

Geography

Manufacturing Industries (Mineral based)

Mineral based industries are those industries which use minerals as their basic raw material.

major mineral based industries in India:

- Iron and Steel
- Heavy engineering
- Electronics

Iron and Steel Industries

• Iron and Steel industries are basic industries as it lays the foundation of other industries. The production and consumption of iron and steel is one of the most significant measures of the level of ~~the signi~~ industrialisation and economic growth of a country.

• Most of the iron and steel industry units are under public sector (government) because they need huge investment, have long gestation period and needs Research and development facilities.

Locational Factors

• Raw Material: • Most of the iron and steel plants of India are located in the Chhota Nagpur plateau because all the raw material are available in this region. The region is very rich in coal and iron ore deposits.

Iron ore - Jharkhand, Bihar, Odisha, MP, Chattisgarh, Karnataka

Coal - Jharia, Raniganj, Bokaro, Giridih, Korba

- Market : • Steel products of an integrated steel plant are quite bulky and it has been estimated that the transport cost per tonne-km of steel product is about 3x more than that of coal or iron ore. Many centres of iron and steel ~~are~~ production tend to be attracted by market.

Large Integrated Iron and Steel Plants:

1. Tata Iron and Steel Company (TISCO):

- > Oldest and largest iron and steel center of India.
- > It is India's first private sector steel plant established in 1907 by Sir Jamshetji Tata.
- > Location: Sakchi in Singhbhum district of Bihar Jharkhand, later renamed as Jamshedpur

raw materials:

a) Iron ore

- High grade hematite iron ore is available from Noamundi mines of Singhbhum in Jharkhand

- Gurumahisani mines of Mayurbhanj in Odisha

b) Coal

- Jharia and Raniganj coal mines

c) Manganese

- Joda mines of Keonjhar district in Odisha

d) Dolomite, limestone and fire clay used as flux material

• ~~Sundergarh~~ Sundergarh district of Odisha

Transportation:

Tamshulpur is located on main railway line connecting it with other major cities and Kolkata port.

Water:

⇒ Sufficient water for cooling purposes is obtained from subarnrekha river and Kharkai river

Labour:

Densely populated regions of Bihar and Odisha

Power:

Damodar Valley ~~and~~ project.

2. Rourkela

-> The Hindustan Steel Ltd.

-> Location: Sundergarh district of Odisha

-> Collaboration: West German firm, Krupps and Demang, during the Second Five Year Plan

Raw material

a) Iron

Sundergarh and Keonjhar district

b) Coal

Raniganj, Jharia,

Bhilai Iron and Steel Centre

- > Location: Durg district of Chattisgarh in 1957
- > Technical support from Soviet Union
- > First steel plant in the public sector.
- > Iron ore from Dalli - Rajhara range
- > Coal is obtained from Korba (Chhattisgarh) Bokaro