

Letters to Editor

**HISTORICAL REVIEW AND ACTUAL SITUATION
OF METALLURGY AT KOSOVO AND METOHIJA**

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Abstract

Historical review and actual situation of metallurgy at Kosovo and Metohija has been presented in this paper. That region is known by metallurgical production of ferrous and non-ferrous precious metals from ancient times to nowadays. By the end of twentieth century, the production of ferronickel started. The destruction of Yugoslavia and wars during nineties caused the stop of production. Beside the presence of the international forces in the last six years, there was no renewal of metallurgical production.

Keywords: history, metallurgy, actual situation, Kosovo and Metohija

1. Introduction

The mining and metallurgical production at Kosovo and Metohija is well

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known from antic and medieval times. But, full development of metallurgical activities has been presented there in the last fifty years.

The main metallurgical plants at Kosovo and Metohija are zinc and lead combine Trepča and ferronickel melting plant. Trepča has been one of the leading Yugoslav exporters, while the melting combine of ferronickel has also been a great Kosovo's exporter.

The happenings in Yugoslavia after 1991 influenced the reduction of metallurgical production at Kosovo and Metohija, and the production was completely stopped in 1999 (i.e. ferronickel, lead, zinc, silver and gold, as well as other commercial products, which were produced in the Combine Trepča).

It was expected that foreign investors would help in revitalizing of the existing metallurgical plants and restart the production. But, even after six years, due to the still present insecurity in the region, nothing important in this field happened.

2. Historical review

The production of lead, silver and gold, as well as products made of these metals, has a long tradition, while the production of ferronickel, zinc, cadmium and bismuth started in the second part of the twentieth century. There are a lot of data about the production of lead, silver and gold in previous times [1-4].

Lead – silver ores at Kosovo have been exploited in antic period [5]. The production of these metals has been specially intensified in the middle ages, under the rule of the Nemanjić dynasty, when Kosovo and Metohija meant the most developed part of Serbia [5].

The law of Serbian czar Dušan regulated mining-metallurgical production in 1346, as well as the mining law of Serbian despot Stefan Lazarević in 1402. As historians wrote [5], Novo Brdo -town and mine, had the ores with great content of lead, silver and gold and up to 560 kg of silver was produced in that time.

In 1455, the Turks occupied Novo Brdo and completely destroyed it, when about 40.000 inhabitants were sent to Asia, as slaves. After destruction of medieval Serbian state and arrival of Turks, the production decreased and

completely disappeared after the Austro-Turkish war, by the end of XVII century.

Major part of the Serbs left the space of Kosovo and Metohija during 1690-1735 (in the movement under Arsenije Čarnojević). The metallurgical production was stopped by their leaving and this space was inhabited by the people from nowadays Albania.

In the Balkan war in 1912, Serbia and Montenegro liberated Kosovo and Metohija from the Turks, and after the formation of new Yugoslavia in 1918, the industrial development started.

The Englishmen bought concession in 1926, and the enterprise 'Trepča Mines Limited' existed under this name from 1927 until the end of the Second World War. After 1945, the economic development has been intensified, especially in the field of mining, metallurgy and energetic. In the period from 1970-1990, processing industry was developed in Trepča and existing capacities enlarged.

And finally, there was a significant economic fall after 1991, caused by catastrophic happenings and wars in some of ex-Yugoslav countries.

3. Metallurgical production at Kosovo and Metohija in XX century

Production in Trepča: By arrival of Englishmen in twenties, mining production was firstly renewed. Melting and refinery of lead started with work in Zvečan, nearby Kosovska Mitrovica, in 1939. The production in Trepča was not interrupted even within the Second World War.

For 60 years, in the period 1939-1999, 3.284.568 t of refined lead, 4.110 t of silver, 3.296 t of bismuth and other commercial products [4] have been produced in Zvečan.

Metallurgy of zinc in Trepča was developed in Kosovska Mitrovica in the period of 1964 to 1967. The zinc metallurgy started with production in 1967, again.

The production of metallurgical plants in the period from 1946 to 2001, is given in Table 1 [4,6].

The production of metal in Trepča in 1988 was very solid and, according to the prices of metals in the middle of 2004, the value of produced metals in that year was 150.000.000 USD. Beside metals given in the Table 1, gold was

produced, as well as mineral fertilizers and other commercial products. These data show what Trepča meant for Kosovo and Metohija, and for Yugoslavia, also, at that time.

Table 1 The production of refined metals in combine Trepča in characteristic years (period 1946-2001) [4,6]

Metal	Year of production					
	1946	1956	1975	1988	1995	2001
Lead (t)	23.007	63.216	89.138	83.445	12.186	700
Silver (kg)	7.317	83.145	111.396	95.491	19.051	5.700
Bismuth (kg)	17.141	111.150	55.243	22.272	0	0
Zinc (t)	0	0	28.808	48.550	5.118	0
Cadmium (kg)	0	0	73.200	156.400	11.000	0

The plant for processing of waste lead accumulators, with 20.000 t/annually capacity, was built in Trepča [7], and also a plant for production of mineral fertilizers in Trepča in Kosovska Mitrovica, with annual capacity of 170.000 tones.

Production of ferronickel in Glogovac: In Glogovac, 40 km west from Priština, melting combine of ferronickel, with annual capacity 52.160 t of ferronickel, was built. The greatest production was achieved in 1989 and it was equal to 6.801 t [8].

Other production: In the period from 1965-1985, several factories for processing of metals were built, such as:

- Production of lead accumulators in Kosovska Mitrovica and Peć,
- Processing of gold and silver in Prizren,
- Factory of zinc coated sheet in Vučitrn,
- Factory for production of nickel-cadmium batteries in Gnjilane etc.

With destruction of Yugoslavia, from 1991 till 1999, the production in these factories kept decreasing, and after the bombardment of Serbia and Montenegro in 1999, the production completely stopped.

4. Actual situation

Actual, real annual capacities of Trepča's plants are:

Electrolytic zinc	60.000 t
Refined lead	120.000 t
Electrolytic silver	110 t

Before 1990, reconstruction of existing capacities started, which should give the capacity of 80.000 t of zinc and 170.000 t of lead. But, finishing of these objects was interrupted due to the well known reasons. Great problem occurred due to poor maintenance of mining at Kosovo and Metohija, but starting it demands a lot of financial means and efforts.

The period after 1999 is considered as the most difficult one for mining and metallurgy in that region. Actual management team of Trepča did some efforts to restart the mining, as well to activate the processing of waste accumulators in Zvečan, but many plants were deteriorated and worn up in last few years. Some quantities of certain metals were produced from semi-products remained from the period before 1999, but that could not mean a primary production.

Mining and melting combine of nickel and ferronickel in Glogovac do not work and the factory was damaged in 1999.

The accumulator factory in Kosovska Mitrovica and zinc coated sheets in Vučitrn do not work at the moment. According to available information, the factory of accumulators in Peć and factory in Prizren work partly, but the authors of this text did not have an opportunity to visit these plants in last five years.

The violence in this province, in March 2004, probably brought more insecurity in the potential investments for restarting of mentioned plants, although several international experts, from famous firms in this field, worked on the evaluation of the actual situation of mining and metallurgical plants at Kosovo and Metohija. So, there is still no any real result.

5. Conclusion

Some activities should be done in Trepča, like Englishmen did in the

beginning of the last century. First of all, mining should be equipped and start with work, as well as the plant for processing of waste accumulators, for it does not depend on any other plants.

The mining products should be exported to Serbia and neighboring countries for further production, and step by step, other processing metallurgical plants should restart and continue with work. Also, the factories, related to final products, should start with work, even if certain raw materials are to be imported in the first moment.

Such opportunities could have important influence on further development of this region at all.

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