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Non-timber innovations: An innovation system analysis for side- activities of forestry

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Background



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Non-timber forest products are often named and presented as:

- „minor“ or „secondary forest products“ and
- „by-products“ or „side-products“ of forestry (e.g., forest laws)
- „niche-markets“ (EU project - Mantau et al., 2001)
- „non-market goods“ (EU tender - Mavsar et al., 2008)

Thus, they are often assumed to be produced in the wake of timber production and dealt with under welfare economics as „forest ecosystem services“, as part of „total economic value“ or as an element of „quality of life“ or „well-being“ but not necessarily as a business opportunity.

Current state



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Non-timber forest products cover a broad range of market sectors:

- food and beverage
- medicinal, pharmaceutical and cosmetics products
- chemicals
- craft and decoration
- environmental and recreational services
- information and communication technologies

A study estimates the total value of NTFPS in Austria to approximately € 220 million, the double of the documented statistics (Wolfslehner/Vacik).

Challenges



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Problems:

1. A **limited marketability** because of an often public good character of the products (Mantau et al., 2001; Mavsar et al., 2008);
2. a **limited attention of established sectoral innovation systems**, thus only limited support or even barriers (Rametsteiner et al., 2005; Weiss et al., 2011; Buttoud et al., 2011).

Research question



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How do innovations happen in a situation
where there is very limited institutional
innovation support?

Material and methods



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- Austrian province Styria as case study area** (part of EU FP7 project StarTree on non-wood forest products, 2012-2016);
- Questionnaire** to relevant organisations (for supporting innovation processes in the field of non-timber forest products);
- Interviews** with central innovation system actors and with innovators in specific innovation projects;
- In-depth analyses of innovation processes** in innovation examples: game meet, Christmas trees, Swiss mountain pine essential oils, chestnuts, muschrooms, herbs and forest fruits.

Current characteristics of non-timber forest products in Styria



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Traditional product uses have been decreasing (grazing, litter, resin);
New uses coming up (direct marketing; often connected to tourism;
examples: pine, rowan tree, chestnuts, mushrooms, herbs, honey, ...);
Small-scale production (home-made jam, liquor, soap, etc.);
Semi-professional (e.g., farmers markets; few large companies);
Embedded products (with experiential or tourism services);
Weak connection to land-owners (collectors/producers are not
necessarily the land-owners; often no contracts);

Innovation-relevant policies



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Forest	Austrian Forest Act Austrian Forest Dialogue
Agriculture	Regions of Delight (Game from Gesäuse); Farm Holidays network
Tourism	Nature Parks Styria; National Park Gesäuse;
Regional development	National development plans; European Territorial Cooperation
Rural development	Austrian Programme for Rural Development 2 LEADER regions (Zirbenland; Holzwelt)
Innovation	(Wood Cluster Styria Ltd.)

Innovation actors



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Research	Joanneum Research Ltd. (Graz); BOKU University Vienna
Development and Innovation	Regional Development Consultants ÖAR Ltd.; LEADER regions and network
Education and training	Forestry College Bruck/Mur; Forestry Training Centre Pichl; Agricultural Vocational School Grottenhof/Hardt
Interest groups	Styrian Chamber of Agriculture; Styrian Forest Association; Direct (Farm) Marketing Association; Styrian Farm Holidays network; Styrian Christmas Tree Producers network; Regions of Delight (Game from Gesäuse); Nature Parks Styria Association
Public administration	Austrian Ministry of Agriculture; Styrian governmental departments for rural and regional development

Innovation example: LEADER region "Zirbenland" (Land of the Stone Pine)



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- ... fosters cooperation and development around both wood and non-wood products from the local characteristic tree "Zirbe" (Swiss stone pine, *Pinus cembra*).
- ... regional marketing, awareness raising and networking activities.
- ... have developed new uses of Swiss stone pine products in the food and non-food sectors,
 - health and wellness effects of the wood, needles and cones;
 - chocolate and other food products.



Innovation example: Styrian Nature Parks

- ... aims are to preserve characteristic cultural landscape types through a sustainable use of local resources; integrated land management and adding new values to traditional land uses;
- ... developing forest products such as liquors, jam and herbal products;
- ... promote local specialities by their label “Naturpark-Spezialitäten” (Naturepark Specialities) and offer educational services with local products embedded, e.g. guided tours, educational trails or “cooking from the meadow”.



Innovation example: Chamber of Agriculture



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- ... within the **Chamber of Agriculture**, a few associations offer joint marketing and information exchange:
- ... **direct marketing association** ("Gutes vom Bauernhof")
- ... **farm holidays association** "Urlaub am Bauernhof"
- ... **Styrian association of Christmas tree producers** offers support and advice, joint acquisition as well as a label for the marketing of Styrian Christmas trees ("Steirischer Christbaum")



Innovation example: Regions of Delight

- ... is a **direct marketing instrument**, initiated by the Federal Agricultural Ministry and implemented in cooperation with the Chambers of Agriculture, to develop attractive and future-oriented regions;
- ... puts **regional specialties** in centre of each "region";
- ... one of 17 gourmet regions in Styria is related to a forest product: **Game from Gesäuse** ("Xeis Edelwild") - high quality game meat;



Conclusions: Bottom-up innovations



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there is no “one” innovation system supporting non-timber products; support is from several sectoral innovation systems, including forestry (Christmas trees), agriculture (LEADER, Urlaub am Bauernhof, chestnuts and the Gourmet region) and nature conservation (Nature Park Specialities).

for none of them, “non-timber forest products” are central; a certain institutionalisation is needed (Christmas tree association; LEADER region; chestnut association,...)

IS need to be **open and flexible** enough to pick-up demands!

innovators often have to **institutionalise themselves** through which the innovations gain an institutional dimension (Ludvig et al. 2016)



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THANK YOU for listening!

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