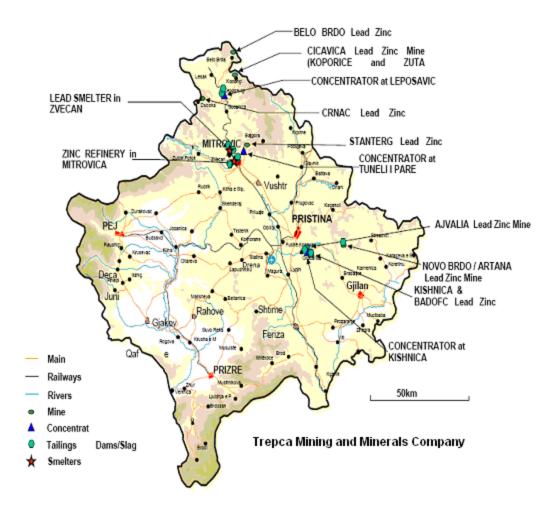
# **Trepca and Kosovo's Uncertain Future** By Ian Lynch University of Vermont Environmental Program, Class of 2012

Written as a term paper for Dr. Saleem H. Ali's class ENVS 295: Environmental Conflict Resolution



The Trepca mining complex in Kosovo is a derelict complex in a failing state that has immense potential, but has so far been ignored by serious investors due to a myriad of reasons. It is located in the northern part of Kosovo, which has a long history of ethnic tension. The mine effectively went out of production as a result of the 1999 civil war and has been rumored to be part of the reason for the conflict in the first place. Some believe that the Serbian government did not want to give Kosovo autonomy because it wanted to control the rich mineral wealth found in Kosovar mines, of which Trepca is the most prominent.

Kosovo is now on a path to independence under the guidance of the United Nations Mission in Kosovo (UNMIK). Its economy is in dire straits and there are few options to improve it. Trepca, despite its problems, provides one of the few significant development opportunities. The facility needs major upgrades, especially if Kosovar membership in the EU is on the horizon, but the mineral reserves are great enough to offset the startup costs. Most importantly a reactivated Trepca would provide several thousand jobs and increase Kosovo's foreign exchange. These are both crucial if Kosovo is ever to gain complete independence.

The UNMIK has the most power to promote the mine and has given exploratory rights to a consortium of American, French, and Swedish investors. The dominant population of K-Albanians in the Mitrovica province of Kosovo has the most to gain from development, as it would create jobs for them. There is also a minority of K-Serbians still living in the region, which causes some tension. They are the legacy of public servants that the Serbian President Milosevic had established at the Trepca mines

as management. Milosevic also imported families to the region to valorize Serbian interests in the area in a similar fashion to Israel's efforts in Palestine today. The stakeholders with the greatest role to play, a role that has not yet been filled, is that of the foreign investors. It may be the Americans, French or Swedish that step up, but really any investor willing to tackle Trepca's issues could be welcome.

#### The Civil War in Kosovo

Trepca's problems began with the civil war in Kosovo. Kosovo covers an area of 11,000 square kilometers, is mountainous, landlocked and has a population of about 2.2 million people (Del Castillo, 2008). Its population is 85% ethnic Albanian, 10% ethnic Serbian, with smaller minorities of Roma (gypsies), Bosniaks (Muslim Slavs), and Turks (Del Castillo, 2008). The Balkan region has a long history of ethnic tensions that sometimes erupt in bouts of violence.

"Following Roman times the region was colonized, influenced, or dominated politically by ever-changing populations. The long history of the successive influxes of Byzantine, Bulgarian, Serbian, Albanian and Turkish peoples helps explain the cultural mixing and the legacies of old grievances which underlie the chaos of the 1990's." (Feraud, 2007)

Under the 1974 Constitution of the Socialist Federal Republic of Yugoslavia (SFRY) Kosovo was given autonomy (Del Castillo, 2008). When President Milosevic came to power in 1989 he began to remove this autonomy.

Milosevic dissolved the K-Albanian dominated legislature and government in Kosovo and put minority K-Serbs in positions of power (Del Castillo, 2008). This furthered anti-Serb sentiment from the K-Albanian majority. Kosovo was already Yugoslavia's poorest province when its economic distress was compounded in the early 1990s, when international embargos led to the shut down of many major industries in Yugoslavia (Greicevi, 2003). During Milosevic's rule, beginning in 1989, Kosovo's economy declined 50% and then another 20% between 1998 and 1999 (Del Castillo, 2008).

Due to the floundering Kosovar economy and limited job opportunities the province experienced a major brain drain in the late twentieth century. Many of the best educated K-Albanians left to work in other countries, primarily Germany and Switzerland. Remittances therefore took on an important role in supporting the population and later in fueling the conflict (Del Castillo, 2008).

Ibrahim Rugova acted as President of a shadow government of the unofficial Kosovo Republic during Milosevic's rule of Serbia (Del Castillo, 2008). This government more accurately reflected the citizens of the province, but the Dayton Accord that ended the Bosnian War undercut its growing importance. The Kosovo Liberation Army (KLA) formed in 1997 in response to the Dayton Accord and failures of Rugova's government to work out a diplomatic solution with Serbia. The Serbian government forcefully cracked down on the uprising but could not keep the KLA from becoming a full-scale guerilla army by 1998. The KLA was funded largely from remittance from K-Albanians abroad and weapons were easily imported from neighboring Albania, which was then both sympathetic and in a state of chaos itself (Del Castillo, 2008).

The UN tried to end the conflict peacefully and the KLA was willing to sign a peace proposal that gave Kosovo increased autonomy, but Serbia rejected the proposal (Del Castillo, 2008). This led to an intense NATO bombing campaign that the UN did not support. Serbia moved quickly to try and eradicate ethnic Albanians form its territory and many atrocities may have occurred during this hurried process. About 900,000 K-

Albanians either fled or were removed to Albania (Del Castillo, 2008). The NATO bombing lasted 78 days before Milosevic agreed to a peace plan (Del Castillo, 2008). NATO focused not only on military targets but also Yugoslavia's industries and infrastructure (Joksimovich, 2000; Del Castillo, 2008).

Milosevic's Yugoslavian government claimed that NATO's bombing campaign was meant to harm human health and destroy natural resources (Jong, 2000). NATO argues that its use of sophisticated weaponry actually lessened secondary damage (Jong, 2000). Whether or not the intent was to harm the environment the bombing certainly did have negative impacts, as all wars do. The region was bombed almost daily with attacks on: oil refineries, petrochemical plants, fuel depots, plastic factories, pharmaceutical plants, automobile and machine plants, heating plants, food processors, water treatment facilities and the electrical grid resulting in many industrial accidents and leaks (Joksimovich, 2000). Among the chemicals released by these attacks in significant quantities were: oil products, vinyl chloride monomer, ethylene dichloride, mercury, lead, PCBs, nitrogen oxides, and sulfur dioxides (Joksimovich, 2000).

After the bombing ended Kosovo became a protectorate administered by the UNMIK. Since 50-75% of homes were destroyed or rendered uninhabitable restoring housing was the first priority of reconstruction (Del Castillo, 2008). Pumping in hard currency reactivated the private sector and microfinance loans have been a staple of development from the beginning. Aid flowed quickly from big donors in Europe due to Kosovo's location in their "backyard".

Despite great international attention many issues have arisen in reconstruction efforts. Of Kosovo's many development problems its biggest may be distortion caused by foreign aid efforts. Aid agencies have lured skilled workers away from civil service in Kosovo with higher wages, better housing, and other services (Del Castillo, 2008). These people are hired to be drivers and interpreters for foreign "experts" and so lose the skills they had that could have benefited their nation due to a lack of practice. This has reduced the overall productive capacity of Kosovo (Del Castillo, 2008). Due to the rapid growth from development and inflation tight fiscal policies are needed. There has also been a recessionary impact from the recent decrease in international presence.

So far little foreign investment has been attracted to projects such as the reactivation of the Trepca industrial complex. The result is an economy that is overly dependent on aid, the presence of in country aid staff, and remittances from the Kosovar diaspora (Del Castillo, 2008). This makes for a bleak economic future and recession is inevitable it Kosovo cannot attract investment and rebuild its industries, of which the Trepca mines seem most promising.

In 2008 Kosovo declared unilateral independence to resolve its final status following the implementation of the peace plan. This declaration was supported by the US and EU, but not by Serbia or Russia (Del Castillo, 2008). Currently Kosovo's complete independence has not been granted.

#### The Trepca Mines

The Trepca mines are located in northern Kosovo in the Trepca Valley near the village Stari Trg. They have produced millions of tons of lead and zinc, thousands of tons of silver and bismuth, and over 60 other fine specimens of minerals (Feraud, 2007). The United Nations now recognizes the mine as "Trepca, Stan Terg". The region has a long mining tradition that stretches back centuries and the people of Kosovo are itching

to reopen their mines. The country has never recovered from the 1999 civil war and their GDP is only around 1,000 euros (Feraud, 2007). In the NATO bombing of the region many industries were targeted including the widely mentioned Pancevo petrochemical facilities and the Novi Sad oil refineries (Walker, 1999). Many of Kosovo's mines were also flooded or made inactive by the conflict. Kosovo's mines are now open to foreign investors and there is an eager, motivated workforce ready to drive production. They have the potential to greatly improve the Kosovo economy, but little investment has been made and the mining facilities are deteriorating with neglect (Feraud, 2007; Del Castillo, 2008).

Trepca has a long mining history that stretches back to 1303 and control of the operations has changed hands many times with the many wars in the region's history. In 1925 the Serbian province of the new Republic of Yugoslavia was opened to foreign investment. A British company called the Selection Trust sent geologists to explore mining prospects in the region (Feraud, 2007). In 1926, as a part of a large exploration and mapping program they began sampling the old Trepca mine works. In 1927 the Selection Trust created a subsidiary called Trepca Mines Limited, Serbia granted a mining concession in 1928, the company easily survived the 1929 stock market collapse, and the Stan Trg mine opened in 1930 on the medieval site (Feraud, 2007). Stan Trg was used as the name until 1950 when the phonetic distortion of Kosovar shepherds was fixed and the mine name was written Stari Trg. The name means old place or old market (Feraud, 2007).

"The Stan Terg mine quickly reached a production level of between 600,000 and 700,000 tons of ore per year, with the annual metal output between 50,000 and 60,000 tons--figures which would never again be matched after 1939. From 1930 to 1940 the mine yielded 5.7 million tons of ore, and the on-site flotation plant

produced 625,000 tons of lead concentrates, 685,000 tons of zinc concentrates, and 444,000 tons of a mixed concentrate of lead, copper and pyrite. By 1936, however, Trepca Mines Ltd. was in need of more capital. The sale of 4,500,000 shares to new stockholders at 5 shillings per share, mostly in March 1936 and March 1937, raised [pounds sterling] 1,125,000. With these new funds the company invested in new equipment and built a lead smelter at Zvecan in 1940." (Feraud, 2007)

When the Germans took control of the mine in World War II the mine largely used slave labor to build batteries for U-boats, because many of the previous Trepca miners where Yugoslavian resistance fighters (Feraud, 2007). After the war the smelter and mine were nationalized and Trepca Mines Ltd. was liquidated, splitting the assets between the British and Yugoslavian governments (Dauti, 2002). Lawyers today use this case in transborder insolvency issues and liquidation of overseas assets.

In 1948 the Mining, Metallurgical and Chemical Conglomerate of Lead and Zinc, Trepca became the biggest mining complex in the Balkans (Feraud, 2007). Stari Trg was at the heart of the complex, which produced half of the complex's 3 million tons of lead, 2 million tons of zinc, and 4,500 tons of silver (Feraud, 2007). The medieval open pit at Trepca is found at an elevation of 935 meters and the deepest level of the mine is 15 meters above sea level (Feraud, 2007). At first the cut and fill method was used, but soon several shafts were built to get at the deeper extensions of ore. It once employed 23,000 workers and was a huge source of income in the Yugoslavian economy (Feraud, 2007).

The complex began to have problems in 1975. The mines were poorly managed, deteriorating equipment was neglected, funds were poorly invested, little regulation of ore grades was done and equipment was stolen (Feraud, 2007; Del Castillo, 2008). These problems were compounded when Milosevic revoked Kosovo's autonomy in 1990 (Del Castillo, 2008). The Albanian workers that ran the mine quit and left the region and political tensions around management increased (Feraud, 2007; Del Castillo, 2008).

Before 1993, when the complex shut down due to the economic embargo on Yugoslavia, Trepca consistently contributed toxic metal pollution to the surrounding waterways (Greicevi, 2003). When the war broke out in 1998 Trepca and Mitrovica were the most hotly contested areas due to highly mixed ethnic populations and proximity to Serbia proper (Feraud, 2007; Del Castillo, 2008).

When the KFOR peacekeeping force entered Trepca the opposing sides were split up and the northern mines fell within Serbian borders (Feraud, 2007). The Albanian workers began to return and they seized the southern mines, which were flooded during the war. KFOR saw the potential of the mine for reconstruction and so dewatered the Trepca mine (Feraud, 2007). An environmental assessment by a joint French-Danish effort found that the war had resulted in pollution accumulation around the two smelters (Feraud, 2007).

Pre-conflict environmental issues also existed. One study of agricultural crops in Mitrovica, near Trepca, in 1989 revealed concentrations of heavy metals that had increased by a factor of 30 as a result of poorly managed industrial waste sites (Greicevi, 2003). High levels of lead and cadmium have long been found in potatoes and wheat in this area and vegetables in 2000 had high levels of lead as well (Greicevi, 2003). Although the health effect of these levels has not been well documented it has been determined that lead levels in pregnant women of this area are three times higher than in the neighboring capital of Pristina (Grecevi, 2003).

In 2005 ore production started back up in the Trepca mine and the zinc concentrator was used again thanks to the hard work of mine managers and workers, but has since been closed again (Feraud, 2007). They have an exploration license and there

are huge reserves left. The exploration is need because reserve figures, which were once calculated for a state-controlled and centrally, planned economy need to be altered to assess their value in a free-market economy (Feraud, 2007).

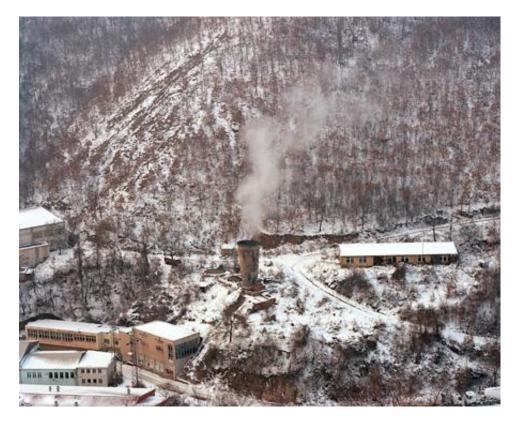
Trepca is a major source of pride for the Kosovar people. UNMIK handed management of the complex over to ITT K Consortium Ltd., a US, French and Swedish consortium (Del Castillo, 2008). Their goal was to assess Trepca's potential and they found that by employing just 2,000 workers the complex could alleviate financial problems and ethnic tension in one of Kosovo's most mixed ethnic areas (Del Castillo, 2008). Both K-Albanians and K-Serbians were opposed to this action and privatization, as they saw it as the first step in giving away their greatest resource to foreigners (Del Castillo, 2008).

Due to lack of Kosovar support for privatization there has been limited interest in the complex. It is not clear what the new Kosovar government, when formed, will determine about property rights to Trepca. They may determine that the interim government had no right to divest government assets or even lease them to foreigners (Del Castillo, 2008). There are also companies that claim that Milosevic privatized the complex in the 1990s and that they hold equity in it (Del Castillo, 2008). The area is also one of the last places with a Serbian presence in Kosovo, as Milosevic installed Serbians in management positions at the mines before the war.

Beyond property rights issues and the lack of financing that has resulted from them there are also environmental considerations to be taken into account. Trepca's facilities have never been held to high environmental standards and lack of maintenance over the decades has led to severe deterioration. The mining techniques used will need to be improved to prevent pollution (Feraud, 2007; Del Castillo, 2008). It is estimated that the necessary improvements would cost between 15 and 30 million US dollars (Feraud, 2007). This would be justifiable if full scale mining where to return as a 2001 UNMIIK report said that "29,000,000 tonnes of mine-run ore at grades varying from 3.40 to 3.45% Pb, 2.23 to 2.36% Zn and 74 to 81 grams/tonne Ag, i.e. around 999,000 tonnes Pb, 670,000 tonnes Zn and 2,200 tonnes Ag" are available (Feraud, 2007). If Kosovo gains admittance to the European Union in the future any company invested in the mine would also have to make sure these derelict facilities meet the European Union's high environmental standards. Despite the difficulty in attracting investment it is still something that Kosovo should pursue, as Trepca would provide substantial income and a moral boost for the small nation.

To make use of Trepca the Kosovar people need to accept foreign investment. They do not have the financial means to upgrade the mines' facilities themselves and there is not enough foreign aid still reaching Kosovo to make a difference either. The Kosovar concern that letting in foreign investors will give away their most promising source of natural resources needs to be appeased. The local people have a long history in mining and the skills needed to operate the mine. Any investment plan should therefore use the Kosovar people for all jobs at the facility. This way the jobs generated by the facilities benefit only the Kosovar people. Making promises not to import labor may be enough to appease the Kosovars and it would not be adverse to the foreign investors as the Kosovars are capable of running the mine with the right investment.

The hardest sell to investors is the uncertain state of Kosovo's government. Even if the interim government, which is strongly influenced by foreign policy makers from the UN and not Kosovar politicians, allows for foreign investors the official government that is forthcoming could determine that the interim government had no right to let in foreign investment. The risk of losing their stake in Trepca is enough to make any investor shy away. It may be too hopeful to think that any future government would recognize the role that foreign investment must play at Trepca and so Kosovo's status as a nation may need to be resolved before investors get involved at Trepca. On the other hand Kosovo may need the financial boost that Trepca can provide in order to secure its full independence. In the meantime it is a shame that a resource with the potential that the Trepca mines have to heal a struggling country lies untapped.



## Photo © ANDREW QUERNER

The Stan Terg mine and community of Trepca, Kosovo.

### Works Cited

- Airhart, M. (2003). Cleaning up after war. Scientific American, 289(October), 44-45.
- Dauti, D. (2002). Lufta per Trepcen (sipas dokumenteve britanike). Prishtine: Ed. Institi Kosovar per integrime evroatlantike, p192.
- Del Castillo, G. (2008). Rebuilding war torn states: the challenge of post-conflict economic reconstruction. Oxford: Oxford University Press.
- Edwards, R. (2001). Traces of war. New Scientist.
- Feraud, J., Gani Maliqi, and Vjolica Meha. (2007). Famous mineral localities: the Trepca mine, Stari Trg, Kosovo. The Mineralogical Record, 38(4), 267+.
- Greicevci, B. (2003). Kosovo, my home. Transitions Online.
- Haavisto, P. (2004). Legacy of conflicts. Environmental Health Perspectives, 112(17), A 976.
- Joksimovich, V. (2000). Militarism and ecology: NATO ecocide in Serbia. Mediterranean Quarterly(Fall), 140-160.
- Jong, R. (2000). Environmental aftermath in Kosovo. Forum for Applied Research and Public Policy, 15(1), 36.
- MacKenzie, D. (2001). Off target. New Scientist.
- Stuart, P. (2002). The Trepca mining complex: how Kosovo's spoils were distributed. World Socialist Web Site.
- Walker, C. (1999). Another victim of Milosevic the environment. Christian Science Monitor, 91(164).