



## Mains Practice Question

**Q.** Account for the present location of iron and steel industries away from the source of raw material, by giving examples. (UPSC GS-1 Mains 2020)

18 Feb, 2021 GS Paper 1 Geography

### Approach

- Start the answer by briefly discussing major location factors for the iron and steel industries.
- Discuss the present location factors of iron and steel industries away from the source of raw material
- Conclude suitably.

### Introduction

Raw material and power resources are key components of the establishment, development, and concentration of the Iron and steel industry. During the 19<sup>th</sup> and early 20<sup>th</sup> centuries, due to the high amount of weight loss during processing, early steel plants were mostly located where coal was available.

However, with the passage of time, the depletion of raw material, emergence of new technologies (like electric furnaces), and fuel-saving transportation, promoted the Iron and Steel industry to locate away from the raw material sources.

### Body

Apart from the availability of raw materials, capital and market are also important factors in the localization of industries, including the iron and steel industry.

- Market-based location is generally found in countries where coal and iron ore deposits are rare.
  - For example, Japan is deficient in both iron ore and coal and almost all raw materials are to be imported from overseas countries.
  - This makes Japanese steel plants mostly market-based.
  - The great 'Tokyo-Yokohama' and 'Osaka - Kobe - Heemeji' iron steel regions are market-based.
- Transportation is another controlling factor of the location of iron and steel industry.
  - The intermediate location, in some cases, gets distinct advantages in terms of the accessibility with raw materials, market and transportation. Its port location is of advantage.
  - For example, the Vizag Steel Plant, Visakhapatnam in Andhra Pradesh, is the first port-based plant that started operating in 1992.
- The raw material-based industries are now facing disadvantages because of depleting reserves of raw material.
  - Apart from this, the drastic reduction of coal use and development of fuel economy also attracted industries to the areas where transport is cheaper.

- For example, a cheap water route or break of bulk location, where due to loading and unloading facilities, raw materials are available at a much cheaper rate.

## **Conclusion**

Nowadays, the localization of steel plants, each of the three factors, i.e., coal, iron ore, and the market, have equal importance. The geographic coincidence of any two factors, however, determines the steel plant site.

PDF Refernece URL: <https://www.drishtias.com/mains-practice-question/question-824/pnt>