

The Privatization of the Common Real Estate in Lombard Alpine Valleys in the Nineteenth Century: Social, Economic, and Environmental Effects

Luca Mocarelli

*University of Milano-Bicocca,
Italy*

Paolo Tedeschi

*University of Milano-Bicocca,
Italy*



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Introduction

This paper deals with the effects of the privatization of common real estate in the Italian Alpine valleys in the nineteenth century, mainly in Lombardy. The sale of a large part of the common real estate greatly changed the methods that the Lombard communities normally used to increase production (or to maintain the same yields) on their properties as well as the system for distributing the associated ‘fruits’ (grain, hay, wood, as well as the rent from pastures, smelting furnaces, mills, etc.).

The villages located in the Alpine valleys gradually lost their social and economic equilibrium, which also had a negative impact on the environment. The privatization of common real estate was not the only factor that destroyed the existing equilibrium; however, it had relevant effects and it also weakened social cohesion and made the local economy less resistant to changes brought about by technological advances in transport and industrial production. Thus, many Alpine villages that had been able to maintain a stable population structure for centuries lost a very high proportion of their population within a few decades. Only in some valleys, which produced high quality artisanal products and had a favourable location in relation to lowland markets, the effects were limited, and

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the foundations were even laid for the creation of new industrial districts in the Alpine valleys.

Our work allows scholars concerned with the factors affecting livelihood outcomes, sustainability, and social and demographic change to obtain some evidence from past privatizations. It also shows how the mismanagement of natural resources produced negative environmental impacts from the very beginning of industrial development (in this case, the Italian one). Finally, it shows that privatization processes had different effects, sometimes negative, depending on the assets affected by the new regulations that favoured private landowners instead of communities.

The Management of the Lombard Alpine Common Real Estate Before its Privatization

At the end of the eighteenth century, in some villages of the Alpine valleys, there were institutions called *vicinie*, formed by the members of families who had lived in the village since the Middle Ages or, since 1764 in the Republic of Venice, by residents who came from families that had lived there for at least fifty years. These institutions owned real estate or had rights to it and managed it through public assemblies. Participation in these assemblies was compulsory: if absence was not justified (e.g. in the case of illness or work outside the village), financial penalties were provided. Local statutes specified when the assembly was to be convened and the majority required for valid decisions, such as rules for electing people who had to ensure the proper use of common resources. It was the case of the people managing the common real estate and the ‘guardians’ who checked compliance with the rules for the use of the common properties, especially the correct way and time of their use. These people made sure that the decisions of the inhabitants about the use of the ‘commons’ and the distribution of its fruits were respected.¹

The common real estate consisted of: (a) forests, which provided raw materials for heating, cooking, buildings, forges, (using charcoal) and tanneries (using the tanning agent); (b) pastures, which provided fodder

1 About the management of the ‘commons’ in Italian ancient States during the eighteenth and nineteenth centuries see, among others: Lorenzini (2020), Bonan and Lorenzini (2019), Ongaro (2016), Mocarelli (2013; 2015), Tedeschi (2011; 2013; 2014), Alfani and Rao (2011), Barbacetto (2008), Pieraccini (2008), Casari (2007), Conte (2002), Corona (1997), Scarpa (1996), Cacciavillani (1988), Farolfi (1987), Pitteri (1985), Guidetti and Stahl (1976), and Tocchini (1961).

for cattle and sheep; (c) low quality arable land and outbuildings such as barns, haystacks, stables, etc.; and (d) smelting furnaces, mills, sawmills. Thus, they were economically important for the village and the survival of its inhabitants, especially the poorest families. If the yields of fruits for human consumption such as cereals were low, the yields of forage and wood were good, both in quality and quantity. Common pastures and forests usually made it possible to feed local livestock and secure firewood for family needs. Common buildings obviously enabled inhabitants to better conserve their fruits. In some villages, they also enabled local artisans to + and sell high-quality handmade goods.

The Assembly also had to decide on all periods of working time concerning free services for the maintenance of roads and the eventual reconstruction of dams, bridges, etc. In the villages having furnaces and forges, it also decided on the division of wood for domestic use (heating and cooking) or for local handicrafts. Regarding the common real estate, the assembly also determined: (a) fines for damages caused by unattended cattle or for people who picked fruits prematurely; (b) the rent for local and foreign cattle breeders who used the common meadows from June to September (when they went back to the plain with their cattle); and (c) the taxes paid by all families for the co-ownership share. Finally, the assembly voted on how the fruits of the common property, i.e. both the harvest and the rent, should be divided among the families.

The management of the common property was especially difficult when the economic and weather trends were negative. In these cases the poorest families tried to harvest more fruits than they were entitled to, which led to disputes with other inhabitants and especially with the managers of the common property, who usually had high professional qualifications and were able to ensure a good income for their families. Thus, sometimes fierce disputes arose over the distribution of the fruits of the common real estate. This explains why it was absolutely forbidden to participate at assemblies with weapons, sticks, or other offensive objects and why the use of the commons was regulated in every detail by statutes.

In the Alpine valleys of Lombardy, the common real estate belonged to communities because: (a) it was impossible to find a private owner; (b) the communities received the real estate by legacy (a rare case, since legacies were usually reserved for ecclesiastical institutions); (c) the communities acquired the real estate from people who were unable to pay their debts (an uncommon case, since family networks that controlled the local credit system gave borrowers long payment terms to avoid protests that dis-

turbed the social peace in the community); (d) the communities obtained the rights to use the properties from the state; (e) the buildings or structures were constructed through the collective labour of the villagers (e.g. a stable, hayloft, furnace, mill, or sawmill); (f) the state granted the use or management of that property (e.g. a bridge, a road, a forest) in exchange for a share of the fruits and/or full maintenance (this usually happened in the valleys that belonged to the Republic of Venice).

The goal of common real estate ownership was to improve the quality of life of the inhabitants in a harsh environment like that of the Alpine valleys. For the poorest families, the fruits of the common property were usually essential for survival, and this explains why they received a significant part of the proceeds. The remaining fruits were distributed to other inhabitants who owned real estate and paid the corresponding taxes; the distribution concerned wood, hay, shrubs, and fruits such as walnuts, chestnuts, berries, etc. It was also possible to share cash – the income from the lease of pastures, parts of forests and rural buildings.

All the families living in the village had the following rights on the common real estate: the *erbatico* (to gather up the wild grass, medicinal herbs and sods), the *legnatico* (to gather up shrubs, firewood and all wood waste that could not be used to produce charcoal), the *pascolo* (to drive their cattle to pasture, but only the bovines, because the sheep had to use specific and limited areas, while the goats were forbidden everywhere), and the *spigolatura* (to gather up all the seeds left after the harvest). Families also had the right to collect leaves (to prepare bedding for the cattle) and stones (for building), as well as wild vegetables and fruits. For the payment of a fee, it was also possible to plant trees (usually chestnuts and mulberry trees) and harvest their fruits for years, or collect waste in the woods and use it as fertilizer and, in autumn, to spread on the streets of the village a layer of dry grasses and straw that usually served as fodder and bedding for the cattle. During the autumn and winter, animals (and sometimes people) left their droppings on this mantle, which absorbed them: thus, in the early spring, the families who had paid for such a right cleaned the roads and fertilized their plots of land. Finally, all families could rent a pasture for cattle breeding and some wood for felling; in this case, however, they were in competition with the ‘foreigners’ who offered higher rents.

The main problem for the local administration was obviously to find the right compromise between the rights of the villagers and the correct use of the commons; it was difficult to control and coordinate the use of

common real estate and to evaluate the real needs of the poor families. To secure more fruits for all villagers, it was necessary to increase production and yields. However, most Alpine communal lands were on soils of poor quality or had limited exposure to sunlight during the day (a few hours or not at all in the colder months), so the real improvements associated with expensive investments were generally small.

The division of the fruits from the use of the common real estate constituted only a part of the budget of the Alpine families. Most Alpine people survived thanks to the Integrated Peasant Economy (IPE), which combined agricultural income with income from other work carried out in the valley or from temporary emigration to farms or towns on the plains.²

The IPE represented an important and efficient barrier against permanent emigration from the Alpine valleys and ensured a stable (sometimes growing) demographic condition. Depending on their professional skills, all members of Alpine families were engaged in many different activities, including agriculture, animal husbandry, forestry, and, where there were mines and forges, iron extraction and the artisanal production of iron and brassware. The most skilled men worked as artisans in forges or as woodcutters or charcoal burners. The others worked in other productive fields inside the house (spinning and weaving) and outside (paper mills and sawmills) or in the transportation of raw materials and finished or semi-finished products. The women took care of the house, the small plots of land and the few livestock that the families owned. In addition, seasonal migration was an important source of household economy: adult men worked mainly harvesting grain and grapes on the plains or as porters or masons in the towns; adult women usually worked as cleaners or servants. Their professional skills were well known, and their wages were very competitive in the labour market of the plains, both in the countryside and in the cities.

The income generated by temporary migration allowed the integration of household income and ensured the survival of Alpine families, including the poorest ones; only when the harvest was scarce due to bad weather conditions and/or the negative economic trend severely reduced IPE income, did the poorest families of the village face serious problems. However, since the negative trends in agriculture and industry were few, the poor families were supported by the richest families in their village.

2 About the concept of IPE cf. Panjek (2017; 2024). See also Viazzo (1988), Coppola (1991), Lorenzetti and Merzario (2005), and Tedeschi (2015).

In fact, the latter influenced the management of the common real estate and the distribution of its fruits; they wanted to make money, of course, but they also wanted to ensure social peace in the community and therefore increased the share of fruits for the poorest families. Moreover, they usually controlled the local credit system, since they also managed, together with the local clergy, the local ecclesiastical institutions that lent money. Small church offerings, rich donations, and legacies related to real estate enabled the ecclesiastical institutions to help poor families, but also to finance artisans and, in general, all the people who lived in the village and ran workshops or other economic activities. Since the villagers all knew each other, it was difficult to remain indifferent to the livelihood problems of the poorest families and the financial needs of the artisans. Loans had very favourable conditions, because the goal was to improve the quality of life of the inhabitants and to ensure social peace; they allowed the richest families to increase their prestige and gain recognition and power in the village.

The IPE and the richest families' attitudes allowed the Alpine villages to maintain a good economic and demographic equilibrium during the eighteenth century, especially in the Alpine valleys that belonged to the Republic of Venice. This was also favoured by low taxes and high tariffs to protect local production. Moreover, the wide range of handmade goods produced in these valleys (firearms, cutlery, swords, agricultural tools, frying pans, sheet metal and gutters, steel and ploughshares, depending on the specialization of the village) allowed diversification of supply on international markets while limiting competition between Alpine villages.

These positive results were also based on: (a) a division of firewood and charcoal between the iron and brass manufacturers and the inhabitants of the village, which privileged the needs of the workshops; (b) the continuous improvement of the quality of the workshops' production, which also depended on new investments made possible due to the favourable conditions of the local credit market; and (c) a strong link between the latter and the real estate market, since the land was used as a guarantee to obtain financing by the local ecclesiastical institutions.³

3 About the credit and real estate markets in the Alpine valleys, see the case of Eastern Lombardy: Tedeschi (2007; 2008).

The Economic Changes in the Lombard Alpine Valleys During the French and Austrian Domination

The economic context that allowed the maintenance of social and demographic equilibrium in the Lombard Alpine valleys changed greatly in the nineteenth century: political choices and technological innovations led to a gradual reduction of Alpine self-governing institutions and their role in the maintenance of common resources. As a result, the area of common real estate and its economic function decreased for the people living in the Alpine valleys. The increasing financial needs of the state and the consequent increase in real estate taxation made it more and more difficult to manage Alpine common land;⁴ this means that the progressive reduction of common real estate was attributable to the state, i.e. to the same institution that had previously allowed Alpine communities to manage the commons thanks to the rights granted to villagers to most (and often all) of the fruits.

At the beginning of the nineteenth century, real estate taxation increased sharply due to the new Napoleonic cadastre, and this reduced the actual revenues that Alpine villages could distribute to their communities. The Napoleonic wars reduced the public funds available to local administrations and, consequently, their control over the exploitation of common real estate as well as investments, to obtain the same yields. Moreover, the first decades of the century were characterized by the adoption of new laws based on the bourgeois ideology that assumed that the improvement of production depended on the abilities of entrepreneurs, which were considered better than those of collective institutions from the Middle Ages. The French (and after the fall of Napoleon, the Austrian) authorities considered that private owners were better able to exploit the real estate than the Alpine communities, and so they favoured the sale of the commons, or its lease if it was not possible to find new buyers and if the majority of the villagers managed to prevent the sale.

In 1820, new Austrian legislation favoured the sale or lease of communal land, and a further reduction of communal land was related to the law enacted in 1839, which provided for the forced sale of a large part of Lombard common real estate (Raccolta Atti Governo 1820; 1839; Pitteri 2005); the goal was to increase the output of these common lands through

4 About the relevance of public institutions' choices for the social and economic evolution of a State or a region see, among others, North (1990; 2005). Concerning the Lombard case during the nineteenth century, see: Locatelli and Tedeschi (2017; 2018a; 2018b; 2022).

new investments by private landowners. If in the past the sales of common real estate had depended on financial needs, now they were compulsory whenever the commons were not cultivated or not used as pasture (a rare occurrence in the Alpine valleys), but also when they did not guarantee a good income. The new objective was to improve the fiscal contribution of the Alpine villagers by increasing the yield of the Alpine communal lands. The Austrian authorities evidently underestimated: (a) the social and economic importance of the common real estate and the traditional rules for its use; and (b) the real costs and the real possibility of improving the production and yields of Alpine pastures, forests and less fertile arable land. Thus, as a consequence of the new legislation, the Alpine communities had to pay more taxes than before, but they also had to continue to satisfy the same needs of the villagers, whose income kept decreasing due to other factors that depended on the improvement of technology in the field of transportation and industrial production.

It is important to point out that the tax increase for the Alpine villages of western Lombardy, which were part of the Austrian Empire, began in the last decades of the eighteenth century. In order to reduce the public debt and rationalize the taxation of real estate, the Austrian government decided to create a new cadastre and to eliminate all favourable fiscal rules related to the commons. The tax burden was low and the new fiscal system, based on a stable tax for many years, favoured landowners who invested in improving the real estate yields. Since the new taxes depended on the estimate of annual ordinary production, any fruit produced in excess of the fiscal estimate did not form a tax base. However, the real impact on the quality of life of the Alpine villagers was not fully understood by the authorities, since the new cadastre came into force only a few decades before the Napoleonic wars and, moreover, did not concern most of the Lombard Alpine villages, which were located in the eastern part of the region, that is, in valleys that until the end of the eighteenth century belonged to the Republic of Venice or to the Swiss canton of Grison. Moreover, few villages were located near the plain; on the contrary, in eastern Lombardy many villages were far from the markets in the plain. In the nineteenth century, the increase of taxes and the consequent recessionary effects on the income of the villagers had more relevance, along with their impact on the sales of the Alpine common real estate. Finally, the new French laws limited the villagers' ability to intervene in the decisions of the authorities. For example, all restrictions on the sale of common real estate disappeared, since the *vi-*

cinie were abolished in 1806 and the rights were transferred to municipalities. The consent of most families living in the village was no longer required for the sale of property; it was thus easiest for the local administration to put 'commons' on the real estate market. The French government affirmed the absolute priority of its needs over the other collective institutions; the sale of the *beni nazionali* showed that collective property could be used to improve public finances. The *beni nazionali* were the ecclesiastic institutions' properties which were confiscated and then sold by the State after the French invasion (on Lombardy, Cova 1963a; 1963b; Farolfi 1967).

The attitude of the new authorities eventually led to the gradual purchase of commons by the richest families in the region or foreigners who invested in real estate to exploit it or as collateral for loans.⁵ Some new landowners, seeking a quick return on their investment, changed the main cultivation and/or practiced overexploitation of their new properties without considering the associated negative impacts on future production and the environment. They did not invest to improve yields, as the increase in productivity was small and, moreover, had positive effects only in the long term. However, in the first years after the privatization of the commons, the government and the Alpine villagers were deceived about the positive effects of the new laws. By selling the common real estate, communities received the money they needed to meet their needs, and they were able to help the poorest families who had lost their rights to the commons. They also had the prospect of further revenue from a portion of the taxes on: (a) the former common real estate; (b) the fruits (wood, hay, etc.) sold by the new landowners; and (c) the rent of the former common pastures and forests. At the same time, the new landowners increased their income and amortized the amounts spent. This economic development finally allowed the Austrian government to increase fiscal revenues, which was the real goal of the new laws.

However, in the second half of the nineteenth century, the negative economic trend forced new landowners to save the cost of routine maintenance of their new real estate and to increase the exploitation associated with it. The attitude of the new landowners created significant environmental costs by encouraging indiscriminate tree cutting and the

5 About the effects on the Lombard economy and real estate market of the new cadastre and new taxes from the second half of the eighteenth century to the end of the Napoleonic period, see: Locatelli and Tedeschi (2012) and Mazzucchelli (1984).

associated reduction in forested area. This reduced the future availability of timber and caused landslides and flooding in some Alpine valleys. In addition, the overuse of pastures gradually reduced the amount of forage available for cattle-breeding; this, of course, had a negative impact on rents and local dairy production.

While it was possible to recover from the damage to the former communal meadows in a short time, it took a long time to remedy the damage to the communal forests. Every mistake in cutting the trees resulted in a significant reduction of the forested areas. If the different times required for the regrowth of the trees were not respected, a progressive deforestation started. Thus, in the Alpine valleys, even if the families and the artisans demanded an increasing production of firewood for heating and cooking and more charcoal for the forges, it was not possible to increase the felling of hardwood and mixed coppice (*bosco ceduo forte e misto*). The villagers knew that the initial advantage would lead to less raw material in the future. This explains why the right of *legnatico*, as well as the contracts for the exploitation of communal forests, strongly regulated and limited wood production. Only the needs of the government, for example to increase the production of ships in the Venice Arsenal or of weapons in the valleys, had the power to temporarily increase the exploitation of the Alpine forests.⁶

New landowners, who sometimes did not live in the village or the valley, ignored these rules and their goal of preserving the forest; they were not obliged to respect them and cut in excess. And even when there were laws regulating the use of the commons, some new landowners (or their tenants) evaded the controls and misused the real estate; the amends (when paid) did not compensate for the costs of restoration in the following years.

The area of former common real estate decreased or changed its characteristics. In many cases, larger trees were replaced by coppice (in order to have new wood in the short term) and new mulberry trees were planted (the cold temperatures in the valleys did not allow profitable silk-

6 About the strategies and problems concerning the management of Italian Alpine forests, a wide bibliography exists. See, among others, Bonan (2019), Occhi (2017), Lazzarini (2009), Agnoletto (2005), Visconti (2002), Agnoletti (1998; 2002), and Sansa (1997). See also Agrawal (2007) and Gibson, McKean, and Ostrom (2000). Concerning the supplies for the strategic needs of the Republic of Venice, see: A. Lazzarini (2014; 2018; 2019) and Mocarelli and Ongaro (2017). See also references in note 1.

worm breeding, but the sale of mulberry leaves in the hills and plains provided relevant earnings). However, the related earnings were offset by the progressive deterioration of timber quality and the decline in the value of mulberry leaves from the mid-nineteenth century onward due to the arrival of the *pebrina*.⁷

The over-exploitation was sometimes associated with the presence of services in favour of the villagers, in order to reduce the investment for the improvement of the former common real estate; when new landowners had to respect these services, part of the profits was reserved for the people who had the related right. This lengthened the payback period and increased the willingness of new landowners to exploit the real estate. If the members of the local administration were not able to sell the commons at a good price and were forced to lease them, the tenant had to respect the services, thus recovering the lost income through excessive use of the pastures or forests. It was a real compromise; the services should have been abolished to avoid overexploitation, but in this case the local administration had to compensate the villagers who lost their rights.

The best condition for the Alpine villages (and also for the environment) occurred when most of the families protested and forced the local administration to sell only part of the common real estate and rent the other to the villagers at a low cost. In this way, all services could be maintained and the local tenants continued to abide by the rules that prevented unfair use of the common real estate. However, this situation did not last long: increases in taxes forced communities to raise rent, eliminate services, or sell. Sales also occurred when the low quality of common real estate made prices too low. It was more profitable to rent, but if the tenant could not pay the rent because his income was too low, the local administration had to sell.

The Lombard Alpine Valleys in The New-Born Kingdom of Italy

The entry of the Lombard Alpine valleys into the new Kingdom of Italy did not improve the situation. Faced with the reduction of common real estate in area and cadastral value (in the valleys of eastern Lombardy it was almost 15 and 43 percent, respectively), the new Italian government increased taxes to pay for the costs of Italian political unification. The Alpine communities had less money for the poorest families and the outlook was not good: the distribution of the real estate in the Alpine valleys

7 About the silk industry granting high income for the Lombard economy and the negative effects of the *pebrine*, see: Fumi (2019), Tolaini (2022), Tedeschi (2006) and Moioli (1981).

was changed and the number of landowners increased, especially those who worked in manufactures such as forges or cattle breeding. They generally used their new property as a guarantee for loans they needed and made few investments to improve yields. Moreover, in 1877 a new law allowed unlimited exploitation of the forests, and the damage to the environment obviously increased. The new landowners were cutting more trees than before because they were supplying wood to the sawmills (and also to some tanneries) in the valleys to increase their market due to the new demand from the cities in the plains. Where the number of trees decreased sharply or coppice replaced all the larger trees, the roots were no longer able to hold the soil, resulting in new landslides and floods. The same disasters occurred in the mountains, where forests were replaced by cultivated land and pastures (with equally low yields). Thus, the environmental costs were higher than the loss of income due to inefficient collective use of the common forests. It was not until the late 1880s that the Italian government changed the legislation and avoided excessive logging; however, the existing damage took a long time to repair.⁸

At the same time, the overexploited pastures provided less forage for the cattle-breeders, who demanded a reduction in rent. This meant that the local administration received less money and, in general, a further reduction in the work necessary to improve (or at least maintain) the yields in the meadows and/or hay. It often became more profitable to have meadows without cattle and sheep because this allowed for three rich cuts (June, August, and September) and the sale of hay in the market on the plains. This, of course, reduced livestock and associated fertilizer, because leases usually stipulated that animal manure had to remain in the meadow; this ultimately reduced yields and the revenue generated by the use and/or sale of this manure. At the end of the nineteenth century, new agricultural institutions, the *Cattedre ambulanti*, financed new studies and projects to change the trend. The new goal was to increase the size and quality of the meadows and in this way improve cattle-breeding and related dairy products, whose economic importance continued to grow.⁹

8 About the excessive deforestation in the Lombard Alpine valleys and its effects during the nineteenth century, see Fusina (1856) and Rosa (1878; 1882).

9 The *Cattedre ambulanti* coordinated the activity of farmers and breeders and favoured the diffusion of more productive cultivation practices and more efficient productive systems, see: Failla and Fumi (2006). About the evolution of the Lombard dairy sector during the nineteenth century, see: Rosa (1888), Tedeschi and Stranieri (2011), and Besana (2012).

At the end of the nineteenth century, the area of common real estate in Lombardy remained relevant (for example, in the valleys of eastern Lombardy it was 50 percent), but especially in the high valleys there were many *incolti produttivi*, that is, uncultivated plots of land that were no longer used as meadow or forest. The quality of common real estate and the associated capability to produce fruits declined, and compared to the Napoleonic period, the decline was significant in both size and value. In the valleys of eastern Lombardy, for example, the area decreased by almost 30 percent, and the cadastral value was reduced by more than 70 percent. The common real estate ownership obviously brought fewer benefits than before and did not allow the Alpine communities to help the villagers, especially the poorest families. This happened while Lombard agriculture in the plains and hills registered a great improvement in production and yields in the nineteenth century, thanks to technological innovations, new landowners who made appropriate investments, and the introduction of various agricultural contracts that allowed for the efficient management of plots of different quality and crops.¹⁰

These events explain why the quality of life of Alpine families declined sharply in the second half of the nineteenth century. The main problems, of course, affected the poorest families, who depended on the rights to the fruits of the common real estate: the loss of this income was not compensated by subsidies of the authorities. The latter kept decreasing as the Alpine communities received less money than before through local taxes and rents of forests, pastures and associated buildings.

Other decisions of the Italian government and the impact of technological innovations worsened the living conditions in the Alpine valleys. The Kingdom of Italy expropriated part of the assets of the ecclesiastical institutions and these reduced the aid and credits that had previously been guaranteed to the villagers and their workshops. There were no banks in the Alpine valleys (the first ones arrived in the 1880s) and this led to a lack of financial liquidity and consequently to a decline in artisan activity.¹¹ At the same time, local artisans had to face competition from products made in the new factories in the plains where the workforce was cheap and the quality-price ratio was good. The quality of the handmade

¹⁰ About the evolution of Lombard agriculture during the nineteenth century see, among others: Fumi (2022), Tedeschi (2017), and Locatelli and Tedeschi (2018a; 2018b).

¹¹ About the Lombard banking system during the nineteenth century, see: Cafaro (2000; 2002).

goods of the Alpine workshops was usually higher, but it was necessary to lower the price or direct production towards high-value niche markets. In addition, the rent for Alpine pastures for cattle-breeding decreased due to the development of new large dairy farms in the plains and the spread of modern stables for year-round cattle breeding, reducing transhumance between the plains and the mountains in the summer. This also lowered the rent for the buildings where the cheese was made and, of course, the production of Alpine cheese and the associated local taxes on trade. In addition, technological innovations in transportation, especially the spread of railroads, increased the competitiveness of raw materials coming from transalpine countries and reduced the market in the plains for the Alpine mines, whose sales depended on the demand of local workshops.¹² Finally, the progressive introduction of agricultural machinery in the plain and the great agricultural crisis of the 1880s meant that seasonal work was no longer available in the countryside. Many villagers thus lost their temporary work in the plain and the income it provided.

This situation led to the definitive emigration of many families and thus to a decline in the population of the Alpine villages in Lombardy. These lost more than 20 percent of their inhabitants, but the demographic decline sometimes reached 45 percent in the high valleys, which were far from the main markets in the low valleys and plains. For many families in the Alps, the income from IPE and the use of common real estate was not enough to survive. The only solution was to emigrate permanently to the low valleys or the plains, although some also sought new work in other European countries or crossed the ocean to reach North America or Latin America. The privatization of the commons with the aim of increasing fiscal revenues and improving the quality of life of the Alpine inhabitants did not have the expected results and, together with other factors, contributed to the destruction of the existing social and economic equilibrium.

However, this process did not affect part of the villages in the low valleys, where there were iron, brass, or textile manufactories that produced high-value goods for niche markets (e.g. cutlery, weapons, metal tools). These workshops continued to sell their products in the lowland markets, thus preventing the increasing migration of the inhabitants. The professional skills of the villagers and their ability to diversify their products

¹² About Lombard mines, see: Calegari and Simoni (1994), Trezzi (1992), Piardi and Simoni (1982), and R. Predali (1980).

and resist the negative economic conjuncture (sometimes by over-exploiting their workforce, represented by members of the artisan family) played a fundamental role. The strategic decision of the richest families to divide the firewood and charcoal between the iron and brass manufacturers and the villagers, giving priority to the needs of the workshops, allowed the latter to keep the prices of the raw materials they used low and to obtain competitive final prices. During the twentieth century, some Alpine villages specialized their production and strengthened their position on the lowland market (and later on the international market); a great attention to the improvement of know-how and a production organization that privileged the employment of family members allowed the workshops to develop into small and medium factories. In a context where many Alpine villages greatly reduced their population and were excluded from the Italian industrial development, some villages resisted and became competitive industrial districts.¹³

It is important to note that the privatization of common real estate represented only one of the factors explaining the demographic decline of the Alpine valleys, while the privatization of forests was the cause of new environmental damage. The frequency and the negative effects of landslides and floods increased, causing considerable economic losses in some Alpine villages. Faced with severe damage to their houses and/or workshops, the inhabitants definitively decided to emigrate, as had happened before to the poorest families. The skills of the artisans were obviously powerless in the face of the forces of nature that destroyed buildings and cultivated plots of land (e.g. Rohr 2020).

Finally, it is interesting to note that the decline of common real estate ownership also took place in other Alpine areas of northern Italy, such as Piedmont and Veneto; the economic and demographic effects were even more severe than in Lombardy. In Piedmont, the strong demographic decline was favoured by the absence of low valleys, that is, most of the villages were far from the lowland markets and lost a high percentage of their inhabitants. Moreover, many factories producing iron products left the valleys, preferring the Ligurian coast. Finally, the steeper slopes caused

13 About the industrial development in the Lombard Alpine valleys, see: Mocarelli, Ongaro and Tedeschi, (2021), Trezzi (2015), Marchesi (2003), Besana (2003), Tedeschi (2001), Mocarelli (1997), Colli (1997), and R. Merzario (1989). See also M. Romano (2012) and Conca Messina (2022).

greater environmental damage than in other Alpine valleys.¹⁴ In Veneto, where the characteristics of the Alpine valleys were similar to those of Lombardy, the economic crisis depended mainly on the loss of traditional foreign markets related to the fall of the Republic of Venice and, in the second half of the nineteenth century, on the lack of demand for Alpine products in the Venetian plain, where the industrialization process had not yet begun. Moreover, there were fewer mines in the Venetian valleys than in Lombardy and, in addition, the actual taxation of real estate (according to the new Austrian cadastre) was higher than in Lombardy, which obviously deprived the Alpine villagers of more financial resources and prevented them from improving the quality of their production.¹⁵

Conclusion

Until the end of the eighteenth century, the communities in the Alpine valleys of Lombardy, organized as self-governing institutions, realized a balanced use of the available resources. They used the common real estate to guarantee further income to the families of the villagers, especially the poorest ones. The gradual failure of the existing social and economic equilibrium in the nineteenth century was the result of many factors, but the crisis began with the introduction of new taxes on real estate and its rent, which the French and Austrian governments decided to impose in order to improve fiscal revenues. The villagers' quality of life also deteriorated due to the spread of the ideology of the new bourgeoisie, whose economic and political power greatly increased by profiting from the progressive decline of the aristocrats, especially the rentiers. New laws were enacted to favour the privatization of the commons, and they were obviously based on the concept that a private landowner exploited real estate better than a community. Thus, bourgeois families acquired a relevant part of the commons and, instead of improving yields, practiced overexploitation of pastures and, above all, of forests, provoking negative consequences both for the families of Alpine villagers, as well as for the environment. At the end of the nineteenth century, the area, the fruits produced and

14 About migration in Piedmontese Alpine valleys see, among others, Ramella, Ottaviano, and Neiretti (1986), Ramella (1984), Allio (1984), Albera (1995), and Audenino (2019). Regarding the mines and the industrialization in Piedmont and Liguria, see: Abrate (1960) and Nicco (1995).

15 About migration in Venetian Alpine valleys see, among others, Fornasin (1998), Lazzarini (1998), Zalin (1998), Fornasin and Lorenzini (2020). Concerning Venetian mines and manufactures during the nineteenth century, see also: Vergani (2003).

the value of the common real estate were greatly reduced, but even the privatized lands had low fertility and low yields. Many Alpine families had to emigrate, reducing the population, especially in the high valleys, which were far from the markets in the plain. At the same time, excessive deforestation and reduced 'maintenance' of the forests increased the frequency of landslides and floods, causing significant economic damage in the valleys and the emigration of families who lost their homes and/or workshops. However, in this negative context, some villages resisted the negative economic conjuncture and produced high quality goods for niche markets. These did not suffer demographic decline and gradually participated in the Lombard industrialization, creating small but very efficient industrial districts. This also explains why in the Lombard Alpine valleys the depopulation of the mountains did not reach the impressive levels indicated by the INEA inquiry in the 1930s for Piedmont and, though to a lesser extent, for Veneto.¹⁶

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16 About the economic development of the Italian Alpine valleys during the Nineteenth century see, among others, P. Tedeschi (2002, 61–78), L. Mocarelli (2002, 79–90), and G. Scaramellini (1978). About the INEA (Istituto Nazionale di Economia Agraria) enquiry, see Istituto Nazionale di Economia Agraria (1938).

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