# International Journal of Bioprocess & Biotechnological Advancements

IJBBA, 7(1): 311-312 www.scitcentral.com



#### **Opinion Article**

## Sustainable Forest Management Implies to Use Not Only Timber but Non-Timber Resources Too

Tamaz Patarkalashvili<sup>\*</sup>

\*Technical University of Georgia, Center Studying Productive forces and Natural resources of Georgia. 69, M. Kostava Str.,0175 Tbilisi, Georgia Received April 15, 2021; Revised April 24, 2021; Accepted April 26, 2021

#### ABSTRACT

Forests are extremely important natural resource that can potentially be sustainably harvested and managed to yield diversity of commodities for economic impotence. Unfortunately, in most cases forest values are not assessed until now in terms of money that leads to unsustainable overharvest resulting in ecological degradation of forest ecosystems. The public concern regarding forest management is gradually shifting from the extraction of timber for earning money to the utilization of additional forest resources, such as non-wood forest products, protecting biodiversity, wildlife, watershed management, recreation and forest residues.

Keywords: Timber, Residue, Non-Wood, Wild fruit, Berry, Mushroom, Condiment, Herb, Nut

From ancient times timber and firewood always considered the main sources of wood products. Only from the second half of the 20<sup>th</sup> century scientists and practitioners began to pay more attention to non-wood forest resources as economically valuable source of feasible nutrient forest products.

Forests provide useful wood products like round wood that can be processed into building materials, or made into plywood products, furniture, etc. Wood pulp is used not only for paper and boxes, but for a wide variety of products including sponge for washing dishes and other kitchen utensils. In many economically developed countries forest residues, that are up to 40-50% of the harvested forests, are used for paper production, pellets, comical products. Forests are the sauce of numerous non-wood products (NWFPs) including bark, dyes, fibers, gums, incense, latexes, oils, resins, shellac, tanning compounds and waxes, wild fruits and berries, maple and birch trees' sap, etc. [1,2].

NWFPs are the products of biological origin other than wood derived from forests. NWFPs can be gathered from wild forests or produced in forest plantations, agro-forestry and from trees outside forests. Examples of NWFPs include products used as food or food additives (edible nuts, mushrooms, wild fruits, herb species for medicine and condiments, aromatic plants used for perfumery, wild animal and game meat etc.), fibers (used in construction, furniture, clothing and utensils), resins, gums and plant and animal products used for medicinal, cosmetic or cultural purposes, wild honey, etc. [3]. Dietologists confirm that there are much more vitamins and other valuable nutrients in wild forest products than in their cultural analogs.

Several decades before NWFPs have never been included in countries' local statistics and recognized as wood commodities originating from forests. In most countries of the world, they are not recognized until now. Forestry of that periods have favored only timber and large-scale enterprises generally regarded NWFPs as incidental. They even called them, secondary forest products. Such attitude to using non-wood forest resources is continued in most countries of the world until now. Presently in many European and northern American countries sustainable forest management consider NWFPs as important forest resource as timber. Sometimes the economic benefit from using non-wood forest resources prevail the benefit from timber realization. Sustainable forest management refers to such approach for using forest ecosystems that maintain both integrity and health of forest ecosystems while maintaining their socio-economic contributions. Sustainable forest management today must be ecologically

**Corresponding author:** Tamaz Patarkalashvili, Technical University of Georgia, Center Studying Productive forces and Natural resources of Georgia. 69, M. Kostava Str.,0175 Tbilisi, Georgia, Tel: +995 557865775; E-mail: tamaz\_41@mail.ru

**Citation:** Patarkalashvili T. (2021) Sustainable Forest Management Implies to Use Not Only Timber but Non-Timber Resources Too. Int J Biopro Biotechnol Advance, 7(1): 311-312.

**Copyright:** ©2021 Patarkalashvili T. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

#### Int J Biopro Biotechol Advance, 7(1): 311-312

viable, economically feasible and socially desirable [4].

Mountain forests of Georgia are rich with variety of different NWFPs namely: foods and food additives, edible nuts (hazelnuts, chestnuts, beech-tree nuts), mushrooms, wild fruits and berries, medicine herbs, condiments, aromatic plants, game, wild plant and animal products used for cosmetic or cultural use, resins, gums, wild honey, etc. [5-8]. Due to improper forest management all these valuable NWFPs have neither been taken into account, nor used. They simply have always been ignored not only by authorities and ministries, but unfortunately by scientists too [9, 10]. At the same time even in the Soviet period Baltic republics successfully used their NWFPs making jams and juices from wild fruits and berries, selling wild animals and game meet, fur-skins, mushrooms, etc. They had sufficient financial and economic incomes in their countries from this business [11]. Today they are among the leaders in using NWFPs on European market. It is high time and good example for our authorities and policy-makers to fallow this example.

### REFERENCES

- Food and Agriculture Organization of the United Nations (FAO) (1995) Non-Wood forest products for rural income and sustainable forestry. Available online at: http://www.mekonginfo.org/assets/midocs/0001410 -environment-non-wood-forest-products-for-ruralincome-and-sustainable-forestry.pdf
- European Commission. Sustainable Forest Management. Brussels. 20.09.2013. Available online at: https://eurlex.europa.eu/resource.html?uri=cellar:21b27c38-21fb-11e3-8d1c-01aa75ed71a1.0022.01/DOC 1&format=PDF
- Saastamoinen O (1999) Forest polices, access rights and non-wood forest products in northern Europe. Available online at: http://www.fao.org/3/x2450e/x2450e06.htm#:~:text =in%20northern%20Europe-,Forest%20policies%2C%20access%20rights%20a nd%20non%2Dwood,forest%20products%20in%20 northern%20Europe&text=Free%20access%20right s%20to%20multiple,of%20NWFP%20policies%20 is%20outlined
- 4. Brandtland GH (1987) Our common future. Available online at: https://sustainabledevelopment.un.org/content/docu ments/5987our-common-future.pdf
- 5. Inaishvili A (1967) Medicine Herbs.
- 6. Khidasheli SH, Papunidze V (1985) Medicine plants of forests of Georgia. pp: 351.

- 7. Rabinovich A (1989) Medicine Plants. pp: 207.
- 8. Chikov P, Pavlov M (1977) Science and medicine plants. pp: 128.
- 9. Patarkalashvili T (2015) Forest Resources. in: Natural Resources of Georgia. pp: 74.
- Patarkalashvili T (2016) Some problems of forest management of Georgia. Ann Agrar Sci 14(2): 108-113.
- 11. Olmos S (1998) Non-wood forest products: Utilization and income generation in the Czech Republic, Finland and Lithuania. Adapted by S. Olmos. pp: 18-20. Available online at: http://www.fao.org/3/x2450e/x2450e07.htm