Mineral resources of Sindh Province, Pakistan

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Abstract

The Sindh Province includes Kirthar Basin and southeastern part of Sulaiman Basin. Iron, laterite and ochre reported from Lakhra, Meting and Makli hills, Nagar Parker, Jhal Dhand, Sohnari Dhand and Noriabad; Nari Formation and in Manchar/Vihowa group in the eastern Kirthar foldbelt; celestite from Thano Bula Khan; tungston/sheelite, gold and other heavy mineral concentrates (magnetite, ilmenite, garnet, epidote, zircon, tourmaline, amphibole/hornblende and tremolite, apatite, pyroxene, etc) from placer in the Indus River and mollase rocks like Vihowa group, Manchar group and recent sea; zircon from the shore areas, gold (can be explored) from Nagar Parker; alum from pyritiferous shales of Gajbeds from Maki Nai, shales of Ranikot group and Nari/Gaj group and at Shah Hassan near Trimi. Alum, Trona (source of Na) and potash slats associated with rock salt deposits and lakes in the vicinity of Sind coast; gypsum from Miocene Gaj shales near Johi and K.N.Shah, Dadu district and nitrogen from air. Various Ceramic Mineral Resources/clays found from Laki, Kirthar and Vihowa/Manchar groups; China clay from Nagar Parkar and Islamkot Thar, Dhed Vero, Parodhoro, Karkhi, Dungri, Motijo, Vandio, Ramji-jo-Vandio, and Didwa-Surachand areas; fuller's earth from Thano Bulla Khan (Dadu district) and Shadi Shahid (Khairpur; near Jheruk and Rohri and at Begamji; fire clay from Dadu district, Sohnari Dhand/Jhimpir; Laki group, Ranikot group and Vihowa/Manchar group of eastern Kirthar Foldbelt; orthoclase feldspar from Nagar Parkar; silica sand from Meting to Jhimpir railway stations and in Eocene and Oligocene strata near Thano Bula Khan in Dadu district and Jangshahi deposits; cement industry raw materials and calcite veins in limestone of different age; pyrite is disseminated in carbonaceous shale and coal; abrasives type red ochre in Eocene Sohnari beds, nodular flints between Rohri and Kot diji; in west of Jhol Dhaund, around Harmon Mohatta coal mine west of Sohnari Dhand (west of Jhimpir), west of Ongar Jhol Dhand (north of Thatta) and Sohnari 15km east of Jhimpir; Grity Pab sandstone of Khadro and Bara areas (can be used for abrasive purposes); Quartz deposits of Cretaceous Pab Formation from eastern slope of Lakhi range district Dadu; Radioactive Mineral/uranium Resources from fluviatile cross bedded sandstones/placer of Vihowa/Manchar group; Coal Resources from Thar, Lakhra, Badin, Sonda-Thatta, Meting-Jhimpir; large Construction stone, dolomite and Industrial rocks Resources from Jurassic to Eocene sequences in Kirthar and Lakhi ranges, Thar and Cholistan desert; granite and other Igneous along with some metamorphic rocks from Nagar Parker, large Water resources in alluvial and bed rocks, and gemstone like agate and chalcedony from Nagar parker, chert, flint and Jasper from Vihowa group/Manchar group from eastern Kirthat and Lakhi range and other areas. The Natural Resources like the minerals, coal, oil, natural gas, etc are non-renewable resources while the solar, air/wind, terrestrial water, marine water/ocean, tides, waves, current, land, biomass, etc are renewable (recycled) resources. It is our urgent need to convert the non conventional energy resources into conventional energy resources. Our land is receiving huge amount of energy from sun. The coastal areas have high potential of wind energy. Gravitational force of moon produces tidal energy in sea which can be converted in energy by the construction of dams which can store water at high tides and release water at low tides. Sindh has a long sea shore from Nagar Parker to west of Karachi. Energy from sea waves can also be benefited by stable and non stable plate's movements. Sindh also has a large waste biomass.