

Delhi Morphological Ridge

Prelims: Indian Geography | General issues on Environmental ecology

Why in News?

Recently, Supreme Court issued show cause notices to senior Delhi government officials for giving nod to the private housing project in the morphological ridge area without proper consultation with the relevant authorities.

- **The Delhi Ridge** - It is a prominent geological feature and biodiversity hotspot located in NCT of New Delhi.



- It is the tail-end of the city's ancient Aravalli hill range, and an ecologically critical zone.

*Delhi Ridge works as a green lung for the NCT of New Delhi ('**Lungs of Delhi**') and a natural barrier against hazards such as desertification and pollution.*

- **Morphological Ridge** - It is a geologically extended Ridge area and an ecologically sensitive zone.
- It is not officially notified as forest land but enjoys protection under several High Court and Supreme Court rulings over the past decade.
- Its extent is based on a Delhi Forest Department map, which itself based on the seismic zonation map of Delhi 2006, undertaken under the Geological Survey of India (GSI).
- **Features** - The region shares the same physical and ecological characteristics as the officially designated Ridge
 - Rocky Aravalli outcrops, shallow soil layers, and dry thorn forest vegetation.
- This land is often recorded as "gair mumkin pahad" (uncultivable rocky hill) in revenue records.
- It primarily features tropical dry thorn forest characterised by scattered trees, thorny scrubs and drought-resistant plant species.

- The native species generally exhibit *stunted growth*.
 - **For instance**, bistendu and the broad-leaved dhak, both native to Delhi, are common in such areas.
- **Vegetation** - It varies as one moves from north to south within the Ridge and the Morphological Ridge, reflecting the changes in the soil texture.
 - **The southern Ridge** - It is drier and more rugged, with thinner soils and exposed rocks
 - **The central and northern Ridges** - They have slightly more water-retentive soil and denser vegetation.
- **Regulation** - All land use changes in the Ridge or Morphological Ridge areas require approvals as per the *directive under the M C Mehta vs Union of India case from the*
 - Ridge Management Board (RMB) and
 - The Supreme Court-appointed Central Empowered Committee

The ground-truthing and field verification of the Ridge remain incomplete, delaying the final notification of the area as a Reserved Forest under Section 20 of the Indian Forest Act, 1927.

Reference

[PIB| Delhi Morphological Ridge](#)

