



Zarshouran Gold: The Mining Industry's Flagship Project

In 2000 BC, Iranian plateau inhabitants started to create jewels and ornaments with colored grains and marbles, illustrating their interest in decoration and ornaments. Jewels belonging to this era have been found in Burnt City (Shahr-e Sukhte). During the next millennium, that is to say in 1000 BC, Iran established its jewelry industry. Jewels in Iran have a long and turbulent history. In ancient Iran, jewels were used to avert calamities as well as for aesthetic purposes. Also, jewels were a sign of person's social position and nobility. In Iran, jewels were made mainly from gold, silver, bronze, and colored stones; as Iranians placed considerable importance on luxury items and adornments, the jewels were used to adorn clothes, hair, and vessels. Consequently, throughout history, Irani-

ans have possessed peculiar styles and designs. Iranian plateau inhabitants used copper jewels and gold and also strings of colored marbles between 300 BC and 1300 BC. During the first half of this millennium, the jewels were used to create necklaces and bracelets containing melon seeds and hollow golden separators, for both men and women. In the ancient city of Susa, located in northwestern Iran, artisans were using the same techniques and designs that were used for jewelry making by local craftsmen in Burnt City, located in Sistan and Baluchestan province. In his book titled "Iran from the Earliest Times to the Islamic Con-

quest" Ghirshman wrote: "the gold mines around Hamadan had been exploited in the Maad period." Will Durant, in the first volume of "The Orient, the Cradle of Civilization" quoted G.HAUART: "In the mountains where the Meds had chosen to live, they found copper, iron, gold, silver, marble, and precious stones. It is quoted from Greek geographer, Strabo as saying that gold, silver, copper, iron, lead and orpiment were extracted in Iran, mainly from the Kerman region." During the Sassanid period (455 to 531 AD), the Chinese delegates that attended the empire court wrote: "In Ctesiphon, capital

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A TOTAL OF 15.2 MILLION
EUROS PLUS 834 BILLION
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INTO THE PROJECT

of Sassanid Empire, the natural products include gold, silver, coral, amber, pearls, crystals and vitreous objects, iron, copper, cinnabar, and mercury.”

Archaeologists believe that gold was used to make ornamental objects during the third millennium BC in Iran. Some of these objects have been discovered in archeological excavations:

“In Iran you can find also gold and silver mines that were operating in the past. Shah Abbas intended to exploit these mines but because their costs were much more than their revenues, he abandoned the idea.”

Chardin mentioned the gold mines near Tabriz: “It’s been a long time since their extraction has ceased, as it turns out that their income does not cover their expenses.”

During the Qajar period, particularly during the tenure of Amir Kabir, some measures were taken to exploit gold mines. The Muteh gold mine, located near Lenjan (although the author made a mistake as the correct name of the city is Delijan) was exploited during this period.

After the Constitutionalist movement in Iran, concessions by the Astaneh (Arak) gold mine in the Azna River were offered to individuals, however, the result was not unsatisfactory. In his scientific mission report to Iran, Jean-Jacques de Morgan wrote:

“Gold is not naturally low in Iran; it is found in some rivers in Kurdistan, Khorasan, and Gharedagh near Aras River” But he hasn’t written anything about their exploitation. Nonetheless, today, approximately 3 tons of gold is produced annually in Iran, and according to the Twenty Year Economic Perspective document, it is set to reach 5 tons per year by 2025. Realizing this goal is part of the government’s plans.



Zarshouran Gold:

A long history of civilization in the Takab region (Takht-e Soleyman) indicates that this mine has been known since the Maad and Sassanid periods. Moreover, the mining works found during these periods include the use of placers and washing gold-bearing sands.

Zarshouran, the largest gold mine in Iran, is located 35 km from the city of

Takab and 15 km from Takht-e Soleyman, a cultural heritage and tourism complex. An exploration certificate for Zarshouran gold mine was awarded to the Iranian Mines and Mining Industries Development and Renovation Organization (IMIDRO) after exploration operation of domestic and foreign groups. Geographically, the mine is located at Zarshouran village, 31 km north of Takab, in geological quad 1: 250,000 and geographical coordinates: latitude 36–37 degrees and longitude 46–48 degrees. The area can be accessed via an asphalted road (Shaheen- Dezh-Takab and Zanjan- Dandi-Takab). Zarshouran gold

THE SUCCESSFUL IMPLEMENTATION OF THE ZARSHOURAN GOLD PROJECT INCREASED THE MOTIVATION OF WORKERS, EMPLOYEES, ENGINEERS, AND EXECUTIVES

mine is located in the same areas as the Zarshouran orpiment mine, which is situated approximately 6 km northeast of Zarshouran village, 30 km northeast of Takab, and 190 km northwest of Zanjan, in the West Azarbaijan province.

Zarshouran gold mine has been defined as the largest gold production project of Iran. Through the implementation of this project, Iran’s gold production surpasses 5 tons per year, enabling the country to achieve its annual gold production goal.

Prior to 1996, exploration activities carried out by international companies in the Zarshouran area were fragmented and limited.



A new round of surveys in Zarshouran area began in 1995 by Mineral Sport Company and South African company, Minorco, and Lumar Consulting. The results of the surveys conducted by Minorco showed that the main deposit zone was 800 meters length, with a breadth of over 20 meters. These surveys confirmed the existence of four types of ore.

The continuation of exploration was given to Anglo-explorish which evaluated ore reserves at 11.5 million tons with an average grade of 7.9 ppm; as a result, they discovered the existence of 88 tons of pure gold in the mine. In addition, laboratory studies and pilot testing of Zarshouran were conducted by South African company, MDM. In April 2008, Pars Kani Co. won the contract for completing the exploration, mine design, and construction of a processing unit with a capacity to produce 3 tons of pure gold and 27.1 tons of silver. A total of 15.2 million euros plus 834 billion rials was invested into the project, which created 850 new jobs. Zarshouran gold project planned to open during the month of Shahrivar (August 23-September 22) after a six-month delay. Finally, after nearly four years of working around the clock, the first piece of 24-karat



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gold (pilot production) was produced at 9 a.m. on Shahrivar 13 (September 4, 2014), bringing great joy and hope to all those involved in the Zarshuran gold project. Further, IMIDRO, as the development organization with a specialty in the mining sector, realized and exceeded one of the most important objectives of the 2025 vision.

The successful implementation of the Zarshouran gold project increased the motivation of workers, employees, engineers, and executives, and also encouraged IMIDRO to define phase 2 of Zarshouran gold mine. Phase 2 involves expanding exploration and launching a second production line with a capacity of 3 tons per year, enabling gold production to increase from 3 to 6 tons per year, while ensuring the production of 2.5 tons of silver and one ton of mercury per year. This project requires an investment of 4.5 million euros and 950 billion rials. IMIDRO intends to begin the project this financial year (2014-2015), with plans to inaugurate the project in 2015; however, climate and heavy snow may delay the project.

