Q5

Despite India being one of the countries of the Gondwanaland, its mining industry contributes much less to its Gross Domestic Product(GDP) in percentage. Discuss.

UPSC Civil Services Mains 2021 · GS I · 10 marks · Natural Resources and Industries

Distribution of key natural resources across the world (including South Asia and the Indian sub-continent); factors responsible for the location of primary, secondary, and tertiary sector industries in various parts of the world (including India).

Core demand of the question

- Despite India being one of the countries of the Gondwanaland, its mining industry contributes much less to its Gross Domestic Product (GDP) in percentage. Discuss
- Keep the discussion within a 10-mark length

Revision summary

India's Gondwana geology holds coal and many metals.

Mining's GDP share is small because services dominate and value is booked downstream.

Clearances, FRA, and social conflict slow new output.

Informal mining and raw exports further shrink measured mine GVA.

Policy should push beneficiation and lawful auctions, not only more pits.

Introduction

India sits on Gondwana coal, iron, manganese, and bauxite, yet mining is a small slice of GDP. Geology gave a store. Policy, value addition, and a services-heavy growth path decide the percentage.

Body

The Gondwana endowment

- Peninsular India holds Gondwana coal in the Damodar, Son, Mahanadi, and Godavari belts, plus Dharwar and Cuddapah metals. The rock is real.
- Australia and South Africa, also Gondwanan, show that the same supercontinent story can feed a large mining GDP when the political economy is extractive-export.

Why the GDP share stays small

- GDP is now dominated by services and a diversified manufacturing base; even a large absolute mineral output is a small percentage of a $3-trillion-class economy.
- Mining is upstream and often low value-added. Iron ore and raw bauxite leave more GDP in steel and aluminium than in the pit, and those factories sit in industry, not in 'mining'.
- Forest Rights, Fifth Schedule consent, **MMDR** auctions, and delayed clearances slow new mines even where the Survey of India has mapped ore.

- Illegal and informal mining, and a history of captive pits, undercount or underperform the formal GVA.
- Coal is large in energy but shrinking as a growth story under **just transition** and import of coking coal for steel quality.

What would raise the share without a resource curse

- Beneficiation, pellet, and downstream parks near the pit; the National Mineral Policy 2019 already points that way.
- Transparent auctions and district mineral funds that actually build local capital, so production is socially licensed.

Flow diagram

Gondwana ore -> Mine GVA

Mine GVA -> Downstream industry GDP

Services share -> Small mining percent

Clearance FRA MMDR -> Mine GVA

Conclusion

Gondwana explains the ore. A small mining share of GDP is explained by a services-led economy, downstream booking of value, and a slow, conflicted extractive regime. The cure is value addition and lawful speed, not a myth that India lacks rock.

Facts & figures

Gondwana coal
Permian coal measures of eastern and central India, the backbone of thermal generation.

MMDR Act
Mines and Minerals (Development and Regulation) framework for leases and auctions.

National Mineral Policy 2019
Seeks exploration, auction transparency, and downstream linkages.

DMF
District Mineral Foundation, meant to spend a share of royalty on mining-affected people.

Services share
Over half of Indian GVA, which arithmetically shrinks mining's percentage even when tonnage grows.