

ASSIGNMENT No. 1

Q. 1 Discuss the contribution of surgical instruments industry. Also elaborate the exports of Pakistan in this regard.

The surgical instruments industry is mainly clustered in and around the skirts of Sialkot. Over 99% of the countries production is centered at Sialkot. The sector comprises over 2300 companies, of which around 30 can be considered large and the remainder can be split as 150 units of medium sized and remaining as small. The industry produces on average over 150 million pieces a year with an estimated value of around Rs 22 billion. Out of the total production, approximately over 95% is exported¹. The industry belongs to the light engineering industry category, and is one that has specialized in skill and stable export market share.

Besides small and medium units, a few units are large and have a 90% integrated system. Most of the larger and medium sized firms are exporting, however, the smaller/vendor units usually supply to commercial exporters/traders. The main raw material used in the production is 'steel'. Around 60% of this steel is manufactured locally and the remaining 40% is imported from Germany mostly.

For the purpose of trade; four broad categories can be defined where Pakistan is supplying in the export markets. The categories include; (i) HS Code 9018 – Instruments for medical, surgical and dental; (ii) HS Code 9021 – Orthopaedic appliances; (iii) HS Code 9022 – Equipment using X-rays, alpha, beta, gamma rays. The exports of Pakistan predominantly fall in the category 9018.

Contribution of Surgical Instruments Industry to National Economy

Indicator	Value
To GDP(%)	0.42%
To Direct Employment (Numbers)	100-150,000
To Indirect Employment (Numbers)	400-450,000
To Exports (%)	1.21%

Source: Pakistan Cutlery & Stainless Utensils Manufacturers & Exporters Association, Pakistan Economic Survey 2008-09 and UN Commodity Trade Data Base

The sector employs around 100,000-150,000 workers. However, employment is volatile as there is high degree of temporary and contractual employment. Over the last four years the exports from the sector has grown by just under 48% to get to US\$245 million in 2009.

Pakistani exports make up only a small fraction of world trade in surgical and medical device industry, which amounts to over \$113 billion (just for above 4 HS Codes). This is one sector where Pakistan has developed special capabilities to penetrate high income markets such as Germany, USA, France, Belgium etc. The average export price of goods made in Sialkot is around \$1.5-2.5 (Note: some products sell for much higher prices – the

price quoted is the average trade price for disposable products), which is much higher than what Chinese products fetch (US\$0.35 – in disposable products). However, the price is lower than some of the more sophisticated producers such as Germany and France.

The sector, whereas, has achieved reasonable export performance growth in the recent years has suffered from lack of product diversification, inadequate shift out of low value disposable instruments to high value sophisticated products and uncertain business environment. The major impediments of the sector are low levels of productivity, inadequate technology upgrade and shortage of skilled staff. The production process value chain analysis suggests several productivity detractors. Moreover, most of the companies operate without any brands with only a couple moving to branding of their products. Furthermore, the industry in the years to come will face higher compliance requirements, especially as the industry tries to diversify into more value added products and enter into more sophisticated markets. Compliance, testing and certifications are going to be critical for the the surgical industry to move up the value curve. Some firms have developed basic design capabilities and often experiment by bringing in newer designs into the market.

Internationally, social movement of fair trade is initiated to help producers in developing countries get a fair value for products such as coffee, sugar, fruit juices etc. Why can't a fair trade demand be raised for surgical instruments?

In Sialkot over 10,000 different medical instruments, covering all basic and surgical segments, are being manufactured. Over 99pc of production is centred at Sialkot.

The sector comprises of around 3,000 companies with the labour force ranging from (15-450) per unit, of which around 30 can be considered large units, and 150 as medium sized enterprises.

The industry produces on average over 170m pieces a year. Of the total production, over 95pc is exported, which includes 60pc of disposable and 40pc of reusable surgical instruments. A wide range of industries including steel, chemicals, and machine parts also have strong linkages with the surgical segment.

Top 10 buyers are the US, Germany, the UK, France, Italy, UAE, Japan, Brazil, Mexico, and Russia. America is the largest market for disposable instruments, while a majority of reusable instruments are exported to the EU.

Former Chairman Surgical Instruments Manufacturing Association Mr Jehangir Bajwa told Dawn that Pakistan is working as a vendor for other exporting countries. He said these countries sourced products to Sialkot and then stamped their logo on them for export to the world market.

“We can't even directly export to Islamic countries because of the excessive registration procedure”, he said, “as Iso the same products are landing in their markets from Germany and US under international brand names”.

The ministry of commerce is a silent spectator to this whole set of affairs of unfair trade practices. “We have no choice, but to provide products to these mediators at much lower prices”, Mr Bajwa said.

Ironically, the ministry of commerce has failed to help the sector in developing brands. In the previous trade policy, the government allocated funds for brand acquisition rather than development.

Mr Bajwa claims Sialkot caters to 90pc of the global demand. The government has also failed to secure direct market access for these products under its so-called preferential trade agreements. Some industrialists say Germany has closed down its own industries and is now outsourcing manufacturing to Sialkot.

New mediators are also emerging. Pakistan's direct exports of surgical instruments to China and India are also on the rise. According to a study of the Sustainable Development Policy Institute, Pakistan's exports of surgical products rose to \$9.6m in 2014 from \$7.6m a year earlier. The study indicates a huge potential exists for increasing direct exports of surgical instruments.

The goods outsourced for manufacturing in Sialkot by German and UAE based companies find their way into Indian markets. The US is the larger exporter of surgical instruments to India. Germany, China and Japan come after. There is a wide margin in import value of these products from Pakistan for re-export to India.

The surgical sector, according to industrialists, is facing several problems. These range from marketing to adoption of new technology. Marketing is a basic problem owing to a failure to develop local brands. Energy supply is another major handicap.

Neither industrialists nor the government allocates funds for R&D to innovate new products in order to stay updated with changing patterns in medical sciences. There is no training institute to train human resource. As 95pc of the surgical industry operates in the SME sector, there is a need for a common facility centre to reduce the cost of production.

Sialkot's position as a leading exporter of surgical instruments may also come under threat from upcoming competition from China and Mexico. These countries not only have cheap labour, but also use superior technologically for innovation and better materials for manufacturing.

Q. 2 Analyze the role off cottage industries in the development of Pakistan? What are the benefits of this sector in the country?

Small scale and cottage industries play an important part in meeting basic necessities of life especially in both rural and urban areas. Goods manufactured at cottage and small scale level are also in high demand in the international market which can help earn much need foreign exchange.

1. Largest source of industrial labour force

In Pakistan, cottage and small scale industries are the largest source of industrial employment. Their contribution in the total industrial work force is 80%. These industries also help create opportunities of self employment for many people thus reducing unemployment rate in the country.

2. Productive involvement of women

Women in rural areas are not encouraged to work outside home. They mostly remain idle and unproductive at homes. They can be involved in cottage and small scale industries established at homes Women in the manufacture of handicrafts etc. can earn huge economic benefits to whole family.

3. Utilization of local resources

The natural resources in rural areas or at local level go wasted or remain underutilized in the absence of industries. These resources can be put to maximum use with establishment of cottage and small scale industries. Use of local raw material provides economic benefits to both the owner of the resources and the industrialist.

4. **Source of foreign exchange earnings**

Handicrafts, handmade carpets, rugs, brass ware, sports goods etc. manufactured in Pakistan are in high demand in international market. According to some estimates Pakistan receives 30% of its total Foreign Exchange Earning of manufacturing sector only through the export of cottage and small scale industries.

5. **Reduction in regional disparity**

In Pakistan regions are unevenly developed. Some areas are very much developed whereas many areas are underdeveloped. This uneven development is the prime reason for economic disparity among different regions within the country. It is not possible to establish medium or large scale industries in all parts of areas but it is pretty possible for the government to help people build small scale and cottage industry thereby creating job opportunities. Thus these industries can help reduce regional economic disparity in Pakistan.

6. **Reduction in Rural Urban Migration**

The employment opportunity and economic activities created as a result of these industries in rural areas will also help reduce rural-urban migration. People move to cities for jobs. If they will have jobs near their homes why would they come to cities? Consequently, acute problems of housing, sanitation, pollution, crimes etc. of urbanization will also be reduced.

7. **Fulfillment of needs at local level**

Cottage and Small Scale industries help meet different needs of people in the locality and country. Locally produced are also cost effective compared to the same items bought from another region or imported from another country. Thus, cottage and small scale industry help decrease import burden and save much needed foreign exchange.

8. **Cost effectiveness**

Majority of rural areas people are poor and poverty stricken. They do not have large amount of money to invest in setting of large scale industries requiring huge capital investment. In contrast, setting of cottage and small scale industries best suits to our traditional economic set up as they do not require high investment of capital and use of sophisticated machinery or technology.

1. Cottage and small-scale industries are labor-intensive and provide employment to 80% of the industrial labor force. This reduces the unemployment and offers opportunities for self-employment.
2. Traditionally, women are not encouraged to work outside their homes. Cottage or small-scale industries like carpet-weaving, candle-making and handicrafts can be established in houses and women can be gainfully employed. This increases the active labor force.
3. These industries also meet the local demands for industrial goods, and save foreign exchange spent in imports.

4. There is a demand for rugs, carpets, brassware, handicrafts and embroidered work in the International market. These goods provide 30% of the export receipts of the manufacturing sector.
5. When people are employed gainfully in villages, the migration of people from rural to urban areas will reduce. The acute problems of housing, sanitation, education, transport and health will be reduced in urban areas.
6. Many districts are under-developed. With the expansion of such industries, the regional disparity in income can be reduced.
7. These industries make effective use of local raw materials which also promotes primary industries like agriculture and mining.
8. Small-scale industry does not require much capital and high technology. I.T is suited to the traditional economic set-up.
9. Cottage and small-scale industries do not use much imported material or equipment.
10. The waste of large-scale industries, particularly the cotton, sugar and steel industries, can be used to make by-products.

There is a web of cottage and books industries. In almost every village, there are a number of such industries depending upon the size of the village and the demand for the products. The establishment of such industry is closely related to the availability of raw material traditional skills, climatic conditions and, in several cases, the local specialization in the organized factory sector.

There is a large variety of handicrafts available in Pakistan. They are not only aesthetically pleasing items, but they also serve the needs of local people.

Some of these industries produce important export items. Recently exports of non-cotton products have faced increasing trade barriers as public opinion in industrialized countries has expressed growing concern about child labor, environmental and health standards. These concerns are being addressed now.

Carpets

In the small scale industries, the most important is the Carpet weaving and its center are located almost all over the Pakistan. It is also significant in economic terms and they make valuable contribution in exports. Cotton is the raw material required for this industry. They also employ women for the production of fine hand woven carpets and for the production of wool silk or a mixture of the two, as the carpets are of great significance which generates equal economic opportunities. It is valuable for gross domestic product of country.

Textiles

Textiles are found throughout the country with a variety of design and techniques. The most famous among them are Khadar, Susi, Khes, Chunri, Boski, Karandi, Shaal, and Ajrak. The designs are invariably brightly colored with traditional emphasis on blue and red.

Embroidery

Embroidery has developed to a fine art with distinctive regional designs and patterns.

Jewelry

Gold and silversmiths are one of the largest communities of craftsmen. Much of the jewelry made and sold in the cities is intricately fashioned and delicate.

Ceramics

Clay and terracotta pottery and utensils continue to be of great practical importance. Many of the designs of urns, pitchers, bowls, jugs, plates, and pots seen today are almost identical to those uncovered at archaeological sites around the country. Distinctive glazed blue tiles are used to decorate many of the great mosques in Pakistan.

Cutlery

Wazirabad is the city of cutlery industry in Pakistan. This industry is growing day by day and has share of 65 million US dollars in Export for 2010. High Quality Damascus Steel ^{[1][2][3]} is manufactured in this city and 95% of world needs are produced here.

Woodwork

The Swat Valley is perhaps the most famous for its intricately carved architectural woodwork and furniture, although wood-carving is common throughout the northern mountains.

Sports goods

Sports goods earn about 3.7% of our total exports. The main raw material for the sports goods industry are leather and mulberry wood that are available in Punjab, but also imported PVC. Footballs, hockey balls, hockey sticks, cricket bats, and rackets are mostly manufactured by hand. The skilled workers are available in Sialkot and Lahore. In the industry large and medium size factories contract work out to small-scale and cottage concerns. The local sports goods manufacturing industry is one of the major source of foreign exchange earnings of Pakistan. It is centralised in and around the city of Sialkot, where it has flourished as a cottage industry with most of its production by generations of skilled craftsmen. At the time of independence, this industry was in an infant stage with a nominal export of Rs. 0.82 million. The Government took immediate steps to develop this industry by providing loans and subsidies to the manufacturers and arrangements were made to market the manufactured goods. Since then, the industry has flourished locally and enjoys good reputation in the international markets as well. mostly these goods are provided to fatima syed productions.

Q. 3 Critically analyze the establishment of fuel and coal-based energy projects given the facts that

Pakistan has innumerable opportunities of hydel power energy. Make a cost benefits analysis.

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Representatives of more than 170 countries reached consensus at the Top World Conference on Sustainable Development, in Johannesburg (2002), and at the 3rd World Forum on Water, in Kyoto (2003): hydroelectric generation is renewable and has certain merits Here are ten reasons leading them to this conclusion.

1. Hydroelectricity is a renewable energy source.

Hydroelectricity uses the **energy of running water**, without reducing its quantity, to produce electricity. Therefore, all hydroelectric developments, of small or large size, whether run of the river or of accumulated storage, fit the concept of renewable energy.

2. Hydroelectricity makes it feasible to utilize other renewable sources.

Hydroelectric power plants with accumulation **reservoirs** offer incomparable operational flexibility, since they can immediately respond to fluctuations in the demand for electricity. The flexibility and storage capacity of hydroelectric power plants make them more efficient and economical in supporting the use of intermittent sources of renewable energy, such as solar energy or Aeolian energy.

3. Hydroelectricity promotes guaranteed energy and price stability.

River water is a domestic resource which, contrary to fuel or natural gas, is not subject to market fluctuations. In addition to this, it is the only large renewable source of electricity and its cost-benefit ratio, efficiency, flexibility and reliability assist in optimizing the use of **thermal power plants**.

4. Hydroelectricity contributes to the storage of drinking water.

Hydroelectric power plant reservoirs collect rainwater, which can then be used for consumption or for irrigation. In storing water, they protect the water tables against depletion and reduce our vulnerability to floods and droughts.

5. Hydroelectricity increases the stability and reliability of electricity systems.

The operation of electricity systems depends on rapid and flexible generation sources to meet peak demands, maintain the system voltage levels, and quickly re-establish supply after a blackout. Energy generated by hydroelectric installations can be injected into the electricity system faster than that of any other energy source. The capacity of hydroelectric systems to reach maximum production from zero in a rapid and foreseeable manner makes them exceptionally appropriate for addressing alterations in the consumption and providing ancillary services to the electricity system, thus maintaining the balance between the electricity supply and demand.

6. Hydroelectricity helps fight climate changes.

The hydroelectric life cycle produces very small amounts of greenhouse gases (GHG). In emitting less GHG than power plants driven by gas, coal or oil, hydroelectricity can help retard global warming. Although only 33% of the available hydroelectric potential has been developed, today hydroelectricity prevents the emission of GHG corresponding to the burning of 4.4 million barrels of petroleum per day worldwide.

7. Hydroelectricity improves the air we breathe.

Hydroelectric power plants don't release pollutants into the air. They very frequently substitute the generation from fossil fuels, thus reducing acid rain and smog. In addition to this, hydroelectric developments don't generate toxic by-products.

8. Hydroelectricity offers a significant contribution to development.

Hydroelectric installations bring electricity, highways, industry and commerce to communities, thus developing the economy, expanding access to health and education, and improving the quality of life. Hydroelectricity is a technology that has been known and proven for more than a century. Its impacts are well understood and manageable through measures for mitigating and compensating the damages. It offers a vast potential and is available where development is most necessary.

9. Hydroelectricity means clean and cheap energy for today and for tomorrow.

With an average lifetime of 50 to 100 years, hydroelectric developments are long-term investments that can benefit various generations. They can be easily upgraded to incorporate more recent technologies and have very low operating and maintenance costs.

10. Hydroelectricity is a fundamental instrument for sustainable development.

Hydroelectric enterprises that are developed and operated in a manner that is economically viable, environmentally sensible and socially responsible represent the best concept of sustainable development. That means, "development that today addresses people's needs without compromising the capacity of future generations for addressing their own needs" (World Commission on the Environment and Development, 1987).

Pakistan's untapped hydropower potential largely lies in the mountainous north along the Indus River in the provinces of Gilgit-Baltistan and Khyber Pakhtunkhwa, as well as the Jhelum River in the provinces of Punjab and Azad Jammu and Kashmir.

Pakistan is currently amid an energy crisis. Some 51 million Pakistanis lack access to electricity, while a further 90 million suffer from unreliable power supply and load-shedding on a daily basis, which is having a serious impact on the economy.

An over-reliance on imported fuels for thermal generation subject to price fluctuations is at the core of the energy crisis, and the government remains under significant pressure to address an annual average power deficit of 4,000 MW. Hydropower once underpinned the country's power sector, accounting for 45 per cent of power generation in 1991, but this share has dropped to around 28 per cent, as short-term planning preferred thermal power plants.

However, hydropower is poised for a resurgence and will play a significant role in addressing this power deficit, with some studies estimating the proportion of hydropower in the total electricity generation to increase to more than 40 per cent by 2030.

There is a great emphasis of the present government on the development of hitherto untapped hydropower potential, and to fulfil this ambition, the government has relied heavily on foreign investment from private investors, foreign governments and multilateral development banks.

A number of hydropower plants were completed or commissioned in 2016 including Ranolia (17 MW), Daral Khwar (37 MW) and Machai (2.6 MW), all located in the Khyber Pakhtunkhwa province.

Several micro hydropower projects were also installed as part of an initiative led by the government of Khyber Pakhtunkhwa, with the support of the Asian Development Bank, to install some 1,000 micro plants. Expected to

have a total installed capacity of 100 MW, these micro projects are designed to support rural, off-grid communities by providing affordable and reliable electricity.

Numerous projects are currently under planning and construction in the private sector, overseen by the Private Power & Infrastructure Board, including Karot (720 MW), Suki (870 MW) and Kohala (1,124 MW). These projects are part of the China–Pakistan Economic Corridor (CPEC) – a collection of infrastructure projects supported by the Chinese Government to strengthen Pakistan's economy and enhance the economic connectivity between both countries.

The run-of-river Patrind hydropower project is another being led by the private sector, a Korean consortium including Star Hydro Power, K-water and Daewoo Engineering & Construction Company.

Scheduled for completion in 2017, the project has also received loans from the Islamic Development Bank, International Finance Corporation, Asian Development Bank and the Export-Import Bank of Korea.

The regulatory regime for private sector investors includes substantial incentives such as generous return on equity, tax concessions and hydrological risk cover.

Current public sector projects under construction and overseen by WAPDA include Golen Gol (106 MW), Neelum-Jhelum (969 MW), Dasu (4,320 MW) and the extension of the Tarbela plant.

The construction on the fourth extension of the 3,478 MW Tarbela hydropower plant located on the Indus River continues, with completion likely in 2017. The Tarbela Dam is the largest earth-filled dam in the world, and the fourth extension to the hydropower plant will lift its installed capacity to 4,888 MW. The World Bank and the Asian Infrastructure Investment Bank have also announced USD 720 million in co-financing to help fund the fifth extension to the plant, which will add a further 1,140 MW in capacity.

Q. 4 Highlight the major industries of the country. Describe the production and contribution of economy any one of the industries.

The country has immense reserves of various minerals and natural resources. Important minerals found in Pakistan are gypsum, limestone, chromites, iron ore, rock salt, silver, gold, precious stones, gems, marble, copper, coal, graphite, sulphur, fire clay, silica. The salt range in Punjab Province has the one of the largest deposit of pure salt founded in the world. Balochistan province is a mineral-rich area having substantial mineral, oil and gas reserves which have not been exploited to their full capacity or fully explored, recent government policies have begun to develop this region of the country and to tap into the immense resources found there. The province has significant quantities of copper, chromite and iron, and pockets of antimony and zinc in the south and gold in the far west. Natural gas was discovered near Sui in 1952, and the province has been gradually developing its oil and gas projects over the past fifty years.

Major reserves of copper and gold in Balochistan's Reko Diq area have been discovered in early 2006. The Reko Diq mining area has proven estimated reserves of 2 billion tons of copper and 20 million ounces of gold. According to the current market price, the value of the deposits has been estimated at about \$65 billion, which would generate thousands of jobs.

The discovery has ranked Rekodiq among the world's top seven copper reserves. The Rekodiq project is estimated to produce 200,000 tons of copper and 400,000 ounces of gold per year, at an estimated value of \$1.25 billion at current market prices. The copper and gold are currently traded at about \$5,000 per ton and \$600 per ounce respectively in the international market. Khyber Pakhtunkhwa Province accounts for at least 78% of the marble production in Pakistan. Pakistan is home to some of the most finest and purest grades of marble, granite and slate found in the world. Much of the grades A Marble that is exported out of European countries like Italy actually have their origins in Pakistan which previously lacked fine polishing and processing machinery. The Government has taken steps to invest in this crucial sector with the recent establishment of a Marble City within Balochistan.

Pakistan's first oil field was discovered in the late 1952 in Balochistan near a giant gas field at suo Sui in Balochistan. The Toot oilfield was discovered in the early 1960s Islamabad in the Punjab. Production has steadily increased since then.

Pakistan's first gas field was the giant gas field at Sui in Balochistan which was discovered in the late 1952. Pakistan is also a major producer of Bituminous coal, Sub-bituminous coal and Lignite. Coal mining started in the British colonial era and has continued to be used by Pakistani industries after independence in 1947.

In FY 2002-03, real growth in manufacturing was 7.7%. In the twelve months ending 30 June 2004, large-scale manufacturing grew by more than 18% compared to the previous twelve-month period. The textile and garment industry's share in the economy along with its contribution to exports, employment, foreign-exchange earnings, investment and value added make it Pakistan's single largest manufacturing sector. The industry comprises 453 textile mills: 50 integrated units; and 403 spinning units, with 9.33 million spindles and 148,000 rotors, The capacity utilization was 83% for spindles and 47% for rotors during 2003.

The Federal Bureau of Statistics provisionally valued large-scale manufacturing at Rs.981,518 million in 2005 thus registering over 138% growth since 2000 while small-scale manufacturing was valued at Rs.356,835 million in 2005 thus registering over 80% growth since 2000.

Pakistan's automotive industry is the one of the fastest growing industries of the country, accounting for 4% of Pakistan's GDP and employing a workforce of over 1,800,000 people. Currently there are 3200 automotive manufacturing plants in the country, with an investment of Rs92 billion (US\$650 million) producing 1.8 million motorcycles and 200,000 vehicles annually. Its contribution to the national exchequer is nearly Rs50 billion (US\$350 million). The sector, as a whole, provides employment to 3.5 million people and plays a pivotal role in promoting the growth of the vendor industry. Pakistan's auto market is considered among the smallest, but fastest growing in South Asia. Over 180,000 cars were sold in the fiscal year 2014-15, rising to 206,777 units fiscal year 2015-16. Pakistan has huge potential for the technology industry, which includes software development and electronics manufacturing. Pakistan Aeronautical Complex recently started the manufacturing of Tablet PCs, Ebook readers, and notebooks in collaboration with INNAVTEK of China. Software

development also has a huge potential, which is being utilized as a result of numerous projects initiated by the Government of Pakistan. After the devastating 2005 Kashmir earthquake Pakistan has instituted stricter building codes. The cost of construction in Pakistan will increase 30 to 50% due to implementation of a new building code which requires strengthening of structures to withstand earthquake of 8 to 8.5 magnitude. The demand for cement has increased due to reconstruction after the earthquake. The price of cement has increased by 50% and Pakistan government banned export of cement to lower the prices and the reconstruction costs.

Dubai Ports World, announced on June 1, 2006 that it will spend \$10 billion to develop transport infrastructure and real estate in Pakistan. Dubai Ports World is also discussing the possibility of the company taking over operational management of Gwadar port in Balochistan.

Emaar Properties, announced on May 31, 2006 three real estate developments in the cities of Islamabad and Karachi in Pakistan. The projects, with a total investment of \$2.4 billion, will include a series of master planned communities that will set new benchmarks in commercial, residential and retail property within Pakistan.

In addition the conglomerate signed an unprecedented \$43 billion deal to develop two island resorts - Bundal Island and Buddo Island - over the next decade.

The Federal Bureau of Statistics provisionally valued this sector at Rs.178,819 million in 2005 thus registering over 88% growth since 2000.

Pakistan has extensive energy resources, including fairly sizable natural gas reserves, some proven oil reserves, coal (Pakistan has the largest coal reserves in the world, and a large hydropower potential. However, the exploitation of energy resources has been slow due to a shortage of capital and domestic political constraints. Domestic petroleum production totals only about half the country's oil needs, and the need to import oil has contributed to Pakistan's trade deficits and past shortages of foreign exchange.

The current government has announced that privatization in the oil and gas sector is a priority, as is the substitution of indigenous gas for imported oil, especially in the production of power. Pakistan is a world leader in the use of compressed natural gas (CNG) for personal automobiles.

The short-term national energy demand has expanded significantly since 2001 due to massive rise in sales of durable goods like refrigerators, washing machines, split air conditioners, et al.. In 2004, Access Group International announced plans to invest \$1 billion over the next 5 years in solar cell manufacture and wind farms. MOUs have been signed with Alternate Energy Development Board. In early 2005, the government approved a 25-year Energy Security Plan to boost electric capacity eightfold.

Q. 5 Discuss the historical background of insurance companies in Pakistan? Discuss its role in employment growth of the country.

Insurance, in law and economics, is a form of risk management primarily used to hedge against the risk of a contingent loss. Insurance is defined as the equitable transfer of the risk of a loss from one entity to another in exchange for a premium. An insurer is a company selling the insurance. The insurance rate is a factor used to

determine the amount called premium, to be charged for a certain amount of insurance coverage. Risk management, the practice of appraising and controlling risk has evolved as a discrete field of study and practice. Insurance appears simultaneously with the appearance of human society. We know of two types of economies in human societies: money economies (with markets, money, financial instruments and so on) and non-money or natural economies (without money, markets, financial instruments and so on). The second type is a more ancient form than the first. In such an economy and community, we can see insurance in the form of people helping each other. For example, if a house burns down, the members of the community help build a new one. Should the same thing happen to one's neighbor, the other neighbors must help. Otherwise, neighbors will not receive help in the future. This type of insurance has survived to the present day in some countries where modern money economy with its financial instruments is not widespread (for example countries in the territory of the former Soviet Union).

The Greeks and Romans introduced the origins of health and life insurance in 600 AD when they organized guilds called "benevolent societies" which cared for the families and paid funeral expenses of members upon death. Before insurance was established in the late 17th century, "friendly societies" existed in England, in which people donated amounts of money to a general sum that could be used for emergencies. Insurance became far more sophisticated in post-Renaissance Europe, and specialized varieties developed.

The first insurance company in the United States underwrote fire insurance and was formed in Charles Town (modern-day Charleston), South Carolina, in 1732. Benjamin Franklin helped to popularize and make standard the practice of insurance, particularly against fire in the form of perpetual insurance. In 1752, he founded the Philadelphia Contribution ship for the Insurance of Houses from Loss by Fire. Franklin's company was the first to make contributions toward fire prevention. Not only did his company warn against certain fire hazards, it refused to insure certain buildings where the risk of fire was too great, such as all wooden houses. In the United States, regulation of the insurance industry is highly Balkanized, with primary responsibility assumed by individual state insurance departments. Whereas insurance markets have become centralized nationally and internationally, state insurance commissioners operate individually, though at times in concert through a national insurance commissioners' organization. In recent years, some have called for a dual state and federal regulatory system (commonly referred to as the Optional Federal Charter (OFC)) for insurance similar to that which oversees state banks and national banks.

INSURANCE IN PAKISTAN

Pakistan is in the process of reshaping its economy to meet the challenges of a global marketplace. The government has introduced a range of reforms designed to promote and consolidate Pakistan's position as an emerging market in the region. The changes have resulted in a deregulated and liberalized financial sector marketplace.

Pakistan's life insurance sector, nationalized in 1972, operated under the aegis of the State Life Insurance Corp. and Postal Life Insurance until 1992, when the government opened it to private sector participation. Foreign

companies are no longer barred from the life insurance business, but they are restricted to minority ownership. Private companies function in nonlife insurance areas, but the government insurance business is controlled by the National Insurance Corp. One of the state's first steps was to standardize and reduce premium rates and to encourage coverage among a wider segment of the population. In 2001, there was US\$168 million of life insurance written in Pakistan.

Although filing of rates is no longer required, there are, however, separate parts in the Ordinance on Market Conduct & Intermediaries which lay down the duties/responsibilities of Direct Insurance Companies and of Intermediaries. The developments in the regulatory environment in Pakistan are in line with those in the International markets. Compliance with regulations is becoming exceedingly important.

ISLAMIC INSURANCE

Ibn Abidin (1784-1836) was the first scholar in the Muslim world to discuss the meaning and legal character of insurance. Islamicity of insurance has been under discussion since then. Opinions regarding legitimacy, adoption, and adaptability of insurance are numerous. Recently, however, a consensus was emerging for adapting insurance in the name of takaful and solidarity. As a result, several Islamic takaful and solidarity companies have been established since 1979.

A prime purpose of Takaful system and its products is to strike the right chord with Muslim customers who may find conventional products unacceptable and buy them reluctantly. The takaful system and product may be appealing to them.

The global takaful premium was US\$ 1.3 bn. in 2002, although this excludes premium in Iran. Including Iran, the figure was US\$ 2.1 bn. It is estimated that about 40% of global of global takaful business relates to family takaful. In 2002 there were an estimated 41 companies offering Islamic Insurance (either as takaful companies or through Islamic windows) in some 23 countries around the world. The number of takaful companies more than doubled to 87 companies in just four years (by mid 2006) across 29 countries.

In a new report from Celent, An Overview of Islamic Insurance: The potential for takaful is enormous given that insurance penetration in most Islamic countries does not exceed 1% of gross domestic product. Many of the challenges facing takaful operators are strategic. This market is trying to establish itself. While skills and resources can be borrowed from conventional insurance markets, there is significant investment required creating the business.

TAKAFUL IN PAKISTAN

The takaful market is still in a formative stage and market projections estimate growth rates between 15% and 20% over the next 10 years, reaching US\$7.4 billion in premium by 2015. With challenges around customer service and productivity, technology can enable this growing industry through its formative stage.

Pakistan is among the top 10 most populous nations in the world. This makes it a very fertile market for Takaful, one with some interesting challenges. Takaful is the latest "wave" in financial protection. Pakistan saw its first Takaful operator, in the General side, start in 2006. Since then, another two operators in General and

two in Family have entered the picture. Dawood Family Takaful being the most recent entrant is the only Pakistani Owned Takaful Company and is highly capitalized. Takaful is not just another tool for risk mitigation and financial protection. Rather, it is a system which works as a source of good for those that use it and the community at large. Tools like these are critical for developing nations, especially those seeing rapid economic growth. Increasing personal debt, the widening divide between the haves and have-nots, and other such issues regularly plague those in rapidly growing developing nations. Pakistan is one of those countries.

To truly comprehend the opportunities for Takaful in Pakistan, we need to see where the present insurance sector stands and. The best way to understand this by comparing it to another nation which shares many traits with Pakistan. India, a much larger neighbor, has an insurance penetration of 4.8%, against Pakistan's 0.8%, and its insurance density is US\$38.40, against Pakistan's US\$5.90. These values make it very clear that there exists a significant gap in Pakistan for financial protection tools. As we know, achieving expectations is not as easy as formulating them.

There are significant challenges for Takaful in Pakistan.

Education and awareness

Is it because of Shariah issues? Or is it due to the fact that as a nation, Pakistanis are conservative spenders? Given the low GDP per capita, spending on something additional with uncertain benefits is not easy. Or perhaps it is because Pakistanis do not know the benefits of using these tools and that little effort has been made to educate the masses about this aspect of the financial industry. It would be safe to assume that the answer consists of a combination of the above elements. In order to deal with the issues, significant investments will be required to reach out to the public and educate them.

Ambiguity in regulatory statutes

Given how recently the rules were formulated by the Securities and Exchange Commission, a lot of aspects need clarity.

Thin margins

Unlike the insurance companies, the Takaful operators' primary source of revenue is the Wakala fee. This has relatively little room to maneuver and so they will need to work very hard to ensure that their operations are not just effective but also lean. Thus we see that the challenges are not small by any measure but they can definitely be overcome. If the present and future Takaful operators are not just looking at going after those individuals who are "religion-centric", they need to look at positioning their offerings in a slightly different manner. The key selling proposition would have to be that Takaful products should be based on the following variables: need-based, appropriate pricing and immaculate customer service. An additional feature would be that the products are Shariah compliant and so, customers need not compromise on their beliefs to be able to get the best in financial protection.

Effectively dealing with the challenges present and properly positioning their offering will allow Takaful operators to achieve levels that even existing insurance companies have thus far been unable to reach.

