Orinoco Belt & Guiana Shield

Prelims: *Current events of national and international importance | Geography*

Why in News?

The United States has recently turned its attention to Venezuela's vast mineral reserves, particularly in the Orinoco Belt and the Guiana Shield.

Orinoco Belt

- The Orinoco Belt (Faja Petrolífera del Orinoco) in Venezuela holds the ***world's largest petroleum deposits***, primarily extra-heavy crude oil.

  20% *of the world's proven reserves of heavy and extra-heavy crude oil or a quarter of the reserves of all nations within OPEC lie within Venezuela's Orinoco Belt.*

- **Location -** Located in the southern part of Venezuela's Orinoco River basin (third largest river in the world).
- It stretches across 5 Venezuelan states Guárico, Anzoátegui, Monagas, Delta Amacuro and northern Bolívar.
- **Divided Areas -** The belt is categorized into 4 main production areas- **Boyacá, Junín, Ayacucho, and Carabobo.**
- **Extra-Heavy Crude -** The oil is very dense (low API gravity), similar to liquid asphalt, and often requires blending with diluents (lighter liquids) to flow through pipelines.



Guiana Shield

- The Guiana Shield is a 1.7- to 2-billion-year-old ***Precambrian geological formation*** in northeast South America, representing one of the oldest stable cratons on Earth.
- It is recognized as the ***"greenhouse of the world"*** for housing the largest remaining block of pristine tropical forest.
- **Geography and Political Divisions** -
  - The Shield underlies 6 countries and territories
  - **The Guianas** - Guyana, Suriname, and French Guiana.
  - **Southern Venezuela** - Including the Bolivar and Amazonas states.
  - **Northeastern Brazil** -Primarily the states of Roraima, Pará, and Amapá.
  - **Southeastern Colombia-** Parts of the Guainía and Vaupés departments.
- The region is characterized by dramatic elevations known as the Guiana

Highlands, home to unique "table-top" mountains called tepuis.

- **Mount Roraima -** A massive tepui at the borders of Guyana, Brazil, and Venezuela; it famously inspired Sir Arthur Conan Doyle's The Lost World.
- **Pico da Neblina -** The highest point in the Shield and in Brazil, reaching 2,995 meters.
- **Angel Falls -** Located in Venezuela, it is the world’s highest uninterrupted waterfall, originating from the Auyán-tepui.

The Guiana Shield holds approximately 20% of the world's fresh water and stores about 18% of the world's tropical forest carbon.

- **Minerals -** It contains massive deposits of **gold**, diamonds, bauxite, and iron ore.



References

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