Changing Mountain Communities

Between Certainties and Uncertainties

Tobias Boos, Daniela Salvucci,
Pier Paolo Viazzo, Roberta Clara Zanini (Eds.)

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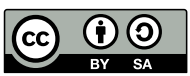

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Mountains of Change: Economy, Tourism, and Heritage in Sardinia

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Abstract

This study examines the socio-economic and cultural transformations in Sardinia's mountainous regions from a historical and anthropological perspective, highlighting the shift from polyculture agriculture to intensive pastoralism and recent heritagisation and economic diversification efforts. Using historical sources and ethnographic methods, it identifies three critical phases: traditional agro-pastoralism, a decline due to migration and industrialisation, and a revival through tourism and heritage branding. Today, local initiatives aim to integrate traditions with new economic opportunities, promoting quality certifications and cultural identity, underscoring the importance of local resilience in adapting to global changes. This analysis offers insights into broader trends affecting mountain communities worldwide, where heritage and tourism are relevant strategies.

Introduction

The expression "the only constant is change," attributed to Heraclitus (Guettlein, 2024), is a fitting starting point for providing an overview of the socio-cultural, demographic, and economic changes in the inner and mountainous areas of Sardinia, a topic this chapter aims to explore. In anthropology, change is a pivotal concept for understanding the processes through which groups maintain continuity and undergo transformation – and in turn, reshape their own territories – over time, through complex and ongoing processes influenced by both external and internal factors, rather than merely a series of isolated events (Steward, 1972; McGrath & Bauman, 2012). Mountain areas, of course, have never been exempt from change or, indeed, from continuity (Mathieu, 2011; Lozny, 2013; Boos & Salvucci, 2022; Viazzo & Zanini, 2022).

These transformations are not exclusive to Sardinia, yet the island's mountainous areas, like other highland regions across the Mediterranean shaped by long-term marginality and outmigration, attempt to respond to decline by experimenting with new ways of making their territory economically and symbolically viable. Across other mountain regions of Mediterranean islands – from Corsica to Cyprus – the dynamics of change are shaped by overlapping forces: the slow retreat of traditional agricultural life, the outflow of younger generations, and shifting ways of imagining local economies and identities. In many cases, the rediscovery – or invention – of cultural and natural heritage, often linked to tourism growth, offers communities new ways to reimagine their relationship with place (San Roman Sanz et al., 2013; Zoumides et al., 2017). The Sardinian mountains provide perfect case in point of how such processes take shape within a landscape marked by long histories of interconnectedness, but also marginality, and structural modifications. Against this backdrop, this chapter asks: How have Sardinia's mountain communities reorganized their economic and cultural strategies in response to the agro-pastoral crisis, depopulation, and globalization? It argues that Sardinian highland regions have undergone a profound reconfiguration, shifting from an integrated agro-pastoral economy to a new system centred on tourism, heritage-making, and quality labels – through locally grounded reinterpretations of territorial and cultural resources.

In recent anthropological and interdisciplinary research, mountain areas – such as those of Sardinia – have increasingly been reinterpreted not as marginal or passive spaces, but as dynamic territories shaped by longstanding patterns of mobility, socio-economic negotiation, and environmental adaptation. This new approach, sometimes called montology (Branca & Haller 2020; Sarmiento 2020, Sarmiento 2022), has underlined how mountain environments are produced through a continuous interplay between ecological constraints, productive strategies, and symbolic practices. In many regions, communities have adapted by adjusting their livelihoods, rethinking traditions, and taking on new roles in response to economic, political, and environmental pressures in a relatively gradual process of transformation, where new practices emerge through modifications of existing ones. Studying mountain communities thus requires attention to structural factors – such as depopulation, infrastructure, or market access – and how people reinterpret their past, articulate a sense of belonging, and experiment with new forms of presence in the territory. So, it is not just holding onto past practices, but a creative reinterpretation in the light of present challenges, including practical adjustments – such as shifting economic activities – and symbolic reimaginings of the territory and its traditions.

The chapter is structured into four sections: first, we introduce readers to the study area, then we provide a historical overview of the socio-economic dynamics of Sardinia's mountainous regions from the 19th century to the early 1950s. Next, we discuss socio-economic and demographic changes from this period through the 1970s. Following this, we analyze recent transformations in economic and social practices. Finally, we reflect on processes of herigitisation, considering new models of territorial enhancement and the strategies adopted by mountain communities in the contemporary context.

Study Area and Methodology

Located in the Mediterranean geographical bioregion (Blasi et al., 2014), the study area includes a group of eighteen municipalities[1] in central Sardinia, primarily distributed across the historical regions[2] of the Barbagie and the inner area of Nuoro: Aritzo and Meana Sardo (Barbagia di Belvì), Austis, Fonni, Gavoi, Lodine, Mamoiada, Ollolai, Ovodda, Teti, and Tiana (Barbagia di Ollolai), Atzara, Sorgono, and Tonara (Mandrolisai), and Bitti, Nuoro, Orani, and Orune (Nuorese or Barbagia di Bitti). The average altitude of these centres is around 720 meters above sea level. The lowest town is Orani (521 m), and the highest is Fonni (1000 m). The highest mountain system in Sardinia is the Gennargentu Massif, which peaks at Punta La Marmora (1834 m).

1 The municipalities selected for this research were identified based on criteria aligned with the goals of the "InnTerr: Innovation, Inclusion & Interdisciplinary Studies for Territorial Development" project (InnTerr: Innovazione, Inclusione & studi interdisciplinari per lo sviluppo del Territorio), funded through a collaboration between the Department of Humanities and Social Sciences of the University of Sassari and the Consortium for the Promotion of University Studies in Central Sardinia, based in Nuoro, under the auspices of the Regional Competence Center R.E.S.T.A.R.T. (Center for Research, Sustainable Economy, Tourism, Environment, and Territorial Revival). The project aims to promote sustainable territorial development in the Nuoro area by enhancing local heritage and adopting digital technologies to coordinate socio-economic growth initiatives, targeting a system that includes all communities and local stakeholders in an inclusive development process. The selected municipalities are those traversed by the Itinerarium Antonini, an ancient route that spanned the entire island – a central element in the project, as it represents a point of historical and cultural connection across various territories. The revitalization of this route, along with the study of associated traditional trail networks, forms the strategic focus of the research. This initiative seeks to create a network connecting elements of Nuoro's territorial capital, promoting the area as a cultural resource and a tourist attraction.

2 The historical regions of Sardinia are territories that, over the centuries, have distinguished themselves by specific cultural, social, and linguistic traits, often linked to unique geographical features and particular forms of economic organization. Their origins trace back to various historical and cultural periods of Sardinia, notably the Roman era, especially the Judicate and Spanish periods. The current territorial configuration – partly reflected in the organization of Local Action Groups (GALs) and the Landscape Areas defined in the 2006 Regional Landscape Plan – reflects a shared historical, cultural, and geographical understanding within Sardinia. In some cases, portions of a single municipality belong to two or more historical regions (for example, the enclave of Berchiddeddu in the municipality of Olbia belongs to Montacuto rather than Gallura, which covers most of the municipality). In other cases, municipalities like Samassi, Serramanna, and Serrenti have been variably assigned to either the Campidano of Cagliari or that of Sanluri. The Logudoro – absent from this particular map – was historically synonymous with the Judicate of Torres and today includes areas such as Meilogu, Sassarese, and Montacuto. For further details on the historical regions, see Brigaglia & Tola (2008) and de Tisi (n. d.), and for the history of the Sardinian Judicates, see Casula (2004).

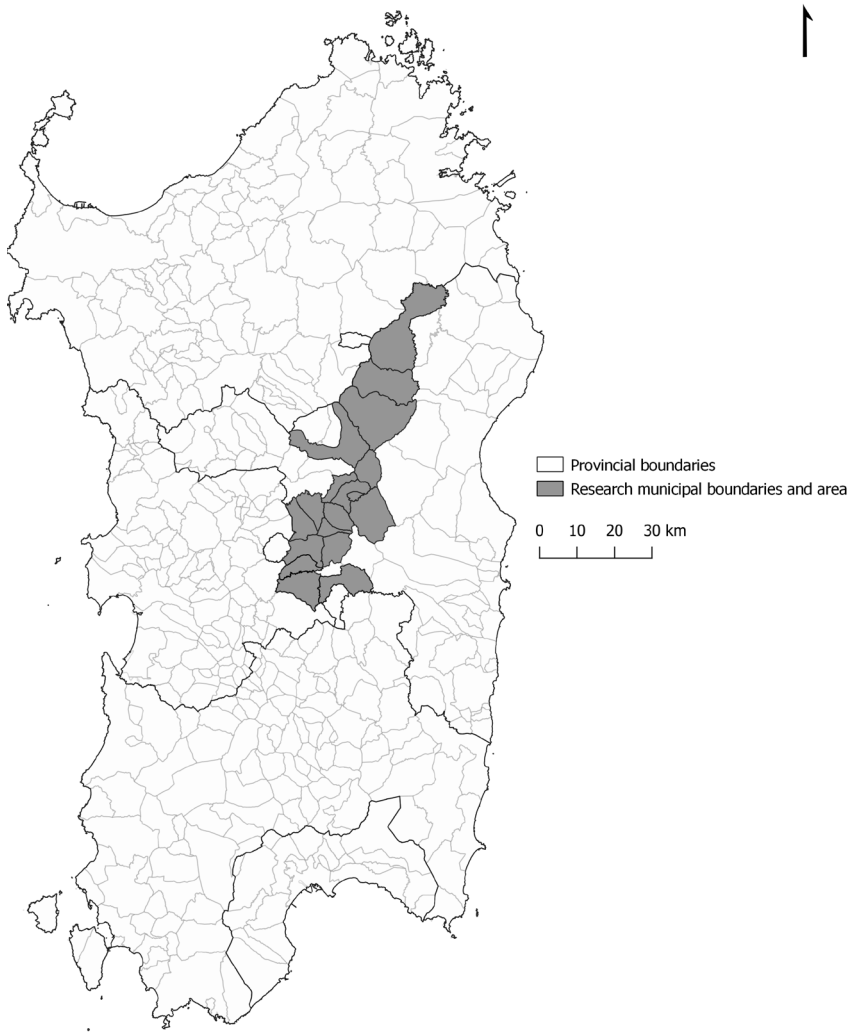

Figure 1 – Map of the Study Area and Involved Communities. Source: Sardegna Geoportale (2025), administration units: @EuroGeographics Coordinate system: EPSG:32632 - WGS 84 / UTM zone 32N, design: Domenico Branca (2025).

In the Italian context, according to the definition provided by ISTAT's Rapporto sul territorio 2020 (Franconi & Molinaro, 2020), these are municipal territories classified as mountainous and inner hill areas (collina interna), with altitudes respectively above 600/700 meters and below this range but still above 300 meters. In the past, the now-repealed Law 991/1952, "Measures in Favor of Mountainous Territories," defined a municipality as "mountainous if at least 80% of its surface area is located above 600 meters above sea level, the difference between the highest and lowest altitudes of the territory is greater than 600 meters, and the average taxable income per hectare, based on 1937–1939 prices, did not exceed 2,400 lire" (Openpolis, 2023). According to this classification, all the municipalities considered in this research were mountainous, whereas, under the current definition, seven of them (Atzara, Austis, Meana Sardo, Nuoro, Orani, Sorgono, and Teti) are now classified as inner hill areas. Nevertheless, almost all the municipalities in this study fall within the classification of so-called "inner areas,"

> [areas that] are significantly distant from centres offering essential services (education, healthcare, and mobility), rich in significant environmental and cultural resources, and highly diversified both by nature and as a result of centuries of human settlement. Approximately a quarter of the Italian population lives in these areas, which cover more than sixty per cent of the national territory and are organized into over four thousand municipalities. (Barca et al., 2014, p. 5)

According to the *Strategia Nazionale delle Aree Interne (2021–2027)* (National Strategy for Inner Areas) of the Agency for Territorial Cohesion (Agenzia per la Coesione Territoriale, 2023), 14 of the 18 municipalities analyzed here (with the exceptions of Nuoro, an urban attraction hub, and Bitti, Mamoiada, and Orune, considered belt areas) are classified as peripheral (Atzara, Austis, Gavoi, Ollolai, Orani, and Sorgono) and 8 as ultra-peripheral (Aritzo, Meana Sardo, Fonni, Lodine, Ovodda, Teti, Tiana, and Tonara)[3]. Nevertheless, in Sardinia, the label "inner areas" – though more an institutional tool than an identity marker – is generally well received by local actors, as it is associated

3 We are aware of the limitations of this type of classification; however, as it is not the focus of this contribution, we refer readers to the special issue of *Archivio di Antropologia* titled "L'invenzione delle aree interne", edited by Santoro, Copertino, and Berardi (2022).

with access to funding, policy recognition, and development opportunities and, rather than being questioned or resisted, it is often strategically adopted. Although we provide some geographical background to contextualize the field, our aim is primarily to understand how social meanings and cultural practices are reshaped in the context of territorial transformation.

Regarding methodology, this study is based on an interdisciplinary approach that combines historical research with ethnographic techniques to analyze changes in the economic, demographic, and socio-cultural dynamics of the municipalities studied. Specifically, primary historical sources and documents related to each municipality's local economy, demographic evolution, and migratory flows were examined to understand fundamental economic transformations from the 19th century to the present. We identified three main periods, each corresponding to significant economic, demographic, and socio-cultural changes in the island's history: the period between the 19th century and the first half of the 20th century, characterized by a predominantly subsistence economy focused on pastoralism and small-scale agriculture (Tore, 1975); the period between the 1950s and 1970s, marked by a significant migratory wave toward urban areas, leading to demographic decline and profound transformations in the economic fabric; and the period from the 1980s to the present, which has seen the beginning of a reevaluation of cultural heritage and local productions, encouraged by regional development policies.

Additionally, selected ethnographic techniques – primarily limited participant observation – were employed in certain municipalities (e.g., Aritzo, Austis, Bitti, Fonni, and Gavoi). Some direct observations were carried out through multiple visits to several of the municipalities involved in the study between 2021 and 2024. These occasions included local festivals, public events, and informal conversations with residents and local administrators. Rather than aiming to build a systematic ethnographic account, these moments of field presence accompanied the broader historical and documentary analysis, offering grounded indications of how ongoing changes are experienced and interpreted by those living in the area. These complemented the historical and documentary analysis rather than constituting a comprehensive ethnographic fieldwork campaign. This methodological integration provides a multifaceted perspective on the economic and demographic transformations affecting the mountainous areas of central Sardinia.

A clarification is warranted regarding the sources employed in the development of this chapter. The analysis presented here draws upon a broad array of bibliographic and institutional materials, including academic literature and documents produced by agencies responsible for the governance of economic and territorial processes. While informed by a deep familiarity with the region and supported by ethnographic observation, this chapter does not rest upon a sustained or systematic ethnographic fieldwork. Ordinarily, it would be unnecessary to justify the inclusion of contributions from geography, history, demography, or sociology in an anthropological essay. Nevertheless, in the context of Sardinia's inland regions, an explicit reflection on the interdisciplinary character of this approach is deserved, particularly in light of the nature and availability of existing research. There are several reasons for this methodological choice. First, anthropological studies on Sardinia have, for the most part, favoured micro-level analyses and qualitative methods. Second, they have long concentrated on popular and material culture – an emphasis that proves advantageous in the present context. As discussed in the concluding section of this chapter, earlier research into traditional practices and material forms – once conducted through direct field engagement – now offers valuable insights for contemporary policies aimed at heritage-making and the development of cultural tourism. Third, long before anthropology turned its attention to these areas, the internal regions of Sardinia had already been the subject of sustained inquiry by human geographers, historians, and rural sociologists. Particularly noteworthy are classic community studies, which remain of foundational significance. Among these, the landmark study by Maurice Le Lannou (1979), conducted before the Second World War and first published in France in the 1940s, only became available in Italian in the late 1970s and continues to serve as a critical reference point in the field.

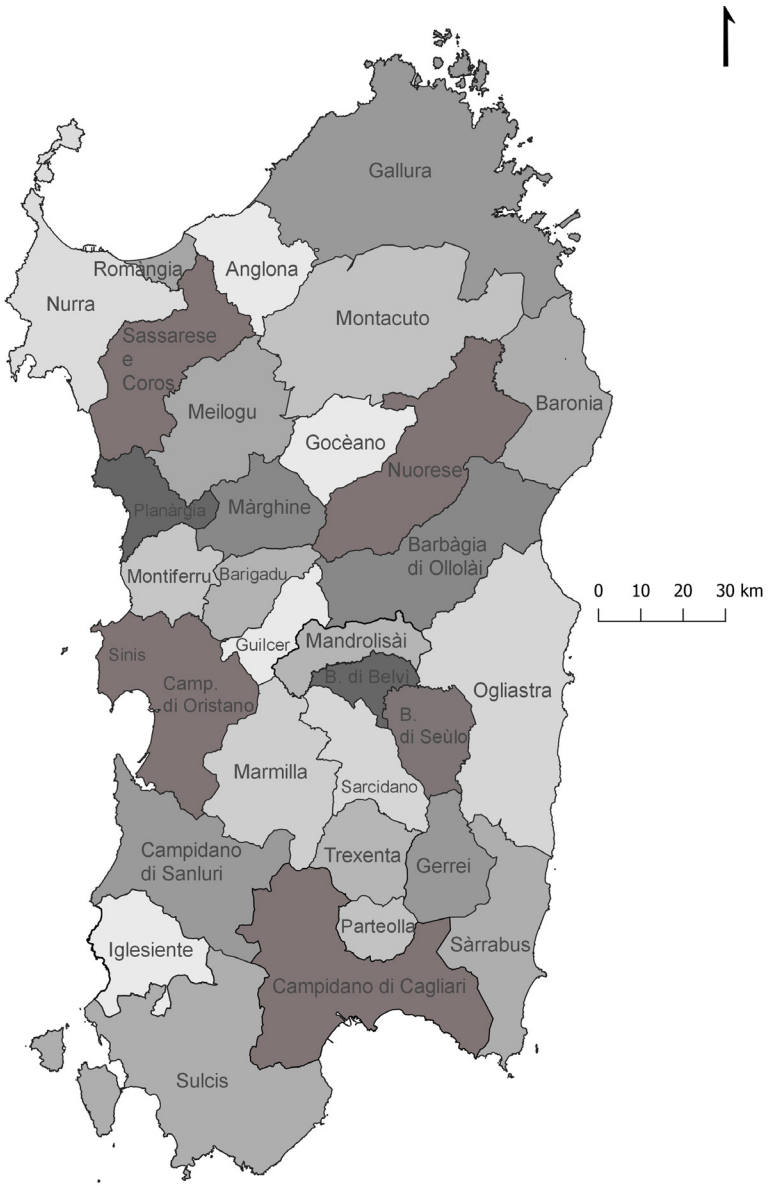

Figure 2 – Historic regions of Sardinia. Source: Sardegna Geoportale (2025), administration units: @EuroGeographics Coordinate system: EPSG:32632 - WGS 84 / UTM zone 32N, design: Domenico Branca (2025).

Poly-Cultural Economy and Transhumance

Between the 19th and early 20th centuries, Sardinia's mountainous and high-hill territories exhibited economies characterized by a "mixed" use of resources and skills. However, each village stood out for one or more productive specializations. Throughout the 1800s, local economies were primarily based on self-sufficiency (Tore, 1975). Socially, the relative scarcity of resources was intensified by far from equitable distribution, with a marked division between "the wealthy and dependent laborers" (Angioni, 1993, p. 232). Until the 1950s, the agro-pastoral model was the primary production system in the mountainous and high-hill areas of the island; a "poly-cultural" and complementary model (Meloni & Farinella, 2015) that combined, on one hand, primarily cereal-based agriculture, with crops like wheat, barley, olives, and vines, and, on the other hand, livestock farming, especially of sheep and goats, but also pigs, cattle, and horses (Ortu, 1981; Meloni, 1984; Mientjes, 2008; Meloni & Farinella, 2015).

Regarding the settlement, except for the larger town of Nuoro, population centres ranged between 100 and 2,000–3,000 inhabitants and were organized around a series of land-use "belts" (Meloni & Farinella, 2015). The first belt, generally closest to the settlement, consisted of gardens shielded by windbreaks; the second belt, featuring *tancas* enclosed by dry stone walls, was designated for fruit trees or cereal production and subject to periodic rotation; the third belt, *su sartu*, was unenclosed and devoted to extensive agriculture and grazing (Meloni & Farinella, 2015). Additionally, even lands at higher elevations were integral to the economic and territorial organization, e.g., for wood harvesting. In line with a classification established since the Middle Ages between *cultum* and *incultum* (de Santis, 2002), beyond the village itself, the territory included *sartos*, communal pastures (*sos cumonales*), lands for sowing, and a smaller or more significant portion of family-owned enclosures, used for animal grazing or cereal production. Forests were a significant component of local economies in the 19th and early 20th centuries. Besides providing firewood, they also offered hunting opportunities for game.

Most individuals were employed in pastoralism and agriculture – with skills in both occupations – and supplemented these activities with more specialized roles, such as gunsmiths and carpenters (Austis, for example), cart

drivers and woodcutters (Aritzo), shoemakers or *turronajos* (nougat makers in Mamoiada and Tonara), and artisans in general. Unlike in later periods, pastoralism and agriculture were integrated and complementary, providing both direct and indirect benefits. In the first case, these benefits were "because cultivating the land allowed the integration of natural forage stocks, which were fundamental for livestock feed; at the end of summer, when natural pasture was scarce, grains like barley, as well as stubble, vine leaves, garden foliage, and by-products (such as pears, chestnuts, and grape pomace), helped sustain the animals." In the second case, "agricultural cycle operations, such as the fall clearing and burning of Mediterranean scrub (especially stubble, rockrose, and thistles), ploughing, and the extraction of heather and arbutus roots, enhanced the soil's productivity and the quality of spontaneous grasses, while also curbing the spread of Mediterranean scrub, which hindered the movement of flocks" (Meloni & Farinella, 2015).

In agricultural terms, the primary crops across all towns – varying in extent depending on the availability of suitable land within each municipality – included wheat, barley, and fava beans, supplemented by vegetable gardens with legumes, cabbages, onions, hemp, pumpkins, tomatoes, and potatoes. Notably, American-origin crops like tomatoes and potatoes had a complex social history regarding their introduction and eventual acceptance by local farmers (Gentilcore, 2012). In the early 19th century, Vittorio Angius, referring to Ovodda, wrote that "the sowing of potatoes is spreading; the production is considerable, and the quality is no less than that of those from Fonni" (Angius, 1832–1848 [2006], p. 1146). Given that in other regions of the island (such as Àrdara), the same author stated that "potatoes are despised, and people die of hunger" (Angius, 1832–1848 [2006], p. 92), it is evident that in Ovodda, Fonni, Aritzo, and even Bitti, this crop was becoming part of the local diet. Orchards were also important, with trees such as plum, cherry, apple, chestnut, walnut, and various types of pear, as well as olives, pomegranates, and figs (for example, in Orani), along with vineyards, primarily for wine production but also, to some extent, for distillation. Complementing agriculture, local communities engaged in livestock farming with various types of animals. Besides oxen, used for agricultural work, and horses, the most commonly raised animals were cows (both "tame" and "wild"), goats, and pigs, though sheep rep-

resented the most significant numbers. Dairy production, moreover, complemented the diet of these communities.

Given the presence of rivers and streams, fishing – primarily for trout and eels – was practised in some villages, such as Lodine. Apiculture was also pursued to varying degrees depending on the context (for example, in Tonara). Textile production was notably essential and linked to the cultivation of mulberry trees, as in Mamoiada and Ollolai, known for manufacturing blankets and rugs. Knife-making and, to a lesser extent, basket weaving (such as in Ollolai) and leather and hide processing were also present. Labour division was strongly gendered, with men dedicated to production and livestock raising and women focused on household care and weaving. However, this general division had exceptions. Despite common patterns, specific specializations emerged based on the unique geographical characteristics of different areas. Specifically, in higher-altitude zones, local economies involved specializations tied to mountain products, where women were primarily responsible for gathering hazelnuts, chestnuts, or cherries. At the same time, men engaged in trade journeys or carpentry work, as was the case in Aritzo (Angius, 1832–1848 [2006]).

The territory's geographical configuration shaped local populations' socio-economic practices, especially concerning the seasonal movement of sheep and goats in winter. Transhumance – "a highly specialized form of mixed farming, practiced by the inhabitants of settled communities, technologically adjusted to a certain set of environmental conditions, which combines livestock herding with arable agriculture" (Jones, 2005, p. 359) – followed an "inverse" or "descending" model: from the higher areas, with the arrival of the first cold in autumn, herds were moved down to the plains, where temperatures were milder, and the shepherds remained there until spring (Le Lannou, 1979; Ortu 1988; Lai, 1998; Mannia, 2014; Branca, 2024). Alongside long-distance mobility, there were also shorter, local movements within single municipalities (Mori, 1975; Meloni, 1988; Ortu, 1988; Meloni & Farinella, 2015). These movements, which often kept shepherds away from the village for weeks, primarily took place in winter, allowing them to avoid the harsh climate of the higher inner areas and graze livestock on the warmer coastal plains (Angioni, 1989). For instance, taking Fonni as a central reference point among the municipalities analysed, two significant movements

can be distinguished: one toward the south and southeast, heading to the Campidano of Oristano, the Marmilla, the Campidano of Cagliari, and the Iglesiente. The other movement was toward the northwest and northeast, that is, toward Marghine and Montacuto of Ozieri on one side and the Baronie and Gallura on the other. For example, Benedetto Meloni (1988) shows that from Austis, shepherds would head either toward the plains of the Campidano of Oristano or those of the Campidano of Cagliari, even reaching the Sulcis region[4]. Transhumance also allowed the sale of surplus products; in Lodine, these included excess grains and cheese. An interesting case is that of Mamoiada, reported by Angius, who, speaking of trade, stated that "[t]he Mamoiadans sell surplus cereals, garden produce, and other fruits, various types of wooden boards, and iron, wood, and woolen goods, as well as hides and leather in Orosei, and wool in Orgosolo, Oliena, and Ogliastra" (Angius, 1832–1848 [2006], p. 853).

Economic Transition and Migration Out of the Mountains

Between the 1950s and 1970s, new economic, social, and demographic transformations impacted Sardinia's mountainous regions. In line with Meloni and Farinella (2015), the factors driving these changes were both internal and external, yet significant enough to mark a shift from a traditional agro-pastoral economy to extensive pastoralism. This change inevitably affected local communities, landscapes, and traditional land use.

As for external factors, the increase in cereal imports, combined with agricultural modernization, triggered a profound crisis in the island's cereal sector (Angioni, 1993; Meloni & Farinella, 2015). External competition and the influx of large quantities of cereal products from other markets – mainly wheat, barley, and legumes – made internal cultivation unprofitable. This phenomenon was accompanied by a reduction in cultivated agricultural land and the subsequent abandonment of fields, which encouraged the expansion

4 For further reading, see Orrù et al. (2018) that examine the relationships between Sardinian populations through the study of surname distribution, with particular attention to the role of transhumance as a possible channel of contact between the mountain communities of the Barbagia di Belvì and those of the southern Sardinian plains.

of Mediterranean scrubland and wooded areas over time that, in turn, necessitated efforts to control vegetation growth through fires, impacting the local ecosystem (Meloni & Podda, 2013). Moreover, there was significant growth in the sheep farming sector, primarily motivated by increased demand for milk to produce *pecorino romano* destined for markets outside the island (Angioni, 1993; Meloni & Farinella, 2015). Farmers and shepherds, affected by the agricultural crisis and shrinking cultivation, embraced various adaptation strategies, transitioning to sheep farming or related livestock sectors. In this sense, the Sardinian mountain production model shifted toward one based almost exclusively on sheep farming. Another change involved land use. With the decline in agriculture, municipal lands were no longer allocated for sowing, and even private properties turned toward grazing rather than cultivation. By the 1960s, about 90% of the agricultural land in inner Sardinia was devoted to pasture. Consequently, cereal and vegetable crops, including forage crops for animals, drastically decreased, contributing to the "transformation from an agro-pastoral economy to extensive pastoralism" (Meloni & Farinella, 2015). This shift implied a transition from an economic system based on the coexistence of agriculture and pastoralism to a model focused almost exclusively on sheep farming. Moreover, while the growth of extensive livestock farming led to the decline of the agricultural sector, it also resulted in stagnation in agricultural innovations as investments to improve the sector diminished. So, "the disappearance of cereal agriculture and the dominance of pastoralism are two sides of the same phenomenon" (Meloni & Farinella, 2015), a process of structural transformation that caused a gradual decline of agriculture as a pillar of the local economy.

In this period, along with external factors, several internal causes also contributed to Sardinia's traditional agro-pastoral mountain system crisis. The scarcity of arable land limited production efficiency, but it was not until the 1960s that agriculture began to be abandoned on a large scale. With the decline of traditional agricultural activities, local communities experienced an economic shift and social and cultural changes. The abandonment of agriculture reduced the available labour force for farming activities, shifting away from an integrated community model in which livestock and agriculture formed the productive core (Meloni & Farinella, 2015). In this model, reciprocity between farmers and shepherds provided economic and social sta-

bility, facilitating resource management and control over fields and pastures. As Angioni (1993) explains, "although not in the specialized and large-scale forms of the plains and hills, a coordinated exploitation of the land also existed in the mountains, balancing the needs of pastoralism with those of a more or less modest cereal and/or tree-based agriculture" (Angioni, 1993, p. 229; see also Meloni, 1984). Even in the island's highest villages (Meloni, 1984), agriculture and livestock farming were complemented by seasonal horticulture, which in the municipal territories of Desulo, Fonni, Gavoi, and Tonara represented a critical socio-economic and cultural resource, with a marked gendered character (Angioni, 1993). As Murru Corriga (1988) notes, while livestock inheritance passed through the male line, cultivated garden plots were inherited through the female line. Of this system, which structured the local productive culture in Sardinia's mountainous areas – generally located at a distance from inhabited centres, at lower altitudes, and near water sources – only traces remain today in place names[5] (Caltagirone, 1988). The transformation of pastoralism into a more extensive economy and the loss of agriculture's central role led to the decline of collective land management practices (Meloni & Farinella, 2015). Additionally, these changes resulted in a scarcity of forage for animals and a decline in pasture quality. The lack of land maintenance – cleaning, ploughing, and controlled seasonal burning – increased invasive Mediterranean scrub species, such as *cistus*, which further depleted pastures, degraded the soil, and compromised its productivity (Meloni & Farinella, 2015). Moreover, intentional fires were often used as a quick method to clear overgrown vegetation and make land usable for grazing. This situation was further compounded by the massive migration phenomenon that intensified during this period, affecting mountain villages and the entire island (Meloni & Farinella, 2015).

The 1950s marked a transition period in the island's recent demographic and socio-economic history, particularly for the municipalities examined in this research. The impact of the Italian economic miracle also reached the island, which experienced gradual industrial development starting in 1951,

5 To give a few examples: the area known as *sas argiolas* ("the threshing floors," where wheat was threshed – *argiolas*, in Southern Sardinian, is also the name for July, not by chance), in the municipality of Lodine; *s'ortu mannu* ("the large garden") or *Mandra 'e Voes* ("the oxen's enclosure"), in Mamoiada (Zirottu, 2004: 176); *inza manna* ("large vineyard"), in Bitti.

culminating in Law No. 588 of June 11, 1962, known as the *Piano di Rinascita* (Rebirth Plan). Among its numerous reforms, this plan included the establishment of petrochemical hubs in Sarroch and Portovesme in the south of the island, in Porto Torres in the northwest, and, a few years later – beginning in 1969 – the industrial centre in Ottana (Zedda, 2021).

On a demographic level, the census interval from 1951 to 1971 clearly shows a significant shift. On one hand, there was exponential growth in areas where industrial projects had been established, with a massive increase in population. For instance, Ottana's population grew by 32.88%, Sarroch by 74.44%, Porto Torres by 78%, and Portoscuso by 89.3%. Similarly, the population of provincial capitals and major coastal cities increased. In these cases, Alghero grew by 50.59%, Sassari by 52.75%, Cagliari by 61.96%, Olbia by 64.74%, and Nuoro saw an 83.11% population increase (ISTAT 2025). At the same time, the growth of coastal centres and those with industrial hubs coincided with the gradual depopulation of the island's inner and mountainous areas, including the research municipalities, which, except Nuoro, experienced a sharp population decline during this period. It is worth noting, however, that between 1951 and 1961, the population of these towns remained relatively stable; the demographic decline began with the 1961 census and continues to this day. Between 1961 and 1971, aggregated data show that the total population of the research villages decreased from 48,379 inhabitants in 1961 to 41,742 in 1971, reflecting a percentage decline of 13.72%.

Several factors lie at the heart of this phenomenon, notably emigration, the search for better job opportunities, and urbanization. During this period, emigration in Sardinia became prominent, bringing about profound socio-cultural, economic, territorial, and land-use changes. Emigration in Sardinia was multifaceted, marked by the mobility of young people, above all, but also of entire families, occurring on intra-island, national, European, and international levels, often following paths established by relatives or fellow villagers who had emigrated. Internal migrations within the island are generally headed toward coastal cities or emerging industrial hubs. Both authors have personal biographies reflecting this type of movement. For instance, the paternal family of one of the authors comes from a village in the Nuorese, an inner high-hill area. During seasonal transhumance, shepherds from the area would head toward the plains between the Baronia and Gallura, where, over

time, they acquired agricultural land. In the 1960s, with Costa Smeralda's real estate and economic development and the airport and port infrastructure in Olbia, many families from the area moved to what was then a large, rapidly growing town, seeking better jobs and educational opportunities for their children. For similar reasons, the family of the other author – originating from an inland Ogliastra village, where transhumance traditionally moved toward the Salto di Quirra and the Sarrabus – relocated to Cagliari, the island's capital and its economic, cultural, and political centre. In other cases, migration from the island's inner and mountainous areas headed toward the Italian mainland, specifically Umbria, Tuscany, and Lazio, filling economic roles vacated by local farmers and livestock breeders due to ongoing urbanization and industrialization (Solinas 1990; Meloni 1996). Similarly, the demand for labour in industrial and mining centres across Central and Western Europe led many Sardinians to emigrate to Switzerland, Germany, France, or Belgium – one of the authors, again, has family members who emigrated to Belgium – and to a lesser extent, to countries like Argentina, Australia, and the United States.

Between the 1950s and 1960s, mountain communities underwent radical transformations. Firstly, the decline of the agricultural sector in favour of extensive pastoralism reshaped the economic and social structure, marking the beginning of a phase of demographic and social depression that would impact cultural practices and the island's landscape. In this context, the Sardinian mountains experienced profound changes that, although economically driven, resulted in environmental and social transformations, establishing new socio-cultural and economic balances.

Economic Changes, Heritagisation, and Tourism

These phenomena significantly affected socio-economic, cultural, and consumption dynamics in the following years. From the 1970s onwards, the seasonal mobility of transhumance entered a period of decline, and mountain shepherds began to settle in the plains – areas traditionally reserved for cereal cultivation – establishing permanent agricultural enterprises. Once again, these changes were driven by both external and internal factors.

In demographic terms, those internal and external emigration took on structural characteristics, resulting in a 34.09% population decline between the 1971 census and the most recent data available for 2023 in the villages considered. The most significant loss occurred in Orune, with a decrease of 53.66% (ISTAT; Bachis et al., 2020).

Furthermore, the specialisation in sheep farming and the rapid development of the dairy industry contributed to transforming the role of the shepherd from a producer and manager of the entire cheese production cycle to a milk supplier for large processing plants (Meloni & Farinella, 2015). This shift led to a mono-specialisation in *Pecorino Romano*, with demand from the Italian and foreign markets, particularly the United States (Meloni & Farinella, 2015; Ruju, 2011). On a global scale, new interconnection processes are shaping a complex, interconnected landscape of ethnic, media, technological, financial, and ideological flows (Appadurai, 1996), which will inevitably have profound impacts at the local level, including in the mountainous areas of Sardinia.

Since the 1990s, the economic situation has worsened. In line with Meloni and Farinella's (2015) account, during this period,

> [a] persistent crisis has hit the dairy sector since the 1990s, driven by high volatility in global agricultural commodities and a steady price decline. At the same time, production costs (feed, electricity, or diesel) have risen, especially following the 2008 economic crisis. The crisis has worsened in recent years due to a collapse in exports to its historically crucial market, the United States. Since 2000, *Pecorino Romano* has been on a slow downward trajectory, losing market share due to competition from similar products from other European countries (France, Spain, Greece, and Romania) and its partial replacement by a locally produced cheese made partly with cow's milk.

Shepherds thus find themselves "trapped by both local conditions related to the structure of production relations and the conditions of global markets where the price of *Pecorino Romano* cheese is determined" (Pitzalis & Zerilli, 2013, p. 151).

These changes have had a significant impact on local communities and their traditional economies without, however, completely dismantling them.

On the contrary, the social and economic globalisation processes that began in the 1980s and 1990s have led – following a global trend, not limited to Sardinia – to a "rediscovery" of economic practices and specialisations, as well as traditional celebrations and, more generally, everything considered important to community identity and its connection to place. In this sense, today's local economies are closely tied to the increasingly diverse tourism industry (such as festivals like *Cortes Apertas* or traditional carnivals in Mamoiada). Processes of heritagisation – "objects and places are transformed from functional 'things' into objects to display and exhibit" (Harrison, 2012, p. 69) – and valorisation of places, objects, rituals, and practices considered heritage serve a dual purpose: both as an identity marker and as an economic resource (Kirshenblatt-Gimblett, 1998; Salemink, 2021), which is even more crucial in a context marked by depopulation (Bachis et al., 2020; Breschi, Perra & Ruiu, 2023). In addition to the broader context driving this trend, institutions at all levels play a decisive role in these dynamics. Since the 1990s, for example, the European Union has established various programmes (such as LEADER) to support and finance local, regional, and micro-regional skills and technical knowledge. This interest is linked to the idea that diverse environments, landscapes, and local economies form a foundational part of Europe's history. Thus, from this period onward, the EU began to support and promote this rediscovery or preservation (Lai, 2012). At the national, regional, and local levels, numerous programmes and funding initiatives (such as the significant role of *GALs*, or Local Action Groups) also aim to develop sustainable tourism models that draw upon the territorial capital (De Rubentis, Mastromarco & Labianca 2019) of different areas.

In the mountainous areas of Sardinia under consideration, this approach is realised through public and private initiatives to carve out a niche within the complex and crowded tourism and heritage market. One strategy, for instance, involves reducing the near-exclusive reliance on livestock farming and dairy production by diversifying income streams and supplementing traditional production with other activities that can generate additional revenue and mitigate risks associated with fluctuations in global market prices (Meloni & Farinella, 2015). In Fonni, for example, the *Parco Oasi di Donnortei* is a family-run agricultural enterprise established in the 1990s to integrate traditional sheep farming with raising "wild" species, particularly mouflons.

Over time, fallow and red deer have also been introduced on a large expanse of land within a Natura 2000 site. This economic strategy is currently complemented by hospitality, dining, and educational farm services, with a small private helipad for mountain tours (Branca & Pulino, 2025).

Territory – whose "development [is] a local/global/local process that unfolds by continuously disorganising and reorganising itself" (Ther Ríos, 2012) – is a critical term in local strategies focused on tourism and heritage. This perspective frames private initiatives like "Trekking e musica ad alta quota, 1660 m", held in 2024 in the municipality of Desulo on the Gennargentu, or the parallel "Trekking, musica e paesaggio" at Sa Stiddiosa, in the areas of Seulo and Gadoni. The heritagisation of territory – and nature (Santamarina, Vaccaro & Beltran, 2014) – is reflected in changes to the meaning of the term itself, shifting from a place of work and production to a site of leisure and the reproduction of contemporary identities and consumption (Lai, 2017). This is evident in regional and/or local projects aimed at rehabilitating traditional structures and infrastructures that, until about fifty years ago, were essential to production, such as *sos pinnetos* (*pinnetu*, singular) – traditional circular structures used by shepherds, especially in mountainous and wooded areas, built with local materials, a stone base, and a conical roof of wood and branches or foliage. These former pastoral workspaces are now transformed into refuges and landmarks along hiking routes crossing the island's mountains, alongside ancient lime or charcoal kilns and, in general, traditional trails used by woodcutters and charcoal burners, by shepherds during transhumance, and by cattle rustlers[6], as in the Tepilora Natural Regional Park (Branca, Haller & Mossa, 2023). The Regione Autonoma della Sardegna is investing considerably in these trails (Battino, Lampreu & Amaro García, 2022).

The territorial dimension extends beyond the environment to encompass the landscape's construction and (re)production, mainly through the cultural history of economic production. Another increasingly common strategy, closely tied to what María Elena García (2021) describes as "gastropolitics" in the context of Peru, is the importance of food in strategies of heritagisation and tourism promotion (Di Giovine & Brulotte, 2014; for example, Grasseni (2011) for a comparison with the Italian Alps). In this context, the approach

6 See http://www.camminotransumanza.org/ and https://www.sardegnasentieri.it/itinerari-per-tipologia/4724.

is highly diversified, including numerous types, from dining to the recognition of excellence in local products, seasonal festivals, and the branding of the mountains. National reality shows, for example, contribute to showcasing the stories and gastronomic offerings of local restaurants, drawing on folk notions such as tradition, authenticity, and innovation, which align well with discourses that can be described as "globally local." An example is an episode of the television series *4 Ristoranti* (directed by Gianni Monfredini, 2022), hosted by Alessandro Borghese, featuring several restaurants in Barbagia or certifications of wine, gastronomic, and dairy products such as IGT Barbagia / Strada del vino Cannonau, DOP and DOC Mandrolisai, or the Consorzio Tutela Formaggio Fiore Sardo DOP of Gavoi.

Moreover, strategies to include inner and mountainous areas in prestigious national and international registers also contribute to integrating these regions into the tourism and heritage markets. As Barbara Kirshenblatt-Gimblett (1998) argues, "heritage and tourism are collaborative industries, heritage converting locations into destinations and tourism making them economically viable as exhibits of themselves" (Kirshenblatt-Gimblett, 1998, p. 151). For the municipalities analysed, examples include two UNESCO recognitions – the Canto a Tenore and the Tepilora Biosphere Reserve (Branca, Haller & Mossa, 2023), as well as the inclusion of the Mandrolisai polycultural landscape in the National Register of Rural Landscapes of Historical Interest (Regione Autonoma della Sardegna, 2018).

All of this contributes to the creation of a territorial brand which, in Sardinia's mountains, is embodied by the label *Prodotto di Montagna* (Mountain Product), an initiative by the regional agency Laore, which promotes and enhances agri-food products from mountain areas. The goal is to encourage the adoption of the quality label Prodotto di Montagna, an optional designation from the European Union intended to identify and promote products from mountain territories, bearing different meanings for consumers and producers. For consumers, it represents a certification of authenticity and quality, guaranteeing that products originate, are processed in these mountainous areas, and are often made using traditional and sustainable methods. For producers, on the other hand, the label offers a tangible opportunity to access markets that prioritise product quality and origin, enabling them to promote local production and stand out in an environment increasingly shaped by

sustainability and a growing awareness of mountain communities. As Salemink suggests, the "brand […] effectively functions as a quality certification and therefore as a brand in the global tourism industry" (Salemink, 2021, p. 5).

Discussion and conclusions

As discussed throughout this chapter, the socio-territorial transformations experienced by Sardinia's inland mountain regions must be understood as part of a complex set of interrelated trajectories – demographic, socio-economic, and environmental. These can be summarised along four main lines. First, significant migratory flows began in agriculturally specialised areas and extended to agro-pastoral zones. This phased progression, while schematic, reflects the uneven geography of economic vulnerability and opportunity within the island.

Second, the local responses to this upheaval included a gradual shift of pastoral groups from mountain areas to the plains (*Campidani*), often along historic transhumance routes. However, rather than maintaining seasonal mobility, these movements resulted in new patterns of landownership and settlement, already emerging in the early 20th century (Meloni, 1984; Murru Corriga, 1990, 1998; Lai, 1995; Ortu, 1988, 2000). It may be argued that the "original accumulation" generated by favourable dairy markets between the 19th and 20th centuries enabled pastoral families to purchase lands abandoned by emigrating farmers or following the decline of extensive cereal production. In some cases, pastoral groups successfully migrated to mainland Italy – for example, to the province of Siena – occupying land vacated by the collapse of the *mezzadria* (sharecropping) system.

A third trajectory concerns the persistent demographic decline. Local actors today are grappling with depopulation and population ageing and sustained youth outmigration. Fertility rates are now aligned with those of post-industrial regions such as Liguria. The continuing exodus of younger generations has compromised demographic renewal and the viability of essential services – schools, healthcare, banking – posing structural risks to the social fabric. Demographers have described this condition with the metaphor

of Sardinia as a "doughnut island": an empty demographic centre surrounded by relatively populated coastal and peri-coastal areas (Breschi, Perra & Ruiu, 2023). In contrast to other European contexts where youth-led "return to the land" movements have gained some ground, these experiences remain rare and often isolated in Sardinia's inland areas. The reduced services and economic uncertainty are among the main reasons and, as one cork worker in Gavoi remarked during an informal conversation in July 2024, many parts of the countryside today are more deserted than in the past.

Finally, in response, various local strategies have emerged. These include repositioning agri-food and craft production toward so-called "typical" and "quality" goods, often through EU-funded programmes such as LEADER. Cultural and tourism initiatives – festivals, seasonal rituals, and food fairs – have helped attract domestic and international visitors[7] (Meloni, 2020). Hiking and ecological tourism have developed around Sardinia's numerous protected areas and historical trails, including revived transhumance routes like the Tramudas project (www.tramudas.com). Finally, local museums and ecomuseums contribute to a dense cultural landscape, positioning Sardinia among Italy's most active internal regions regarding heritage engagement (ISTAT, 2025). These long-term processes, interpreted in their socio-territorial dimension, help contextualise the current responses of local communities, discussed below.

The complex landscape of Sardinia's mountains, explored through an analysis of socio-economic and cultural changes, reveals a territory where community resilience has navigated the transition from polyculture agriculture to intensive pastoralism and, more recently, to initiatives in heritagisation and economic diversification. The transformations of the agro-pastoral model and demographic decline highlight the adaptive strategies of local communities, which blend traditions with the opportunities offered by tourism and global markets, mainly through the promotion of local products, her-

7 On a jazz festival as a tool for cultural, environmental, and food and wine tourism, see Meloni (2020); on traditional festivals and local fairs, see https://www.traccedisardegna.it/page/sagre-gastronomiche; www.italia-italy.org; and the Autonomous Region of Sardinia, Tourism: https://www.sardegnaturismo.it.

itagisation policies, and economic diversification initiatives, including tourism activities rooted in local identity.

These strategies reflect phenomena not limited to Sardinia but common to mountain regions globally, manifesting differently according to context. Ultimately, they demonstrate that change is not an abrupt rupture but a constant presence. At the same time, Sardinia's experience shares some traits with other mountain and island regions in the Mediterranean, such as Crete, Corsica, or parts of inland Cyprus, which have also faced rural decline and tried to rethink their development strategies. Nevertheless, what stands out in the Sardinian case is how transformation has taken shape not so much through demographic return or radical economic shifts but through gradually reworking identity, land use, and symbolic value. Change here it often unfolds through institutional frameworks, local projects, and attempts to make heritage a usable resource – yet this process is far from neutral. Decisions about what is preserved, promoted, or commodified reflect broader power dynamics shaped by funding structures, regional policy agendas, and the selective visibility of certain traditions over others. This has shaped different responses to crises that often rely less on demographic return and more on the symbolic value of heritage, and selective forms of place branding.

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