

## Box 2: The importance of non-wood forest products in Europe

Forests systems are responsible for a diversity of very valuable ecosystem services throughout Europe. Among these, Non-Wood Forest Products (NWFPs) such as mushrooms, chestnuts, cork, pine nuts, honey truffles and berries are among the most important from economic and social points of view. The FAO has classified NWFPs into two broad categories: animal and plant products.



... In several European countries, the Nordic common rights (right of public access to the wilderness, or freedom to roam) grant access for picking non-wood forest products such as berries.

Top: Blueberry picking.

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Bottom: Understorey of *Vaccinium myrtillus* in a coniferous forest.

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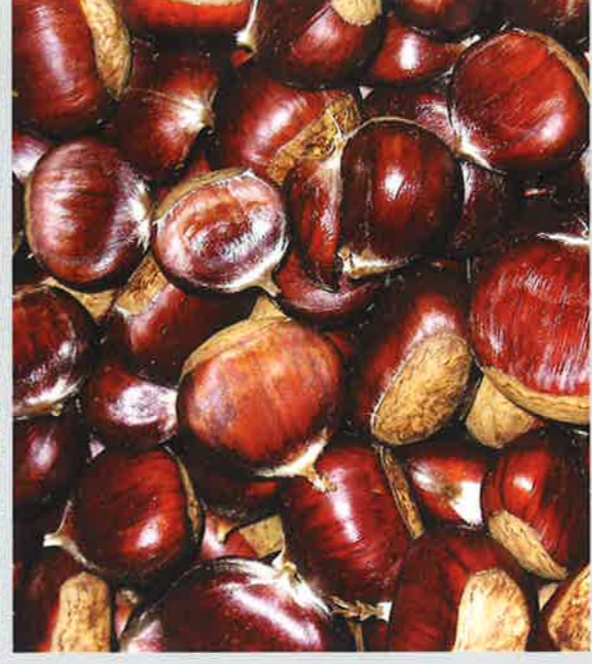
In northern Europe, the Nordic common rights allow access for picking berries, mushrooms and other non-wood forest products (NWFP), even from private forests. This free access, facilitated by a dense network of forest roads, makes berry and mushroom picking an essential part of the way of life in rural areas of the Nordic countries. Opportunities in the sale and processing of NWFPs to provide additional income vary widely between products, regions and seasons. Earlier interventions to promote NWFP utilisation have included training in identification, picking, processing and marketing of natural products. As an example, in Finland 55 000 commercial mushroom pickers have been trained since the early 1970s. Sales tax and income tax exemptions on selling berries and mushrooms picked by an individual continue to be key incentives for commercial picking. About one-third of berries and some one-tenth of mushrooms picked in the Nordic countries enter the market. In recent years, berries sales have decreased as a result of urbanisation and aging of the rural population, as well as low berry prices. As a result, commercial berry picking has, during the past decade, relied largely on migrant pickers, including workers from neighbouring countries and from as far as SE Asia<sup>11</sup>.

In the Mediterranean region, non-wood forest products such as mushrooms, cork, pine nuts, chestnuts, resin, honey and truffles are of extreme importance to the economy. Despite this, there is a general lack of regulation of the cultivation of these non-forest wood products<sup>12</sup>.

For example, in the Northeast of Portugal, mushrooms have traditionally been picked for self-consumption. This region is one of the few in the country where there is a strong local knowledge concerning wild (and even cultivated) mushrooms. Thanks to this strong tradition and a rich stock of mushrooms, commercial picking has become a very important economic activity in the region since the 1980s. This activity has provided significant income for families and individuals on an annual basis. At the same time, the first studies on mushrooms in the region were conducted with the purpose of assessing diversity, productivity and the economic potential of mushrooms as a forest resource<sup>13, 14</sup>. This activity is still mainly undertaken by locals, usually self-employed or retired elderly women, individually or in groups of two, and within the limits of the village where they reside or the neighbouring village<sup>15</sup>. Almost all the mushrooms picked locally have international markets as final destination including Spain, France, Germany, and Italy. Although no official statistics are available for the production and trade in the region, mushrooms are estimated to contribute 5 to 10 million Euro to the local economy every year. Population in cities have recently developed an interest in wild mushrooms which has led to the organisation of courses, workshops and other training initiatives by forest, agriculture and environment associations. Formal education in mushrooms has been offered in the Polytechnic Institute of Bragança since 1991<sup>16</sup>.

Chestnuts are a very important non-wood forest product of forests in Mediterranean countries. The high market price of chestnuts and the low level of inputs required in the chestnut systems have led to the recent expansion of chestnut agro-forestry systems in some Mediterranean regions. This process is favoured by the movement of people from the countryside

to cities in the region and abroad and by the abandonment of traditional agriculture systems. Chestnut diseases such as “ink disease” and “chestnut blight” and the newly arrived “chestnut gall wasp” (*Dryocosmus kuriphilus*) are serious threats to this product. Localised research (for example<sup>17</sup>) and forest extension promoted by forest associations has, however, contributed to minimise the effects of these agents.



... In 1993-2013, the European average production of chestnuts has been 130 000 tonnes per year, i.e. more than 10% of the global production<sup>18</sup>.

Top: Chestnut bur.

(Copyright William Warty, CC-BY, <https://archive.is/0qz5n>)

Bottom: Chestnuts

(Copyright Maja Dumat, CC-BY, <https://archive.is/05seX>)



... Variety of mushrooms found in the forests of Priekule, Latvia.

(Copyright Inga Viola, CC-BY, <https://archive.is/SL6W2>)



... Raspberries.

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... Truffle hunter with his dog. Tuscany, Italy. Italian white truffles are highly sought after and have high value.

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