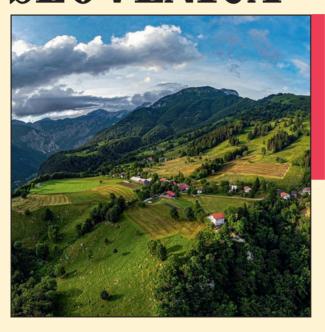
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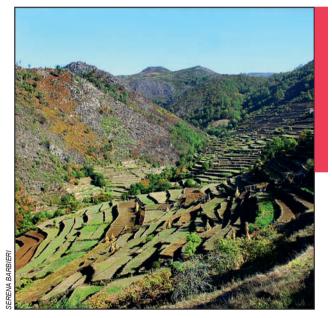
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Front cover photography: Common lands, like the pastures around Čadrg, reflect socio-economic change in the landscape. Their conservation and successful management are crucial for preserving local culture and biodiversity and supporting sustainable development (photograph: Jure Tičar).

Fotografija na naslovnici: Skupna zemljišča, kot so pašniki v okolici Čadrga, so odsev družbeno-gospodarskih sprememb v pokrajini. Njihovo vzdrževanje in uspešno upravljanje sta nujni za ohranjanje lokalne kulture ter biotske raznovrstnosti in zagotavljanje trajnostnega razvoja (fotografija: Jure Tičar).

COMMON LANDS, LANDSCAPE MANAGEMENT AND RURAL DEVELOPMENT: A CASE STUDY IN A MOUNTAIN VILLAGE IN NORTHWEST PORTUGAL

Joana Nogueira, José Pedro Araújo, Joaquim Mamede Alonso, Sara Simões



Terraced landscape of Sistelo village, framed by forest and pastures in common lands (Alto Minho — Portugal).

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Joana Nogueira¹, José Pedro Araújo^{1,2}, Joaquim Mamede Alonso¹, Sara Simões¹

Common lands, landscape management and rural development: A case study in a mountain village in northwest Portugal

ABSTRACT: Sustainable landscape management is a key aspect for the development of mountain areas, especially where communities historically held common lands. Mountains face depopulation and abandonment, and transition to multifunctional landscapes emerges as an opportunity. We present a village case study (NW Portugal) focusing on people's perceptions and practices around the common land. Results confirm the common plays a central role in local identity, being perceived as shared heritage with potential to provide multiple benefits. Traditional uses and governance practices are prevalent, revealing inertia in adapting to new users and goals. Public support targeting common land management skills would facilitate these transitions, as well as to overcome lasting effects of former authoritarian regime.

KEY WORDS: traditional commons, multifunctional landscape, rural development, mountain, Portugal

Skupna zemljišča, upravljanje pokrajin in razvoj podeželja: študija primera gorske vasi na severozahodu Portugalske

POVZETEK: Trajnostno upravljanje pokrajin je ključni vidik razvoja gorskih območij, zlasti pa tam, kjer so bila zemljišča tradicionalno v skupni lasti. Z gorskih območij se ljudje odseljujejo in jih zapuščajo, zato je zanje prehod na večfunkcionalne pokrajine dobra priložnost za nadaljnji razvoj. Avtorji v članku predstavijo primer vasi na severozahodu Portugalske, pri čemer se osredotočijo na mnenja ljudi in prakse, povezane s skupnimi zemljišči. Njihovi izsledki potrjujejo, da imajo skupna zemljišča v lokalni identiteti pomembno vlogo, saj jih ljudje dojemajo kot skupno dediščino, ki lahko prinaša različne koristi. Prevladujejo tradicionalni načini rabe in tradicionalne upravljavske prakse, pri čemer se kaže pasivnost ljudi in nepripravljenost prilagajanja novim uporabnikom in ciljem. Državna podpora spretnostim upravljanja skupnih zemljišč bi pospešila spremembe, hkrati pa bi pomagala odpraviti dolgotrajne posledice nekdanjega avtoritarnega režima.

KLJUČNE BESEDE: tradicionalna skupna zemljišča, večfunkcionalna pokrajina, razvoj podeželja, gore, Portugalska

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1 Introduction

European mountain landscapes management is a particularly challenging governance problem within wider rural development and nature conservation issues. Many of these landscapes have been shaped and maintained for centuries by local communities, in complex agroecosystems combining private lands and common lands (De Moor 2011; O'Rourke, Charbonneau and Poinsot 2016; Haller et al. 2021). This is also the case of the Portuguese mountainous landscapes, where large extensions higher lands, mainly forests, shrublands and pastures, have been historically managed and used in common by local peasant communities (Brouwer 1995; Lopes et al. 2013; Baptista 2014).

In the past, Portuguese common lands, the »baldios«, were integrated in agro-silvo-pastoral productive systems, providing multiple goods and services to local communities (Lopes et al. 2013; Baptista 2014). Many of the European historical common lands have been lost during the last two centuries, either by privatization or by the transference of land tenure and/or operational management to central state or local administrations (De Moor 2011; Skulska et al. 2020). Others have survived until today, after long periods of conflicts and dispossession, as it was the case of Portuguese baldios (Brouwer 1995; Lopes et al. 2013; Baptista 2014; Skulska et al. 2020), and of the very similar Galician (Spain) montes veciñales (Soto 2017). After Elinor Ostrom's findings supporting community-based sustainable commons management (Ostrom 1990; Mckean and Ostrom 1995; Ostrom 2010) but also under more democratic and inclusive political and social values and governance models, several countries introduced legal and political reforms that reinstate or reinforce the rights of local communities over land and natural resources and community-based governance institutions (Skulska et al. 2020; Šmid Hribar et al. 2023). In this recent context, with highly urbanized and growingly environmentally concerned societies, local communities with common lands face new and demanding governance challenges, with common lands representing both an opportunity and a responsibility (Haller et al. 2021; Lopes et al. 2013; Baptista 2014; Soto 2017).

Transformations of historical common lands - how they are perceived, used, managed and who is involved – are multiple and diversified (Smid Hribar et al. 2023), even in places with long established and politically recognized common lands institutions as the Swiss Alps (Haller et al. 2021). Some communities and territories are better equipped to successfully manage common lands than others. Elinor Ostrom's design principles helped to frame the analysis of commons management, and to identify relevant factors for more efficient, equitable and sustainable local governance (Ostrom 2010). Recent research expanded this theoretical framework, with newer concepts and added regional and local case studies, enlarging the analysis to embrace innovative communities and processes, and more dynamic settings (Soto 2017; Nieto-Romero et al. 2019; Šmid Hribar et al. 2023). Additional research is needed to explore this diversity, to clarify how contemporary rural communities and territories are coping with the challenges of collectively managing common lands, and which wider political and governance systems perform better in enhancing local communities' management role. This is particularly relevant for mountainous landscapes, considering that many are still facing intense depopulation trends and persistent socioeconomic vulnerabilities (Torre 2015; O'Rourke, Charbonneau and Poinsot 2016; Pinilla and Sáez 2021). As literature review shows, success in local commons management does not depend only on local actors and institutions. It depends also on larger institutions and governmental agencies governance models being supportive of local communities', empowering them as owners and managers of local common lands. Giving a more prominent and participatory role for local communities and commoners' institutions seems to be in need, even in contexts with less disputed communal rights and roles than in Portugal (Haller et al. 2021). This idea is also the case for general rural development policies, with participatory rural planning being considered a necessary process to stimulate more rooted, collaborative, and creative people and rural communities (Pinilla and Sáez 2021).

In this article we explore the links between rural development, common lands and landscape sustainable management considering Elinor Ostrom work and more recent research findings and relating them to the case of the Alto Minho Portuguese region. This northwestern mountainous and hilly Portuguese region is rich in historically rooted common lands, that traditionally played important roles for local communities (Baptista 2014). After a long period of agricultural decline, rural exodus, and aging, combined with decades of State common lands appropriation, Portuguese rural communities and the common lands institutions are no longer traditional peasant villages. There is a lack of knowledge about current common land management challenges and opportunities and how they relate with wider rural development changes, which

include intense rural depopulation, but also emerging transitions into more multifunctional economies and landscapes, with increased tourism and nature conservation functions adding to traditional farming, pastoral and forestry related activities (Pereira et al. 2005; Madureira et al. 2013; Luz 2017; Nogueira, Simões and Araújo et al. 2020). In this article we present an in-depth village level case study, focusing on the local people perspectives about the common land. By the analysis of people's expectations, difficulties, and perceptions around their *baldio* we intend to clarify how is the community currently involved in the common land use and management. By introducing retrospective and prospective questions and topics, we also intend to frame these perceptions and expectations in the wider context of governance system evolution and in the local development trends, including increased multifunctionality. Finally, the study aims to clarify the challenges faced by community to sustain and to improve common land management in inclusive and sustainable ways, as this information is relevant to guide future research and to elaborate policy recommendations.

1.1 Rural development, mountain landscape management and sustainability

In a highly urbanized world, facing a global environmental crisis, the development of rural areas, with their multiple natural resources, acquires a social and political centrality that is much greater than their demographic weight (Torre 2015). While many rural areas continue to lose population and economic activities others, including remote rural areas, have regained attractiveness following long periods of depopulation (Torre 2015; Pinilla and Sáez 2021). Contemporary rural development issues are linked to the enlarged societal perception of the fundamental functions and resources rural areas and rural people play in the transition to a more sustainable future (Torre 2015). On the other hand, even with less population, rural areas in developed countries may have more resources today than at any time before, providing opportunities for other ways of life, linked to environmental and social qualities present in small communities (Pinilla and Sáez 2021). The development trajectory of a particular rural community depends on the local protagonist's organization, talents, and commitment, but also on active strategic cohesion policies enhancing and supporting local communities and projects (Pinilla and Sáez 2021).

Contemporary environmental sustainability concerns are linked to an increasing recognition of the value and relevance of ecosystem goods and services generated in mountain landscapes (Gløersen et al 2004; Korner and Ohsawa 2005; O'Rourke, Charbonneau and Poinsot 2016; Scheurer et al. 2018). Ecosystem services (ES) provided by mountain landscapes depend on biophysical conditions, but also on land cover patterns and management practices, with traditional farming and forestry productive systems being associated with higher environmental value and economic prospects (Madureira et al. 2013; Scheurer et al. 2018; Ribeiro and Šmid Hribar 2019). Persistence of traditional land-based productive activities is linked to the maintenance of mosaic multifunctional landscapes, with more biodiversity, less fire proneness, and more attractive and culturally valued landscapes (Agnoletti 2014; O'Rourke, Charbonneau and Poinsot 2016; Honrado et al. 2017; Scheurer et al. 2018). These reasons motivate researchers and policymakers to look for more adequate policies and governance systems to safeguard the remaining traditional landscapes and communities, and to support the maintenance of multifunctional landscapes (O'Rourke, Charbonneau and Poinsot2016; Scheurer et al. 2018; Nishi et al. 2021).

In places where common lands represent a considerable share of landscapes, the success or failure of communal institutions may have important impacts in the viability of rural communities' social life and economy, as well as in the highlands landscapes capacity to provide ES for the society at large, including biodiversity conservation and resilience to climatic change and to wildfires (Baptista 2014; Lopes et al. 2015; Soto 2017; Haller et al. 2021; Serra, Detotto and Vannini 2022). Scientific interest on the commons, including traditional common lands, has increased since Elinor Ostrom was awarded a Nobel Prize, recognizing the significance of the findings resulting from a systematic analysis of case-studies of community-based management and use of natural resources all around the world (Ostrom 1990; McKean and Ostrom 1995; Ostrom 2010; Ostrom et al. 2012). These works emphasized the relevance of local knowledge and local organizational capacity, involving people who use and directly benefit from a system of natural resources, to ensure a set of rules and decision-making institutions adequate for long-term socioeconomic and environmental sustainability.

More recently, it has also been stressed that common lands and common land management practices (commoning) represent an opportunity for enhancing social local identity and cohesion, improved natural

heritage stewardship, and for the emergence of more collaborative rural-urban interactions (Nieto-Romero et al. 2019; Haller et al. 2021; Šmid Hribar et al. 2023). Participating in collective decision-making and actively collaborating in commoning was found to have the potential to increase social capital in the community, enhancing local social cohesion and interpersonal cooperation, more positive identities, and sense of place (Haller et al. 2021; Šmid Hribar et al. 2023) and allowing for the expression of more intimate humans-to-nature bonds (Nieto-Romero et al. 2019). This social and non-material benefits of commoning may involve traditional owners, users and uses, but also newcomers and non-local beneficiaries (Šmid Hribar et al. 2023). When traditional commons incorporate these (or other) newer elements the concept of transforming commons is being applied (Šmid Hribar et al. 2023). On the other hand, failure in community-based common lands management may represent a lost opportunity or even a perturbing factor for local development, if conflicts and dysregulation go together with poorly managed or abandoned landscapes, configuring increased natural and socioeconomic risks for territories, as it seems to be the case in several Iberian rural areas (Lopes et al. 2015; Soto 2017).

1.2 Traditional common lands in Portugal: from resistance to transformative change?

The Portuguese common lands, *baldios*, are located mostly in the country's north and center highlands, and are estimated around 400,000 hectares, representing 18% of the country total surface (Lopes et al. 2013). Mountainous communal forestry and pasturelands in Portugal represent a typical example of historical commons which preserved their traditional character until the first decades of the 20th century. Portuguese common lands have survived till the present under constant pressures for private appropriation or government interference through public ownership or direct management (Baptista 2014; Lopes et al. 2015; Luz 2017; Skulska et al. 2020).

The likelihood of successful commons management by local communities was found to increase in contexts characterized by a minimal recognition of local community rights from higher levels of governance, and by a nested governance system, with cooperation between different governance levels (Ostrom 2010). It is important to highlight that these conditions were not observed during a long historical period in Portugal and Spain, and mainly during the dictatorships of Salazar (1928–1974) and Franco (1936–1975). This was a particularly hard time for local communities, with disrespect for local people and community rights coinciding with a significant expansion of the state's financial and technical capacity. Between 1938–1968, 80% of existing common lands were appropriated by the Portuguese State to implement an extensive Afforestation Plan (Lopes et al. 2015; Skulska et al. 2020). This drastically reduced the pasture and shrubland areas available for traditional communitarian uses and produced severe disruptions in local communities' economies (Pereira et al. 2005; Baptista 2014).

The legal recognition of communal land ownership and management rights was recovered during the transition to democracy, in 1976 (Baptista 2014; Lopes et al. 2015; Skulska et al. 2020). At this time, some of the previous rights remained more limited than before, with Forestry and Nature Conservation authorities maintaining co-responsibility in direct management, including the right to a share of financial returns from wood sales (Skulska et al. 2020). On the other hand, by then, rural communities had already started to move away from previous demographic levels, traditional values, and economic structures (Baptista 2014; Lopes et al. 2013; Luz 2017; Soto 2017).

As Elinor Ostrom sustained, local communities are in many cases able to define and to agree on a set of rules that meet local needs, in a way perceived as fair and reasonable by local users, while ensuring natural resources system use and maintenance is effective and sustainable (Ostrom 1990; Ostrom, 2010). This seems to have been the case of historical common lands in Portugal, when local communities' livelihoods where heavily dependent on local natural resources, combining small plots of private farmland with large extensions of collectively used common lands (Lopes et al. 2013; Baptista 2014). More controversial is the interpretation of current situation, after a long period of dispossession, combined with rural decline. Many contemporary Portuguese common lands seem to be in a situation where local governance does not always fit Elinor Ostrom's design principles, facing inadequate institutional and regulation settings, with local communities unable to actively manage landscape in sustainable ways (Lopes et al. 2013; Baptista 2014). In other cases, communities reassumed collective and local management activities, privileging traditional productive uses, like forestry and livestock production, or combining it with new sources of income, mainly rents linked to non-local investments in windfarms or communications projects, with financial

gains applied in social local projects (Baptista 2014; Luz 2017). Finally, some transforming commons seem to be emerging, with communities and commoner organizations finding ways to improve the integration between traditional uses with environmental and nature conservation goals, as well as with explicit community-building goals in common lands management (Soto 2017; Nieto-Romero et al. 2019).

Historical and place-specific conditions may help to explain current diversity of situations in Portuguese common lands. Considering the local, regional, and even national relevance of common lands for territorial cohesion and for sustainable landscape management, more research and case studies are needed.

2 Methods

Increasing and updating knowledge about how local communities perceive and make decisions concerning common lands use and maintenance is, thus, an important step to adapt governance systems and to expand social, economic and environmental benefits obtained from common lands for both local and non-local people. This was the purpose of the study we developed in the Alto Minho region, and the reason to privilege and in-depth village level study in a mountain community.

The methodological approach includes a brief regional contextualization and the explanation of the criteria applied to select the local case study. Alto Minho is a NUTS level 3 region, comprising 10 municipalities, each subdivided into smaller administrative units – parishes or, more recently, parishes unions – corresponding to local communities. Our case study was developed in the Sistelo parish, located in an interior and mountainous municipality (Figure 1).

2.1 Study area

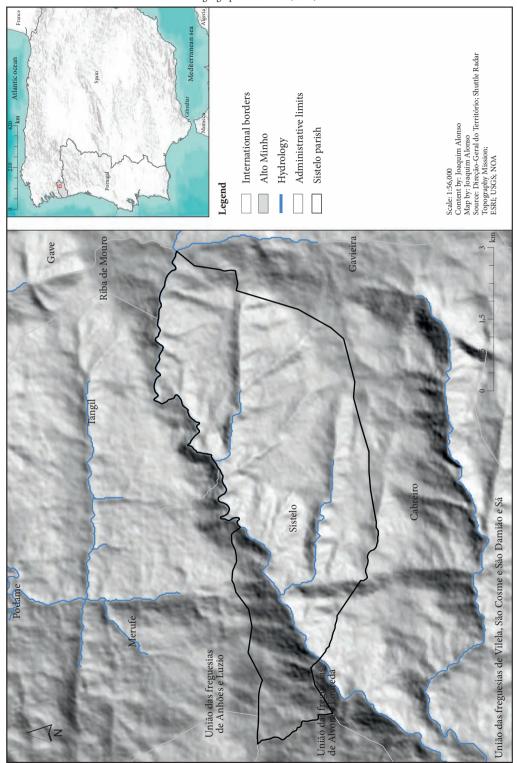
Alto Minho's demography is characterized by relatively high historical population densities, even in rural areas, and a late transition to low fertility patterns (Bandeira 1996). These features, combined with return migration, help to explain why regional mountain villages have kept, till the present day, some social and economic vitality, as well as a traditional character. By the data provided by Statistics Portugal (*Instituto Nacional de Estatística*) the region reached a demographic peak in 1950, with almost 280,000 inhabitants (126 inhabitants/km²) with subsequent population decline to current 231,500 individuals and 104 inhabitants/km². Demographic decline was spatially uneven, severe in the mountainous municipalities, with coastal and urban ones witnessing smaller losses or even growth (Figure 2).

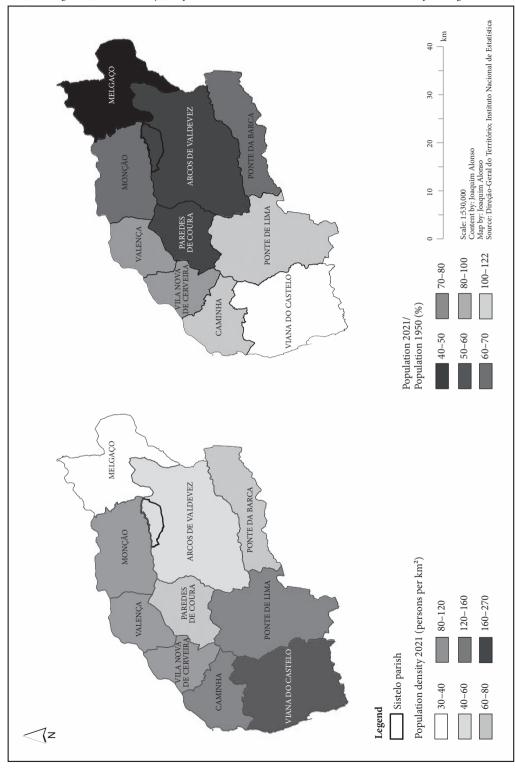
Communal owned lands are particularly important in the region. It is difficult to obtain accurate data on existing common lands number and areas. The agricultural censuses are an interesting source, as they include parish level information and capture all commons having agricultural use at the time. In 2019 a total of 159 common land units *baldios* were surveyed in the Alto Minho. This means 76% of regional parishes have at least one communal area, occupying 77,997 hectares of land, from which 46,114 hectares are classified as pasturelands. By the Statistics Portugal communally owned lands represent 35% of total regional surface and 65% of total utilized farmland, and an agricultural average size of 290 hectares, contrasting with 2,1 hectares in privately owned farm holdings. In this region, common lands have a huge relevance for sustainable landscape management and mountainous areas development.

Sistelo is a parish with a unique landscape, located in the Peneda Mountain Range, with altitudes ranging from 180 m to 1360 m (Pereira et al. 2005). By the Statistics Portugal population was around 800 individuals during the 19th Century and until 1960, when it began a steady decrease, reaching 199 inhabitants in 2021, from which 58% have 65 years old or more. By the Statistics Portugal from the parish total surface of 2,623 hectares, the common land represents 85%. Previous research in the same village, dating from 2003, evidenced a local economy still dominated by traditional farming and extensive livestock production activities, with local living standards heavily dependent on external sources of income, mainly pensions, emigrant remittances and agricultural subsidies (Pereira et al. 2005). Declining and aging population and agricultural abandonment were pointed as the main causes for rather pessimistic local people's

Figure 1: Sistelo parish and Alto Minho location. ➤ p. 57

Figure 2: Population density (2021) and population in 2021 compared to 1950 (%) at municipal level (Alto Minho region, NW Portugal). > p. 58





perceptions about the future, stated by the expression »Sistelo is dead« (Pereira et al. 2005). Both farmland and common land ES where perceived by local community as decreasing, mainly due to abandonment (Pereira et al. 2005). The study identified the community as having a strong focus on the landscape and agroecosystem provisioning services, with little attention or value associated with regulating or cultural services (Pereira et al. 2005).

The village has recently seen an important part of its landscape classified as a national monument (Sistelo's Cultural Landscape, Decree-Law 4/2018). The whole area has high natural value, bordering the Peneda-Gerês National Park and being part of Natura 2000 Network and UNESCO Biosphere Reserve. Our study field work was performed in 2019, coinciding with a touristic boom in the village. The objective was to perform a participatory diagnosis in the village, unraveling local people perceptions around current challenges and opportunities, considering the on-going transition into a more open and multifunctional village. At the same time, we wanted to assess current levels of local community engagement and participation in planning and decision-making concerning development strategies and landscape management. It was particularly interesting to get a holistic perspective on how the community interacts with the common land, and how this traditional common land management is evolving (or not) to adapt to new conditions and goals.

2.2 Data collection

An exploratory phase comprised semi-structured interviews to local representatives, sectoral organization professionals and local association leaders to get more accurate insights around the main stakeholders involved and the relevant themes and questions implying decisions or solutions. After that we organized four thematic focus-groups (FG) with the following thematic areas: Living and working in a mountain village (FG1), Agro-silvo-pastoral activities (FG2), Forestry and biodiversity (FG3), and Tourism (FG4). For the first FG all local inhabitants were invited, and an effort was made to reach different age, gender, professional and socioeconomic profiles. Participants in the FG2 to FG4 were invited accordingly to their involvement in the respective activity. In total there were 30 local inhabitants involved in the FG. The sessions were audio recorded, with previous permission request, and transcribed for content analysis.

Qualitative data from interviews and FG was complemented with quantitative data obtained through a household survey (n = 48; 50% of total households). The questionnaire included questions on people's perceptions and attitudes about local development recent dynamics, including demographic trends, quality of life, opportunities for young people and the challenges related to on-going touristic growth. A second set of questions aimed to characterize current practices, perceptions and attitudes around land use. A specific set of questions focused the common land, how it is used by the family, and to collect data on perceptions and attitudes concerning the common land management and use at the community level.

3 Results

Sistelo is a village where we can still find very traditional land uses and ways of life side-by-side with modern lifestyles and technologies. The village community is almost exclusively composed of people with ancient family roots in the local area. Social and family networks are significantly wider, with emigration, and more recently daily commuting, being a part of life strategies of most residents. Village depopulation is a major concern for local community, with recent tourism growth considered as critical to sustain economic activity and population. Nevertheless, in the first FG it became clear local inhabitants are aware of the risks of poor development planning. As a young girl stated: »We need to have things that attract people, but without spoiling. I think this is the main thing, without spoiling what we have: the landscape, the essence« (FG1; age 20).

Farmers have been the main landscape architects and managers, as well as the main users of the common. Small arable terraces around the houses are still used to produce food (potatoes and legumes), but an increasing share of this arable land produces maize, grass and hay, as forage (Figure 3). The agroecosystem is highly dependent on seminatural vegetation in common land pastures and shrubland, were livestock (mainly bovines) stay most of the time (Figure 4). Forested areas are also present (Figure 5), mainly in intermediate altitudes.

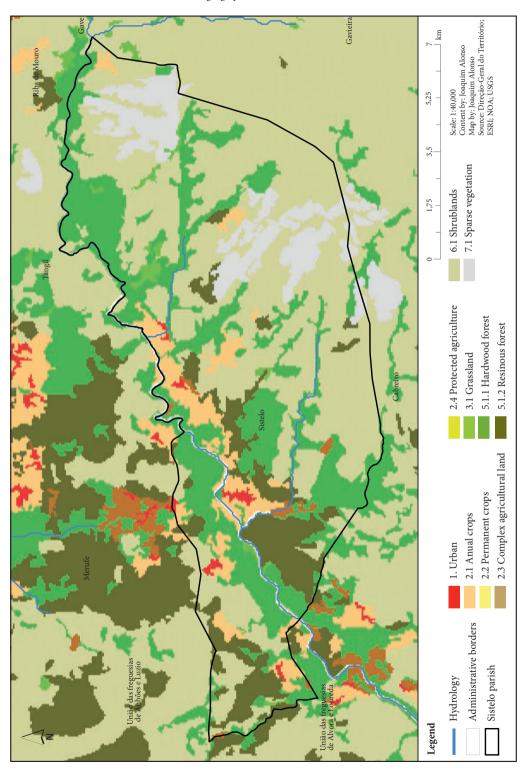


Figure 3: Terraced fields — Sistelo village.



Figure 4: Sistelo's common land pastures with Cachena cattle.

Figure 5: Land cover and use of study area 2018. ➤ p. 61



3.1 Common land history and current management institutions

The common land history and current management institutions were intensely commented and transversal to the four FG. Compulsory and authoritarian state intervention history is still very present in people's minds. They keep distinguishing clearly the *»monte«* (the areas continuously used by the community, which include pasturelands and oak woods) from *»*the forest*«* (areas submitted to state afforestation, mainly with conifers). Memories from this time include the sense of being under scrutiny from forest rangers, and disproportionate penalties in case non-compliance with the rules. The devolution of the common to the community is reminded as a joyful occasion: *»*The 'forest' has ended, and it was a joy, because we could go everywhere with the animals, and it was pleasant to go to the higher places, and to stay there« (commoner 1, age 68).

Currently, the *baldio* is managed by a directive board, elected by the commoner's assembly, in association with the National Forestry and Nature Conservation Institute (ICNF), the latter having a more relevant intervention in forested areas. Strategic decisions, new projects and non-local commoners' admissions are dependent on the Assembly approval. It is important to state all adult local inhabitants are legally entitled as commoners (*compartes*). After the community-based management was re-established, rules and monitoring did not disappear, but their legitimacy and purpose acquired a quite different perception »It were rules to induce respect, not impositions. People respected the *baldio*. We went to gather shrubs (for cattle bedding), firewood and went with the animals. The common gave us as much as the fields because animals where there most of the time« (commoner 1).

Regarding common land governance, survey results showed a large majority of village inhabitants (76%) considers every neighbor is entitled to participate in the common's management, even if it does not have cattle. Even more interesting was to verify 83% of residents considered all neighbors as co-responsible for the common maintenance. Nonetheless 89% declares cattle owners, being the major users, should contribute more. When asked if commoners assembly is highly attended, 44% household representatives were not able to respond and, from those who did, a majority of 59% disagreed with this statement. Finally, 48% respondents did not agree with the statement that all commoners are aware of the rules for using the common land, 33% did not now, and only 19% agreed with this. It seems clear that formally and culturally a large majority of local inhabitants consider themselves as commoners, and believe the common land as being a collective heritage. Nevertheless, effective engagement in the common land management is strongly connected with livestock ownership.

As a final note, it is important to mention local autonomy regarding the common land management is relative, even outside forested areas, as many actions require positive opinion from national or local authorities, under to nature conservation or landscape planning regulations. Bureaucratic procedures are seen as an obstacle by the directive board: »... we cannot touch in the common to move a rock, or to improve a pathway, we must ask for permission to the municipality, to the ICNF and now to this new one ... (cultural heritage authority)« (commoner 4; age 60). There are other controversial issues between local community and higher-level governance levels, including the traditional fire use by shepherds and the wolf protection measures. When these are introduced in the debates they bring about more emotional discourses, revealing the persistence of unsolved tensions between local community and administration authorities.

3.2 Common land uses and benefits: present and future

By the late 1970's, common land devolution to local community was clearly linked to the possibility and intents to return to traditional uses and rules. Since then, farming activity has decreased significantly, and many families became less dependent on the common land for both productive and reproductive uses. Based on the village survey data, the proportion of families regularly using the common in 2019 was around 58%. The main use was for cattle grazing (75% of users), followed by shrubs collecting (71%) and firewood collecting (43%). Less expressive were the leisure related uses, including hunting (30%) and walking (30%).

Former results suggest dominant common land uses are still very traditional. This needs to be framed in wider agricultural recent trends. After decades of decline, the village cattle total heads have been increasing, with significant growth in average herd size. The proportion of producers with less than 20 animals has dropped from around 90% in 1998 (Santos 2000) to 60% in 2019 (household survey). There is a small number of cattle breeders standing out for the larger size of the herd, a high degree of specialization and

for becoming the main users of the parish's agricultural and agroforestry areas. This is directly related to Common Agriculture Policy (CAP) measures supporting autochthonous breeds, extensive animal production and the maintenance of farming in mountainous areas. Local farmers depend heavily on the common land for pasture but also for being eligible for CAP subsidies. From the resident's perception subsidies are a major support for local economy: "Without the subsidies these villages would disappear" (commoners 2, 3, ages 54 and 59).

When asked about future common land uses there is a strong consensus about the need to maintain the traditional agricultural and forestry uses (100% agreement). But it is also interesting to notice that 97% of respondents also agreed that leisure, educational and touristic activities should also be encouraged. This multifunctionality is still emerging. Recent local tourism attractivity is encouraging new business and investments, most of them involving local families. For those who invest or are employed in tourism, it seems to be clear farmers play a central role in the landscape scenic value: »The main attractions for tourists are the *socalcos* (terraced arable plots) and the forests and pasturelands. If this landscape is not preserved, tourism will end« (FG4; restaurant owner, age 47).

There is a perception, by some members of the community, that fewer people (cattle owners) are absorbing a bigger share of the common land benefits: "They took over the common land, and took over the properties that we have abandoned, and then they have the animals. Otherwise, they wouldn't be able to keep them." (FG3; retired, age 67); "Only half a dozen people benefit from the *baldio*, not all..." (FG3; commoner 6; age 60). Tourism does not seem to have any positive impact in the common land financial situation: "Those people who come to the *baldio* should pay a fee, so that we can have some money for repairs or other things. There's a company that comes, takes the money, and doesn't leave a dime here" (commoner 4, age 60). It is worth mentioning the common land has no fences or walls, and any other informative support aiming to raise outsiders' awareness about the existence and the common land limits, being considered by many as open access or publicly owned land.

Even if ES where not explicitly mentioned as such in the FG and the survey, local economy benefits from the common land provisioning and cultural ES and this is well known by local inhabitants. Less clear

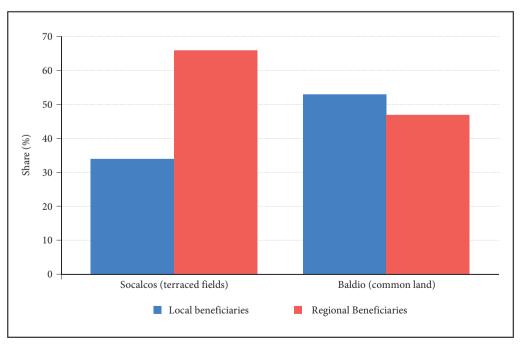


Figure 6: Perceptions about who benefits most (local or regional beneficiaries) from continued agricultural use in the *Socalcos* and from continued pastoral use in the *Baldio;* (household survey).

is how local community perceives the relevance regulating services, and how these depend on the maintenance of farming and pastoral activities. In the household survey a question was included asking who benefited more from continued agricultural use of (1) the *socalcos* (terraced fields) and (2) common land (Figure 6). The continuity of privately owned farmland cultivation is clearly associated by the respondents as having a wide range of beneficiaries, as implied in the prevalence of regional beneficiaries (66% of respondents). On the other hand, the continuity of pastoral activities in the common land is considered to benefit local stakeholders mainly, including cattle owners and common land surrounding areas owners. Even if 47% respondents believe pastoral activities in the *baldio* may generate regional wide benefits, it is worth remembering the common land area occupies 85% of total parish surface.

The common land management and use are still strongly attached to customary rules and uses. It is managed as a collective resource, ensuring that individualistic uses by the residents, mainly animal producers, comply with rules aiming to preserve the resources and fairness amongst commoners. The interdependencies between farming, tourism and nature conservation issues are being subject to intense debate, mainly around how costs and benefits are distributed amongst different community groups. Community building goals are less mentioned. Community solidarity ties are valued but also perceived as weaker than before: »I think people lived better before, there was more ... community, which we do not have now, people are getting away from each other« (local female resident, age 49). Another significant change relates local knowledge about nature, with 75% survey respondents stating younger generations have less knowledge about the nature around them than the older ones.

4 Discussion

This study allowed us to get a wider understanding of current challenges and opportunities faced by a local community regarding the common land management. As stated before, sustainable development of these lands may have serious repercussions for the future of rural areas of Northern and Central Portugal (Skulska et al. 2020). Our village level case-study revealed a local community anchored in a peasant culture and economy, where people acknowledge the common land as an important resource system, mainly for agricultural and pastoral activities, as well as a collective heritage. In this sense it configures a traditional common, as defined by Šmid Hribar et al. (2023).

Former authoritarian state intrusion is quite present in the community's memory as a negative period, which left some persistent effects, consistent with other findings of the relevance of path dependency type effects (Soto 2017; Šmid Hribar et al. 2018). It is not surprising if contemporary local communities have low trust levels in governmental institutions, even if they have been democratic for several decades now. Moreover, the same effect seems to be relevant to explain the Portuguese public institutions low readiness (or willingness) to give rise to local communities' empowerment regarding their commons (Lopes et al. 2013; Baptista 2014). It has also been stated that recent agricultural and natural conservation policies, already under the European Union context, tend to follow the same pattern of privileging command and control instruments, giving little scope for rural communities to participate in decision making (Luz 2017; Skulska et al. 2020). Previous uses and customary rules where reintroduced as soon as the post-revolutionary democratic regime allowed it, but less clear are the lasting effects of this historical phase in the community's ability to adapt to a changing economy and society. Multifunctional landscape management, including forestry, pastoralism, nature conservation, recreation and tourism activities and goals, is a challenging task. The relative absence of innovation in the Sistelo community common land use and management institutions is clearly associated with local people's decreasing knowledge and involvement in daily or strategic decisions related to it. Considering local economy and social expectations have changed significantly, and will continue to change, this inertia may constitute a factor of vulnerability.

It must be emphasized the community is rapidly changing, with economic changes involving the farming activity (fewer farmers, with bigger cattle herds) and the expansion of tourism related businesses and activities. Similar trends were found by other researchers in Portugal and Spain (Baptista 2014; Luz 2017; Soto 2017; Nieto-Romero et al. 2019; Skulska et al. 2020). There is a perception of increasing inequity in the commons-based benefits distribution, as well as a progressive disconnection between non farmers groups and the common-land. As Barnaud and Couix (2020) stated, increasing multifunctionality of mountain landscapes and of mountain farming implies a diversification of stakeholders in the local arena, as well as

the need to actively address negotiations to conciliate diversified interests and to build synergies. Non-individualistic motivations to engage in the common land management and use, as found in other common lands in Portugal and Spain (Soto 2017; Nieto-Romero et al. 2019) or in transforming commons in Slovenia and Japan (Šmid Hribar et al. 2023) did not emerge in our case study. As a matter of fact, our findings suggest a trend of progressive loss of community sense and the diminishing connection between younger people and their natural surroundings. Nevertheless, strong local support to the idea of promoting educational activities in the common land, as well as the consensus around the commons management as a collective responsibility and heritage, should be recognized as favourable conditions to improve community-based management, in line with Elinor Ostrom's theory. A participatory redefinition of rules may be needed, to ensure new social and economic conditions are reflected in the local governance system (Ostrom et al 2012).

A final remark regarding the younger generation, which has mentioned the loss of community identity and solidarity as having negative impacts in individual and social well-being. When other community-building institutions tend to disappear (local school, church attendance) the common land acquires a new significance as the main collective action arena, including non-users, and linking people to each other and to the landscape. Redefining the common-land management to explicitly incorporate community-building goals between farmers and non-farmers and between older and younger generations, may be a needed step to enter the new level of *commoning*, as suggested by Nieto-Romero et al. (2019). As Skulska et al. (2020) stated Portuguese public forestry and nature conservation authorities, which are still serving more as an enforcement agency than as facilitators of community-based management institutions could have a more relevant and positive role in this transition.

5 Conclusion

Portuguese common lands (baldios) are traditional commons which have resisted a long-term conflictive history with government authorities. Legal and political reestablishment of communal rights was very important for community's empowerment, even if path-dependency effects still influence community relations with non-local institutions. In some traditional villages, like Sistelo, local farmers were able to ensure the continuity of complex agroecosystems with large areas of communally owned pasturelands. Financial CAP support had significant effect in this survival. Recent classification of Sistelo's village landscape as nationally relevant cultural heritage and increased touristic attraction represent both a recognition of value, as an opportunity for further economic diversification. In other contexts, it may have happened otherwise, with severe rural depopulation and/or agricultural abandonment leading to the disappearance of the common's traditional management institutions, rules and uses, along with undesirable and well-documented ES losses.

Common land management is not, however, only relevant for farmers and for pastoral use, as our case-study has confirmed. Even more traditional communities are witnessing increased cultural pluralism and economic diversification, as well as intensified interactions with other stakeholders and with wider society. Innovative managing practices and improved rules systems may be necessary to adapt communal land management to these changing conditions. Emerging new perspectives on common lands, including explicit community-building goals, expanding non-individualistic benefits for the community, as well as deeper persons-to-nature interactions, may be leading the way. Communities and commons are diversified, and this diversity suggests the need for further research at local and regional levels. It seems wise to say communities and common's local managers may learn from each other, while preserving their autonomy and specificities. Regional governance actors are well placed to facilitate the creation of collaborative communities' networks as a tool for commons management skills improvement. Both suggestions are in line with Elinor Ostrom's ideas, namely that, by the end of the day, learning capacity and trust are vital for resilience and success.

6 References

- Agnoletti, M. 2014: Rural landscape, nature conservation and culture: Some notes on research trends and management approaches from a (southern) European perspective. Landscape and Urban Planning 126. DOI: https://doi.org/10.1016/j.landurbplan.2014.02.012
- Baptista, F. O. 2014: Os Baldios Autonomia e desenvolvimento local. Lisboa.
- Bandeira, M. L., 1996: Demografia e Modernidade Família e Tradição Demográfica em Portugal. Lisboa. Barnaud, C., Couix, N. 2020: The multifunctionality of mountain farming: Social constructions and local negotiations behind an apparent consensus. Journal of Rural Studies 73. DOI: https://doi.org/10.1016/j.jrurstud.2019.11.012
- Brouwer, R. 1995: Baldios and common property resource management in Portugal. Unasylva (FAO) 180-46. De Moor, T. 2011: From common pastures to global commons: a historical perspective on interdisciplinary approaches to commons. Natures Sciences Sociétés 19. DOI: https://doi.org/10.1051/nss/2011133
- Gløersen, E., Price, M., Aalbu, H., Stucki, E., Roque, O., Schuler, M., Perlik, M. 2004: Mountain Areas in Europe: Analysis of mountain areas in EU member states, acceding and other European countries. Nordregio Report 2004: 1, Report to the Directorate–General for Regional Development, European Commission. Stockholm
- Haller, T., Liechti, K., Stuber, M., Viallon, F.-X., Wunderli, R. (eds) 2021: Balancing the Commons in Switzerland: Institutional Transformations and Sustainable Innovations. London. DOI: https://doi.org/ 10.4324/9781003043263
- Honrado, J. P., Lomba, A., Alves, P., Aguiar, C., Monteiro-Henriques, T., Cerqueira, Y., Monteiro, P., Barreto Caldas, F. 2017: Conservation management of EU priority habitats after collapse of traditional pastoralism: Navigating socioecological transitions in mountain rangeland. Rural Sociology 82-1. DOI: https://doi.org/10.1111/ruso.12111
- Korner, C., Ohsawa, M. 2005: Mountain Systems. Ecosystems and Human Well-Being: Current State and Trends. Washington.
- Lopes, L. F. G., dos Santos Bento, J. M. R., Cristovão, A. F. A. C., Baptista, F. O. 2013: Institutionalization of common land property in Portugal: Tragic trends between »Commons« and »Anticommons«. Land Use Policy 35. DOI: https://doi.org/10.1016/j.landusepol.2013.05.007
- Lopes, L. F. G., dos Santos Bento, J. M. R., Arede Correia Cristovão, A. F., Baptista, F. O. 2015: Exploring the effect of land use on ecosystem services: The distributive issues. Land Use Policy 45. DOI: https://doi.org/ 10.1016/j.landusepol.2014.12.008
- Luz, A. L. 2017: Entre subsídios e turismo: Instituições e poder na gestão dos Baldios do Parque Nacional da Peneda-Gerês. Finisterra 52. DOI: https://doi.org/10.18055/finis9824
- Madureira, L., Magalhães, P., Silva, P., Marinho, C., Oliveira, R. 2013: Economia dos serviços de ecossistema um guia para conhecer e valorizar serviços de agroecossistemas em áreas protegidas de montanha. Lisboa.
- McKean, M., Ostrom, E. 1995: Common property regimes in the forest: just a relic from the past? Unasylva 46-180.
- Nieto-Romero, M., Valente, S., Figueiredo, E., Parra, C. 2019: Historical commons as sites of transformation. A critical research agenda to study human and more-than-human communities. Geoforum 107. DOI: https://doi.org/10.1016/j.geoforum.2019.10.004
- Nishi, M., Suneetha, Subramanian, M., Gupta, H., Yoshino, M., Takahashi, Y., Miwa, K., Takeda, T. 2021: Fostering transformative change for sustainability in the context of Socio-Ecological Production Landscapes and Seascapes (SEPLS). Dordrecht. DOI: https://doi.org/https://doi.org/10.1007/978-981-33-6761-6
- Nogueira, J., Simões, S., Araújo, J. P. 2020: Mountain agriculture and pastoralism in Northwest Portugal transition to sustainable multifunctionality?. European structural measures for mountain farming in the context of domestic needs and expectations. Warsaw.
- O'Rourke, E., Charbonneau, M., Poinsot, Y. 2016: High nature value mountain farming systems in Europe: Case studies from the Atlantic Pyrenees, France and the Kerry Uplands, Ireland. Journal of Rural Studies 46. DOI: https://doi.org/10.1016/j.jrurstud.2016.05.010
- Ostrom, E. 1990: Governing the Commons The evolution of institutions for collective action. Cambridge. DOI: https://doi.org/10.1017/CBO9780511807763
- Ostrom, E. 2010: Beyond markets and states: Polycentric governance of complex economic systems. American Economic Review 100-3. DOI: https://doi.org/10.1257/aer.100.3.641

- Ostrom, E., Chang, C., Pennington, M., Tarko, V. 2012: The future of the commons Beyond market failure and government regulation. Institute of Economic Affairs Monographs. Indiana University, Bloomington School of Public & Environmental Affairs Research Paper 2012-12-02. DOI: https://doi.org/10.2139/ssrn.2267381
- Pereira, E., Queiroz, C., Pereira, H. M., Vicente, L. 2005: Ecosystem services and human well-being: A participatory study in a mountain community in Portugal. Ecology and Society 10-2.
- Pinilla, V., Sáez, L. A. 2021: What do public policies teach us about rural depopulation: The case study of Spain. European Countryside 13-2. DOI: https://doi.org/10.2478/euco-2021-0021
- Ribeiro, D., Šmid Hribar, M. 2019: Assessment of land-use changes and their impacts on ecosystem services in two Slovenian rural landscapes. Acta Geographica Slovenica 59-2. DOI: https://doi.org/10.3986/AGS.6636
- Santos, J. 2000: Sistema de criação dos bovinos na Serra da Peneda. Cadernos da Montanha -Peneda I. Arcos de Valdevez.
- Scheurer, T., Agnoletti, M., Bürgi, M., Šmid Hribar, M., Urbanc, M. 2018: Exploring alpine landscapes as potential sites of the Globally Important Agricultural Heritage Systems (GIAHS) programme. Mountain Research and Development 38-2. DOI: https://doi.org/10.1659/MRD-JOURNAL-D-18-0047
- Serra, L., Detotto, C., Vannini, M. 2022: Public lands as a mitigator of wildfire burned area using a spatio-temporal model applied in Sardinia. Letters in Spatial and Resource Sciences. DOI: https://doi.org/10.1007/s12076-022-00315-7
- Skulska, I., Colaço, M. C., Aggarwal, S., Didier, H., Monteiro, M. L., Rego, F. C. 2020: Assessment of Portuguese community forestry using the voluntary guidelines on the responsible governance of tenure and FAO community-based forestry framework. Society and Natural Resources 33-1. DOI: https://doi.org/10.1080/ 08941920.2019.1660934
- Šmid Hribar, M., Kozina, J., Bole, D., Urbanc, M. 2018: Public goods, common-pool resources, and the commons: The influence of historical legacy on modern perceptions in Slovenia as a transitional society. Urbani Izziv 29-1. DOI: https://doi.org/10.5379/urbani-izziv-en-2018-29-01-004
- Šmid Hribar, M., Hori, K., Urbanc, M., Saito, O., Zorn, M. 2023: Evolution and new potentials of land-scape commons: Insights from Japan and Slovenia. Ecosystem Services 59. DOI: https://doi.org/10.1016/j.ecoser.2022.101499
- Soto, D. 2017: Changing identities over commons during the process of agricultural industrialization. The case of Galician (NW Spain) since 1960. XVI Biennial IASC-Conference 'Practicing the Commons'. Utrech.
- Torre, A., 2015: New challenges for rural areas in a fast moving environment. European Planning Studies 23-4. DOI: https://doi.org/10.1080/09654313.2014.945811