

Column | Contribution of Hitachi to Development of Egypt and North Africa

Egypt and other countries of North Africa constitute a major part of the MENA region. Although these countries differ widely in the structure of their economies and the extent of their natural resources, they also share many common features, notably the Arabic language, majority Muslim populations, and membership of the Arab League. Hitachi products have long had a presence in the markets of the region, particularly in Egypt where Hitachi has actively contributed to infrastructure development. The major countries of the North Africa region are Egypt, Libya, Tunisia, Algeria, and Morocco.

PROFILE OF NORTH AFRICAN COUNTRIES

IN recent years, changes in the MENA (Middle East and North Africa) region triggered by increasing oil prices and the economic boom in the area have led to the region playing a more prominent role in international business, including at Hitachi.

Despite this, the visibility of North African countries remains low compared to the Gulf states like the Kingdom of Saudi Arabia and the United Arab Emirates (UAE). Therefore I would like to start with an outline of the North African region.

The five main North African countries are Arab Republic of Egypt, the Kingdom of Morocco, the People's Democratic Republic of Algeria, the Republic of Tunisia, and The Great Socialist People's Libyan Arab Jamahiriya.

The success of Egypt's ambitious program of economic reform and liberalization is demonstrated by its GDP (gross domestic product) growth of around 7% for the past 3 years. Growth has been driven by high levels of foreign direct investment

and increased exports. The government's five-year plan for the period August 2007 to December 2011 includes an ambitious target for annual real GDP growth of 8%. If achieved, this would meet the need to create jobs for Egypt's fast-growing and youthful population, and allow for a gradual reduction in the country's debt burden.

The other four countries, Morocco, Algeria, Tunisia and Libya, are often collectively referred to as the Maghreb which means "place of sunset." All of the countries are oil producers, with Libya and Algeria in particular having vast oil reserves.

Libya is a major oil producer, with the oil sector contributing practically all export earnings and over one-quarter of the country's GDP. Libya has begun a process of economic reform. Efforts are being made to modernize the economy as part of a broader campaign to reintegrate with the international community. Initial steps include applying for World Trade Organization (WTO) membership.

Algeria's economy is based overwhelmingly on oil and gas. The hydrocarbons sector accounts for



Fig. 1—Map of North Africa.

Country	Area (sq km)	Population (million)	Capital city	GDP (billion \$)	GDP per capita (\$)	Real GDP growth rate
Egypt	1,001,450	83	Cairo	444.80	5,800	7.2
Libya	1,759,540	6	Tripoli	87.72	14,200	5.9
Algeria	2,381,741	34	Algiers	233.50	6,900	3.5
Morocco	446,550	34.8	Rabat	137.90	4,500	6.2
Tunisia	163,610	10.4	Tunis	81.98	7,900	4.4

GDP: gross domestic product Source: Central Intelligence Agency of the USA web site

TABLE 1. Data on North African Countries

about 60% of budget revenues, 30% of GDP, and more than 95% of export earnings. Hydrocarbons earnings have enabled Algeria to accumulate more than \$90 billion in foreign currency reserves. The medium term outlook is good, with continued high oil earnings expected to underpin real growth in GDP of 3-4% a year for the next five years.

While Libya and Algeria are rich in oil, Tunisia and Morocco have less oil production. Although Tunisia has been self-sufficient in terms of hydrocarbons in the past, the country's dwindling oil resources have led to a growing energy supply deficit since the turn of the new millennium. Nevertheless, real growth in GDP in 2006 was almost 6% and the medium-term economic outlook is good. According to the World Economic Forum's Global Competitiveness Report for 2006-07, Tunisia has the most competitive economy in the Middle East and Africa, but is held back by public debt and limited foreign access to private property.

Oil production in Morocco is very low but it is rich in other natural minerals including mineral phosphate, lead, cobalt, and natural gas. However, Morocco's economy is mixed. Approximately 45% of the population is employed in agricultural production, which represents 15% of GDP. Long-term challenges include preparing the economy for freer trade with the USA and European Union, improving education and job prospects for Morocco's youth, and raising living standards.

## HITACHI IN EGYPT

Although Hitachi has at various times moved its base for the North African market between Cairo, Beirut and Athens in response to political or security changes in the area, it has had a presence in the market since the late 1950s. In the early years, it dealt mainly in pumps and trains.

However, Hitachi's business in Egypt started to progress again in 1983 following the start made on liberalizing Egypt's economy under the late

President Sadat, and its Liaison Office was moved to a location in the center of Cairo City within the Nile Hilton Commercial Centre.

Although there were two Japanese and four Egyptian staff at first, since 1989 the office has been run by Egyptian staff only. The office initially only dealt in pumps but then subsequently expanded into power projects for which there was considerable demand. The fact that Egypt was a major recipient of Japanese aid (yen credit and grants) also helped Hitachi expand its business in the country.



Fig. 2—Staff at Egypt Office.



Fig. 3—Egypt Office.

## MAJOR ACHIEVEMENTS

In 1983 and 1985, Hitachi was awarded its first major power generation and substation projects in Egypt, these being for the Damanhour Gas Turbine Power Plant and Assiut Substation, both projects financed by yen credit.

Hitachi's business in Egypt grew steadily although it remained primarily project-based. Power projects and pumps remained at the core of Hitachi's business as more power products were introduced into the market.

The first utility boilers supplied by Hitachi to Egypt were for the Cairo West Power Plant commissioned in 1995. This project was a milestone for local production as it involved Babcock-Hitachi K.K. fabricating some of the major components of the boilers locally. In 2007, Hitachi was awarded the contract for two similar boilers for units 7 and 8 at Cairo West allowing a further increase in the share of local production. Hitachi's first desalination units were supplied for the Sidi Kreir and Ayoun Moussa Plants commissioned in 2001.

In 1998, Hitachi achieved a major milestone in its activities in Egypt by being awarded the contract for the Mubarak Pumping Station, the world's largest pumping station. The contract was awarded to a consortium consisting of Hitachi along

with British and Egyptian contractors. Hitachi's responsibilities included the design and supply of pumps and motors.

Hitachi supplied its first steam turbine generator to Cairo North Combined Cycle Power Plant (250 MW) which was commissioned in 2004. This was followed by a similar steam turbine generator for the Koreimat Combined Cycle Plant to be commissioned in 2009.

Another recent milestone came when Hitachi was awarded the contract for the Ain Sokhna Power Station (2 × 650-MW steam turbine generators) in 2009. This plant will be the first super-critical power plant in the Middle East. This means that it reduces CO<sub>2</sub> emissions by boosting energy efficiency through the use of high-temperature and high-pressure steam.

Although Hitachi remains strong in Egypt, it has been less active in the Maghreb region. However, as mentioned earlier, the region's recent economic boom driven by higher oil prices has seen Hitachi starting to pay closer attention to the area.

Hitachi's business in Libya has been limited for many years by the international embargo enforced on Libya because of its political status. The bulk of Hitachi's business in Morocco, Algeria, and Tunisia, meanwhile, has been the supply of equipment through European contractors who dominate those markets.

The major change in Libya's political position toward rapprochement with the West, the growing stability in Algeria following the end of the civil war, and the economic booms in Tunisia and Morocco are all factors that Hitachi takes into account when considering whether to pursue business in the region.

The first major supply of Hitachi steam turbines to Libya was for the 4 × 350-MW Tripoli West Power Plant and 4 × 350-MW Gulf Power Plant subcontracted by Hyundai Engineering & Construction Co., Ltd. in 2007.

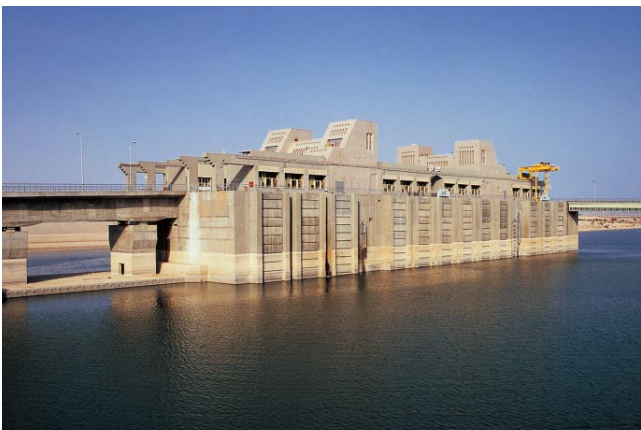


Fig. 4—Mubarak Pumping Station.

Hitachi supplied 21 pumps, each with a capacity of 16.7 m<sup>3</sup>/s, and 21 12-MW motors.

## CURRENT BUSINESS

Unlike other major markets in Europe or the USA, the stable power market in Egypt makes it possible to plan ahead regarding the projects in which Hitachi should aim to participate.

Moreover, because power projects are tendered in packages, we can select those packages in which Hitachi is likely to be competitive. Presently, we are focusing on the Super Critical Thermal Power Generation Plan which started with the Ain Sokhna Power Plant 120 km east-south-east of Cairo.

Our first target package was the steam turbine generators for which we concluded a contract in September, 2008. Hitachi also actively participated in the boilers package, forming a consortium with a major local contractor. This package is currently under evaluation.

The pumps package (boiler feed-water pumps, circulating water pumps, etc.) was recently tendered and Hitachi Plant Technologies, Ltd. is in the process of preparing a bid to be submitted by October 2009.

Japan AE Power Systems Corporation is also actively participating in the Ain Sokhna project by bidding to be the main contractor for the transformers package and to supply 500-kV GIS (gas insulated switchgear) as a subcontractor to other main contractors.

Both the transformers package and the 500-kV GIS package were tendered in June 2009 with the closing date being September 2009.

## STRATEGY TO EXPAND BUSINESS

Our plan is to expand Hitachi's business in Egypt and North Africa in the following three key fields.

- (1) Power projects
- (2) Water projects
- (3) Oil and gas projects

We also plan to develop new business for other Hitachi products in the region.

The strategy we propose for achieving our plan is based on the following factors.

- (1) Maintain a strong presence in those markets in which Hitachi already has experience.
- (2) Collaborate with reliable and strong local partners to improve competitiveness.
- (3) Use Egypt as a base to expand business elsewhere in North Africa by making use of the experience of our local partners in these countries.
- (4) Extend Hitachi corporate support to Hitachi subsidiaries active in the market to emphasize the strong presence of the Hitachi brand.

Other Hitachi products such as home appliances, air conditioners, industrial components, construction machinery, medical equipment, and communication equipment are available in the market through dealers and local partners. Although these markets are promising and have great potential, sales volumes remain modest.

I have been helping to sustain Hitachi's power business for over 20 years. My hope is to encourage these other businesses as well as the power business, and by doing so achieve an expansion in all of Hitachi's businesses in the North African region, including Egypt.

### ABOUT THE AUTHOR



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Joined Hitachi, Ltd. Egypt Office in 1983 and is now Deputy General Manager of Hitachi, Ltd. Middle East Office and General Manager of Hitachi, Ltd. Egypt Office.