



**GOVERNMENT OF JAMMU & KASHMIR**

**REPORT**

**ON**

**TYPE STUDY**

**“ ASSESSMENT OF TIMBER AND ROUND WOOD USED IN  
CONSTRUCTION - 2008 ”**

**2007-2008.**

**DIRECTORATE OF ECONOMICS & STATISTICS**  
**JAMMU & KASHMIR GOVERNMENT**

**OVERVIEW**

The objective of the study was to know the percentage quantity of Timber / Round-Wood used in construction for the estimation of Capital Formation.

The study was launched in all the districts of the state. The study was a sample survey covering all the categories of ultimate beneficiaries who have been provided industrial wood by the forest Department.

The percentage quantity of Timber / Round-Wood used in construction as obtained from selected sample beneficiaries is **89.58**.

The highest rate of **95.11%** of Timber / Round-Wood used in construction has been obtained in Udhampur district and lowest rate of **61.96%** is obtained in Poonch

district. The percentage quantity of Timber/Round Wood used in construction for Deodar, Kai I and Fir has been observed as **95.80**, **92.50** and **90.67** respectively.

## HIGHLIGHTS OF THE CASE STUDY RATES AND RATIOS IN JAMMU & KASHMIR STATE

Reference Period 2006-07

S No	Rates Derived	Kashmir Division	Jammu Division	State
1	2	3	4	5
1	Percentage of Timber / Round Wood used in construction to total quantity obtained	92.32	84.48	89.58
2	Percentage of Timber / Round Wood used for other purposes to total quantity obtained	5.57	11.87	7.77
3	Percentage of Timber / Round Wood still un-used to total quantity obtained	2.10	3.65	2.64
4	Percentage of Timber / Round Wood still un-used likely to be used for construction to total un-			

	used quantity.	50.44	53.94	52.13
5	Percentage of Timber/Round Wood still un-used likely to be used for other purposes to total un-used quantity.	49.55	46.06	47.87

## TYPE STUDY ON ASSESSMENT OF TIMBER AND ROUND WOOD USED IN CONSTRUCTION

### INTRODUCTION:

National Income/State Income by definition is a measure of estimating volume of goods and services produced, by the Nation/ State from its all economic activities during a given period of time within its geographical boundaries counted without duplication. The goods include all types of goods produced e.g. agriculture goods, livestock and livestock products, fish, forest, mineral products, manufacturing of various consumption items, machinery and equipment etc. The services usually cover wide spectrum of services like medical services,

educational services, financial services, transport services, administration services, sanitary services, etc. These estimates are built up in terms of monetary value as different units of production and kinds of services are not directly additive.

Government of India (GOI) had set up National Statistical Commission (NSC) under the Chairmanship of Dr. C Rangarajan to review the Indian Statistical System and suggest measures to revamp the same. The NSC in its first report submitted to the government recommended various type studies to improve the existing rates and ratios used in the estimation of State Domestic Products (SDP) and Capital Formation (CF). The rates and ratios used were age old and required updating. Accordingly, Ministry of Statistics and Programme Implementation, which was nominated as nodal Ministry, asked many State Directorate's of Economics & Statistics to launch certain type studies and directed Central Statistical Organisation (CSO) to give technical details for conducting these studies. The Directorate of Economics & Statistics, Government of Jammu & Kashmir, proposed some eight studies in the sectors of agriculture, livestock, fisheries, forestry, trade and transport. A proposal to this effect was sent to GOI, which desired a comprehensive workable proposal and the guidelines were issued vide Do. No. M

11013/3/2002/NAD-9 dated: 30<sup>th</sup> September, 2003. In view of those guidelines a comprehensive workable proposal was sent to GO for accord of approval and technical improvements. This proposal was subsequently put before the Screening Committee, in the fourth meeting, which took place on 6<sup>th</sup> September, 2004. The committee recommended following studies for Jammu and Kashmir. The extract of the minutes of meeting, issued vide No: M/11013/1/2004/NAD-8 dated: 16-09-2004 are reflected hereunder:

S.No.	Sector	Subject
1.	Agriculture	<p>I. Production of newly emerging crop- Mushroom</p> <p>II. Production of newly emerging crop- Cut and Dried Flower.</p> <p>III. Seed rate of crops other than those covered in the Crop Cut Survey.</p>
2.	Livestock	<p>I. Estimates of consumption of roughage and concentrates including composition consumed by different categories of cattle</p>

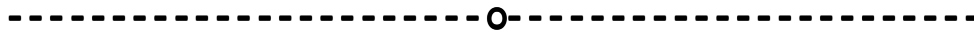
3.	Fishing sector	I. Estimates of production of fish and prawns from fish pond cultivation and subsistence fish  II. Inputs in fishing sector
4.	Capital formation	I. Estimation of timber and round wood used in construction  II. Estimation of quantity of coal required for production of one lakh bricks.

Subsequently, the proposal was put before Screening Committee for technical clearance. The Screening Committee accepted the proposal to conduct the proposed type studies and placed a ceiling of Rupees seven lakhs for the proposal. In view of the financial ceiling imposed, the studies were confined to four only, which are identified as under:

- I. Production of newly emerging crop- Cut and Dried Flower.
- II. Seed rate of crops other than those covered in the Crop Cut Survey.
- III. Estimation of timber and round wood used in construction
- IV. Estimation of quantity of coal required for production of one lakh bricks.



All these studies were launched in all districts of the state in selected villages / urban blocks. The present report pertains to the study "*Estimation of timber / round-wood used in construction*".



## ASSESSMENT OF TIMBER/ round wood used in construction

### **Background:**

The estimates of value of output from construction activity are prepared separately for pucca construction and labour intensive kuchha construction. In the case of former, the estimates are prepared by commodity flow approach and the value of all pucca construction undertaken with the use of construction materials such as Cement, Iron, Bricks and Timber etc. The estimates of labour intensive kuchha construction undertaken with the help of freely available material like leaves, reeds, mud etc. are prepared by expenditure approach using data from sample surveys, budget documents of centre/state governments, local authorities and annual reports of public and private sector enterprises.

The value of output of pucca construction are prepared by the commodity flow approach, but the data on regular flow of all input material going into

construction are not available annually. Therefore, total value of construction is estimated in three parts one and the most important among these is the value based on inputs of four basic construction materials viz; Cement and Cement products, Iron and Steel, Timber / Round wood and Bricks and Tiles.

The State Forest Department provides information on the production of industrial wood comprising mainly on timber and round wood. From this, total quantity of timber utilised for making railway sleepers is deducted to obtain the quantity of timber available for other uses. From this, the timber used in construction is taken at the rate of 48.5% on the basis of information contained in the timber trends study for the far east country report for India 1958, and round wood used in construction is taken at the rate of 38.3% of the production of round wood as per the information contained in the same study. As these rates are very old and due to changing circumstances and styles of construction work, may have undergone a change, the Central Statistical Organisation (CSO) on the recommendations of the National Statistical Commission (NSC) has desired to conduct a type study on the subject which will result in updating the rates realistically. The Directorate of Economics & Statistics, J&K accordingly designed the study and accomplished the task as per the following plan:-

**Objective :**

To know the quantity of timber / round wood used in construction in order to revise and update the rates used in the estimation of capital formation.

**Data Utilization :**

The data with regard to the output of industrial wood and its distribution was obtained from the State Forest Department on district wise basis. The list of ultimate beneficiaries was obtained depot wise from their respective divisional forest offices and a state wide study was launched to know the quantity of timber / round wood being actually utilised for construction work during the reference year 2006-07.

**Sample Survey :**

The study was a sample survey which covered all those categories of ultimate beneficiaries who had been provided industrial wood by the Forest Department throughout the state during the reference period 2006-07.

**Sample Design :**

The study was launched in all the districts of the state. 5% of the ultimate utilisers of the industrial wood under each category comprising of households, contractors, general builders, trade contractors, firm owners and other categories

etc. were selected randomly and assessed the different uses of the allotted quantity of timber / round wood has been put to, in order to know the percentage quantity being actually utilised for construction purposes.

**Schedule :**

A simple schedule was devised for obtaining information from the selected sample utilisers regarding the allotted quantity of wood/timber provided to them by the Forest Department. The information is simply about the different uses of the quantity utilised for and the quantity actually used in construction work during the reference period (See Annexure A).

**Tabulation :**

The field study was conducted by the staff of District Statistical and Evaluation Offices under the supervision by their respective District Statistics and Evaluation Officers. The Capital Formation unit of the Directorate of Economics & Statistics devised the tabulation plan, Scrutinized and tabulated the data and drafted the report.

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## RESULTS THROWN OUT BY THE STUDY

### Assessment of Timber / Round wood:-

The case study on assessment of Timber / Round wood used for construction was launched in all the 14 districts of the state. In all 762 beneficiaries were selected in J&K 451 from Kashmir Division and 311 from Jammu Division. A total quantity of 32866 cfts of timber and round wood was obtained by the selected 762 beneficiaries, comprising of 21384 cfts from selected beneficiaries of Kashmir Division and 11482 cfts from selected beneficiaries of Jammu Division during the reference period 2005-06. A total quantity of 5545 cfts. of Deodar was obtained by the selected beneficiaries of J&K comprising of 2717 cfts. from the selected beneficiaries of Kashmir Division and 2828 cfts. from that of Jammu Division. A total quantity of 13780 cfts of Kail was obtained by the selected beneficiaries of State, comprising of 8193 cfts cfts obtained from Kashmir Division and 5587 cfts. obtained from Jammu Division. 12555 cfts. of Fir was obtained by the selected beneficiaries of the State, comprising of 10474 cfts. obtained from Kashmir Division and 2081 cfts. obtained from Jammu Division while as a total of 986 cfts of Chir was obtained from Jammu Division only. In other words, out of total quantity of timber / round wood obtained of - Deodar 49% belongs to Kashmir Division and rest 51%

to Jammu Division, similarly in case of Kail and Fir - 60% and 83% from Kashmir Division and 40% and 17% from Jammu Division respectively.

The total cost paid by the selected beneficiaries of the State stands at Rs.64,57,284, of which Rs.37,28,284 i.e., 57.74% of the total cost paid by Kashmir Division and Rs.27,29,043 i.e., 42.26% of the total cost paid by Jammu Division.

From total quantity of 32866 cfts of Timber/ Round wood obtained by the selected beneficiaries of State, comprising of 21384 cfts obtained from Kashmir Division and 11482 cfts obtained from Jammu Division, 29442 cfts. of Timber/ Round wood comprising of 19742 cfts obtained from Kashmir Division and 9700 cfts obtained from Jammu Division was used for construction work.

**On an average Timber/ Round wood used for construction is taken at the rate of 89.58% in the State as obtained from selected sample beneficiaries.** The rate of Timber/ Round wood used for construction in Kashmir Division is more than that of Jammu Division which can be visualised from the fact that only 33% of Timber/ Round wood is used for construction in Jammu Division as compared to 67% used in Kashmir Division.

The highest rate of **95.11%** of timber / Round wood used in construction has been obtained in Udhampur District and the lowest rate of **61.96%** is obtained in Poonch District amongst the districts falling in Jammu Division while as the rates observed in Kashmir Division varies from **85.19%** to **94.91%**. The District wise rates of Timber / Round wood used in construction as culled out from the schedules is shown in the **table A**

The rate of Timber / Round wood used in construction for Deodar varies from **88.46%** to **100%** among the all districts of the state while as the rates of Kail and Fir varies from **82.51%** to **100%** and **84.88%** to **100%** respectively. The specie wise rate of Timber / Round wood used in construction as observed from the schedules is shown in the **table B**

**Table - A**

**DI STRI CTWISE RATE OF TI MBER/ ROUND WOOD USED I N CONSTRUCTI ON**

<b>S No</b>	<b>District</b>	<b>Percentage of Timber / Round Wood used in Construction to total Quantity obtained</b>
<b>1.</b>	<b>Srinagar</b>	<b>90.13</b>
	<b>Anantnag</b>	<b>94.91</b>

2.		
3.	Baranul I a	93.69
4.	Budgam	92.87
5.	Kupwar a	90.47
6.	Pul wana	89.71
7.	Leh	85.19
8.	Kargi l	86.52
9.	Tot al Kashnir Dī vi si on	92.32
	Jammu	90.16
	Udhampur	95.11
	Doda	85.40
	Raj our i	69.92
	Kat hua	93.61
	Poonch	61.96
16.	Tot al Jammu Dī vi si on	84.48
17.	Tot al St at e	89.58



**Table - B**

**DISTRICT WISE / SPECIE WISE RATE OF TIMBER / ROUND WOOD USED IN CONSTRUCTION**

S No	District	Percentage of Timber / Round Wood used in Construction to Total Quantity Obtained			
		Deodar	Kail	Fir	Chir
1.	Srinagar	100	89.92	86.05	-
2.	Anantnag	-	94.97	94.78	-
3.	Baramulla	97.48	92.27	90.06	-
4.	Budgam	91.11	100	92.57	-
5.	Kupwara	100	90.41	89.45	-
6.	Pulwama	-	100	87.13	-
7.	Leh	-	82.61	100	-
8.	Kargil	-	100	84.88	-
9.	Total Kashmir Division	95.95	93.53	90.43	-

10.	Jammu	88.46	90.95	89.58	-
11.	Udhampur	97.55	95.20	91.85	-
12.	Doda	100	82.51	93.55	-
13.	Rajouri	92.72	100	-	-
14.	Kathua	93.61	-	-	-
15.	Poonch	100	86.11	-	-
16.	Total Jammu Division	95.65	91.00	91.83	-
17.	Total State	95.80	92.50	90.67	-

Total quantity of 869 cfts. of Timber/ Round wood received by selected beneficiaries has been shown as quantity still unused, out of which 450 cfts. was obtained from Kashmir Division and 419 cfts. from Jammu Division.

The rate of Timber/ Round wood still unused, likely to be used for construction is **52.13%** for the State, comprising of **50.44%** for Kashmir Division and **53.94%** for Jammu Division.

### Specie-wise Timber/Round wood obtained (Cft)

S.No.	District	Total Number of Beneficiaries	Deodar	Kail	Fir	Chir	Total Timber/ Round wood obtained	Total Cost Paid (Rs)
1	2	3	4	5	6	7	8	9
1	Srinagar	64	171	655	380	-	1206	649282
2	Anantnag	112	-	3080	1378	-	4458	563170
3	Baramulla	61	1708	1177	1318	-	4203	834163
4	Budgam	72	754	331	3542	-	4627	737443
5	Kupwara	60	84	2064	654	-	2802	267848
6	Pulwama	66	-	746	2977	-	3723	550007
7	Leh	8	-	115	20	-	135	69064
8	Kargil	8	-	25	205	-	230	57264
9	<b>Total Kashmir Division</b>	<b>451</b>	<b>2717</b>	<b>8193</b>	<b>10474</b>		<b>21384</b>	<b>3728241</b>
10	Jammu	68	182	696	403	-	1281	689432
11	Udhampur	54	1512	1042	1166	-	3720	738320
12	Doda	47	66	1772	512	-	2350	209813
13	Rajouri	73	206	1501	-	713	2420	579569
14	Kathua	41	783	-	-	-	783	289661
15	Poonch	28	79	576	-	273	928	222248
16	<b>Total Jammu Division</b>	<b>311</b>	<b>2828</b>	<b>5587</b>	<b>2081</b>	<b>986</b>	<b>11482</b>	<b>2729043</b>
	<b>Total State</b>	<b>762</b>	<b>5545</b>	<b>13780</b>	<b>12555</b>	<b>986</b>	<b>32866</b>	<b>6457284</b>

<b>Specie-wise Timber/Round wood used for construction work</b>						
<b>S.no</b>	<b>District</b>	<b>Deodar</b>	<b>Kail</b>	<b>Fir</b>	<b>Chir</b>	<b>Total</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
1	Srinagar	171	589	327	-	1087
2	Anantnag	-	2925	1306	-	4231
3	Baramulla	1665	1086	1187	-	3938
4	Budgam	687	331	3279	-	4297
5	Kupwara	84	1866	585	-	2535
6	Pulwama	-	746	2594		3340
7	Leh	-	95	20	-	115
8	Kargil	-	25	174	-	199
	<b>Total Kashmir Division</b>	<b>2607</b>	<b>7663</b>	<b>9472</b>		<b>19742</b>
9	Jammu	161	633	361	-	1155
10	Udhampur	1475	992	1071	-	3538
11	Doda	66	1462	479	-	2007
12	Rajouri	191	1501	-		1692
13	Kathua	733	-	-	-	733
14	Poonch	79	496	-		575
	<b>Total Jammu Division</b>	<b>2705</b>	<b>5084</b>	<b>1911</b>	<b>-</b>	<b>9700</b>
	<b>Total State</b>	<b>5312</b>	<b>12747</b>	<b>11383</b>	<b>-</b>	<b>29442</b>

<b>Specie-wise Timber/Round wood used for other purposes</b>						
<b>S.no</b>	<b>District</b>	<b>Deodar</b>	<b>Kail</b>	<b>Fir</b>	<b>Chir</b>	<b>Total</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
1	Srinagar	-	66	-	-	66
2	Anantnag	-	50	72	-	122
3	Baramulla	43	-	131	-	174
4	Budgam	-	-	263	-	263
5	Kupwara	-	198	-	-	198
6	Pulwama	-	-	318		318
7	Leh	-	20	-	-	20
8	Kargil	-	-	31	-	31
	<b>Total Kashmir Division</b>	<b>43</b>	<b>334</b>	<b>815</b>		<b>1192</b>
9	Jammu	-	-	42	-	42
10	Udhampur	-	-	95	-	95
11	Doda	-	207	33	-	240
12	Rajouri	-	-	-	713	713
13	Kathua	-	-	-	-	-
14	Poonch	-	-	-	273	273
	<b>Total Jammu Division</b>	<b>0</b>	<b>207</b>	<b>170</b>	<b>-</b>	<b>1363</b>
	<b>Total State</b>	<b>43</b>	<b>541</b>	<b>985</b>	<b>986</b>	<b>2555</b>

**Details of Timber/Round wood from obtained quantity still un-used**

S.no	District	Deodar	Kail	Fir	Chir	Total
1	2	3	4	5	6	7
1	Srinagar	-	-	53	-	53
2	Anantnag	-	105	-	-	105
3	Baramulla	-	91	-	-	91
4	Budgam	67	-	-	-	67
5	Kupwara	-	-	69	-	69
6	Pulwama	-	-	65	-	65
7	Leh	-	-	-	-	-
8	Kargil	-	-	-	-	-
	<b>Total Kashmir Division</b>	<b>67</b>	<b>196</b>	<b>187</b>		<b>450</b>
9	Jammu	21	63	-	-	84
10	Udhampur	37	50	-	-	87
11	Doda	-	103	-	-	103
12	Rajouri	15	-	-	-	15
13	Kathua	50	-	-	-	50
14	Poonch	-	80	-	-	80
	<b>Total Jammu Division</b>	<b>123</b>	<b>296</b>	<b>0</b>	<b>-</b>	<b>419</b>
	<b>Total State</b>	<b>190</b>	<b>492</b>	<b>187</b>	<b>-</b>	<b>869</b>

**Purpose for which the un-used quantity is likely to be used  
Construction/Other**

<b>S.no</b>	<b>District</b>	<b>Deodar</b>	<b>Kail</b>	<b>Fir</b>	<b>Chir</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1	Srinagar	-	-	Other	-
2	Anantnag	-	Other	-	-
3	Baramulla	-	Construction	-	-
4	Budgam	Construction	-	-	-
5	Kupwara	-	-	Construction	-
6	Pulwama	-	-	Other	-
7	Leh	-	-	-	-
8	Kargil	-	-	-	-
9	Jammu	Construction	Other	-	-
10	Udhampur	Construction	Other	-	-
11	Doda	-	Construction	-	-
12	Rajouri	Construction	-	-	-
13	Kathua	Construction	-	-	-
14	Poonch	-	Other	-	-

## ANNEXURE -A

### SCHEDULE

#### FOR ASSESSMENT OF TIMBER AND ROUND-WOOD UTILISED FOR CONSTRUCTION WORK

#### Identification :

1. District \_\_\_\_\_ Tehsil \_\_\_\_\_ Block \_\_\_\_\_
2. a. Name of the beneficiary \_\_\_\_\_  
b. Parentage \_\_\_\_\_  
c. Mohalla/Village \_\_\_\_\_
3. Year of assessment \_\_\_\_\_
4. Name of sale depot \_\_\_\_\_
5. **Category to which the beneficiary belong:-**
  - a. Household
  - b. Contractor
  - c. General Builde
  - d. Trade Contractor
  - e. Firm Contractor
  - f. Other (specify)
6. **Specie-wise timber/round wood obtained from Forest Department:-**

S.No.	Item	Quantity obtained (cft)					Total cost paid Rs.
		Deodar	Kail	Fir	Chir	Other	
1.	Special						
2.	Samudha						
3.	Under size						
4.	B-Class						
5.	Logs samudha						
6.	Ballas						
7.	Karries and planks						
8.	Logs B-Class						
9.	Other						



**7. Specie-wise timber/round wood used for construction work:-**

S.No.	Item	Quantity obtained (cft)					
		Deodar	Kail	Fir	Chir	Other	Total
1.	Special						
2.	Samudha						
3.	Under size						
4.	B-Class						
5.	Logs samudha						
6.	Ballas						
7.	Karries and planks						
8.	Logs B-Class						
9.	Other						

**8. Specie-wise timber/round wood used for other purposes:-**

S.No.	Item	Quantity obtained (cft)						Total cost paid Rs.
		Deodar	Kail	Fir	Chir	Other		
1.	Special							
2.	Samudha							
3.	Under size							
4.	B-Class							
5.	Logs samudha							
6.	Ballas							
7.	Karries and planks							
8.	Logs B-Class							
9.	Other							

**9. Detail of timber/round wood used from obtained quantity still un-used:-**

S.No.	Item	Quantity obtained (cft)						Total cost paid Rs.
		Deodar	Kail	Fir	Chir	Other		
1.	Special							
2.	Samudha							
3.	Under size							
4.	B-Class							
5.	Logs samudha							
6.	Ballas							
7.	Karries and planks							
8.	Logs B-Class							
9.	Other							

10. Purpose for which the un-used quantity is likely to be used.  
Construction/other (indicate "C" or "O")

S.No.	Item	Likely use of remaining quantity ("C" or "O")					
		Deodar	Kail	Fir	Chir	Other	Total
1.	Special						
2.	Samudha						
3.	Under size						
4.	B-Class						
5.	Logs samudha						
6.	Ballas						
7.	Karries and planks						
8.	Logs B-Class						
9.	Other						

Signature of Investigator