

SYRIA

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Slow but steady may be not quite enough to spur Syria's economy in view of its rapidly increasing population. Its economy regained a modest growth in 2000, and in 2001 real GDP grew by an estimated 2%, with consumer price inflation at a low 1.5%; this year real GDP growth is anticipated to be about 1.8%, but a 5% rate is probably necessary for real economic progress. Syria has been trying to reform its economy and industry especially since British educated President Bashar Assad took office after the death of his father in 2000. The process of reform has been a slow one, although in December 2001 President Assad reshuffled his cabinet and appointed several new pro-reform ministers. He has also issued several decrees to establish private banks and a stock market. The goal is to move towards a more modern market-based economy, reduce the high rate of unemployment, and diversify from an oil-based economy.

In January 2000 the EU, Syria's main trading partner, strongly encouraged the trend and offered Syria the possibility of an association agreement. Nevertheless, large state corporations still control major sectors. Last year, however, Syria announced the opening of its mining industries to local and foreign investors. The general manager of the Geology and Mineral Resources Department at the Oil Ministry, Talal Ballani, said there were indications of diamond deposits and, in addition to oil and gas, there are huge deposits of phosphate, natural zeolites, quartz sands, volcanic tuff, and natural asphalt rocks. He suggested that investors could receive incentives including the possibility of a seven-year tax holiday.

Relations with Iraq have improved markedly. In 1998, both signed a memorandum of understanding on reopening an oil pipeline closed in 1982 from northern Iraqi oilfields to

Syria's port of Baniyas on the Mediterranean. On January 31, 2001 the Syrian Prime Minister and Iraqi Vice President also signed a free trade agreement and the two countries announced that they had worked out a plan for sharing waters from the Tigris and Euphrates. At the UN, the UK has challenged Syria to explain why it was buying at least 100,000 bbl/d of Iraqi oil in violation of UN sanctions and noted that Syria exported an average of 100,000 bbl/d during 2001 and has the capacity to double the crude exports to 200,000 bbl/d. In the past, Syria has maintained that it was just testing the pipeline and denied the new charges. The aim is for Syria to place the revenues in the UN account minus its costs of running the pipeline rather than allegedly paying Baghdad directly and so providing Saddam Hussein with cash while not alleviating the impact of the embargoes on the Iraqi people. On January 23, 2001 the Bush Administration had offered to allow Iraqi oil exports through Syria as long as they were regulated by the UN food-for-oil programme.

The oil industry in Syria certainly faces some challenges. (Syria is a member of OAPEC, the Organisation of Arab Petroleum Exporting Countries, but not OPEC.) Output and production continue to decline and output has fallen steadily to an estimated 527,000 bbl/d in 2001. The country hopes to reverse the trend through intensified oil and natural gas exploration and production, as well as moving to natural gas fired electric power plants. Unattractive contract terms as well as poor exploration results have hampered oil exploration, but a less rigid approach is being pursued after pressure from Shell and TotalFinaElf.

The Oil and Mineral Resources Ministry received bids from several companies in December 2001 on five exploration areas. The main oil producer is al-Furat Petroleum

Co., a joint venture between state-owned Syrian Petroleum Co. (SPC), Pecten Syria Petroleum, and Royal Dutch/Shell and German Deminex; fields are located in the northeast and produce approximately 400,000 bbl/d of high quality light crude. Omar/Omar North, which began production in 1989 at 55,000 bbl/d, now produces about 15,000 bbl/d from natural pressure and 30,000 bbl/d from water injection. SPC's fields include Karatchuk, Suwaidiyah (85,000 bbl/d with the possibility of 150,000 bbl/d), Jibsah (oil and gas), Rumailan (heavy oil), and the small depleting fields of Alian, Tishreen, and Gbebeh; other oil fields include Maleh, Qahar, Sijan, Azraq, and Tanak; Jafra operated by TotalFinaElf has a current production of some 60,000 bbl/d.

Major shale oil deposits exist mainly in the Yarmouk Valley. In May 2000 the small Canadian company Tanganyika Oil signed an agreement to develop the Oude oil block in the northeast which currently has only one producing field (2,000 bbl/d) and this may open the possibility of more deals with foreign investment.

Syria's two oil refineries need upgrading and are at Banias and Homs with current production at 242,140 bbl/d; a third is planned at Deir ez-Zour with an initial capacity of 60,000 bbl/d and perhaps doubling. The state marketing company Sytrol markets all of its crude oil and its three major oil export terminals are operated by the Syrian Company for Oil Transport (SCOT), which is also in charge of the country's pipelines.

Syria plans to build several natural gas combined-cycle power plants and convert the major oil-fired plants to natural gas in order to save oil for hard currency exports. Proven natural gas reserves are estimated at 8.5 trillion cubic feet. In 1999 about 213 billion cubic feet of natural gas were produced and there are plans to increase this production perhaps even doubling it by 2005. In January 2001, Syria signed an agreement with Egypt and Lebanon on an underwater gas pipeline

from El Arish on the Sinai Peninsula's Mediterranean coast to Tripoli and in May 2001 Syria signed an agreement with Lebanon to build a pipeline to supply power stations in Lebanon with natural gas in Syria.

Syria's gas reserves are located largely in the northeast while its population is in the west and south and Syria is trying to expand output. Foreign energy companies have been invited to submit proposals on gas projects in the Palmyra area where Syria discovered a large new natural gas field in 1997. In September 2001, a new integrated natural gas project called Desgas was finished in the Dir ez-Zour region and uses some 175 mmcf/d of previously flared associated natural gas in the Dir ez-Zour fields; TotalFinaElf and Conoco each hold a 50% interest with Conoco as lead operator.

On the industrial mineral front, Syria has two nitrogenous fertiliser plants and one phosphate-based unit at Holms. There are plans for further expansion including a 450,000 t/y nitrogenous complex near Haseko in the northeast that would use gas from the Omar field. A 500,000 t/y triple super phosphate plant is being built by Bechtel and Makad International near Palmyra. More than 1 Mt/y of phosphate rock have traditionally been produced and have mainly been destined for Europe. Syria produces phosphate rock through the state-owned company Gecopham. Total phosphate rock production in 2000 has been estimated at 2.4 Mt from open-pit mines in the Palmyra area.

Syria is also a producer of salt, marble, basalt, and limestone as well as possessing reserves of natural zeolites, silica sand and gypsum, plus some chrome and manganese ores. Zeolite deposits were identified several years ago 170 km east of Damascus and reserves are estimated at about 605 Mt. Feasibility has been carried out on a silica sand resource of about 150 Mt 160 km north of the capital.

Rafiq Burghli & Co. established Jordan Minerals Est. (JME) in 1980 to produce

ground calcium carbonate (GCC) and production capacity has grown with several quarries supplying material to the company's plant in Amman which underwent a US\$4 million modernisation project in 1999-2000; production capacity was increased from 125,000 to 150,000 t/y of natural and stearic acid coated; new equipment allows for the production of 42,000 t/y of treated GCC. Syrian Carbonate Co. Ltd., a joint venture company with Jordan Carbonate Co., also produces GCC, while Fawaz Istwani & Co. (Syrian Chemical) established its first GCC plant in 1975 and a second in 1998.

Power generation in Syria is adequate, but distribution is more problematic. In 1999 Syria signed an agreement with Russia on co-operation in the peaceful use of nuclear power

including construction of two nuclear reactors. The previous year a paper was received by the Canadian Institute of Mining, Metallurgy and Petroleum on radiometric profiles of uranium dispersal patterns adjacent to Cretaceous phosphatic sediments in Wadi Qasser Al-Hallabat Basin in central Syria. The objective was to explore for uranium and to define its dispersion pattern. It estimated that about one third of the original uranium content of the Cretaceous sediments has been dispersed and mechanical erosion is responsible for the main part of this released uranium. However, occurrences of spotty secondary uranium mineralisation indicate that another small part of the available uranium must have been chemically leached out by the prevailing oxidising waters, forming minor surficial minerals.