

## IT IS STILL ALMOST HALF A YEAR UNTIL HARVEST: THE RAGING HAIL IN THE POSTOJNA DISTRICT IN AUGUST 1864 AND ITS CONSEQUENCES

### JOŠ JE SAMO POLA GODINE DO BERBE: BIJESNA TUČA U KOTARU POSTOJNA U KOLOVOZU 1864. I NJEZINE POSLJEDICE

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#### Summary

*In Slovenia in the 19<sup>th</sup> century, poor harvests and consequently the shortage of food and seeds for sowing were a localised and completely normal periodic phenomenon. The weather had a profound impact on the emergence of regional life-threatening crises. Since forever, farmers had been especially worried and afraid of hail. The menacing icy precipitation had the potential of devastating the fields. The Swiss historian Christian Pfister rightfully described it as "an exogenous shock that can trigger sequences of events that would otherwise have not happened". The present study focuses on the regionally restricted example of a severe hailstorm that caused enormous damage in the district of Postojna in the summer of 1864, as it almost completely destroyed the crops. During the agrarian crisis, the majority of the peasant population had already barely lingered on in profound poverty. Apart from the unusually cold and rainy weather in 1864, the damages caused by the hail even exacerbated the severe distress, and ten villages in the district faced severe food scarcity. The head of the district turned to the Provincial Presidency in Ljubljana for help, and it provided aid in the usual manner: by collecting donations for the purchase of food and seeds.*

**Keywords:** hail, poor harvest, shortage, subsistence crisis, hunger, Postojna district, Inner Carniola, 1864/65.

**Ključne riječi:** tuča, loša žetva, nestašica, glad, kotar Postojna, Unutrašnja Kranjska, 1864/65.

Climate and weather influence the broader natural as well as social environment, so we need to underline that for the modern historians who study the phenomena of poor harvests, distress, shortage, and famine in the past, the knowledge of weather and climate history is also important. Hail has a prominent place on the list of factors that influence the emergence of such crises. For example, already the polymath Johann Weichard Valvasor established, in his famous work *Glory of the Duchy of Carniola* (1689), that hailstorms could seal the tragic fate of the poor, as they could destroy whatever little these people had. This broadly educated Carniolan noble described the anguish of the peasants suffering due to hail with honest compassion: "Whoever faces /hail/ suffers, especially diligent peasants that are thus pushed into distress and destitution so that they go without bread and must face poverty with their families."<sup>1</sup> Even though they were mostly localised in Carniola, severe hailstorms could completely destroy crops and push the rural population into anguish and misery.<sup>2</sup>

<sup>1</sup> Qtd. in: Ogrin / Kosmač, Valvasorjevi prikazi vremena, p. 45.

<sup>2</sup> Cf.: ibid.

To explain the severe shortages in the past, “which often develop into permanent hunger of certain lower social strata, we should primarily mention the geographic conditions, followed by a variety of natural phenomena”.<sup>3</sup> Among the weather phenomena, violent hailstorms, in particular, can trigger sporadic famines, as they can cause enormous damage in the farmers’ fields, orchards, or vineyards. In extreme cases, this icy precipitation can be particularly devastating. Hail is thus one of the factors that can, to a greater or smaller degree, influence the peasants’ food and seed stores.

Hail has a vital place in the cultural history of weather and climate. The Swiss historian Christian Pfister rightfully described it as “an exogenous weather shock” that can “trigger sequences of events that would otherwise have not happened”.<sup>4</sup> Already in the Old Testament, hail is described as a plague that occurs as a consequence of God’s wrath, as God’s punishment. For example, The Book of Sirach describes it as an element of punishment: “Fire, hail, famine, and death, all these were created for vengeance.”<sup>5</sup> The Old Testament “in particular is full of notions about hail”.<sup>6</sup>

Apart from the biblical notions regarding hail, we can also mention the very old reasoning of Archbishop Agobard of Lyon (769?–840), who argued against weather magic in his sermon *De grandine et tonitruis* (*On Hail and Thunder*). Already in Agobard’s time – in the extremely uncertain early Middle Ages, characterised by the renowned French Medievalist Georges Duby as “a hostile environment of a long period of cold and dampness”, “wet summers with hail were especially detrimental to wheat production”, /.../ “while poor harvests, famine, and contagious diseases represented greater threats than wars”.<sup>7</sup> In “the early Medieval society, which had no concept of coincidence, disasters /like hail/ were personified”. Agobard preached: “*In these regions, nearly all men, noble and common, city and country dwellers, old and young, believe that hail and thunder can be produced by human will. /.../ We have seen and heard of many people overcome with this type of foolishness, made crazy by such stupidity...*”<sup>8</sup>

Such folk notions of hail persisted even later. For example, they resurfaced in the time of witch hunts, when people believed that witches cooked hail and caused damage with it.<sup>9</sup>

Under the influence of the Enlightenment, the Universal Church replaced the God who would punish people with hail with the image of a “loving and good God the Father”.<sup>10</sup> Penitential worship was pushed to the background, while the Church leadership was reserved in its interpretations of weather anomalies and crises caused by severe food shortage. “On the one hand, it did not want to provide fertile ground for the increasingly popular pietism, while on the other hand, the religious interpretation models competed with the interpretations of the natural sciences, which had changed radically in comparison with the crises of the Early Modern Period.”<sup>11</sup>

Since forever, the menacing icy precipitation would worry farmers and instil fear in them. This scourge of God was also reflected in people’s piety and folk painting of beehive panels. The extraordinarily rich beehive panel motifs present saints with all the emblems and symbols, but “primarily the so-called peasant saints that protect their houses from fire and their fields from hail, the patrons of housekeepers and maidservants, intercessors against various human diseases, etc.”<sup>12</sup> Popular folk patrons and patronesses thus include St John the Evangelist, patron saint against hail; St Amelia, patron saint against hail and crop damage; and St Mark, an intercessor against lightning and hail.

<sup>3</sup> Granda, Pomanjkanje, p. 78.

<sup>4</sup> Cf.: Pfister, *Weather, Climate, and the Environment*, p. 85.

<sup>5</sup> *Sveto pismo*, Sirach 39/29, p. 1424.

<sup>6</sup> Cf.: Behringer, *Kulturgeschichte des Klimas*, p. 80.

<sup>7</sup> *Ibid.*, p. 95.

<sup>8</sup> *Ibid.*, p. 96.

<sup>9</sup> See for example the influential witch hunting book: Sprenger / Institoris, *Der Hexenhammer (Malleus maleficarum)*, II., pp. 50, 146.

<sup>10</sup> Krämer, “*Menschen grasten nun mit dem Vieh*”, p. 53.

<sup>11</sup> *Ibid.*

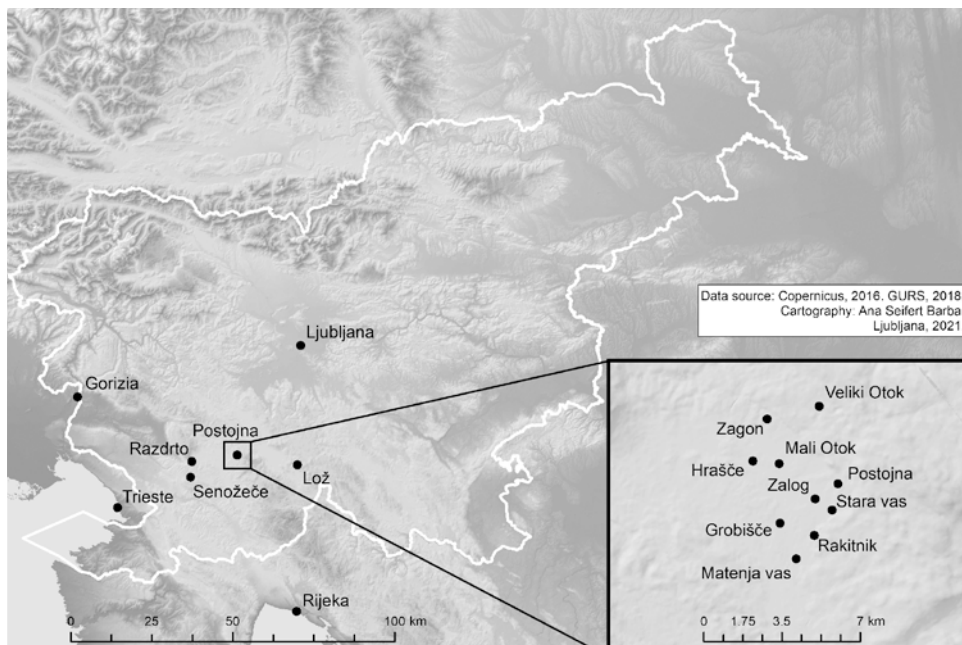
<sup>12</sup> Vurnik, *Slovenske panjske končnice*, pp. 168–169.

## SEVERE HAIL DEVASTATES THE DISTRICT OF POSTOJNA

As of the last great famine of 1816/17<sup>13</sup>, poor harvests due to hail, excessive rainfall or drought, cold, frost or hoarfrost, plant diseases, and pests had only had a “limited local impact” in Slovenian territory.<sup>14</sup> In the 19<sup>th</sup> century as well as in the first decades of the 20<sup>th</sup> century, they were thus a completely ordinary periodic phenomenon in the countryside. In case of poor harvests, starvation was relatively general, while in case of relatively rare good harvests, seasonal shortages were less serious. Of course, the poor peasantry (smallholders, cottagers, and lodgers) suffered the most because of regionally restricted life-threatening crises resulting from poor harvests: these people would “normally face food shortage already during the winter, and hunger would drag on far into the springtime months”.<sup>15</sup>

The present study of one of the localised examples of weather-induced disasters with destructive hail and consequent damage analyses the circumstances in the Postojna district, affected by a devastating hailstorm in the summer of 1864. The study involves a case reported by the press in the 1860s and simultaneously well-documented by the preserved archival materials. For example, the German newspaper *Laibacher Zeitung* wrote the following about the hail in the Postojna district:

*“During the night from 2 to 3 August 1864, shortly before cereal harvest in the Pivka Basin, a violent hailstorm raged in the vicinity of Postojna and caused enormous damage especially in the fields of the villages Zalog, Rakitnik, Grobišče, Mali Otok, and Zagon. The losses at the local cereal fields were exacerbated by the fact that the cereals that had just been harvested were destroyed as well – because in this region hayricks, which are otherwise frequent in the other parts of Carniola, are almost non-existent. Therefore, the sheaves had been left in the fields to dry, after which they would have been stored in granaries.”*<sup>16</sup>



**Figure 1:** Map of all locations dealt with in this paper. For easier orientation, state boundaries are presented in their present-day outline

<sup>13</sup> Josip Mal (Mal, *Zgodovina slovenskega naroda*, pp. 504–513) reported extensively on this economic and social crisis. Recently, Dragica Čeč has carried out in-depth research into the time of the life-threatening crisis during the last great famine in Slovenian territory in 1816/1817. She has also taken into account the newest climatological realisations and the environmental impact of the eruption of the Indonesian volcano Tambora in April 1815, which neither the contemporaries nor Josip Mal were aware of. See: Čeč, *Družbena percepcija*, pp. 243–275; Čeč, *Gospodarska in družbena kriza*, pp. 3–16.

<sup>14</sup> Makarovič, *Prehrana na Slovenskem*, p. 158.

<sup>15</sup> Pirc / Baš, *Socialni problemi*, pp. 102–103.

<sup>16</sup> *Laibacher Zeitung*, 5 August 1864.

As the harvest of 1864 in the entire region of Inner Carniola had already been harmed by the extraordinarily rainy and cold weather,<sup>17</sup> the hail in question caused an additional “disaster” in some of the Postojna district villages, where farmers could not do much but “mow down the pummelled straw in many of the fields”.<sup>18</sup> On 10 August 1864, another “storm gathered near Postojna, and even though there was no hail during the pouring rain, lightning struck a house in Veliki Otok, and the fire destroyed a house roof as well as a stable. The downpour, bora wind in the opposite direction, and people’s assistance – as well as God’s mercy, of course – prevented the whole village, densely packed with mostly straw-covered houses, from burning down. Fortunately, the victim of the fire was insured with the Graz association.”<sup>19</sup>

## THE ECONOMIC-HISTORICAL CONTEXT OF THE CASE UNDER CONSIDERATION

The analysed example from the Postojna district illustrates how the climate, weather, and natural disasters were factors that had since forever strongly affected the course of events in the specific environments. They influenced on agricultural production, on the “quality and quantity of harvests that the material life of the predominantly rural population depended on,” thus it influenced on vulnerability of local population as well.<sup>20</sup> Naturally, in the time under consideration and in terms of their dimensions, the extreme weather influences threatened the people’s existence far more directly than today.

In the time of the crisis under consideration, the unenviable situation of the peasants from the Postojna district villages was made even worse by their considerable indebtedness after the 1848 abolishment of serfdom, when the land had been allocated to the peasants in return for monetary compensation for the landowners.<sup>21</sup> Small farmers and cottagers as well as, partly, medium farmers were also hurt by the abolishment of advantages stemming from peasant profits à prendre (in forests, for example, the right to grazing, wood, and litter harvesting) or their purchase, which once again represented considerable monetary obligations.<sup>22</sup> Aside from the changes in the agrarian sector after 1848, the “abolishment, purchase, and regulation of easements were among the changes that had the strongest economic impact on the lives of the majority of the population”.<sup>23</sup> Even the abolishment of serfdom in itself failed to encourage the development of the agrarian sector and did not result in increased productivity, while the commercialisation of agriculture progressed very slowly as well. Farmers were forced to become a part of the market economy in spite of the substantial financial burdens, yet only a narrow stratum of big farm owners benefitted from the sales. Meanwhile, the majority of the peasant population kept struggling with existential problems throughout this time. By means of the aforementioned profits à prendre, “peasants would commonly solve their existential situation, as their farms were often too small and their lands frequently not very fertile, so harvests were too meagre to allow for the survival of the peasant families from year to year.”<sup>24</sup>

Apart from the significant financial burdens (paying off the instalments for the abolishment of serfdom, the purchase of easement rights, and very steep taxes in comparison with certain other provinces in the Monarchy), the agrarian crisis in the district of Postojna (similarly as elsewhere in Carniola) was even exacerbated by the extremely unfavourable land ownership structure.<sup>25</sup>

<sup>17</sup> Cf.: Studen, *Lakota na Notranjskem 1865*, pp. 43–72.

<sup>18</sup> *Kmetijske in rokodelske novice*, 17 August 1864.

<sup>19</sup> Ibid. “Graz association” refers to the Imperial and Royal privileged central Austrian Mutual Fire Damage Insurance Company (k. k. privilegierte Innerösterreichische wechselseitige Brandschaden Versicherungsanstalt für Steiermark, Kärnten und Krain), established in 1828 at the initiative of Archduke Johann.

<sup>20</sup> Strömmer, *Klima-Geschichte*, p. 7.

<sup>21</sup> For more information about the peasant debt, see for example: Lazarevič, *Kmečki dolgovi na Slovenskem*; Kačičnik Gabrič, *O kmečkih dolgovih nekoliko drugače*.

<sup>22</sup> More details in: Lazarevič, *Kmečki dolgovi na Slovenskem*, pp. 14–19.

<sup>23</sup> Kačičnik Gabrič, “*To smemo že tako dolgo*”, p. 382.

<sup>24</sup> Ibid., p. 384.

<sup>25</sup> About the issue of the fragmentation of agricultural holdings, cf.: Fischer, *Zagate v kmetijstvu*, pp. 72–73.

**Table 1:** Land ownership structure in the district of Postojna in 1865\*

Settlement	Size of land									
	A	B	C	D	E	F	G	H	I	J
Rakitnik	•	3	•	12	1	1	•	•	6	•
Veliki Otok	•	•	•	5	1	17	2	•	8	•
Zalog	•	•	1	7	1	16	•	•	7	•
Grobišče	•	2	•	11	•	•	•	•	10	•
Matenja vas	•	•	1	15	•	7	•	•	•	•
Mali Otok	•	•	2	4	•	5	•	•	3	3
Hrašče	1	2	4	14	3	1	•	•	9	2
Zagon	•	•	•	15	5	2	•	•	•	2
Stara vas	•	•	2	6	•	4	•	1	1	•
Postojna	•	•	•	2	21	11	38	•	12	•
<b>SUM</b>	<b>1</b>	<b>7</b>	<b>10</b>	<b>91</b>	<b>32</b>	<b>64</b>	<b>40</b>	<b>1</b>	<b>56</b>	<b>7</b>
PERCENTAGE	0.3	2.3	3.2	29.4	10.4	20.7	13	0.3	18.1	2.3

Legend: A = 1 and a half Hufe; B = an entire Hufe; C = 3/4 Hufe; D = 1/2 Hufe; E = 1/3 Hufe; F = 1/4 Hufe; G = 1/6 Hufe; H = 1/8 Hufe; I = cottager; J = no information.

\* A detailed analysis of the land structure was made possible by a special section (*Hubenbesitzstand*), included in the tabular census of food and seed stocks from house to house in the Postojna district villages that had been affected by hail of 23 February 1865, signed by the Head of the Postojna District Office (*k.k. Bezirksamt=Vorsteher*) Anton Globočnik and sent to the Provincial Presidency in Ljubljana. The analysis was annexed to Globočnik's crisis report of the Imperial and Royal District Office of Postojna of 23 February 1865 and is a part of the bundle of the Provincial Presidency for Carniola (reports on hunger in Inner Carniola), kept in the Archives of the Republic of Slovenia (ARS): SI AS 16, bundle: 24, t. e. 10, Z. 357.

As the table indicates, in the region in question, most farms (almost 30 percent) measured half a family farm or *Hufe* – i.e. approximately 15 to 20 hectares. Most of these half-a-*Hufe* farms were located in the villages of Matenja vas, Zagon, Hrašče, Rakitnik, and Grobišče. Only a handful of farms were larger than that. In terms of numbers (over 20 percent), the farms measuring a quarter of a *Hufe* were also not negligible. Most of these were located in Veliki Otok and Zalog. Even in the beginning of the 20<sup>th</sup> century, when it became a town (in 1909), Postojna as a district centre was predominantly a “rural settlement” with only a few modern buildings.<sup>26</sup> In 1865, smallholders with a sixth of a *Hufe* represented the most numerous group in Postojna (45.2 % of all landowners) and a quarter of landowners (25 %) owned a third of a *Hufe*.

While a “strong presence of cottagers” was characteristic of Inner Carniolan boroughs (*Märkte*),<sup>27</sup> it is somewhat surprising that only 12 cottagers (*Keuschler, Häusler*) existed in Postojna, representing a modest 14.3 % in the context of the land ownership structure. The modest number of cottagers can also be noted in certain other villages of the district under consideration (altogether amounting to less than a fifth). It is interesting that there were no lodgers (*Inwohner*, Slovenian *gostači*, the poorest of the poor) at all in the district of Postojna. Granted, it is possible that some might have been included in the section without any information about the state of ownership. The comparison between the district of Postojna and the neighbouring district of Senožeče, located south of the analysed area, reveals that Senožeče had, judging from the archival information, more than a quarter or 26.9 % of cottagers and 7.8 % of lodgers. The census interviewers registered most of them in the municipalities of Razdrto and Senožeče,<sup>28</sup> i.e. in the boroughs next to the main commercial road between Ljubljana and Trieste that

<sup>26</sup> Čeč, Zakaj je Postojna hotela postati mesto?, p. 39.

<sup>27</sup> Cf.: Golec, Cerknica, p. 214.

<sup>28</sup> The analysis of the information about the land structure is based on: SI AS 16, bundle: 24, t. e. 10, Kronland Krain, Bezirk Senosetsch, Ausweis über den Vorrath an Lebensmitteln in der Ortsgemeinde Präwald (Razdrto), 12 January 1865, and Kronland Krain, Bezirk Senosetsch, Ausweis über den Vorrath an Lebensmitteln in der Ortsgemeinde Senosetsch (Senožeče), 14 January 1865.

passed through Postojna as well. The structure of ownership in the Razdrto municipality indicates that cottagers amounted to as much as 40 %, while 8 % of lodgers were registered as well. Senožeče had 39.4 % of cottagers and 11 % of lodgers. In Razdrto as well as in Senožeče, we can therefore note an above-average number of cottagers and lodgers who would assist the larger farmers with work in the field, while during the winter, they would survive on small artisanal works or other side businesses related to transit trade and transport or forestry.

Small farms mostly produced solely for their own needs. The environmental circumstances – including, among other things, the climate and pedological conditions – were unfavourable for farming.<sup>29</sup> Soil surveys indicate that “in the Pivka Basin, there are relatively few soils thick enough to suffice for fields /.../. Because of frequent floods, the soil is much more appropriate for pastures and meadows. The karst landscape of slopes and plateaus was, apart from the forests, almost exclusively useful only as meadows and pastures.”<sup>30</sup> In 1900, the district of Postojna thus contained only 10.8 % of fields, 27.7 % of meadows, 32.7 % of pastures and mountains, 26.5 % of forests, 1 % of gardens, and 1.3 % of vineyards.<sup>31</sup>

The settlements under discussion could secure relatively decent and steadiest profits from transportation, as they were located next to or at least in the vicinity of the commercial roads that ran from Vienna through Ljubljana and further on through Postojna onwards to the ports of Trieste and Rijeka as well as towards Gorizia. The local peasants actually “focused all of their energy” into transportation. /.../ With their draught animals and undersized carts, small farmers could not keep up with the big foreign freight forwarders that boasted heavy carts and good horses. Nevertheless, more than enough work was still left for small transporters. Numerous innkeepers and tradesmen who accommodated and fed the carriers as well as serviced their vehicles could also make a lot of money from these operations.”<sup>32</sup>

After the final section of the Southern Railway between Ljubljana and Trieste became operational in 1857, road traffic started declining. The redirection of freight transport to the railway caused a significant stagnation of the transportation business in the district of Postojna, severely hampering the possibilities for additional earnings. With the arrival of the railway, the time of medium and long-range road transport that had offered numerous opportunities to the peasant population and contributed significantly to integrated peasant economy gradually came to an end.<sup>33</sup> The time that would later be seen by many as the true golden age of earnings from non-agricultural activities would soon be over. This was the end of an era when “some money could be found even in the poorest houses in the remotest of villages”, which resulted in “the prevalence of general satisfaction, while hardship and distress was almost unheard of.”<sup>34</sup>

The life of peasants in this mostly rural area was “very difficult and exhausting, which was evident even from these people’s physical constitution”. Already the German historian Ernst Moritz Arndt, who travelled through the Pivka Basin at the end of the 18<sup>th</sup> century, observed that “none of the villagers appears truly robust. At least I cannot recall any such farmer. Their bodies are thin and disproportional, and they are only rarely tall and shapely. I have not seen a comely figure either in men or women. The latter rarely have handsome physiques and are chubby.”<sup>35</sup>

The travellers’ descriptions underline that food, daily as well as festive, was the main concern of the rural population. At the same time, these people were completely careless regarding their inferior and paltry housing<sup>36</sup> and hygiene.<sup>37</sup>

<sup>29</sup> Fischer, *Zagate v kmetijstvu*, p. 72.

<sup>30</sup> Pančur, *Porajanje modernega gospodarstva*, p. 57.

<sup>31</sup> *Ibid.*

<sup>32</sup> *Ibid.*, p. 64.

<sup>33</sup> Kalc, *Prebivalstvo in gospodarski viri v tržaškem kraškem zaledju*, p. 155.

<sup>34</sup> Pančur, *Porajanje modernega gospodarstva*, p. 66.

<sup>35</sup> Arndt, *Reisen*, p. 386.

<sup>36</sup> Cf.: Drobesh, *Grundherrschaft und Bauer auf dem Weg zur Grundentlastung*, pp. 54–55.

<sup>37</sup> Cf.: Remec, *Podgri, očedi, živali otrebi*, pp. 123–124.

## POOR HARVEST THREATENS TO CAUSE HUNGER; SOWING AND PLANTING ARE IN DANGER AS WELL

The most pressing question of “what will the mistress of the house put on the table?” always accompanied poor harvests, shortage, austerity, and looming hunger. The same was true in our case, as the extremely unfavourable weather and ultimately also the horrific hail destroyed the crops to the degree where farmers were, on the one hand, forced to ask themselves what they would eat to survive, while, on the other hand, they needed to figure out what they would be able to sow at all. The state of the peasants’ food and seed stocks was crucial for their livelihood, especially in case of poor harvests.

Towards the end of 1864, this situation grew worse from day to day in the area under consideration. By Christmas, the distress had already become so profound that the Head of the Postojna District Office Anton Globočnik was forced to ask the Provincial Presidency of Carniola in Ljubljana for assistance. At this point, let us mention that at the end of December 1864, the Heads of the Lož and Senožeče districts turned to the Provincial Presidency for help as well due to the severe distress and impending famine. Regarding their request for assistance, at the beginning of January 1865, the Provincial Presidency ordered a detailed examination of the state of food and seed stocks in the field in these three Inner Carniolan districts.

The investigation of the aforementioned situation in January 1865, whose results were then communicated to the Provincial Presidency in Ljubljana, proceeded from village to village and from house to house in all three districts. In terms of structure, the tabular statements about the food and seed stocks in the districts of Postojna, Senožeče, and Lož contain an abundance of information, yet differ from each other in terms of details as well as the sections that they contain. The statements for the district of Senožeče are the most precise and include many detailed notes. The information for the villages in the Lož district is slightly less telling, yet still quite revealing. Unfortunately, the data for the district of Postojna is almost completely numerical and therefore less expressive.<sup>38</sup> This information is nevertheless extremely valuable for our research. Let us first examine the recapitulation of the data for the area affected by hail, discernible from the Tables 2 and 3.

The sums of the established stocks of field crops in the affected villages indicate that potatoes were the most widespread and predominant field crop in this area. Already the aforementioned traveller Arndt noticed that this was a very frequent dish. Potatoes thus represented the basic and most ordinary food

Settlement	A	B	C	D	E	F
Rakitnik	146	3.5	13	13.5	2.5	146
Veliki Otok	191	31.5	40	38.5	31.5	331
Zalog	185	5	•	•	2	101
Grobišče	129	1	6	3	4.5	48
Matenja vas	169	22.5	45	30	55	204
Mali Otok	115	•	•	•	•	90
Hrašče	219	8	21	•	30.5	182
Zagon	174	0.25	1.25	8	3.25	185
Postojna	462	•	5	12	10.5	173
Stara vas	88	8	3	13	1.5	30
<b>TOTAL</b>	<b>1878</b>	<b>79.75</b>	<b>134.25</b>	<b>118</b>	<b>141.25</b>	<b>1490</b>

Legend: A = number of persons; B = buckwheat; C = oats; D = barley; E = beans; F = potatoes.

**Table 2:** Current field crop stocks in Merling\* (RECAPITULATION, 23 February 1865)

\* Merling (in Slovenian: *mernik*) was an old Austrian unit of volume: 1 Merling = half a Metzen = 30.74 litres.

<sup>38</sup> The aforementioned tabular statements are kept in the Archives of the Republic of Slovenia (ARS): SI AS 16, the bundle of the Provincial Presidency for Carniola (reports on hunger in Inner Carniola): 24, t. e. 10.

Settlement	A	B	C	D	E	F
Rakitnik	206	75	137	65	30	69
Veliki Otok	245	104	66	53	54	97
Zalog	202	63	75	53	46	76
Grobišče	156	61	110	65	35.5	135
Matenja vas	183	58	70	41	17	120
Mali Otok	167	71	81	38	19	52
Hrašče	195	94	126	96	46	132
Zagon	151	79	126	44	50	118
Postojna	492	58	19	96	85	238
Stara vas	102	41	36	32	24	88
<b>TOTAL</b>	<b>2099</b>	<b>704</b>	<b>846</b>	<b>583</b>	<b>406.5</b>	<b>1125</b>

**Table 3: THE REDUCED YET CRUCIAL QUANTITY OF FIELD CROPS, CRITICAL FOR SURVIVAL AND PRODUCTION (SOWING AND PLANTING) IN MERLING (RECAPITULATION, 23 February 1865)**

Legend: A = for survival (maize); B = buckwheat for sowing; C = oats for sowing; D = barley for sowing; E = beans for sowing; F = potatoes for planting.

apart from porridge. “Per unit of agricultural land, potato yield far exceeded that of cereals in terms of volume, though the caloric value of potatoes was modest in comparison: 100 g of potatoes contain 87 kilocalories, while 100 g of wheat flour, for example, contain as much as four times more, i.e. 363 kilocalories. It is nevertheless certain that potatoes were of extraordinary importance for the population that lived in scarcity: potato stocks lasted longer than the stocks of cereals produced on the farmland of the same size, and potatoes provided the feeling of satiation sooner in spite of their inferior nutritional value.”<sup>39</sup> Furthermore, cereals like oats, barley, and buckwheat did not grow well in this region, which is why their yields were more modest in comparison with potatoes as well as beans.

The absence of maize, which was already quite widespread elsewhere in Carniola in the period under consideration, is interesting. In comparison with potatoes, this new crop only asserted itself with great difficulty in the district of Postojna, and its presence was negligible. This was because highly resistant varieties of maize, more easily adapted to poorer climate conditions,<sup>40</sup> were in short supply, and farmers preferred to avoid the time-consuming and expensive manner of sowing maize, also due to significant expenses.<sup>41</sup> Furthermore, they were dissuaded from sowing maize because of the significant importation of cheaper maize from Croatia and the Veneto region, which, for example in 1869, was the most significant “of all cereals in terms of quantity”.<sup>42</sup>

The table regarding the field crop stocks (Table 2) indicates that the situation was most dire in the villages of Mali Otok and Zalog.<sup>43</sup> At the time, Mali Otok, if we look at it more closely, consisted of no more than 17 houses and 115 inhabitants. As the tabular census indicates,<sup>44</sup> in the tiny village, five land-owners owned a quarter of a *Hufe*, four owned half a *Hufe*, while two owned three quarters of a *Hufe*. Apart from these, the table lists three cottagers, while the state of ownership is not indicated for three households (it is possible that they were lodgers).

<sup>39</sup> Makarovič, *Prehrana na Slovenskem*, p. 156. Judging from the information contained in the chronicles of the Luče parish – in the middle of the 19<sup>th</sup> century, potatoes prepared in a variety of ways played the main role in the evening meals at the local farms. Žiga Zwitter, referring to Robert Netting, stated an approximate estimate that on the same surface, potatoes yielded around 3.3 times as many calories for human consumption as rye. Furthermore, potatoes were more resistant to bad weather, and shortly before harvest, the tubers could not even be harmed by hail. See: Zwitter, *Subsistence*, p. 175.

<sup>40</sup> In his article *Kmetovanje na Notranjskem*, the publicist Peter Hicinger wrote, for example, that maize did not grow well in these parts especially because of the severe bora winds. See: *Kmetijske in rokodelske novice*, 16 May 1860.

<sup>41</sup> For general information about the introduction of maize see: Britovšek, *Uvajanje novih kultur na Kranjskem*, about maize pp. 127–140.

<sup>42</sup> *Ibid.*, p. 139.

<sup>43</sup> These two villages stood out because the inhabitants of Mali Otok did not possess any stocks of cereals or beans and had only very modest stocks of potatoes; while the inhabitants of Zalog owned, apart from modest stocks of potatoes, also minimal amounts of buckwheat and beans.

<sup>44</sup> Archives of the Republic of Slovenia (ARS): SI AS 16, the bundle of the Provincial Presidency for Carniola (reports on hunger in Inner Carniola): 24, t. e. 10, the tabular census for Mali Otok (*Ortschaft Kleinotok*).



The latter, as well as the cottagers, had no stocks at all, while the census indicates merely an approximate estimation of how many *Merling* of maize the individual families needed for survival. In the opinion of the census interviewer in the field, a cottager with a family of six needed, for example, at least ten *Merling* of maize, while a cottager with a family of two needed at least four *Merling*. However, based solely on the numerical tables, it is not possible to discern any precise explanations regarding the living conditions or circumstances that led the census interviewer to these approximate estimates of what people required for their bare survival. Therefore, all we learn about the two-member household of the cottager from Mali Otok No. 14 is that it had no stocks and that it urgently needed four *Merling* of maize to ensure its bare survival. The same was true of the eight-member family of the cottager from Mali Otok No. 22, which was left without anything and urgently needed at least ten *Merling* of maize to start with.

Of course, it is not easy to come to terms with the approximate estimates of the quantities of maize as an emergency foodstuff required for the bare survival of the individual families that needed help – meaning that they could avoid the impending famine until the next harvest and therefore crops. Nowadays that we live in a society of abundance and when enormous quantities of food get discarded even without any guilty conscience, we can, for example, ask ourselves what ten *Merling* of maize actually represented for the aforementioned family of eight in order to tide these people over until August when the next harvest was to be expected. When shaping our perception of the charitable aid in the form of foodstuffs, we can at least partly resort to a similar claim regarding the urgent need for food that the Head of the neighbouring district Lož, Anton Ogrinc, wrote in his report of 6 February 1865 on the distress, addressed to the Imperial and Royal Provincial Presidency in Ljubljana. In his report, he stated the following opinion: “*If we reduce the shortage of food to the usual foodstuff of the poor, maize, based on the investigations and calculations that have been carried out, one Merling (30.74 litres) of maize yields 20 Maß (1.4 l X 20 = 28 litres) of flour. To barely linger on, a person therefore needs, on average, half a Maß (0.7 litres) of flour per day.*”<sup>45</sup> Ogrinc wrote that this could serve as a starting point for the aid, even though the quantity supposedly, “*taking into account the circumstances, barely corresponds to a quarter of the usual prison rations*”.<sup>46</sup> As it was, the diet of the poor was monotonous, and they would often eat corn mush. When people had nothing else but corn flour at their disposal, it was not unusual to eat it in the morning, noon, and evening. During the times of crises, shortages, and looming hunger, the poorest of the poor would sometimes cook and eat nothing but barley mush, potatoes, carrots, pickled cabbage, or sour turnips, often completely thin, watery, and without any dressing – provided that they had these foodstuffs at all.<sup>47</sup>

If we apply Ogrinc’s methodology<sup>48</sup> to calculate the ten *Merling* of maize that would purportedly help the family of eight of the cottager from Mali Otok No. 22 to weather the crisis and allow it to at least survive, we ascertain that this quantity was supposed to suffice for 50 days per family member. As the harvest was still almost half a year away at the time, this by no means met the needs. In fact, this reduced quantity of food aid was supposed to at least temporarily stave off the hunger of the cottager’s family, which, much like the rest of the villagers in distress, needed help as soon as possible.

In the village of Mali Otok, which suffered the most, the hail in fact destroyed all of its field crops, and none of the households had any reserves of cereals (buckwheat, oats, barley) or beans. Regarding the stocks of potatoes – which had remained small and prone to rot due to the extraordinarily wet and cold weather in 1864<sup>49</sup> – the census interviewers only discovered some in five households that only owned a modest amount of 90 *Merling* altogether. Of these, as much as a third (30 *Merling*) belonged to the

<sup>45</sup> SI\_AS 16, batch: 24, t. e. 10, Z. 329 Report of the Imperial and Royal District Office of Lož to the Imperial and Royal Presidency of 6 February 1865.

<sup>46</sup> SI\_AS 16, batch: 24, t. e. 10, No. 87, Report of the Imperial and Royal District Office of Lož of 7 February 1865 regarding No. 2, pertaining to the distress of the fire victims from Gornje Jezero.

<sup>47</sup> Cf.: Makarovič, *Prehrana na Slovenskem*, p. 137.

<sup>48</sup> 10 *Merling* of maize: 8 persons = 1.25 *Merling* per person. 1.25 *Merling* X 28 litres = 35 litres of flour per person. 35 litres / 0.7 litres = 50 days per person.

<sup>49</sup> Cf.: *Kmetijske in rokodelske novice*, 28 December 1864.

owner of half a *Hufe* and the head of the family of six at Mali Otok No. 12.<sup>50</sup> Twenty *Merling* of potatoes were registered in the nine-member household of the owner of half a *Hufe* at Mali Otok No. 3; while two owners of three quarters of a *Hufe* owned 15 *Merling* of potatoes each. The first of these was the head of a family of six at Mali Otok No. 8, while the second was the head of the seven-member family at Mali Otok No. 11. The census interviewers registered the remaining ten *Merling* of potatoes with the head of the family of nine at Mali Otok No. 5, who owned a quarter of a *Hufe*. As Table 3 indicates, during the census of food and seed stocks, District Head Globočnik assessed that the farmers from Mali Otok needed at least 52 *Merling* of potatoes for planting. Of the five aforementioned farmers that owned some potato stocks, the farmer with the smallest stock – i.e. the one from Mali Otok No. 5 who stored ten *Merling* of this field crop – needed no less than six *Merling* of potatoes for planting.

Seeds required for agricultural production were a specific issue. During the increasingly severe distress and impending famine, the seed and tuber stocks that the farmers had set aside for the next sowing and planting were constantly “under threat”. Once the farmers started using them to stave off hunger, they could vanish very quickly. Once people resorted to such a solution, the damage was already done as this harmed their own agricultural production: with meagre financial resources, they would be unable to purchase seeds in the market to make up for the shortage. During crises, the issue of preserving seeds and tubers until sowing and planting was therefore of crucial importance. At the same time, it made a difference when the sowing and planting of individual field crops took place. In his appeal for urgent aid for the purchase of sufficient quantities of high-quality seeds, Anton Globočnik therefore humbly underlined “that potatoes, barley, and oats must be planted or sowed immediately after the snow melts; beans should be planted in the middle of May; while buckwheat seeds will be needed at the beginning of June”.<sup>51</sup>

It is also interesting that the stocks of cabbage and turnips, whose larger or smaller quantities were listed as “survival foods” in the districts of Senožeče and Lož, were not included in the census anywhere in the district of Postojna. However, as Anton Globočnik’s report suggests, the local farmers still occasionally stocked these two field crops. Foods related to pig farming, which was vital for domestic consumption in Inner Carniola, were also not mentioned – even though in the neighbouring district of Senožeče, the registrars recorded that many farmers stocked certain quantities of bacon or pork. Let us conclude our commentary with yet another note: that even livestock allegedly suffered because of animal feed shortage. Globočnik also reported that not only did “the hail completely destroy the farmers’ crops”, but the “two-month livestock ban because of cattle plague caused all the animal feed stocks to be used up so that the livestock suffers a severe shortage as well”.<sup>52</sup>

## THE DIMENSIONS OF THE CRISIS AND THE FINAL REPORT TO THE PROVINCIAL PRESIDENCY

Before we move on to the most credible description of the crisis under consideration – i.e. to the exhaustive report drawn up by the District Head Anton Globočnik, which he sent to the Provincial Presidency in Ljubljana on 23 February 1865 together with a tabular statement of food and seed stocks – let us look at the percentage of the population affected by the life-threatening crisis of 1864/65 with the aid of the Table 4.

The table reveals that in the area under consideration, the population increased very slowly between 1817 and 1869 (the number of inhabitants increased by 15.5 %). In view of the information from the tabular statement, the life-threatening crisis affected more than a half (55.6 %) of the population, if we

<sup>50</sup> Unlike the food and seed censuses in the districts of Lož and Senožeče, the statement regarding the field crop and seed stocks in the district of Postojna does not include the landowners’ names and surnames.

<sup>51</sup> SI\_AS 16, batch: 24, t. e. 10, Letter to the Provincial Presidency in Ljubljana (regarding 704/P) – the Imperial and Royal District Office of Postojna reports on the crisis in the district (28 March 1865).

<sup>52</sup> Ibid. The cattle plague that caused additional damages to the farmers appeared in the middle of October. See: *Kmetijske in rokodelske novice*, 30 November 1864.

compare the information about the number of persons in 1865 (A) with the number of people in 1869. However, if we look at the contemporaneous information provided by Anton Globočnik in his letter to the Imperial and Royal Provincial Presidency in Ljubljana (he lists 3606 inhabitants),<sup>53</sup> this percentage would be a little bit lower, but would still exceed half of the population (52.1 %).

Finally, we need to familiarise ourselves with the “humblest report on the crisis in the district of Postojna”, signed at the District Office by the District Head and Mayor of Postojna Anton Globočnik and the municipal heads of the villages affected by the hail:

*“The humbly undersigned personally visited ten neighbourhoods affected by hail. Going from village to village, from house to house, and based on the attached statement A, he established the state of available stocks as well as the dire need for food and cereal seeds.*

*The statement indicates that people mostly face a shortage of food – that at this point, they only have some cabbage and occasionally a few carrots and turnips at their disposal. I did not find any bread in any of the privately-owned houses. While wealthier households had some corn mush (Kukuruz Mozhnik), most households only had pickled cabbage or simply nothing that they could cook. I was shown houses where they could only prepare a meal once every few days, yet misery and desperation are still not that overwhelming. Nevertheless, I have no choice but to ask for help.*

*As far as cereal seeds are concerned, there are occasional households that have saved some cereals for sowing, though not enough. It is questionable whether these seeds will be preserved until sowing at all. Most households – especially in the villages of Mali Otok, Zalog, Grobišče, Hrašče, and Rakitnik – have been left without any cereal seeds, and because the income is so scarce during this season, there is little hope that these families could procure any.*

*In light of the circumstances that have been established, the humbly undersigned is convinced that the population of all these villages will suffer immensely due to shortage until the next harvest, which means until the end of July. Among other things, this will have serious consequences for the people’s health as well. Deaths due to famine should nevertheless not occur, as people will disperse throughout the province – partly to earn some money and partly to beg. Other landowners will resort to loans or claim their shares of the forests in accordance with the abolishment of serfdom, mark the marketable wood for cutting, and thus attempt to stave off the shortage of food temporarily.*

*However, we cannot overlook the fact that it is still almost half a year until harvest; that people are already suffering because of terrible scarcity; and that their distress will keep mounting from day to day. During the growing season, when the farmers urgently require more filling food during the exhausting work in the fields, the crisis will reach its peak. Therefore, it is urgent that the bigger settlements resort to charitable donations. The poorest families from these villages should be the first to receive aid, and food for survival should be distributed among them periodically.*

*Currently, this need is apparently all the more pressing as it appears – in view of the reduced tabular data that has been collected – that those who require aid [need it for survival, see Table 3] currently*

**Table 4:** Number of inhabitants of the villages affected by hail in 1817 and 1869\*

Settlement	1817	A	1869
Rakitnik	194	146	180
Veliki Otok	210	191	222
Zalog	158	185	203
Grobišče	177	129	136
Matenja vas	185	169	218
Mali Otok	126	115	133
Hrašče	229	219	294
Zagon	182	174	190
Postojna	1356	462	1701
Stara vas	109	88	103
<b>TOTAL</b>	<b>2926</b>	<b>1878</b>	<b>3380</b>

Legend: A = number of persons affected by the life-threatening crisis of 1864/65

\* The information regarding the population was gathered by Pančur, Postojna kot upravno središče, p. 46.

<sup>53</sup> SI\_AS 16, batch: 24, t. e. 10, Letter to the Provincial Presidency in Ljubljana (regarding 704/P) – the Imperial and Royal District Office of Postojna reports on the crisis in the district (28 March 1865).

possess 2099 Merling of maize, which is much more than a half of the actual normal needs. However, to alleviate the shortage, any quantities of food would be welcome so that it could at least be distributed among the poorest inhabitants of the municipality and widows with many children who are unable to earn anything on their own.

Regarding cereal seeds, let us underline that the landowners that are better off do not wish to receive any assistance from the esteemed government in this regard, as they are concerned that they could be given cereal seeds from other areas that might not grow well here. Furthermore, they can procure cheaper seeds on their own. However, due to their failure to repay the loans for their estates, inability to secure additional earnings, and numerous other reasons that include the latest two-month disturbance of trade caused by the rampant cattle plague, the majority of landowners will simply depend on this aid if they want to ensure that their fields are farmed.

The proposed quantities of seeds, which are also more modest than the actual needs, are evident from the attached statements. It is true that a considerable amount of money would be required to purchase this reduced quantity of seeds and it should not be overlooked that the repayment of this sum will be very difficult considering the poverty of the locals, who have nevertheless never failed to pay taxes. However, if people are left without cereal seeds, they will be unable to sow as well as harvest anything, and thus the distress will persist in the following year as well. Otherwise, I can assume that the aforementioned quantities could perhaps be further reduced somewhat. As it is, some of these people will be able to procure cereal seeds on their own – especially if the esteemed government does not provide them at a considerable discount.

In order to assist those who cannot help themselves at this time, a suitable advance should urgently be transferred from the state treasury or the provincial fund to allow for the purchase of cereal seeds from the areas where the soil resembles the local conditions. These seeds would then be distributed, in exchange for the purchase price, among the individual landowners that wish to buy them. As it is possible that many of the local landowners hope to procure cheaper cereal seeds elsewhere or do not wish to source seeds in this manner out of fear of repayment obligations, it is recommendable that the purchase of cereals be left to the district office, which could buy and distribute at least the approximate quantities of seeds in accordance with the demand as soon as possible.

The other neighbourhoods in this district did not have a good harvest either, which is why they must face scarcity, as it has been customary in the Karst region for many years now. However, as they have been spared the severe downpours, they have at least not been left without any food and cereals. Consequently, I have not heard any particular complaints from these parts, and I have, to date, not carried out similar inquiries in these neighbourhoods.

I am turning to the Imperial and Royal Provincial Presidency in the hope that it might elect to take measures to alleviate the distress of the local population.

- An Imperial and Royal Government Commissioner should be dispatched to manage the public collection of resources to provide aid to this area. However, experience shows that not much hope should be invested in such a collection of donations. Therefore, his majesty the Emperor should be turned to for help. Appropriate measures should be taken as soon as possible in order to promptly distribute, with the assistance of the heads of municipalities, the variety of foods collected or purchased with donations among the families most affected by the shortage and thus ensure their survival until the next harvest.
- A fund should be established to allow for the purchase of local seeds as follows:
  - 350 Metzen<sup>54</sup> or 704 Merling of buckwheat
  - 420 Metzen or 846 Merling of oats
  - 290 Metzen or 583 Merling of barley

<sup>54</sup> Metzen (in Slovenian: mecen or vagan) was an old Austrian unit of volume used for cereals: 1 Metzen = 2 Merling = 2 X 30.74 l = 61.48 litres.

200 Metzen or 406.5 Merling of beans

600 Metzen or 1125 Merling of potatoes.<sup>55</sup>

- The direction of the Southern Railway in Vienna could be asked for a special privilege of transporting the aforementioned quantities to the railway station in Postojna free of charge.

To avoid sending separate requests, the municipal heads have joined this report with a humble request that assistance be graciously provided to the suffering population.

Imperial and Royal District Office of Postojna, 23 February 1865<sup>56</sup>

## AID FOR THE AFFECTED

Based on his comprehensive and detailed inquiries into one of the poorest harvests in the district of Postojna in a long time, which could result in hunger, Anton Globočnik – similarly to the heads of the Lož and Senožeče districts – managed to convince the Provincial President Johann von Schloissnigg to take the measures that were customary in that period, i.e. to collect donations throughout the province of Carniola for the people affected. After a detailed examination of the Postojna District Office's statements and report, Schloissnigg informed the district head that he, as an imperial deputy, "issued a special call to the whole crown land of Carniola to provide aid by collecting donations in order to mitigate the distress, suffered in certain Inner Carniolan districts. As according to the report No. 357 of 23 February certain municipalities in the Postojna district have been affected as well, I shall also take them into account when allocating the received donations. They shall also participate in all the measures introduced to mitigate the distress in the districts of Lož and Senožeče". He asked the district head "to immediately establish a commission for distress under your leadership, consisting of the heads of the municipalities, the local priest, and other impartial confidants. The commission shall be tasked with distributing aid to the people in need according to the facts established after all the circumstances and conditions have been thoroughly verified. Naturally, the in-kind provision of food should be given priority over the provision of money, which is why the commission for distress will be further tasked with the appropriate distribution of aid. During the winter, the commissions will also have to be ready to acquire and allocate the seeds needed for sowing in spring". In his letter, the imperial deputy pointed out that "the district head should immediately inform /him/ of all the particular events regarding the distress".<sup>57</sup>

Provincial President Baron von Schloissnigg was a highly respected man with a strong influence in Carniola, hence his "Call to aid the poor in Inner Carniola", published by all three Ljubljana newspapers (*Kmetijske in rokodelske novice*, *Laibacher Zeitung*, and *Triglav*) was much more efficient than the other calls to collect aid (for example at the local parish level). As an authority, the state deputy explicitly demanded that the newspapers publish the lists of people who donated alms for the people of Inner Carniola. This also contributed to a greater donor response, as the public listing revealed the charitable nature of donors, thus increasing their reputation and honour in the society. Apart from generous individuals, various charitable societies also organised events where money to help "the poor compatriots" was collected. As usual, some money was also collected with theatre performances and concerts. The Church collected money as well, while the imperial dynasty was the most generous: Emperor Franz Joseph, who also made use of generous donations to increase the popularity of the ruler and his dynasty, contributed as much as 4000 *Gulden*; Empress Caroline Augusta 1000; Archduke Franz Karl 2000; and Archduke Albrecht 200. The magnitude of this donation is revealed by the fact that together with all the other contributions collected by 18 June 1865, the total amounted to 17 675 *Gulden*.

<sup>55</sup> Calculated as litres: 21,518 or 21,640.96 l of buckwheat; 25,821.6 or 26,006.04 l of oats; 17,829.2 or 17,921.42 l of barley; 12,296 or 12,495.81 l of beans; and 36,888 or 34,582.5 l of potatoes.

<sup>56</sup> SI\_AS 16, batch: 24, t. e. 10, Z357, Report of the Imperial and Royal District Office of Postojna on the crisis in this district of 23 February 1865.

<sup>57</sup> SI\_AS 16, batch: 24, t. e. 10, Letter from the Imperial and Royal Provincial Presidency to the Imperial and Royal District Office of Postojna of 28 February 1865.

It should also be mentioned that Ljubljana expected aid from the state treasury as well, yet in vain. The Head of the Department for Political Administration Minister Josef Lasser von Zollheim notified His Excellency von Schloissnigg in a letter of 28 February 1865 that “it is not possible to use the resources for aid from the state treasury because the distress is of a local character and such expenses are not provided for in the state financial plan”.<sup>58</sup> The province should therefore resort to its own resources since the empty treasury, as it is, contains nothing but cobwebs. The only option the provincial president was therefore left with was to encourage charity for the poor people of Inner Carniola.<sup>59</sup>

According to the newspapers, also on this occasion, Carniolans provided as much assistance as they could. Similarly as when faced with other disasters (for example fires), they proved their compassion and observance of the old Christian imperatives of loving your neighbour and having faith.<sup>60</sup>

By the end of March 1865, the distress had reached such proportions that the District Head Globočnik implored the Imperial and Royal Provincial Presidency to “finally pay merciful attention” to the districts of Lož and Senožeče as well as Postojna. He reported that “he and the priest keep coming across large groups of people begging for alms”.<sup>61</sup> Despair and anguish were spreading among the population deprived due to the shortage. Future prospects were thus bleak, and the chances of a disease outbreak also increased as the misery was spreading and intensifying. The increasing number of beggars supposedly also threatened to result in a social revolt. Aid in the form of providing food and seeds was thus more than necessary – not only to mitigate the growing distress but also to prevent the economic paralysis by reviving agriculture and thus the landowners’ ability to pay taxes.

Anton Globočnik, much like the head of the Lož district, emphasised that fields should be sowed as soon as possible regardless of the constantly unfavourable weather conditions. The harshest winter in eighty years persisted and dragged on well into springtime. In Inner Carniola, it continued to snow in March: in some places, more than two and a half meters of snow fell. It was extremely cold and the harsh bora wind blew continuously, producing snowdrifts and preventing normal communication. According to the report of the head of the Senožeče district office, “the unusually long winter” prevented “works in the fields that are normal for this time of year, making it impossible for the poor to earn anything”.<sup>62</sup> People hoped that circumstances would improve and that they would finally receive the aid in food and seeds. They hoped that the collected money would suffice to buy enough seeds or at least enough seed potatoes, which were the most important crop in the district, and that “the seeds will germinate well and, due to the unfriendly local climate, originate in Upper Carniola”, which shared a similar climate.<sup>63</sup>

The Provincial Presidency responded to Globočnik’s plea for immediate help and provided the district with some money to overcome the worst of the situation. At the beginning of April, His Excellency Master of the Horse (*k. und k. Oberstallmeister*) Count Karl von Grünne, who was responsible for the royal stud farm in Lipica, also witnessed the distress in Inner Carniola and reported it to the Emperor. On 8 April 1865, he met with the heads of Lož, Senožeče, and Postojna districts at a consultation to mitigate the distress in Postojna, convened by the Provincial President Baron von Schloissnigg. Count von Grünne informed the participants of the contributions “from the highest circles” to mitigate the distress and expressed his wish for “a purposeful distribution of aid”. At the consultation, it was established that at least 22,000 *Gulden* were needed to purchase seeds and food, of which more than 18,000 *Gulden* would be required just for seeds. They determined that by 7 April, the Provincial Presidency had managed to collect 7608 *Gulden*. However, after subtracting 1600 *Gulden* already spent to aid the people of Inner Carniola, only 6008 *Gulden* were left. This meant that even with the generous contribution of the Emperor and the Court (7200 *Gulden*), the collected money was insufficient. The Provincial

<sup>58</sup> SI\_AS 16, batch: 24, t. e. 10, 481/P 1865, Response from Vienna to Baron von Schloissnigg of 28 February 1865.

<sup>59</sup> More details in: Studen, *Lakota na Notranjskem* 1865, p. 67.

<sup>60</sup> More details in: Čeč, “Srce vsakega je treba pripraviti za dejavno udeležanje zapovedi ljubezni do bližnjega”, pp. 37–70.

<sup>61</sup> SI\_AS 16, batch: 24, t. e. 10, 706/P – Report of the Imperial and Royal District Office of Postojna to the Imperial and Royal Provincial Presidency in Ljubljana of 28 March 1865.

<sup>62</sup> SI\_AS 16, batch: 24, t. e. 10, Z. 652/P – Letter from the Imperial and Royal District Office of Senožeče to the Imperial and Royal Provincial Presidency in Ljubljana of 20 March 1865.

<sup>63</sup> Studen, *Lakota na Notranjskem* 1865, p. 70.

President hoped that the available amount could increase by another 1000 *Gulden* with a further collection of donations. The participants agreed that the available amount should be distributed among the individual districts as swiftly and purposefully as possible, especially in order to provide the seeds that were required to finally cultivate the fields. Ultimately, they came to an agreement that the district of Postojna should be given 4000 *Gulden*; the district of Senožeče 4000 *Gulden*; and the district of Lož 5400 *Gulden*. Furthermore, Master of the Horse von Grünne informed all those present that the Head of the Imperial and Royal Southern Railway Bontout agreed to transport the cargo to aid the people of Inner Carniola free of charge. Freight charges were thus not an issue.<sup>64</sup>

From the viewpoint of the Provincial Presidency, the consultation in Postojna represented the final act regarding the organisation of aid for the affected inhabitants of Inner Carniola. Afterwards, some additional resources were collected through donations. On 3 July 1865 in the newspaper *Laibacher Zeitung*, State Deputy and Provincial President von Schloissnigg publicly thanked the contributors for all of their donations to the people of Inner Carniola. A precise statement of expenses was published as well. If we skip the details, this statement indicates the following:

- 3762 *Gulden* and 65 *Kreuzer* were used to purchase food, i.e. 1100 *Metzen* of maize,<sup>65</sup> 110 *Zentner*<sup>66</sup> of flour, 75 *Metzen* of beans, 6 *Zentner* of salt, and 4 *Zentner* and 14 *Pfund* of lard.
- 11,751 *Gulden* and 32 *Kreuzer* were used to purchase seeds, i.e. 775 *Metzen* of barley, 968 *Metzen* of oats, 735 *Metzen* of buckwheat, 303 *Metzen* of beans, 11 *Metzen* of millet, and 2300 *Zentner* of seed potatoes.
- A further amount of 700 *Gulden* and 59 ½ *Kreuzer* in cash was distributed as well.

A total of 16,214 *Gulden* and 59 ½ *Kreuzer* were therefore spent, and 1461 *Gulden* remained. Some of the leftover sum – 442 *Gulden* – was spent to purchase another 170 *Metzen* of maize for the survival of the inhabitants of the Lož and Senožeče districts. Ultimately, 1019 *Gulden* were left, which were allegedly – as the report of the Imperial and Royal Provincial Presidency for Carniola concludes – “profitably invested”.<sup>67</sup>

## CONCLUSION

In the times when good and poor harvests “still determined the line between humble survival and hunger of the majority of the peasant population”,<sup>68</sup> the modest yet urgent aid arrived in the district of Postojna. In light of the general shortage of food and seeds as well as the looming famine, it at least partly alleviated the crisis that had forced many people to search for bread elsewhere or emigrate to the so-called “promised lands”, for example America, due to severe poverty and lack of additional forms of income. Because of the repeated crises caused by poor harvests, the state gradually became “unable to only collect and distribute aid contributed by individuals any longer, but started to allocate increasing sums of its own money to the people in distress. Naturally, this aid was always too modest. When shortage once again overwhelmed the district of Postojna in 1880, even the government itself doubted that its resources would suffice. Finally, in 1890, the Slovenian Member of the Austrian National Assembly Jožef Poklukar made a straightforward demand that the state allocate more money for the struggle against poverty and impending famine in the district of Postojna. However, in spite of the repeated complaints regarding the insufficient aid for the starving population, hunger was never quite so severe that large numbers of people would die from it.”<sup>69</sup>

<sup>64</sup> Ibid., p. 71.

<sup>65</sup> As Table 3 indicates, only in the district of Postojna, people required 2099 *Merling* or 1049.5 *Metzen* of maize for bare survival. As urgent aid in the form of food was also needed in the districts of Lož and Senožeče, this quantity was relatively modest if all needs were to be covered.

<sup>66</sup> Viennese *Zentner* = 100 *Pfund* = 100 X 0.56 kg = 56 kg.

<sup>67</sup> *Laibacher Zeitung*, 3 July 1865.

<sup>68</sup> Pančur, *Porajanje modernega gospodarstva*, p. 55.

<sup>69</sup> Ibid.

Ultimately, dangerous infectious diseases – for example, the deadly cholera that had devastated the very region of Inner Carniola a decade earlier (in 1855) – represented a more serious threat than hunger. In the district of Postojna, 2080 people had contracted it, and 800 of them had died. Thus, it had killed as much as 7 % of the local population at the time. Furthermore, it had not spared the neighbouring district of Senožeče, either: there, 1161 people had fallen ill, 342 of whom had died – i.e., approximately 5 % of the population. During the subsequent major outbreaks of cholera in 1866 and 1886, this serious intestinal disease did not claim nearly as many lives, yet it was still much more dangerous and deadly than the severe shortages and looming famine in case of poor harvests.<sup>70</sup>

The insufficient and monotonous diet or, in the worst case, hunger and the consequent malnutrition certainly influenced the resistance of the population against various diseases and its work productivity, which was of decisive importance especially in case of the most intense farm chores, e.g. during harvest. Food shortage could also have a long-term impact on the growth as well as the physical and psychological development of children. In women, for example, malnourishment could result in diminished fertility or incapacity to bear children. In case of men, it would eventually influence the recruitment of military conscripts, for example. For instance, at the beginning of World War I, the problem of ensuring the fitness of the largest possible number of military recruits turned out to be an exceedingly pressing problem, “as the authorities had no choice but to relax the criteria exceedingly if they wanted to ensure the required number of fighters at the front”. Even in 1893, the conscripts had to be at least 1.55 metres tall. In 1913, however, this body height limit was reduced to 1.54, while in 1917, it was even reduced to 1.5 metres. If we look closely at the results of medical examinations during the draft in the nearby city of Gorizia at the end of the 19<sup>th</sup> and the beginning of the 20<sup>th</sup> century, it is “obvious that merely 20 to 30 % of young men met the conscription criteria”.<sup>71</sup> Among other things, this situation had undoubtedly been contributed to significantly by the crises caused by poor harvests – as well as by the hail examined in the present case study.

## SOURCES AND LITERATURE

### Archival sources

1. *Archives of the Republic of Slovenia (ARS)*:
2. SI\_AS 16, the bundle of the Provincial Presidency for Carniola (reports on hunger in Inner Carniola): 24, t. e. 10 – furthermore: SI\_AS 16, bundle: 24, t. e. 10.

### Newspapers

3. *Kmetijske in rokodelske novice*, 1860, 1864, 1865
4. *Laibacher Zeitung*, 1864, 1865.

### Literature

5. Arndt, Ernest Moritz. *Reisen durch einen Theil Teutschlands, Ungarns, Italiens und Frankreichs in den Jahren 1798 und 1799*, Leipzig: Heinrich Gräff, 1804.
6. Behringer, Wolfgang. *Kulturgeschichte des Klimas: von der Eiszeit bis zur globalen Erwärmung*, Munich: C. H. Beck, 2007.
7. Britovšek, Marjan. Uvajanje novih kultur na Kranjskem v drugi polovici 18. in v prvi polovici 19. stoletja. In: *Zgodovinski časopis* 1958–1959, pp. 111–150.
8. Čeč, Dragica. “Srce vsakega je treba pripraviti za dejavno udejanjanje zapovedi ljubezni do bližnjega”. In: Studen, Andrej (ed.). *Pomisli na jutri. O zgodovini (samo)odgovornosti*. Ljubljana: Inštitut za novejšo zgodovino, 2012, pp. 37–70.
9. Čeč, Dragica. Družbena percepcija in pravna obravnava zločinov iz stiske. Primer eksistenčne krize 1816–1817 na Slovenskem. In: Bianco, Furio / Panjek, Aleksander (ed.). *Upor, nasilje in preživetje: Slovenski in evropski primeri iz srednjega in novega veka*. Koper: Založba UP, 2015, pp. 243–275.
10. Čeč, Dragica. Gospodarska in družbena kriza zaradi izbruha vulkana Tambora v Indoneziji aprila 1815. In: *Zgodovina v šoli*, XXV, No. 1, 2017, pp. 3–16.
11. Čeč, Dragica. Zakaj je Postojna hotela postati mesto? *Zgodovina za vse*, 2001, year VIII, No. 1, pp. 35–51.

<sup>70</sup> Ibid.

<sup>71</sup> Remec, Podrgni, očedi, živali otrebi, p. 169.



12. Drobesh, Werner. *Grundherrschaft und Bauer auf dem Weg zur Grundentlastung: Die "Agrarrevolution" in den innerösterreichischen Ländern*, Klagenfurt: Verlag des Geschichtsvereines für Kärnten, 2003.
13. Fischer, Jasna. Zagate v kmetijstvu. In: ed. Fischer, Jasna [et al.]. *Slovenska novejša zgodovina: od programa Zedinjena Slovenija do mednarodnega priznanja Republike Slovenije 1848-1992*, 1 knjiga, Ljubljana: Mladinska knjiga, 2005, pp. 72–74.
14. Golec, Boris. Cerknica – pozni nastanek in specifični razvoj največjega slovenskega trga, *Kronika*, 66/2018/No. 2, pp. 213–230.
15. Granda, Stane. Pomanjkanje ali do kdaj je moral biti kruh varovan v zaklenjeni shrambi pod skrbno varovanim ključem? In: Šorn, Mojca (ed.). *Lakote in pomanjkanje: slovenski primer*, Ljubljana: Inštitut za novejšo zgodovino, Zbirka Vpogledi; 20, 2018, pp. 73–98.
16. Kačičnik Gabrič, Alenka. "To smemo že tako dolgo": kmečke služnosti in njihova odprava, Ljubljana: Inštitut za novejšo zgodovino, Razpoznavanja 22, 2014.
17. Kačičnik Gabrič, Alenka. *O kmečkih dolgovih nekoliko drugače: problem servitutnih pravic na posestvu Snežnik*, Ljubljana: Knjižnica "Kronike" 8, 2004.
18. Kalc, Aleksej. Prebivalstvo in gospodarski viri v tržaškem kraškem zaledju (16.–20. stoletje). In: Panjek, Aleksander / Lazarevič, Žarko (ed.), *Preživetje in podjetnost: integrirana kmečka ekonomija na Slovenskem od srednjega veka do danes*, Koper: Založba Univerze na Primorskem, 2018, pp. 155–188.
19. Krämer, Daniel. "Menschen grasten nun mit dem Vieh": Die letzte grosse Hungerkrise der Schweiz 1816/17, Basel: Schwabe Verlag, 2015.
20. Lazarevič, Žarko. *Kmečki dolgovi na Slovenskem: socialno-ekonomski vidiki zadolženosti slovenskih kmetov 1848–1948*, Ljubljana: Znanstveno in publicistično središče, 1994.
21. Makarovič, Gorazd. Prehrana na Slovenskem v 19. stoletju. In: *Slovenski etnograf*, 33/34, 1988/1990, pp. 127–205.
22. Mal, Josip. *Zgodovina slovenskega naroda*, II. del. Celje: Mohorjeva družba, 1928.
23. Ogrin, Darko / Kosmač, Simona. Valvasorjevi prikazi vremena in podnebja v Slavi vojvodine Kranjske, *Dela* 40, 2013, pp. 39–53.
24. Pančur, Andrej. Porajanje modernega gospodarstva v 18. in 19. stoletju. In: Fikfak, Jurij (ed.), *Postojna: upravno in gospodarsko središče*, Postojna: Galerija 2, Ljubljana: Inštitut za novejšo zgodovino, 2009, pp. 51–66.
25. Pančur, Andrej. Postojna kot upravno središče. In: Fikfak, Jurij (ed.), *Postojna: upravno in gospodarsko središče*, Postojna: Galerija 2, Ljubljana: Inštitut za novejšo zgodovino, 2009, pp. 33–49.
26. Pfister, Christian. Weather, Climate, and the Environment. In: Hamish, Scott (ed.). *The Oxford Handbook of Early Modern European History, 1350–1750: Volume I, Peoples and Place*. Oxford: University Press, 2015, pp. 70–93.
27. Pirc, Ivo / Baš, Franjo. *Socialni problemi slovenske vasi*, book I, Ljubljana: Socialno ekonomski inštitut, 1938.
28. Remec, Meta. *Podrgni, očedi, živali otrebi: Higiena in snaga v dobi meščanstva*, Ljubljana: Inštitut za novejšo zgodovino, Razpoznavanja 24, 2015.
29. Sprenger, Jakob / Institoris, Heinrich. *Der Hexenhammer (Malleus maleficarum)*, München: Deutscher Taschenbuch Verlag, II. Teil.
30. Strömmmer, Elisabeth. *Klima-Geschichte: Methoden der Rekonstruktion und historische Perspektive: Ostösterreich 1700 bis 1830*, Vienna: Franz Deuticke, 2003.
31. Studen, Andrej. Lakota na Notranjskem 1865: Primer okraja Lož. In: Šorn, Mojca (ed.). *Lakote in pomanjkanje: slovenski primer*, Ljubljana: Inštitut za novejšo zgodovino, Zbirka Vpogledi; 20, 2018, pp. 43–72.
32. *Sveto pismo stare in nove zaveze*, Slovenski standardni prevod iz izvornih jezikov, Ljubljana: Svetopisemska družba Slovenije, 1996.
33. Vurnik, Stanko. Slovenske panjske končnice: Donesek k studijam o slovenskem ljudskem slikarstvu, *Etnolog* 3/1929, pp. 157–178.
34. Zwitter, Žiga. Subsistence, Prosperity and Abandonment of Alpine Isolated Farms in the Dynamic 17<sup>th</sup> Century Environment: Case Study from the Upper Savinja Valley with Special Emphasis on Tenants' Inventories. In: *Ekonomska i ekohistorija: časopis za gospodarsku povijest i povijest okoliša*, 2015, vol. XI, No. 11, pp. 139–181.

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