.382	0.551	0.933
181-190	*	*	*	*	*	0.871	0.192	0.436	0.627	1.063	0.854	0.188	0.427	0.615	1.042
191-200	*	*	*	*	*	0.965	0.213	0.483	0.695	1.178	0.948	0.208	0.474	0.682	1.156

Table 15(b): Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Raisen division

Girth class (cm)	Site quality Va					Site quality Vb				
	Sound		Half Sound		Unsound	Sound		Half Sound		Unsound
	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel
21-30	0.020	0.006	0.010	0.016	0.026	0.009	0.003	0.005	0.007	0.012
31-40	0.035	0.010	0.017	0.028	0.045	0.023	0.006	0.011	0.018	0.029
41-50	0.054	0.015	0.027	0.042	0.069	0.041	0.011	0.020	0.032	0.052
51-60	0.078	0.022	0.039	0.061	0.100	0.063	0.018	0.031	0.050	0.081
61-70	0.106	0.030	0.053	0.083	0.136	0.090	0.025	0.045	0.070	0.115
71-80	0.139	0.039	0.070	0.109	0.179	0.121	0.033	0.060	0.094	0.154
81-90	0.177	0.050	0.088	0.139	0.227	0.156	0.044	0.078	0.122	0.200
91-100	0.220	0.061	0.110	0.171	0.281	0.196	0.055	0.098	0.153	0.251
101-110	0.267	0.074	0.133	0.208	0.341	0.240	0.067	0.120	0.187	0.307
111-120	0.319	0.089	0.159	0.249	0.408	0.289	0.080	0.144	0.225	0.369
121-130	0.375	0.105	0.188	0.292	0.480	0.342	0.096	0.171	0.267	0.438
131-140	0.437	0.122	0.218	0.341	0.559	0.399	0.112	0.200	0.311	0.511
141-150	0.503	0.140	0.251	0.392	0.643	0.461	0.129	0.230	0.360	0.590
151-160	0.573	0.161	0.287	0.447	0.734	0.527	0.148	0.264	0.411	0.675
161-170	0.649	0.182	0.324	0.507	0.831	*	*	*	*	*
171-180	0.729	0.204	0.364	0.569	0.933	*	*	*	*	*
181-190	0.814	0.228	0.407	0.635	1.042	*	*	*	*	*
191-200	0.903	0.253	0.452	0.704	1.156	*	*	*	*	*

Table 16: Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Sehore division

Girth class (cm)	Site quality III					Site quality IVa					Site quality IVb				
	Sound		Half Sound		Unsound	Sound		Half Sound		Unsound	Sound		Half Sound		Unsound
	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel
21-30	0.052	0.009	0.026	0.035	0.061	0.016	0.004	0.008	0.012	0.020	0.009	0.002	0.004	0.007	0.011
31-40	0.073	0.012	0.037	0.048	0.085	0.036	0.008	0.018	0.026	0.044	0.027	0.007	0.014	0.020	0.034
41-50	0.101	0.016	0.050	0.067	0.117	0.062	0.014	0.031	0.045	0.076	0.051	0.014	0.026	0.039	0.065
51-60	0.135	0.022	0.067	0.090	0.157	0.094	0.022	0.047	0.069	0.116	0.082	0.021	0.041	0.062	0.103
61-70	0.176	0.029	0.088	0.117	0.205	0.133	0.031	0.066	0.098	0.164	0.118	0.031	0.059	0.090	0.149
70-80	0.224	0.037	0.112	0.149	0.261	0.178	0.042	0.089	0.131	0.220	0.160	0.042	0.080	0.122	0.202
81-90	0.278	0.047	0.139	0.186	0.325	0.229	0.055	0.115	0.169	0.284	0.209	0.055	0.104	0.160	0.264
91-100	0.340	0.057	0.170	0.227	0.397	0.287	0.068	0.144	0.211	0.355	0.263	0.069	0.131	0.201	0.332
101-110	0.408	0.069	0.204	0.273	0.477	0.351	0.084	0.176	0.259	0.435	0.323	0.086	0.162	0.247	0.409
111-120	0.483	0.081	0.241	0.323	0.564	0.422	0.100	0.211	0.311	0.522	0.389	0.103	0.195	0.297	0.492
121-130	0.565	0.094	0.282	0.377	0.659	0.499	0.119	0.250	0.368	0.618	0.462	0.122	0.231	0.353	0.584

Girth class (cm)	Site quality III					Site quality IVa					Site quality IVb				
	Sound		Half Sound		Unsound	Sound		Half Sound		Unsound	Sound		Half Sound		Sound
	Timber	Fuel	Timber	Fuel	Fuel	Fuel	Timber	Timber	Fuel	Fuel	Timber	Fuel	Timber	Fuel	Fuel
131-140	0.653	0.110	0.327	0.436	0.763	0.583	0.138	0.291	0.430	0.721	0.540	0.143	0.270	0.413	0.683
131-140	0.653	0.110	0.327	0.436	0.763	0.583	0.138	0.291	0.430	0.721	0.540	0.143	0.270	0.413	0.683
141-150	0.748	0.126	0.374	0.500	0.874	0.673	0.159	0.336	0.496	0.832	0.624	0.165	0.312	0.477	0.789
151-160	0.850	0.143	0.425	0.568	0.993	0.769	0.182	0.385	0.566	0.951	0.715	0.189	0.357	0.547	0.904
161-170	0.959	0.162	0.480	0.641	1.121	0.872	0.207	0.436	0.643	1.079	0.811	0.214	0.405	0.620	1.025
171-180	1.075	0.181	0.538	0.718	1.256	0.981	0.233	0.490	0.724	1.214	*	*	*	*	*
181-190	1.197	0.202	0.599	0.800	1.399	1.096	0.260	0.548	0.808	1.356	*	*	*	*	*
191-200	1.327	0.223	0.663	0.887	1.550	1.218	0.289	0.609	0.898	1.507	*	*	*	*	*
201-210	1.463	0.246	0.731	0.978	1.709	1.347	0.319	0.673	0.993	1.666	*	*	*	*	*
211-220	1.606	0.270	0.803	1.073	1.876	1.481	0.352	0.741	1.092	1.833	*	*	*	*	*

Table 17(a): Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Seoni division

Girth Class (cm)	Site Quality III								
	Sound			Half Sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
21-30	0.0113	0.0020	0.0133	0.0078	0.0021	0.0099	0.0022	0.0044	0.0066
31-40	0.0357	0.0110	0.0467	0.0261	0.0115	0.0376	0.0070	0.0201	0.0271
41-50	0.0681	0.0297	0.0978	0.0504	0.0310	0.0814	0.0134	0.0487	0.0621
51-60	0.1085	0.0568	0.1653	0.0807	0.0590	0.1397	0.0214	0.0863	0.1077
61-70	0.1569	0.0894	0.2463	0.1170	0.0926	0.2096	0.0310	0.1288	0.1598
71-80	0.2133	0.1249	0.3382	0.1593	0.1290	0.2883	0.0421	0.1729	0.2150
81-90	0.2777	0.1614	0.4391	0.2076	0.1664	0.3740	0.0548	0.2168	0.2716
91-100	0.3501	0.1976	0.5477	0.2619	0.2036	0.4655	0.0691	0.2592	0.3283
101-110	0.4305	0.2330	0.6635	0.3222	0.2397	0.5619	0.0850	0.2997	0.3847
111-120	0.5189	0.2669	0.7858	0.3885	0.2744	0.6629	0.1025	0.3379	0.4404
121-130	0.6153	0.2992	0.9145	0.4608	0.3074	0.7682	0.1215	0.3737	0.4952
131-140	0.7197	0.3299	1.0496	0.5391	0.3386	0.8777	0.1421	0.4073	0.5494
141-150	0.8321	0.3588	1.1909	0.6234	0.3681	0.9915	0.1643	0.4386	0.6029
151-160	0.9525	0.3861	1.3386	0.7137	0.3959	1.1096	0.1881	0.4679	0.6550
161-170	1.0809	0.4117	1.4926	0.8100	0.4220	1.2320	0.2134	0.4952	0.7086
171-180	1.2173	0.4359	1.6532	0.9123	0.4466	1.3589	0.2404	0.5208	0.7612
181-190	1.3617	0.4587	1.8204	1.0206	0.4698	1.4904	0.2689	0.5447	0.8136
191-200	1.5141	0.4801	1.9942	1.1349	0.4916	1.6265	0.2990	0.5671	0.8661
201-210	1.6745	0.5004	2.1749	*	*	*	*	*	*
211-220	1.8429	0.5194	2.3623	*	*	*	*	*	*

Girth Class (cm)	Site Quality III								
	Sound			Half soumnd			UnSound		
	Timber	Fule	Total	Timber	Fule	Total	Timber	Fule	Total
221-230	2.0193	0.5375	2.5568	*	*	*	*	*	*
231-240	2.2037	0.5545	2.7582	*	*	*	*	*	*
241-250	2.3961	0.5706	2.9667	*	*	*	*	*	*
251-260	2.5965	0.5859	3.1824	*	*	*	*	*	*
261-270	2.8049	0.6004	3.4053	*	*	*	*	*	*
271-280	3.0213	0.6142	3.6355	*	*	*	*	*	*
281-290	3.2457	0.6272	3.8739	*	*	*	*	*	*
291-300	3.4781	0.6397	4.1178	*	*	*	*	*	*

Table17(b): Site quality and girthclass-wise volume (cmt) of timber and fuel wood in Seoni division

Girth Class (cm)	Site Quality Iva								
	Sound			Half Sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
21-30	0.0087	0.0022	0.0109	0.0065	0.0026	0.0091	0.0016	0.0048	0.0064
31-40	0.0319	0.0116	0.0435	0.0226	0.0132	0.0358	0.0059	0.0212	0.0271
41-50	0.0627	0.0310	0.0937	0.0441	0.0346	0.0787	0.0115	0.0508	0.0623
51-60	0.1011	0.0589	0.1600	0.0708	0.0646	0.1354	0.0186	0.0894	0.1080
61-70	0.1470	0.0922	0.2392	0.1029	0.0999	0.2028	0.0271	0.1327	0.1598
71-80	0.2006	0.1282	0.3288	0.1403	0.1379	0.2782	0.0370	0.1775	0.2145
81-90	0.2618	0.1652	0.4270	0.1829	0.1765	0.3594	0.0482	0.2219	0.2701
91-100	0.3306	0.2018	0.5324	0.2309	0.2145	0.4454	0.0609	0.2647	0.3256
101-110	0.4070	0.2374	0.6444	0.2842	0.2513	0.5355	0.0750	0.3054	0.3804
111-120	0.4909	0.2716	0.7625	0.3427	0.2865	0.6292	0.0904	0.3438	0.4342
121-130	0.5825	0.3040	0.8865	0.4066	0.3198	0.7264	0.1073	0.3797	0.4870
131-140	0.6817	0.3348	1.0165	0.4758	0.3513	0.8271	0.1256	0.4133	0.5389
141-150	0.7885	0.3638	1.1523	0.5502	0.3810	0.9312	0.1452	0.4447	0.5899
151-160	0.9029	0.3911	1.2930	*	*	*	*	*	*
161-170	1.0248	0.4167	1.4415	*	*	*	*	*	*
171-180	1.1544	0.4409	1.5953	*	*	*	*	*	*
181-190	1.2916	0.4637	1.7553	*	*	*	*	*	*
191-200	1.4364	0.4851	1.9215	*	*	*	*	*	*
201-210	1.5888	0.5053	2.0940	*	*	*	*	*	*
211-220	1.7487	0.5243	2.2730		*	*	*	*	*

Girth Class (cm)	Site Quality Iva								
	Sound			Half sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
221-230	1.9163	0.5423	2.4586	*	*	*	*	*	*
231-240	2.0915	0.5592	2.6507	*	*	*	*	*	*
241-250	2.2743	0.5753	2.8496	*	*	*	*	*	*
251-260	2.4647	0.5905	3.0552	*	*	*	*	*	*
261-270	2.6626	0.6049	3.2675	*	*	*	*	*	*
271-280	2.8682	0.6186	3.4868	*	*	*	*	*	*
281-290	3.0814	0.6316	3.7130	*	*	*	*	*	*
291-300	3.3022	0.6440	3.9462	*	*	*	*	*	*

Table 17(c): Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Seoni division

Girth Class (cm)	Site Quality IVb								
	Sound			Half Sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
21-30	0.0080	0.0023	0.0103	0.0062	0.0027	0.0089	0.0015	0.0050	0.0065
31-40	0.0303	0.0121	0.0424	0.0222	0.0140	0.0362	0.0051	0.0224	0.0275
41-50	0.0599	0.0322	0.0921	0.0435	0.0361	0.0796	0.0100	0.0531	0.0631
51-60	0.0967	0.0609	0.1576	0.0699	0.0669	0.1368	0.0160	0.0927	0.1087
61-70	0.1409	0.0951	0.2360	0.1016	0.1030	0.2046	0.0233	0.1368	0.1601
71-80	0.1924	0.1320	0.3244	0.1386	0.1416	0.2802	0.0318	0.1823	0.2141
81-90	0.2511	0.1698	0.4209	0.1807	0.1806	0.3613	0.0414	0.2271	0.2685
91-100	0.3172	0.2072	0.5244	0.2282	0.2191	0.0447	0.0523	0.2703	0.3226
101-110	0.3906	0.2435	0.6341	0.2808	0.2561	0.5379	0.0643	0.3113	0.3756
111-120	0.4712	0.2783	0.7495	0.3387	0.2915	0.6302	0.0776	0.3498	0.4274
121-130	0.5592	0.3114	0.8706	0.4019	0.3250	0.7269	0.0921	0.3858	0.4779
131-140	0.6545	0.3427	0.9972	0.4703	0.3565	0.8268	0.1077	0.4195	0.5272
141-150	0.7570	0.3722	1.1292	0.5439	0.3862	0.9301	0.1246	0.4508	0.5754
151-160	0.8669	0.3999	1.2668	0.6227	0.4141	1.0368	0.1426	0.4801	0.6227
161-170	0.9840	0.4260	1.4100	0.7068	0.4402	1.1470	0.1619	0.5073	0.6692
171-180	1.1085	0.4506	1.5591	0.7962	0.4648	1.2610	0.1824	0.5328	0.7152
181-190	1.2403	0.4737	1.7140	0.8908	0.4879	1.3787	*	*	*
191-200	1.3793	0.4954	1.8747	0.9906	0.5095	1.5001	*	*	*

Girth Class (cm)	Site Quality IVb								
	Sound			Half Sound			UnSound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
201-210	1.5257	0.5159	2.0416	*	*	*	*	*	*
211-220	1.6794	0.5352	2.2146	*	*	*	*	*	*
221-230	1.8403	0.5535	2.3938	*	*	*	*	*	*
231-240	*	*	*	*	*	*	*	*	*
241-250	*	*	*	*	*	*	*	*	*
251-260	*	*	*	*	*	*	*	*	*
261-270	*	*	*	*	*	*	*	*	*
271-280	*	*	*	*	*	*	*	*	*
281-290	*	*	*	*	*	*	*	*	*
291-300	*	*	*	*	*	*	*	*	*

Table18: Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Sidhi division

Girth Class (cm)	Site Quality IVb								
	Sound			Half Sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
21-30	0.020	0.001	0.021	0.014	0.001	0.015	0.006	0.002	0.008
31-40	0.034	0.008	0.042	0.026	0.008	0.034	0.011	0.012	0.023
41-50	0.052	0.022	0.074	0.043	0.024	0.067	0.018	0.032	0.050
51-60	0.074	0.045	0.119	0.063	0.048	0.111	0.026	0.061	0.087
61-70	0.101	0.074	0.175	0.087	0.078	0.165	0.035	0.096	0.131
71-80	0.132	0.106	0.238	0.115	0.111	0.226	0.047	0.134	0.181
81-90	0.167	0.140	0.307	0.147	0.146	0.293	0.060	0.174	0.234
91-100	0.207	0.174	0.381	0.184	0.181	0.365	0.074	0.212	0.286
101-110	0.251	0.208	0.459	0.224	0.216	0.440	0.090	0.250	0.340
111-120	0.300	0.242	0.542	0.268	0.250	0.518	0.108	0.287	0.395
121-130	0.353	0.274	0.627	0.316	0.282	0.598	0.127	0.321	0.448
131-140	0.410	0.304	0.714	0.368	0.313	0.681	0.148	0.354	0.502
141-150	0.472	0.334	0.806	0.425	0.342	0.767	0.170	0.385	0.555

Table19: Site quality and girthclass-wise volume (cmt) of timber and fuelwood in South Panna division

Girth Class (cm)	Site Quality Vb								
	Sound			Half Sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
21-30	0.0135	0.0008	0.0143	0.0125	0.0009	0.0134	0.0079	0.0013	0.0092
31-40	0.0239	0.0052	0.0291	0.0222	0.0059	0.0281	0.0134	0.0081	0.0215
41-50	0.0376	0.0162	0.0538	0.0350	0.0178	0.0528	0.0207	0.0237	0.0444
51-60	0.0548	0.0338	0.0886	0.0511	0.0366	0.0877	0.0298	0.0478	0.0776
61-70	0.0754	0.0565	0.1319	0.0703	0.0605	0.1308	0.0407	0.0780	0.1187
71-80	0.0993	0.0825	0.1818	0.0928	0.0876	0.1804	0.0534	0.1119	0.1653
81-90	0.1267	0.1105	0.2372	0.1184	0.1164	0.2348	0.0679	0.1477	0.2156
91-100	0.1575	0.1391	0.2966	0.1471	0.1458	0.2929	0.0842	0.1839	0.2680
101-110	0.1917	0.1677	0.3594	0.1791	0.1750	0.3541	0.1022	0.2196	0.3218
111-120	0.2292	0.1957	0.4249	0.2142	0.2035	0.4177	0.1221	0.2544	0.3765
121-130	0.2702	0.2229	0.4931	0.2526	0.2311	0.4837	0.1438	0.2879	0.4327
131-140	0.3146	0.2490	0.5636	0.2941	0.2575	0.5516	*	*	*
141-150	0.3623	0.2740	0.6363	0.3387	0.2826	0.6213	*	*	*
151-160	0.4135	0.2978	0.7113	0.3866	0.3066	0.6932	*	*	*
161-170	0.4681	0.3205	0.7886	0.4376	0.3293	0.7669	*	*	*
171-180	0.5260	0.3420	0.8680	0.4919	0.3509	0.8428	*	*	*
21-30	0.019	0.002	0.021	0.017	0.003	0.020	0.005	0.007	0.012

Girth Class (cm)	Site Quality IVb								
	Sound			Half Sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
31-40	0.037	0.012	0.049	0.033	0.014	0.047	0.009	0.029	0.038
41-50	0.059	0.033	0.092	0.053	0.036	0.089	0.014	0.066	0.080
51-60	0.087	0.062	0.149	0.078	0.066	0.144	0.020	0.113	0.133
61-70	0.121	0.097	0.218	0.108	0.102	0.210	0.028	0.163	0.191
71-80	0.161	0.134	0.295	0.144	0.141	0.285	0.037	0.214	0.251
81-90	0.206	0.172	0.378	0.184	0.180	0.364	0.047	0.264	0.311
91-100	0.257	0.210	0.467	0.229	0.219	0.448	0.059	0.312	0.371
101-110	0.313	0.247	0.560	0.279	0.256	0.535	0.071	0.357	0.428
111-120	0.375	0.283	0.658	0.335	0.292	0.627	0.085	0.399	0.484
121-130	0.442	0.316	0.758	0.395	0.326	0.721	0.100	0.438	0.538
131-140	0.515	0.348	0.863	0.460	0.357	0.817	0.117	0.474	0.591
141-150	0.594	0.378	0.972	0.530	0.387	0.917	0.134	0.507	0.641
151-160	0.678	0.406	1.084	0.606	0.416	1.022	*	*	*
161-170	0.768	0.432	1.200	0.686	0.442	1.128	*	*	*
171-180	0.864	0.457	1.321	0.771	0.467	1.238	*	*	*
181-190	0.965	0.480	1.445	0.861	0.490	1.351	*	*	*
191-200	1.071	0.502	1.573	0.957	0.512	1.469	*	*	*

Table 21: Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Umariya division

Girth Class (cm)	Site Quality																	
	III									IVa								
	Sound			Half sound			Unsound			Sound			Half sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
31-40	0.034	0.007	0.041	0.023	0.010	0.033	0.012	0.020	0.032	0.032	0.007	0.039	0.021	0.009	0.030	0.008	0.020	0.028
41-50	0.066	0.022	0.088	0.044	0.029	0.073	0.022	0.049	0.071	0.063	0.022	0.085	0.041	0.026	0.067	0.017	0.049	0.066
51-60	0.105	0.045	0.150	0.070	0.057	0.127	0.035	0.088	0.123	0.101	0.045	0.146	0.065	0.052	0.117	0.027	0.089	0.116
61-70	0.153	0.074	0.227	0.102	0.092	0.194	0.051	0.133	0.184	0.147	0.075	0.222	0.095	0.085	0.180	0.040	0.134	0.174
71-80	0.208	0.108	0.316	0.138	0.130	0.268	0.070	0.180	0.250	0.201	0.109	0.310	0.129	0.122	0.251	0.055	0.181	0.236
81-90	0.270	0.144	0.414	0.180	0.171	0.351	0.091	0.227	0.318	0.262	0.146	0.408	0.169	0.161	0.330	0.072	0.229	0.301
91-100	0.341	0.181	0.522	0.227	0.212	0.439	0.115	0.273	0.388	0.331	0.183	0.514	0.213	0.200	0.413	0.091	0.275	0.366
101-110	0.419	0.218	0.637	0.280	0.251	0.531	0.141	0.318	0.459	0.407	0.220	0.627	0.262	0.239	0.501	0.112	0.319	0.431
111-120	0.506	0.254	0.760	0.337	0.290	0.627	0.170	0.359	0.529	0.491	0.256	0.747	0.316	0.277	0.593	*	*	*
121-130	0.600	0.289	0.889	0.400	0.327	0.727	0.201	0.399	0.600	0.583	0.291	0.874	0.375	0.314	0.689	*	*	*
131-140	0.701	0.323	1.024	0.468	0.363	0.831	0.236	0.436	0.672	0.682	0.325	1.007	0.438	0.349	0.787	*	*	*

Girth Class (cm)	Site Quality																	
	III									IVa								
	Sound			Half Sound			Unsound			Sound			Half Sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
141-150	0.811	0.355	1.166	0.541	0.396	0.937	0.272	0.470	0.742	0.789	0.357	1.146	*	*	*	*	*	*
151-160	0.928	0.386	1.314	0.619	0.428	1.047	0.312	0.502	0.814	0.903	0.387	1.129	*	*	*	*	*	*
161-170	1.054	0.415	1.469	0.702	0.458	1.160	*	*	*	1.025	0.416	1.441	*	*	*	*	*	*
171-180	1.187	0.442	1.629	0.791	0.486	1.277	*	*	*	1.155	0.444	1.599	*	*	*	*	*	*
181-190	1.327	0.468	1.795	0.885	0.513	1.398	*	*	*	1.292	0.470	1.762	*	*	*	*	*	*
191-200	1.476	0.493	1.969	0.984	0.538	1.522	*	*	*	1.437	0.495	1.932	*	*	*	*	*	*
201-210	1.632	0.516	2.148	*	*	*	*	*	*	1.589	0.518	2.107	*	*	*	*	*	*
211-220	1.796	0.539	2.335	*	*	*	*	*	*	1.749	0.540	2.289	*	*	*	*	*	*
221-230	1.968	0.560	2.528	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
231-240	2.148	0.580	2.728	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
241-250	2.336	0.599	2.935	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
251-260	2.531	0.617	3.148	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
261-270	2.734	0.634	3.368	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Girth Class (cm)	Site Quality																	
	III									IVa								
	Sound			Half Sound			Unsound			Sound			Half Sound			Unsound		
	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total	Timber	Fuel	Total
271-280	2.945	0.650	3.595	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
281-290	3.164	0.666	3.830	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
291-300	3.391	0.681	4.072	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Table 22: Site quality and girthclass-wise volume (cmt) of timber and fuelwood in Vidisha division

Girth class (cm)	Site quality IVb			Site quality Va		
	Sound			Sound		
	Timber	Fuel	Total volume	Timber	Fuel	Total volume
21-30	0.005	0.000	0.005	0.004	0.001	0.005
31-40	0.008	0.000	0.008	0.005	0.001	0.006
41-50	0.011	0.001	0.012	0.007	0.002	0.009
51-60	0.016	0.001	0.017	0.010	0.002	0.012
61-70	0.021	0.001	0.023	0.013	0.003	0.016
71-80	0.028	0.002	0.030	0.017	0.004	0.021
81-90	0.035	0.002	0.037	0.021	0.005	0.026
91-100	0.043	0.003	0.046	0.026	0.006	0.032
101-110	0.052	0.003	0.055	0.031	0.007	0.038
111-120	0.062	0.004	0.066	0.037	0.008	0.045
121-130	0.073	0.004	0.077	0.043	0.009	0.052
131-140	0.085	0.005	0.090	0.050	0.011	0.061
141-150	0.097	0.006	0.103	0.057	0.012	0.069
151-160	0.111	0.007	0.118	0.065	0.014	0.079
161-170	0.125	0.007	0.132	0.074	0.016	0.090
171-180	0.141	0.008	0.149	0.082	0.018	0.100
181-190	0.157	0.009	0.166	0.092	0.020	0.112
191-200	0.174	0.010	0.184	0.102	0.022	0.124

Note:- (*) Indicates that data was not available for these girth classes.