



Forest policies, access rights and non-wood forest products in northern Europe

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In northern European countries, where most NWFPs are underutilized, maintaining free access to forests may be the best resource management policy.

The first forest-related policy measures - and the birth of the forestry profession - in the Scandinavian countries were related to game management and protection. However, attention was also given to the conservation of fruit-bearing forest trees very early in the development of forest policies in the region (Helander, 1949; Fritzboeger and Soendergaard, 1995). This article discusses policies concerning non-wood forest products (NWFPs). (For the most part only plant-based products such as berries and mushrooms are considered.) Their role in forestry is greatly influenced by the general status assigned by legislation to the multiple use of forests. Free access rights to multiple products and services of forests are characteristic of many northern European countries and are examined country by country. Finally, a general framework for the development of NWFP policies is outlined.

MULTIPLE USE AND RIGHTS OF ACCESS IN NORTHERN COUNTRIES

Access rights are a fundamental policy issue in multiple-use forestry in general, and in the NWFP sector in particular. Access and ownership rights are the result of historical institutional developments and reflect, among other things, existing land use patterns and the availability of forest resources.

Denmark

Denmark differs from the other Scandinavian countries in its high population density, the dominance of agriculture and the smallness of its forest area. For most Danes, non-wood uses of forests (recreation, wildlife, biodiversity, protection of groundwater, landscape and cultural values) are probably more important than wood (Plum, 1998). In Denmark there is free access to public forests (36 percent of all forests); however, there is only limited access to private forests as these are legally accessible only to pedestrians and cyclists, who must keep to the roads and paths and only enter the area during the daytime. If a private forest is smaller than 5 ha, the general Act on Access allows it to be closed entirely; if followed to the letter, this policy prevents the utilization of mushrooms and berries by the public. In fact, both the availability and the amounts of NWFPs collected (such as branches, plants, moss, lichen, nuts, cones,

mushrooms and berries) are very limited and have practically no private or national economic significance. In contrast, Christmas trees and greenery production (valued at US\$38 million) and hunting (valued at US\$21 million) together amount to more than the value of wood produced (US\$52.5 million) (Plum, 1998).

The significance of NWFPs in the Nordic countries: some historical examples

Trade in plant-based NWFPs in the Nordic countries dates back many centuries. For example, the tall herb *Angelica archangelica* was an important commodity for the Vikings in the sixteenth and seventeenth centuries. Large amounts were exported from Norway to central Europe for use in treatments against the plague and other infectious diseases (Osa and Ullveit, 1993).

The people of the Kainuu region in northeastern Finland, an area that offers limited possibilities for agriculture, have traditionally been dependent on the forests for multiple uses. They remain among the most active in the gathering of wild forest berries. In Finland, lingonberries (*Vaccinium vitis-idea*) were among the top ten export products in the 1920s.

After the decline of the tar trade, especially during the famine years to the latter half of the nineteenth century, the Kainuu people relied on pine bark bread for their survival (Helander, 1949).

Berries (such as the cloudberry, *Rubus chamaemorus*) and mushrooms (pictured, *Boletus edulis*) can generally be collected by anyone - even on private land



In general, multiple-use forestry is highly appreciated in Denmark. The Forest Act is based on the principle of integrating production and conservation in all forests and defines good and multiple-use management with regard to increasing and improving wood production as well as nature conservation, landscape and historical value, environmental protection and recreational interests.

Norway

Norwegians are enthusiastic about outdoor life; outdoor activities in forests and on mountains are an important part of national identity. The forestry law is mainly a frame law with few detailed rules. The Norwegian traditional policy on private forestry rests mainly on the principle of "liberty under responsibility", which is supported by economic incentives (Troemborg and Solberg, 1995). In 1981, the goals were changed to include multiple uses. The first paragraph of the 1976 Forestry Act was changed to stipulate that consideration must be given to recreation, landscape protection, animal and plant habitats and hunting and fishing areas. However, improved multiple-use management has become more apparent only in the 1990s (Eckerberg, 1995).

A key feature of Norwegian common access is the distinction between *innmark* (fields, grazing areas, yard and garden areas) and *utmark* (other public outdoor areas). In *innmark* people are only allowed to move on foot when the soil is frozen or under snow cover, and not between 30 April and 15 October. In *utmark* there are no limitations for movement or overnighing.

Universal rights include the possibility to pick berries, mushrooms and common herbs. However, there are some restrictions concerning the cloudberry (*Rubus chamaemorus*), the most economically valuable wild berry, which grows throughout the country but is most abundant in the north. In 1854, a law prohibiting the picking of cloudberry on privately owned land was passed in the three northernmost counties. In the same counties berry picking on public lands is allowed only for local people. Picking unripe cloudberrries has been forbidden in the entire country since 1970 (Vorkinn and Kaltenborn, 1993). In addition to spatial and date restrictions, quantity restrictions may also be applied.

Sweden

In Sweden, multiple-use considerations were first introduced into the Forestry Act in 1975 and were made more specific in 1979. New forest policy and the related new Forestry Act of 1994 raised the maintenance of environmental values to the same status as meeting production goals. The policy adopted the multiple-use approach and specified that forests shall be managed in such a way that the needs for both high timber production and other functions of forests are satisfied, in principle, in every hectare of forest. By emphasizing the integration of environmental considerations into forest management, the policy is thought to reduce the need to set aside forest land solely for protection purposes.

The Swedish Forestry Act does not mention NWFPs explicitly, as it does with biodiversity, historical, aesthetic and social values. NWFPs can be understood to be included implicitly both in forest production (which must have a potential to satisfy different needs in the future) and in the concept of social values.

In Sweden, as in other Nordic countries, common access rights apply to residents of other countries as well. In Sweden in particular this has permitted increasing numbers

of berry pickers from other countries to collect wild products not only for their own use, but also for income earning. This has caused some tension between the local people and migrant pickers and has even created the need to publish multilingual information about the precise rights and duties associated with common access rights (Eckerberg, 1995). There are no date regulations in Sweden. In commercial berry picking, the quality control of buyers ensured that unripe berries do not enter the markets.

The Russian Federation and the Baltic States

Unlike Scandinavian forest legislation, forest legislation in the Russian Federation and the Baltic States has traditionally been clear and explicit with regard to NWFPs. For example, the forest law of the Republic of Karelia (in the Russian Federation) lists the following categories of forest use: wood production, resin production, secondary forest materials and technological raw materials, the use of forest by-products, scientific research, cultural and social purposes, hunting economy, recreation (including tourism) and other forest uses not prohibited by law. Research on non-wood resources (especially medicinal plants and wild berries) has been conducted in Karelia for 30 years (Belonogova and Zaitseva, 1996).

The Forest Act in Estonia also recognizes non-wood production explicitly. It states that the forests of Estonia shall be used, among other purposes, for the procurement of forest by-products such as berries, mushrooms, herbs, and decorative plants, as well as for hunting, bee-keeping and the grazing of cattle (Estonian Forest Department, 1995). An important feature of the Estonian Forest Act is that the principle of sustainability also concerns non-wood production. For example, the act states that by-products must be procured in such a way that berry, mushroom and herb yields are not adversely affected. Unlike the Scandinavian countries, Estonia recognizes universal rights explicitly. For example, according to the Estonian Forest Act, camping in the forest as well as picking berries, mushrooms and other non-wood products in state, municipal and private forests without bound or mark is a right of every citizen.

Finland

Finns are quite active in utilizing the traditional rights of common access: according to a survey, 87 percent of Finland's citizens aged 15 to 75 years collect berries or mushrooms sometimes or often (Kangas and Niemeläinen, 1996). The collection of most species remains far less than the biological resources available in sparse northern forests. It is estimated (in the absence of accurate data) that no more than 5 to 10 percent of the most common berry species and only 1 to 3 percent of the mushrooms are collected (Salo, 1995; Saastamoinen *et al.*, 1998). In fact, every summer and autumn complaints about the underutilization of forest resources appear in the media with calls for better use of these resources for nutrition and health, as well as for improving income and employment.

Finland has a long history of public measures aimed at increasing the extent of utilization of non-wood forest resources. The most powerful of these are tax relief measures (see Box). In addition, in response to concerns about underutilization of NWFPs, a programme for developing the natural products sector was introduced by a working group of the Ministry of Agriculture and Forestry in 1995. Its targets included increasing rates of utilization of berries and mushrooms by 30 percent and the industrial use of the products by 10 percent.¹

¹ **Editor's note:** Details about this programme are given in the article entitled "Utilization and income-generation aspects of non-wood forest products in the Czech Republic, Finland and Lithuania".

Other interventions to promote NWFP utilization include training and research. Since 1969 about 3 000 voluntary extension advisers have been educated on subjects such as species identification and proper handling of products for sale. The training has largely concentrated on mushrooms, since they have lower rates of utilization than other NWFPs; however, in recent years training has been extended to include herbs and other products as well as further processing and marketing of natural products. Training has also been given to 55 000 commercial mushroom pickers. Research carried out on NWFPs in universities and research institutes has mostly concentrated on biology and technology related to berries and mushrooms, but product development and marketing have recently been gaining attention.

Incentives for increasing utilization of NWFPs in Finland

The most powerful measure adopted to encourage NWFP use in Finland is a tax exemption that has been in force since the early 1970s: pickers receiving income from selling berries and mushrooms that they have picked themselves need not pay income tax. In Finland, where rates of income taxation are extremely high, this is a remarkable incentive, and it forms the backbone of commercially oriented picking activities. From time to time the Ministry of Finance suggests that this rare exception in a country of high taxes should be removed, but so far political forces have been able to prevent the exemption's removal.

Another tax relief, which has been removed since Finland joined the European Union (EU), was called "primary product deduction" and concerned all food products. Companies buying berries and mushrooms had a right to deduct 18 percent of the value-added tax from products bought from pickers. Value-added tax for all food products applied only to processing and further trade. The natural products industry has recently suggested that the value-added tax be lowered for products from the wild.

The period for picking berries and mushrooms is short in northern Finland and the yield varies a great deal from year to year. In good years, when yields are abundant (and prices low), food processing industries stock up for future lean years. Storing is costly, however, and therefore since 1982 minor financial support has been given to companies storing berries. With Finland's membership in the EU, this support is now only allowed in the northern part of the country.

Customs duties on wild berries imported into Finland used to be substantial (up to 28 percent for fresh berries), but in conformity with EU regulations the duties have been removed or substantially reduced. It was predicted that lowered border protection would cause the prices obtained by domestic pickers to drop, and this appears to have occurred. Imports of wild berries from the Baltic countries and Karelia (Russian Federation) have been increasing, and the real prices of most common berries have experienced a substantial downward trend. According to the views expressed by berry pickers in the newspapers, the current low prices of imported berries appear to threaten the profitability of commercial picking activities in Finland.

CAN OPEN ACCESS BE A SOUND POLICY?

There is a large variation in forms of access and property regimes regarding NWFPs (Rekola, 1998). However, it is usually assumed that the sustainable promotion of material non-wood products would require a shift from open access to more secure and organized forms of tenure arrangements. In the northern European countries many NWFPs (in Finland, any parts of growing trees: twigs, bark and birch sap, as

well as lichens and moss) unambiguously belong only to forest owners. Hunting rights usually belong to landowners, although some collective or local rights are also recognized.

However, as discussed above, in most Nordic countries, in the Russian Federation and in the Baltic countries forest berries and mushrooms are open-access resources. Anyone can pick them regardless of who owns the forest. However, from time to time in some countries, questions are raised as to whether rights to these products, or some of them, should be included among the exclusive rights of the forest owners. Open access has often been seen (both in theory and in practice) to contribute towards the depletion of the resources concerned, and in many societies it is considered a policy of the past. In boreal forest regions, however, open access to non-wood forest resources has not led to the so-called "tragedy of the commons". Low population pressure, decreasing returns to labour used in collecting the last berries or mushrooms, and the fact that only the annual growth is harvested are among the explanations for the limited detrimental impact of NWFP extraction in the forests of the region (Saastamoinen, 1998). Would the removal of open access (i.e. the establishment of private ownership rights for berries and mushrooms) increase the utilization of these resources and lead to their better management? In theory, private ownership would give landowners an incentive to seek an optimal combination between the wood and non-wood portions of their resources. For example, the past large-scale drainage of peatland for increased wood production, which could have long-term negative impacts on cloudberry and cranberry production, could perhaps have been avoided if the berries had been owned exclusively by the forest owners. However, in general, apart from this exception, there have not been any serious conflicts between berry and mushroom production and wood production, so privatization would probably not result in changes in management practices.

The major problem in the north is not overutilization of NWFPs, but rather underutilization; for example, in Sweden it was estimated in 1977 that roughly 10 percent of all bilberries, cowberries and raspberries (and only 5 percent of total mushrooms) were collected (Kardell, 1980). In Finland the figures are probably lower. In northern boreal forests the main impact of removing open access to wild berries and mushrooms would probably be reduced harvesting. Forest owners - half of whom are currently urban - would not be able to collect more than a small part of what the whole population is able to collect. Privatization would also mean less income and employment for people currently engaged in commercial picking activities. Similarly, there would be fewer products collected for own use and recreation, which now make up more than two-thirds of the total amount collected. In addition, many forest owners (especially the owners of small forest holdings) might feel that they are also among the losers, as they too are beneficiaries of open access.

In most Nordic countries, lichens and mosses are the private property of forest owners

Privatization would probably also lead to higher berry and mushroom prices. Forest owners could earn more by gathering and selling the products themselves or by selling licences to the pickers. However, it is not evident that the prices would rise sufficiently to cover the costs of licensing and/or other forms of exclusion.

The removal of free access would mean a substantial loss to society in both economic and social terms. It needs to be emphasized that politically it would not be possible to remove these traditional and popular rights which are an essential part of the way of life in the northern European countries.

FEATURES OF SUPPORTIVE NWFP POLICIES

It is evident now that the threats and opportunities for NWFPs result not only from changes in the physical climate, which are generating wide variations in the yields of wild products, but also from changes in the economic and social climate and the unpredictable functioning of markets. The decreasing profitability of picking activities resulting from increased international competition and the apparent increased consumer interest in clean and natural products from forests are good examples. It is clear that the separate and sometimes incidental development activities in any country need to be more concerted, coordinated and carefully thought out in order to be effective and to benefit the synergy of integration. This is where the call for a conscious policy is raised.

NWFPs should be given recognition in national forestry policies and programmes, as they provide substantial income and processing possibilities for rural people and healthy food and recreation for those picking for themselves. Often NWFPs have been a neglected or invisible component of forestry or other policies. Finland, for example, has had a long and successful tradition in national forest planning, but it was not until the National Forestry Programme of 1999 that the importance of NWFPs and their uses were fully recognized (Finnish Ministry of Agriculture and Forestry, 1999). The roles of NWFPs and the problems and opportunities associated with them should be put on national agendas.

The problems, challenges and possibilities concerning NWFPs vary considerably by country and even more among the regions within countries. Still more variation can be found among the products in terms of the availability of resources, the sustainability of their use, traditional use patterns and commercial status and possibilities. As the problems and opportunities vary, policies should be tailored to existing and anticipated needs. Nevertheless, as is true for any forestry policies applied in strikingly varying conditions, there are some basic elements that are worth considering in each context. The following are considerations that should be common to NWFP policies.

A complex set of traditional and unwritten (as well as official and written) usufruct, tenure and ownership rights are involved in the collection and utilization of NWFPs. Their role should be examined and understood, and the public's sensitivity to the issue recognized. Often, even minor changes that are considered necessary might take much time to gain acceptance and be implemented.

The structure, development and dynamics of markets require much consideration. Market studies may have wide gaps, but they are urgently needed for two reasons. First, evaluation of the functioning of the markets is required to decide the extent of policy intervention needed. Second, increased market knowledge is needed in extension and development activities, where it is one of the most scarce resources. It is worth exploring the possibility of using the Internet to provide market information. It is also important to recognize that some products that used to be traditional staple foods (such as pine nuts) might find new markets as delicacies in today's society, and that some products (e.g. evergreen boughs) may perform strongly in international trade while others (e.g. gum naval stores) are in decline (Vantomme, 1998). In addition, differences in labour costs may essentially change the competitiveness of some products in some countries (e.g. Russian and Baltic berries in Finnish markets) (Lloyd, 1998).

The existing structure of economic incentives and disincentives also requires careful analysis. Comparative analysis is needed among different products and different

countries. Needs for international harmonization have to be balanced with contrasting demands to tailor incentives to the specific needs of each country. One example among the many existing forms of taxation relief is that in the Czech Republic, forests for important non-wood production functions are not subject to taxation (Third Ministerial Conference on the Protection of Forests in Europe, 1998). As processing and trading enterprises are usually small, instruments and programmes available to small- (including micro) and medium-scale enterprises should be explored. For example, in many countries there are specific rural development or rural entrepreneurial programmes which may fit well with small-scale non-wood processing activities.

Extension, training and education as well as research and development activities are a vital part of any successful policy, and in the NWFP sector they are essential as it is largely composed of small enterprises and operators. Among the long list of efforts needed in this area are the research of the lesser-known species, quality management and the development of more value-added products.

In northern conditions the gathering of NWFPs is a seasonal activity, and particularly for this reason the pickers are not organized and their voice is seldom heard when the problems of the industry are considered. The promotion of better organization not only of the pickers but also of all the other stakeholders in the industry (where often micro and small enterprises are involved) would improve development efforts and raise the general status of the industry.

Any industry and its products need a positive image and publicity. The NWFP sector by its nature has excellent potential in this respect, but again, because of the scale and heterogeneity of NWFP industries, policy support is needed. Enhancing promotional information is also an important part of market development activities.

No doubt there are many other important elements and aspects to be considered in formulating policies and programmes in a sector as varied and multifaceted as the NWFP sector. However, of the greatest importance now is the simple recognition that the NWFP sector in many countries is in need of a specific policy, integrated with general forestry and other policies, but directed at advocating and enhancing the sector's own merits to further the economic, social and ecological roles and potentials of non-wood forest production.

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