Geography · GS - I

Discuss the natural resource potentials of ‘Deccan Trap’.

EXAM YEAR	PAPER	SUBJECT
2022	GS - I	Geography

MARKS	WORD LIMIT
10	~150 words

Answer Hint

The Deccan Trap’s volcanic basalt formations support fertile black soils, mineral resources, groundwater storage in weathered and fractured zones, construction materials and distinctive landscapes. Its resource potential varies according to geological structure, weathering and regional conditions.

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Model Answer

Introduction

The Deccan Trap is a vast volcanic province formed mainly by successive basaltic lava flows during the Late Cretaceous period. It covers large parts of Maharashtra and adjoining regions of western and central India.

Body

Natural Resource Potential

1. Fertile Soil: Weathering of basalt produces black cotton soil (regur), rich in clay minerals and suitable for cotton, soybean, sugarcane and other crops under appropriate water conditions.

2. Mineral Resources: Basaltic formations contain minerals such as zeolites, while associated geological formations may host other economically valuable minerals.

3. Groundwater: Weathered, jointed and fractured basalt can store and transmit groundwater, supporting irrigation and domestic requirements. However, availability is uneven.

4. Construction Materials: Basalt provides durable building stone, road metal and aggregates used in infrastructure development.

5. Industrial Potential: Certain basalt-associated minerals have applications in construction, filtration and industrial processes.

6. Tourism and Ecology: Volcanic landforms, plateaus, waterfalls and geological sites support tourism and scientific research.

Conclusion

The Deccan Trap offers significant agricultural, mineral, groundwater and construction-resource potential. Sustainable extraction, groundwater management and soil conservation are essential to maximise these benefits.

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