Statistics on resources, production and trade

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Abstract—The collection of reliable statistical information is a skilled and costly business. The issue of statistics on bamboo and rattan is explored, illustrating the need, the problems and the possibilities for collecting information. The information need varies according to whether bamboo and rattan are important to households, to local communities, to industry or to national and international trade. In the main producing regions all these apply, while in importing regions industry and trade are the dominant concerns.

Although this information is important to people actively dealing with aspects of bamboo and rattan in the economy, data may be difficult to collect. Specific information on these topics may have small significance for general assessment of the national economy or of international trade. Bamboo and rattan are often harvested and processed, marketed and utilised by rural households with no formal records. The production in the commercial system often involves small scale of operation and a wide range of products.

The current state of data collection is problematical. Though the data for China are rather comprehensive, for other important producer countries the available data are limited and not consistently available over time. The available data hardly give an indication of the scope and importance of bamboo and rattan for rural communities. Trade data provides broad indications of magnitude but specific data is lacking.

Recommendations on the development of bamboo and rattan information involve in the first place the initiative and commitment of the countries, communities and enterprises to which the products are important and the collaboration and support of a number of international organisations. These would focus on resource assessment, production and activity surveys and improvement of international trade data.

Key words: Resources; production; trade data; bamboo; rattan.

INTRODUCTION

Decision making, be it at the level of the household, business, corporation or government, is best when it based on the analysis of reliable facts. Statistical data and trends on production and trade are among those key pieces of information to

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be considered by governments and international development organisations when setting policies and making decisions towards the development of a sector in a country. Their concern is to have reliable figures on the socio-economic contribution of the non-wood forest products sector to national economies, on the numbers of people involved in the products and their level of dependency [1].

The collection of reliable statistical information is a skilled and costly business and will only be done if the topic is seen to be important and the urgent need for information about it is recognised. In this paper the issue of statistics on bamboo and rattan is explored with the aim of illustrating the need, the problems and the possibilities for collecting information on bamboo and rattan in particular and on non-wood forest products in general.

If the topic is important—to people, to communities—they need information about it

The first requirement is to have a sense of the importance of the topic, which in turn may suggest the type of information that will be helpful. Bamboo, for example, is a widespread resource in parts of China, as are bamboo and rattan in countries of South and South-East Asia. These materials are seen in those regions to be widely used as a domestic raw material and are significant as industrial raw materials. Many products are found in domestic trade and in the international trade of those countries. In European countries and the USA bamboo and rattan are the raw material of some specialised industries and bamboo and rattan products are widely traded. In some countries of Africa and Latin America bamboo as a resource is present, but its potential has been less developed.

Thus in the countries of the Asian region bamboo and rattan are important to households, to local communities, to industry and to national and international trade. In Europe and the USA they are of importance to specialised industries and to their trade. At the same time the trading partners in Asia have an interest in the demand of European and US industries and in those regions demand for bamboo products. In Africa and Latin America the development potential of the resource is perhaps the most important issue.

Taking the example of the regions of China and Asia, where bamboo and rattan have a wide spread importance, the range in the types of information that may be required can be illustrated.

Resources

There will be a need for resource assessment to determine the extent and distribution of bamboo and rattan resources and the potential supply of bamboo and rattan. The assessment has to consider the ability to meet demand and the vulnerability of supply to risks or threats such as conflicts in land use, impact of management of other forest species and indeed such biological issues as the flowering of bamboo.

Supply and demand

On the demand side the best indication may be the volume and value of products consumed; however, collection of such data is not easy. Indirect indicators such as numbers of people using bamboo and rattan products and their dependence on them, and the distribution of these users are indicators that will help in the assessment of the importance of bamboo and rattan to communities and in the location of the regions where this is most critical. The commercial and economic importance of the products will take account of the volume and value of consumption gauged through markets.

Similarly, on the supply side volume and value produced are best indicators, but the numbers of people active in the production of bamboo and rattan products and their dependence on these products as a source of income are again indicators of their importance to communities. The commercial and economic importance will take account of the volume and value of production and sales of companies manufacturing the products.

Trade

An important contribution is made to national economies by the exchange of goods in international trade. The measurement of the significance of the contribution of bamboo and rattan products to this trade depends on the transactions in these goods being recorded in an identifiable way in national trade statistics. In the absence of specific records in the national trade statistics it may be possible to obtain the information from the trading companies or their trade associations. Information from these systems is needed both by the country itself and by its trading partners, so that they can better understand the development of their markets.

PROBLEMS

Non-wood forest products individually are tiny in international or national economic activity. They are very significant and of great importance to the people associated with them

Non-wood forest products considered individually tend to constitute only a tiny component of international or national economic activity. If we consider bamboo and rattan, which are among the most prominent of non wood forest products, economic activities associated with these materials may amount world wide to an annual contribution to gross national product perhaps in the range of US\$ 10–20 billion. International trade in products of these materials may be around US\$ 3 billion annually. These are significant amounts and of great importance to the people associated with them, but when considered internationally, or nationally in the countries of their greatest significance, they remain very small in relation to total economic activity. Thus, although the information is important to people actively dealing with



Figure 1. Bamboo goes to market.

aspects of bamboo and rattan in the economy, specific information on these topics may have small significance for general assessment of the national economy or of international trade and may in turn be given a low priority in collecting national or international statistics.

For products harvested, processed, marketed and utilised by rural households and small businesses, no formal commercial system operates, no formal records are kept

Bamboo and rattan, like many non-wood forest products, are often harvested and processed, marketed and utilised by rural households and small family businesses and never enter any formal commercial system. This may mean that no formal records are kept of the quantities or values of the products. The assessment of their importance falls in the difficult area of the subsistence economy dependent on specially designed household or community surveys (Fig. 1).

Small enterprises produce a wide range of products on a small scale

When the products are handled in a formal commercial system the scale of operation is often relatively small and the enterprises may produce a wide range of products all on a small scale. Bamboo and rattan enter into larger-scale industries such as furniture. These raw materials are often utilised in combination with other materials in furniture manufacture so that the enterprise is not exclusively identified with the bamboo or rattan raw material. Bamboo also enters into the panels industry and the pulp and paper industry, but the number of production units is small when compared

with the total capacity of these two industries. This wide diversity of products also presents difficulty for their identification in trade statistics.

In forest resource assessments bamboo and rattan species occur along with many other forest species. Though in detailed local management inventories these species or species groups may be specifically identified, such detail may be lost in the aggregation to regional or national data. An important part of the resource may occur in woodlands or agricultural holdings outside the forest not well covered in forest resource assessments.

Some effort has been made to compile both national and international statistics on bamboo and rattan and these efforts have been coordinated by INBAR in recent years. Referring particularly to the effort on trade statistics, bamboo and rattan have been sighted as the flagship of non-wood forest products. Perhaps this is also true in other aspects. In the following section, the extent to which the problems of collecting data on bamboo and rattan have been tackled, in various countries and internationally, is considered.

BAMBOO AND RATTAN DATA

This section reviews the availability of international and national data on: (a) bamboo and rattan resources; (b) production of raw material and production of products; and (c) trade. This summary is based on a review carried out by the author for IN-BAR [2].

Bamboo and rattan resources

The availability of country data is poor. International data are given first, followed by national data.

FAO. The FAO Global Forest Resource Assessment 2000 [3] indicates a subdivision of natural forests for bamboo and palm forest. Data for this sub class are not identified in the summary tables of this volume. In the terms and definitions used in the FRA process in the forest classification, plantations and natural forest are distinguished. Subdivisions of natural forest are provided according to composition by species groups; these include broad-leaved, coniferous, bamboo/palm formations and mixed. Bamboo/palm formations are defined as forest on which more than 75% of the crown cover consists of tree species other than coniferous or broad-leaved (e.g. tree-form species of the bamboo, palm or fern families). Mixed forest is defined as forest in which neither coniferous nor broad-leaved nor bamboo/palm account for more than 75% of the tree crown cover

INBAR research. INBAR, in conjunction with UNEP-WCMC, has carried out studies to establish the distribution of bamboo species. So far this as been completed for the Asia Pacific region. A similar study has been completed to provide a global

overview and regional distribution maps of all rattan species occurring in the Asia Pacific Region and Africa [4, 5].

Chinese Academy of Forestry. An estimate of world area of 14 million ha, providing estimates for 12 countries in Asia, and for Oceania, Africa and America, is contained in Cultivation and Utilisation of Bamboo [6]. No indication of the source of these estimates was provided.

National data. Several countries report national data on bamboo resources. For other countries reports on the bamboo resources of particular regions are available:

China. The Ministry of Forestry conducts periodic forestry surveys, the most recent of which was carried out in 1994–1998. These surveys distinguish between (i) special bamboo land (3 million ha) located in high mountains and classified as regions of natural protection and not suitable for economic utilisation and (ii) potentially commercial bamboo land (3.8 million ha with growing stock of 96 million tons) [7]. The China Forestry Statistics Yearbook reports plantation area of bamboo and output.

Japan. The Forestry Agency, Ministry of Agriculture, Forestry and Fisheries carries out a forestry census every ten years with bamboo as a separate category of forest (153 000 ha in 2000). They also maintain records of the production of bamboo culms. These data are maintained through prefecture surveys of private bamboo and totalled by the Forestry Agency for Japan [8, 9].

India. The 'bamboo bearing area' and area of bamboo plantation (respectively 9 million ha and 1.1 million ha) were given in the 1995 data base report to INBAR Bamboo and Rattan Database for Asia [10]. Similar data on 'bamboo bearing area' are shown in Natural Forest-based Bamboo Production to Consumption System [11], for several states.

Indonesia. It was estimated that 9.3 million ha of forest contain rattan, but the growing area of rattan in forestlands was not reported. 12 000 ha of rattan plantations was reported [10].

Nepal. The bamboo growing area in natural forest (62 000 ha) is reported in Bamboo and Rattan Database for Asia [10].

Philippines. The Master Plan for the Development of Bamboo as a Renewable and Sustainable Resource, Department of Trade and Industry estimated the area of erect bamboo in the range 39 000–53 000 ha, 65% in forest and 25% in natural stands on private farms and the remainder in private and public plantations. Resource of rattan is estimated at 4.5 billion linear metres [10, 12].

Production of raw material and production of products

Very limited coverage of national production of bamboo and rattan is available. No regular international statistics have so far been established. Available estimates were collected in INBAR Bamboo and Rattan Database for Asia [10]. Further information is available on China and Japan. These are discussed first, followed by a review of data collected in the above study [10].

China. Data are available on production of bamboo materials (number of poles, tons, price and output value) and bamboo branch and fresh bamboo shoot (weight, price and output value). These are published in Statistics of Chinese Forestry, Ministry of Forestry [13].

Data on 'bamboo rattan and straw products' and 'bamboo and rattan furniture' giving number of firms, employees and revenue, are available from China Market Yearbook, All China Marketing Research [14] (data appear similar to those reported in Ref. [15]). This study also provides estimates of the production of bamboo pulp and bamboo-based panels and composite board.

Data from the above sources deal with production of government enterprises and large private enterprises with annual output greater than 5 million Yuan. Data on bamboo rattan and straw handicrafts made by township and village manufacturers is reported in the Almanac of China Township and Village Enterprises. This provides information on the number of enterprises, gross output value and number of workers [15].

Japan. The Forestry Agency publishes annual statistics on bamboo culm and bamboo shoot production. The data are collected by prefecture and reported in the statistics of the Forestry Agency. The standard unit is 'soku' or bundle which is equivalent to 30 kg. Production in 1999 was about 2 million bundles or 60 000 tons. Until the mid 1970's production exceeded 300 000 tons, but has declined steadily over two decades. Price data for two species, *P. bambusoides* and *P. pubescens*, are also available. Summary data are provided by Forestry and Forest Products Research Institute. An estimate of usage by main product is available, but dating from the year 1981. Bamboo shoot production is reported in tons. Production in 1990 was 137 000 tons from an area of 53 000 ha [8].

Data collected by INBAR 1997. The following is a summary of data on aspects of production collected by INBAR [10].

Bamboo. Data was collected on bamboo harvest for the years 1980–1995 (Table 11 in Ref. [10]).

China: 4 rising to 12 million tons,

India, fluctuating according to reports received from states, 126 000 to 1.1 million tons,

Philippines, fluctuating around 1000-5000 tons,

Nepal for 1992-1995 18 000 tons,

Nepal also reported bamboo shoot production of 130 tons for 1994.

Some data were also assembled on prices, numbers of market participants, numbers of enterprises involved in bamboo with lists of enterprises. One table for Nepal estimated people dependency and employment potential relating to bamboo.

Rattan. Harvest data were collected.

Indonesia 1978–1992, fluctuating around 90–200 000 tons, average 124 000,

Philippines 1978–1995, fluctuating around 10–60 000 tons, average 27 000.

Data and estimates are also provided for value of output, market participants, finished product manufacturers, pries and lists of enterprises.

Trade in bamboo and rattan and their products

International statistics are collected by the UN in COMTRADE, but bamboo and rattan aggregated with other plaiting materials.

International trade statistics. In October 2000 INBAR was accepted by the Common Fund for Commodities as the International Commodity Body for Bamboo and Rattan. Sound trade statistics are an essential tool in pursuit of its development objectives relating to standards, diversification and marketing.

Trade in bamboo, rattan and their products is recorded in national trade statistics and reported internationally by the UN Statistics Division in COMTRADE. This uses internationally agreed standard definitions and coding of products. The current standard coding system is the Harmonised System (HS) [16].

HS provides two codes identifying bamboo and rattan materials. It provides six codes for products of plaiting materials, where products of bamboo and rattan are grouped together with products of other plaiting materials such as straw, osier or willow, rushes, reeds, strips of wood, strips of other vegetable material.

A third group of codes, particularly the code in the chapter concerning wood and articles of wood, may include products made of bamboo although bamboo is not specifically listed. Beyond these there are a number of manufactured product codes which cover products some of which are made from materials including bamboo or rattan. Edible bamboo and rattan shoots are included in the chapters concerning edible vegetables and prepared foodstuffs. They are located in four codes in these chapters, all of which cover other vegetables not specified elsewhere. (See Appendix A, on harmonised system codes and rattan and bamboo.)

The grouping of bamboo and rattan products together with products of other materials in international trade statistics makes it impossible to derive exact data on bamboo products or rattan products from these sources. The reported data on the product group do provide the magnitudes within which the trade in these products lies and may provide a basis for expert estimation of the actual trade in these products.

INBAR, with the assistance of the European Forest Institute, has established a trade flow matrix, which covers the bamboo and rattan codes and the codes for manufactures of plaiting materials and for furniture of these materials. This has been updated and augmented to cover the four codes for edible vegetables and prepared foodstuffs that include bamboo and rattan shoots. This data includes all trade flows for these products providing data for 200 countries and territories. Data under HS is for the years 1990–1998 and to 2000 on completion of the update. There is also a summary of more historic data under UN SITC coding from 1961–1990 [17] (Fig. 2).

World export trade in bamboo raw material ranges around US\$ 40–50 million, while trade in rattan is in the range US\$ 80–90 million. The total trade in plaiting products, basket work and seats of all vegetable plaiting materials is in the range US\$ 1.1–1.4 billion. China is predominant in the export of bamboo, accounting for 75%. Singapore, Malaysia, Indonesia and Vietnam are the predominant exporters of rattan together, accounting for more than 75%. China accounts for 50% of export trade in products. Other major exporters are Indonesia and the Philippines. Other significant exporters are Vietnam, South Korea, Thailand and India. Because of the inclusion of products of other materials and products made from imported raw material several European countries and the USA contribute significant exports. Major importers of products are USA, Japan, China, Germany, Italy, France, South Korea, Netherlands and Spain. The total trade in furniture of bamboo, rattan and other plaiting materials is around IS\$ 1.5 billion.

Though bamboo shoots are included in a number of harmonised system codes, the same codes cover many other vegetable products and it is therefore not possible to estimate the value that is attributable to bamboo shoots from international trade data.

National trade data. Information was obtained on the trade classification used in China and Japan. Both use the harmonised system, but in both 8- or 9-digit subdivisions are provided, which distinguish bamboo and rattan products from product of other plaiting materials for some plaiting product and furniture codes. INBAR has also collected some estimates of trade of bamboo and rattan products for a number of countries.

China. Customs coding distinguishes the following bamboo products at the 8-digit level;

0709 Other vegetables, fresh or chilled;

0709.90 10 fresh bamboo shoots;

0711 Vegetables provisionally preserved;

0711.90 31 bamboo shoots in salt water;

2005 Other vegetables prepared or preserved (not vinegar, not acetic acid, not sugar not frozen);

2005.90 31 Canned bamboo shoots: volume exceeds 8 litres;

World Exports of Plaiting Materials and Products



Figure 2. World export of plaiting materials and products.

2005.90 39 Other canned bamboo shoots;

4601 Plaits and similar products;

4601.20.10 Mats, matting and screens of rattans;

4602 Basketwork, wickerwork made from plaiting materials;

4602.10.10 Articles of rattans;

4602.10.30 Articles of bamboos;

9403.80 — Furniture of other materials (other than metal and wood) including cane, osier, bamboo or similar materials;

9403.80.10 Other furniture and parts thereof cane, osier, bamboo or similar materials.

Japan. The customs coding distinguishes the following bamboo and rattan products at the 9 digit level:

0712 Dried vegetables;

0712.09.010 bamboo shoots;

2004 Other vegetable prepared or preserved (not vinegar, not acetic acid, not sugar) — frozen;

2004.90.220 bamboo shoots;

2005 Other vegetables prepared or preserved (not vinegar, not acetic acid, not sugar not frozen);

2005.90.210 bamboo shoots;

4409 Wood (including strips and friezes for parquet flooring, not assembled) continuously shaped;

4409.20.110 of bamboo;*

4421 Other articles of wood:

4421.90.091 combs of bamboo;

(4421.90.092 fans);*

4602 Basketwork, wickerwork made from plaiting materials;

4602.10.023 of bamboo;

9401 Seats:

9401.30.020 swivel seats of rattan;

9401.40.020 seats convertible into beds of rattan;

9401.50 seats of cane, osier, bamboo or similar materials;

9401.50.10of rattan;

9401.90.010 parts of rattan;

9403.80 — Furniture of other materials;

9403.80.100 of rattan:

9403.90.030 parts of rattan;

(960310 Fishing rods).*

*These codes were indicated as significant in bamboo imports in a report in Ref. [19].

INBAR data. Data on exports of bamboo and rattan were collected in INBAR Bamboo and Rattan Database for Asia [10]. Bamboo exports were recorded for China, India, Nepal and the Philippines. Rattan exports were reported for China, Indonesia, and the Philippines.

INFORMATION COLLECTION — THE STATE OF THE ART

The examples of information collection illustrate the many levels at which data may be collected. Comprehensive bamboo production statistics for Japan; bamboo shoot production for China; indications of bamboo furniture production through the number of firms, employees and revenue; similar information on bamboo, rattan and straw handicrafts at the village level; estimates of bamboo pulp and panel production. In one case from Nepal people dependency and employment related to bamboo was estimated. No doubt the trade in bamboo and rattan is included in national and international trade statistics; many codes can be identified which ensure the inclusion of their products, but only in very few cases are bamboo or rattan products specifically identified.

Though the data for China are rather comprehensive, for other important producer countries the available data are limited and not consistently available over time. Specific trade data is mostly missing. In particular the available data hardly give an indication of the scope and importance of bamboo and rattan for rural communities in many regions, or of the extensive rural processing industry based on these raw materials. So the conclusion — 'still today hundreds of millions of people derive a significant part of their subsistence needs and income from non-wood forest products. But in reality we really do not know if such claims are (based on valid) estimates because we don't have the figures' [1] applies also to the flagship among non-wood forest products, bamboo and rattan.

POSSIBILITIES FOR FUTURE INFORMATION COLLECTION

The first requirement in getting impetus behind collection is motivation of people and organisations that need the information.

How then do we move to the position where decisions of the household, business, corporation or government, is based on the analysis of reliable facts on bamboo and rattan? A number of recommendations have been put to INBAR and ITTO and a project has been adopted to implement them. They involve in the first place the initiative of the countries and enterprises to which the products are important and the collaboration, and support of a number of international organisations.

Resources

Work on the assessment of resources would be a collaboration between countries, INBAR, FAO and the World Conservation Monitoring Centre (WCMC).

Supply and demand

In order to understand the contribution of bamboo and rattan the following information are relevant: the production (harvest) of raw bamboo and rattan and the production and sale or consumption of products of these raw materials. For the production of products quantity, price and value are usual units of measurement. The employment or numbers of people active and the value added in the economy by these activities and the numbers, location and size of enterprise, are important in assessing the contribution and potential for society.

A first requirement in getting impetus behind the collection of information in these complex areas is the motivation of the organisations that need the information and the people active in the sector, who will benefit from the better decision making, to support the collection.

Trade

INBAR, with the assistance of the European Forest Institute, has established an international bamboo and rattan and plaiting materials trade flow data base. This is based on UN trade statistics and has the limitation that bamboo and rattan products cannot be specifically identified.

There are two lines in the development of effective enquiry on the bamboo/rattan components of vegetables, plaiting product aggregates, panels, pulp and paper furniture and other manufactures in trade. First is the identification of products where the raw material component, bamboo or rattan, should be specifically recognised in the national and international coding of trade. Second is the identification of bamboo and rattan products, which could not justify specific coding, but where the producers and traders could pool their information to provide useful indicators of the magnitude of trade in those bamboo and rattan products.

Concerning the possible revision of coding, INBAR, FAO and the World Customs Organisation are already working with interested countries to identify cases where the international coding in the Harmonised System should be revised to identify specific bamboo and rattan products. An initial discussion was held at FAO in Rome in December 2002 [19].

A second requirement is a well-designed and tested enquiry procedure. In the collection of household production and consumption data the following steps should be considered:

Reconnaissance to identify topics, assess importance and regional distribution,

Design and test a survey,

Sample survey with regional focus,

Insert questions in household survey.

In the collection of information on enterprise production where more formal information may be available the following steps may be appropriate:

Reconnaissance to identify topics, assess importance and regional distribution, Industry or trade association enquiry,



Figure 3. Adopt appropriate technology.

Specification of the bamboo and rattan industry in the National Industry Survey. Collecting additional information on detail not coded in trade statistics requires the willing collaboration of producers and traders and, again, the development of a well designed and tested enquiry procedure.

In conclusion: adopt appropriate technology to collect the statistics (Fig. 3).

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APPENDIX A

Harmonised system codes — for rattan and bamboo

The sections, chapters and codes which could contain bamboo or rattan products are listed with relevant chapter notes [16]. The 8-digit classification used by China to separate bamboo is indicated where it applies [7].

Section II, Vegetable products

Chapter 7, Edible vegetables

0709 Other vegetables, fresh or chilled;

0709.90 — other

(Fresh bamboo shoots 0709.90 10), (fresh rattan shoots trade recorded for Thailand);

0711 Vegetables provisionally preserved;

0711.90 — other vegetables, mixtures of vegetables;

(Salted bamboo shoots 0711.90 31);

0712 Dried vegetables;

0712.90 — other vegetables, mixtures of vegetables;

(Dried bamboo shoots 0712.90 10);

Note: (0709.90 10) 8-digit code used in Chinese customs nomenclature.

Chapter 14, Vegetable plaiting materials

Note: Heading 1401 applies, *inter alia*, to bamboos (whether or not split, sawn lengthwise, cut to length, rounded at the ends, bleached, rendered non-inflammable polished or died), split osier, reeds and the like, rattan cores and to split and drawn rattans. The heading does not apply to chipwood (heading 44.04).

1401 vegetable materials of a kind used primarily for plaiting (bamboos, rattans, reeds, rushes, osier, raffia, cereal straw, lime bark ...);

1401.10 — Bamboos;

1401.20 — Rattans:

1401.90 — Other.

Section IV, Prepared foodstuffs

Chapter 20, Preparations of vegetables

2005 Other vegetables prepared or preserved (not vinegar, not acetic acid, not sugar not frozen):

2005.90 — other vegetables, mixtures of vegetables;

(Canned bamboo shoots: volume exceeds 8 litres 2005.90 31, other 2005.90 39).

Note: (2005.90 31) 8-digit code used in Chinese customs nomenclature.

Section IX, Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of esparto or other plaiting materials; basket ware and wickerwork

Chapter 44, Wood and articles of wood; wood charcoal Notes:

- (1) This chapter does not cover:
 - (b) Bamboos or other material of a woody nature of a kind used primarily for plaiting (1401);
 - (d) activated charcoal (3802);
 - (f) goods of chapter 46;
 - (h) goods of chapter 66 (umbrellas, walking sticks and parts thereof);
 - (o) articles of chapter 95 (furniture ...);

6 subject to note 1, any reference to 'wood' in a heading of this chapter applies also to bamboo and other materials of a woody nature.

4401 Fuel wood;

4402 Wood Charcoal;

4404 Hoop wood; split poles; piles, pickets, stakes; wooden sticks suitable for manufacture of walking sticks, umbrellas, tool handles or the like;

4408 Sheets for veneering (including those obtained by slicing laminated wood), for plywood or for similar laminated wood;

4409 Wood (including strips and friezes for parquet flooring, not assembled) continuously shaped;

4410 Particle board and similar board of wood or other ligneous materials;

4411 Fibreboard of wood or other ligneous materials;

4412 Plywood, veneered panels and similar laminated wood;

4413 Densified wood;

4414 Wooden frames for paintings, photographs;

4415 Packing cases, boxes, crates, drums;

4416 Casks, barrels, vats, tubs and other coopers products including staves;

4417 Tools, tool bodies, tool handles, broom or brush bodies and handles;

4418 Builders' joinery and carpentry including cellular wood panels, assembled parquet panels, shingles and shakes;

4418.10 Window frames;

4418.20 Doors;

4418.30 parquet panels;

4418.40 shuttering for concrete construction work;

4418.50 Shingles and shakes;

4419 Tableware and kitchenware;

4420 Wood marquetry and inlaid wood, caskets and cases for jewellery and cutlery; statuettes and other ornaments;

(44201010 Wood and bamboo carvings);

4421 Other articles.

Note: (44201010) 8-digit code used in Chinese customs nomenclature.

Chapter 46, Manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork

Note 1 'Plaiting materials' means materials suitable for plaiting*, interlacing or similar processes; it includes straw, osier or willow, bamboos, rushes, reeds, strips of wood, strips of other vegetable material (for example strips of bark, narrow leaves, raffia) and other materials — monofilament and strip and the like of plastics and strips of paper.

4601 Plaits and similar products;

4601.20 — mats, matting and screens of vegetable material;

- other;

460191 — of vegetable materials;

4601.99 — other (not of vegetable materials);

4602 Basketwork, wickerwork made from plaiting materials;

4602.10 — of vegetable materials;

(Bamboo Plaiting Products 46021030);

4602.90 — other (not of vegetable materials).

Note (46021030) eight digit code used in Chinese customs nomenclature

*Note: this chapter makes no explicit reference to 'Rattan'. Plaiting materials are defined explicitly, including rattan, in Chapter 14.

Section X, Pulp of wood or other fibrous cellulosic material; recovered paper and paperboard; paper and paperboard and articles thereof

Chapter 47, Pulp of wood; recovered paper or paperboard

4706 Pulps of fibres derived from recovered (waste and scrap) paper or paperboard or of other fibrous cellulosic material;

4706.10 — cotton linters pulp;

4706.20 — pulps from recovered paper and board;

— Other (of other fibrous cellulosic material);

4706.91 — Mechanical;

4706.92 — Chemical;

4706.92 — Semi-chemical.

Section XX, Miscellaneous manufactured articles

Chapter 94, Furniture; bedding; lamps and lighting fittings

9401 Seats:

9401.50 — seats of cane**, osier, bamboo or similar materials;

9403 — Other furniture and parts thereof;

9403.80 — Furniture of other materials (other than metal and wood) including cane**, osier, bamboo or similar materials.

**Note: this chapter makes no explicit reference to 'Rattan', probably intending rattan under the term cane.

Other chapters which may include products made of bamboo or rattan Chapter 38, Miscellaneous chemical products

3802.10 Activated carbon.

Chapter 64, Footwear

6406.91 — parts of footwear of wood;

6406.91 — of other materials.

Chapter 66, Umbrellas, walking sticks and parts thereof

6601 Umbrellas, sun umbrellas, walking stick umbrellas, garden umbrellas; 6602 walking sticks, seat sticks, whips, riding crops;

6603 parts, trimmings and accessories of these.

Chapter 67

6702.90 Artificial flowers of other materials (other than plastics).

Chapter 92, Musical instruments

Chapter 95, Toys, games and sports requisites; parts and accessories thereof

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