

# **KHEDA BAUXITE MINERAL** **RESOURCES**

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# Fact File:

01	Geographical Location	72.32 <sup>0</sup> to 73.37 <sup>0</sup> (Longitude) 22.30 <sup>0</sup> to 23.18 <sup>0</sup> (Latitude)
02	Temperature	41 <sup>0</sup> Centigrade (Maximum) 14 <sup>0</sup> Centigrade (Minimum)
03	Average Rainfall	723 mm
04	Rivers	09 (Mahi, Sabarmati, Meshvo, Khari, Luni, Vatrak, Shedhi, Mahor, Varasi)
05	Area	3959 sq. km.
06	District Head Quarter	Nadiad
07	Seismic Zone	Zone III

Source: MSME data

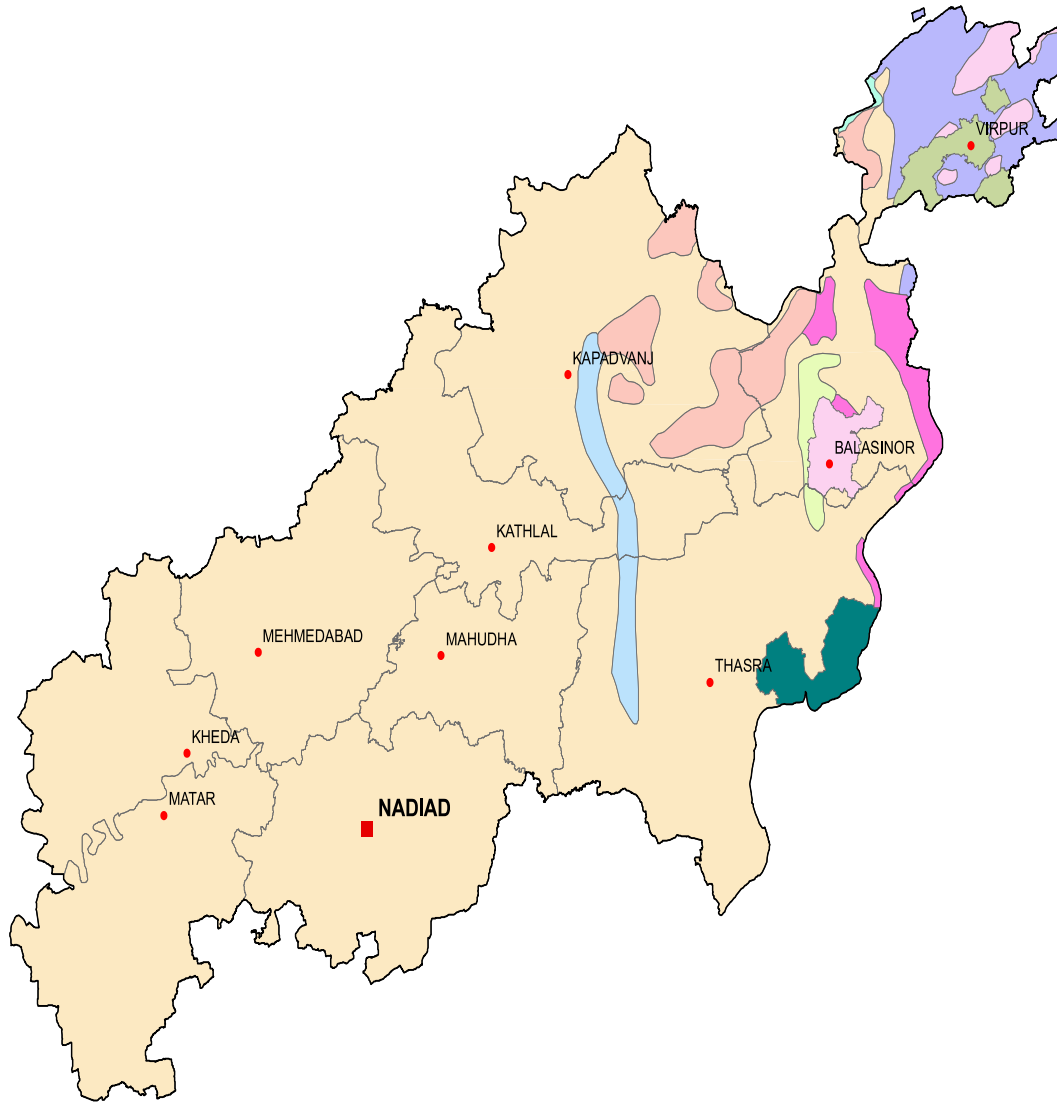
Map 1: District Map of Kheda with Talukas



Source: MSME data

- There are various types of minerals available in different tehsils of the district, which are further classified into two categories as major and minor minerals.
- In major minerals group Bauxite and Laterite are found in Taiyabpura, Salod, Sorna, Savli and Mirzapur villages of [Kapadvanj](#) tehsil, Dakor, Amrutpura and Porda Villages of [Thasara](#) tehsil.
- Bauxite area in Taiyabpura is 6.73 km. And, it is used in manufacturing aluminium metal, Fatkadi and other arsenic liquids and cement also. It is expected that approximately 890 lac ton reserves of bauxite lies in the district.
- Besides, Quartz is also found in Bharodi, Bar, Limbarvada, Bhatoda, Saradiya, Viraniya villages and in Virpur town of Virpur tehsil of the district.
- Some of the mineral based industries in Kheda are Bauxite pulverizing plant, Bentonite pulverising plant, Cement plant, Crockery\Ceramic unit, Glazed Tiles, Marble cutting & polishing and Quartz crushing units.

The Map shows information regarding geological formations of different ages and their respective lithology.



### Geology:





#### LITHOLOGY

	ALLUVIUM, BLOWN SAND & MILIOLITE SAND
	BASALT ANDESITE & TRACHYTE FLOWS
	GRANITOID & PEGMATITES
	LATERITE & BAUXITE
	LIMESTONES & NODULAR LIMESTONES
	LIMESTONES & SANDSTONES
	PHYLLITES & MICA-SCHISTS
	QUARTZITES
	BLACK TRAP

#### AGE

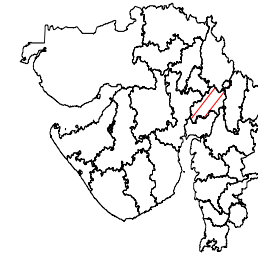
RECENT
LOWER EOCENE TO UPPER CRETACEOUS
POST DELHI
SUPRATRAPPEANS
INFRATRAPPEAN BAGHLAMETA BEDS
LOWER CRETACEOUS
LUNAWADA GROUP
LUNAWADA GROUP
LOWER EOCENE TO UPPER CRETACEOUS

### Legend:

-  District Boundary
-  Taluka Boundary
-  District Headquarter
-  Taluka Headquarter

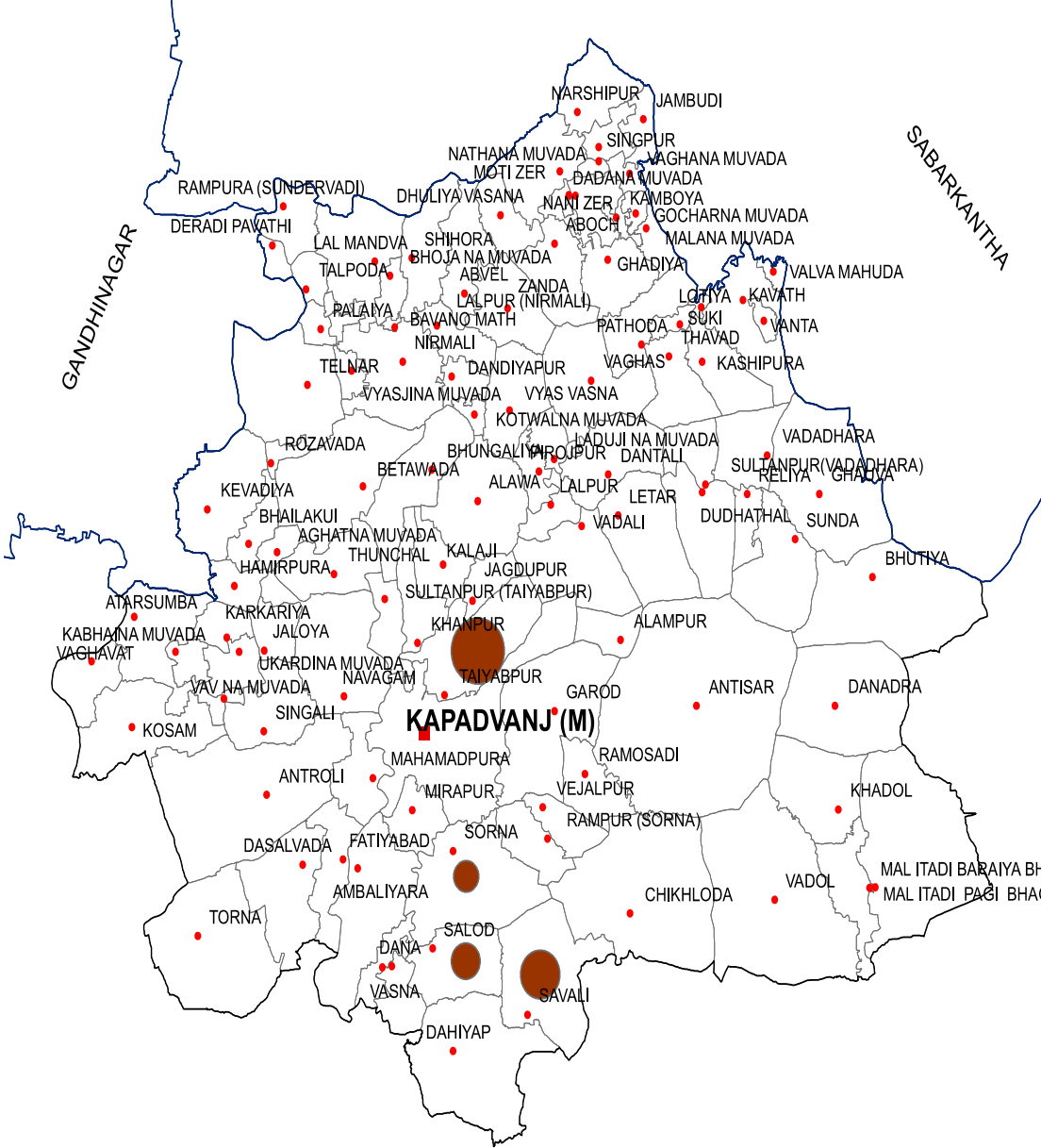
### Location Index:

GUJARAT



 District : Kheda





**Major Minerals:**

Bauxite

**Production and Receipt of Minerals :**

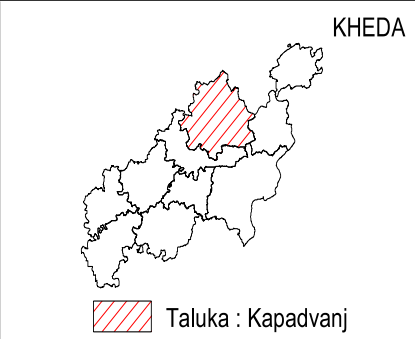
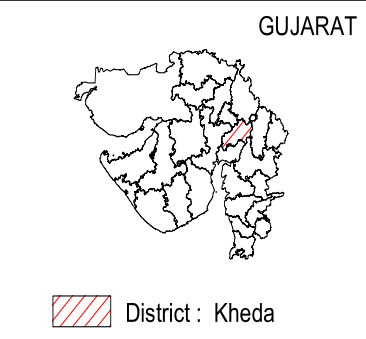
Production (in Metric Ton)

Receipt (in Rs.)

**Legend:**

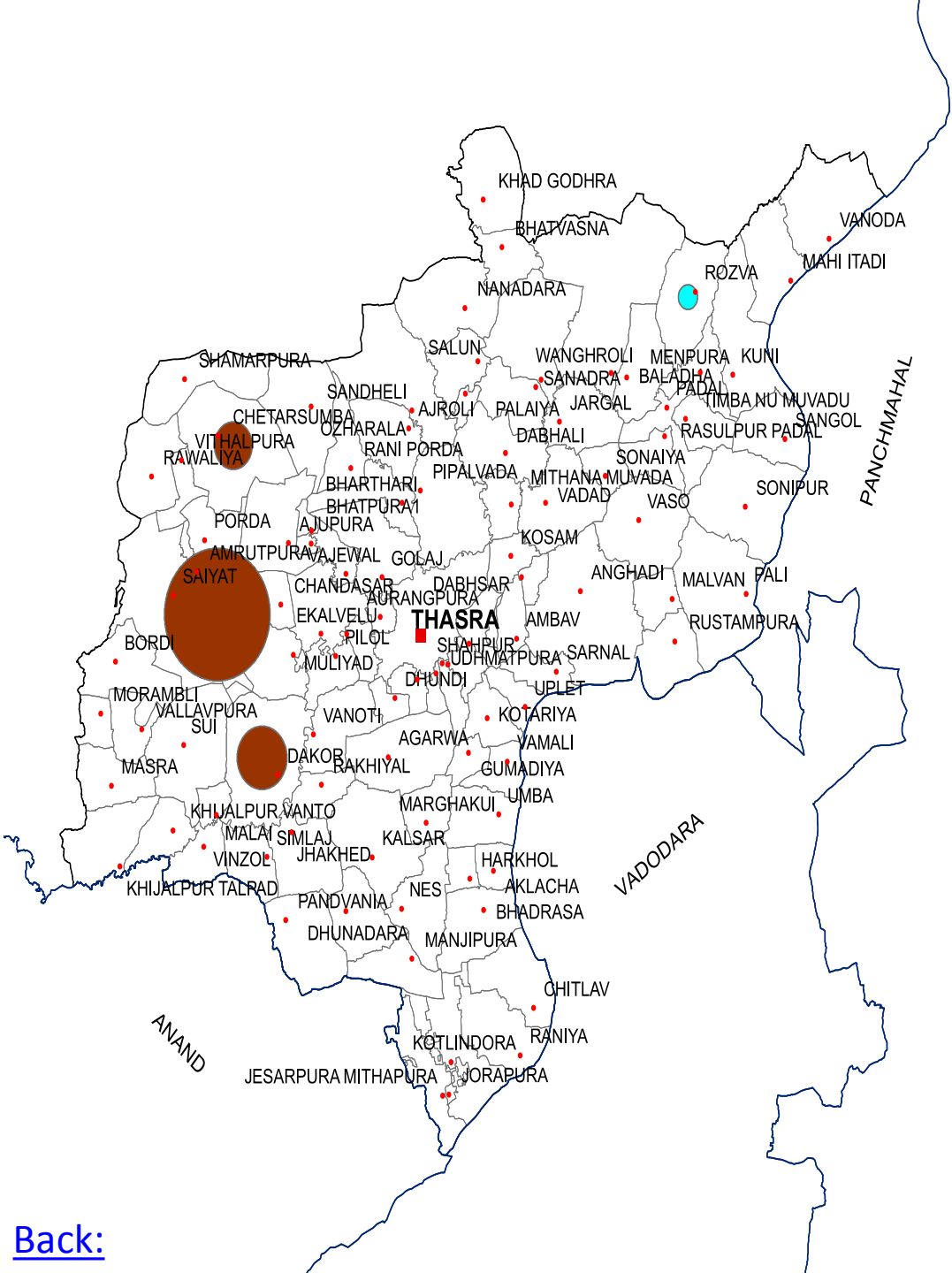
- District Boundary
- Taluka Boundary
- Village Boundary
- Taluka Headquarter
- Village Location

**Location Index:**





9.6 ha (Pie size vaires on Leased area)










**Major Minerals:**

-  Bauxite
-  Limestone

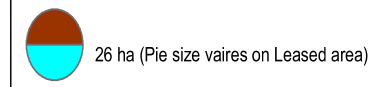
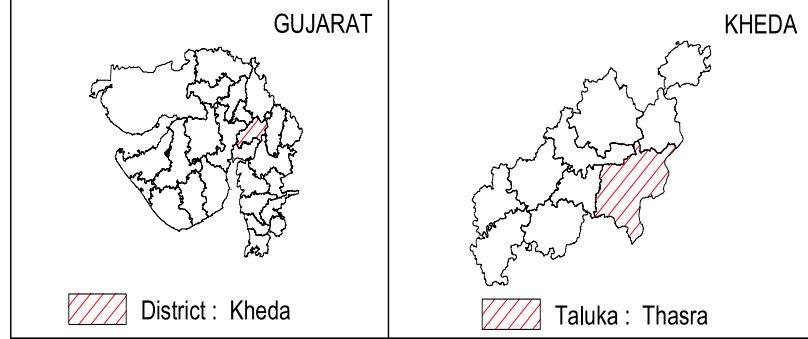
**Production and Receipt of Minerals :**

Production (in Metric Ton)	Receipt (in Rs.)

**Legend:**

-  District Boundary
-  Taluka Boundary
-  Village Boundary
-  Taluka Headquarter
-  Village Location

**Location Index:**

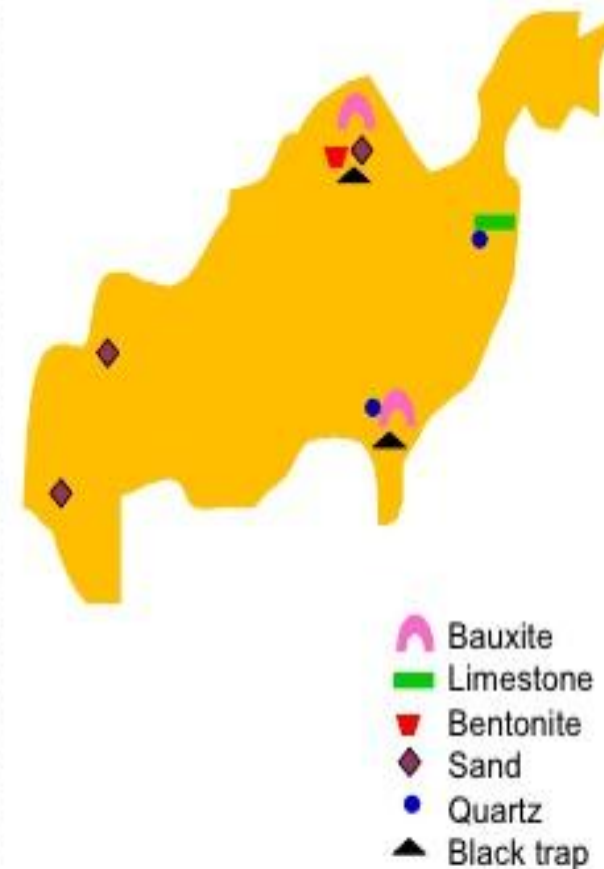


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# Minerals

- **Major minerals** found in the district are bauxite, limestone and quartz. Other minerals found in the district include bentonite, brick sand, road metal, sand, gravel and black trap
- **Limestone** occurs in Balasinor taluka of Kheda with 800 Million tonnes of reserves, processing having **7% share in total reserves of the State**
- **Bauxite** reserves are found in Thasara and Kapadwanj talukas (approx. 89 Million tonnes) and **quartz** reserves exist in Balasinor and Thasar talukas of the district
- Some of the mineral-based industries in Kheda are:
  - **Bauxite calcination plant**
  - **Bentonite pulverizing unit**
  - **Cement plant**
  - **Crockery/ceramic unit**
  - **Glazed tiles**
  - **Marble cutting and polishing**
  - **Quartz crushing unit**

Map 2: Mineral Reserves in Kheda



Source: Kheda District Profile Booklet 2007, Geology & Mining department

<b>INDIAN BAUXITE DEPOSITS</b>	<b>POSITIVE FEATURES</b>	<b>NEGATIVE FEATURES</b>
<b><i>EASTERN GHATS (ODISHA &amp; ANDHRA PRADESH)</i></b>	Large bauxite deposits (10 to 360 million tons), amenable to mechanised mining, soft low silica gibbsitic bauxite with low level of other impurities. Easily digestable bauxite at low temperature / pressure conditions.	Comparatively low alumina, high iron, away from the ports, some have poor infrastructure and covered by forest.
<b><i>GUJARAT</i></b>	Fairly high alumina, low silica, low organic carbon, low moisture content, near to ports, limited environmental hazards and average infrastructure	Small scattered deposits, mixed gibbsitic–boehmitic hard bauxite with significant CaO and sulphur content at places.
<b><i>MAHARASHTRA</i></b>	Fairly high alumina, low silica, predominantly gibbsitic bauxite with low level of impurities. Some deposits are just near the sea coast.	Small scattered deposits with poor infrastructure / ports and some have forest cover.
<b><i>GOA</i></b>	Soft gibbsitic bauxite with low level of impurities, well developed port, medium sized deposits. Easily digestable bauxite.	High silica bauxite with low to medium alumina.

Source: IBAAS Summit:2015



## Statistics :

Sr. No:	Tehsil	Number of Bauxite Mining Leases	Area Covered Approx (Hectare)	Reserve (Approx M.T.)
01	Kapadvanj	15	87:00:00	89 Million Ton
02	Thasara			

Source: web based Data: based on approximation and subject to variation