

North American Networking Activities on Non-wood Forest Products by the Food and Agriculture Organization of the United Nations

Paul Vantomme¹

Abstract.—FAO, the Food and Agriculture Organization of the United Nations, is the largest autonomous agency within the United Nations system dealing with agriculture, fisheries, forestry, and related disciplines. FAO provides a neutral forum for policy dialogue, a source of information and knowledge, technical assistance, and advice to 180 member countries. Technical information and global networking on non-wood forest products (NWFPs) are provided mainly by the Forestry Department. The NWFP Programme, intended to be a “Centre of excellence in information sharing,” is implemented through the following main elements: information gathering, analysis, and dissemination; appraisal of the socioeconomic contributions of NWFPs to development; and improved networking. FAO and NWFP related activities of interest to the North American region are mainly channeled through The Committee on Forestry (COFO), The North American Forest Commission (NAFC), and the NWFP task group of the North American Forest Products Study Group (FPSG). URL addresses are provided for further reading.

WHAT FAO IS AND WHAT IT DOES

FAO, the Food and Agriculture Organization of the United Nations, was founded in October 1945 with a mandate to raise levels of nutrition and to improve agricultural productivity. It is the largest autonomous agency within the United Nations system with 180 member nations and more than 4,300 staff, including specialists in agriculture, fisheries, forestry, and related disciplines. FAO has headquarters in Rome, Italy, a comprehensive regional

structure with regional offices², and a physical presence/representation in more than 100 countries.

The primary roles of FAO are to serve as:

- a neutral forum for policy dialogue (including international governmental meetings, for example, on agricultural trade, on natural resource management issues, etc.),
- a source of information and knowledge (technical information on products, methodologies, and statistical data on production and trade in agriculture),
- a provider of technical assistance (field projects to develop/introduce new products or technologies, to assist governments in institutional capacity building, etc.),
- a provider of advice to governments.

More information on FAO, its mission, and contacts can be downloaded from <http://www.fao.org>.

¹ *Coordinator, Non-Wood Forest Products Programme, Forestry Department, FAO, Rome, Italy; e-mail: Paul.Vantomme@fao.org.*

² *For the North American region: Liaison Office for North America (LOWA), Suite 300, 2175 K Street NW, Washington, DC 20437-0001, USA; Phone: (001-202) 653-2400; Fax: 653-5760; e-mail: fao-lowwa@fao.org.*



HOW FAO DEALS WITH NON-WOOD FOREST PRODUCTS (NWFP)

The term “non-wood forest products” (NWFP) and similar terms like “minor,” “secondary,” or “non-timber” forest products (NTFP) have emerged as umbrella expressions for the vast array of both animal and plant resources other than wood (or timber, in the case of “non-timber”) derived from forests or forest tree species. The term NWFP is used by FAO to refer to all plant and animal products derived from forests and other wooded lands.

Technical information on products gathered in forests or from forest species falls under the responsibility of FAO’s Forestry Department, through its NWFP Programme. However, other programmes may also be involved with NWFPs, such as the Community Forestry, Marketing, and Extension programmes. More information on the activities of the Forestry Department in general and on the above programmes in particular can be downloaded from the FAO Web site at: <http://www.fao.org/forestry>.

For those NWFP products that are partly domesticated and that can also be cultivated by farmers, technical documentation may be complemented with information provided by FAO’s Agriculture Department, and particularly by the programme on the development of underutilized plants of the Industrial Crops Group at <http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPC/doc/industr/Indcrop.htm>.

On NWFPs used for food and on food products in general, information and quality control aspects are provided by the Nutrition Division, at: <http://www.fao.org/WAICENT/FAOINFO/ECONOMIC/ESN/NUTRI.HTM>.

It is important that NWFPs, when promoted and traded as food products, comply with the internationally agreed upon food quality requirements as described in the ‘Codex Alimentarius.’ This code on food has become the seminal global reference point for consumers, food producers and processors, national food control agencies, and the international food trade. The code has had an enormous impact on the thinking of food producers and processors as well as on the

awareness of consumers. Its influence extends to every continent, and its contribution to the protection of public health and fair practices in the food trade is immeasurable: <http://www.fao.org/WAICENT/FAOINFO/ECONOMIC/ESN/codex/default.htm>.

ACTIVITIES OF FAO’S NON-WOOD FOREST PRODUCTS PROGRAMME

The aim of the Non-Wood Forest Products Programme is to be a “Centre of excellence in information sharing” for improved use of NWFPs. Wise use of NWFPs is seen as a contribution to sustainable forest management and to the conservation of the biological diversity of forest resources, and simultaneously as a way to improve income and food security for rural people. The programme’s URL is: <http://www.fao.org/forestry/FOP/FOPW/NWFP/nwfp-e.stm>.

NWFPs may represent the major actual or potential source of income from forests with low timber production potential, such as degraded/logged-over forests or those in arid and semi-arid zones. With a few exceptions, however, it is unlikely that in production forests NWFP income can compete with financial returns from timber harvesting. NWFPs are likely simply to supplement the returns from timber rather than replace it as a source of revenue. Increased production of NWFPs in forests that are unsuitable for timber production, however, will enhance the value of these forests, and thus at least theoretically provide a form of economic protection against conversion to other land uses. Care must be taken, however, that commercialization does not result in overharvesting of NWFPs, since this can have its own negative environmental consequences. Management of forests for NWFPs in addition to timber is more likely to benefit the local economy and to provide goods and a source of income for forest-dwellers.

The NWFP Programme is composed of the following main elements: (a) information gathering, analysis, and dissemination; (b) appraisal of the socioeconomic contributions of NWFP to development; and (c) improved networking.

(a) Information Gathering, Analysis, and Dissemination

Specific categories of NWFPs and important topics for their development are highlighted in the FAO *Non-Wood Forest Products Series*. Twelve volumes have been published to date including the following titles: *Flavours and Fragrances of Plant Origin*; *Natural Colourants and Dyestuffs*; *Edible Nuts*; *Non-Wood Forest Products for Rural Income and Sustainable Forestry*; *Trade Restrictions Affecting International Trade in Non-Wood Forest Products*; *Domestication and Commercialization of NWFP Through Agroforestry Systems*, *Tropical Palms, NWFP from Conifers*; and *Medicinal Plants for Forest Conservation and Health Care*. These and many other publications on NWFPs can be viewed online at: <http://www.fao.org/forestry/FOP/FOPW/NWFP/pubser-e.stm>.

The FAO *NWFP Series* is open for contributions and joint development of new titles with any interested agency, as long as they deal with topics of global relevance within the overall scope of the NWFP Programme of FAO. Several issues in this series have already been jointly compiled with governmental and/or non-governmental agencies, and potential topics for new titles to be developed include the following working titles: The contribution of NWFP to food security, Gender and NWFP, Sustainable harvesting of NWFP, Extension of NWFP, and Certification of NWFP.

(b) Appraisal of the Socioeconomic Contributions of NWFP to Development

Comprehensive statistical data and other descriptive information on the production and trade of NWFPs are essential for an accurate appraisal of their true socioeconomic contribution to sustainable development. This, in turn, will contribute to the elaboration (and acceptance by policymakers and senior decisionmakers) of appropriate policies leading to more equitable access to non-wood forest resources and to a fair distribution of benefits obtained from them.

Although FAO, as well as many other agencies, has already assembled a wealth of information on the socioeconomic role of

many NWFPs, the available information base on NWFPs is very dispersed, still insufficient, not aggregated at a national level, and far from being comprehensive or global in scope.

The objective of this programme element is to gather, validate, and disseminate statistics and other descriptive information on the production and trade of NWFPs at the national level for all countries. As a first step in this direction, and within the framework of an "EU-FAO Partnership Programme to Support Data Collection and Analysis for Sustainable Forest Management in the African, Caribbean and Pacific Regions," country reviews are being prepared that describe the production and trade of major NWFPs. Similar exercises are ongoing to cover countries of other regions, i.e., in Latin America, the Near East, and Asia. The results will be posted on the FAO Forestry Department Web site at: <http://www.fao.org/forestry/FON/FONS/outlook/Africa/acpro-e.stm> as they become available. Data are obtained and validated through partnerships with the relevant national agencies in the countries.

(c) Improved Networking

In the past years, an impressive network of contacts with organizations (governmental and non-governmental) and individuals working in the field of NWFPs has been developed by the NWFP Programme of the Forest Products Division of FAO. To improve networking, an annual news bulletin, *Non-Wood News*, compiled from voluntary contributions of relevant information about ongoing activities dealing with NWFPs, links more than 2,200 individuals and organizations worldwide. The newsletter is available at: <http://www.fao.org/forestry/FOP/FOPW/NWFP/newsle-e.stm>. Printed copies are available free of charge upon request.

A comprehensive database is presently under construction, the aim of which is to gather and collate reliable information about all partners involved with the development of NWFPs and about the kind of activities with which they are concerned. A first draft of this interactive database can be consulted at: <http://www.fao.org/forestry/FOP/FOPW/NWFP/nwfpdb-e.stm>; it incorporates an option to download a



questionnaire (available in English, French, or Spanish) for those who wish to be included in the directory.

Although FAO is an intergovernmental organization and, as such, its main line of communication is with member governments, this is not its only source of information. Inputs from a broad range of interest groups, including the private sector, universities, forest industries, and non-governmental organizations, representing environmental and developmental interests, are warmly welcomed. There is a need to ensure that dialogue takes place between interested parties and that duplication of efforts is avoided so that skills and resources are most efficiently used. To further increase awareness about NWFPs and to strengthen collaboration and partnerships at the national, regional, and global levels, FAO's NWFP Programme has co-organized several international expert consultations on NWFP worldwide, including:

Global expert consultations:

Social, Economic and Cultural Dimensions of NWFP. Bangkok, Thailand, 1994.
Inter-regional Expert Consultation on NWFP. Yogyakarta, Indonesia, 1995.

Regional expert consultations:

Asia and Pacific Region. Bangkok, Thailand, 1991.
Anglophone African Countries. Arusha, Tanzania, 1993.
Latin America and Caribbean Countries. Santiago, Chile, 1994.
Medicinal Culinary and Aromatic Plants in the Near East. Cairo, Egypt, 1997, and followup meeting in Beirut, Lebanon, 1999.
NWFP in Boreal and Cold Temperate Forests. Joensuu, Finland, 1998 (in collaboration with EFI/ECE and Ministry of Forestry, Finland).
Expert Consultation on NWFP in the Congo Basin. Cameroon, 1998 (in collaboration with CARPE, USDA Forest Service).

Reports of these meetings can be viewed at the NWFP Web page, under "Publications."

FAO AND NWFP RELATED ACTIVITIES IN THE NORTH AMERICAN REGION

The Committee on Forestry (COFO)

Dialogue at the international level is an essential complement to the efforts of individual countries to develop appropriate forest policies, institutions, and practices. FAO supports a number of statutory bodies specifically designed to provide neutral fora for discussion in the field of forestry. Foremost among these is the Committee on Forestry (COFO). Heads of forest services and other senior government officials meet at FAO headquarters every 2 years to identify emerging policy and technical issues, to seek solutions, and to advise FAO and others on appropriate action. Other international organizations and, increasingly, non-governmental groups participate in COFO. Six regional forestry commissions complement the work of COFO and cover the regions of Asia-Pacific, Africa, Europe, Latin America and the Caribbean, Near East, and North America. These commissions normally meet between COFO sessions and provide a forum for member countries to discuss both technical and policy issues at the regional level. Information on COFO, and their reports, can be downloaded from: <http://www.fao.org/forestry/FO/STATBOD/statb-e.stm>.

The North American Forest Commission (NAFC)

Established in 1959, the North American Forest Commission provides a policy and technical forum for Canada, Mexico, and the United States to discuss and address forest issues on a North American basis. Drawing on regional experiences, it also provides advice to the FAO's forestry program. The mandate of NAFC, as with other FAO forestry commissions, is to advise on the formulation of forest policy and to review and coordinate its implementation at the regional level; to exchange information and, generally through special subsidiary bodies, advise on suitable practices and action with regard to technical problems; and to make appropriate recommendations to FAO. In this regard, NAFC supports research and sustainable natural resource management activities through study groups that explore issues of concern to the three countries. Since together,

Canada, Mexico, and the United States contain a mix of boreal, temperate, and tropical ecosystems, the results of NAFC's work can be applied more broadly to assist other countries and regions facing similar conditions. The NAFC Web page is: <http://www.fao.org/forestry/fo/statbod/nafc/nafc-e.stm>.

Every 2 years, the North American Forest Commission brings together the Canadian, Mexican, and United States heads of forest service and other senior forest officials from those countries, FAO, and observers from non-governmental organizations to address forestry and natural resource matters, to advance scientific knowledge, to promote cooperation, and to facilitate the exchange of information. The biennial sessions of NAFC are held in each country in rotation. At its last meeting (19th session, 16-20 November 1998, in Villahermosa, Mexico), the state of forestry in the region was reviewed through national progress and study group reports. Technical papers were also presented and discussed on a) forest-related traditional knowledge, b) applications of criteria and indicators of sustainable forest management at the field level, and c) forest resource assessment and monitoring.

A feature of NAFC is the Bureau of Alternates (BOA), comprised of senior forest service members from Canada, Mexico, and the United States. BOA reports to NAFC and advises on current activities and future direction; it meets on a regular basis to guide and oversee the work of the seven study groups; evaluate progress of projects; commission analytical papers on emerging issues; and identify opportunities to advance cooperative objectives. Another key function of BOA is to distribute information to its extensive network.

The NAFC has established the following study groups that carry out cooperative research and management projects: atmospheric change and forests, fire management, forest products (including NWFPs), insects and disease, neotropical migratory species, silviculture, forest inventory and monitoring, and forest genetic resources.

North American Forest Products Study Group (FPSG)

The mission of the FPSG is to promote and enhance the efficient and sustainable use of forest products within North America by bringing together and expanding upon the body of information and scientific and technical expertise related to North American wood and non-wood products.

The goals and objectives of the FPSG are to:

- Facilitate the exchange of existing and emerging forest products technology within North America
- Identify appropriate expertise in each country
- Facilitate a network of scientific or technical experts to address issues of concern to the forest products sector in North America

The study group is composed of four task groups:

- Wood Products Standards
- Fiber Supply
- Certification
- Non-Wood Forest Products

More information on FPSG work and reports is available at: <http://www.fs.fed.us/global/nafc/welcome.html>.

The NWFP task group status report (output of the 1998 Merida meeting) recommends the following regarding future work on NWFP, and particularly regarding the possibility of holding a regional expert consultation on NWFP for the North American region: (quote)

“Discussions taking place regarding holding a non-forest products workshop in Mexico. The suggested dates for this workshop have now been proposed for September 2000 or 2001 for a multinational workshop. Pinchot Institute provided funds to convene policy group after U.S. assessment is done. Best timing for workshop for U.S. is after credible report on assessment is completed.”

Discussions among staff of BOA and FAO are continuing regarding the possibility of holding the above regional expert consultation for North America. More information on the purpose and proposed content of this meeting can be obtained from the writer.



Birch: The Original Tupperware®



The bark of the paper birch tree has been used for many generations by inhabitants of the northern forest around the world. Uses include covering for dwellings, canoes, containers for food storage, decorative containers, back packs, and shoes, among other things. Characteristics important in determining the use of bark include the density and size of lenticels (pores for gas exchange), bark thickness, and tendency to separate into annual layers. Betulin, a chemical compound making up 15-20 percent of the bark, gives the bark its white color. Betulin and other compounds in the bark are known to have fungicidal properties and are part of the reason that the bark decays so slowly, remaining long after the wood is gone. Bark kept dry and out of the elements seemingly lasts “forever.”



Bark can be removed from living trees without killing the tree, although the effect of bark removal on tree health is not well-known. Bark will regrow after removal. Care should be taken to remove the bark only in the appropriate season and to remove only the outer bark, leaving the inner bark undamaged.



Removal of bark from living trees drastically changes the appearance of the tree as shown here. Although a new layer of outer bark forms over time, the tree never looks the same as a tree from which bark has not been removed. The best trees from which to collect bark are those that will be cut for other purposes, as in a commercial timber sale. From an aesthetic point-of-view, it is best not to collect bark from trees growing along highways and well-traveled backroads. The tree in this photo has been damaged more than necessary because the vertical cut made to remove the bark damaged the inner bark layer and the outer part of the wood.



Large basket made from a single sheet of bark. The design on the body of the basket is porcupine quill work. The figure on the basket cover is made by scraping away the dark brown layer that is characteristic of winter bark. The body of the basket is from summer bark. Split spruce roots are used to sew the bark together.



Slipper made by weaving strips of birch bark. Birch bark weaving was the traditional method used in Finland and Sweden for making various items from bark.



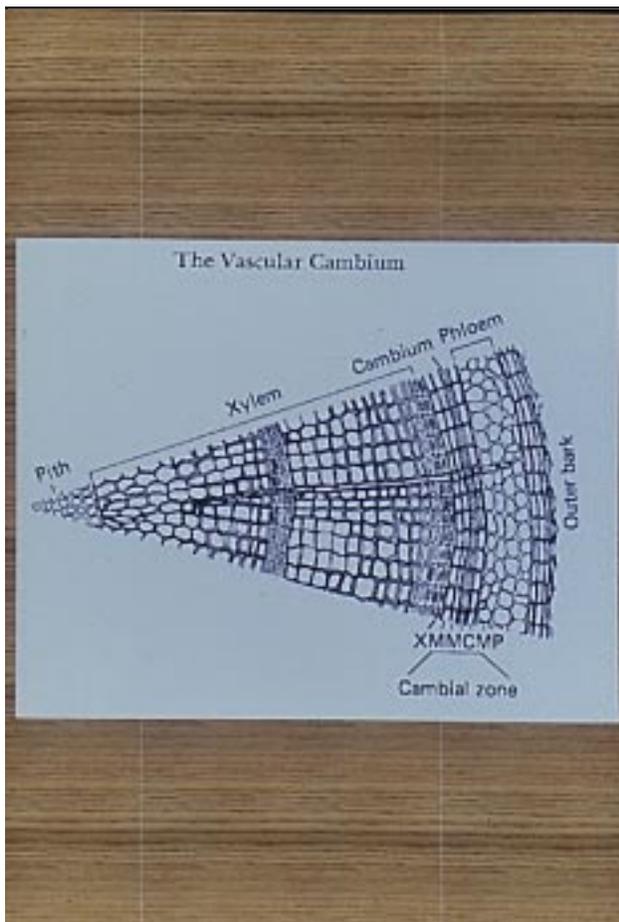
This container, from Siberia, illustrates the intricate designs cut into the bark and then layered on bark of a different color to highlight the design. In this basket, the darker bark is the inner layer of the outer bark. The lighter bark is from the outer layer of the outer bark and is the color normally associated with birch bark.



Small decorative basket illustrating a different basket style and use of other natural materials. The seams between the pieces of bark are reinforced with sweet grass and the design is made with dyed porcupine quills. This basket was made with the white side of the outer bark showing.



Idealized drawing of a bud. Buds formed during the summer contain embryonic leaves, flowers, and cells that will form next year's new growth. Any harvesting practice should take care to preserve an adequate number of buds so that the plant can recover following harvest.



Cross section of conifer stem. The cambium is the zone of cells that produces all of the wood to the inside and the phloem (sometimes called inner bark) to the outside. The cambium is directly or indirectly involved in producing many important NTFPs. Severe damage to the cambium can cause the tree to lose vigor or even die.