## CHANGING LAND USE AROUND SALGÓTARJÁN

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The investigated area has been shaped by various geological formations and by similarly various human effects being reflected in the ever changing land use.

Animal breeding nomadic peoples lived in this land as early as in 2500 BC (Badenian Culture). The relics of their Copper Age settlements were found near Baglyaskő and Pécskő (Dornyai, B. 1926). In the last period of the Copper Age an ethnic group belonging to the Vucedolian Culture occupied the fertile valleys, driving the small groups of the Badenian Culture into the forests of the higher surfaces. The dwellers of the settlement excavated adapted themselves to their forested environment and they were plantgathering, deer-hunting breeders of lesser animals (Belitzky, J. 1972).

The peoples of the Iron Age beginning in about 750 BC, were represented by the Scythians for nearly 300 years in the region. Then Celts came (in 250 BC) who introduced ploughing by draught animals, and the usage of the potter's wheel. They maintained a welldeveloped trade, forming the path leading north along the valleys of the Zagyva and Tarján Streams towards Fülek. This was the first route following the direction of today's Road 21. After the Sarmatan, Hun and Avar rules, this territory became part of the Bulgarian Empire in 803 AD. The earthwork of Somoskő was built by the Slavs to protect and control the N-S trade path. The Hungarian Conquest took place around 899 in this region. The first settlers came here to protect the border-land. First they adapted their way of living to their geographical surroundings and the vegetation cover in order to draw military and agricultural advantages from them. The local Slavs gradually assimilated into the Hungarians, while the latters became ploughmen giving up animal husbandry as a dominant occupation. They cut the ancient forest to gain ploughland. The region became temporarily uninhabited during and after the Mongol Invasion. The increasing power of the aristocracy was manifested in building castles to withstand another, expected Mongol Invasion. The castles built by the Kacsics family (Baglyaskő, Somoskő, Salgó, Zagyvafő) are mentioned in the 14th century documents first (Makkai, L. 1954).

The 14th - 15th century sources indicate an economic prosperity. Newer and newer areas were cultivated. The uninhabited lands of the 13th century had been populated by the middle of the 14th century, due to the landlords' efforts. meanwhile the settlement pattern also changed. The scattered farm-like settlements of the Árpáds' Age were concentrated gradually, the population lived in villages. The quantity and quality of production rose and improved. Winegrowing began in this area in the beginning of the 14th century.

<sup>&</sup>lt;sup>1</sup> Anjou Age rec. II. pp 65-66, 1323 (In: History of Salgótarján. 1972)

When the Turkish invaders appeared in the region (1552), the old castles of Baglyaskő and Zagyvafő were ruins and never rebuilt. Somoskő and Salgó castles had been renewed and reinforced since the 13th century, but neither of them could withstand a serious siege. The Turkish raids resulted in the population perishing and seeking asylium elsewhere. In 1576 Somoskő fell to the Turkish, too, and so the whole region came under direct Turkish rule for 17 years. The anti-Turkish wars and the Turkish Rule led to the total desolation of several villages (Bárna, Zagyvapálfalva, Andrásfalva, Nemti, Somoskőalja) or to the total and final destruction of some (Nagy- and Kisarany, Zagyva, Szőrös, Salgó, Uzsa, etc.). Despite the ever growing burdens, the local peasants' way of living underwent a great change in the 17th century. Some of the deserted villages were re-populated and land cultivation and production was started again. The number of draught animals is a parametre to measure the economic welfare of the peasantry of the age<sup>2</sup>. At the middle of the century there were 2-3 draught animals in a serf's farm on the average, while in 1662 there were 9 according to the records. Peasants under Turkish Rule usually had more animals than those elsewhere<sup>3</sup>. Considereing the constant uncertainty of existence and the two kinds of taxation in the Turkish Rule, it seems to be a contradiction at first sight. The landlords' farming could hardly develop in the Turkish Rule, so socage did not require so much animal power there than in the region outside Turkish occupation. Also, the lands of the destroyed villages offered abundant grassy meadows for animal husbandry and for additional land cultivation. Meanwhile landlords outside the Turkish Rule kept on occupying more and more croplands, fields, woods from the peasants' farms.

After the fall of Rákóczi's War of Independence, the Habsburgs were free to colonize the country, as the aristocracy could go on exploiting the peasantry at the expense of giving up the idea of the independent state. Most of the arable lands were not cultivated or were forested. Landlords allowed their serfs to cultivate the masterless peasant estates. Cropland area was soon multiplied resulting from deforestation and newly cultivated waste fields. Half of the croplands of the Somosko domain e.g. was a former clearing in 1717<sup>4</sup>. During the Turkish Rule there was a lot of uncultivated land used for extensive animal husbandry by the peasants who drew some profit from this, growing cereals far less than it was possible. As the population went on rising a considerable part of the fields did become croplands again. Animal keeping was no longer preferred to land cultivation thus large scale cattla dealing was replaced by corn trade of similar size. Peasants kept horse and cattle to meet their own demands; for sale they bred seep and pigs. A description given by Mátyás Bél (1742) emphasizes the large scale pig breeding in the Nógrád Forest as one of the main sources of the peasantry's income. Viniculture gained great importance in the first half of the 18th century, too. Wine production was mainly confined to serfs' farms at that time, the vineyards of the aristocracy had played no important role. The development of agriculture was not accompanied by that of industry, however. The landlords' seignioral domestic economy reached the point by the middle of the century, when it could gain new space only forcefully and at the expense of the peasants' farms. Expropriation of the peasants' lands was started. Most of the croplands cultivated by the serfs were attached to the manors and the socage was also intensified.

<sup>&</sup>lt;sup>2</sup> Urbaria et Conscriptiones 66/33. 1662 Hungarian National Archives, Budapest

<sup>&</sup>lt;sup>3</sup> Urbaria et Conscriptiones 96/20., 90/47, 1662 Hungarian National Archives, Bp.

<sup>&</sup>lt;sup>4</sup> Urbaria et Conscriptiones, 57/ 38. Hungarian National Archives, Bp.

The lack of industrial development, limited by the Habsburg colonalization policy caused the appearing a mass of cotters being unemployed and vegetating as vagabonds. In spite of growing poverty, the burdens of the serfs kept on growing, too. Finally landlords owned the clearings as well as the common grazing lands and forests and most of the serfs' lands<sup>5</sup>.

The preconditions of capitalist production were given by the big mass of people excluded from the feudalist production as free labour force, and by the lands being privately owned by few people. In the first third of the 18th century the 'breadless Tarján' was a well-known name coming from the settlement being unable to grow enough cereals for its population or for its domain in the hilly surroundings, bad croplands and meadows of the village (Bél, M. 1742). The expansion of croplands through clearings began at the time of the re-settlement. The clearings had two problems: the bush vegetation and the erosion could very quickly occur on them leading to their abandonment, or the peasants were likely to keep their cultivation a secret to avoid paying tax on them. What happened to the wood coming from deforestation? It was used for heating, building material and was also sold. Animal stock, extra clearings both contributed to the restructuring of peasantry, some of it getting poorer, some of it richer. Masting was important in the large oakwoods<sup>6</sup>. According to a record from 1726 the croplands of medium quality were cultivated in 3 rotations and they yielded grain four times more than the seed sown. Meadows were of medium quality, too. Cropkands were enalrged by clearings. Forests gave firwood and building material. Logged lands were mown. The domain did not have a vineyard in Tarján, but two fish ponds (Vendégi and Kucordi). To develop the domain Ferenc Szluha wanted to establish a stud and a large scale bee-keeping of 25 hives in Salgótarján in 1726<sup>7</sup>. In 1729 Szluha initiated the consolidation of the domain lands and the prevention of the erosion danger, too. He ordered the lands situated among the seigniorial medows and fields, but belonging to the serfs, to be attached to the domain. And the serfs were given lands elsewhere. In order to stop the washing away of fertile soil, he ordered his farmbailiffs to have deep furrows ploughed in the upper and lowermost sections of the croplands to avoid the erosional damages caused by sudden rainfalls. He cared about animal keeping as well. He ordered the fish ponds to be cleared and the dams renovated. However, he forbade free masting and tree felling in his forest causing a drop in pig breeding. At the same time he let hunting in autumn and winter for bear and fox hides. In the 1730s sheep breeding spread instead of pig breeding. The deforested areas around the settlements can well be seen in the maps of the Military Survey I (1782), in Fig. 1.

The coal reserves of the area were not recognized at first and the self-conbustion and warming up and the smelling of coal gas in the near surface layers were recorded only as natural phenomena. Ferenc Radványi wrote about Vecseklő in 1727: 'A pit is said to be found in our territory which keeps on burning and smoking by itself and it cannot be put out with water.' The 31st Ocober 1767 issue of the Pressburger Zeitung says 'last summer the earth started to burn itself in the Salgó Hill and kept on glowing for two months. Farmers used occasional flames to cook their meals. The earth that burnt became coal.'

<sup>&</sup>lt;sup>5</sup> Urbaria et Conscriptiones, 86/15. Hungarian National Archives, Bp.

<sup>&</sup>lt;sup>6</sup> Urbaria et Conscriptiones, 57/17. Hungarian National Archives, Bp.

<sup>&</sup>lt;sup>7</sup> Salgó 79 Hungarian National Archives, Bp.

<sup>8</sup> Salgó 97 Hungarian National Archives, Bp.

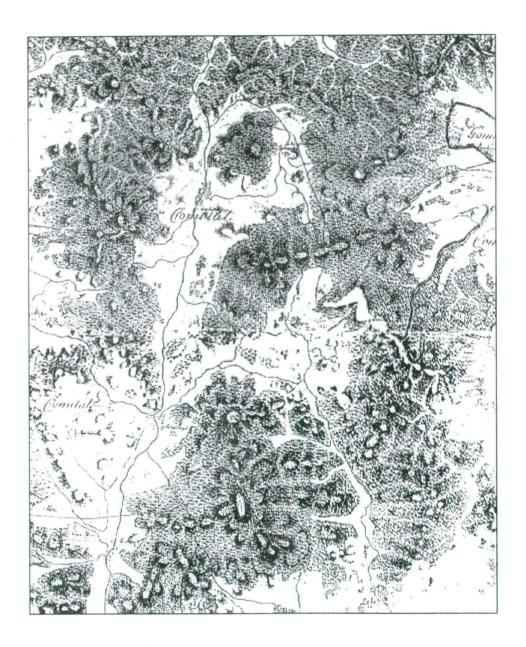


Figure 1 First military surveying map (1782)

The expropriation of the peasants' land went on in the first half of the 19th century. Production of the reduced serfs' lands could not meet the basic demands of the peasants to prevent them from starving. Famines were frequent in the first half of the 19th century (Pulszky, P. 1850). The lands of the aristocracy yielded extra corn to be exported to the Uplands (Losonc), Moravia, Austria. After a drop in the demand for corn, the aristocracy was getting involved in animal husbandry. Wool producing was especially profitable, not only abroad, but in Hungary, too. As the rough fleece of the Hungarian bred sheep was not suitable for industry, the Merino kind was bred (Mocsári, A. 1826). cattle keeping also thrived. Corn was getting difficult to sell, so it was used for large scale distillation and oxen for sale were fed with the by-product. The livestock in the manor needed ever larger pieces of land, so the land owners took land away from the serfs, leaving no space for them to keep their own animals. Feudalism faced a crisis by that time, the contradiction between the peasants and the land owners rose high and movements of the peasantry began to spread. The meadows belonging to Salgó Tarján village were situated north and south of the village in the 200 - 300 m wide valley of the small river. Following the unconsiderable deforestation the snow melting and the storms caused floods, intensive erosin in the barren hill sides and slime deposition in the valleys. Contemporary descriptions inform us about limetrees and willows almost quite covered with slime in teh Tarján Valley. Slimy sediments were deposited in the meadows, their quality got worse, contributing to the decrease of livestock. Croplands were situated in the low hills around the villages and in the transverse valleys (Ponyi, Diós, baglyasalja Valleys) adjoining the meadows. In the higher surfaces there were barren grazing fields. This land use was very disadvantageous, since erosion was thus let free. The quality of croplands was hardly second class. The serfs' lands being very dissected made cropland cultivation difficult. The pieces of cropland belonging to a serf having quarter ground, were usually situated in at least twelve pieces. Most of these pieces of land were small (400 - 500 sq fathoms), lying far apart from one another and from the village as well. This did no good to their cultivation. All the graze lands and forests of the village were owned by Antal Jankovich. The serfs were permitted to use the fields for grazing and to collect wood in the forest 10. The most outstanding feature of the Salgótarján landscape used to be the barren and high hills edging the valley up to the middle of the 19th century. The barren grazing fields of very bad quality were dissected with huge and active ravines. The century long deforestation of the ancient Turkey-oak, beech and oakwoods left the landscape barren, or scarcely wooded. The decay of the forest was caused by not the need of new croplands, but the wood supply of glass works, an iron furnace, a cloth factory, the buildings, broom and basket making spread among the local population as a source of income. Forest decay was completed by the introduction of the sheep in the Jankovich domain. The large number of sheep resulted in the unconsiderate deforestation and sheep grazing prevented reforestation.

Deforestation resulted in serious consequences for livestock and crop cultivation alike. Most of the grazing fields were situated on the top of the hills so they were suitable for grazing seasonally. By the middle of the last century, the forest virtually disappeared from the vicinity of Salgótarján. Its remnants were of bad quality. Only barren hills surrounded the settlements. Today's forest covering them was grown later (Kaulfusz, J. 1854).

<sup>&</sup>lt;sup>9</sup> Land Registry of Salgótarján: records of the National Inst. for Geodesy and Mapping: and that of the Nográd County Authority 728/ 1852. (In History of Salgótarján 1972)

<sup>&</sup>lt;sup>16</sup> Land Registry of Salgótarján, 1852 Archives of Nógrád County. Balassagyarmat (In History of Salgótarján 1972)

It was coal, making Salgótarján an industrial centre and its name well-known. The coal layers in and around Salgótarján were known in the 18th century, though their exploitation began only in the second half of the 19th century with the first Hungarian industrial boom. The first mines of this coal basin were opened at the Zagyva and Inászó estates. The Salgótarján mines were rather coal pits at first. Mines were deepened down to 80 - 100 m only later, following the material in the outcrops. Cribbing and tubbing were not performed regularly, as miners had to supply wood. Transportation was troublesome as well. The nearest coal consumers were located at Eger (mills), and Vác (Danubian steam boats). Also, there were only two coal outcrops at Salgótarján, they were situated in the middle of the coal basin and there were important roads linking them to the country's road network.

Mining changed landscape and induced the infrastructural development. Ramps and tramroads were built on the barren hills. Railway traffic was started between Salgótarján and Pest in 1867. New settlements were built due to coal mining (Salgóbánya, Rónabánya). The forest of the Medves region yielded wood for mining (rail sleepers, mine timbers, firewood, Gajzágó, A. There was a change underground, too. Today there are abandoned and exploited mines situated everywhere beneath Salgótarján. After the coal reserves of the outcrops had been excavated, drift mining was replaced by deep mining requiring more technical knowledge and facilities (Andreics, J. 1894).

Another important mineral resource was the basalt of Medves. Its mining was started in 1878 in the Bagókő-quarry. At first its owners did not plan its exploitation, they were not interested in the mining conditions, but profit only. The deadrock thus e.g. was placed at a site causing problems for later mining.

The local and developing industry increased the food market too, therefore land owners (both peasant farmers and aristocrats) tried to expand their areas of crop cultivation. During 1859-95 forests turned into croplands occupied 600 acres, while newly ploughed meadows mounted to 400 acres. This 1100 acre territory was not all added to cropland, as pieces of the farmers' former lands were built up. The proportion of meadows went on decreasing. The little remaining meadows were owned by the aristocracy. It had a catastrophic effect on farmers' households. The growing demand for transportation facilities and for dairy products and meat made the farmers keep more and more draught and farm animals. They had no access, however, to the meadows needed for livestock keeping, so they had to grow fodder on their croplands or buy fodder. Both draught and farm animal stocks kept on increasing. The development of animal keeping resulted in the peasantry taking part in the traffic created by the increasing industry and commerce, with their draught animals. At the same time their agricultural activity got confined to growing fodder to feed their livestock. Fruit growing was also attempted in the region as an intensive economic branch. The number of fruit trees grew in the 19th century. In 1895 there were 1535 apple trees, 1697 pear trees registered in the settlement. Orchards producing marketable fruits did not appear, however. The land owning peasants tried to make use of industrialization and the growing population: they gradually sold their pieces of land situated in the inner part of the settlement and they built their new houses closer to their newly occupied lands during the process of consolidation. By the turn of the century, the former Jankovich manor was divided into six large estates. One of them was the Salgótarján Coal Mine Holding with 2383 acres in five villages, and another was the Rimamurány - Salgótarján Iron Works with 1339 acres in two villages. These lands were

not cultivated at all, they served the horse keeping function and the wood supply of the mines <sup>11</sup>. These large scale industrial firms purchased the farmers' lands surrounding their mines as it was the only of their spatial development. Peasants were inclined to sell land to the mines as they received a relatively good price for them. By the time of World War I the village with its original population disappeared. The lands were owned by the industry, croplands were replaced by mines and industrial estates. Peasants without their lands became either hauliers or factory workers, craftsmen.

The Salgótarján landscape was described by barren hills, exposed gulleys, wastetips smoking and burning on the hills and thick smoky dust covering the valley (Szabó, B. 1972). Salgótarján has always belonged to the towns with the least agricultural land per a resident (20 acres). The population employed in agriculture was only 4 % of the total. According to the statistic data, the total agricultural land of the towns was 4783 cadastral acres. Almost half of it (2057 cadastral acres) represented forest, 669 c.acres meadows and only 1594 c.acres were cropland. The out-of-date agriculture can be described by the following data: in 1935 20 % of the total cropland area (1594 c. acres) was manured, out of which there were only 20 c. acres receiving fertilizers. That is only 1.5 % out of the cropland area as opposite to the national average being 7.2 % (Gunst, P. 1970). The structure of agricultural production had barely been modified since the middle of the 1920s. Croplands had low yield and the farmers could not reach a suitable farming level with their simple and traditional tools and with the lack of enough draught animals. Underdeveloped agriculture can be described by the rotation system and the lay-land farming being important even in the 1920s. Beside the extensive fallow, the barren surfaces stricken with erosion grew, due to the unconsiderable deforestation. Also, natural disasters struck large cropland areas year by year<sup>12</sup>. The economic importance of the forest began to grow after World War I, due to the areal changes of the country. The Medves Region had more forest than the national average. However, there was no forestry planned in the 1920s. The owners of the forests did not even plant the free seedlings provided by the state. Among the valuable species beech, oak and some pine couls be found in the forest. The ruthless exploitation of land went on following the harmful practice having appeared in the 19th and in the beginning of the 20th centuries. Land owners continued deforestation resulting in barren fields and hillsides exposed to erosion<sup>13</sup>. The yield of the bad croplands could not be increased during World War II, either. What is more, the production of the small holders was decreasing, as they could not perform thorough soil cultivation or use fertilizers. Also, most of the horses were taken to war and it became troublesome to cultivate the rough surface. Cattle were used as draught animals therefore, which caused a drop in milk production. Animal husbandry remained extensive during the war<sup>14</sup>. Livestock was the largest in 1941. Then it rapidly decreased, as great volumes were taken to Germany and to the army year by year. Except for a little allowence per head, all the corn was taken away from the peasants as delivery. Coal was also used up by the factories serving the army. The remaining coal was not enough to cover the population's need, thus wood-felling had spread as long as it was slowed down again by the lack of labour due to recruitings.

<sup>&</sup>lt;sup>11</sup> Cadastral maps ÁFTH; Agricultural Statistics 1895; national list of farmers of the Hungarian Crown. Archives of Nógrád County, Bgy. (In History of Salgótarján 1972)

<sup>12</sup> Government reports; statistical year books: 1923-1925 and 1927-1928; total data of crop yields by municipalities (In History of Nógrád County III. 1970)

<sup>&</sup>lt;sup>13</sup> Statistical year books: 1923-25. 73 p.1927-28. pp.91-97. (In History of Nógrád Country III. 1970)

<sup>&</sup>lt;sup>14</sup> Statistical Year Book on the government in 1940, 56 p.(In History of Nógrád County III. 1970)

After the war, the agrarian reform made the large estate system come to an end, and the number of farmers grew considerably. The average cropland is Nógrád yielded the least profit in the country: it was 5.91 gold crown per cadastral acre, while the national average was 9.38 in 1951<sup>15</sup>. The rough hilly surface needed special soil cultivation in the croplands. The modern agricultural technology following the rapid change of the ownership and the better crop yields were doubtful to occur due to the lack of up-to-date agrarian technology, fertilizers, etc. From 1948 on, the formation of the farmers' cooperatives and the agricultural cooperatives was launched to strengthen agriculture. After the revolution of 1956 most of the numerous cooperatives of inadequate functioning split up, however, the strong ones did survive (at Cered e.g.), where armed peasants defended the cooperative against forceful closing down<sup>16</sup>. The cooperatives kept on trying to grow corn (maize, potato) even at the end of the 1960s. The establishment of nature conservation areas meant stricker conditions for agriculture. Therefore and because of the unfavourable soil conditions (shallow, clayey brown forest soil) the cooperatives began to grow more and more fodder for their livestock.

In the 1960s coal mines closed down due to their exhausted reserves (Gajzágó, A. 1962).

There was a rising demand for basalt and new quarries were opened (at Salgó and Vecseklő). The basalt was transported by road and rail to road and railway building and to dam construction works (e.g. at River Tisza). Even these basalt quarries were closed down when the demand of the market grew less and when environmental protection began to increase by the beginning of the 1970s. No recultivation plans were made for these spots, so most of the quarries have been untouched since their use was stopped. Some of them became illegal deposits of waste.

The recultivation of the open mines and their surroundings is an important task in landscape reconstruction.

Tourism may considerably contribute to the economic development of Salgótarján, the centre of the region, having excellent natural setting. The basic condition of receiving visitors is accomodation of acceptable quality and quantity (like Karancs, Salgó and Medves Hotels). Its landscape of great variety and acceptable quality is an adequate touristic attraction, too.

<sup>&</sup>lt;sup>15</sup> Collection of agricultural statistics 1870-1970; Land Register II. County data KSH Bp. 40 and 438 p. Land Register I. National data KSH Bp. 55 p.

<sup>&</sup>lt;sup>16</sup> In Nógrád Népújság 8th Dec. 1956: In Defending the Cooperatives (In History of Nógrád County IV. 1974)

## References

ANDREICS J. 1894: A Salgótarjáni Kőszénbánya Rt. története. (History of the Salgótarján Coal Mine) – Bányászati Kohászati Lapok

BELITZKY J. 1972: Salgótarján története (History of Salgótarján). Salgótarján p.18.

BÉL M. 1742: Notitia Hungariae Novae IV. 33.p.

DORNYAY B. 1926: Adatok Salgótarján és vidéke őskorához. (Data Regarding the Ancient Histrory of Salgótarján) – Salgótarján, 8.p.

GAJZÁGÓ A. 1962: A salgótarjáni Iparvidék. (Industry around Salgótarján) – Salgótarján GUNST P. 1970: A mezg.-i termelés története Magyarországon. (Histrory of Agricultural Production in Hungary) – Akadémiai kiadó, Bp. p. 414.

KAULFUSZ J. 1854: Nógrádi erdők (Forests in Nógrád) - Gazdasági Lapok

MAKKAI L. 1954: Nógrád megye története 1848-ig (History of Nógrád County till 1848).

– In: Genthon I. (szerk.): Nógrád megye műemlékei. pp. 35–83. Bp.

MOCSÁRY A. 1826: Nemes Nógrád vármegyének históriai, geographiai és satisztikai (Historical, Geographical and Statistical Introduction of Nógrád County)esmertetése I-II. Pest

PULSZKY, T. 1850: Az 1846/47-es éhínség leírása (Description of the Famine in 1846/47) – Memoirs of a Hungarian Lady. London 64-68 pp.

SZABÓ B. 1972: Salgótarján a kapitalizmus uralkodóvá válásának időszakában 1848-1918. (Salgótarján at the Time of the Formation of Capitalism: 1848-1918 in History of Salgótarján)—In: Salgótarján története.

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