

Royal Embassy of Saudi Arabia
Information Office
601 New Hampshire Avenue, N.W.
Washington, D.C. 20037
Tel. (202) 337-4134 Fax: (202) 944-5983
www.saudiembassy.net

Economy and Infrastructure

S A U D I A R A B I A

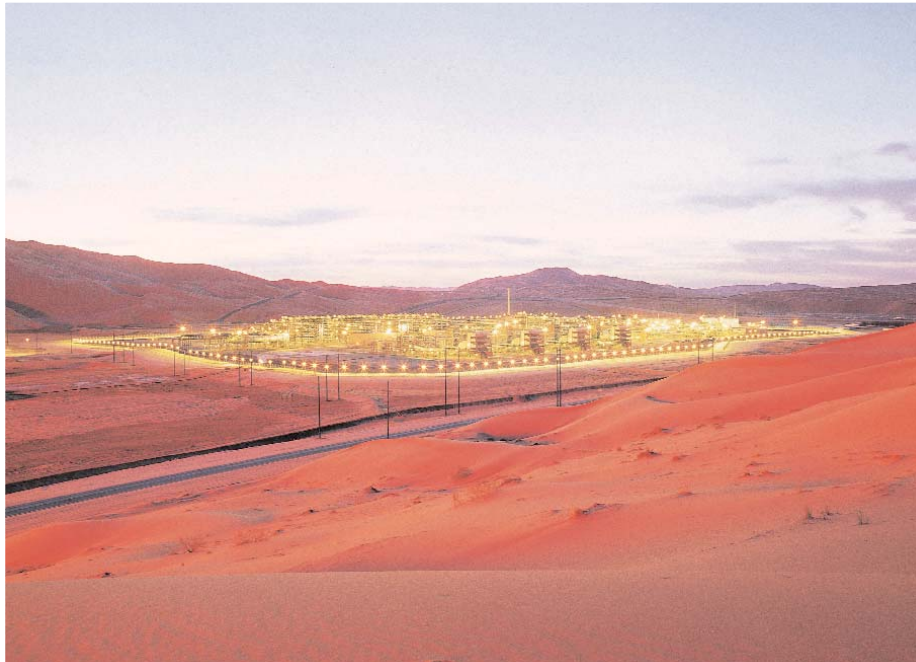
ECONOMY AND INFRASTRUCTURE

Saudi Arabia's free market economy has undergone remarkable changes in a relatively short period of time. It has evolved from a basic agricultural society into a regional and global economic power with a modern infrastructure.

Petroleum is an integral part of the Saudi economy; Saudi Arabia is the world's largest producer and exporter of oil. In recent decades the Kingdom has increasingly diversified its economy, and today produces and exports a variety of industrial goods all over the globe.

The government has an essential role in industrial and economic development. The Ministry of Economy and Planning formulates economic and social development plans that set long-term economic goals. Additional sectors of the economy are overseen by individual ministries, such as agriculture, petroleum, transportation, communications and finance.

The private sector is playing an increasingly larger role in the Saudi economy – it now accounts for 48 percent of the gross domestic product (GDP). The sector is expected to continue growing, especially as Saudi Arabia opens its doors further to foreign investment.



The Kingdom's oil fields, such as this one at Shaybah, produce high-grade crude

In December 2005, Saudi Arabia joined the World Trade Organization (WTO), a significant development that gives Saudi products greater access to global markets, creates jobs and encourages foreign investment.

BUILDING A MODERN ECONOMY

When the modern Kingdom was established in 1932, the Arabian Peninsula was an agricultural society that depended on farming and commerce – especially date exports and trade generated by pilgrims coming to Makkah and Madinah. It lacked the infrastructure needed to support the kind of economic growth envisioned by its founder, King Abdulaziz bin Abdulrahman Al-Saud.

The discovery of oil in commercial quantities in 1938 changed that. Soon after World War II, steady oil exports provided the funds to build a basic infrastructure of roads, airports, seaports, schools and hospitals.

In 1970, Saudi Arabia introduced the first of a series of ongoing five-year development plans to build a modern economy capable of producing consumer and industrial goods that previously had been imported. The country's infrastructure was expanded, allowing industry and commerce to flourish.

At the same time, the national oil company, Saudi Aramco, invested in new production and shipping facilities, pipelines, and plants. Aramco also continued exploring for new deposits to maximize earnings from the oil sector, which were needed to fund further growth.

The result has been a steady economic transformation of the country. Today, Saudi Arabia is one of the fastest developing nations in the world.

ENERGY SECTOR

The energy sector is the backbone of the Saudi economy. The Kingdom possesses a quarter of the world's proven oil reserves, and is the world's largest producer and exporter of oil.

Saudi Arabia is also developing its additional energy resources – natural gas that once flared off oil wells is collected and used, and the Kingdom has become



The King Fahd Port at Yanbu on the Red Sea

a producer of refined oil products and petrochemicals such as kerosene, diesel oil and gasoline.

Saudi Arabia has taken steps to expand the energy sector and encourage greater investment, especially by foreign companies. In May 2000, the Supreme Council for Petroleum and Minerals (SCPM) – which oversees the maximization of natural resources – announced a decision to allow foreign investment in the gas sector and downstream industries.

Oil

The story of Saudi Arabian oil goes back to 1933 when King Abdulaziz granted Standard Oil of California (Socal), later renamed Chevron, the right to prospect for oil in the new Kingdom.



Loading crude at Ras Tanura

In 1938, Socal discovered large quantities of oil in the Dammam Dome near the Arabian Gulf. Limited exports began in 1939, and picked up significantly with the end of World War II. In the late 1940s, Socal entered into a consortium with other American oil companies and was renamed the Arabian American Oil Company (Aramco). By the 1970s, Saudi Arabia had become the top producer and exporter of oil in the world.

The Saudi oil industry entered a new era in 1980 when the government assumed full ownership of Aramco, renaming it Saudi Aramco. The company began exploring in areas that had previously been untouched, and discovered vast deposits of high-grade crude oil. Saudi Arabia continues to find new fields – such as one discovered 175 miles southeast of Riyadh on April 20, 2005.

Ensuring Stability of Global Markets

Saudi Arabia has proven oil reserves of more than 260 billion barrels. Most are located in the Eastern Province, including the largest onshore field in Ghawar and the largest offshore field at Safaniya in the Arabian Gulf.

As the world's largest producer and exporter of oil, Saudi Arabia plays a unique role in the global energy industry. Its policies on the production and export of oil, natural gas and petroleum products have a major impact on the energy market, as well as the global economy as a whole.

Mindful of this responsibility, Saudi Arabia is committed to ensuring stability of supplies and prices. The Kingdom has repeatedly acted in times of crisis – such as the Gulf Crisis of 1990-1991, the 2003 Iraq war and market fluctuations of the late 1990s – and covered any drop in oil supplies by increasing its output. In this way, Saudi Arabia has prevented major shocks to the global economy from a loss of supply or sharp price increases.

Saudi Arabia's oil production varies according to the state of the market and guidelines set by the Organization of Petroleum Exporting Countries (OPEC). OPEC unifies petroleum policies among its members and ensures stability in international oil markets by eliminating fluctuations in prices.

As a founding member of OPEC and its largest producer, Saudi Arabia has a leading role in guiding the organization to promote cooperation in energy issues, often acting as OPEC's principal moderating force.

Refining Capacity

Saudi Arabia has nine refining complexes that produce gasoline, fuel and diesel oil, liquefied petroleum gas, jet fuel, kerosene and other petroleum products for the domestic market and for export. Considered among the most technologically advanced in the world, these refineries have an output of around nine million barrels per day of petroleum products, most for export. The Kingdom continues to invest in its refineries. In



The Ras Tanura oil refining facility



The Haradh-3 natural gas processing plant southwest of Dhahran

May 2005, Saudi Aramco announced plans for new refineries in Jubail and Yanbu with an anticipated capacity of 800,000 barrels per day of petroleum products.

Saudi Arabia has entered downstream operations in other countries, including South Korea, the Philippines, Greece, India, and China. Motiva, a joint venture between Shell Oil Company and Saudi Refining Inc., refines, distributes, and markets oil products in the United States. Motiva is planning to more than double the capacity of its Port Arthur, Texas refinery from 235,000 to 600,000 barrels per day, making it the largest in the United States.

Natural Gas

Saudi Arabia possesses vast reserves of natural gas – dissolved, associated and non-associated – which it uses as an environmentally friendly energy source for urban and industrial use. Major industrial facilities use gas as feedstock to produce petrochemicals, fertilizers, steel and other products that in turn feed a thriving industrial sector.

Until the 1970s, most of the natural gas produced in the Kingdom was in association with crude oil production and was flared off at the well. An ambitious project known as the Master Gas System allowed Saudi Aramco to collect the gas and pipe it around the country. Exploration of the Kingdom's natural gas resources remains ongoing. Major deposits have been discovered in the Eastern Province near Abqaiq in 2003 and southwest of the Ghawar oil field.

Saudi Arabia also actively promotes foreign investment in natural gas. In July 2003 an agreement was signed with Royal Dutch/Shell and France's Total and China's Sinopec



Saudi Arabia uses oil, natural gas and solar energy to meet its electricity needs

to develop upstream gas operations in the Empty Quarter (*Rub ' al-Khali*). In March 2005, additional contracts were signed for two vast oil and gas projects.

Electricity Network

Saudi Arabia has a massive electricity distribution network that extends to cities, towns and villages across the country. Its network consists of 8,750 miles of transmission lines, 52,000 miles of distribution lines and over 53,000 miles of service connections.

The Kingdom also uses desalination plants to generate electricity using the steam that is a byproduct of the desalination process. The Kingdom generates more than 26,300 MW of electricity, 2,800 MW of which is produced by the desalination plants. Saudi Arabia eventually plans to increase the electricity produced by these desalination plants to equal half of the total output.

The Saudi Electric Company (SEC) manages existing power generation, distribution and delivery facilities, as well as investment in new general plants. Wholly owned by shareholders, the SEC also sets the price of electricity sold to consumers and industry under rules set by a governing body based on the cost of production, distribution and services.

Saudi Arabia has also begun working with GCC countries to link their national power grids. Ultimately, plans include linking the GCC grid with the rest of the Arab world and Europe through Turkey and Syria.

Alternative Energy Sources

Saudi Arabia is also looking at alternative energy sources, including solar energy. The Kingdom receives some of the most intense sunlight in the world – 105 trillion kilowatt hours a day, which is roughly the equivalent of 10 billion barrels of crude oil in energy terms. Scientists at the King Abdulaziz City for Science and Technology (KACST) are working on groundbreaking projects to make solar power generation more economically feasible.

A DIVERSIFIED ECONOMY

While Saudi Arabia's economic base continues to be dominated by oil, the Kingdom has taken steps to diversify the economy. Today, industrial products make up more than 90 percent of the Kingdom's non-oil exports. Saudi Arabia exports petrochemicals, plastics, metal goods, construction materials and electrical appliances to some 90 countries.

As part of Saudi Arabia's diversification efforts, industrial cities have been built in major urban centers. The Jubail Industrial City on the Arabian Gulf has dozens of factories and industrial facilities, including a desalination plant, a seaport, a vocational training institute and a college. The Yanbu Industrial City on the Red Sea has a modern port, refineries, a petrochemical complex and manufacturing and support enterprises.

The government offers incentives for the establishment of private companies at the industrial cities. The Saudi Arabian Basic Industries Corporation (SABIC), created in



Saudi Arabia exports food items such as fruits, vegetables and dairy products, as well as flowers

1976, set up non-oil industrial facilities that use as feedstock natural gas and natural gas liquids manufactured by the oil industry.

One of the most ambitious economic projects to date is the massive King Abdullah Economic City near Jeddah, which broke ground in December 2005. The residential and commercial megaproject will include a dedicated port, an industrial park, a residential and hotel complex, and educational facilities. It is the largest joint venture in the Kingdom.

Other similar projects are planned, including the Prince Abdulaziz bin Musaed Economic City in Hail and Al-Madinah Economic City in Madinah.

In addition, Saudi Arabia has extensive deposits of minerals. They include gold, silver, copper, tin, tungsten, nickel, chrome, zinc, lead, phosphates, iron ore, bauxite, potassium ore and even table salt.

The Kingdom is encouraging greater private sector involvement in the mining sector, and Saudi Arabia expects to become a major exporter of minerals in the coming decades.

AGRICULTURE

Saudi Arabia's agricultural development over the last three decades has been astonishing. Large areas of desert have been turned into agricultural fields – a major accomplishment in a country that receives an average of about four inches of rain a year, one of the lowest rates in the world.

Historically, agriculture in the Arabian Peninsula was limited mostly to date farming and small-scale vegetable production in widely scattered oases, except in a small coastal strip in the southwest. Small plots produced enough food for the local communities, and any extra was sold to passing caravans.

Serious agricultural development began in the 1970s. The government launched an extensive program to promote modern farming technology; to establish rural roads, irrigation networks and storage and export facilities; and to encourage agricultural research and training institutions.



Dates have traditionally been a Saudi staple

As a result, there has been a phenomenal growth in the production of all basic foods. Saudi Arabia is now completely self-sufficient in a number of foodstuffs, including meat, milk and eggs. In fact, Saudi Arabia now exports wheat, dates, dairy products, eggs, fish, poultry, fruits, vegetables and flowers to markets around the world. Dates, once a staple of the Saudi diet, are now mainly grown for global humanitarian aid.

The Ministry of Agriculture is primarily responsible for agricultural policy. Other government agencies include the Saudi Arabian Agricultural Bank (SAAB), which disburses subsidies and grants interest-free loans; and the Grain Silos and Flourmills Organization, which purchases and stores wheat, constructs flourmills, and produces animal feed. The government also offers land distribution and reclamation programs and funds research projects.

The private sector has played a major role in the Kingdom's agricultural development. This is mostly due to government programs that offers long-term, interest-free loans, technical and support services, and incentives such as free seeds and fertilizers, low-cost water, fuel and electricity, and duty-free imports of raw materials and machinery.

WATER

Saudi Arabia is a desert country with no permanent rivers or lakes and very little rainfall. Water is scarce and extremely valuable, and with the country's rapid growth, the demand for water is increasing. The Kingdom, therefore, has turned to innovative ways to provide enough water to support its development.



A network of dams captures runoff from rain for use in agriculture

Aquifers, vast underground reservoirs of water, are a major source of water in Saudi Arabia. In the 1970s, the government undertook a major effort to locate and map aquifers and estimate their capacity. As a result, it was able to drill tens of thousands of deep tube wells in the most promising areas for both urban and agricultural use.

Another major source of water is the sea. This conversion is done through desalination, a process that produces potable water from brackish seawater. Saudi Arabia is the world's largest producer of desalinated water. The Saline Water Conversion Corporation (SWCC) operates 27 desalination stations that produce more than three million cubic meters a day of potable water. These plants provide more than 70 percent of the water used in cities, as well as a sizeable portion of the needs of industry. They are also a major source of electric power generation.

Dams are used to capture surface water after frequent flash floods. More than 200 dams collect an estimated 16 billion cubic feet of runoff annually in their reservoirs. Some of the largest of these dams are located in the Wadi Jizan, Wadi Fatima, Wadi Bisha and Najran. This water is used primarily for agriculture and is distributed through thousands of miles of irrigation canals and ditches to vast tracts of fertile land that were previously fallow.

An expanding source of water is the use of recycled water. The Kingdom aims to recycle as much as 40 percent of the water used for domestic purposes in urban areas. To this end, recycling plants have been built in Riyadh, Jeddah and other major urban industrial centers. Recycled water is used for irrigation of farm fields and urban parks.



Desalination plants such as this one in Yanbu are an important source of water



King Khalid International Airport in Riyadh

TRANSPORTATION

At the time of the establishment of the modern Kingdom of Saudi Arabia in 1932, the country lacked modern transportation facilities and ports, and had less than 30 miles of paved roads. Today, the Kingdom is served by a modern transportation network of roads, railroads, air, marine and public transport.

Saudi Arabia has a comprehensive road network that comprises some 100,000 miles of roads. Perhaps the most spectacular is the King Fahd Causeway, which links Saudi Arabia to Bahrain. At 15.5 miles, it is the second longest causeway in the world, an engineering masterpiece that spans both water and reclaimed land. Under consideration is a second causeway linking Saudi Arabia and Egypt.

The Kingdom currently has three international airports: King Khalid International in Riyadh, King Fahd International in Dammam and the King Abdulaziz International Airport in Jeddah. There are also 24 regional and local airports. Plans are underway to convert the Prince Muhammad bin Abdulaziz Airport in Madinah into an international airport.

The national airline, Saudi Arabian Airlines (SAA), started out in 1945 with the gift of a single twin-engine DC-3 Dakota from President Franklin D. Roosevelt. It now has a fleet of some 140 aircraft, and carries around 15 million passengers each year.

Saudi Arabia has 21 large, modern ports that facilitate industrial development, and a new deep-water port is under construction at the King Abdulaziz Economic City near Jeddah. Saudi ports move some two million twenty-foot equivalent units (TEUs) annually. Around 12,000 ships visit Saudi ports each year, totaling one ship every 30 minutes. There are over 220 berths at Saudi ports. They are operated by the Saudi Ports Authority, which supplies equipment and building piers. Maintenance is provided mostly by private companies.

More than half of the Kingdom's sea traffic passes through the Islamic Port of Jeddah, one of the main ports in the Middle East and an entry point for pilgrims. New port facilities at Yanbu Industrial City on the Red Sea have eased Jeddah's load and improved the efficiency of petrochemical exports. Other major ports are located in Dammam, Jizan and Jubail.

Saudi Arabia's rail network is managed by the Saudi Railway Organization (SRO). The network consists of the 449-mile Dammam-Riyadh line that includes stops in Hofuf and Abqaiq. A second, 556-mile Dammam-Riyadh line travels via Haradh, on the edge of the Empty Quarter.

There are plans to extend the railway to the Jubail Industrial City on its eastern end and, eventually, to Makkah, Jeddah and Madinah on its western side. Yet another extension would link Riyadh to the mining areas in the north. This expansion is being carried out by the private sector.



The King Fahd Causeway links Saudi Arabia with the island of Bahrain

The Saudi bus network provides affordable public transport both within and between the Kingdom's cities. Operated by the Saudi Public Transport Company (SAPTCO), the fleet of over 2,000 buses carries more than 3 million passengers each year. There are also 10 international routes that are used by nearly half a million travelers each year.

SAPTCO operates special bus service during the *hajj*, the annual pilgrimage to Saudi Arabia's holy sites.

COMMUNICATIONS

Saudi Arabia's telecommunications sector is growing at a rapid rate. Facilities and services are constantly expanded to accommodate the growing market.



Communications satellites in Saudi Arabia

The Ministry of Telecommunications and Information Technology oversees all modern communications technologies in the Kingdom. The major provider in Saudi Arabia is the partially privatized Saudi Telecommunications Company (STC), one of the largest telecom services operators in the world. A second company, Mobily, also provides mobile phone service.

The Kingdom's landline telephone system is modern and efficient, using extensive microwave radio relay, coaxial cable, and fiber-optic cable systems. In 2000, 2.9 million lines were available, and Saudi Telecom is expanding its network to 4 million lines. Seven standard earth stations link up with the Intelsat Satellite System.

Mobile phones are extremely popular in Saudi Arabia. In 2002, there were more than 5 million mobile phones in use in the Kingdom. Saudi Arabia's mobile telephones operate on the Global System for Mobile Communications (GSM), one of the leading digital cellular systems used all over the world.

Internet usage is growing rapidly in Saudi Arabia. More and more lines are being provisioned for Internet access to accommodate increasing demand, including high-speed service such as DSL. According to a 2003 Zogby poll, nearly two-thirds of Saudis have Internet access.

The Communications and Information Technology Commission (CITC) supervises all operations of the Kingdom's Internet sector. CITC also helps Saudi families own per-

sonal computers and access the Internet through the Saudi Home Computing Initiative.

Saudi Arabia also sends satellites into space. In 2006 alone, the Kingdom plans to launch six Saudi-built satellites for communication and observation. The King Fahd Satellite Communications City in Jeddah is the largest complex of its kind in the Middle East.

The King Fahd City is also the ground station for Arabsat, the leading communication satellite in the Arab world. The second Arabsat satellite was launched on June 17, 1985 with the help of Saudi Payload Specialist Prince Sultan bin Salman – the first Arab and Muslim to travel to space – during his mission on the US space shuttle Discovery.

COMMERCE

Saudi Arabia's commercial sector is growing rapidly. This is mainly due to generous government incentives such as the provision of long-term interest-free loans and support services and facilities. In addition, chambers of commerce and industry in the major cities and regions promote commercial ventures. There are currently some 10,000 firms, mostly joint stock companies, involved in commercial activities in the Kingdom. Their total invested capital is estimated to be more than \$45 billion.

The sector is overseen by the Saudi Arabian General Investment Authority (SAGIA), which offers private entrepreneurs free consulting and support services and publishes lists of investment opportunities. In November 2005, SAGIA announced plans to open offices abroad, including in China, the United States, the United Kingdom and Germany to attract investment in infrastructure projects.



The Globe Restaurant at the Faisaliyah Commercial Center with panoramic views of Riyadh

The role of the private sector in commerce is substantial – private companies account for some 48 percent of the nation’s GDP of \$248.82 billion. They manufacture, distribute and sell domestic products.

Private companies also handle most imports of consumer and industrial goods and the bulk of the exports of non-oil products. Saudi Arabia is among the top 20 export and import markets in the world, and exports of non-oil products to some 90 countries average around \$6 billion per year.

Foreign investment is also growing in the Kingdom. Investors from all over the world are joining Saudi partners to set up ventures, attracted by the Kingdom’s political, economic and social stability, modern infrastructure, inexpensive energy supplies and strategic geographic location.



The Kingdom offers modern banking facilities

The Kingdom’s foreign investment rules make it attractive for foreign investors to invest in the Kingdom by introducing a new law giving them the right to the same benefits, incentives and guarantees offered to Saudi individuals and companies. It also allows foreign investors to own property and real estate.

The future of the commercial sector is promising. Saudi Arabia’s membership in the WTO will boost commercial activity and provide Saudi products with more opportunities in global markets. Another positive development is the formation of free-trade zones that Saudi Arabia has undertaken with several neighboring countries.

BANKING AND FINANCE

Saudi Arabia has a modern banking industry with 13 commercial banks. Saudi banks provide retail and corporate banking, investment services, brokerage facilities, and derivative transactions in addition to credit cards, ATMs and point-of-sale transactions.

There are also banks in the Kingdom that provide Islamic banking services. Islamic banking is a system of banking that is consistent with the principles of Islamic law (*Shari’ah*). It prohibits usury, the collection and payment of interest, trading in financial risk and investing in companies considered un-Islamic.

Saudi Arabia also has a thriving stock market. The total value of shares traded annually is some SR 60 billion [US \$16 billion]. The Tadawul All-Share Index (TASI) of the Saudi stock market is one of the most highly capitalized stock exchanges in the Arab world. TASI was also one of the first exchanges globally to set up a full electronic clearing and settlement system with immediate transfer of ownership.

The banking and finance sector is overseen by several government agencies. The Ministry of Finance supervises economic policies. The Saudi Arabian Monetary Agency (SAMA) manages fiscal policy, issues the country's currency, the Saudi Riyal, and oversees the nation's commercial banks.

The government has also established five specialized credit institutions to provide loans to citizens for development projects in agriculture, industry and construction – the Saudi Industrial Development Fund (SIDF), the Saudi Arabian Agricultural Bank (SAAB), the Real Estate Development Fund, the Public Investment Fund and the Saudi Credit Bank.



SAMBA (the former Saudi-American Bank) in Jeddah