Natural Resources in Pakistan

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Natural Resources in Pakistan

Pakistan is rich in diverse natural resources. Pakistan's human resources include a population of intelligent young people and a burgeoning urban middle class. The culture, knowledge, wealth, and infrastructure are sure to grow and improve in the near future. This combined with its prime location will lead to long-term success for the nation.

Pakistan has an abundance of natural resources. Nature has blessed the country with many types of fossil fuels which if utilized properly can reshape the country and put the country on a path to prosperity. However, political instability, corruption and lack of law and order in the country has prevented full use of such resources. Following are some of the details of natural resources of Pakistan which are needed to be utilized for the economic boom in the country:

Mining in Pakistan

Mining is an important industry in Pakistan. Pakistan has deposits of several minerals including coal, copper, gold, chromite, mineral salt, bauxite and several other minerals. There are also a variety of precious and semi-precious minerals that are also mined. These include peridot, aquamarine, topaz, ruby, emerald, rare-earth minerals bastnaesite and xenotime, sphene, tourmaline, and many varieties and types of quartz .[1]

The Pakistan Mineral Development Corporation is the responsible authority for the support and development of the mining industry. Gemstones Corporation of Pakistan looks after the interests of stake holders in gemstone mining and polishing as an official entity. Baluchistan province is the richest in mineral resources available in Pakistan. While recently Sindh discovered coal deposits in Thar. Khyber Pakhtoonkhwa is rich in gems. Most of the mineral gems found in Pakistan exist here. Apart from oil, gas and some mineral used in nuclear energy purposes which comes directly under federal control mining of other minerals is provincial issue. Currently around 52 minerals, are mined and processed in Pakistan.[2]

Power Resource Minerals

1. Coal.
2. Natural Gas.
3. Crude Oil etc.

Coal:

We have not yet discovered coal which can be used in engines. It is mostly used in manufacturing Calcium Carbonate and bricks. Some coal is also used in homes. We have got coal from various spots places but it is not of good quality. It fulfils 10% of our needs.

Places

The biggest mines of coal is Salt Ranges in Kohistan in the region of Makarwat in Punjab. In these regions coal is also found in Dundot and Pudh. Like Makarwal some mines are such whose tunnels are about nine miles long. In the province of Balochistan many reservoirs are found at other places. Coalmines are in Sharg, Hoset, Hernai, Sar, Dagari, Sheeren Aab, Bolan, Aab and Mush. Processing plant is also set in Shargh. In the lower regions of Sindh mines of Jhimpir and Lakhra are important. Government is in search of more mines.

Mineral Oil:

Minerals oil is very important in modern age. It is used in factories, industries and transport. Motorcars, tractors, train truck etc depending upon this oil. It is also used in homes. Average production of oil in Pakistan cannot meet its needs. We are getting 10% oil for our needs and the rest of the oil is imported on which we spend a large amount of foreign exchange. Experts say that at certain we can get oil from the sea. For this purpose we started digging in 1985 at the coast of our sea in Karachi. At certain other places are digging our earth. If we succeed we shall satisfy our need of oil from our our resources.

Places

We are getting oil from Khor, Bhullian, Tut, Kot Sarug, Miyal, Dherznund (District Attock), Kazian (District Rawalpindi), Dhodak (District Dera Ghazi Khan), Kursal (District Jhelum), and Khushkhali (District Badeen). The oil obtained from Attock, Jhelum and Chakwal districts is refined in Morgah Refinery near Rawalpindi. Refinery means the industry where crude oil is refined for different purposes.

Mineral salt:

Salt has been mined in the region since 320 BC. The Khewra Salt Mines are among the world's oldest and biggest salt mines. Salt is mined at Khewra in an underground area of about 110 square kilometres (42 sq mi). Khewra salt mine has an estimated total of 220 million tonnes of rock salt deposits. The current production from the mine is 325,000 tons of salt per annum.

Natural Gas:

Natural gas is an important discovery. We meet 35% of our need of energy from this gas. This gas is brought in Lahore, Karachi, Faisalabad, Gujranwala, Sialkot, Peshawar and other cities by means of pipelines. This gas is used in Industries and also in our homes as fuel. Fine type of fertilizer is prepared in Multan by using this gas. This gas is aslo used in manufacturing Rayon thread and Chemical materials.

Places

The reservoirs of natural gas are in Sui, Uch, Zin, Kherpur, Muzrani, Hindi, Kundkot, Sarung, Dhodak, Peerkoh and Dhullian.

Iron Ore

Iran ore is very important for the progress of a country. We have set up a steel mill in Karachi with the cooperation of Russia. In Pakistan, iron is not of good quality so it is imported to meet our needs.

Places

The biggest reservoir of iron is found in Kala Bagh. Some are also found in Chitral, Khuzdar, Chulgari and Muslim Bagh. Iron obtained from Chitral and Nokundi is of good quality. Our iron fulfills only 16% of our needs.

Copper:

It is used in manufacturing electric goods especially electric wires. In past it was only used in making coins and utensils.

Places

Its reservoirs are in provinces of Balochistan and Frontier. In Balochistan it is found in Saindak, Chaghi and some other places. These reservoirs are refined by progressive corporation of natural resources. Corporation is working on this plan with cooperation of foreign experts. The work has been started on crude metal in Saindak and Karachi Laboratory.

Saindak Copper Project

In Balochistan, large deposits of copper, gold and silver have been discovered at saindak, Chagai and Amuri. The economy of Pakistan is depended on these projects. China is collaborating with Pakistan on these projects. According to an estimate saindak will give annual production as below.
Copper = 16,000 Tones
Gold = 1.5 Tones
Silver = 2.75 Tones

Chromite:

It is a white metal which is used to make iron. It is also used in manufacturing certain instruments, aero planes and colours. It is also used in the art of photography. It is exported to get large amount of foreign exchange**.**

Places

Its reservoirs are the biggest of the world in found Pakistan. Theses reservoirs are found in Muslim Bagh. Small reservoirs are found in Chaghi, Kharan, Malakand, Mehmund and North Waziristan.

Rock Salt :

Pakistan has vast reserves of salt. It is used in various eatables, the biggest is Khewra Mine. The area of this mine is about 10500 square meters. It is producing high quality of salt from centuries. Another mine is in Khushah. We aslo get salt from mines of Kala Bagh, Jutta and Bahadur Khail. We get salt from

seawater near Maripur and Coast of Makran. This sea salt is used to preserve fish and is in some industrial uses. The annual production during the year 2000-01 was 1275 tonnes.

Lime Stone:

Limestone is very useful raw material for cement industry. It is found in the northern and western mountain areas of Pakistan mostly. Large deposits are found in Daudthail, Wah, Rohri, Hyderabad and Karachi. The annual production of limestone is 9.9 thousand tonnes.

Gypsum:

It is obtained from Salt range and western mountainous areas of Pakistan.The annual production of Gypsum is 358.5 thousand tonnes approximately.

Places

The important mines of Gypsum are in Khewra, Dandot, Daudkhail, Rohri and Kohat.

Marble:

It is a very beautiful stone of white or black colour. It is used in the floores or walls of building to make them attractive and beautiful. A large quantity of white and black marble is found in Cambelpur near Faith Jung in Kala Chitta Hills. District Muzaffarabad and Mirpur of Azad Kashmir are other important areas where marble is found. The annual production of marble is 586.6 thousand tonnes.

Places

In our country marble is of various types. The best in Khyber Agency at Mullah Gori. It is Swat, Noshera, Hazara, Gilgit and Chaghi.

Sulphur:

It is the necassary part of explosive material. It is very important for the defence of a country. It is also used in making Sulphuric Acid and many other chemicals. We get crude Sulphur which is made useful by our experts. Soon we will be able to meet our needs of Sulphur. After cleaning Sulphur, it is also used chemical industries. Industries are being set up in Quetta and Karachi.

Places

Its reserves are found in Koh-e-Sultan (District Chaghi) and (District Karachi).

Gems and other precious stones

A number of precious stones are mined and polished for local as well as export purposes. The centre point of this operation is Khyber-Pakhtoonkhwa and most recently Gilgit-Baltistan. These include actinolite, hessonite, rodingite, agate, idocrase, rutile, aquamarine, jadeite, ruby, amazonite, kunzite, serpentine, azurite, kyanite, spessartine (garnet), beryl, marganite, spinel, emerald, moonstone, topaz, epidote, pargasite, tourmaline, garnet (alamandine), peridot, turquoise, grossular, quartz (citrine & others) and vesuvianite. The export earned from these gems is more than 200 Million dollars.[7]

Soil:

The Soil of Pakistan belongs to dry group having high calcium carbonate and content and deficient in organic matter. These vary in colour from reddish brown in the north to red or gray in the south. These soils are generally fertile due to process of formation. The newly deposited alluvium near the river is called Khaddar and mostly consists of sand. The old alluvium of the bar uplands, called Bangar, consists of finer particles - loams. At the foot of the mountains the soil is sandy and generally becomes finer towards the plains where Khankah, limestone concentration, is occasionally found. The soils of the Thal and the Thar deserts and of Balochistan are wind-blown. In southern Potwar a thin layer of residual soil covering is found.

Soil is defined as that part of the unconsolidated material covering the surface of the earth which supports plant growth. It has three major constituents. (1) Solid Particles (Salts, mineral and organic matter), (2) air and (3) water. The type of soil formed is a function of topography, climate vegetation and the parent rocks from which the soil material is derived. Soil material transported and deposited by running water is known as alluvium which that transported and deposited by winds form aeolian soil. Soils formed in silt are termed residual. Soil forming process is complex and continuous. As a result, soils vary in their chemical composition colour, texture and organic content place to place**.**

Land:

About 28% of Pakistan's total land area is under cultivation. Pakistan boasts one of the largest irrigation systems in the world. According to Wikipedia, "the most important crops are cotton, wheat, rice, sugarcane, maize, sorghum, millets, pulses, oil seeds, barley, fruits and vegetables, which together account for more than 75% of the value of total crop output." The fertile lands of Punjab are ready to feed a population twice that of current Pakistan.

Forests:

Forests are extensive, continuous areas of land dominated by trees. The forests of Pakistan reflect great physiographic, climate and edaphic contrasts in the country. The desired level of forests is 20-30 percent of the total land of a country. In Pakistan only about 4.8 percent of the total area is forested which is very low.

Forests are important in many different ways. From an ecological point of view, they help to maintain a balance in the environment by checking pollution and protecting the soil from erosion by wind or water and intercepting rainfall, particularly on sloping ground. By preventing soil erosion, the trees on the slopes of hills also regulate the supply of water to the reservoirs thereby reducing floods.

Decomposition of leaves helps in humus formation, which maintains the fertility of the soil. This ensures food supply to millions of people.

From a commercial and industrial point of view, forests provide raw materials to various industries e.g. timber, pharmaceutical paper. They also have recreational value, promote tourism and provide employment in the forest department. The are many employment opportunities that depend on the forests.
The type and distribution of forests are closely linked to altitude. In areas above the snow line, there is hardly any vegetation. Alpine forests grow just below the snow line. From 1000 to 4000 meters, coniferous forests are found. Below 1000 meters, only irrigated plantations have good species of wood.

Water:

Water is basic need of life. Human beings, animals and plants cannot live without water. Water is essential for sustaining quality of life on earth. This finite commodity has a direct bearing on almost all sectors of economy. In Pakistan its importance is more than ordinary due to the agrarian nature of the economy. The share of agricultural sector in the Gross Domestic Product (GDP) of Pakistan is about 25%. Since agriculture is the major user of water, therefore sustainability of agriculture depends on the timely and adequate availability of water. The increasing pressures of population and industrialization have already placed greater demands on water, with an ever increasing number and intensity of local and regional conflicts over its availability and use. Historically, the high aridity index of the country is adding further to the significance of water in development activities in Pakistan.

Though, once a water-surplus country with huge water-resources of the Indus River System, Pakistan is now a water-deficit country. Surface water-resources of Pakistan are mainly based on the flows of the Indus River and its tributaries. The Indus River has a total length of 2900 kilometres (Km) and the drainage-area is about 9,66,000 sq.km. Five major tributaries joining its eastern side are Jhelum, Chenab, Ravi, Beas and Sutlej; besides, three minor tributaries are the Soan, Harow, and Siran, which drain in mountainous areas. The famous lakes of Pakistan are Haleji Lake, Hana Lake, Keenjhar Lake, Manchhar Lake, Saiful Muluk Lake

Pakistan rich in natural resources but poor in their management:

. Pakistan is one of the richest countries in the world in terms of natural resources but also one of the poorest among them in their management. The country is abundant in the vital resources including that of energy, agriculture, minerals, population, and geography, but unlike the developed countries, these have not been properly exploited due to poor management. This dismayed situation is caused due to several, both chronic and acute, flaws which have led to poor governance of country since its inception except some brief spells of economic prosperity. Prevalent political rivalry and instability, worsening law and order and rampant corruption have catalyzed the situation to resource development impasse. Contrary to economic potential of its natural resources, Pakistan is a depending on foreign aid and debt, it is facing deficit in trade, acute energy crisis to run industry, and water stress for agriculture, to name a few challenges.