

## KYRGYZSTAN

*By Interfax-M&CN*

**K**yrgyzstan's GDP expanded by 5.1% last year, the fastest growth in the past three years. Growth accelerated as foreign trade relations were restored with Uzbekistan and Kazakhstan. Exports from Kyrgyzstan had been sharply restricted after the Russian financial crisis in 1998. In 2000 exports grew by 9% as world market prices increased and the country's trade deficit shrank. At the same time, economic growth remains unstable and depends strongly on the agricultural sector and development of the Kumtor gold field. The agricultural sector produces 35% - 40% of Kyrgyzstan's GDP, so growth depends a great deal on weather conditions - an unfavorable combination of weather factors could not only stop growth but reverse it. The development of the Kumtor gold field produces about a third of the country's export earnings (40% in 1999) and produces roughly 10% of GDP. As a result, the budget and the balance of payments depend on the earnings of the operator at the field, and ultimately world gold prices.

Industrial production increased by 8.9% in 2000. Industrial output was up largely due to an increase in electricity production, nonferrous metallurgy, light industry and the food industry. Losses reported by industrial enterprises dropped by more than half during the year but still 120 - 160 enterprises were idle. The increase in industrial production benefited from efforts by the government, namely tax breaks for enterprises, abolishing fines, lifting restrictions on the export of certain products, government support for the coal industry, and deferments on loans made to enterprises in light industry. Industrial production is expected to increase by at least 4.5% in 2001. Processing enterprises are expected to increase production by 5.9%, mining enterprises will increase output by 2.6% and power companies will produce 1.5% more product.

Kyrgyzstan mines and processes molybdenum, mercury, antimony, gold, uranium, numerous rare metals and industrial minerals, and the country is rich in reserves of a number of metals. It has particularly impressive reserves of tin and tungsten, which are concentrated at the Trudovoye deposits of the Sary-Dzhaz river basin, in the east of the country. The deposits include Uch-Koshkon, Kensuu, At-Dzhailau, Sary-Bulak and Teimir-Tash. Trudovoye as a whole contains 25 Mt of tin and tungsten ores which have been prospected and prepared for commercial development. The ores are reported to contain more than 150,000 t of tin and 90,000 t of tungsten.

Since mineral resources play a major role in the economy, Kyrgyzstan is paying much attention to exploration. It attracted US\$3.9 million in foreign and local investments into its geological sector in 2000. In all, Kyrgyzstan's geology sector received US\$12 million in foreign investment between 1996 and 2000. Foreign investments financed exploration by companies like Barrick Gold of Canada, Hemko-Kyrgyzstan (a subsidiary of Hemko of the US) and Temelesu. In 2000 the Kyrgyz Renton group drew local investments for exploration. The company was able to complete, on schedule, the exploration of the Bozymchak and Kuru-Tegerek copper-gold deposits in the Chatkal district, south Kyrgyzstan, and to start preparing them for commercial development.

In 2000, Kyrgyzstan was able to start developing the Dolpran gold deposit in the Kemin district, north Kyrgyzstan; Kyrgyzstan also managed to build the Kurgak mine at the Trudovoye tin and tungsten deposit, which last year yielded its first tin concentrate and will produce 1,400 t of tin in 2001.

Recently, Kyrgyzstan has become more active protecting state economic interests

when implementing mineral development projects on its territory. The Geology Agency's appraisals of feasibility studies to develop the Jerooy and Taldy-Bulak Levoberezhny gold lodes have reduced the cost of these projects and raised their projected margins and mineral recovery rates. Malaysia's MMC Berhad, which is partner to the project to develop Taldy-Bulak had originally planned to mine reserves containing 19 t of gold at the initial stage and then to conduct further exploration along the deposit's perimeter to increase reserves. But the Agency's appraisal indicated that the company could go straight ahead and develop reserves containing 50-60 t of gold at the first stage of the project. The Agency has also averted the loss of 55 t of gold at the Kumtor gold lode thanks to an appraisal of geological and financial information used by the developers of this site.

Kyrgyzstan is not self-sufficient in energy resources. It mines coal, but only in small amounts. Kyrgyzstan produced 419,400 t of coal in 2000, 1% more than the 415,200 t achieved in 1999. Kyrgyzkomur, the country's biggest producer, turned out 320,700 t, up 5%. Stripping by Kyrgyzkomur, though, fell 14.6% to 1.5 million m<sup>3</sup>. The company supplied consumers with 240,200 t of coal, of which households received 55,200 t, utility providers 25,300 t, and power stations 28,300 t. The company exported 10,200 t.

### Gold

In 2000, Kyrgyzstan significantly increased gold production. The Kara Balta Mining Combine of Kyrgyzstan planned to refine about 21 t of gold in 2000, compared with 19 t in 1999. The additional gold came from the Kumtor mine. The remainder was mined by the Makmalzoloto joint stock company. Foreign investment in developing gold deposits totalled US\$3 million - US\$4 million in 2000 and foreign investment in geological research approached US\$3 million.

The Kyrgyz-Canadian Kumtor Gold Co. (KGC) last year produced 21.5 t (670,000 oz)

of gold at the big Kumtor lode in Kyrgyzstan, 10% more than the 18.97 t (610,000 oz) achieved in 1999, and more than it has ever produced since going on stream. Ore extraction at the deposit increased by 4% (200,000 t). Gold recoveries from ore were 81.5%, 2.7% higher than in 1999 and 2% higher than projected by the feasibility study. Operating costs were reduced by US\$4 million, or 4%. Unit costs fell from US\$179.3 to US\$152.3/oz in 2000. After allowing for loan repayments, unit costs fell from US\$236 to US\$198/oz.

The KGC's 2001 budget projects gold production to increase by 2% over 2000 to 21.9 t (681,603 oz). Projected sales this year are US\$206 million, or US\$5 million less. Overall unit costs in 2001 should be US\$10 million lower at US\$196 million as the company saves US\$2 million in production costs and reduces financial outlay (loan repayments) by US\$7 million and amortization deductions by US\$2 million. Planned earnings are US\$10.4 million, compared with US\$4 million in 2000.

In November 2000, Sheshenaly Murzagazyev, head of the State Institute for Geology and Mineral Resources, said that the Canadian Cameco Gold, partner in KGC, should start to explore the deeper lodes at the Kumtor gold deposit in 2001. The exploration was a term of the general agreement signed with Cameco back in 1992. In the past, Cameco asked for additional time to carry out the exploration, which it said it would start in 2000. According to the agreement, Cameco has 3-5 Mt of ore to mine by the deep method. The deep lodes at Kumtor contain something like 300-400 t of gold. The company should drill about 50,000 m and, if the reserves are confirmed, start to build a deep mine.

Another foreign company, the UK's Norox Mining, is to complete a feasibility study of developing Jerooy, a major gold field in Kyrgyzstan. A government commission reviewed the initial version of the study on

November 23, 2000 and concluded that it needed more work. The study proposed an incomplete extraction of resources and the financial estimates for the project were deemed unreliable.

Talas Gold Mining Co., a joint venture, holds the licence to Jerooy. State concern Kyrgyzaltyn holds 33.33% of the joint venture and Norox Mining holds 66.67%. Norox Mining is owned by Oxus Resources Corp., which is 30% held by Australia's Normandy Mining and 10% held UK-based Lonmin Plc (formerly Lonrho). Specialists from the Australian consultancy Snowden Associates estimate that Jerooy holds 2.03 Moz (62.98 t) of gold in recoverable reserves with an average content of 5 g/t. Open-pit mining will be used to extract 1.21 Moz (37.65 t) with an average content of 3.86 g/t, and 815,000 oz (25.33 t) with a content of 8.92 g/t will be extracted by underground methods.

Talas Gold Mining Co. is also licensed for operating the Dzherui field, a major gold location in Kyrgyzstan, and Norox Mining recently completed a recalculation of the reserves there – boosting them by 40 t. Snowden Associates has estimated that Dzherui holds 2.03 Moz (62.98 t) in recoverable reserves with a gold content of 5 g/t.

In April 2000, Israel's Golden & Silver Ltd recommissioned a 350,000 t/y gold recovery plant in Aktyuz in the Kemin district of northern Kyrgyzstan. The company spent US\$9.3 million renovating and upgrading the plant, which will process ores mined at the Dolpran gold lode using a flotation and gravitation method and Knelson concentrators. It will sell the concentrate to the Kaztink Corp., based in Ust-Kamenogorsk, Kazakhstan. In 2000, the company processed about 20,000 t of ore mined at Dolpran on a trial basis at the plant.

Meanwhile, Kyrgyz President Askar Akayev signed a decree on January 15, 2001 giving the republic's entire gold mining industry (and

the government interest in the Taldy-Bulak Mining Corp.) over to the state concern Kyrgyzaltyn. Kyrgyzstan's Kara Balta Mining Complex and MMC Berhad set up a joint venture in 1997, Taldy-Bulak Mining Corp., in which the Malaysians own 48% and the Kyrgyz 52%, to develop Taldy-Bulak's Levoberezhny gold lode. The decree, 'On Measures to Develop Gold Production in Kyrgyzstan', separates the refining and gold mining operations from the Kara-Balt mining plant and makes them a subsidiary of Kyrgyzaltyn. The concern will also obtain the Sary-Dzhaz mining department.

The Kara-Balt mining operation will vest Kyrgyzaltyn with the rights and duties of the Kyrgyz founder of the Taldy-Bulak Mining Corp. Kyrgyzaltyn will represent the government at negotiations with foreign investors in Taldy-Bulak's Levoberezhny project, as well as in other gold mining and production projects. Levoberezhny's predicted gold reserves are about 34 t of C1 category and about 41 t of C2 category. The field's adjacent deposits are believed to contain another 50 t of gold.

Kyrgyzaltyn will also exercise control over 70% of the government-controlled stock of the Kadamzhai antimony plant, which produces antimony, gold and silver. Kyrgyzaltyn possesses 70% of the stock in Kumtor Gold Co. and 33.33% of Talas Gold Mining Co. It will thus control almost all the gold mining and refining industry in the republic.

### **Antimony and Mercury**

Kyrgyzstan is the biggest antimony producer in the former Soviet Union. Antimony is produced at the Kadamzhay combine, in the Osh region of southwest Kyrgyzstan. Kyrgyzstan increased antimony production by 14% to 1,505 t in 2000. The Kadamzhay combine produces antimony trioxide, and metallic antimony of varying purity, Schlippe's salt, and a small amount of incidental lead and silver. The combine had overcome some difficulties with supplies at the start of 2000

and is signing new supply contracts with Russia, Tajikistan and Kazakhstan. At the same time, Kadamzhay is switching its own mining operations to gold. It intends to increase mine production at its Tereksay and Kadamzhay mines and recover 200 kg of gold from ore in 2000. There are also plans to recover tin from the ore.

The state-owned Khaydarkan Mercury Combine from Kyrgyzstan's Osh region plans this year to produce 600 t of mercury and 3,500 t of fluorite concentrate, about as much as last year. In 2000, Khaydarkan reduced mercury production by 8.3% from 1999 to 549.9 t. It started to mine lower grade ore with a 0.35% Hg content compared with a previous 0.46% Hg. It drilled 2,616 m last year, of which 1,935 m were into the main workings. All of the mercury produced in 2000 was exported to China.

Also in 2000, the combine sustained its 1999 fluorite concentrate output of 3,232 t. To produce this in 2001, the combine will use complex mercury-antimony-fluorite ores mined at the lower levels. For this the combine will have to strip the richer, more oxidised sulphide minerals in the complex ore at the Zapadnaya deep mine's third level. The management had decided to suspend production of mercury pyroantimonate which it started in 2000 and which totalled 400 kg owing to sales problems.

### **Uranium and Rare Earth Metals**

Uranium production is concentrated at the Kara-Balta combine built in the early 1950s to develop the Kavak uranium and coal deposit. Kara Balta uranium production is carried out by the wholly-owned Uran.

An agreement between Kyrgyzstan's Kara Balta mining combine, the Russian Ministry of Atomic Energy and Kazakhstan's national

nuclear corporation, Kazatomprom, on the joint development of a uranium field in Kazakhstan and the subsequent processing of the uranium concentrate in Kara Balta, was drafted in October 2000. Kara Balta and the Russian atomic ministry will develop the uranium field in Kazakhstan with finance from abroad. Kara Balta currently produces yellowcake from chemical concentrates from Kazakhstan. The project between Russia, Kyrgyzstan and Kazakhstan should begin in 2001.

In December 2000, Kyrgyzstan and Russia signed a deal concerning uranium and nonferrous and precious metals. Russia and Kyrgyzstan also decided to monitor uranium tailings dumps in Kyrgyzstan. The Russian atomic ministry plans to finance a feasibility study for the recultivation project in 2001. They also agreed during to discuss the possible development of a gold deposit in Kyrgyzstan using existing capacity at Kara Balta and Russian atomic ministry technology.

Kyrgyz Chemicals and Metallurgy Plant of Kyrgyzstan, a major rare-earth metals producer, is implementing a comprehensive development programme to 2004 which involves upgrading existing capacity with a view to cutting costs, enhancing product quality. Output of rare-earth metals grew by almost 50% to 7,736 kg, while output for rare-earth oxides grew 34% to 15,235. Production of mono-crystalline silicon, halted in 1999 when raw material supplies and markets dried up, has yet to be restarted. The plant is now in a market research campaign and is drawing up an attractive business project for investment in semi-conductor production. In 2000, the plant exported 10,384 kg of rare-earth metals to countries outside the CIS, 4,200 kg of rare-earth oxides to the CIS and 10,907 t of oxides to countries outside the CIS.