DISASTROUS MINES OF ARMENIA IN PICTURES

Posted on June 19, 2020 by Keghart



Category: Opinions

Houry Ellezian, Montreal, 2 June 2020

"Zangezur Copper and Molybdenum Combine" and the Artsvanik tailings dam:

Fig. 1 and 2 are two satellite Google images of Zangezur Copper and Molybdenum Combine, taken by the author, two years apart, in 2018 and 2020, to compare the changes that have occurred within the course of two years. The two images reveal a difference in lithologic color as well as vegetation loss and widening in certain areas, indicating high activity. This fact was also confirmed by the environmentalists who detected more than the allowed quantity of rocks mined and transported outside the country.



Figure 1 - Zangezur Copper Molybdenum Combine - 2018 screenshot by the author.

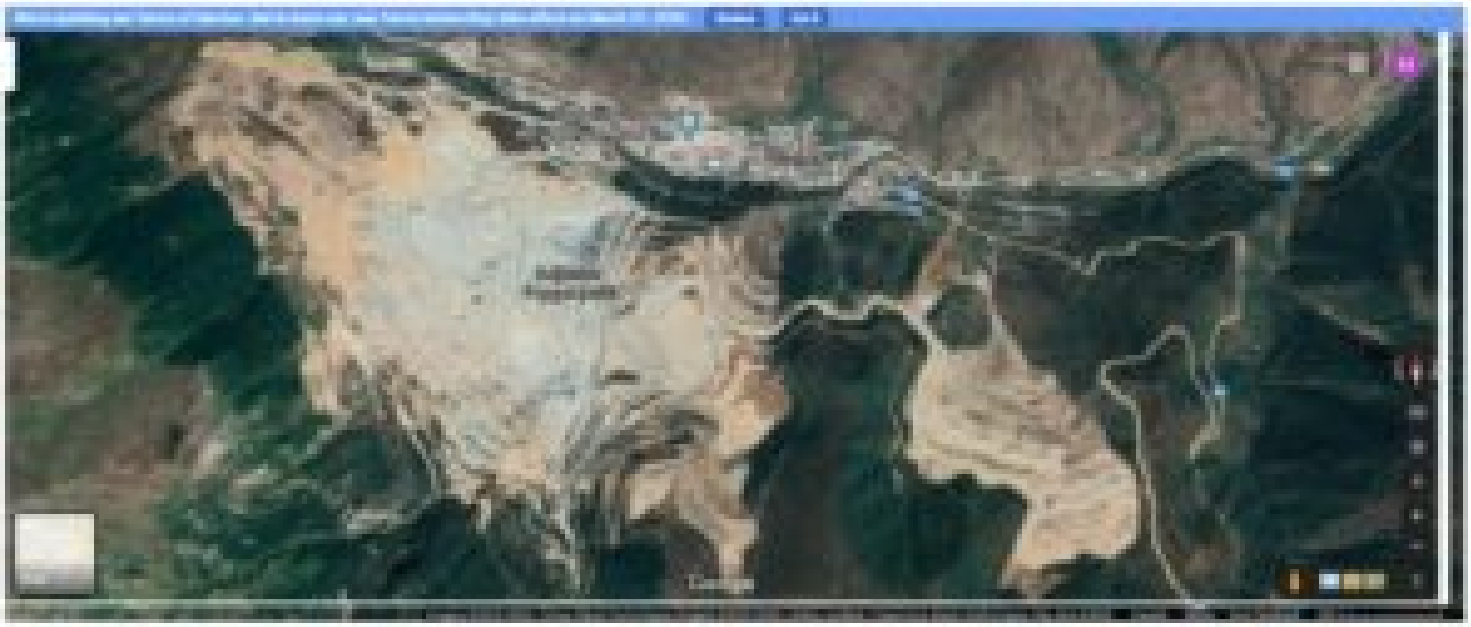


Figure 2- Zangezur Copper Molybdenum Combine - 2020 screenshot by the author.



Figure 3 - Artsvanik tailings dam - the 4th largest in the world according to Hetq - located 6-7 km from Kapan, fed by Zangezur Copper Molybdenum Combine, seen at the lower left - 2020 screenshot by the author.



Figure 4 - Mountain view of Kapan, with Geghanush dam to the left (fed by Kapan Enrichment Company), and Artsvanik dam to the right (fed by Zangezur Copper Molybdenum Combine, seen in the upper left corner) – 2020 screenshot by the author.



Figure 5 - Artsvanik tailings dam up close, named after the neighboring Artsvanik village (Courtesy of Hetq)

Hetq writes:

"Before the 1970s, there were settlements and gardens there ."

"Historical Value of the Area

Historian, director of Kapan Geological Museum Grisha Smbatyan, says Artsvanik is one of the oldest villages in the Kapan area and its full of historical and cultural monuments. During archaeological excavations and agricultural and construction works, Bronze Age cultural items - statues, jugs, weapons, and jewelry - were discovered in the village.

Smbatyan says there were two little villages, a cemetery, a chapel, a mill and other structures at the site of the current tailings dump. Archaeologists were particularly interested in the late Bronze Age sculptures of musicians and an encrypted inscription.

The Institute of Archeology and Ethnography of the Armenian National Academy of Sciences has been conducting research in the Artsvanik and neighboring Chapni villages since 2016. Archaeologist Tigran Aleksanyan says their expedition has found monuments of various eras."

"Hrant Harutyunyan recalls that residents used to sell their crop in Kapan. Their produce was in high demand. Now, there is almost no crop to sell."

"Harutyunyan's wife, 83-year-old Marusya Melkonyan, says that the lower part of the village has to graze cows near the tailings dump because of pastureland scarcity. Some cows even fall into the tailings dump."

"The milk we drink and the cheese we eat are the result of the tailings dump. Neither the young nor the elderly are in good health here," says Melkonyan."

A big question arises: why was this location chosen for the dam, in spite of all the above facts, visibly, so close to the town of Kapan (Figs. 3 and 4), so dangerously close to the drainage system of the area, and yet so far from the mine that feeds it?

Voghji River pollution:



Figure 6 - Voghji River pollution

As feared and predicted, not so long ago, there was a disastrous accident that caused heavy pollution of Voghji River, near the town of Kapan. This contamination was linked to tailings flowing from the Artsvanik dam, converting the whole river into muck and unfit to support any life form. The environmentalists, as well as the residents of Kapan, were highly alarmed and were continuously posting images and videos of the river contamination during that time. This was a live validation that mining hazards are not controllable, that citizens do not matter, and are paying the high price with their health. Environmentalist Levon Galstyan, justifiably called it "ecocide". Listen to the details in the following audio record Ողջի գետը աղտոտողը Զանգեզուրի պղնձամոլիբդենային կոմբինատն է.

Teghut Mine and pollution of Shnogh and Debed Rivers:

Teghut Mine is situated in Lori province, in the North, and the pictures below speak for themselves (Figs. 7, 8, 9 & 10).

In 2017, disaster struck and Shnogh river was polluted because of Teghut Mine.

"There were eight species of fish in Shnogh, and now there is none, not even insects, and frogs, the gardens of the Shnogh residents were dried up after being irrigated with this water". "The operating company "Valex" had told they would build a tailing, the floor of which would be isolated, and the danger threatening the environment would be zeroed. That's not so. The bulwark is wrongly built. The forest was cut, and now the tail pours on the cut trees and vegetation, "swallows"… that is no isolation." Tells Hakob Sanasaryan, chairman of the "Greens' Union of Armenia" to journalists.



Figure 7 - Teghut Mine mountain view (Wikipedia)

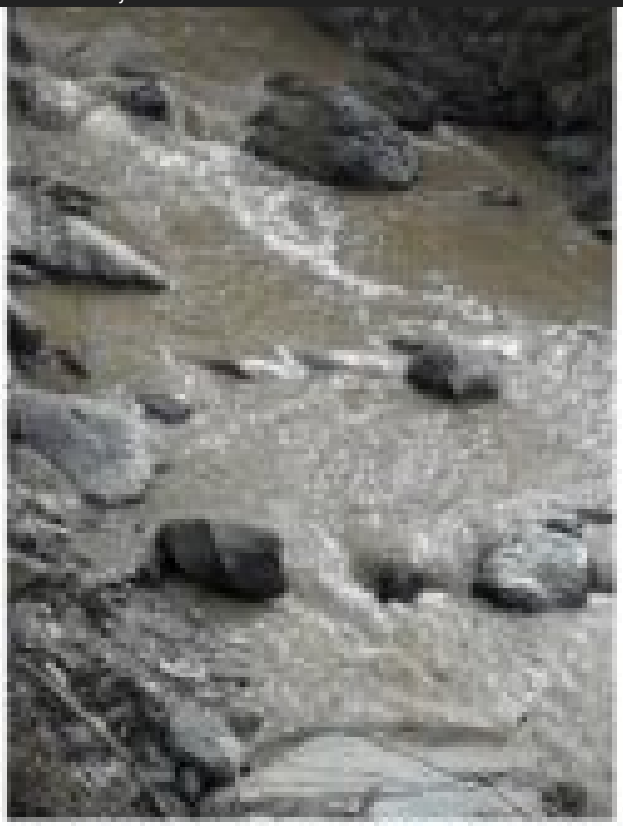


Figure 8 - Shnagh River pollution by Teghut Mine, 19.01.2018 (Courtesy of armecofront)

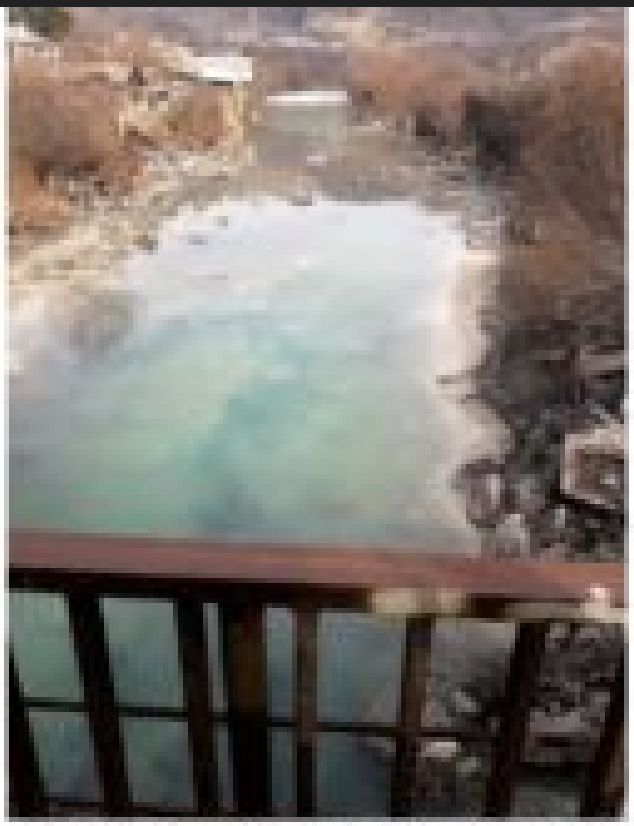


Figure 9 – Debed River pollution by Teghut Mine, 19.01.2018 (Courtesy of armecofront)



Figure 10 - Teghut Mine - polluted Shnogh River meets Debed River (Wikimedia)



Figure 11 - Kahutak tailings dam, fed by Akhtala Mountain Enrich Combinat (Courtesy of Hetq)



Figure 12 - Nairig tailings dam, an example of failed "re-cultivation" (Courtesy of Heta)

You may view more on this at "Environmental Disaster in Lori: The Consequences of Akhtala Mountain Enrich Combinat"

Sotk Gold Mine:

Geographically Sotk Mine is situated in Gegharkunik province, east of Lake Sevan (Fig. 13 & 14).

Gold was mined in Sotk or Zod since antiquity and so the region is expected to be rich in history and artifacts. But with more removal and deepening of earth by bulldozers and explosions, these artifacts would not stand a chance to be preserved. For more on this history, you can visit Wikipedia.

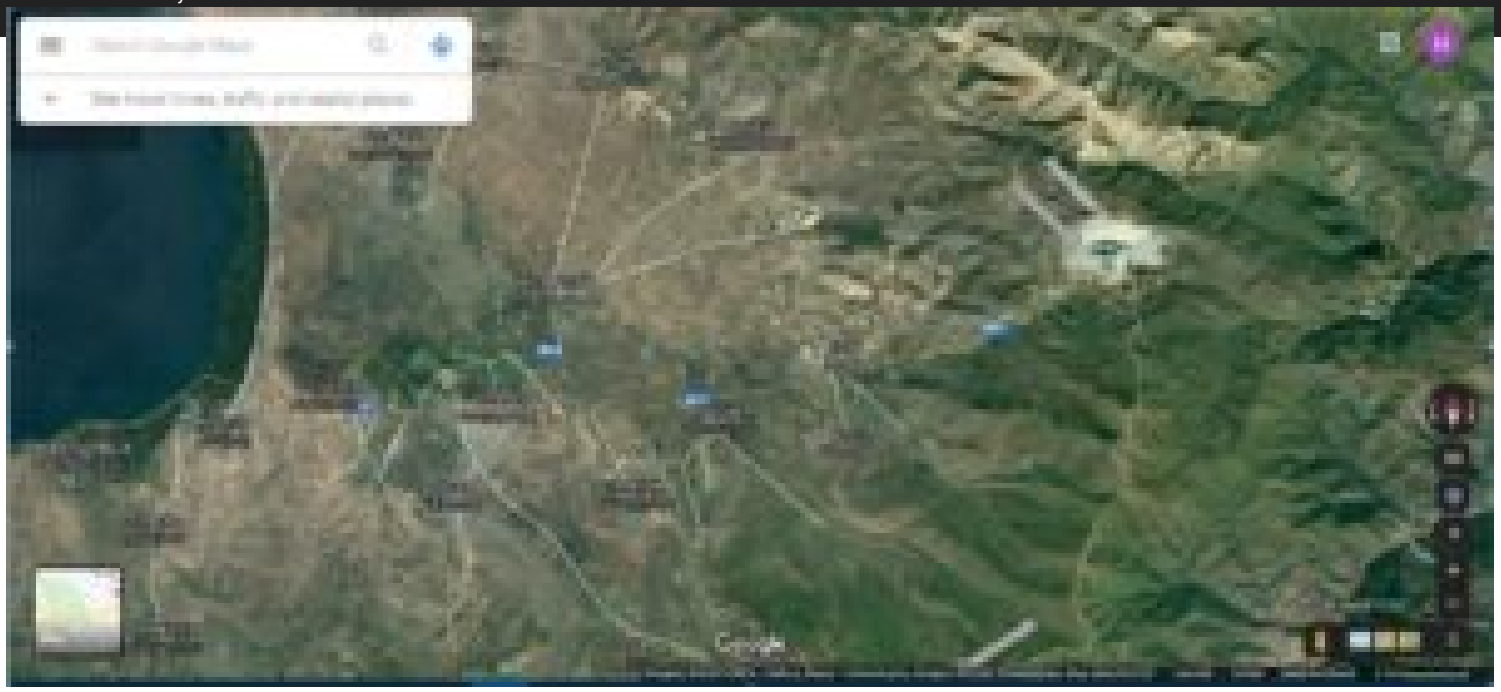


Figure 13 - Sotk Mine east of Lake Sevan - 2020 screenshot by the author



Figure 14 - Sotk Mine up close - 2020 screenshot, by the author

In an investigative report "Mining Caucasian gold: Corporate profits come at a high price" by a Hetq reporter, worker abuses in Sotk Mine are described as follows:

"… citizens of Armenia know next to nothing about who is getting rich from mining the resources of

their country... Sotk is the largest gold mine in Armenia... Locksmith Ruben Grigoryan, who worked at the Sotk mine and was dismissed... says that the when explosives are set off in the open mine area, they mix with ammonia and saltpeter and seep into the underground water reserves. The company then pumps the water into a village river that feeds into the Metz Masrik River which eventually flows into Lake Sevan. The company makes sure to conceal the entire process from the eyes of local residents... Former Sotk mine employees say that faulty methods were used to dig to a depth of 250-300 meters at the open pit mine. It's dangerous, and miners often refuse to extract the ore. They're afraid of being buried in landslides from above. Those protesting such conditions are advised to resign... Ruben Grigoryan says the company isn't concerned with the health of its workers, and that tragic accidents often occur due to inadequate regulations. Such accidents have claimed four lives in the past few years. A dump truck driver died last year while releasing his cargo..." For more please read article and watch video in Hetq.

Hence, it is safe to say that Sotk Mine is the main culprit in polluting Lake Sevan. Others being the flourishing shore resorts, villas that wish to preserve low water levels, rubbish from various sources and oil leaks from ships and jet skis. We all have witnessed blooms of cyanobacteria or blue-green algae, in Lake Sevan during the past 3 summers. These blooms can be safely attributed to the disturbed ecosystem in the lake, accentuated during the hot seasons. Apparently, they are reappearing this year too, as reported.

Certainly, the above showcased mines and tailings dams are not the whole, there are still plenty of other mines with their harmful tailings in little Armenia, about which the environmentalists voice every day. To have a better idea and horrify yourself, you must see: Հայաստանի պոչամբարները՝ մեկ քարտեզում.

Houry Ellezian is a geologist/sedimentologist with work experience in seismology. She is an environmental activist.

Next is "AMULSAR: A would be disaster and an open letter".

There are no comments yet.