# **PAKISTAN: EMERGING** MARKET IN **CEMENT AND** MINERALS **INDUSTRIES**

Hansruedi Hagen, ABB Switzerland Ltd, discusses the situation and how to face the challenges in this emerging market.

#### **■ INTRODUCTION**

This article will present ABB Business Unit Mineral's approach and business development into Pakistan's emerging cement and mineral industries, with particluar focus on how to combine international and local experience to create a successful business approach.

Pakistan is the sixth most populated country in the world, the 36th largest in terms of area and the 26th in terms of GDP, once adjusted for Purchasing Power Parity (PPP). It is located in an area with great geo-strategic significance, between the CIS countries in the north, India in the east, Afghanistan and Iran in the west, and the Arabian Sea in the south.

The country is divided into four provinces. The most populated and the most powerful economically are the provinces of Punjab and Sindh. Baluchistan has only recently begun the process of development and has one of the world's richest mineral deposits. This area is rife with opportunities for industrialisation. Though investments are planned and some mining developments are on their way, the full extent of the resources in the province has yet to be exploited.

The North West Frontier Province (NWFP) is currently at the heart of the joint US - Pakistan War on Terror. This area is currently unsuitable for investment and operations, but the civilian leadership of the country is firmly behind combating the threat of terrorism within the country.

## ■ THE HISTORY AND SITUATION

Since the country regained its



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Figure 1. Contract signing with the author and Brigadier (retired) Asmat Ullah Khan Niazi, MD AC-Wah.

Table 1. Copper	
Name	Size (million t)
Shinkai, Boya, Waziristan	120
Saindak, Changai	212
Sasht-e-Kain, Chagai	400
Ziarat Pir Sultan, Chagai	200
Kabul Koh, Chagai	50
Missi, Chagai	100
Reko Diq, Chagai	800
Total	1882

Source: Board of Investment

Table 2. Iron Ore	
Name	Size (million t)
Goldanian	60.0
Langrial	30.0
Kalabagh	350
Pezu	66
Nizampur	100
Dilband, Kalat	200
Shekran, Khuzdar	10
Chilghazi	23
Pachin Koh	45
Others	12
Total	903.4
Source: Board of Investment	

Table 3. Gold		
Name	Size (million oz)	
Saindak	2.24	
Reko Diq	9.00	
Total	11.24	
Source: Board of Investment		

independence in 1947 from the British, Pakistan has faced several wars and economic setbacks. However, the economic development of the country, with its large agriculture and rapidly-expanding industrial base, has boomed over the past 10 years.

Pakistan is a strategic partner to the USA in the War on Terror. The nuclear-armed nation also has a military rivalry with India, with whom they have fought two wars since independence. Despite this history, recent development in the disputed territory of Kashmir, increased trade, and an improved political environment indicate a thaw in the relationship.

The recent political/financial unrest has put a temporary hold on industrial development and the economic growth has slowed to between 3 - 5% pa. Of importance will be how the new government handles the internal, as well as the external political situation, and whether support from the international community, especially that of the US, continues. Indications are that the international community welcomes the democratic government in Pakistan and will lend its support to help the future development of the nation.

#### ■ ECONOMY DATA

- Population: 172.8 million.
- ⇒ GPD in MUSD: US\$144 billion.
- Installed electrical capacity: 20.4 GW.
- GDP per capita: US\$908.
- ⇒ GDP per capita (PPP): US\$2594.
- Main industries:
  - Agriculture: wheat, fruit, cotton and sugar cane.
  - Textiles: Cotton yarn and cotton cloth.
  - Food, beverages and tobacco: vegetable oil and sugar.
  - Petroleum products: naptha.
  - Pharmaceuticals: tablets, syrup, injections.
  - Chemicals: caustic soda and soda ash.
  - Non-metallic minerals: cement.
  - Metallic minerals: copper, gold and silver.
- Financing: commercial banks.
- Attraction: large domestic market, growing economy and unexploited resources.
- → Market increase: 6 7% pa since 2000.
- ⇒ Inflation: currently 25%. Action is being taken by Central Bank, Federal government and IMF to fight
- ⇒ Economic growth: 6 7% pa.

## **■ CEMENT/MINERALS MARKET DATA**

- ⇒ The consumption of cement increased from 70 kg. in 2003 to 120 kg/capita in 2008, a 70% increase in 5 years.
- Pakistan's cement consumption per capita is comparable to that of India's, which is at 132 kg.
- Pakistan has 28 different cement producers, 22 of which are registered on the Karachi Stock Exchange.

## ■ PRODUCTION OF CEMENT

- North region, Punjab and NWPT: approximately. 30 million tpa.
- South region, Sindh and Baluchistan: approximately 10 million tpa.

#### MINERALS PRODUCTION

Pakistan has a variety of mineral, chemical, oil exploration and gem manufacturers, many of whom are on the Karachi stock exchange.

The following major projects are under execution and/or development (other minerals projects are located in Tables 1 - 3):

- Reko Diq, copper/gold.
- Western Porphyries.
- ⇒ H8 Complex.
- Sandiak copper/silver.

#### ■ MARKET OUTLOOK

In Pakistan, major projects are at the planning stage. Large dams are needed to provide water for the fast growing population and to secure the necessary demand for food. The shortage of electrical power is a big problem. Large motorways are under execution and the political situation with India is getting better. Export of cement has already started and will increase as trade with India liberalises. Based on this, it is expected that the production capacity of cement must be increased by approximately 50 000 tpd within the next 5 years.

The Tethyan Mineral belt, which crosses from Iran through Baluchistan into India, contains the world's largest deposits in copper and gold minerals. The industrial exploitation of these resources has just started and will require a large industrialisation infrastructure within the next few decades.

## **■ SUCCESS IN PAKISTAN**

After the first complete electrical installation for the AC Wah Cement plant in 1995, ABB was barely present



Figure 2. Fauji Cement, Pakistan, existing 3000 tpd kiln line.



Figure 3. Ceremony for the successful completion of the AC-Wah project.

in large plant projects. The Pakistani market was only served by the company's local organisation and focused on small to medium size component sales and the spare parts business.

In 2005, ABB signed a contract for the revamping of the phased-out control system at AC Wah, winning the contract ahead of other European competitors. In this contract, the company also supplied their Expert systems for kiln/cooler control and raw meal preparation. The successful execution of the project was realised

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by combining the experience from the "Center of Excellence" at the Minerals Business Unit in Switzerland with the local engineering capacities available at ABB Pakistan. Shortly after this success, additional contracts for the revamping of the two kiln lines at Essa Cement, now known as Power Cement, were signed. Also, the Expert system for raw material proportioning was also delivered and the project has been successfully executed.

In 2007, the company signed the contract for the supply of the overall electrification, control and optimisation system for the largest cement production line (with a 7200 tpd kiln) with Fauji Cement. The plant will go into operation in late 2009/beginning of 2010.

In 2008, the company signed another contract, this time for the revamping of the control system at the existing 3000 tpd kiln of Fauji Cement. The project should be finished before the end of this vear and will be used to train and familiarise customers' personnel with the new technology delivered for the large kiln line mentioned above.

# **■ STRATEGIC TEAM APPROACH**

With this momentum in mind, ABB is looking towards penetrating a previously closed market controlled by either Chinese firms or one of the company's European competitors for turnkey/total plant projects.

The company approached Polysius, Germany, and a strategic market approach has been agreed. Since 2006, this alliance has proven its success.

# **■ COMMITMENT TO THE PARTNERS**

Success in the emerging markets is based on essential preconditions. Companies that want to enter must

commit to medium to long-term investments in marketing, customer support and after-sales service. It is essential to be able to solve problems, which requires the full support of a given company's top management.

Rules and regulations of all partners involved must be respected and there should be an awareness that obligations must be fulfilled, before any contract is signed.

The team is committed to enhancing its presence in Pakistan, as the economy continues to grow and new resources/opportunities emerge.

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#### CONCLUSION

- Expanding into emerging markets requires an integrated approach where all partners, local and foreign, are taken on board.
- The Pakistani market presents many political, social and security challenges, but the opportunities are even greater.
- Local partners and customers have to be assured of the long-term commitment and presence of ABB in Pakistan if the success/attainment of large scale projects is to be expected.
- These winning aspects are always followed by the company's Business Unit Minerals in its engagement for large projects delivered worldwide. The reference of over 90 complete cement plant installations are proof of the company's success.