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THE ROLE OF IRONMAKING IN A PREMODERN RURAL COMMUNITY. THE EXAMPLE OF THE WEISSENFELS LORDSHIP

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ABSTRACT

Using the example of the Weissenfels lordship, attention is drawn to some social and economic processes that took place until the mid-seventeenth century and were a consequence of mining, especially of the production and processing of iron. After the end of the medieval colonisation process, in the sixteenth century, there was a social stratification of peasantry and the formation of the peasant proletariat. This class managed to ensure its existence by participating in ironmaking processes. The production of iron became in the first half of the seventeenth century the most important economic sector in the Weissenfels lordship. The more intensive activity also had a strong environmental impact, especially due to the increased need for wood and charcoal.

Keywords: ironmaking, lordship, Untersassen, Weissenfels, Bela Peč, Upper Sava Valley

IL RUOLO DELLA SIDERURGIA NELLA COMUNITÀ RURALE DI PREMODERNA. L'ESEMPIO DELLA SIGNORIA DI WEISSENFELS

SINTESI

Utilizzando l'esempio della signoria di Weissenfels, si richiama l'attenzione su alcuni processi sociali ed economici che si verificarono fino alla metà del XVII secolo e furono conseguenza dell'attività mineraria e in particolare della produzione e lavorazione del ferro. Dopo la fine del processo di colonizzazione, nel XVI secolo, si verificò una stratificazione sociale della classe contadina e la formazione del proletariato contadino. Questa classe riuscì a garantire la propria esistenza attraverso la partecipazione ai processi di lavorazione del ferro. La produzione di ferro divenne nella prima metà del XVII secolo il settore economico più importante della signoria di Weissenfels. L'attività più intensiva ebbe anche un forte impatto ambientale, soprattutto a causa della crescente necessità di legna o carbone vegetale.

Parole chiave: siderurgia, signoria, Untersassen, Weissenfels, Villa Bassa/Bela Peč, Valle del Alto Sava

Late medieval society was essentially a rural society. Its foundation was based on agricultural production, which dictated its social character and gave it its typical internal dynamics. The changing legal status of the peasant population did allow for certain social changes but did not significantly alter the character of society itself. Despite significant regional differences, the majority of the population still consisted of peasantry, for whom the land was the main source of livelihood (Rösener, 1993). Even in the late Middle Ages, the incomes of the nobility still came mainly from feudal rents. As the example of the Counts of Celje shows, monetary surpluses generated by other activities, such as mercenary entrepreneurship, were often reinvested in the accumulation of land holdings to increase income from rents (Mlinar, 2009, 118–119). From the mid-thirteenth century onwards, certain technical and technological innovations and the gradual transfer of royal prerogatives to the high nobility as well as to the certain bishoprics and monasteries enabled the gradual development of new economic sectors, which provided landowners with additional income. The Eastern Alps were no exception. There, individual landowners had been acquiring the right to exploit mineral resources and process ore from the twelfth century (Oitzl, 2018a; 2024, 67–72). In the wider Julian Alps region, ironmaking thus became the most important non-agricultural economic activity at that time (Oitzl, 2018b, 79–80). The increase in iron production was gradually reflected in increased trade of iron products and semi-finished products, which in the Eastern Alps can be traced back to the mid-thirteenth century (Oitzl, 2024, 73).

While recent systematic studies in the history of ironmaking in the Eastern Alps were made – particularly by Gašper Oitzl – the social consequences of the emergence of this then new economic sector are less well known. The purpose of this study is to analyse these consequences using the example of the Bela Peč¹ lordship and to highlight, at least in part, some of the social changes that ironmaking brought to rural areas during the transition from the Middle Ages to the early modern period. In doing so, we will rely primarily on two sources that provide us with a somewhat better insight into the economic and social picture of the lordship in question. The first source is the 1498 land register (*urbarium*) of the Weissenfels lordship. It was created as a result of the broader reforms of (future) Emperor Maximilian I, who sought to improve the transparency of the management of his lordships and to increase their yields (Umek, 1982, 312; Juričić Čargo, 2016, 74–75). The second source is of the same type and was created a little less than 150 years later, when Emperor Ferdinand II sold the Weissenfels lordship to Johann Ulrik Eggenberg in 1636 (Komić Marn, 2015, 15–19). An integral part of the purchase agreement was also a transcript of a land register that was probably a few years older. A comparison of the two land registers provides a good insight into the lordship's structure and the changing social conditions.²

1 Weissenfels (Fusine in Val Romana or Villa Bassa in Italian, Bela Peč in Slovenian) is the present-day settlement located at the border between Italy, Austria and Slovenia. Since the area is multilingual, I am using the name of the settlement in German form as found in sources dating from the fourteenth to sixteenth centuries.

2 Both documents have been published in critical edition (Mlinar, 2018).

MEDIEVAL COLONISATION AND FORMATION OF THE LORDSHIP

The Weissenfels lordship covered a large area of the Upper Sava Valley. The eastern edge of the estate was marked by the Završnica stream valley. To the west, the estate stretched across the watershed at Rateče all the way to the Rio Bianco stream (today in Italy) west of the village of Weissenfels (today Fusine in Valromana). The lordship was divided into two parts by the estate of the Bishopric of Freising in Dovje in the middle, which was incorporated in the Škofja Loka lordship as an independent office (Mlinar, 2018, 22–23).

Weissenfels was developed into an independent lordship relatively late. It originally belonged to the larger Lordship of Radovljica, which was controlled by the Counts of Ortenburg. The Counts of Ortenburg are believed to have acquired their estates in the upper Upper Carniola (Gorenjska) region as heirs to the Counts of Ebersberg. They are mentioned relatively late in the sources, for the first time between 1140 and 1185, when Heinrich of Ortenburg donated a farmstead in Moste to the Provost Church of the Mother of God located on Bled Island (Mlinar, 2005, 337; Oitzl, 2016, 299). In his discussion of the first mention of Bled in written sources, Peter Štih was toying with the very attractive possibility that this legal act took place in 1142 during the consecration of a church in the Bled area, but unfortunately this appealing idea cannot be confirmed by other sources (Štih, 2004, 22–23). The Ortenburgs connected their estate, which stretched mainly along the left bank of the Sava River, into a lordship with its seat at Waldenberg Castle (Pustigrad) near Radovljica. The castle was presumably built in the last decades of the twelfth century and was administered by the Ortenburg ministerials (Sapač, 2016, 329). After a brief division between 1263 and 1271, Friedrich of Ortenburg reunited the estate. Waldenberg thus finally became the administrative centre of the lordship, while nearby Radovljica became the ecclesiastical centre of the Ortenburg estate in Upper Gorenjska (Lackner, 1991, 185).

The Ortenburgs soon realised the economic potential of the iron ore deposits located in the Karawanks and Julian Alps. They began to systematically consolidate their property rights over the Upper Sava Valley and colonise it. The Ortenburgers start to intervene in the valley at the beginning of the fourteenth century. In April 1326, Georg der Gutenberger, as he is given in the sources, appointed Count Albrecht of Ortenburg as protector of *sechs huoben gereutes*. Georg acquired the property from Bishop Emicho of Freising and donated it to the Church of the Assumption of Virgin Mary in Kranjska Gora (Mlinar, 2005, 339). Sources indicate that the Ortenburgs initiated intensive colonisation of the valley in the following decades. In November 1362, Lodovico della Torre, Patriarch of Aquileia, addressed a letter to Heinrich, the parish priest of Radovljica. He had received information that ‘within the boundaries of the parish of Radovljica, in the until now uninhabited and uncultivated forests near Kranjska Gora and Dovje, many new dwellings had been built’. The settlers had also built two new churches, one in Kranjska Gora and the other in Dovje. The Patriarch instructed the priest to appoint worthy vicars to take care of the spiritual welfare of the

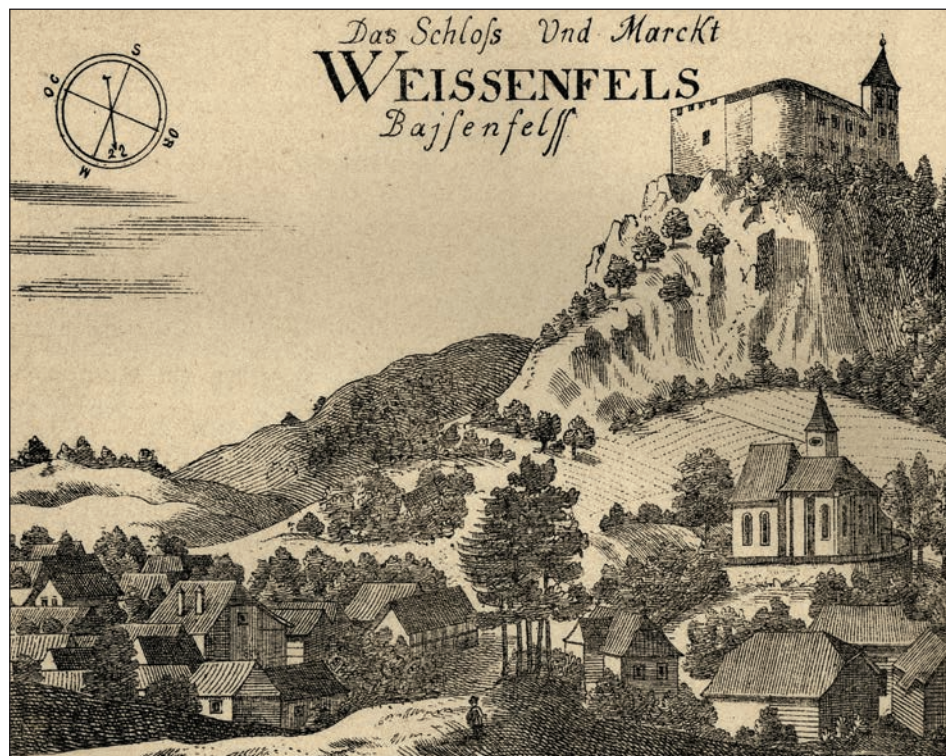


Fig. 1: *Weissenfels castle (Valvasor, 1689).*

settlers. A few months later, della Torre also wrote to Count Otto of Ortenburg. Similar to his letter to the parish priest of Radovljica, he stated that he had received information about Otto's colonisation activities in the Kočevje region (southeast of Ljubljana) and in Kranjska Gora. The Patriarch further mentioned that five new churches had been built in the Kočevje region and another in Kranjska Gora, and granted Otto and his heirs the right to present a priest (Mlinar, 2005, 338).

The second document in particular draws attention to a fact that has been overlooked in the scientific literature. The Ortenburgers did not focus their colonisation activities in Carniola, which reached their peak in the mid-fourteenth century, solely on the Kočevje region, but also on the Upper Sava area. The scope of the latter territory was, of course, much smaller than that in the Kočevje region, as it did not allow for more intensive settlement, but it does indicate Ortenburg intentions to control the Upper Sava area. The fact that the two colonisations were linked and that they were the product of the same systematic endeavour and policy of the house of Ortenburg is also indicated by the documents of Countess Agnes. Agnes of Ortenburg, who was married to Eberhart of Walsee, issued two documents on 29 October 1386. With the

first, she donated 30 marks of pfennigs for the salvation of her soul to the Church of Saint Bartholomew in Kočevje, and with the second, the same amount for the same purpose to the church in Kranjska Gora. In this way, Agnes also symbolically supported the efforts of her brother and the entire family to colonise a specific area. The identical sums and the fact that Agnes donated part of her property to the church in Kranjska Gora despite the small area of settlement indicate that the colonisation of the Upper Sava Valley was of equal importance to the Ortenburgs as that of the Kočevje region (Mlinar, 2005, 339).

Colonisation was quickly followed by the final consolidation of land ownership. In April 1385, an agreement was reached between the collegiate church in Maria Wörth (on Lake Wörthersee in Carinthia) and Friedrich of Ortenburg. The collegiate church handed over the entire village of Rateče to Friedrich in exchange for eight farmsteads in the vicinity of Sternberg/Strmec Castle in Carinthia. With this agreement, the Counts of Ortenburg gained control of the entire Upper Sava Valley, with the exception of the Dovje Office, which belonged to the Freising bishops (Mlinar, 2005, 337–339).

The consolidation of property was followed by ecclesiastical subordination. An extensive *vidimus* from the 1470s, which was apparently drawn up at the request of the newly appointed Bishop of Ljubljana, reveals the complexity of the legal act. In May 1390, after mediation by the Canon of Udine, Burkhard *de Weldeneck*, tripartite talks began between the parish of Maria Gail (south of Villach), the parish priest of Kranjska Gora, and Friedrich of Ortenburg about the future pastoral care in Rateče. An agreement was reached in November of the same year. The parish priest of Maria Gail transferred the parish rights in Rateče to the parish priest of Kranjska Gora, while Friedrich of Ortenburg assumed the resulting financial consequences. As a landowner, he undertook to contribute to the increased costs of care for the parish priest of Kranjska Gora, and to cover the loss of fourteen marks of pfennigs for the parish of Maria Gail out of his own pocket. On 8 December 1390, the Patriarch of Aquileia also gave his consent to the agreement (Mlinar, 2005, 339).

The ownership ties of Rateče and, likely, the rest of the valley west of the village of Belca to their Carinthian landlords left significant traces, especially in the colonisation of the valley. Traces in the dialect are so evident that Tine Logar wrote that the Rateče dialect is a Carinthian dialect – its elements can be traced throughout the valley to the village of Belca – and the fact that older innovations from Gorenjska did not reach Rateče indicate that this area was colonised from Carinthia and not from Carniola (Logar, 1954, 145–149). The result of the original attachment to Carinthia is also the creation of the Rateče manuscript, the second oldest preserved medieval Slovenian linguistic document after the Freising manuscripts (Grafenauer, 1958). The ties with Carinthia only began to break at the end of the fourteenth century, when the Ortenburgs finally gained control of the entire Upper Sava Valley and administratively incorporated it into their Waldenberg lordship, while ecclesiastically linking it more closely to their Radovljica parish through their right of presentation (Mlinar, 2005, 339; 2018, 20).

Although the sources do not mention this directly, the entire Ortenburg estate in the Upper Gorenjska region was initially administered from the Waldenberg castle. Changes in the administration of this extensive lordship did not occur until after the Ortenburgs died out in 1418. They were succeeded by the Counts of Celje. If we are to believe the historical note in the *Cillier Chronik*, which is also summarised by Hieronymus Megiser in his *Annales Carinthiae* and Johann Weikhard Valvasor in *Die Ehre des Herzogthums Krains*, a dispute arose between Hermann of Celje and his son Friedrich. After the reconciliation, Friedrich withdrew from public life and had a new castle built in 1431 on a cliff above the settlement of ironworkers (Megiser, 1612, 1091; Valvasor, 1689, III, 642; Krones, 1883, 81; Golia, 1972, 22).

Preserved sources indicate that a new lordship was formed relatively quickly around the castle. A new economic and administrative unit was created separate of the Radovljica lordship. In 1440, *Hannsen vonn Friesach*, the first castellan at Weissenfels Castle, is mentioned. Later castellans changed relatively often. Sources mention at least eleven individuals who held this position in just under seven decades until the end of the fifteenth century. As the lordship was recent, the owner of the estate no longer needed to rely on the ministerial nobility for its administration, but the castellans acted as officials who were paid for their work. At the end of the fifteenth century, when the oldest preserved manorial land register was created, the Weissenfels lordship was already a fully-fledged independent economic and administrative unit (Golec, 2016, 392; Mlinar, 2018, 22).

EXPLOITING THE ECONOMIC POTENTIAL

With the consolidation of their holdings, the Ortenburgs were able to begin systematically exploiting the natural resources and economic potential of the valley. Their efforts reached their peak in the last decades of the fourteenth century. Somewhat surprisingly, right at the beginning of the chronological list of sources indicating their deliberate efforts, their most important document stands out. A privilege to miners in the mountain pastures above Jesenice (the area around Planina nad Jesenicami) was issued in 1381 by Friedrich III of Ortenburg, which is known today in scientific literature as the Ortenburg or Jesenice Mining Ordinance (Benedičič, 2001; Oitzl, 2024, 83–88). According to Sergej Vilfan, the document, which has been preserved only in form of insert from 1452 and later transcripts, is one of the most important medieval legal documents in Slovenia (Vilfan, 1996, 191). Even in the wider European context, the Ordinance is one of the older text monuments of its kind (Sprandel 1968, 5; Oitzl, 2025, 12). The reasons for its early creation can be found primarily in Friedrich's interest in attracting a skilled workforce from abroad by establishing a regulated legal framework (Mlinar, 2016, 51; Oitzl, 2025, 14).

The document is relatively extensive, carefully structured and well-written. It specifies the obligations of mining masters (*pergmaister*) to the feudal lord, while also defining their rights. In legal terms, it grants a considerable degree of internal autonomy to the mining community. It allows them to elect their own mining judges (*pergrichter*),

defines the powers of the judges, determines the scope of punishments and even specifies procedural rules. It granted the mining community a number of privileges. Mining masters were exempt from all taxes, personal working services (*Rabot*) and other personal duties and obligations. Only permanently settled masters were allowed to mine and process ore. They were given the opportunity to use mountain pastures, and they could freely dispose of and inherit their property (Benedičič, 2001; Oitzl, 2024, 83–88).

At the turn of the century, the first signs of urbanisation began to appear in the lordship. Around 1400, a smelting settlement gradually was established on the western edge of the Weissenfels lordship. In the sources, it was initially referred by the name of the Chapel of Saint Leonard located there (*bey sannct Lienhart ob Ratschach*), and after 1440 by the hill on which the castle already stood at that time (*bey sannt Liennhart vnnder Weissenfels*). As sources show, some ironmaking masters came from nearby Malborghetto and Camporosso in Val Canale. Judging by their names, the origins of some can also be traced to Italy or Friuli (Golec, 2016, 390–392). The modest settlement with a mining judge, first mentioned in 1404, gradually acquired market attributes and finally developed into an independent market town in the 1540s. The first mentions of market traders are from 1499, while in judicial practice the term market judge became established a few decades later (Golec, 2016, 394–395). The growing importance of the settlement is also shown by the fact that in 1465, despite later opposition from the parish priest of Kranjska Gora, the neighbourhood got its own chaplain (Žnidaršič Golec, 2000, 49–50, 102; Höfler, 2013, 218).

Sources are scarcer for the lower part of the Weissenfels lordship, where urbanisation seems to have proceeded more slowly. No settlement is mentioned in the mining ordinance of 1381. It is only in the document of Ulrik of Celje from 1452, confirming the Ordinance, that the village of *Asnighk* – today's Jesenice – is mentioned (Benedičič, 2001, 14). The parish was established in 1526 (Žnidaršič Golec, 2000, 323). Despite the somewhat slower development in the lower part of the estate, the trend brought about by the introduction of ironmaking is evident. In addition to promoting colonisation, the exploitation of iron ore and iron processing were also the main factors in the formation of urban centres in the Upper Sava Valley and more broadly in the Julian Alps (Oitzl, 2018b, 96).

ECONOMIC CHANGES

With the administrative and ecclesiastical consolidation of their estates, the Ortenburgs were able to begin systematically exploiting the economic potential of the Upper Sava Valley. Sources for the first decades are very scarce. The Ortenburg ordinance mentions only a smithy in Jesenice, owned by a certain *Wisser* (Benedičič, 2001, 17). Individual ironmaking facilities and their owners are also mentioned in Weissenfels at the beginning of the fifteenth century (Golec, 2016, 390–392). Only the material from the end of the fifteenth century is more informative. The 1498 land register mentions seven furnaces (*Pleiofen*), six hammers for further processing of material obtained from the smelter, and six saws.

Table 1: Income share according to Weissenfels land registers from 1498 and 1636.³

	1498		1636	
	sum in β	%	sum in den	%
agricultural activities	9,826	63.21	43,652	48.58
non-agricultural activities	4,300	27.66	46,019	51.21
<i>Schreibgeld</i>	18	0.12	186	0.21
other incomes	1,400	9.01		
total	15,544	100	89,857	100

The economic changes brought about by ironmaking are most clearly reflected in the structure of land register income. In the 1498 land register, income from agricultural activities amounted to 9,826 solidi, representing 63.21 per cent of the estate's total income. In just over hundred years, their share decreased significantly, amounting to only 48.58 per cent in 1636. Consequently, the share of estate income derived from non-agricultural activities increased significantly. At the end of the fifteenth century, this type of income accounted for a good quarter of the estate's total income (27.66 per cent). In the 1636 land register, income from non-agricultural activities rose to 51.21 per cent of the estate's total income (Mlinar, 2018, 176). In just over a century, iron-making and related activities surpassed all other activities in terms of income generated and became the most important economic activity in the Weissenfels lordship.

Table 2: Income share by settlement in 1498.

	income 1498		share by settlement
	mr den	β	%
JESENICE	2	1,033	8.70%
POTOKI		432	2.78%
HRUŠICA		369	2.37%
PLANINA POD GOLICO		208	1.34%
RUDNIKI NAD JESENICAMI	15	400	18.01%
RATEČE	13	1,975	26.09%
PODKOREN		1,872	12.04%
KRANJSKA GORA		887	5.71%
ROVTI		1,260	8.11%
BELA PEČ	2	588	5.84%
other income (<i>Burghut</i>)	8	120	9.01%
total	97	24	100%

3 Abbreviations for money used in tables: gulden (f), mark (mr), kreutzer (xr), solidus (β), pfening (den).

The changed role of ironmaking is also indicated by the composition of income by single settlements in the estate. According to the land register from 1498, the largest share of income came from the settlement of Rateče. With eighteen farmsteads, they contributed more than a quarter (26.09 per cent) of all monetary income in the estate. The only income from non-agricultural activities was a negligible amount of fifty pfennigs, which *Gilg Potschige* paid from the sawmill on the Jezernica stream near Weissenfels. Rateče was followed by the mines above Jesenice with 18.01 per cent. The only two remaining settlements that still contributed levies from non-agricultural activities in 1498 were Jesenice with 8.70 per cent and Weissenfels with 5.84 per cent. While Weissenfels's income came exclusively from non-agricultural sources, agricultural income still accounted for the majority of the value generated in Jesenice (almost 66 per cent). In other settlements, the estate had virtually no non-agricultural income (Mlinar, 2018, 175).

The picture changed significantly in the 1636 land register. The mines above Jesenice retained almost the same share of generated income (17.62 per cent), but the ratios between other settlements changed significantly. Weissenfels and Jesenice together generated almost half of the estate's total income (47.37 per cent), with agricultural income in Jesenice falling below half, while in Weissenfels it was negligible (less than two per cent). Although the absolute amount of levies remained the same, the share of income from settlements that retained their agricultural character also decreased significantly. In Rateče, for example, the share of the estate's total income fell from a

Table 3: Income share by settlement in 1636.

	income 1636		
	f	xr	den
BELA PEČ	115	1,138	76
ROVTI V OKOLICI BELE PEČI	2	116	8
KOPRIVNIK	1	83	6
RATEČE	31	1,339	55
PODKOREN	26	842	32
KRANJSKA GORA	7	857	52
GOZD MARTULJEK		552	36
SREDNJI VRH		338	20
HRUŠICA		650	32
JESENICE	75	1,606	69
RUDNIKI NAD JESENICAMI	80	478	6
KLADIVA NA SAVI	2	496	20
PLANINA POD GOLICO	6	249	6
POTOKI	4	137	0
total	349	8,881	418

good quarter (26.09 per cent) in 1498 to a good 10 per cent in 1636. In real terms, the role of non-agricultural activities probably increased even more than the statistical data show, as in the 1636 land register some groups of the agricultural population, that were not considered in the 1498, were now also included (Mlinar, 2018, 175).

A comparison of data from both land registers clearly confirms the direction of development. In the seventeenth century, ironmaking became the most important economic activity in the estate. Although most settlements retained their predominantly agrarian character, it generated the largest share of income. The changes were concentrated mainly in two settlements, Weissenfels and Jesenice, which finally acquired a (pre-)industrial character.

SOCIAL CHANGES

Other social changes were also generated by the expanding economic role of ironmaking. According to the older land register, at the end of the fifteenth century, the population of the Weissenfels lordship was dominated by farmstead holders. This ensured their livelihood and that of their (extended) families, in exchange for which they paid taxes to the lordship. The 1498 land register lists a total number of sixty-one farmsteads. Most of them, eighteen, were located in Rateče, and only in Podkoren and Jesenice did their number exceed ten. In other settlements, their number ranged from two (Planina) to seven (Kranjska Gora). By 1636, their number remained basically the same. All sufficiently fertile land had therefore already been cultivated and occupied by 1498. It was no longer possible to establish new farmsteads. The process of colonisation in the Weissenfels lordship was thus completed before the end of the fifteenth century.

However, a comparison of the two land registers reveals certain social processes. During this period, there was a marked increase in the number of farmsteads managed by a larger number of individuals. Rateče stands out in particular. In 1498, there were eighteen farmsteads in the settlement. Five of them already had two or more beneficiaries, while the remaining were still managed by a single beneficiary. By 1636, there were no longer any farmsteads with a single beneficiary in Rateče. All of them had at least two, and some even three, all of whom seem to have been close relatives, judging by their surnames. A total of thirty-seven individuals managed eighteen farmsteads. A similar process can also be observed in Kranjska Gora (seven farmsteads and twelve

Table 4: Share of the Untersassen in 1636.

	Number of farmsteads	Number of farmstead holders	Number of Untersassen	Share of Untersassen (%)	Taxes paid by farmstead holders (den)	Taxes paid by Untersassen (den)	Share paid by Untersassen (%)
RATEČE	18	37	24	39.3%	8,424	1,194	12.41%
PODKOREN	13	20	17	45.9%	6,585	629	8.72%
KRANJSKA GORA	7	12	25	67.6%	2,182	1,685	43.57%
HRUŠICA	5	8	18	69.2%	990	982	49.80%
JESENICE	12	15	65	81.3%	6,021	2,384	28.36%
POTOKI	4	4	10	71.4%	903	228	20.16%

farmstead beneficiaries) and Podkoren (thirteen farmsteads and twenty farmstead holders). This process was slightly less pronounced in the lower part of the estate. In Hrušica, there were eight farmstead holders on five farmsteads and in Jesenice there were fifteen beneficiaries on twelve farmsteads, while in Potoki, there was still only one farmstead holder on each of four farmsteads (Mlinar, 2018, 176). It seems that in the Weissenfels lordship the division of farmsteads began in the sixteenth century, confirming the thesis that the colonisation potential of the valley had already been exhausted by the end of the fifteenth century. The legal relationships between individual farmstead holders on the same farmstead are not apparent from the land register.

At the same time as the division of the farmsteads, a new class of peasant population began to emerge more and more prominently. These were the so-called *Untersassen* (subordinates, or *podružniki* in Slovenian). According to Sergij Vilfan, the *Untersassen* represent a social group of peasantry. Their basic economic unit, the *kheüschel* or cottage (*kajža*), was created as the landowner or neighbourhood allowed them to fence off a part of the commons (*Gmain*). On this part of the land, which was usually of poorer quality, they set up an agricultural facility, which helped them to support themselves and their families (Vilfan, 1996, 291). In the 1498 land register, the *Untersassen* are mentioned only in connection with certain settlements. For example, in Potoki and Jesenice, they were obliged to participate with their share of service to lordship (*Rabot*). They were not yet listed by name in the land register. It is impossible to determine their number, but given their modest appearance in the sources, it can be assumed that at the end of the fifteenth century it was still low.

In the sixteenth century, the number of *Untersassen* increased significantly. At the same time they were forced to pay taxes from their modest possessions. According to the 1636 land register, in some settlements the *Untersassen* had already become or were very close to becoming the largest social group. Their share was the lowest in Rateče (39.3 per cent) and Podkoren (45.9 per cent), while Jesenice stood out with 81.3 per cent. Their number in the land register increased for two reasons. The main reason was the requirement of the landlords that taxes should be paid from the estate's entire used and cultivated land. This process seems to have reached its peak in the early seventeenth century. For example, in August 1602, Archduke Ferdinand issued a special patent imposing tithe on the subjects in Planina pod Golico, Gozd Martuljek and Srednji Vrh, which they claimed they had not been required to pay until then. Similarly, a few years later, the subjects of Weissenfels complained about the leaseholder of the lordship, Inocenc Moscon, who also demanded taxes from properties that the subjects had deforested and cultivated in recent years. The dispute was only settled by a special commission of the Inner Austrian Government, which in October 1616 worked out a compromise solution and set a new level of taxes. The size of the taxed property thus expanded significantly (Mlinar, 2018, 45).

In the sixteenth and seventeenth centuries, a new social class of *Untersassen* emerged in sources of the Weissenfels lordship. Due to limited opportunities to survive by agriculture, they were forced to secure their livelihood through other activities. The possibility of additional income was found in ironmaking. Their integration into

various phases of the production process (extraction and processing of ore, charcoal production, etc.) enabled their existence, and thus also influencing their numbers. It is therefore not surprising that in 1636, it was in Jesenice, where there were obviously the most opportunities for additional income, that the proportion of *Unterrassen* was the highest (81.3 per cent).

THE IMPACT OF IRONMAKING ON ENVIRONMENT

The relatively modest number of ironmaking facilities, and particularly the method of ore extraction had a limited direct impact on environment in the late Middle Ages. In the foothills of the Julian Alps, iron was mainly extracted from limonite, which contained between forty-five and sixty per cent iron. In contrast, in the Karawanks, ore was mined in the form of siderite, which lay like a wedge between layers of schist. Individual veins were relatively short (Müllner, 1909, 372–373). With this form of ore extraction, the direct impact on the environment was small. The indirect impact of ironmaking was significantly larger. The technological processes of ore processing and the manufacture of (semi-)finished products required multiple heat treatments of the material at extremely high temperatures. These could only be achieved by using charcoal. Until the introduction of coke at the end of the nineteenth century, wood or charcoal were the only energy sources for iron production. Therefore, the impact of iron production on the environment was the largest through the exploitation of the wood reserves (Mlinar, 2014, 187; Oitzl, 2023, 73–76).

Until the end of the Middle Ages, the wood reserves in the Weissenfels lordship were large enough to meet the needs of the existing ironmaking facilities. For example, despite its detailed content, the Ortenburg mining order does not address the issue of rational exploitation and protection of forests at any point. This was obviously not a problem at the time of its creation at the end of the fourteenth century. Only one provision of the order can be linked to the desire for an uninterrupted wood supply. The landlord assured the mining masters that neither he nor his subjects would cut down any additional forests on the slopes above Jesenice, thus preventing the natural regeneration of wood stocks through cultivation of the area. The exclusive right to exploit the forest in this area was left to the mining masters (Benedičič, 2001, 30).

The documentary evidence indicates that the right to exploit and process ore included not only the management of economic facilities but also the disposal of natural resources necessary for the technological process. The wording that the feudal lord granted the recipient not only the economic facility but also ‘the forest and water needed for his smithy’ was an integral part of the grant documents. The individual was left to organise and carry out the entire production process, from the preparation of raw materials to the final manufacture of the product (Mlinar, 2014, 188).

The wood situation only began to change in the sixteenth and seventeenth centuries. There were several reasons for this. The first lies in technological changes in the iron extraction process. The old so-called *Windischen* furnaces began to be gradually replaced by more efficient Breschia type furnaces, which enabled higher production

but also required an extended amount of energy (Müllner, 1909, 393; Oitzl, 2023, 73). The second reason lies in the increase in the number of ironmaking facilities in the sixteenth century. For 1569, Müllner counted twenty facilities in Carniola, eleven of which were located in Upper Gorenjska. The three ironmaking facilities mentioned in the Weissenfels lordship were situated in Planina, Jesenice, and Javornik. Two years later, three new facilities were added. A new hammer mill was built in Mojstrana, and new smelting facilities in Jesenice and in the Radovna River Valley (Müllner, 1909, 475–476; Mlinar 2014, 188).

From the mid-sixteenth century onwards, disputes related to the exploitation of forests begin to appear more and more frequently in sources. Initially, disputes arose mainly between individual landowners who encroached on the territory of others by cutting down trees (Mlinar, 2014, 189). These disputes were soon joined by disputes over the unplanned exploitation of woodlands. Judicial practice in the second half of the sixteenth century indicates the further direction of development. Measures were aimed primarily at preserving young forests to limit uncontrolled logging and enable their natural regeneration. In the first decades of the seventeenth century, this practice became the norm. The 1636 land register already emphasises, when listing the obligations and rights of individual villages, that the exploitation of the forest is only permitted for personal needs, whereby young forests had to be preserved.

CONCLUDING REMARKS

The example of the Weissenfels lordship demonstrates that the impact of ironmaking on the socio-economic development of local communities was already substantial and multifaceted in pre-industrial society. Administrative and political changes were mainly linked to the landowners' – in case of the Weissenfels lordship to those of the Counts of Ortenburg's – interest in making better use of natural resources and, as a result, increasing the economic yield from their estates. Similar motives were also behind the planned colonisation in the fourteenth century. When the colonisation potential offered by the natural conditions of the estate was exhausted at the end of the fifteenth century, significant social changes started to take place. A class of so-called *Untersassen* began to emerge in the sources. Due to their poor economic situation, this class of subjects sought opportunities for survival in non-agricultural activities.

In addition to society, ironmaking also had an impact on the environment. This is particularly evident in the use of wood and its products. With the increase in iron production and processing, and especially with innovations in technological processes that required larger amounts of energy, the exploitation of forests also intensified. In the sixteenth century, this increased to such an extent that natural growth could no longer compensate for the logging, leading to the first measures for a more sustainable exploitation.

VLOGA ŽELEZARSTVA V PREDMODERNI RURALNI SKUPNOSTI.
PRIMER GOSPOSTVA WEISSENFELS

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POVZETEK

Rudarjenje, zlasti pa pridobivanje in predelava železa, je že v predmoderni dobi imelo znaten vpliv na družbeno in socialno podobo posameznih skupnosti. Gospostvo Bela Peč, na katerega je osredotočena pričujoča razprava, ni bilo izjema. Upravnopolitične spremembe so bile povezane zlasti z interesom zemljiškega gospoda do boljše izrabe naravnih danosti in, posledično, povečanja ekonomskega donosa. Podobni motivi so stali tudi za načrtno kolonizacijo v 14. stoletju. Ko je bil konec 15. stoletja kolonizacijski potencial, ki so ga omogočale naravne danosti v gospostvu, izčrpan, je začelo prihajati do izrazitih družbenih sprememb. Pojavil se je sloj t. i. podružnikov ali Untersassen. Zaradi slabšega ekonomskega položaja je ta sloj podložnega prebivalstva pospešeno iskal možnost preživetja v neagrarnih dejavnostih. Poleg družbenih vplivov je železarstvo vplivalo tudi okolje, zlasti z uporabo lesa in njegovih produktov. S povečevanjem proizvodnje in predelave železa, zlasti pa z novostmi v tehnoloških postopkih, ki so zahtevali večjo količino energenta, se je intenzivirala tudi izraba lesa. V 16. stoletju se je povečala do te mere, da naravni prirast ni več zmožal nadomestiti posekanega. Posledično je to pripeljalo do prvih ukrepov za trajnostno izrabo gozdov.

Ključne besede: železarstvo, gospostvo, podružniki, Bela Peč, Zgornjesavska dolina

SOURCES AND BIBLIOGRAPHY

- Benedičič, Irena (2001):** Ortenburški rudarski red. Planina pod Golico, Krajevna skupnost.
- Golec, Boris (2016):** Posebnosti nastanka in razvoja fužinarskega trga Bela Peč. *Kronika: časopis za slovensko krajevno zgodovino*, 64, 3, 389–412.
- Golia, Modest (1972):** Kronika grofov Celjskih. Maribor, Založba Obzorja.
- Grafenauer, Ivan (1958):** Celovski rokopis iz Rateč, podružnice beljaške prafare pri Mariji na Zilji. *Razprave II. razreda SAZU* 3 (separat), 5–61.
- Höfler, Janez (2013):** O prvih cerkvah in župnijah na Slovenskem. Ljubljana, Viharnik.
- Juričič Čargo, Danijela (2016):** Reformirani urbarji deželno knežjih posesti (na ozemlju pod upravo kranjskega deželnega vicedoma). In: Bizjak, Matjaž & Lilijana Žnidarčič Golec (eds.): *Urbarji na Slovenskem*. Ljubljana, Arhiv Republike Slovenije, 71–91.
- Komič Marn, Renata (2015):** Kratka zgodovina rodbine Eggenberg s posebnim ozirom na slovenski prostor. *Kronika: časopis za slovensko krajevno zgodovino*, 63, 1, 5–26.
- Krones, Franz (1883):** Die Freien von Saneck und ihre Chronik als Grafen von Cilli. Zweiter Theil. Graz, Die Cillier Chronik.
- Lackner, Christian (1991):** Zur Geschichte der Grafen von Ortenburg in Kärnten und Krain. *Carinthia I*, 181, 181–200.
- Logar, Tine (1954):** Dialektične študije I. Dialektična podoba zgornje Savske doline. *Slavistična revija*, 5, 7, 145–149.
- Megiser, Hieronymus (1612):** Annales Carinthiae, das ist Chronica, des löblichen Ertzhertzogthumbs Khärndten [...]. Leipzig, Abraham Lamberg.
- Mlinar, Janez (2005):** Slepó črevo Kranjske. Prispevek h kolonizacijski zgodovini Zgornjesavske doline. *Zgodovinski časopis*, 59, 3–4, 333–340.
- Mlinar, Janez (2009):** Celjski grofje in najemništvo. *Vojaška zgodovina*, 10, 1, 107–121.
- Mlinar, Janez (2016):** Povednost srednjeveških urbarjev. Primer belopeškega urbarja iz leta 1498. In: Bizjak, Matjaž & Lilijana Žnidarčič Golec (eds.): *Urbarji na Slovenskem*. Ljubljana, Arhiv Republike Slovenije, 35–53.
- Mlinar, Janez (2018):** Urbarji belopeškega gospostva. Novejši urbarji za Slovenijo 2. Ljubljana, Založba ZRC, ZRC SAZU.
- Müllner, Alfons (1909):** Geschichte des Eisens in Inner-Österreich von der Urzeit bis zum Anfange des XIX. Jahrhunderts. Erste Abteilung: Krain, Görz und Istrien. Vienna – Leipzig, Verlag von Halm und Goldmann.
- Oitzl, Gašper (2016):** Poselitvena slika Zgornje Gorenjske v srednjem veku. *Kronika: časopis za slovensko krajevno zgodovino*, 64, 3, 295–314.
- Oitzl, Gašper (2018a):** Zgodovina železarstva v Vzhodnih Alpah od propada rimske oblasti do 13. stoletja. *Kronika: časopis za slovensko krajevno zgodovino*, 66, 2, 171–196.
- Oitzl, Gašper (2018b):** Gospodarstvo v prostoru Julijskih Alp v srednjem veku. *Zgodovinski časopis*, 72, 1, 2, 62–103.

- Oitzl, Gašper (2022):** Železarske skupnosti na Kranjskem v poznem srednjem veku. *Zgodovinski časopis*, 76, 3–4, 352–396.
- Oitzl, Gašper (2023):** Use and Management of Natural Resources in Ironmaking in the Slovenian Territory between the 14th and 16th Centuries. *Ekonomika i ekohistorija. Časopis za gospodarsku povijest i povijest okoliša*, 19, 1, 69–88.
- Oitzl, Gašper (2024):** Od rude do železa. Železarjenje na Slovenskem do konca 16. stoletja. Ljubljana, Slovenska matica.
- Oitzl, Gašper (2025):** Rudarski redi kot vir za raziskave zgodovine železarstva na Slovenskem. In: Keber, Katarina & Mojca Žagar Karer (eds.): *Historični seminar 15*. Ljubljana, Založba ZRC. ZRC SAZU, 9–29.
- Rösener, Werner (1993):** *Die Bauern in der europäischen Geschichte*. Munich, C. H. Beck.
- Sapač, Igor (2016):** Grad Waldenberg – Pusti grad pri Radovljici. *Stavbno-zgodovinski oris. Kronika: Časopis za slovensko krajevno zgodovino*, 64, 3, 327–352.
- Sprandel, Rolf (1968):** *Das Eisengewerbe im Mittelalter*. Stuttgart, Anton Hiersemann.
- Štih, Peter (2004):** Prva omemba Bleda v pisnih virih. Listina kralja Henrika II. za briksenškega škofa Albuina z dne 10. aprila 1004 (D.H. II. 67). In: Dežman, Jože (ed.): *Bled 100 let. Blejski zbornik*. Radovljica, Didakta, 7–34.
- Umek, Ema (1982):** Reformirani urbarji deželnoknežjih gospostev na Kranjskem. *Zgodovinski časopis*, 36, 4, 311–321.
- Valvasor, Johann Weichard (1689):** *Die Ehre dess Hertzogthums Crain [...]*. Nuremberg.
- Vilfan, Sergij (1996 [1961]):** *Pravna zgodovina Slovencev*. Ljubljana, Slovenska Matica.
- Žnidaršič Golec, Lilijana (2000):** Duhovniki kranjskega dela ljubljanske škofije do tridentinskega koncila. *Acta ecclesiastica Sloveniae* 22. Ljubljana, Inštitut za zgodovino Cerkve pri Teološki fakulteti Univerze v Ljubljani.