

CHAPTER IV

INCOME FROM FORESTRY

Revised estimates of income from 'forestry' sector have been presented in detail in this chapter. The figures included in the various issues of the 'Estimates of National Income' were prepared generally on the lines indicated in paragraphs 2.111 to 2.118 of the Final Report of the NIC. During the past few years, however, certain more up-to-date additional material has become available. On the basis of such material and also certain conceptual improvements, the earlier estimates have been revised. The nature and extent of the changes so effected are described in detail in the following paragraphs.

2. In estimating the contribution of forestry sector, use has been made of the 'inventory' method which aims at estimating the gross value of output in the first instance and then deducting the value of different inputs charged to current expenses. Forestry sector broadly conforms to the industrial classification suggested in the 'Systems of National Accounts and Supporting Tables'<sup>1</sup> and includes (a) forestry (e.g. planting, replanting and conservation of forests; gathering of uncultivated materials; charcoal burning carried on in the forest) and (b) logging (e.g. felling and rough cutting of trees; hewing or rough shaping of poles, blocks etc; and transportation of logs).

3. The principal forest statistics relate to area under forests, volume of standing timber, output and value of timber and firewood, value of minor forest produce, employment in forestry and forest industry, forest revenue and expenditure and trade in forest produce. These are published annually in the Indian Forest Statistics (IFSt)<sup>2</sup> issued by the DESAg which compiles these statistics on the basis of returns received from forest department of various State Governments. The data relate to financial years ending 31st March, the latest issue (mimeographed) relating to the year 1957-58<sup>3</sup>. The statistics relating to the major States in the Indian Union are fairly complete in respect of major items but for smaller States the available data on certain items including private forests is not complete.

3.1. Estimates of total area under forests, as given in the AgStat are based on the returns received from the State agriculture or revenue departments and relate generally to the agricultural year ending 30th June. The area reported under 'forests' in the AgStat, however, is much less than that reported in the IFSt. Appendix 4.1. sets out in detail the State-wise differences in area under forests according to the

<sup>1</sup> U.N. Studies in Methods: F.2, 1953, (Appendix I.)  
<sup>2</sup> Prior to 1946-47, similar information was published in "Annual Returns of Statistics relating to Forest Administration in India". For further details as regards the nature of information published, reference may be made to Vol. II of the Indian Forest Statistics, 1954-55.  
<sup>3</sup> Partial data for the year 1958-59 have, however, been compiled by the DESAg. Advance use has been made of these data in preparing the estimates presented in this chapter.

*Income from Forestry*

two sources. These differences result mainly due to (i) diversity in definitions<sup>4</sup> of the term 'area under forest', (ii) diversity in purposes for which these statistics are compiled by the two agencies, (iii) differences in geographical coverage<sup>5</sup> of the two sets of figures and (iv) differences in reference periods; the last one, however, is not very important.

3.2. Very recently the DESAg have, in consultation with the State forest departments, finalized a revised set of proformae for reporting of forest statistics. One of the most important features of the revised system is to adopt the same definition of 'forest' areas as adopted in the AgStat. Accordingly, all such unwooded or other areas put to some agricultural or non-forest use, would be left out from 'forest' areas and indicated separately, thus bringing about greater agreement in the two sets of 'forest' area estimates. Besides giving the following additional data, viz. (i) area of forests surveyed with topographical details, (ii) outturn of logs, sleepers etc. (iii) species-wise outturn of timber and fuel wood and (iv) outturn and volume of minor produce, the revised system provides for collection and publication of data pertaining to (a) annual consumption and carry over of wood and minor forest produce, (b) wholesale prices of forest produce and (c) game shot in the State etc. These data on revised lines would, however, be available only from 1958-59 onwards.

3.3. Besides the important sources described above, there are other *ad hoc* publications giving valuable data on forests. These are (i) India's Forests and the War, (ii) Forestry in India, and (iii) The Timber Trends Study for the Far East—Country Report for India. Of these, the first two were brought out by the DESAg whereas the last one, viz. the TTS Report is based on an extensive study undertaken by the Inspector General of Forests on behalf of the FAO.

3.31. The TTS Report, besides reproducing the data on area and outturn of forest produce from the IFSt, gives information on (a) methods of logging operations and waste and losses incurred during logging (b) production costs at different stages of forest exploitation such as stumpage prices, felling costs, transport charges from stump to permanent lines of transport and transport charges along these permanent lines, (c) supply and consumption of round wood, fuel wood and charcoal, bamboo and palm species, (d) State-wise movement of round wood and (e) future supply of raw materials from indigenous sources etc.

3.4. Information on prices (generally wholesale prices but in the case of certain States retail prices also) are available from the following sources:—

- (i) Indian Census of Manufactures (annual)
- (ii) Annual Reports of the Railway Board
- (iii) Agriculture in Brief (annually published by the DESAg)

<sup>4</sup> In the IFSt returns, the whole area including non-wooded area of unclassified forests under the control of forest department is taken as area under forests, while in the AgStat the same is classed according to its actual utilization.

<sup>5</sup> Whereas the Forest Department Reports cover the entire forest areas under the jurisdiction of the State forest and other departments, the AgStat relate only to the 'reporting areas'.

National Income Statistics

- (iv) Statistical Supplements to State Gazettes
- (v) Monthly/Quarterly Bulletins of Statistics (State Statistical Bureau publications) and
- (vi) Economic Adviser's Index Number of Wholesale Prices (weekly).

The scope and extent to which the above sources have been used for estimation will be described in the following sections on evaluation of forest output.

4. Evaluation of forest output : In the light of available forest statistics, we may now describe the actual method of arriving at the gross and net output from the 'forestry' sector. In these estimates, it may be stated at the very outset that limited use has been made of the area statistics given either in the IFSt or in the AgStat. The latest available information on the subject has, however, been reproduced in Appendix 4.1.

4.1. State-wise estimates of outturn of major produce, viz. timber and fuel wood are available in IFSt according to (i) ownership, (ii) legal status and (iii) composition of forests. On detailed examination of these data it was noticed that whereas the areas managed by the State forest departments are generally covered fully, those under the ownership rights of corporate bodies, civil authorities and private individuals are not. The position in this regard, prevailing during the three years 1953-54 to 1955-56 is set out in summary Table 4.1.

TABLE 4.1: AREA UNDER FORESTS\* FOR WHICH OUTTURN STATISTICS ARE AVAILABLE IN THE IFSt

ownership type	(in 00 sq. miles)		
	1953-54	1954-55	1955-56
(1)	(2)	(3)	(4)
(i) forest department	2041.3 (93.1)	2148.1 (93.0)	2336.8 (99.9)
(ii) civil authorities	167.9 (35.5)	253.8 (64.0)	128.9 (42.7)
(iii) corporate bodies	0.2 (3.1)	0.6 (24.9)	0.05 (2.3)
(iv) private individuals	29.6 (16.2)	24.2 (29.9)	29.7 (41.0)
(v) total : all types of ownerships	2239.0 (79.8)	2426.7 (86.7)	2495.4 (91.9)

\*Figures within brackets represent the percentages of area covered to total area under forests under each category.

A more serious limitation of these outturn data is that they represent only the authorised exploited forest resources. Thus all such unauthorised removals of timber or firewood of any description are obviously missed from the official production data. As regards the former limitation, that is non-reporting of major forest produce for certain areas covered in the IFSt, the NIC made certain adjustments. For the part for which production data were not available, the outturn of timber per square mile

*Income from Forestry*

was assumed to be one-third of outturn per square mile of the area for which returns exist; the corresponding figure for fuel was assumed to be two-thirds—these fractions were adopted arbitrarily after discussion with officials of the forest departments and the DESAg<sup>6</sup>.

The assumption involved in this procedure is that the forest areas managed by non-government agencies are less exploited. The ownership pattern has, however, undergone a significant change from 1949-50 onwards, as will be seen from figures presented in Appendix 4.2. The proportion of forest area under corporate bodies and private individuals to total forest area has decreased from 22.8 per cent in 1949-50 to 2.8 per cent in 1955-56. This was in consequence of the National Forest Policy, announced in May 1952, whereafter sizable portions of private owned forests were acquired by State Governments through legislation<sup>7</sup>. Since it is necessary to recognize the change in ownership pattern, it would follow that in estimating the unrecorded production, account should be taken of the effects of this change. Therefore, the procedure of adjustment adopted by the NIC cannot be fully applicable to post-1950-51 period. Besides, as stated earlier, the production data given in the IFSt even in respect of reported areas, do not take account of the unauthorised removal of forest products, whose magnitude is quite considerable.

4.2. Some attempts have been made in the TTS Report to arrive at estimates of unrecorded production of timber and fuel wood. Private forests and to some extent unreserved forests, farmyards, village commons, field ridges, canal banks, roadside avenues, individual household courtyards and unproductive fruit trees form the main sources of this unrecorded production. According to the report, in regard to unrecorded production, there has been but limited scope for direct data and in most cases particulars of this part of production have been filled in only as the figures were necessary to balance production and consumption<sup>8</sup>. The approach adopted for these estimates has been from consumption side by end-uses of forest products. These 'consumption data' have been obtained from a variety of sources. Numerous references to industrial users of round wood and its products and the specialized agencies of Government in connection with such industries, enabled data to be assembled with a reasonable degree of accuracy, e.g. the plywood industry, match industry, paper industry etc. State Forest authorities also furnished some information in this regard. For further details of non-industrial consumption, relevant particulars from such sources as the National Sample Survey<sup>9</sup>, Planning Commission etc. were availed of. To fill in the gaps still left, sample surveys and field studies were undertaken by special staff engaged specifically for the purposes, e.g. saw milling and timber in use in Delhi area, saw milling and timber in use in Calcutta industrial area, timber in use in the Asansol localities of the coal mining industry, as also study of the end-uses of timber in the Kallai and other markets of the South West Coast<sup>10</sup>.

<sup>6</sup> Final Report of the NIC, February, 1954, pp. 55-56.

<sup>7</sup> According to it, the control and management of private forests "should be strictly regulated and where that cannot be done, they should be taken over by State Governments by effective legislation".

<sup>8</sup> The TTS Report, p. 62.

<sup>9</sup> Data pertained to the 8th round of the NSS which was carried out in July 1954 to March 1955. The data has been taken to be the average for 1953-55, TTS Report, p. 96.

<sup>10</sup> Timber Trends Study, preface, p. VIII.

- 77 -

*National Income Statistics*

4.2.1. An overall idea about the magnitudes of unrecorded production of timber and fuel wood can be had from Table 4.2 embodying the relevant estimates from the TTS Report:

TABLE 4.2: INDIGENOUS SUPPLY OF INDUSTRIAL  
FUEL WOOD (AVERAGE 1953-55)

(in lakh cu.ft.)

category	recorded	unrecorded	total
(1)	(2)	(3)	(4)
<b>a. industrial wood</b>			
1. saw and veneer logs	1122	508	1630 <sup>a</sup>
2. pulp wood	16	—	16
3. pitprops	37	25	62
4. other industrial wood	192	343	535
5. sub-total	1366	876	2242
<b>b. fuel and charcoal wood</b>			
	3490	21220 <sup>b</sup>	24710 <sup>c</sup>

<sup>a</sup> Excluding net imports of 753 thousand cu.ft. As such the figures here do not tally with those given in Table 2 of the TTS Report.

<sup>b</sup> Out of this, unrecorded production from 'trees outside forests' is stated to account for as much as 20710 lakh cu.ft.

<sup>c</sup> An independent check on the total consumption of fuel wood is also available in the 'Domestic Fuels in India' (National Council of Applied Economic Research). According to this publication, the estimated household consumption of fuel wood (including charcoal wood) comes to 32 million tons of coal equivalent. Making use of the following technological ratios, the firewood equivalent works out at 2160 million cu.ft.

1 ton coal energy = 1.35 tons firewood energy

1 ton fuel wood = 50 cu.ft. of firewood.

This compares very favourably with the estimated household consumption of 2426 million cu.ft. of fuel wood given in the TTS Report, the rest, i.e. 35 million cu.ft. being total non-household consumption of fuel wood.

Unrecorded production would comprise of (i) unauthorised removals from regularly worked forests and production not recorded in IFSt but pertaining to private owned forests and (ii) production from 'trees outside forests' (e.g. trees in village commons, field ridges, canal banks, roadside avenues, fruit gardens no longer productive of fruit etc.). The break-up for fuel wood by the two categories (i) and (ii) has been given in the report under reference (*vide* foot note 10) but the same has not been attempted in respect of timber, presumably for lack of any good basis. For our purpose on the basis of some indirect evidence we have assumed two-thirds of the unrecorded timber, shown under col. (3) of Table 2, to originate from regularly worked forest areas corresponding to category (ii) whereas the rest is assumed to represent fellings etc. effected in 'agriculture' proper. The average figures for the three year period 1953/55, have further been assumed to represent the outturn for the year 1954-55. For later years, however, the figures have been estimated by accepting the assumed annual rates of decline of 1.75 and 2.25 per cent for timber and fuel wood respectively<sup>11</sup>. The resulting figures of total production of timber and fuel wood,

<sup>11</sup> TTS Report (para 5 on round wood, page 70 and para 5 on fuel wood, p. 71).

relevant for estimating the value of output from 'forestry' sector, are given in Table 4.3.

4.3. No outturn figures are available in respect of minor products. The IFSt gives their value only. Besides it contains data on quantity and value of removals of some of these minor products by various agencies, viz. government, purchasers, free grantees and right holders. Like major products, these are also very likely to suffer from under/non-reporting or both. Estimates are, however, directly available on area and outturn of lac in the 'Area and Outturn of Principal Crops in India'. These are based on annual direct returns obtained by the DESAg from the State Governments. In respect of bamboos, rough estimates of total production are available for the period 1953-55 in the TTS Report<sup>12</sup>. These are again framed on the basis of end use consumption of bamboo. As these relate to just one year and are very rough in nature, we have not accepted these for purposes of estimation of minor forest outturn.

4.4.1. We now turn to the problem of estimating the value of different forest products at prices accruing to the producers. Obviously the price chosen should be such that it covers all activities associated with the forest exploitation within the prescribed boundaries of production. The value figures given in the IFSt clearly do not represent the true price. This was pointed out by the NIC in their Final Report which stated that 'the aggregate government revenue from forest produce is likely to be considerably less than the value of output of the government forests'<sup>13</sup>. Important reasons for the same are :

i) A substantial part of the forest produce is removed without any authorisation and thus escapes reporting. The magnitudes have been indicated in an earlier para of this chapter.

ii) The government works its forests only on a limited scale. According to the IFSt, 1954-55, the share of government agency in the total removals of various forest products during the quinquennium 1950-1951 to 1954-1955 averaged to just 17.7 per cent for timber, 10.0 per cent for fuel and 2.7 per cent for bamboos respectively, the rest being handled or worked by private agencies. The position for individual years in respect of timber, fuel, bamboos, lac and myrobalans is summarized in Appendix 4.3.

iii) As regards the forest produce worked by private agencies, mostly contractors, the government sells off the same by public auction, through leasing out of forest areas on tender or on permit basis<sup>14</sup>. The price realised by government is not

---

<sup>12</sup> Cf. Table 10(a) page 95 of the TTS Report.

<sup>13</sup> Final Report of the NIC, para 2.115.

<sup>14</sup> Describing the phases of logging operations at which the bulk of round wood is sold, the TTS Report observes: 'The bulk of forests are sold as standing timber by public auction. Marked standing trees, in coupes, are sold for lump sum payments. The purchasers work the trees as locally convenient. . . . A fair percentage of the forests are, however, worked departmentally and the timber extracted to a sale depot for disposal, usually by auction. Some forests are leased out on tender, e.g. in M.P. (Bastar Division) for the extraction of railway sleepers; for large scale timber operations in the North Andamans; for soft wood and plywood species in remote areas of Upper Assam, N.E.F.A., Mysore forests etc. In unreserved forests, e.g. Orissa, Assam etc., trees are sold standing on permit basis. In some States such sales are allowed at concessional rates when made to right holders, e.g. Orissa, Andhra etc. . . .', page 15.

National Income Statistics

thus 'the first market value of felled wood and timber, as laid down in the instruction pertaining to the IFSt schedules, but an auction price of standing timber or royalty fee paid by the purchaser who is yet to exploit the forest resources.

From the above discussion, it would be clear that over and above the price at stump, one has to account for felling costs, rough hewing, lopping and topping of round wood, their transportation from the stump to the nearest road, rivulet, river or railway station from where the produce is likely to be carried by other mechanical or regular means of transportation—all the above activities being an essential part of forest production.

4.4.2. Monthly wholesale prices are published in various statistical supplements to State Gazettes as also in certain publication of the SSBs. These are generally urban wholesale prices of commercial timber, which include a large element of trade and transport margin. Similarly prices available in the Weekly Bulletin of Index Number of Wholesale prices (EA's Office) relate to teak logs at Balharshah and to sal and shisham at Bareilly. None of the above have, therefore, been used by us directly.

4.4.3. Purchase prices of certain important manufacturing industries, e.g. match, plywood, paper, tea-chest etc. can be obtained from the CMJ which gives quantity and value of timber used by each of these industries. The prices therein contain trade and transport margins and are not representative of a large bulk of timber. The various industries referred to above use only soft wood which forms a small percentage of total timber. These soft wood prices are low compared to hard wood (timber and round wood) prices.

4.4.4. The 'Annual Report of the Railway Board' also gives the purchase price of first class sleepers of certain specifications. These purchases are made by the Railways on zonal basis and as such State-wise prices cannot be worked out from them.

4.4.5. Wholesale prices of certain important varieties of timber and fuel wood are being collected by the DESAg and some of these are published in their annual hand book entitled 'Agriculture in Brief'. The specific advantage of these prices is that they are available for practically all the important states, with a number of primary timber assembling centres covered in each State and relate to different kinds of timber and fuel wood.<sup>15</sup> These prices also contain certain element of trade and transport margins, though not so much as in the case of other available prices reviewed earlier. The average prices worked out for each of the major States have been deflated at a flat rate of 25 per cent to allow for the trade and transport margins implicit in them. This adjustment factor has been worked out by comparing these

<sup>15</sup> Prices of fuel wood are given in rupees per maund. These have been converted into prices per cu.ft. on the basis of volume-weight ratios, which data were independently obtained from State Forest Departments. This ratio works out as follows:  
1.84 solid cu.ft. = 1 md.

### *Income from Forestry*

State average prices with the cost of production of timber as given in the TTS Report<sup>16</sup>. In the absence of similar data on cost of production of fuel wood, the same deflationary factor has been used for adjusting the average wholesale prices of fuel wood.

4.5. The value of reported production of timber and fuel wood has been worked out at the State level using State outturn figures and the State-wise prices of timber and fuel wood, the latter having been obtained from the DESAg. As regards the adjustment of these prices for making them net of trade and transport margins, the same has been explained in the preceding paragraphs. Estimates for 1958-59 and 1959-60 are, however, provisional. Partial data in respect of recorded production were collected from the unpublished records of the DESAg. These related to the year 1958-59. In the absence of similar data for the year 1959-60, the figures of the earlier year, viz. 1958-59 were repeated. As regards the unrecorded production, the procedure of estimating remains the same as for earlier years. For evaluation purposes the all-India estimated prices of 1957-58 have been adjusted to the years 1958-59 and 1959-60 on the basis of index number of wholesale prices of logs and timber.

4.6. The estimated value of timber and firewood roughly works out at four times the value reported in the IFSt. For minor products also, the same ratio has been adopted to arrive at the actual gross value. It may be observed here that value of bamboos and lac were independently worked out for the period 1953-55 making use of the direct outturn data referred to in para 4.3 above and the relevant prices obtained from the DESAg. These turned out to be nearly eight times the value reported in the IFSt. As the reported value of lac and bamboos forms only a small proportion of the total reported value of all minor products, this adjustment has been made only on the basis of the observed differences in major products.

4.7. The estimated value of output from 'forestry' sector is presented in Table 4.3 for the country as a whole. In the absence of any State-wise estimates of unrecorded production, it has, however, not been possible to give State-wise estimates of total outturn though for the recorded part, the estimates have been set out in Appendix 4.5.

---

<sup>16</sup> As pointed out earlier in para 3.31, the TTS Report gives (i) the stump prices, (ii) cost of felling, (iii) transport charges from stump to permanent lines of transportation and (iv) transport charges from permanent lines of transport onwards, all per cu.ft. for each of the important States. For our purpose, we have, however, ignored item (iv) for working out the cost of production on this basis. The all-India average cost of production for the period 1953-55 works out at Rs. 3.75 (vide Appendix 4.4) as against Rs. 5.08 on the basis of wholesale price data obtained from the DESAg. The adjustment factor thus derived is 0.738 which has arbitrarily been rounded off to 0.75 yielding an overall trade and transport margin of 25 per cent.

TABLE 4.3: OUTFURN AND VALUE OF FOREST PRODUCE IN INDIA  
(at current prices)

outturn in lakh cu. ft.  
value in lakh rupees.  
price in Rs. per cu. ft.

item	1954-55			1955-57			1957-58			1958-59 (preliminary)			1959-60 (preliminary)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
<i>major produce</i>																
<i>1. timber</i>																
1.1 recorded	1483			9274	1570	4.711	7424	1649	4.929	8128	1727	5.058	8735	1727	5.572	9023
1.2 unrecorded	574		4.230	2428	664		2657	554		2731	644		2752	634		2976
1.3 total	2057			8702	2140		10081	2203		10859	2271		11487	2291		12598
<i>2. fuel and charred wood</i>																
2.1 recorded	3921			1032	3594	0.499	1793	3876	0.568	2292	4129	0.583	2407	4129	0.642	2651
2.2 unrecorded	436		0.493	240	488		244	477		271	406		272	460		293
2.3 total	4420			2170	4082		2037	4353		2473	4595		2679	4585		2944
<i>3. sub-total (1+2)</i>																
3.1 recorded	5404			8297	5170		9217	6325		10330	5855		11142	5855		12274
3.2 unrecorded	1073			2674	1052		2901	1031		3002	1010		3024	890		3208
3.3 total	6477			10971	6222		12118	6356		13332	6865		14166	6840		15482
<i>minor produce</i>																
4. sub-total				3207			3166			3417			3411			13863
<i>5. total: all products (item 3.1 + item 4)</i>																
				14088			15283			1674			17677			19463
<i>6. loss 5) i. e. for cost deductions</i>																
				704			764			837			884			970
<i>7. net output (item 5 - item 6)</i>																
				13384			14519			15912			16793			18493

### *Income from Forestry*

5. *Net Output* : The NIC, while using an overall figure of 5 per cent for various cost deductions, observed that 'little is known about deductions necessary for the derivation of net output of forestry' and recommended that 'a few studies on forest exploitation, if undertaken, will lead to an improvement in the basis of netting adopted in this report. The Indian Forest Research Institute (IFRI) may fruitfully undertake some work in this direction.' Some discussions in this connection took place between the CSO and the IFRI towards the end of 1955. Later a proforma with a comprehensive note explaining the individual items were furnished to the IFRI for collection of requisite data through the State Conservators of Forests. Obviously this task involved a large amount of clarification, scrutiny and examination at technical level. The IFRI passed on the entire mass of returns to the CSO (in March '58) without examining the contents and their quality. On further reference by the CSO to the Ministry of Food and Agriculture, the latter expressed inability to undertake even an *ad hoc* survey either through the IFRI or through the Inspector General of Forests for various reasons such as (i) the requisite information was not readily available with the Centre or the States; (ii) for the collection of the required data, a study of the forms maintained by the different States would be necessary before a proforma for their collection can be prescribed and as the system of maintenance of accounts and other data in the States are not uniform, even a limited proforma would mean maintenance of additional forms at various levels from the Range upwards, which in turn would necessitate appointment of extra staff at each level; and (iii) the data on forestry as collected at present through the State Governments are sufficient for the day to day requirements of administration and planning.

5.1. Obviously nothing has been achieved in respect of 'netting' relating to forestry sector. A general examination of these returns by the CSO revealed that their quality and content left much to be desired. The returns did not generally include information on a large number of items, e.g. expenditure on wages and salaries, expenditure of materials physical assets etc. On the basis of some very rough calculations made from these mostly incomplete returns, the percentage of cost of materials and depreciation worked out at 3.9 per cent of the gross value. In their Draft Report on Inter-Industry Table for 1953-54, the ISI have adopted a figure of 6.9 per cent of total value of output as cost deductions for purposes of netting. This seems to be based on analysis of Budget for Andamans (1951-52). It may, however, be pointed out here that the conditions of exploiting forests in Andamans and Nicobar are very different from the main sub-continent, because of the underdeveloped means of transport and communication in that territory. Besides, its share in the total forest outturn is insignificant. As such the NIC figure of 5 per cent for various cost deductions has been adopted to arrive at the net output as set out in Table 4.3.

6. *Comparison with conventional estimates* : The estimates prepared on the revised lines differ from those given in the earlier issues of the 'Estimates of National Income'. Table 4.4 gives the two sets of estimates by broad components :

## National Income Statistics

TABLE 4.4: COMPARISON OF THE REVISED ESTIMATES WITH THE CONVENTIONAL ESTIMATES : 1955-56 TO 1959-60

item	(at current prices)						quantity in lakh cu.ft. value in lakh rupees			
	1955-56		1956-57		1957-58		1958-59 (preliminary)		1959-60 (preliminary)	
	revised	conven- tional	revised	conven- tional	revised	conven- tional	revised	conven- tional	revised	conven- tional
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1. timber										
1.1 quantity	2957	1468	2140	1559	2203	1628	2271	1727	2261	1727
1.2 value	8702	4771	10081	5721	10359	5843	11487	6355	12598	7001
2. fuel wood										
2.1 quantity	4420	3917	4082	3547	4253	3892	4595	4129	4585	4129
2.2 value	2178	1680	2037	1348	2473	1557	2679	1693	2944	1865
3. minor products										
value	3207	1184	3165	1282	3417	1372	3511	1292	3643	1292
4. total gross										
value	4087	7635	15283	6351	16749	8772	17677	9340	19405	10188
5. total net										
value	13384	7253	14519	7923	16912	8323	16793	8873	18435	9680

6.1. Differences in the two series mainly result from differences in data on outturn and prices used for preparing these estimates. As regards the outturn figures, whereas no allowance was made earlier for the unrecorded production of timber and fuel wood, the same have been adjusted on the basis of relevant data given in the TTS Report. As will be seen from the figures presented in Table 4.3, the value of this unrecorded production alone forms nearly 33 per cent of the value of the corresponding recorded production. Similarly, whereas the reported value of minor forest products was adopted as such for the conventional series, the same has been adjusted on the basis of differences observed in the case of major products.

6.2. There has also been considerable change in the price material used for purposes of evaluation. For the conventional series, use was made of the CMI input prices of timber and fuel wood, the limitations of which have been discussed in para 4.1.2 above. The present series, on the other hand, has been built up by using the State annual wholesale prices of fair average qualities of commercial timber, duly adjusted for trade and transport margins. The average prices thus worked out are the nearest approximation to the producers' prices. The revised price of timber in 1955-56 worked out thus is nearly 30.2 per cent higher than the corresponding CMI input price for the same year. In the case of fuel wood this difference works out at 12.0 per cent only indicating that the CMI input prices in this case were comparatively more reasonable.