

**PRELIMS  
SAMPORNA  
FACT FILE**

# Geography

## MINERAL BELTS OF INDIA & IMPORTANT MINERALS



# PRELIMS SAMPOORNA

As IAS prelims 2022 is knocking at the door, jitters and anxiety is a common emotion that an aspirant feels. But if we analyze the whole journey, these last few days act most crucial in your preparation. This is the time when one should muster all their strength and give the final punch required to clear this exam. But the main task here is to consolidate the various resources that an aspirant is referring to.

GS SCORE brings to you, **Prelims Sampoorna**, a series of all value-added resources in your prelims preparation, which will be your one-stop solution and will help in reducing your anxiety and boost your confidence. As the name suggests, **Prelims Sampoorna** is a holistic program, which has 360-degree coverage of high-relevance topics.

It is an outcome-driven initiative that not only gives you downloads of all resources which you need to summarize your preparation but also provides you with **All India open prelims mock tests series** in order to assess your learning. Let us summarize this initiative, which will include:

**GS Score UPSC Prelims 2021 Yearly Current Affairs Compilation of All 9 Subjects**

**Topic-wise Prelims Fact Files (Approx. 40)**

**Geography Through Maps (6 Themes)**

**Map Based Questions**

**ALL India Open Prelims Mock Tests Series including 10 Tests**

**Compilation of Previous Year Questions with Detailed Explanation**

We will be uploading all the resources on a regular basis till your prelims exam. To get the maximum benefit of the initiative keep visiting the website.

To receive all updates through notification, subscribe:



<https://t.me/iasscore>



<https://www.youtube.com/c/IASSCOREofficial/>



<https://www.facebook.com/gsscoreofficial>



<https://www.instagram.com/gs.scoreofficial/>



<https://twitter.com/gsscoreofficial>



<https://www.linkedin.com/company/gsscoreofficial/>



## Target PT QUICK REVISION NOTES



*PRINTED  
NOTES*



**ORDER NOW**

**UPDATED**

## PRELIMS PRACTICE WORKBOOK



*PRINTED  
NOTES*



**ORDER NOW**

## OUR CLASSROOM & ONLINE COURSES

### GS FOUNDATION

- ☑ 1 Year IAS Foundation
- ☑ 3 & 2 Year IAS Foundation
- ☑ GS Mains Foundation

### OPTIONAL FOUNDATION

- ☑ Political Science
- ☑ History
- ☑ Geography
- ☑ Public Administration
- ☑ Anthropology

### MAINS COURSES

- ☑ GS Mains Advance
- ☑ Applied GS
- ☑ Ethics Integrity & Aptitude
- ☑ Essay Writing
- ☑ GS Paper 2
- ☑ GS Paper 3

### TEST SERIES

- ☑ Prelims Test Series
- ☑ GS Mains Test Series
- ☑ Essay Test Series
- ☑ Ethics Test Series
- ☑ Optional Test Series
  - Political Science
  - Geography
  - History
  - Public Administration
  - Anthropology

# MINERAL BELTS OF INDIA AND IMPORTANT MINERALS

## MINERALS BELTS OF INDIA

### The Chotanagpur Belt

- This belt stretches over Jharkhand, Chhattisgarh, Odisha, Bihar, and West Bengal.
- This region is rich in coal, mica, manganese, chromite, ilmenite, bauxite, iron, uranium, phosphate, copper, dolomite, chin-clay, and limestone.
- This region contains almost 100% of Kyanite reserves, 93% of Iron Ore, 84% of coal, and 70% of chromite of the country.

Chotanagpur Belt		
Jharkhand	Odisha	West Bengal
Dhanbad, Hazaribagh, Palamu, Ranchi, Santhal-Pargana, and Singhbhum.	Cuttack, Dhankenal, Kendujhar (Keonjhar), Koraput, Mayurbhanj, Sambhalpur, and Sundargarh.	Bankura, Birbhum, Medinipur, and Purulia

### The Midland Belt

- **States:** Chhattisgarh, Andhra Pradesh, Madhya Pradesh and Maharashtra.
- This belt is rich in manganese ore, mica, bauxite, copper, graphite, limestone, lignite, and marble.

### The Southern Belt

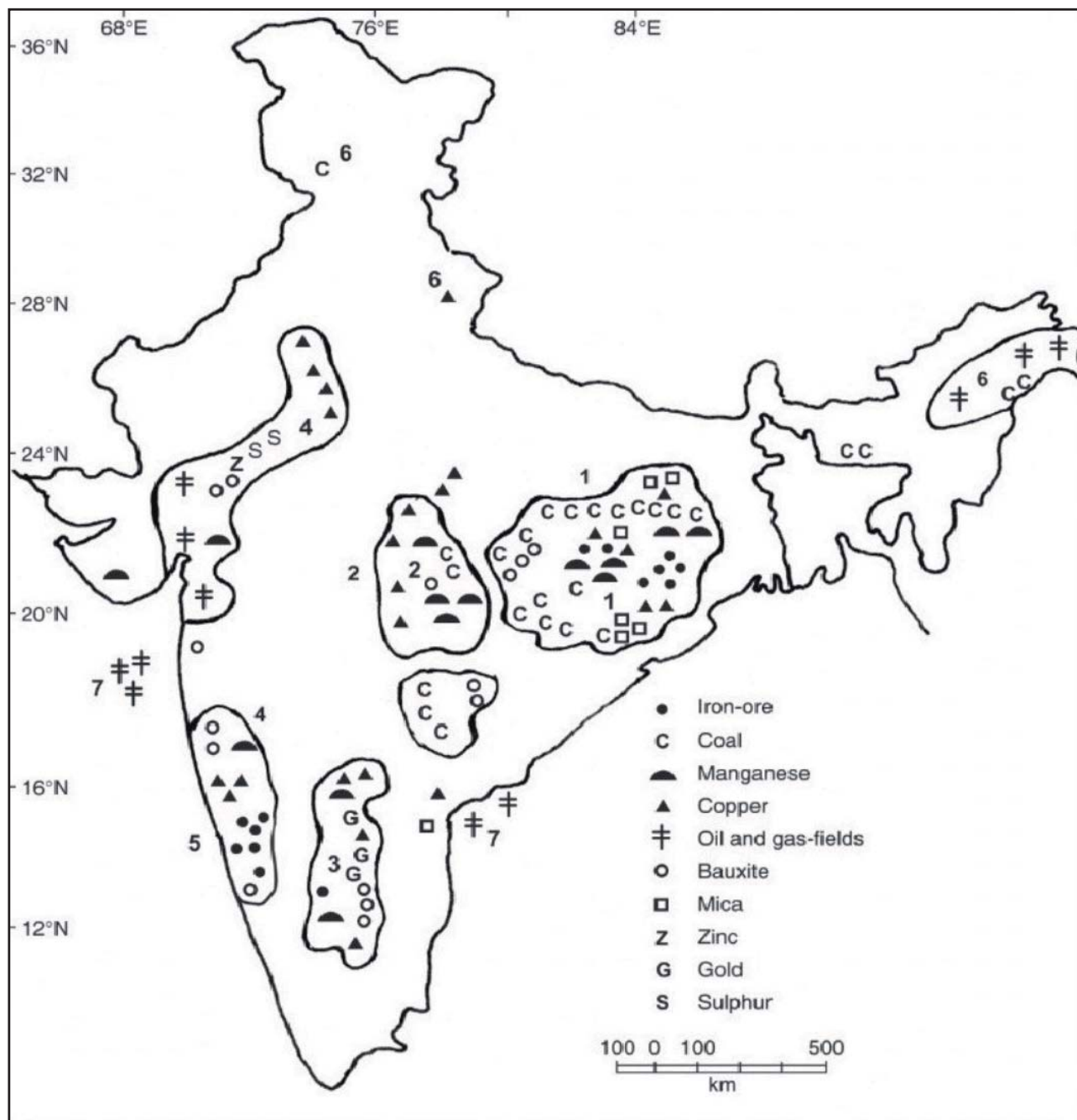
#### Image on Next Page:

- **States:** Andhra Pradesh, Telangana, Karnataka, and Tamil Nadu.
- This belt is rich in iron ore, gold, chromite, manganese, lignite, mica, bauxite, gypsum, asbestos, dolomite, ilmenite, chin-clay, and limestone.

### The Western Belt

- **States:** Rajasthan, Gujarat, and Maharashtra.
- This belt is rich in non-ferrous metals like copper, lead, zinc, uranium, mica, salt, manganese, asbestos, building stones, precious stones, etc.





## The South-Western Belt

- ◉ **States:** Goa, Karnataka, and Kerala.
- ◉ It contains the deposits of iron-ore, ilmenite, zircon, monazite sands, garnet, chin-clay, bauxite, mica, limestone and soapstone.

## The Himalayan Belt

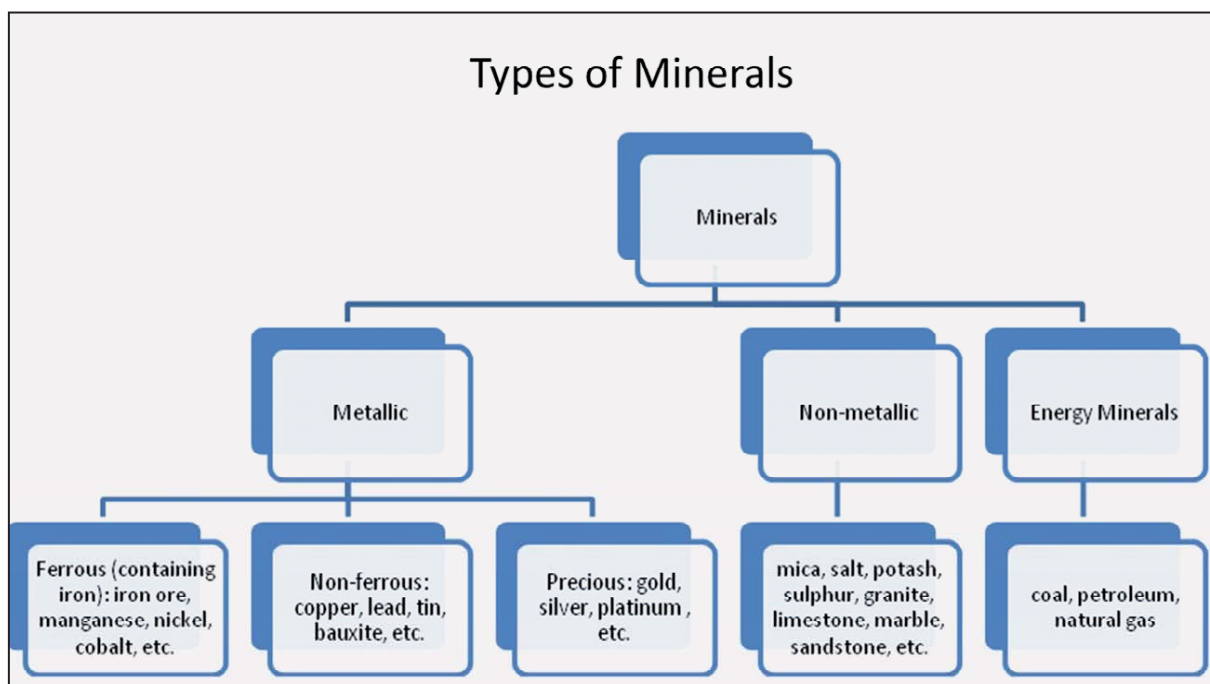
- ◉ **Regions:** Himalayan Regions
- ◉ Generally poor in metallic minerals. Copper, lead, zinc, bismuth, bauxite, antimony, nickel, cobalt, tungsten, gold, silver, gypsum, limestone, and dolomite are found in this region.

## The Indian Ocean

- **Regions:** The continental shelf of the Arabian Sea and Bay of Bengal.
- The sea bed is rich in mineral oil, and natural gas. It also contains high grade nodules of manganese, phosphate, barium, aluminium, silicon, iron, titanium, sodium, potassium, chromium, monazite, ilmenite, magnetite and garnet.

## CLASSIFICATION OF MINERALS

Minerals can be grouped under two main categories of metallic and non-metallic on the basis of chemical and physical properties.



## IMPORTANT MINERALS

### Iron Ore Distribution

#### ■ Global Distribution

Top 10 Exporters of Iron ore 2018-2019			
Rank	Exporter	Rank	Exporter
1.	Australia	6.	Sweden
2.	Brazil	7.	India
3.	South Africa	8.	Netherlands
4.	Canada	9.	Russia
5.	Ukraine	10.	China

Top 10 Importers of Iron Ore 2018-2019

Rank	Importer	% World	Rank	Importer	% World Total
1.	China	65.3%	6.	Taiwan	1.7%
2.	Japan	8.1%	7.	France	1.2%
3.	South Korea	4.7%	8.	Malaysia	0.9%
4.	Germany	3.1%	9.	India	0.9%
5.	Netherlands	2%	10.	Egypt	0.9%

## Distribution in India

- Odisha is the leading producer of iron ore accounting for 51% of total production followed by Chhattisgarh (17%), Karnataka (14%), Jharkhand (11%) and remaining (7%) production was reported from Andhra Pradesh, Goa, Madhya Pradesh, Maharashtra and Rajasthan.
- Geologically, iron ore is owned from following types of deposits.
  - Banded Iron Formation of Precambrian age**
    - Archean schist belts:** Jharkhand, Odisha, Karnataka, Chhattisgarh, Goa (high grade deposits).
    - Granulite terrain of South India:** Tamil Nadu and Kerala.

Types of Iron Ore

Name	Formula	% of Fe
Hematite	Fe <sub>2</sub> O <sub>3</sub>	69.9
Magnetite	Fe <sub>3</sub> O <sub>4</sub>	74.2
Limonite	HFeO <sub>2</sub>	63
Siderite	FeCO <sub>3</sub>	48.2

### Image on Next Page:

- Sedimentary Iron Ore Deposits of siderite and limonite composition** (30–40% Fe) associated with Iron stone shales of Lower Gondwana age in coal field areas of Bihar, West Bengal, and Assam.
- Lateritic ores derived** from the sub-aerial alteration of gneisses, schists, basic lava etc. under humid tropical condition. Deccan Trap, Chotnagpur gneisses (30–40% Fe)
- Apatite Magnetite Rocks of Singhbhum Copper Belt:** Occur in form of a zone associated with granodiorite on the hanging wall side of Copper lodes.
- Titaniferous and Vanadiferous Magnetite deposits** occurring in form of lensoidal bodies associated with intrusive ultramafic – gabbroic rocks of Singhbhum (Jharkhand), Mayurbhanj, Kendujhar (Odisha) and Southern districts of Karnataka (Hassan and Tumkuru districts).
- Fault and Fissure filling Deposits of magnetite** within gneisses found at Veldurti and Ramallakota in Kurnool dist., AP (Fe: 50–65%, SiO<sub>2</sub>: 3–18%)

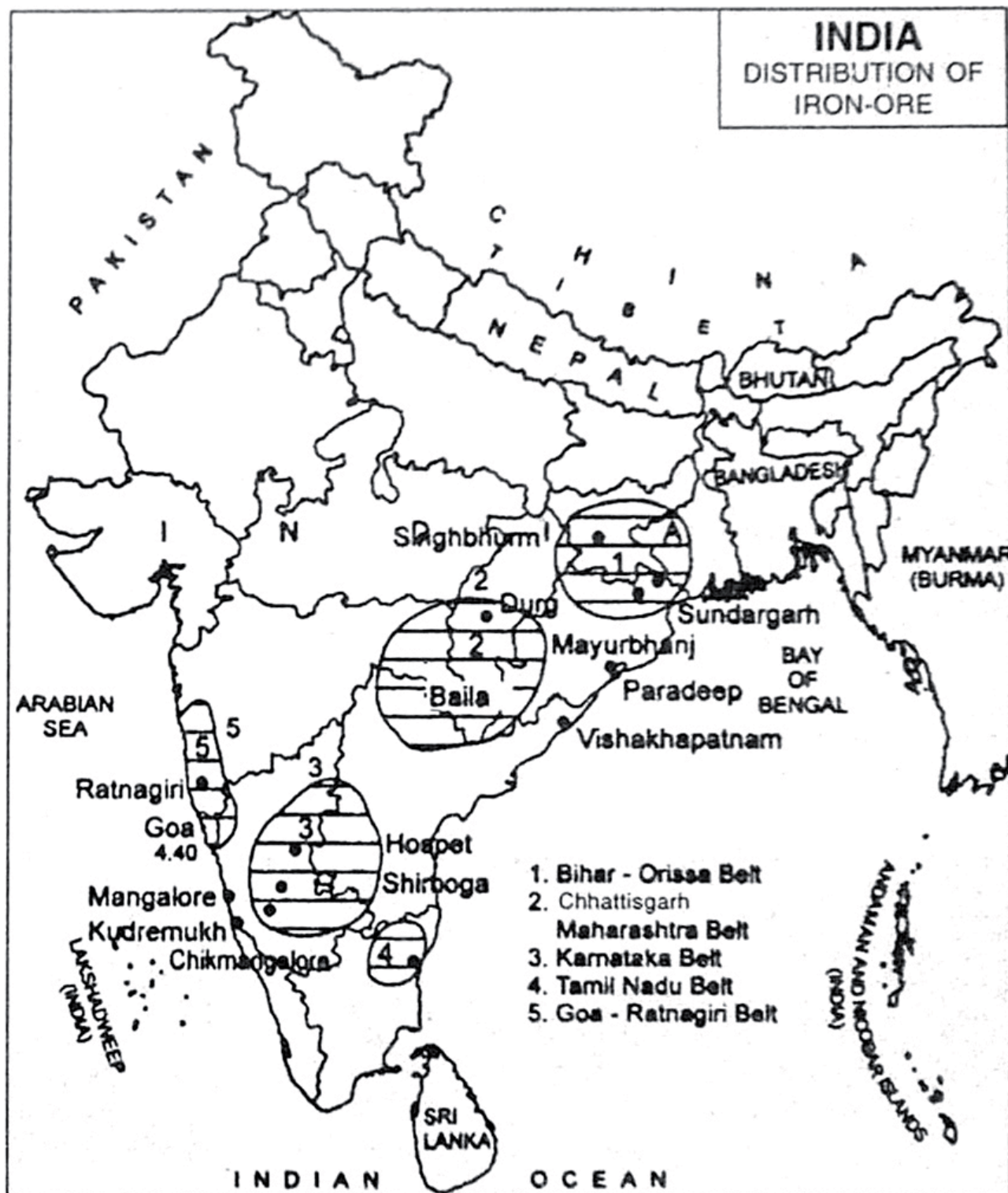
## Manganese Distribution

### ■ Global Distribution

Top 10 Manganese Ore Producing Countries 2018

Rank	Countries	% World Total	Rank	Countries	% World Total
1	South Africa	32	6	China	6
2	Australia	17	7	India	5





3	Gabon	12	8	Ukraine	4
4	Ghana	7	9	Malaysia	3
5	Brazil	6	10	Ivory Coast	2

Top 5 Largest export destination of India		
Country	Import value (2018-19)US\$ Billion	Percentage Share(2018-19)
1.USA	52.43	15.88
2.United Arab Emirates	30.13	9.13
3.China PRP	16.75	5.07
4.Hong Kong	13.00	3.94
5.Singapore	11.57	3.51

Top 5 Import sources of India		
Country	Export value (2018-19)US\$ Billion	Percentage Share(2018-19)
1. China PRP	70.32	13.68
2. USA	35.55	6.92
3.United Arab Emirates	29.78	5.79
4.Saudi Arab	28.48	5.54
5.Iraq	22.37	4.35

## ■ Major Manganese Ore mining centre across world

- ▶ **South Africa** - Kuruman area of Kalahari Basin.
- ▶ **Gabon** -Moanda.
- ▶ **Australia** - Groote Eylandt in the Gulf of Carpentaria.

### *Image on Next Page:*

- ▶ **Russia** - Nikopol Basin, Urals, Western and Eastern Siberia.
- ▶ **Brazil** - The Serra do Navio and Corumba district of Mato Grosso.
- ▶ **Mexico** - Molango region.

## ■ Distribution in India

### **Manganese Ore reserves (in descending order)**

- ▶ Odisha
- ▶ Karnataka
- ▶ Madhya Pradesh
- ▶ Maharashtra

### **Manganese Ore production (in descending order)**

- ▶ Madhya Pradesh
- ▶ Odisha
- ▶ Maharashtra
- ▶ Karnataka



## Bauxite Distribution

### ■ Global Distribution

- ▶ The **world bauxite reserves** are estimated at 30 billion tonnes and are located mainly in **Guinea (25%), Australia (20%), Vietnam (12%), Brazil (9%), Jamaica (7%), Indonesia, Guyana and China (3% each)**.
- ▶ The **world production of bauxite** was estimated at 304 million tonnes in 2017. **A**
- ▶ **ustralia continued to be the major producer and accounted for about 29%** share in total production, followed by China (21%), Guinea (15%), Brazil (13%) and India (7%).

- ▶ **Exports of bauxite** decreased drastically by 45% to 1,529 thousand tonnes in 2017-18 from 2,791 thousand tonnes in 2016-17.
- ▶ **Exports were mainly to China (83%), Kuwait (7%),** Nepal (3%) and Hong Kong & Mozambique (2% each).
- ▶ **In 2017-18, imports of bauxite** decreased considerably by 23% to 1,461 thousand tonnes from 1,895 thousand tonnes in the previous year.
- ▶ Imports were mostly from **Guinea (40%), Pakistan (15%),** Ghana (13%), Trinidad (9%), Brazil (8%), China (6%) and Sierra Leone, Jamaica & Solomon (3% each).

## ■ Distribution in India

### *Image on Next Page:*

- ▶ **Odisha alone accounts for 51% of country's resources of bauxite** followed by Andhra Pradesh (16%), Gujarat (9%), Jharkhand (6%), Maharashtra (5%) and Madhya Pradesh & Chhattisgarh (4% each).
- ▶ Major bauxite resources are concentrated in the **East Coast bauxite deposits in Odisha and Andhra Pradesh.**
- ▶ **Major Bauxite Centres in India**
  - **Odisha:** Kalahandi, Sambalpur, Bolangir and Koraput.
  - **Jharkhand:** The patlands of Jharkhand in Lohardaga.
  - **Gujarat:** Bhavnagar, Jamnagar in Gujarat.
  - **Chhattisgarh:** Amarkantak plateau
  - **Madhya Pradesh:** Katni-Jabalpur area and Balaghat.
  - **Maharashtra:** Kolaba, Thane, Ratnagiri, Satara, Pune and Kolhapur.
  - Tamil Nadu, Karnataka and Goa are minor producers of bauxite.

## Copper Distribution

### ■ Global Distribution

- ▶ **Chile:** Most of the copper mines are located on the western side of the Andes with main site located in Chuquibambilla.
- ▶ **China**
- ▶ **Peru:** Cerro de Pasco, Morococha, Casapalca and Toquepala.
- ▶ **USA:** Arizona, New Mexico, Montana, Nevada and Utah.
- ▶ **Australia:** Queensland, Kanmantoo in South Australia and Boddington in Western Australia etc.

### ■ Production:

**Chile, the world's leading copper producer** by far, produced an estimated 5.6 million metric tons of copper in 2019.

**In second place is Peru,** with an estimated copper mine production of 2.4 million metric tons in the same year.

**The world's third-largest copper producer from mines is China.** In 2019, China produced an estimated 1.6 million metric tons of copper from mines, which is over three times less than Chile's production.

### ■ Imports & Exports:

- ▶ Overall copper exports from India during the April 2018 to March 2019 period were down 70% from the fiscal year 2017/18. India has an installed copper refining capacity of 1 million tonnes.





- ▶ During FY 2018-19, **exports fell by 87.4 per cent, whereas imports increased by 131.2 per cent.**
- ▶ India imported refined copper from, Japan, Congo, Singapore, Chile, Tanzania, the UAE and South Africa while exported refined copper to China, Taiwan, Malaysia, South Korea and Bangladesh during 2018-19.
- ▶ Share of exports towards China has increased, from it being 63 per cent during 2017-18 to 75 per cent during 2018-19 and share of imports from Japan has increased from it being 68 per cent during FY2017-18 to 71 per cent during FY2018-19.

- Imports of copper ore and concentrates fell by 44.6 per cent in the last fiscal due to lack of requirement from the Tuticorin smelter.

## ■ Distribution of Copper in India

- **Madhya Pradesh:** Malanjkhand copper mines of Balaghat district, Betul district.
- **Rajasthan:** Ajmer, Alwar, Bhilwara, Chittaurgarh, Dungarpur, Jaipur, Jhunjhunu, Pali, Sikar, Sirohi and Udaipur districts. **Khetri-Singhana belt in Jhunjhunu district is the most important copper producing area.**



- **Jharkhand:** Singhbhum is the most important copper producing district. Hazaribagh district, Santhal Parganas and Palamu districts.
- Copper-bearing ores, in India, fall into three main classes i.e. oxides, carbonates and the sulfides.
  - The important **oxide ores** include **cuprite ( $\text{Cu}_2\text{O}$ )** and **tenorite ( $\text{CuO}$ )**.
  - The **carbonate ores** are
    - Malachite ( $\text{Cu}_2\text{CO}_3(\text{OH})_2$ ).
    - Azurite ( $\text{Cu}_3(\text{CO}_3)_2(\text{OH})_2$ ).
  - The common sulfides of copper include
    - Chalcopyrite ( $\text{CuFeS}_2$ )
    - Covellite ( $\text{CuS}$ )
    - Chalcocite ( $\text{Cu}_2\text{S}$ )
    - Bornite ( $\text{Cu}_5\text{FeS}_4$ ).

## Nickel Distribution

### ■ Global Distribution

- In 2019 world nickel consumption is estimated to be 2.4 million tonnes — 2.5 per cent higher than in 2018.



- ▶ **China accounts for more than half of world nickel consumption**, and in the year (2019) to September, nickel consumption grew 13 per cent compared to the same period in 2018.
- ▶ **Country-wise distribution**
- ▶ **Laterite-Nickel Ore:** Cuba, New Caledonia, Indonesia, Philippines, Burma, Vietnam and Brazil.
- ▶ **Nickel Sulphide ore:** Canada, Russia, Australia, China and South Africa, etc.

## ■ Distribution of Nickel in India

- ▶ Nickel occurs principally as oxides, sulphides and silicates in India.
- ▶ Important occurrence **is nickeliferous limonite in the overburden of chromite in Sukinda Valley, Jajpur district, Odisha.**
- ▶ In addition, **nickel is found associated with uranium deposits at Jaduguda, Jharkhand** and a process are being developed for its recovery.
- ▶ Resources are spread over in **Singhbhum East district of Jharkhand and Jajpur, Keonjhar & Mayurbhanj districts of Odisha.**
- ▶ It is found as oxide in Odisha which has 93% of the India's nickel resources. In Jharkhand, nickel is found along with copper and uranium deposits.
- ▶ Nickel is also produced as a by-product of copper mining, as in the **Ghatsila area of Jharkhand** where nickel occurs in small quantities in the copper sulphide ore

*Image on Next Page:*

## Chromite Distribution

### ■ Global Distribution

Most of the world's known chromite occurs in two **stratiform deposits**: the **Bushveld Complex in South Africa and the Great Dyke in Zimbabwe.**

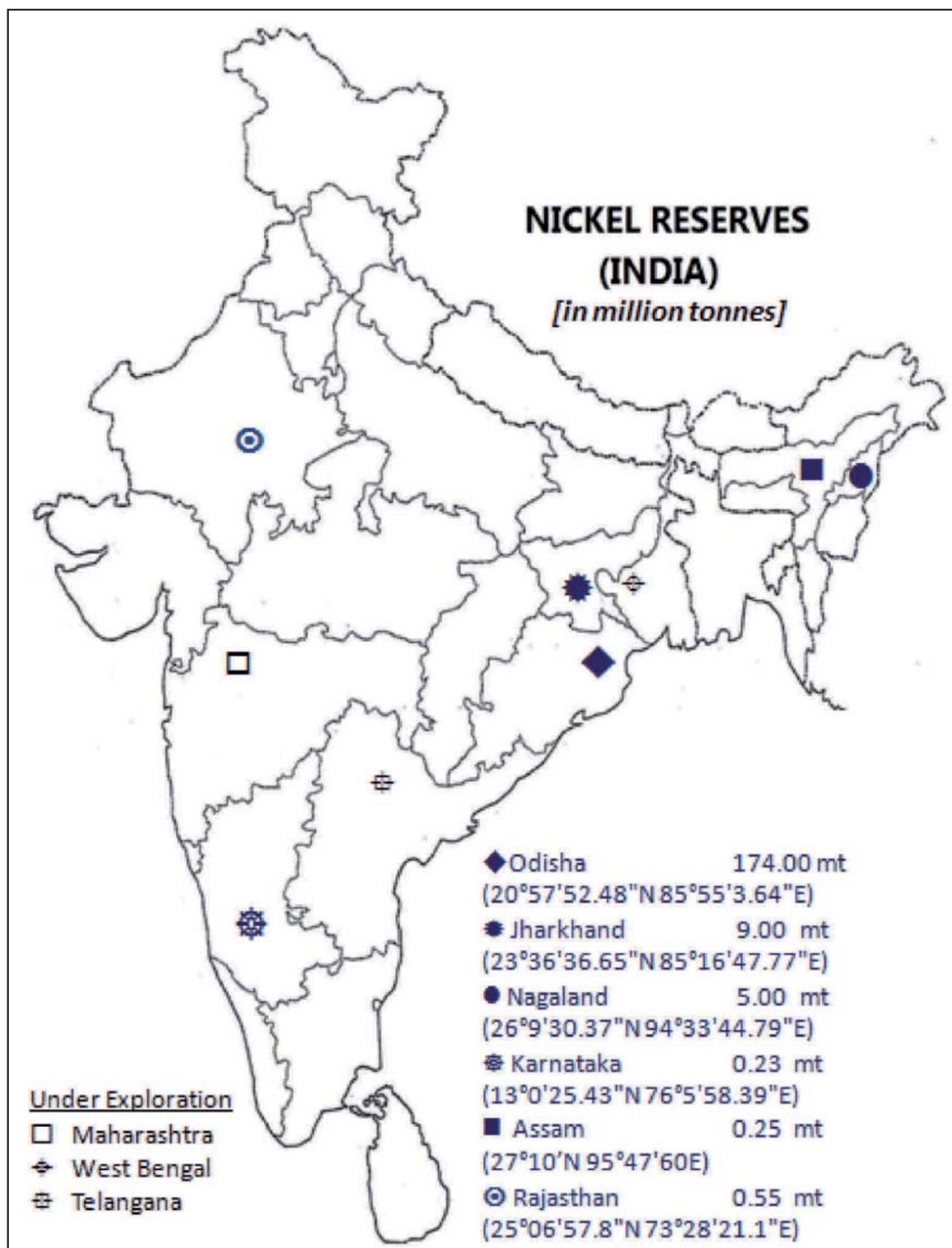
- ▶ Other important **stratiform deposits include**: the Stillwater Complex in Montana, the Kemi Complex of Finland, the Odisha Complex of India, the Goias in Brazil, the Mashaba Complex of Zimbabwe and small deposits in Madagascar. **Nearly all of these are Precambrian in age.**
- ▶ **Podiform deposits** are known in Kazakhstan, Russia, the Philippines, Zimbabwe, Cyprus, and Greece.

### ■ Distribution in India

- ▶ More than 96% resources of chromite are located in Odisha, mostly in Jajpur, Kendujhar and Dhenkanal districts.
- ▶ Minor deposits are scattered over Manipur, Nagaland, Karnataka, Jharkhand, Maharashtra, Tamil Nadu, Telangana and Andhra Pradesh.
- ▶ At present, mining operations for chromite are restricted in the Sukinda ultramafic belt, in the Baula Nausahi chromite belt in Odisha, in Hassan district of Karnataka and minor quantity is also produced in Maharashtra.

### ■ Exports

- ▶ Exports of chromite decreased sharply to 82 thousand tonnes in 2017-18 from 230 thousand tonnes in the previous year. Out of total chromite exported in 2017-18, the share of about 41% was of chromite concentrate, while chromite ore (others) accounted for 59%. There were exports of chrome ore lumps to only UAE in 2017-18.



- On the whole, exports were mainly to China (77%) and Japan (23%). In 2017-18, 56 tonnes of chromium & alloys (scrap) were exported which was 30% less from that of the preceding year. Exports of chromium & alloys (scrap) were mainly to USA (68%), Indonesia (13%), and Thailand (5%).

## ■ Imports

- ▶ Imports of chromite increased slightly by 4% to 161 thousand tonnes in 2017-18 from 154 thousand tonnes in the previous year. Imports were mainly from, South Africa (71%) and Oman (22%). Imports of Chrome Ore Concentrate were only from South Africa.
- ▶ Imports of Chromium and Alloys in 2017-18 were at 1,084 tonnes as compared to 982 tonnes in the previous year. Imports were mainly from Russia (72%), UK (18%) and China (4%). Imports of Chromium and Scrap increased to 2 tonnes in 2017-18 from negligible in 2016-17.

## Lead and Zinc Distribution

### ■ Global Distribution

- ▶ In 2019, **China produced the world's largest volume of lead**, despite having the **second largest lead reserves in the world**.
- ▶ Global lead metal reserves were 87.8Mt (2018) with **Australia having the largest lead reserves** globally followed by China, Russia, Peru, Mexico, the US and India.
- ▶ Global lead mine or metal content in ore production was estimated to have fallen to 4.7Mt in 2018 - down by 0.9% over 2017.

### ■ Distribution in India

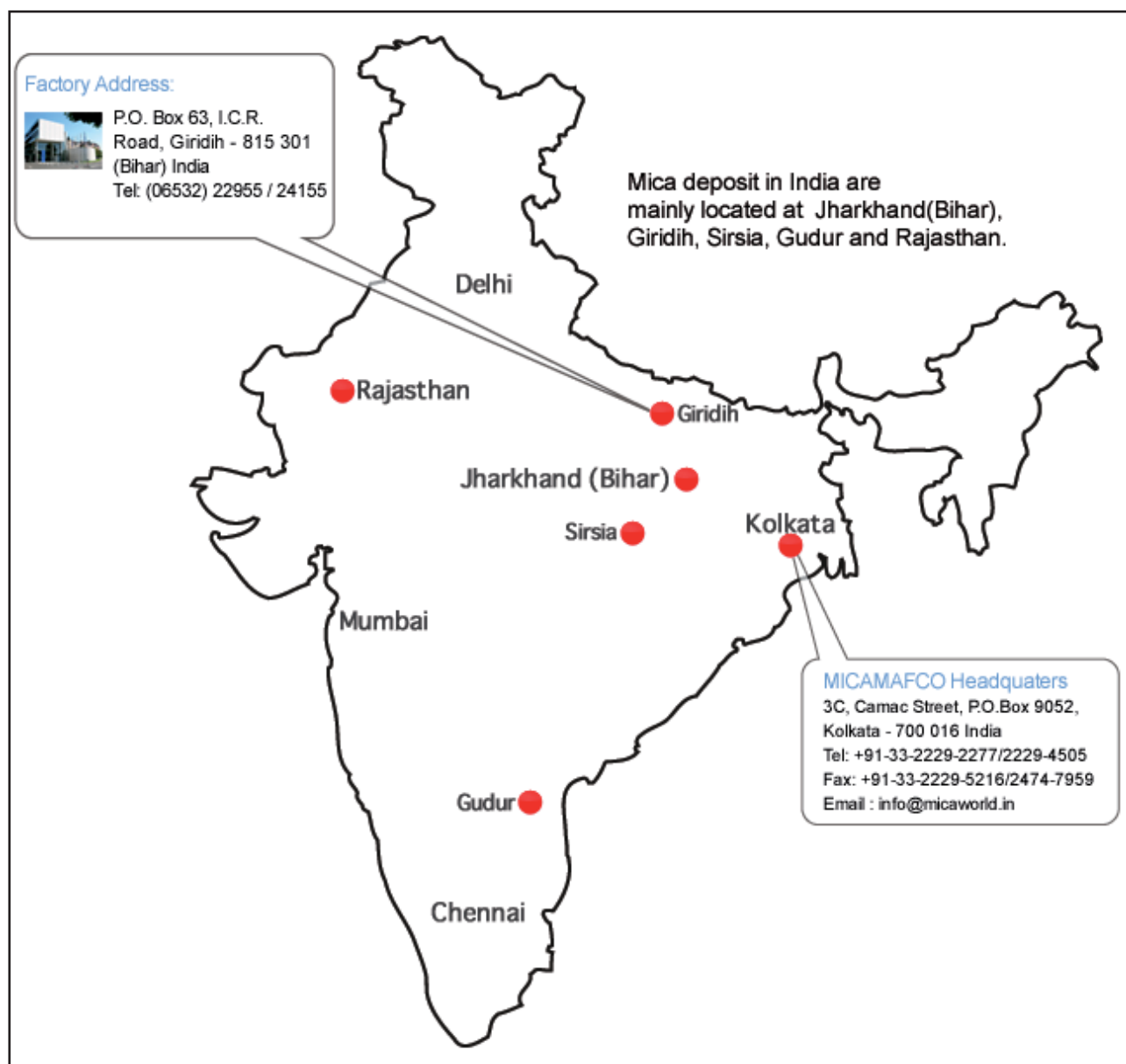
- ▶ India has a combined zinc-lead production capacity of more than one million tonnes per annum.
- ▶ **Rajasthan is endowed with the largest resources of lead-zinc ore in India.**
- ▶ Resources are also established in Andhra Pradesh, Maharashtra, Gujarat, Meghalaya, Odisha, Sikkim, Tamil Nadu, Uttarakhand and West Bengal.
- ▶ **Rampura Agucha is zinc and lead mine in the Bhilwara district of Rajasthan, India. It has world's largest deposits of zinc and lead.**
- ▶ Production grew by **14.6% during FY19 as compared with the 18.4% increase during FY18.**
- ▶ Refined lead is imported from South Korea, Australia, Malaysia, UAE and Myanmar and exported to the US, South Korea, Taiwan, Vietnam & Thailand. **Since the last two years (FY18 and FY19) India has become a net exporter of refined lead.** Exports increased by 10.3% during FY19 whereas imports fell by 1.5% during the year.
- ▶ Zinc production declined by 12.0% during FY19 on account of lower availability of zinc concentrates.
- ▶ Unwrought zinc is imported from South Korea, UAE, Australia, Spain and Taiwan and exported to China, South Korea, Malaysia, Taiwan, Nepal, UAE, USA, Vietnam, Saudi Arabia, Montenegro and Singapore. During FY19, exports have fallen sharply by 32.1% on account of fall in domestic production of zinc ingots.

## Mica Distribution

*Image on Next Page:*

### ■ Distribution of Mica in India

- ▶ The three major types of mica found in India are: muscovite (potash or white mica), phlogopite (magnesium or amber mica) and biotite.



- Important mica bearing pegmatite occurs in Andhra Pradesh, Bihar, Jharkhand, Maharashtra, Odisha, Rajasthan and Telangana.
- Andhra Pradesh leads with 41% share in country's total resources followed by
  - Rajasthan (28%)
  - Odisha (17%)
  - Maharashtra (13%)
  - Bihar (2%) and
  - Small quantities in Jharkhand and Telangana.

#### Top 5 export destinations of "Mica, including splittings; mica waste." from India in 2019:

- China with a share of 65% (37 million US\$)
- Japan with a share of 9.18% (5.32 million US\$)

- Belgium with a share of 6.18% (3.58 million US\$)
- USA with a share of 3.8% (2.2 million US\$)
- France with a share of 2.03% (1.18 million US\$)

#### **Top 5 trading partners (import of “Mica, including splittings; mica waste.”) of India in 2019:**

- China with a share of 35% (720 thousand US\$)
- Madagascar with a share of 18.9% (382 thousand US\$)
- Japan with a share of 12.3% (250 thousand US\$)
- USA with a share of 10.6% (214 thousand US\$)
- Korea with a share of 6.66% (134 thousand US\$)

## **Gold Distribution**

### **■ Global Distribution**

**Australia and South Africa hold a large share of the world’s gold mine reserves**, accounting for 10,000 metric tons and 5,300 metric tons, respectively. Worldwide, the production of gold reached some 3,300 metric tons in 2019. **China currently produces about 13 percent of the world’s gold.**

*Image on Next Page:*

### **■ Imports:**

- ▶ Gold imports fell 14.23 per cent to \$ 28.2 billion during 2019-20. Imports of the yellow metal stood at \$ 32.91 billion in 2018-19.
- ▶ India is the largest importer of gold, which mainly caters to the demand of the jewellery industry. In volume terms, the country imports 800-900 tonnes of gold annually.

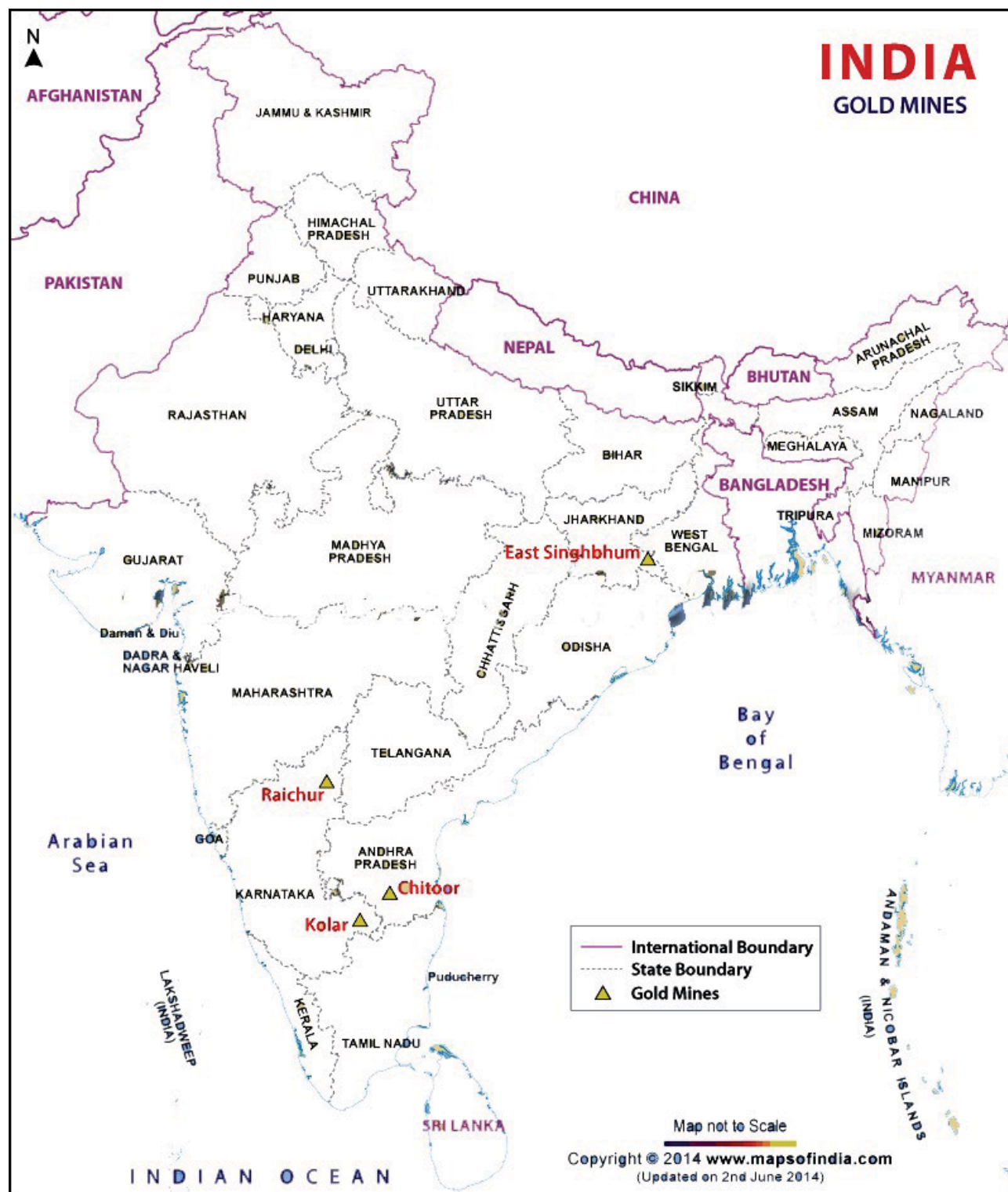
### **■ Gold Deposits in India**

- ▶ There are three gold fields in the country, namely Kolar Gold Field, Kolar district, Hutti Gold Field in Raichur district (both in Karnataka) and Ramgiri Gold Field in Anantpur district (Andhra Pradesh).
- ▶ Karnataka is the largest producer of gold in India.

#### **The ten largest gold mines in the world:**

- ▶ South Deep gold mine, South Africa
- ▶ Grasberg gold mine, Indonesia
- ▶ Olimpiada gold mine, Russia
- ▶ Lihir gold mine, Papua New Guinea
- ▶ Norte Abierto gold mine, Chile
- ▶ Carlin Trend gold mine, USA
- ▶ Boddington gold mine, Western Australia
- ▶ Mponeng gold mine, South Africa





- Pueblo Viejo gold mine, Dominican Republic
- Cortez gold mine, USA

## Silver Distribution

### ■ Global Distribution

- **Mexico is the world leader in terms of silver production** from mines, followed by countries such as Peru, Australia, China, Chile, Bolivia, USA and Russia among others.



## ■ Distribution in India

- Top countries for Silver export from India

Country	Value (USD Million)
China, Hong Kong SAR	693.99
USA	286
United Kingdom	47.7
United Arab Emirates	35.68
Rep. of Korea	27.14

- By states, largest resources in terms of silver ore in descending order: Rajasthan>Jharkhand>Andhra Pradesh>Karnataka.
- In terms of production, following states are the top producer of silvers in descending order: Andhra Pradesh>Bihar-Jharkhand>Rajasthan>Karnataka.

\*\*\*\*\*

**TOP 100**  
ALL INDIA RANKING  
CSE 2020

8 9 12 13 14 16 17 19 20  
24 26 28 30 31 36 38 41 45 50  
51 52 55 56 58 59 67 68 70 71 73  
74 76 78 83 84 85 86 89 93 98 100

**SUCCESS IS A PRACTICE WE DO!**

**TOP 100**  
ALL INDIA RANKING  
CSE 2019

3 6 10 11 16 17 21 22 28  
30 33 38 39 42 44 46 53 54 59 66 69  
70 72 77 78 80 82 84 86 87 94 97 98

**TOP 100**  
ALL INDIA RANKING  
CSE 2018

2 3 5 7 27 36 37 40 44 49  
51 52 56 58 62 74 81 89 92 94 98 100

**TOP 100**  
ALL INDIA RANKING  
CSE 2017

3 10 19 31 33 35 40 41 44 45 48  
54 57 63 64 68 71 75 77 80 83 93 97 100