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A Sample Survey to Update Rates and Ratios of Timber and Non – Timber Forest Products of India.

Division of Statistics
Directorate of Extension
Indian Council of Forestry Research & Education
P.O. New Forest
Dehradun

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Introduction

Forests and forest produce play an important role in the economy of a country, be it urban or rural. Of late, forests are looked not as a mere source of timber and non-timber forest produce, but also as assets, which will serve the long term interest of a society in terms of climate, environment and ecology. However, the revenue earned by a society through its forests still figures high on the list of uses a forest can be put to, and more so, if attained on a sustained basis.

The problem of estimating the revenue earned from forests persists from a large time. The value of timber and non-timber resources that lie within forests and that are taken out to the market may be gigantic but remain under represented in national figures due to lack of proper methods that can really estimate it. This assumes more difficulty as a large proportion of the forest produce is traded by the unorganized sector, which is not only difficult to estimate but is also very difficult to identify. A large part of the forest produce is kept for self-consumption by the dwellers in the forest area and what remains is traded in unofficial markets (*mandis*). The problem of non-response in the surveys conducted to estimate the revenue or value of the resources forests generate is also too cumbersome to handle.

Objectives of the Study

The study is aimed at providing a momentum to the ongoing efforts of ICFRE in collection and dissemination of data related to forestry in India. The aim is to develop a methodology that can be used in future for the purpose. The study is proposed with the following objectives:

- 1. to estimate the value of output and the value of input of timber in the country
- 2. to estimate the of output and the value of input of Non timber forest products in the country

Methodology

The forest produce has been divided into two major segments *viz.*, the timber and the non – timber part. While the timber market is fairly organized, with trade controlled by the state forest departments through their depots, the non – timber forest products market is largely unorganized with the tribal people and forest dwellers carrying on the trade in unknown and local markets. The state governments control the trade of forest produce like tendu patta that brings a large amount of revenue to the state. However, the collectors are tribal people who sell their collection to the state governments through the established *mandis*.

The Indian Council of Forestry Research and Education has eight institute spread across the country with each of them looking after the research needs of the state mandated to it.

Institute	Location	Mandated States / UTs
Forest Research Institute	Dehradun	Uttaranchal Uttar Pradesh Haryana Punjab Delhi Chandigarh
Institute of Forest Genetics & Tree Breeding	Coimbatore	Tamilnadu Kerala Lakshadweep Andaman & Nicobar Islands
Institute of Wood Science & Technology	Bangalore	Karnataka Andhra Pradesh Goa
Tropical Forest Research Institute	Jabalpur	Madhya Pradesh Chattisgarh
Arid Forest Research Institute	Jodhpur	Rajasthan Daman & Diu Gujarat
Rain Forest Research Institute	Jorhat	Assam Meghalaya Tripura Nagaland Arunachal Pradesh

Institute of Productivity	Forest	Ranchi	Jharkhand Bihar Orissa (confirm) Sikkim West Bengals
Himalayan Forest Institute	Research	Shimla	Himachal Pradesh Jammu & Kashmir

Supervisors were nominated by the Directors of each ICFRE institute along with four investigators for field level data collection from the mandated states as given above. A two-day orientation programme for the supervisors at Van Vigyan Bhawan, New Delhi to take into account their views and designing the data collection form. The finalized forms were then sent to the supervisors with necessary instructions to start the work. The proceedings of the orientation programme are given in Annexure – I.

Value of Non – Timber Forest Products

Initially it was decided to lay a 1-hectare sample plot in the different forest types and note down the details of NTFP being collected from the plot. However, this approach was not feasible as it is not practical to post a person continuously in each plot to accomplish the work. The best way was to select the forest villages and go through the interview method with validation built in through data collected from the different organized markets. Instead of the state wise stratification, the physiographic zones identified by the Forest Survey of India were taken as a basis for stratification. Forest Survey of India has identified fourteen physiographic zones in the country based on broad similarities in factors responsible for the growth of tree vegetation. A certain number of districts were selected in each physiographic zone, depending upon, again, on the cost function of the study. Three villages in each district were selected randomly and surveyed for the amount of produce collected and its value in the form of the revenue they earned from them.

The following table gives the fourteen physiographic zones along with the area in square kilometers:

Table 1: Distribution of Districts within Physiographic Zones (source: State of Forest Report 2003, Forest Survey of India, Dehradun)

S. No.	Name of the zone	Area in square kilometers
1.	Western Himalayas	338556
2.	Eastern Himalayas	65317
3.	North East	133990

4.	Northern Plains	295780
5.	Eastern Plains	223339
6.	Western Plains	319098
7.	Central Highlands	373675
8.	North Deccan	355988
9.	East Deccan	336289
10.	South Deccan	292416
11.	Western Ghats	72381
12.	Eastern Ghats	191698
13.	West Coast	121242
14.	East Coast	167494

Value of Timber

For estimating the value of timber, minimum three depots (more depending upon the costs incurred in data collection) of each state forest department were surveyed in each state and data on the species stocked, incoming and outgoing quantity, price and value were collected during each month. The purpose of monthly data collection was to ensure validity of the estimates and estimations in case data are not received due to any reason. In order to estimate the cost of input, data in respect of variables like electricity, cost of maintenance of depot, and other variables, excluding the salaries of employees were also incorporated into the data collection forms. The data collection forms are given in Annexure III. It was assumed, and quite rightly so, that the timber that is sold in the market comes from two sources, namely the state forest departments and the imports, the latter not being a part of the study.

For the purpose of timber, three classifications are adhered to, *viz.*, Round Logs, Sawn Timber and Poles. Firewood has been kept out of the purview of the study. Thus, value of Round Logs, Sawn Timber and Poles has been included in preparation of final estimates.

General Mechanism for data collection

The income from NTFP was assessed using structured questionnaires, which were put to the collectors of the NTFP from the forest. The distance from the village where NTFP are collected was also assessed in the questionnaire. On an average, each village gets its share from around 6 kilometers radius. Thus, each village collects NTFP from 114 square kilometers.

Sampling

I. Non – Timber

For estimating the value of non – timber forest produce, the country was divided into fourteen strata based on the different physiographic zones as identified by the Forest Survey of India. A three stage sample comprising of districts in the first stage and village in the second was then drawn from each stratum. Household was selected in the third stage of sampling. However, efforts were made to do a comprehensive survey in each village. The questionnaire is given in Annexure II. A sample of a minimum of 30 households was drawn from each village depending upon the availability of respondent and the cost function associated with the survey. In many villages, more than 30 households were surveyed. Data from the households was used to estimate the value of NTFP from each village (compartment). However, it is worth mentioning here that the forest villages are generally small with a population of 200 to 500. The details of the sample drawn is as follows:

(a) Stratification variable: Physiographic Zone

(b) First stage unit: District

(c) Second stage unit: Village (compartment)

(d) Third stage unit: Household

(e) Method of data collection: Interview of collectors

Formulae

Each village spans an area of 114 square kilometers (a radius of approximately, 6 kms.) and hence, defines a compartment in a particular physiographic zone. The total number of compartments in each physiographic zone is given by:

Area of the physiographic zone/114 = N

The total number of compartments sampled equals the number of villages sampled = n.

The average value of NTFP in each compartment = Total value in sampled villages/number of villages

The estimated value of NTFP in each physiographic zone =

(Average value of NTFP in the zone X N)/n

The total estimated value of the NTFP in the country is the sum total of the values in each physiographic zone.

Data Collection from each zone

1. Western Himalayas

This physiographic zone consist of a total of 45 districts, (41 complete and 4 partial) of Himachal Pradesh, Jammu & Kashmir, Sikkim, Punjab, Uttaranchal and West Bengal. A total of six villages were surveyed in different ranges of Darjeeling district. The total revenue earned by the respondents in the sampled villages is Rs. 1,38,777.00 from an area of 684 square kilometers, which equal 6 compartments. The total number of compartments in the zone for NTFP collection is 2501. Thus, the total estimated revenue from the physiographic zone is (138777*2501/6), i.e. 57846879.5, or INR 57846880. The total revenue from Uttaranchal is 70983013

2. Eastern Himalayas

The zone consists of ten complete districts of Arunachal Pradesh. The total area is 65,317 square kilometers. The total number of estimated compartments is 573, out of which 6 were sampled. The average revenue per compartment was estimated as Rs. 67680.00, and the value for the total zone was estimated to be Rs. 406082.00

3. North East

The North East Zone comprises of 43 complete and 4 partial districts, spanning an area of 133,990 square kilometers. The estimates were available only for Mizoram. The survey in the rest of the zone could not be carried out due to logistic reasons. Data from 1 district of Mizoram estimates the value of NTFP to the tune of 2630000 for the entire state. The figures of the rest of the zone were esitnmated form the past data as 2% of the total revenue to the tune of Rs. 172460805.00.

4. Northern Plains

This physiographic zone consists of 102 complete districts and 8 partial from Chandigarh, Delhi, Haryana, Punjab and Uttar Pradesh. The total area is 295,780 square kilometers. Out of these, Non Timber Forest Products are collected in Uttar Pradesh only and little or none are found in the remaining states. The value of NTFPs in U.P. is 306083000 as per the data furnished by the forest department.

5. Eastern Plains

With a total area of 223,339 square kilometers and 62 complete and 11 partial districts, the total number of compartments in the zone is estimated as 1959 out of which 24 were sampled. The average value of NTFPs collected from each compartment is Rs. 13712 and the total value of NTFP was estimated as Rs. 26861482.00

6. Western Plains

The Western Plains physiographic zone comprises of 17 complkete and 8 partial districts of Daman & Diu, Gujarat and Rajasthan. Data for Gujarat from the Gujarat State Forest Development Corporation (GSFDC) are available and the total value of NTFPs traded is Rupees 565452.00. From the remaining area, 3 compartments were sampled out of 1080 compartments. The average value per compartment was estimated as Rs. 13243 while the total value of NTFPs traded was estimated as Rs. 14301900.00

7. Central Highlands

Central Highlands comprises of 52 complete and 19 partial districtsof Bihar, Gujarat, Haryana, Madhya Pradesh, Rajasthan and Uttar Pradesh with a total area of 373675 square kilometers. The total number of compartments in the zone was estimated to be 3278 out of which 12 were sampled. The total value of NTFPs in the sampled compartments was estimated to as Rs. 756330.00 with an average of Rs. 63027.00 per compartment. The total value for the entire physiographic zone is Rs. 206604008.00

8. North Deccan

Spread over an area of 355,988 square kilometers, this physiographic zone consist of 33 complete and 15 partial districts of Gujarat, Madhya Pradesh and Maharastra. The estimated number of compartments in the zone is 3123 out of which 30 were sampled. The average value per compartment is estimated as Rs. 57746.00 and the total value as Rs. 180341903.00

9. East Deccan

Spread over an area of 336,289 square kilometers, this physiographic zone consist of 48 complete and 15 partial districts of Bihar, Chattisgarh, Jharkhand, Madhya Pradesh, Orissa, Uttar Pradesh (one) and West Bengal (one). The toal number fo compartments estimated in this zone is 2950 out of which 27 were sampled. The total value of NTFPs from the sampled compartments is estimated to be Rs. 1630769, with an average of Rs. 60399 per compartment resulting in the estimated value of Rs. 178176613.00.

10. South Deccan

This zone consists of 26 complete and 11 partial districts of Andhra Pradesh and Karnataka. Consisting of an area of 292,416 square kilometers, the total number of compartments identified in the zone is 2565 and 27 were sampled. The total value in the sampled compartment is Rs. 35585594 with an average of Rs. 1317985.00 per compartment. The total estimated value of NTFPs collected from the zone is estimated to be Rs. 3380631430.00

11. Western Ghats

Consisting of an area of 72,381 square kilometers and 5 complete & 30 partial districts, the total number of compartments identified in the zone is 635 out of which 30 were sampled. The total estimated value of NTFPs colelcetd from this zone ios Rs. 3400532 which gives an average of Rs. 113351.00 per compartment. Thus, the total value of NTFPs from the zone is estimated to be Rs. 71977927.00

12. Eastern Ghats

The total area covered by this physiographic zone is 191,698 square kilometers with 12 complete and 28 partial districts of Andhra Pradesh, Orissa, Karnataka and Tamil Nadu. The total number of compartments in this zone was identified as 1682 out of which 24 were sampled. The total estimated value of NTFPs from the sampled compartments of this zone is Rs. 32801762.00 with an average of Rs. 1366740.00, bringing the total estimated value to Rs. 2298856820.00.

13. West Coast

The area of this physiographic zone is 121,242 square kilometers with 20 complete and 21 partial districts. The total number of compartments identified in this zone is 1064 with 12 sampled compartments. The total value of NTFPs in the sampled compartments is Rs. 566620.00 with an average of Rs. 47218.00. Thus, the total value estimated is Rs. 50240305.00

14. East Coast

This physiographic zone consists of 24 compete and 23 partial districts spread over 167,494 square kilometers. There is a total of 1469 compartments out of which 15 have been sampled. The total estimated value in the sampled compartments is Rs. 16146788.00 with an average of Rs. 1076453.00. The total value of NTFPs collected from this zone has been estimated to be Rs. 1581308771.00.

The results of total estimated and the estimated value for the country are summarized in the table given below:

Table 2: Results of estimates of Non – Timber Forest Products:

S. No.	Stratum	Area (in square kilometers)	No. of compartments	No. of compartments sampled	Revenue in sampled compartment	Average value per compartment	Estimated value for stratum
1.	Western Himalayas	338556	2970				0
1 (a)	Western Himalayas, Except Uttaranchal	285073	2501	6	138777	23129.5	57846879.5
1 (b)	Uttaranchal	53483		Whole state			70983013
2.	Eastern Himalayas	65317	573	6	406082	67680	406082
3.	North East						0
3 (a)	Except Mizoram	112909			2% of total		172460805
3 (b)	Mizoram	21081		One District	328750		2630000
4.	Northern Plains	295780					0
4 (a)	Except UP						0
	Uttar Pradesh	240928		Whole State			306083000
5.	Eastern Plains	223339	1959	24	329084	13711.83	26861481.5
6.	Western Plains						0

6 (a)	Except Gujarat	123076	1080	3	39727.5	13242.5	14301900
6 (b)	Gujarat	196022		Whole state			565442
7.	Central Highlands	373675	3278	12	756329.5	63027.5	206604008
8.	North Deccan	355988	3123	30	1732391	57746.4	180341903
9.	East Deccan	336289	2950	27	1630769	60398.9	178176613
10.	South Deccan	292416	2565	27	35585594	1317985	3380631430
11.	Western Ghats	72381	635	30	3400532	113351	71977927
12.	Eastern Ghats	191698	1682	24	32801762	1366740	2298856820
13.	West Coast	121242	1064	12	56620	47218	50240307
14.	East Coast	167494	1469	15	16146788	1076453	1581308771
						Total	8600276382

Thus the total estimated value of NTFP from the country is Rs. 8600276382, or **86003 lakhs** of rupees approximately

II. Timber

In order to estimate the value of timber, the State Forest Departments were taken as strata and the depots as the sampling unit. Three depots from each state were selected at random and a structured data collection form was used to collect data from the sampled depots. In case cost function allowed, more depots were sampled. Complete data for all the months were available for U.P. from the U.P. Forest Development Corporation. The format is given in Annexure – III.

For the purpose of estimating the total number of depots in each state, the number of ranges in each state was obtained. The number of depots almost equals the number of depots.

The cost of input is generally not available from the depots. The data for this were collected from three depots and the cost of input has been estimated as Rs. 500,000 per annum on an average.

The results of the survey are summarized in the table below:

Table 3: Estimates of Timber

	nates of Timber			Revenue from	Adjustment
state	No. of depots	Sampled			for Months
A & N	55				
Andhra Pradesh	196	10	6	81997456	163994912
Arunachal Pradesh	75				
Assam	121				
Bihar	33	6	3	3602550	14410200
Chandigarh					
Chattisgarh					
D & N Haveli	3				
Daman & Diu					
Delhi	9				
Goa	11				
Gujarat	140	4	6	80145897.8	160291795.6
Gujarat	140	16	9	118443394.4	157924525.9
Haryana					
HP	189	5	9	507211930.9	676282574.5
J&K	123	1	6	331516038	663032076
J&K	123	1	3	27872957	111491828
Jharkhand	131				
Karnataka	445	1	9	244935	326580
Karnataka	445	1	4	275545	826635
Karnataka	445	1	12	884905.33	884905.33
Kerala	106	4	3	2502480	10009920
MP	362				
Maharashtra	309				
Manipur					
Meghalaya	17				

Mizoram	70				
Nagaland	42				
Orissa	152				
Pondicherry					
Punjab	68	68	3	11179810	44719240
Rajasthan	261	2	6	4436	8872
Rajasthan	261	1	9	11312135	15082846.67
Sikkim	20	7	7	12332383.95	21141229.63
Tamilnadu	155	6	6	19824975	39649950
Tripura	43				
UP	424	424	12	1078195000	1078195000
Uttaranchal	245	29	12	823322188.7	823322188.7
West Bengal	298	3	3	1126467	4505868
West Bengal	298	2	6	259763	519526
	5815	592			3986620673

Keeping in mind the high degree of non – response, and considering 592 as a random sample of 5815 (sampling intensity of 10%), the value of timber is estimated as:

(5815/592)*3986620673

= 39159120293 or **Rs. 391591 lakhs.**

* State: State Forest Department

The estimated cost of input per depot per annum works out to Rs. 500,000.00. Thus, the estimated cost of input for 5815 depots works out to Rs. 29075 lakhs of rupees. Thus the estimated value of timber is Gross value – Cost of input, which works out to Rs. 362516 lakhs.

No. of Depots: Total number of depots in the state

Sampled: Total number of depots in the sample

Value: Value of timber sold by the depots sampled

Adjustment for months: Adjustment for the number of months for which data are available

Finalized estimates:

Component	Total value estimated (in lakhs of rupees)	Cost of input	Net value estimated (in lakhs of rupees)
Non – Timber Forest Products	86003	0	86003
Timber	391591	29075	362516

Proceedings of the Orientation Programme for Supervisors of CSO Funded study "Estimation of rates and ratios of timber and non – timber forest products in India"

Held at Van Vigyan Bhawan, R.K. Puram

New Delhi

27 – 28 January 2005

The meeting started at 10:00 a.m. The following were present:

- 1. Shri Pratap Singh, ADG (Statistics), ICFRE, Dehradun
- 2. Shri Rajiv Pandey, Scientist C, FRI, Dehradun
- 3. Shri D. Raj Suguna Sekar, Scientist C, IFGTB, Coimbatore
- 4. Dr. S.R. Shukla, Scientist D, IWST, Bangalore
- 5. Shri Saikat Banerjee, TFRI, Jabalpur
- 6. Dr. V.P. Tewari, Scientist E, AFRI, Jodhpur
- 7. Shri Chandrashekar B.S., Scientist B, IFP, Ranchi
- 8. Dr. R.K. Verma, Scientist D, HFRI, Shimla
- 9. Sri Anoop Singh Chauhan, R.A. I, Division of Statistics, ICFRE, Dehradun
- 10. Shri Raman Nautiyal, Scientist C, Division of Statistics, ICFRE, Dehradun

The ADG (Statistics), ICFRE, Dehradun briefed the participants about the purpose of the orientation programme. A meeting with the DDG, NAD, CSO and his staff was also held at their office at Sardar Patel Bhawan, to discuss the modalities of conducting the survey. The following decisions were taken:

- 1. The data for timber component will be taken from the circle level / corporations or appropriate source as the case may be, with few depots in each state surveyed for cost of input, monthly intake and sale of timber, species wise.
- 2. Utilization pattern of timber demands a more extensive survey involving all the stakeholders, and as such cannot be taken up along with the present study.
- 3. A complete list of all depots in the states will be provided by the supervisors.
- 4. Questionnaires and data collection forms have been remodeled according to the discussions of the participants.

- 5. Data in respect of import / export of timber can be obtained from the DG, Commercial Intelligence and Statistics, Govt. of India.
- 6. Data in respect of minor forest products will be collected from state forest departments, local bodies involved in the trade, market where available and collectors.
- 7. Individual collectors will be interviewed and data collected after stratification by forest types. The samples will be selected by the DoS, ICFRE.
- 8. Data regarding MFPs / timber from SFDs will be on monthly basis. The frequency of collection may be as per the convenience of the supervisors.
- 9. Interim funds will be provided to the institutes soon. The supervisors will send physical and financial report regularly to ADG (Statistics) for compilation and onward submission to CSO.

Pratap Singh	Rajiv Pandey	D. Rajasuguna Sekar
Dr. V.P. Tewari	Chandrashekar B.S.	Dr. R.K. Verma
Dr. S.R. Shukla	Saikat Banerjee	Anoop Singh Chauhan
	Raman Nautiyal	

WORKING MANUAL

A SAMPLE SURVEY TO ESTIMATE RATES AND RATIOS OF TIMBER AND NON – TIMBER FOREST PRODUCTS IN INDIA

27 – 29 January 2005

held at

Van Vigyan Bhawan

New Delhi

Division of Statistics

Directorate of Extension

Indian Council of Forestry Research and Education

Dehradun

Introduction

The Central Statistical Organization, Ministry of Statistics and Programme Implementation, Govt. of India, has funded a study to collect data in respect of minor forest produce and timber in order to update the rates and ratios for timber and non – timber forest produce of India. Forests and forest produce play a major role in the society and the life of a human being. They provide timber, fuel, fodder and a host of other goods and services for immediate consumption or consumption after processing, notwithstanding the intangible benefits that accrue from the protection of environment, tourism and other elated activities. The contribution of forests and forest products to the economy of our country is immense, but remains clouded with skepticism for want of data and precise estimation of the value of inputs and the outputs associated with it.

The products for which we depend upon the forests can broadly be classified into two categories – Timber and Non – Timber forest products. The latter category includes a wide spectrum of products that vary with the geographical regions of our country.

The collection of data pertaining to NTFPs becomes difficult, as the collection of NTFPs is unorganized to quite some extent. The collection agencies vary from the well-organized State Forest Department to the unorganized villagers and tribal people who don't keep any records of the value of the forests they are collecting. The timber market, on the other hand is quite organized and the sale is through the SFD depots or well established timber markets (*mandis*).

Objectives

The study is aimed at providing a momentum to the ongoing efforts of ICFRE in collection and dissemination of data related to forestry in India. The aim is to develop a methodology that can be used in future for the purpose. The study is proposed with the following objectives:

3. To estimate the value of output and the value of input of timber in the country

4. To estimate the of output and the value of input of Non – timber forest products in the country

Cost of inputs and outputs regarding the timber and non – timber forest produce needs to be estimated to arrive at the rates and ratios of these two components.

Methodology

For data regarding timber component

The data regarding timber component will be collected from two sources, namely, the timber depots of state forest departments and the timber markets. The markets from which data are proposed to be taken are the same as for the Timber / Bamboo Trade Bulletin published by ICFRE.

- 1. Ahmedabad
- 2. Bangalore
- 3. Kolkata
- 4. Calicut
- 5. Dehra Dun
- 6. Delhi
- 7. Gorakhpur
- 8. Guwahati
- 9. Hyderabad
- 10. Jabalpur
- 11. Jaipur
- 12. Jammu
- 13. Chennai
- 14. Nagpur
- 15. Pathankot
- 16. Raipur
- 17. Ranchi
- 18. Siliguri
- 19. Yamuna Nagar

Out of the list of state forest depots in the various circles, a sample of 20% will be drawn subject to a minimum of two from each state and data collected from the selected depots on a monthly basis.

For data regarding the MFP component

Data for minor forest produce has to be collected from three sources monthly.

1. Government and other agencies dealing in MFP/NTFP

Secondary data from governmental / institutional (NGOs / societies) sources to be collected in the format prescribed on a monthly basis.

2. Markets

Data from the markets to be collected on a monthly basis in the formats prescribed.

3. Source

Primary data from a sample plot of 1 Ha to be laid in the forest types to estimate the quantity collected per unit Ha of forest area.

Reporting the data to ADG (Statistics)

Data collection forms will be provided. The data from the depots, markets, and sources should be recorded in a data register and transferred to the forms after proper scrutiny and validation. Four registers will be provided to each institute, one for each investigator. The data records in the register should be signed and verified by the investigators and countersigned by the supervisor for ensuring accuracy and precision of data. The aim here is not to find faults but to ensure the figures are properly recorded, leaving almost no room for any doubt, whatsoever. Care should be taken to maintain homogeneity in units of measurements. Where there are differences, the conversion factor should be recorded and mentioned separately for the purpose of conversion.

Once validated and scrutinized, the data should be entered in the relevant form given in the booklet by hand and verified and signed. Under no circumstances, the data should be printed or computer printouts taken. Booklets of formats will be provided to each institute, one for each month and state. The booklets, complete in all respects, should be returned to the ADG (Statistics). Abnormal figures should be well explained in annexure citing the page number wherein the figure appears. In case some data is not available, reasons for such non – availability should be clearly spelled out. However, care should be taken to complete the booklets and the aim should be to fill in all the details, taking into account the non – response, if any. Reasons for non – response should be mentioned.

The data sheets should be submitted to the ADG (Statistics), ICFRE, Dehradun, as per the time schedule. Each page of the booklet should be signed by the supervisor.

Time Schedule

There will be a total of 12 visits for MFP and 8 for timber component of the sample survey.

MINOR FOREST PRODUCTS

	\neg
DATA FOR THE MONTH OF	
	_
NAME OF THE INSTITUTE	
NAME OF THE STATE	

This booklet should be completed in all respects and submitted to ADG (Statistics), ICFRE, Dehradun, according to the time schedule

Form I: Details of NTFPs from Cooperatives / Govt. agencies

Name of the organizat	ion						
Locality / area							
	Details of NTFPs						
Name of NTFP	Quantity collected each month	Collection Cost (in Rs.)	Quantity sold	Revenue realized (Rs.)	Remarks		

Signature of investigator	Signature of supervisor
Name:	Name:

QuestionnaireFor collection of Forest Produce

Name of the respondent					
Village		Tribe (if appli	icable)		
Annual Income					
Assets owned					
Name of NTFP	Quantity	collected	Return to collecto (in Rs.)	or	Remarks

Extent of area cov (Km)	vered	Time spent in collection days)		1 *		_		(in	
Method of selling	Coo	operative	Direct M	I arket	To Govt. Agencies	Any other			
Estimated quantity any	y of ea	nch Forest I	Products (timber	and Non – timb	er) k	cept for self use, if		
Name of the pro	duce		Quantity k	cept for s	self use		Purpose		
Other Socio – econ	omic o	details							
Number of family m	nembei	rs							
Male	F	Female		Male -	- children	Fen	nale – children		
Number of family m	nembe	rs engaged i	n collectio	n of for	est produce				
Male	F	Female		Male -	- children	Fen	nale – children		
Other observation worth reporting	ons								

TIMBER

	\neg
DATA FOR THE MONTH OF	
NAME OF THE DIOTHER	
NAME OF THE INSTITUTE	
NAME OF THE STATE	

This booklet should be completed in all respects and submitted to ADG (Statistics), ICFRE, Dehradun, according to the time schedule

Questionnaire for Timber component (traders)

Depot / Market						
Staff Position	,	,	,			
Category	Number of personnel	Salary (p.m.)	Remarks			
Supervisors						
Laborers						
Middle level managers						
Others						
Investment detail	s	1	1			
Item	Value	Depreciation	Time of installation	Remarks		

Form I: Data for Timber in the SFD depots / Plantation Corporations

Name of de	epot	Input Cost											
Details of	Гimber												
Species	Inc	Incoming quantity (monthly)			Outgoing Quantity (Monthly)						Remarks		
	Round	Sawn	Poles	Firewood	irewood Round Logs		Round Logs Sawn		Poles		oles Firewood		
	Logs				Qty	Price	Qty	Price	Qty	Price	Qty	Price	

Signature of investigator:	Signature of Supervisor:	
Name:	Name:	
Date:	Date:	

Supervisors for the survey in ICFRE Institutes

S. No.	Institute	Supervisor
1.	Forest Research Institute, Dehradun	Shri Rajiv Pandey Scientist – D
2.	Institute of Forest Genetics & Tree Breeding, Coimbatore	Shri D.R.S. Sekar Scientist – C
3.	Institute of Wood Science & Technology, Bangalore	Dr. S.R. Shukla Scientist – D
4.	Tropical Forest Research Institute, Jabalpur	Shri Saikat Banerjee,
5.	Arid Forest Research Institute, Jodhpur	Dr. V.P. Tewari, Scientist – E
6.	Rain Forest Research Institute, Jorhat	Shri A.K. Sarkar
7.	Institute of Forest Productivity, Ranchi	Chandrashekar B.S. Scientist – B
8.	Himalayan Forest Research Institute, Shimla	Dr. R.K. Verma, Scientist – D

Annexure – V

Coordinating team from ICFRE

- 1. Mr. Pratap Singh, ADG (Statistics), up to 10.06.2005
- 2. Mr. Ajay Kumar Lal, ADG (Statistics), from 14.06.2005 to 21.04.2006
- 3. Mr. H.S. Sohal, ADG (Statistics), from 21.04.2006 till date
- 4. Mr. Raman Nautiyal, Scientist D (Statistics)
- 5. Mr. S.K. Sheel, R.A. I
- 6. Mr. A.S. Chauhan, R.A. I
- 7. Mr. S.S. Aswal, R.A. I

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