

## **Opportunities and challenges of non-wood forest products certification**

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### **Abstract**

Non-wood forest products (NWFP) such as medicinal plants, nuts or bushmeat are used by hundreds of millions of people for subsistence purposes and for the provision of income. The international trade in NWFP involves high potentials and risks. In this regard, a discussion is emerging on the opportunities and challenges of certification as a tool to promote the sustainable use of natural resources, including NWFP.

Certification schemes relevant to NWFP include forest management, social, organic and product quality certification. These schemes focus, at different degrees, on social, economic, ecological and/or product quality issues.

Key requirements for the certification of NWFP include the establishment of a limited and monitored permitting system, the development of clear tenure rights, limited access to harvesting sites, the development of niche markets and the implementation of quality control measures.

Information on NWFP certification is still insufficient in order to properly assess the usefulness and effectiveness of certification as a tool to promote the sustainable use of NWFP. The available literature indicates opportunities, constraints and unclear issues, which require further in-depth analysis, in order to provide sound information on the pros and cons of NWFP certification.

### **Keywords**

Non-wood forest products, certification, fair trade, forest management, organic production, product quality, sustainability.

## **Introduction**

"Non-wood forest products (NWFP) consist of goods of biological origin other than wood, derived from forests, other wooded land and trees outside forests" (FAO, 1999). They include edible nuts, mushrooms, fruits, herbs, spices, gums, aromatic plants, bushmeat, fodder and plant or animal products for medicinal, cosmetic or cultural uses.

Still today, hundreds of millions of people, mostly in developing countries, but also in developed countries, derive a significant part of their subsistence needs through the use of NWFP such as medicinal plants, construction materials or edible products. Income from plant and animal products gathered from forests is generated through local, national, trans-national and international trade.

The international trade in NWFP involves high potentials and risks. The main benefit of the international trade in NWFP is the high market value the products achieve compared to local or national markets. However, high market values combined with high demands may also cause unsustainable use since they might lead to the overexploitation of species providing NWFP. In addition, higher product values might not be equally shared among all stakeholders involved in the collection, processing, manufacturing, trade and marketing of NWFP.

Certification is perceived by various stakeholders as tool to promote the sustainable use of natural resources, including NWFP. The three major dimensions of sustainability are i) environmental friendliness; ii) economic viability; and iii) social equity. Since many stakeholders involved in NWFP certification have different interests and perceptions of the dimensions of 'sustainability', certification rarely addresses all dimensions but focuses on some aspects of the sustainable use of natural resources/NWFP.

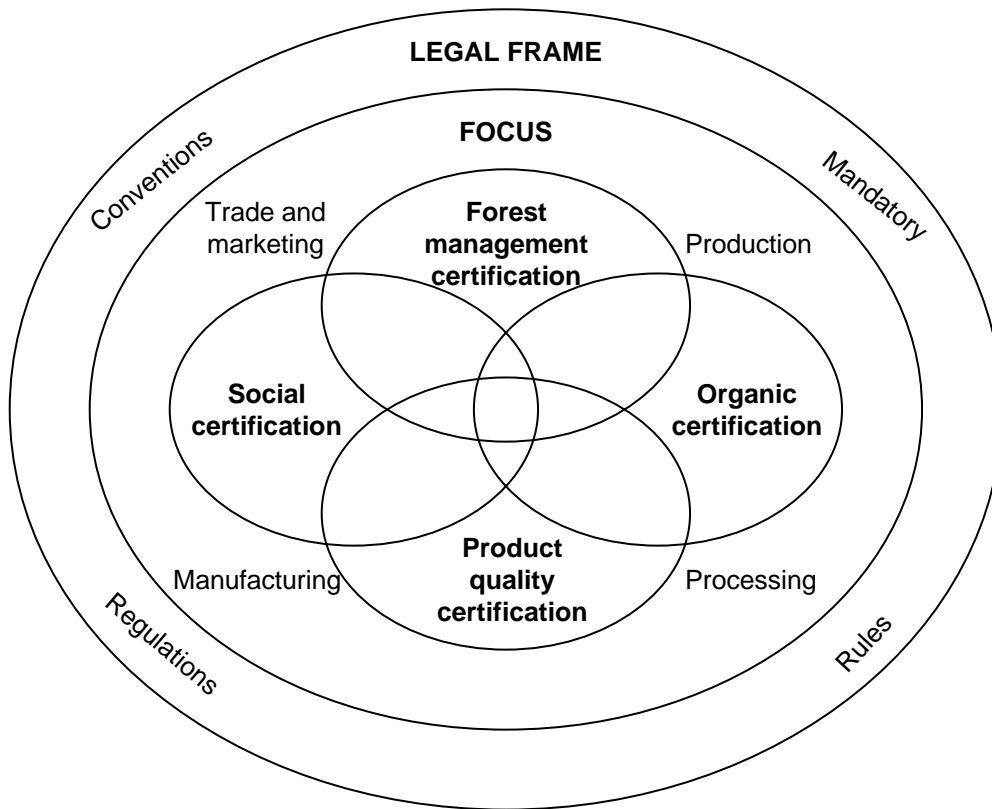
## **Certification schemes relevant to NWFP**

Certification programmes related to natural resource use have mainly been developed for timber and agricultural products. Four main categories of certification schemes have been identified to be of major relevance for the use of NWFP and are briefly described below: Forest management, social, organic and product quality certification. For further information on these certification schemes, see Walter (2002a, 2002b).

Depending on their basic concepts, these certification schemes focus on different areas such as production, processing, manufacturing as well as trade and marketing. However, many schemes do not focus on only one area but include, to different degrees, several areas. Therefore, considerable overlaps, and potential synergies between the different certification schemes exist.

The certification programmes discussed below are voluntary schemes, which have to be in accordance to mandatory, national and international rules, regulations and conventions. Examples of international agreements and conventions, which are legally binding to signatory countries, include the World Trade Organization agreements, the Convention on Biological Diversity (CBD), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and other related laws and regulations. They set the legal frame for every voluntary certification scheme.

Fig. 1. Overview of relevant certification schemes in the field of NWFP



Source: Walter (2002a)

Forest management certification programmes mainly assess ecological aspects of resource management, both at the forest and at the species or product level, including chain-of-custody certification. Many different programmes exist on the international, regional and national level, which focus almost exclusively on timber products and include NWFP only marginally.

Social certification systems, such as fair and ethical trade, assure that labour conditions are acceptable and benefits are equally shared among those involved in production and trade. These kind of trade initiatives foster business partnerships and management supply chains, which include secure and fair commercial deals and support the provision of market information (Krueger v., 2000). Important criteria focusing on social issues include: i) Tenure and customary rights; ii) Fair returns and adequate benefits; iii) Safe and healthy working environment; iv) Impact on local/indigenous communities; v) Economic viability; vi) Absence of child labour; and vii) Ethical marketing (Mallet, 2000; Burns and Blowfield, undated).

"Organic agriculture is a holistic production management system which promotes and enhances agroecosystem health, including biodiversity, biological cycles, and soil biological activity..." (FAO/WHO, 1999a). Wild crafted and semi-domesticated NWFP can also be considered as organic and many NWFP such as pine nuts, mushrooms and herbs are increasingly commercialized as organic food products.

Product quality certification aims at ensuring that defined production standards have been taken into consideration. These standards can focus on the product itself as well as on the way it is processed and manufactured. Product quality parameters include product identity, purity, efficiency and safety. These parameters are relevant for a wide range of internationally traded NWFP mainly used in the food and pharmaceutical industry. One example of international commodity and general standards relevant for the food industry is the Codex Alimentarius, which aims at developing and disseminating international food standards to protect consumer health and to facilitate international fair trading practices in foods (FAO/WHO, 1999b; Health Canada, undated).

### **Opportunities and challenges of NWFP certification**

The above certification programmes aim at promoting the sustainable use of NWFP by focusing, to different degrees, at social, ecological, economic or product quality issues.

The information currently available shows that experiences and data on NWFP certification are still limited. For many certification programmes, NWFP certification is still challenging since the specifics of NWFP certification in comparison to timber and cultivated products are not yet well analysed and documented. Since certification of NWFP only started recently, experiences in the procedure and the details of NWFP certification are still lacking (Mallet, 2000).

Most of the information on NWFP certification is provided by organizations, which are directly involved in certification, be it as accreditation or certification bodies. Independent research on the potential and constraints of certification and benefit-sharing in the field of NWFP seems still to be embryonic, despite the existence of initiatives such as the certification programme of the Falls Brook Centre, the NTFP Exchange Programme, the Rogue Institute for Ecology and Economy, Tropenbos International and the NTFP Network for Sustainable Forest Management in the Mediterranean by the WWF Mediterranean Programme Office (Maas and Ros-Tonen, 2001). Most of these initiatives are focusing on specific regions such as North America, Asia and the Mediterranean region.

The above summary of certification schemes indicates the multitude of factors which influence the sustainability of NWFP utilization. Despite this multitude of influencing factors, the NTFP Demonstration Project (undated) identified five key requirements for certifying NWFP:

- (a) Establishment of a limited and monitored permitting system;
- (b) Development of tenure rights;
- (c) Limited access to harvesting site in order to maintain sustainable harvesting level;
- (d) Development of niche market for high quality products; and
- (e) Implementation of quality control measures.

These key requirements comprise underlying opportunities and challenges of NWFP certification, which are discussed below.

Key opportunities include (in brackets see link to above requirements):

- *Monitoring system (a)*: Certification implies the establishment of monitoring systems in order to ensure the compliance of NWFP utilization according to given standards. Such monitoring systems may provide key information on the use of NWFP. Such monitoring systems might also be used as tool to monitor and evaluate the consideration of laws and regulations such as

CITES. CITES requests for appendix II species, which risk to become threatened with extinction, that trade is closely controlled and will not be detrimental to the survival of the species. This control could be provided by certain certification systems.

- *Traceability (a)*: The establishment of a monitoring system on the forest management unit level provides the opportunity to trace a product from the source to the consumer (chain of custody).
- *Clarification of tenure rights (b), (c)*: Certification may contribute to the clarification of tenure issues, taking into account both land and user rights. Many NWFP are collected in open-access systems, which might enhance overexploitation of resources providing NWFP. The clarification of tenure issues, if carried out in a participatory manner, might contribute to the sustainable use of NWFP.
- *Sustainable exploitation (b), (c)*: The establishment of sound exploitation techniques and the limitation of access to harvesting site might reduce or prevent high pressure and overexploitation of selected, particularly high value species.
- *Improved income generation (d)*: Certified NWFP might achieve higher market prices (premium price) compared to non-certified NWFP.
- *Value addition (e)*: High quality products might have better access to markets and gain higher prices compared to products, which can not assure quality standards.

Key challenges include:

- *Dispersion of collectors (a)*: A specific problem related to the monitoring of NWFP utilization is the dispersion of many NWFP collectors, who are often located in rural and isolated areas. It is therefore difficult to ensure that products are derived, according to given standards, from certified areas and not from uncertified areas (see also Viana et al., 1996).
- *Definition of sustainable harvesting levels (c)*: The ecological knowledge of sustainable harvesting levels is very limited for most NWFP. Appropriate methodologies to define these sustainable harvesting yields are still rudimentary.
- *Creation of user conflicts (c)*: The limitation of access to harvesting sites might create conflicts between different user groups.
- *Unclear market potential (d)*: The actual demand in certified NWFP in the market is the driving force for many certification initiatives and a key to ensure economical viability. For many NWFP it is not yet proven that customers are willing to pay a higher *premium prices*. In the case of rattan, for example, the market for certified products “would be minimal unless a major public education effort took place to inform consumers of the negative impacts of many unsustainable rattan sources (Viana et al., 1996).
- *Insufficient product definition and classification (e)*: Most NWFP are not yet included in international classification or standardization systems such as the Harmonized System, Standard International Trade Classification, the Codex Alimentarius, etc. This insufficient coverage prevents the international trade in these products as well as the documentation of their actual trade.

In addition to above opportunities and challenges, the following issues still need further clarification in order to assess the relevance and applicability of certification in the field of NWFP certification:

- *Suitability of different certification programmes*: Which programme or arrangement is, under what conditions, the most suitable, and for whom? A large portion of NWFP, for example,

comes from production systems outside the forest, which can not be certified according to forest management certification systems (see e.g. the *dehesa silvicultural* system in the case of cork [Moussouris, 1999]). Therefore, the certification programme has to be selected according to the actual production system or habitat exploited. In addition, products might be derived in the same area from different production systems, which might also create problems for certification.

- *Collaboration opportunities among certification programmes:* Although different certification programmes focus on different issues related to the sustainable use of NWFP, they show however many commonalities, which might be used as a starting point for improved collaboration or mutual recognition. Field tests on palm heart production in Brazil, for example, were jointly carried out by FSC-accredited (IMAFLOA and SmartWood) and IFOAM-accredited (Instituto Biodinamico) organizations. The tests showed that both systems (forest management and organic farming certification) are complementary and no major contradiction in what was being assessed was identified (FSC NTFP Working Group, 1999).
- *Standard quality and complementarity:* The quality of a certified product is only as good as the standard, against it is assessed, is. Since many products are certified against different standards, the quality of each product is difficult to assess and to compare. The discussion on the 'mutual recognition' of forest certification schemes shows the difficulties in comparing different certification programmes.
- *Costs:* Certification requires up-front investments to cover costs related to the certification procedure as well as to the actual audit, which have to be financed by the stakeholders involved (By whom? The collectors, exporters or importers, etc.?). These costs might differ from various products, locations and certification programme. Fair trade certification schemes, for example, require less investments since audit costs are already included in the premium guaranteed by the certifier. Organic production implies lower costs than forest management certification; the latter might therefore be an option for large-scale production systems (Falls Brooke Centre, undated; Mallet and Karmann, 2000);
- *Benefits:* What are the ecological, economic and social benefits actually derived from the use of certified NWFP? Does certification promote the sustainable use of NWFP, and if yes, to which extend?
- *Non-monetary benefits:* The multitude of non-monetary benefits reflects the importance of certification as *policy tool* by providing improved capacity, stakeholder participation and consultation and the recognition of custom, tenure and user rights. These non-monetary benefits risked to be overlooked in the analysis of certification and need to be addressed properly (see Irvine, 2000).
- *Beneficiaries:* Who is actually benefiting from certifying NWFP? Many stakeholders such as collectors, intermediaries, processors, exporters and importers are involved in the trade in NWFP. Does certification ensure the adequate share of benefits, in particular for local communities? Is certification able to promote the production of NWFP by forest dependent people viz-à-viz the production of these products through farming systems?
- *Replicability/Mainstreaming:* How relevant is certification to promote the sustainable use of NWFP, taking into account that they are only applied for a limited number of products in specific locations? Can certification contribute to the sustainable use of many NWFP providing improved income and livelihoods for a significant number of people? What is the impact of certification on the bulk of NWFP used for self-consumption?

## Conclusions

Information on NWFP certification is still insufficient in order to properly assess the usefulness and effectiveness of certification as a tool to promote the sustainable use of NWFP. The available literature indicates opportunities, constraints and unclear issues, which require further in-depth analysis, in order to provide sound information on the pros and cons of NWFP certification.

Forest-based certification of NWFP will probably not become a universal tool to promote the sustainable use of NWFP. However, under certain conditions, forest-based certification might in fact be an appropriate tool eventually in combination with other certification schemes like organic or fair trade based systems.

The FAO Programme activity *Assessment of impact of trade and marketing on the sustainable use of NWFP* therefore aims at analysing the impact of NWFP certification on the sustainable use of NWFP and at identifying favourable conditions, which would allow the use of appropriate certification systems as a tool to promote the environmentally friendly, economical viable and socially viable use of NWFP.

## Bibliography

- Blowfield, M., undated. Ethical trade: A review of developments and issues. Third World Quarterly 20:4. Also available at [www.nri.org/NRET/3wqart.pdf](http://www.nri.org/NRET/3wqart.pdf)
- Burns, M and M. Blowfield, Approaches to ethical trade: Impact and lessons learned. Natural Resource Institute. Internet document. [www.nri.org/NRET/burns\\_final.pdf](http://www.nri.org/NRET/burns_final.pdf)
- Carey, C., 2000. A preliminary assessment of forest management certification systems. Report prepared for IUCN, Economics Unit. Internet document. [biodiversityeconomics.org/business/topics-101-00.htm](http://biodiversityeconomics.org/business/topics-101-00.htm)
- Costa, S. and L. Ibanez. 2000. Forest certification: 'performance-based' approach versus process-based' approach: Internet document. [www.toulouse.inra.fr/centre/esr/semUnite/papsem/Ibanez.pdf](http://www.toulouse.inra.fr/centre/esr/semUnite/papsem/Ibanez.pdf)
- Dankers, C., 2002. Social and environmental certification in agriculture. Internal FAO Presentation, 6 February, Rome
- Falls Brook Centre, undated Certification of Forest Products: An introductory guide for producers and harvesters. Internet document. [web.net/~fbcja/programs/certmark/ntfp/certpam.htm](http://web.net/~fbcja/programs/certmark/ntfp/certpam.htm)
- Falls Brook Centre, undated. Certification of NTFP - The state of the playing field. Internet document. [www.web.net/~fbcja/programs/certmark/ntfp/ntfp.htm](http://www.web.net/~fbcja/programs/certmark/ntfp/ntfp.htm)
- FAO, 1999. Towards a harmonized definition of non-wood forest products. In: Unasylva, Vol. 50, 1999/3. Also available at [www.fao.org/docrep/x2450e/x2450e00.htm](http://www.fao.org/docrep/x2450e/x2450e00.htm).
- FAO/WHO, 1999a. Codex Alimentarius Commission Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods, Rome
- FAO/WHO, 1999b. Understanding the Codex Alimentarius. Rome. Also available at [www.fao.org/docrep/w9114e/w9114e00.htm](http://www.fao.org/docrep/w9114e/w9114e00.htm)
- Fern, 2001. Behind the logo: An environmental and social assessment of forest certification schemes. Also available at [www.fern.org/Library/Reports/reports.html](http://www.fern.org/Library/Reports/reports.html)
- FSC NTFP Working Group, 1999. Final report to the Board of Directors (Excerpts from final draft)
- Health Canada online. undated. Food Program. Internet document. <http://www.hc-sc.gc.ca/food-aliment/english/codex/index.html>

- Irvine, D., 2000. Certification and community forestry-current trends, challenges and potential. Forest, Trees and People Newsletter No. 43
- Kruedener, B.v., 2000. FSC forest certification-enhancing social forestry developments. FTP Newsletter No.43
- Maas, J. and M.A.F. Ros-Tonen, 2000. NTFP certification: Challenges for research. ETFRN 32. Also available at [www.etfrn.org/etfrn/newsletter/pdf/etfrnnews32.pdf](http://www.etfrn.org/etfrn/newsletter/pdf/etfrnnews32.pdf)
- Mallet, P., 2000. NTFP certification: challenges and opportunities. FTP Newsletter No. 43
- Mallet, P. and M. Karmann, 2000. Certification of NTFPs: An emerging field, ETFRN 32. Also available at [www.etfrn.org/etfrn/newsletter/pdf/etfrnnews32.pdf](http://www.etfrn.org/etfrn/newsletter/pdf/etfrnnews32.pdf)
- Moussouris, Y., 1999. Cork certification according to FSC Principles and Criteria. WWF Mediterranean Programme
- NTFP Demonstration Project, undated. Options for NTFP Certification. Internet document. [www.island.net/~ntfp/pages/certification.html](http://www.island.net/~ntfp/pages/certification.html)
- Sierra Club, undated. Comparing the Systems: Credibility is Key. Internet document. [bc.sierraclub.ca/Activism/Comparing\\_the\\_Systems.htm](http://bc.sierraclub.ca/Activism/Comparing_the_Systems.htm)
- Temple Inland Forest, undated. Certification. Internet document [www.templeforest.com/frenew2c.html](http://www.templeforest.com/frenew2c.html)
- Ten Kate and K; S.A. Laird, 1999. The commercial use of biodiversity: Access to genetic resources and benefit-sharing. Kent
- Viana, V.M., A.R. Pierce and R.Z. Donovan, 1996. Certification of non timber forest products. In: Viana, V.M., J. Ervin, R.Z. Donovan, C. Elliott, H. Gholz (Eds). Certification of forest products – Issues and perspectives. Washington
- Walter, S., 2002a. Certification and benefit-sharing mechanisms in the field of non-wood forest products - an overview. Medicinal Plant Conservation, Volume 8, Newsletter of the IUCN Species Survival Commission, Medicinal Plant Specialist Group. Bonn. Also available at <http://www.fao.org/DOCREP/ARTICLE/001/AB542E01.HTM>
- Walter, S. 2002b. NWFP certification – an overview. FAO NWFP Programme, Draft Discussion Paper. Rome. Available at [www.fao.org/forestry/FOP/FOPW/NWFP/new/doc/x554e.htm](http://www.fao.org/forestry/FOP/FOPW/NWFP/new/doc/x554e.htm)



## Annex: Basic principles of certification systems

<b>Certification principles</b>	<b>Definition</b>	<b>Examples</b>
First party verification	Internal assessment of production systems and practices.	Sustainable Forestry Initiative (SFI), business ethics standards, company standards, (e.g. Weleda, Wala), codes of practice, codes of conduct (e.g. Body Shop)
Second party verification	Assessment of a second party (e.g. customer or trade associations), who assess the company according to contractual obligations.	EU Regulation 2092/91
Third party verification	Independent assessment of a separate accredited third party <sup>3</sup>	Forest Stewardship Council (FSC), International Federation of Organic Agriculture Movements (IFOAM)
Standards	"Documented agreements containing technical specifications or other precise criteria to be used consistently as rules, guidelines or definitions of characteristics, to ensure that materials, products, processes and services are fit for their purposes" (ISO, 1996).	Standards by various accreditation and certification bodies.
System-based standards	Focus on the <i>process</i> and evaluate whether specific systems are in place, which allow organizations and/or producers to achieve their (performance) objectives.	Environmental management systems ISO 14001/14004, Social Accountability 8000, SFI <sup>1</sup> , Pan European Forest Certification Scheme (PEFC) <sup>12</sup> , Canadian Standards Association (CSA) <sup>1</sup>
Performance-based standards	Focus on the <i>outcome</i> , the quality of goods and/or services, which should be in accordance to defined standards.	Forest Stewardship Council (FSC), Rainforest Alliance/SmartWood, Instituto de Manejo e Certificação Florestal e Agrícola (IMAFLORA).

Source: Dankers (2002); Blowfield (undated); Maas and Ros-Tonen (2000); Carey (2000), Temple-Inland Forest (undated); Sierra Club (undated); Costa & Ibanez (2000); Fern (2001)