

The evolution of institutions for wild forest products: an empirical study of harvesting practices across Europe

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Multipurpose trees and non-wood forest products, a challenge and opportunity

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Introduction

- Foraging for wild forest products (WFPs) for self-consumption and for sale is in augment
 - Schulp et al. (2014): 65M EU citizens collect wild edible forest products, and over 100M consume them
- Different institutional frameworks governing harvesting rights in Europe (e.g. free unlimited harvesting, at forest owners' discretion, restrictions for commercial harvesting, total prohibition)
- Customary laws related to land tenure and resource rights
- Weak enforcement
 - Prokofieva et al. (2014): forest owners are not able to exclude the public from recreational harvesting of WFP in 10 of 14 case studies, and in 7 case studies from commercial harvesting
- Emergence of local institutional arrangements of a variable degree of formality governing the access to and harvesting of wild forest products



Research questions



- What drives the evolution of local institutions?
- Why do they take different forms (extraction restrictions, harvesting practices) and modalities (formal/informal) in different regions?
- What role do the individual behaviours play in this process?



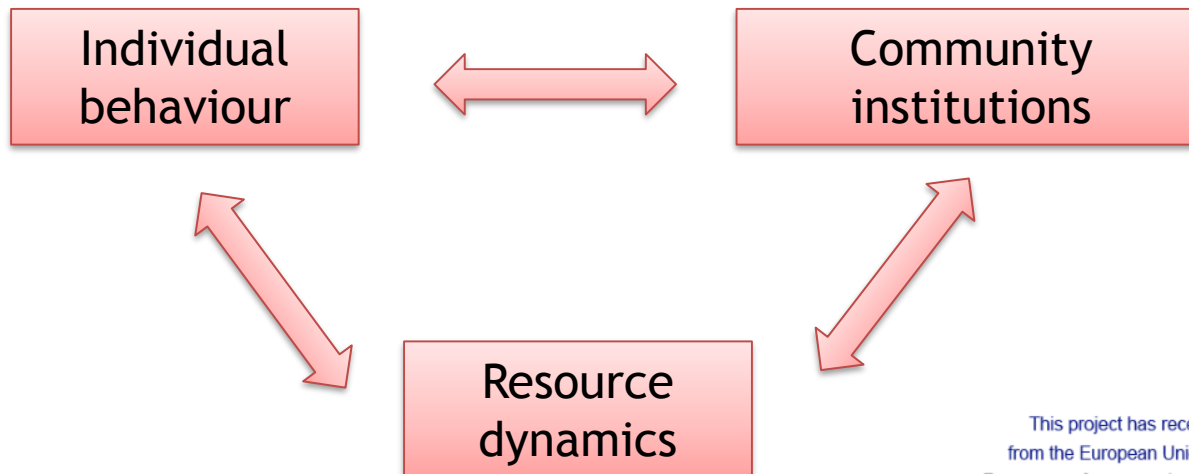
Related literature

- **Institutions and behaviour:**
 - **Neoclassical economics:** preferences independent of the institutional context (e.g. Vatn 2005)
 - **New institutionalism:** institutions as constraints on individual behaviour (e.g. North 1990)
 - **Social constructivism:** preferences are endogenous to the institutional context; behaviour is socially created, choices reflect norms, rules and expectations built into the institutions of a society (e.g. Bowles 1998, Hodgson 1998, Vatn 2005)
 - **Institutions as patterns of behaviour** (endogenous equilibrium outcomes) (e.g. Calvert 1995, Aoki 2001, Greif 2006)
- **Institutional change:**
 - deliberate design (e.g. Ostrom 2005, Libecap 1989) vs. decentralized evolution (e.g. Young 1996, Williamson 2000, Alchian 1950)
 - \triangle formal \leftrightarrow \triangle informal institutions (North 1990 vs. Roland 2004)



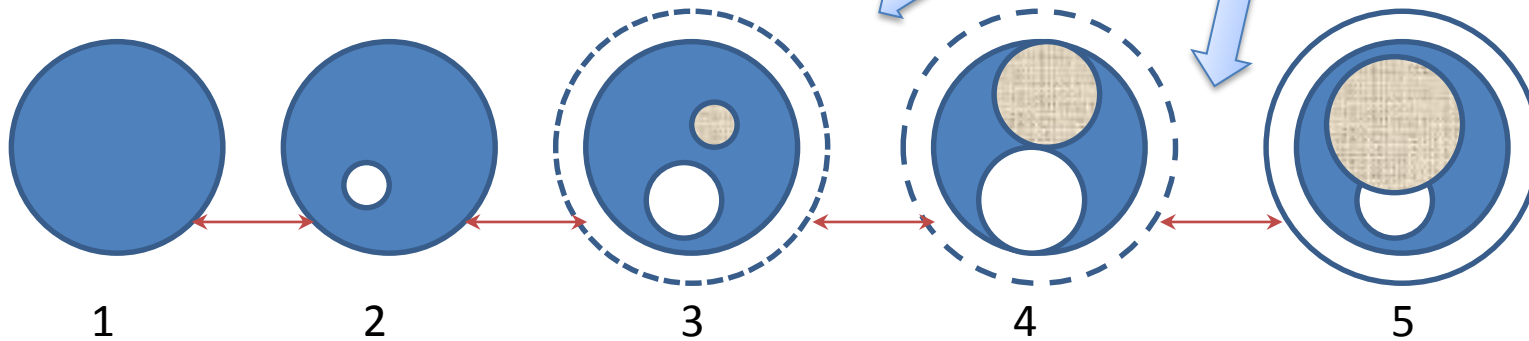
Coevolutionary approach

- Coevolutionary ecological economics (Kallis and Norgaard 2010)
- Coevolutionary dynamics between conservation behaviours and community resource management institutions (Brooks 2010)
- Co-evolution is “dynamic interactions between two or more interdependent systems, which account mutually for each other's development” (Rammel et al., 2007)



Brooks' dynamics

Resource scarcity
Economic factors
Attitudes and values
Social capital



1

2

3

4

5



Population of resource users



Population of voluntary conservationists



Population of punishers



Weak institutions



Stronger institutions



Robust institutions



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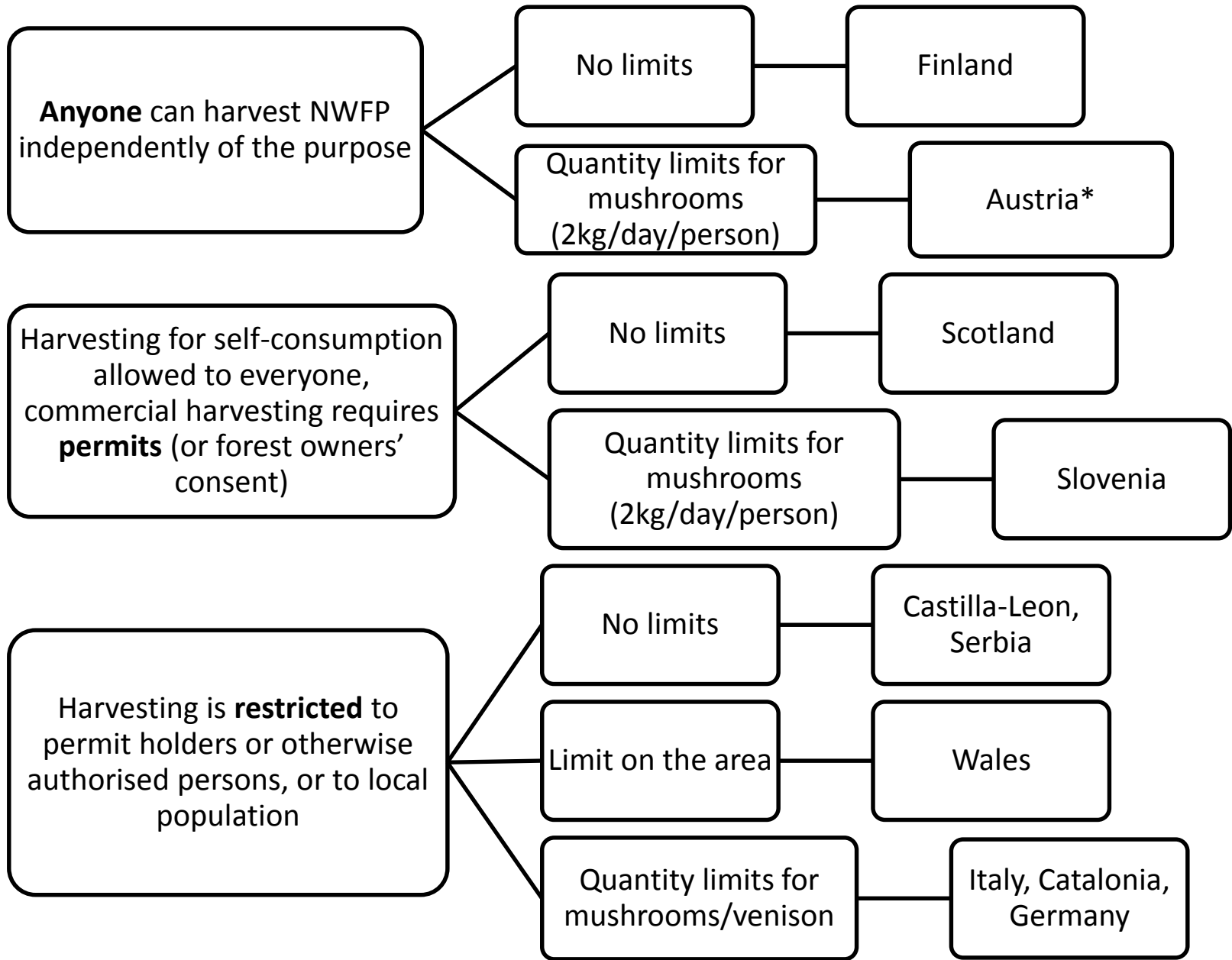


Material

- Focus: evolution of institutions governing access to and harvesting of WFP in Europe
- 10 case studies (Italy, Spain (2), UK (2), Finland, Germany, Austria, Slovenia, Serbia)
- Predominantly private forests
- WFP: mushrooms, berries, herbs, moss, venison
- 78 in-depth interviews (private forest owners, WFP pickers, SME representatives, local policy and decision-makers, forest guards, local NGOs, etc.)
- Semi-structured interview guide (forest area, WFP and related practices, procedures, traditions and informal rights, and policy instruments)
- Text content analysis (e.g. MAXQDA(C))



Initial situation



Conservationists and punishers

- “Conservationists” - can be identified in all case studies
 - Good harvesting practices are similar across cases
- “Punishers” - can be identified in all case studies, but address not only the issue of “how” but also “who”
 - How harvesting/extraction is to be done (Finland, Castilla-Leon, Catalonia, Germany, Italy, Scotland)
 - Who can harvest/extract (Austria, Slovenia, Scotland, Castilla-Leon, Italy, Wales*)
 - Formal rules and formal control exists on paper in most cases (Austria, Serbia, Catalonia, Germany, Castilla-Leon, Scotland, Wales, Italy), but is effective in practice only in Italy
 - Differences in the behaviour of punishers: active confrontation (e.g. telling off), passive confrontation (e.g. punching tires), condemnation (e.g. criticising among the locals)



Brooks (2010) triggers

- Ecological scarcity perception = perception of pressure on the resource
 - Triggers the development of harvesting norms in some cases (Catalonia, Italy) more than in others
- Attitudes and values of resource users
 - Important triggers both towards the formalization of existing rules (e.g. Finland, Catalonia) and towards acceptance/non-acceptance of existing formal rules (e.g. Serbia, Scotland, Castille-Leon, Italy, Slovenia)
- The degree of dependence on the resource
 - Triggers the formalization of norms (e.g. Finland, Italy, Castilla-Leon), or attitudes towards acceptance/non acceptance of existing rules (e.g. Serbia)
- Social capital and networks as propagation channels for institutional rules
 - Crucial in almost all case studies



Additional triggers

- **Social threshold** = the capacity of rural communities to absorb and accept external pickers (Catalonia, Italy, Finland)
- **Externally-led learning processes** on good harvesting practices (Finland, Castilla-León)
- **External disturbances** (Castilla-León, Finland) trigger the need to modify existing practices
- **The degree of acceptance and adoption of existing formal institutions** (Serbia, Italy, Castilla-León, Scotland)



Case study	Who can pick?	How to pick?	How much to pick?	Interaction
Finland	Informal	Informal	Informal	Formalization
Scotland	Formal Informal	Informal	Informal	Conflicting / Complementary
Germany	Formal	Formal Informal	Formal	Complementary
Wales	Formal Informal	Informal		Complementary
Slovenia	Formal Informal	Informal	Formal	Conflicting
Serbia	Formal Informal	Formal Informal		Conflicting
Catalonia	Formal	Formal Informal	Formal	Complementary
Castilla-Leon	Formal Informal	Informal		Complementary
Italy	Formal Informal	Formal Informal	Formal Informal	Complementary
Austria	Formal Informal	Informal	Formal	Complementary

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Final remarks

- **Harvesting practice vs. harvesting right**
- Knowledge, values and social capital within the community shape their **social reality** and trigger the evolution of behavioural norms and their formalization
- **Institutional change is not always desired** by local community
 - Non-exposing beneficial activities vs. missed opportunities to benefit from WFP
- Formalization of norms is not a unique equilibrium, **each stage is stable** in the absence of external triggers or external regulatory processes
- **Complex interactions** between local institutions (formal and informal) and existing upper level institutions
 - Local practices prevail
 - Blueprints?
 - Bottom-up, stakeholder engagement at local level crucial





THANK YOU!

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