

# Thar Coal Resources in Sindh, Pakistan



Mines and Mineral Development Department  
Government of Sindh



# Thar Coal Resources in Sindh, Pakistan

## Location

- Thar coalfield is approximately located between Latitudes 24°15'N and 25°45'N and Longitudes 69° 45'E and 70° 45'E in the southern part of Sindh Province in Pakistan.
- Based on available infrastructure and favourable geology, the Geological Survey of Pakistan selected four blocks near Islamkot for exploration and assessment of coal resources. Two more blocks were also explored by the Government of Sindh. The blocks with names, area and coordinates are given in the Table.

## Accessibility

- The area is accessible by a 410 kilometers metalled road form Karachi up to Islamkot via Hyderabad-Mirpur Khas- Naukot and Thatta-Badin-Mithi-Islamkot. A road network connecting all the major towns with Thar Coalfield have been developed. The rail link from Hyderabad is up to Naukot, which is about 100 kilometers from Islamkot.

## Topography

- Thar coalfield is a part of the Thar Desert of Pakistan and is the 9<sup>th</sup> largest desert of the world.
- It is bounded in the north, east and south by India, in the west by flood plains of the Indus River. The terrain is sandy and rough with sand dunes forming the topography.

## Climate

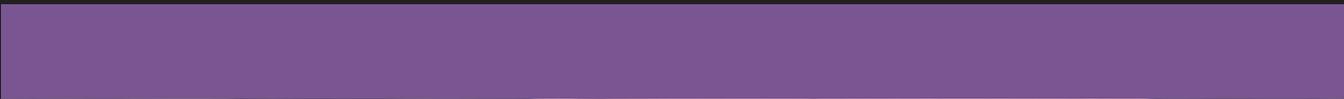
- The climate is essentially that of an arid to semi arid region with scorching hot summers and relatively cold winters.
- It is one of the most densely populated deserts of the world with over 91 thousand inhabitants.
- The livelihood of the population is dependent on agriculture and livestock.

## Water Resources

- The area is a part of the desert where precipitation is very little with a high rate of evaporation.
- **Surface Water:** The water is scanty and found in a few small “tarais” and artificially dug depressions where rain water collects.
- **Groundwater:** Drilling data has indicated three aquifers (water-bearing Zones) at an average depth of 50 m, 120 m and more than 200 meters:
  - One aquifer above the coal zone: Ranges between 52.70 and 93.27 meters depth.
  - Second aquifer with the coal zone at 120 meters depth: Varying thickness up to 68.74 meters.
  - Third aquifer below the coal zone at 200 metres depth: Varying thickness up to 47 meters.
  - Water quality is brackish to saline

S.No.	Name/Blocks	Area (Sq.km)	Coordinates		Reserves Million Tonnes
			Latitude	Longitude	
1.	Sinhar Vikian Varvai, Block-I	122.00	24° 35'N to 24° 44'N	70° 12'E to 70° 18'E	3566
2.	Singharo Bhitro, Block-II	55.00	24° 44'N to 24° 51'N	70° 15'E to 70° 25'E	1584
3.	Saleh Jo Tar, Block – III	99.50	24° 49'N to 24° 58'N	70° 12'E to 70° 18'E	2008
4.	Sonalba, Block – IV	82.50	24° 41'N to 24° 48'N	70° 12'E to 70° 20'E	2471
5.	Saju Magho Bhil, Block – V	63.50	24° 46' 30"N to 24° 52' 30"N	70° 09' 30"E to 70° 16' 11"E	1394
6.	Kharo Jani, Block – VI	66.10	24° 46' 30"N to 24° 52' 50"N	70° 15' 10"E to 70° 22' 30"E	1655





## Geology

The Thar coalfield area is covered by dune sand that extends to an average depth of over 80 meters and rests upon a structural platform in the eastern part of the desert.

## Coal

- The coal beds of variable thickness ranging from 0.20 – 22.81 meters are developed. The maximum number of coal seams found in some of the drill holes is 20.
- The cumulative thickness of the coal beds range from 0.2 to 36 meters. Claystone invariably forms the roof and the floor rock of the coal beds.
- The coal is brownish black, black and grayish black in colour. It is poorly to well cleared and compact.

## Reserves

- As a result of wide spread drilling over an area of 9000 km<sup>2</sup>, a total of 175 billion tons of coal resource potential has been assessed.
- The overburden consists of three kinds of material; dune sand, alluvium and sedimentary sequence. The total overburden is around 150 to

230 meters. The roof and the floor rocks are claystone and loose sandstone beds.

## Infrastructure at Thar coalfield

- **Electricity:** 11 kV feeder emanating from Islamkot Grid Station to Thar Coal Project with 200 watts transformer and energized.
- **500 kV transmission line:** 500 kV transmission line has been laid by WAPDA up to mining site.
- **Telephone:** Optical fiber cable lying/installation of system between Mirpurkhas to Mithi exchanges completed. 100' high guide tower (1" dia) is to be installed at Thar coal site with DRS equipment. Telephone facility is available up to Islamkot.
- **Water supply:** Water supply line from Mithi to Islamkot and Islamkot to coal mines (Thario Halepoto) has been completed and water reservoir of 6 lac gallons is available at coal mine site. 03 lac gallons / day will be available at site (Block-II).
- In addition, 2 reverse osmosis plant for desalination of water to provide potable water to investors and local people has been installed at Sobharo Shah and Islamkot (near Thar Coalfield).



- **Construction of Airstrip:** The scheme “Construction of Airstrip at Islamkot” costing Rs.120 million is under implementation.
- **Railway line:** Pakistan Railway conducted feasibility study of railway line at Thar coalfield to facilitate transportation of coal equipment. The railway route has been approved by the Government.
- **Town Planning of Islamkot:** Town Planning of Islamkot” nearest town to coalfield has also been sponsored for rehabilitation/resettlement of the villages located within the coalfield vicinity.
- **Thar Lodge:** The scheme for construction of 20-bedded accommodation to facilitate foreign and local investors at Islamkot is under construction.

### Incentives for Investors in Pakistan

- To keep Pakistan competitive in international markets and support the viability of investments in the country the following incentives are available to both foreign and local investors.

#### Fiscal Incentives

- **Reduced Custom Duty and Sales Tax.**
- **Initial Depreciation Allowance:** Initial Depreciation Allowance at the rate of 50% is permissible on an “eligible depreciable asset” placed into service in Pakistan for the first time in a tax year.
- **Amortization:** Amortization of pre-commencement expenses allowed at the rate of 20% annually.

Amortization of intangible assets allowed over a period of ten years.

#### FACILITATION

- **Exchange Control:** Full repatriation of capital, capital gains, dividends and profits is allowed.
- **Expatriate Facilitation Services:** Foreign nationals (investors, executives, expatriate employees) having “CBR’s Pass Booklet” are allowed duty-free import of food stuffs and other consumable items equivalent to US \$ 1000 per year per person in Pakistan.
- **Double Taxation Treaties:** The Government of Pakistan has signed agreements on Avoidance of Double Taxation with 52 countries including China.
- Under these agreements proportionate tax relief is allowed to a person resident in Pakistan, on any income earned abroad (if such income has already been subjected to tax outside Pakistan), at the average rate of tax in Pakistan or abroad, whichever is lower.
- **Protection to Investment:** The economic policies and the existing legal cover for foreign and Pakistani investment will be extended to new areas and sectors.
- The benefits and incentives for investment provided by the Government shall continue enforce and will not be reduced or altered to the disadvantage of investors.

**Secretary, Mines and Mineral Development Department  
Government of Sindh**  
Room No. 214, Sindh Secretariat Building-2,  
Tughlak House, Karachi, Pakistan  
Tel: ++92 21 9211294/95  
Fax: ++92 21 9211296  
secy@sindhmines.gov.pk  
www.sindhmines.gov.pk

**Director General, Sindh Coal Authority  
Mines and Mineral Development Department  
Government of Sindh**  
F-158/A, Block-5, KDA Scheme No. 5, Clifton,  
Karachi, Pakistan  
Tel: ++92 21 9251509-9251063  
Fax: ++92 21 5874708