

3.3 Rural Development and Sustainable Transformations

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Introduction: setting the context within multifunctional rural landscapes

This chapter proposes an interdisciplinary understanding of the social aspects of the rural landscapes of Southern Transylvania, developed in seven years of place-based empirical and transdisciplinary research (until 2019) addressing human-nature relationships. Drawing on a large number of interviews and focus groups with residents, farmers and local NGOs, this research generated knowledge by assessing their perceptions and by considering them as both stakeholders and local experts. Although it is not delineated administratively, geographically, Southern Transylvania spans the cities of Braşov, Sibiu and Sighişoara (Fig. 3.4). The county of Sibiu, for example, (Fig. 3.4) had a rural population of approximately 141,000 inhabitants in 2011.

The case study of Southern Transylvania is relevant for the analysis of rural development issues for several reasons. Relatively poor economically, with low to medium intensive agriculture, Southern Transylvania is one of Europe's last biocultural refugia (Barthel et al. 2013) with valuable biological and cultural diversity (Dorresteijn et al. 2015). The heterogeneous character of this landscape stems from a historical co-evolution of social and ecological factors leading to being often conceptualized as a complex of social-ecological systems (Loos et al. 2016). Partly delineated as Natura 2000 sites (an area of approximately 270,000 ha), these human-shaped environments have a multifunctional character, providing multiple amenities beyond food and fodder, such as scenic beauty or a sense of place. These landscapes are the providers of diverse renewable natural resources to be capitalized upon within a bioeconomy driven by rural development. Traditionally characterized by rather direct linkages between resource use and ecological dynamics, most rural livelihoods are at least partly farming-based and persistently reliant on local ecosystem services. For example, firewood is the primary source of household energy for most rural dwellers, as forests in Southern Transylvania occupy roughly 30% of the land-cover, followed by arable land of approximately 20% and surpassed by pastures of 40%.

The region is inhabited by diverse ethnicities: Romanians, Hungarians, Roma, and Saxons, which together with the region's history have created a rich cultural and ethnic diversity, even at the village level. In addition to the Saxon migration, which is specific to Southern Transylvania, the region also underwent other major political, social and economic changes common in the last decades to the whole of Romania. These include the collapse of communism and the accession to the European Union (EU). A direct consequence of the latter was the increasing impact of the EU Common Agricultural Policy (CAP) on the country's farming landscapes (Hartel et al. 2016). The increasing global pressure for a market-dominated economy and the progressive modernization of agriculture has made traditional agricultural practices no longer viable and have decreased the productivity of traditional rural livelihoods while encouraging a strong rural-urban migration. In addition to these, other changes include rural depopulation, inconsistent national tenure changes, and the global markets that have placed the region under a lot of pressure, intensifying the threats of land abandonment or land-use intensification.

Today, these multifunctional landscapes are being altered by poverty, corruption and social exclusion, similar to other rural areas in Romania. By scaling up, Southern Transylvania may be representative of the complex rural development challenges faced by other multifunctional landscapes undergoing similar pressures from the current global economic system. Some of these challenges and associated opportunities are presented in the following section.



Figure 3.4 Map locating the counties of Mureș, Harghita, Sibiu and Brașov in Romania. Southern Transylvania mainly spans the cities of Brașov, Sibiu and Sighișoara. Figure by © Daniela Peukert, after a published version under a Creative Commons Attribution Non-commercial License (CC BY-NC) in Fischer et al. 2019, page 41.

Challenges and opportunities: a diversity of human-nature relationships, aspirations, identities and sustainability initiatives

As is the case with other multifunctional or multicultural landscapes, the rural population relates to the environment in different ways, prioritizing different functions of the environment for their wellbeing and for improving their quality of life. In order to reap the benefits they aspire to, locals envision different ways to manage their landscape based on their capabilities. They may aspire to prosperity and economic growth as well as to maintaining traditions and a balanced lifestyle, to social security and community life, to productive farming and a farming-based lifestyle, or to preserving nature-thriving landscapes.

Members of local communities thus have divergent opinions regarding their ideal vision of human-nature relationships. Some may prefer to revitalize traditions and small-scale farming, while others favor the option of modernization and intensification, and of imprinting contemporary new values on the landscape. Especially areas on the rural-urban fringe are highly pressured by competing land-use interests. Tendencies towards agricultural production,

urbanization, recreation and biodiversity conservation appear to be detrimentally opposed and are difficult to reconcile. The divergent needs, interests and values regarding the nature of the stakeholders inhabiting these spaces lead to conflicts that need to be managed. In this context, managing land for improved equity and sustainability outcomes, through multi-actor governance seems a daunting task. How to represent different parts of society, their connections to, influence, or dependency on nature?

In this challenging context, one opportunity resides in the numerous sustainability initiatives organized around the values of nature, typically led by non-governmental organizations and grassroots movements in Southern Transylvania (Lam 2021). These sustainability initiatives share a nature and a cultural heritage conservation profile and are in favor of maintaining small-scale farming support systems, rural education, community development, and eco-tourism (Figura 3.5). These initiatives are vibrant, locally relevant and leading the way to local transformation (see examples presented in Fischer et al. 2019).

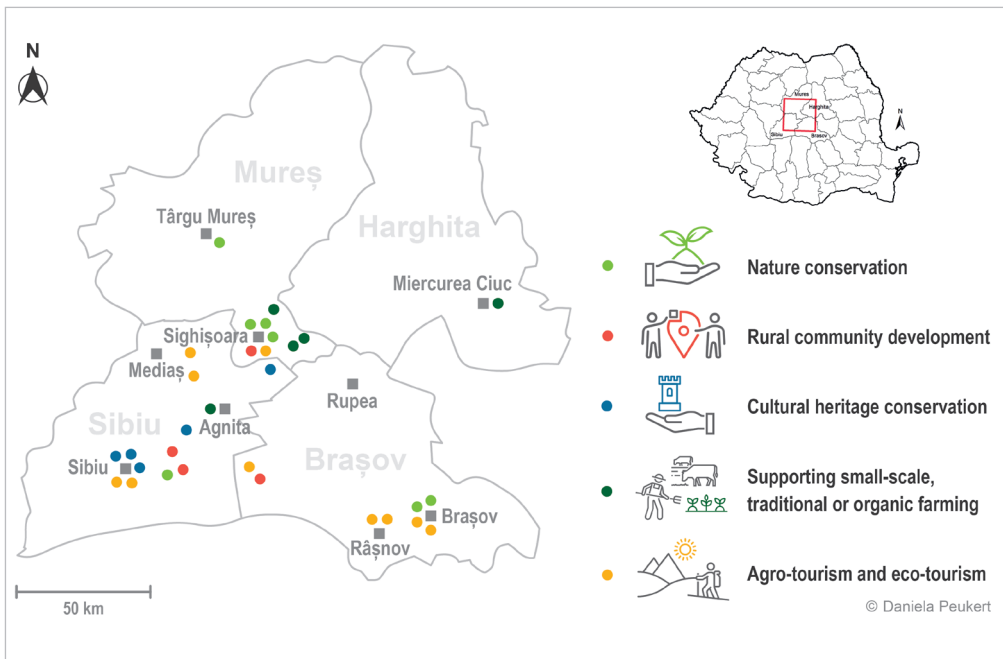


Figure 3.5 Map locating sustainability initiatives in Southern Transylvania. Figure by © Daniela Peukert, published under a Creative Commons Attribution Non-commercial License (CC BY-NC) in Fischer et al. 2019, page 41.

In settings of weak governance, as in post-communist countries or in the Global South, such sustainability initiatives have a significant impact. For example, ADEPT is a local foundation, piloted together with the Pogány-havas association (Harghita), with around 70 small-scale farmers in Târnava Mare leading a results-based agri-environment scheme, in an attempt to promote Transylvania’s high nature-value farmland, especially meadows. The scheme is a more flexible alternative to the remuneration schemes proposed by the CAP. It remunerates practical management resulting in good quality hay and the protection of wild

species. Another example relates to the value of wood pastures in Southern Transylvania (based on personal communication²⁹).

Local communities in Valea Zălanului together with a local leader established an informal mechanism for protecting the ancient sparse trees found in wood pastures which are traditionally used for grazing. The CAP policy and the interpretation of its measures at the local level allow the cutting of sparse pasture trees in order to ensure eligibility for direct payments. Informal rules set through a spontaneous collaboration among the community, a local leader and a biologist, established a financial compensation for the conservation of ancient wood pastures trees. This financial mechanism was also linked to the development of a business plan on ecotourism that could further provide necessary resources for maintaining compensations to local farmers. Finally, the establishment of the destination management unit of the Transylvanian Highlands is yet another example of a sustainability initiative relying entirely on networking and cooperation among local actors. The formal network emerged organically following the elaboration of management plans for the Natura 2000 sites in Southern Transylvania. During consultations with local actors in 2012, there was consensus towards the promotion of the area as a single unit in view of its common cultural, historical and biogeographical character. The initiative aims to develop an ecotourism infrastructure for the recognition and (re)interpretation of this area in light of its recreational, inspirational and relational values.

The inherent diversity of human-nature relationships in the context of rural development in multifunctional landscapes is therefore a source of both challenges and opportunities. Opportunities reside in existing sustainability initiatives, which with the support of municipalities or regional authorities, can give birth to communities of practice in the domain of forests or landscape stewardship that guide contemporary human-nature relationships towards sustainable pathways (Watkins et al. 2017). These communities of practice are spaces where – through dialogue, deliberation and processes of socialization – community values emerge, become apparent, or are shared in the context of current challenges (Watkins et al. 2017). Additional innovation approaches which involve a diverse civil society, such as the ones proposed in chapter 2.2, are necessary to ensure a degree of experimentation, stabilization, and internalization of community values. How to further navigate the challenges of rural development, with a view to unfolding a circular-bioeconomy transformation for Romania, is addressed in the next sections which explore where to focus rural development interventions and how to intervene.

A vision for rural development: Where to intervene for a sustainability transformation wary of the transformative potential of bioeconomy?

Rural development is typically associated with the so-called “second pillar” of the Common Agricultural Policy (CAP) which simultaneously seeks to improve the quality of life of rural communities, and to enhance the provision of public goods through agri-environment payments. In addition to CAP, another policy component of rural development is the EU-wide network of protected Natura 2000 areas, consisting of Sites of Community Importance (SCI) and of Special Protection Areas (SPA) set up under the Habitats Directive (EC, 1992)

²⁹Personal communication with Professor Tibor Hartel, Babeş-Bolyai University, Cluj-Napoca.

and the Birds Directive (EC, 2009) respectively. Such rural development policies are criticized for not considering the broader social realities of the recipients of policy interventions. These deficiencies undermine the social and conservation targets which the rural development policies were initially designed to protect, through the unexpected and poorly understood feedbacks they produce.

In the last decade, research looking at transformative change and transformative adaptation have pushed for another approach to rural development (Bastiaensen et al. 2021; Castro-Arce and Vanclay 2020). Within this body of literature, a recent academic discourse revives the seminal work of Donella Meadows (1999) on the notion of leverage points in order to understand “where to intervene?” to incite societal change. There are four general types of interventions: on the parameters, feedbacks, design, and intent of a system, be it the food system, mobility system, energy system, or the social system of a given country, region, or place (Abson et al. 2017). Interventions at shallow leverage points (e.g., parameters and feedbacks) contribute less effectively to transformation. Of particular interest is the identification of deep leverage points, where interventions would sustain fundamental changes. If bioeconomy is to be part of Romania’s forests and societal sustainability transformation, it needs to engage with deep leverage points. Deep leverage points are system properties where interventions can lead to transformation in the system as a whole, as opposed to interventions at shallow leverage points leading to incremental change (Abson et al. 2017). Deep leverage points have been theoretically associated with notions such as intent, paradigms, worldviews, or values.

Empirically, within the research conducted on multifunctional rural landscapes, values appear as particularly relevant deep leverage points (Horcea-Milcu 2015). Held values partly explain some of the changes and at the same time the inertia of the landscapes faced with global pressures. Deeply held values also play a role as mediating factors in the distribution of ecosystem services and their equity implications. Although these values help to maintain a deeper relationship between people and nature, they face the risk of being eroded and degraded by external factors such as large-scale institutional arrangements or state-imposed regulations. There is evidence that one of the best ways to create and maintain a sustainable rural landscape is to tap into the existing local identity, the self-esteem of farmers, their connection to the land, and their intrinsic motivation of making the land worthwhile. Having clarified where rural development interventions need to focus in order to allow for a circular-bioeconomy transformation to unfold, i.e., at deep leverage points, it is necessary to understand how to intervene.

Pathways for rural development: How to intervene for a sustainability transformation wary of the transformative potential of bioeconomy?

How to intervene at deep leverage points and (co-)create transformation pathways towards a sustainable rural development inclusive of the transformative potential of bioeconomy? Drawing on existing literature, and the place-based empirical and transdisciplinary research addressing human-nature relationships in Southern Transylvania, two recurrent notions emerge as pertinent answers to this question: sustainability initiatives, and collaborative approaches such as landscape stewardship.

Taking sustainability initiatives into account

In contexts such as Southern Transylvania, sustainability initiatives represent the building blocks on the transformation pathway towards the desired future. Rural development that

integrates local knowledge and recognizes the efforts to change of local practitioners is more likely to be accepted as a legitimate impulse for societal transformation, it also fosters local empowerment (Lam et al. 2019). The first step of sustainability initiatives, therefore, involves creating a safe space that supports, enables and connects those contributing to a resilient forest bioeconomy for Romania. (Fig. 3.6., P1). Secondly, context-tailored innovation strategies co-designed together with identified change leaders can subsequently complement the missing contributions and accelerate the transformation towards the desired vision (Fig. 3.6, P2). Technocratic solutions should only complement older existing practices which are sometimes more sustainable. As a third step, contextual drivers and barriers can further inform the development of sustainability strategies (Fig. 3.6. P3). Fostering conditions for social learning can support the continuation of these iterative steps (Fig. 3.6., P1-3). One potential pitfall of this approach is the mismatch between the local level where sustainability initiatives are active and the regional and national levels where policies are enacted. Boundary organizations that balance between community and individual agencies, on the one hand, and top-down interventions, on the other hand, may tackle this mismatch.

In the case of Southern Transylvania, there are numerous contributions of sustainability initiatives leading to transformation at the local level based on a commonly agreed-upon vision for this region’s future (see Fig. 3.5., Fischer et al. 2019). This normative vision and subsequent narrative called *Balance Brings Beauty* were co-generated and validated through a process guided by academic research (Hanspach et al. 2014). The approach of counting local sustainability initiatives has been a subject of critique because the uptake and subsequent upscaling of similar sustainability initiatives is strongly dependent on factors such as leadership, social capital, and community spirit. Endorsing an action-oriented, and practice-oriented approach by sustainability science and by sustainability researchers alike, can contribute to the development of the above-mentioned factors.

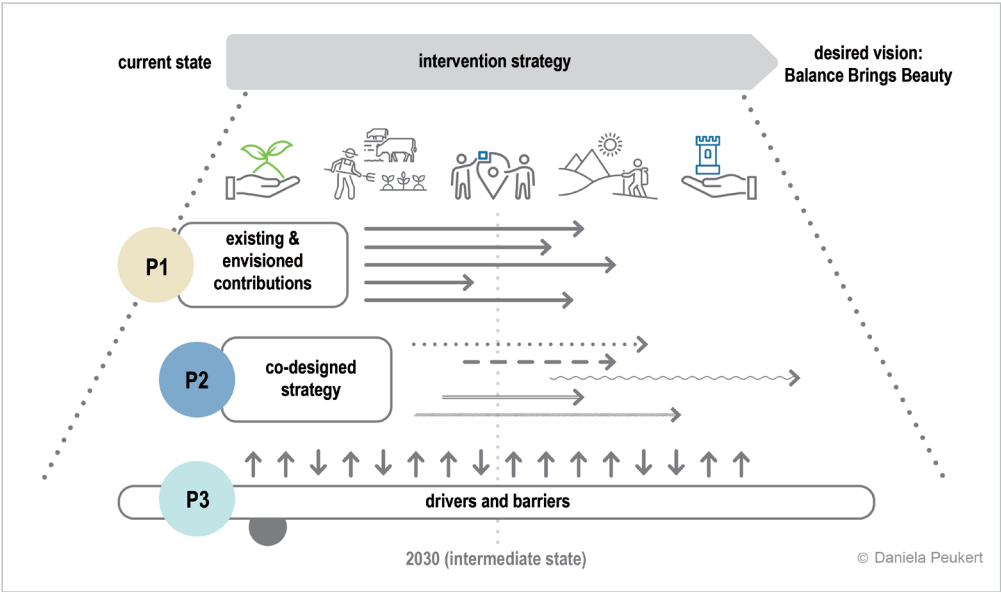


Figure 3.6 Main steps for co-designing intervention strategies to progress from the current situation to a desired future state. Figure by © Daniela Peukert

Collaborative approaches: landscape stewardship

The notion of landscape stewardship is especially relevant for designing rural development policies for multifunctional land-use systems that are shaped by close interactions between local people and local ecosystems. Landscape stewardship inclusive of forest stewardship provides a collaborative approach for the governance of complex landscapes that is complementary to other top-down forms of governance (Bieling and Plieninger 2017). Landscape stewardship relies on forms of human-nature interaction, whereby humans are encouraged to interact with the landscape with care and responsibility while deriving a diverse set of benefits (Cockburn et al. 2020) which are aligned with the circular-bioeconomy paradigm. This co-creational approach takes into account governing landscapes not only for productivity and for tangible ecosystem services, but also for promoting intangible values such as local identities and aesthetics in order to achieve transformative change. It draws on the shared values, knowledge and the agency of local residents, communities, farmers, researchers, government officials and non-governmental organizations; it further points to the importance of a rural policy environment that encourages and enables plurality and the active involvement of civil society in developing a sustainable bioeconomy (such as explained in chapter 2.2 and here). Working together in such a diverse configuration involves experimenting and cultivating new ways of knowing and doing, hence making possible innovative landscape stewardship practices for a sustainable Romanian bioeconomy tailored to its rural particularities. Potential limitations of landscape stewardship revolve around trade-offs between openness to plurality and decreased efficiency, or the difficulty to maintain, for longer periods of time, constant levels of engagement and of responsibility from all landscape stewards. One local example of a Landscape Stewardship Working Group is provided by the Harghita County Council. It assembles university experts from fields of knowledge such as wildlife and forestry, nature conservation, social sciences, agriculture, rural development, economics, and representatives of governmental institutions, non-governmental organizations and local communities. Its mission is to ensure cross-sectoral cooperation between institutions and disciplines in order to preserve and promote the biocultural capital of Harghita County, with a special view on managing human-carnivore coexistence in the county.

Summary

Rural development is a challenging systemic and complex problem; there is no definite formulation of the problem as all those involved perceive it from the perspective of their own relationships with the environment. Rural landscapes are characterized by complex and diverse human-nature relations underpinned by various needs, capabilities and values. Competing land-use interests create trade-offs between production, conservation and the social goals of landscape management. Navigating this challenging diversity, while conserving a natural heritage and responding to global pressures and local aspirations, constitutes a delicate balancing act for sustainable rural development in Romania. This chapter sought to emphasize those elements usually overlooked in policy design, which may contribute to a rural development supportive of a resilient forest bioeconomy in a country like Romania. These key elements are: i) action at deep leverage points such as deeply held values; ii) action inclusive of local sustainability initiatives; iii) action through collaborative approaches and in partnership with local change agents from the public, private and academic sectors.

Take-home messages:

- The latest literature calls for a design of interventional policies that takes a holistic systems view, and targets both the shallow and deep leverage points of a system, be it the energy system, food system, mobility system or social system of a given country, region, or place. Although easier to design, the effectiveness of numerous current policies that focus on shallow leverage points (e.g., taxes, incentives, indicators) is brought into question.
- In this context, focusing on measurable and monetizable parameters needs to be complemented with attention given to less tangible but more transformation-effective deep leverage points such as values, paradigms and intent.
- Rural development that builds on what is already working locally, that capitalizes on existing sustainability initiatives and integrates the efforts to change of local practitioners is more likely to generate change that involves a sustainable future and human wellbeing.
- An active partnership where power and responsibility are shared among practitioners, researchers and authorities is likely to increase the ability to address the problem of landscape management; landscape stewardship is a salient and established approach to such a partnership. In Romania, the Agricultural Payments and Intervention Agency (APIA) has some attributions in this regard, as farmers and potentially landscape stewards who receive agricultural payments need to respect Statutory Management Requirements (SMRs) and Good Agricultural and Environmental Conditions (GAECS). Similarly, the Romanian Ministry of Environment, Waters and Forests has attributions regarding the European Landscape Convention; most environmentalists criticize the lack of an integrated and systematic approach for considering the landscape scale. However, there is no officially designated institution with direct competencies in landscape stewardship.

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