

Draft Geo-heritage Sites and Geo-relics (Preservation and Maintenance) Bill

February 15, 2023

In news– Ministry of Mines has recently notified the draft Geo-heritage Sites and Geo-relics (Preservation and Maintenance) Bill.

Key features of the bill-

- **The Bill is aimed at providing for the declaration, preservation, protection and maintenance of geo-heritage sites and geo-relics of national importance**, for geological studies, education, research and awareness purposes.
- The Bill states that despite identifying these sites, there are concerns over their preservation.
- Due to the absence of any legislation in the country for the protection, preservation and maintenance of the geoheritage sites, these are increasingly threatened with destruction not only by the natural causes of decay but also by population pressure and changing social and economic conditions which is aggravating the situation.
- It states that the fossil wealth of dinosaur remains of Madhya Pradesh and Gujarat, marine fossils of Kutch and Spiti...oldest life forms viz. stromatolites of Rajasthan and Madhya Pradesh...are of great geoheritage and geotourism value.
- The world's oldest metallurgical records of gold, lead and zinc in Rajasthan and Andhra Pradesh are still preserved but are under great threat.
- **It points to how the GSI has the authority to acquire any material of geological significance**, including sediments, rocks, minerals, meteorites, and fossils, as

well as sites of geological importance.

The key proposals say:

- It would **authorise the Central Government to declare a geoheritage site to be of national importance.**
- This would be **under the provisions of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013(RFCTLARR Act).**
- Through a public notification in the Official Gazette, the government would spell out what areas were to be acquired by it, and objections to this can be raised within two months.
- **Provision is made for compensation to the owner or occupier of land** who incurs loss or damage from the land due to the exercise of any power under this Act.
- The market value of any property will be ascertained in accordance with the principles set out in the RFCTLARR Act.
- **The Bill imposes a prohibition on construction, reconstruction, repair or renovation of any building within the geoheritage site area** or utilisation of such area in any other manner, except for construction for preservation and maintenance of geoheritage site or any public work essential to the public.
- **Penalties for destruction, removal**, defacement or contravention of any direction issued by the Director General, GSI in the geo-heritage site are mentioned.
- There is a penalty of imprisonment which may extend to six months or fine which may extend to Rs.5 lakh, or both.
- In the case of a continuing contravention, additional fine of upto Rs.50,000 for every day of continuing contravention may be imposed.

What are the Geo-heritage Sites and Geo-relics?

- **The draft bill defines Geoheritage sites as “sites containing geo-relics and phenomena, stratigraphic type sections, geological structures** and geomorphic landforms including caves, natural rock-sculptures of national and international interest; and includes such portion of land adjoining the site,” that may be required for their conservation or to access to such sites.
- **A Geo-relic is defined as “any relic or material of a geological significance or interest like sediments, rocks, minerals, meteorite or fossils”.** The GSI will have the power to acquire geo-relics “for its preservation and maintenance”.
- According to a 2016 press release by the Ministry of Mines, **the Geological Survey of India (GSI) declares geo-heritage sites/ national geological monuments for protection and maintenance.** The GSI or the respective state governments take necessary measures to protect these sites.
- Coming under the Ministry of Mines, the GSI was established in 1851 to investigate and assess coal and other mineral resources of the country through regional-level exploration.
- The 32 geo-heritage sites spread across 13 states include the Volcanogenic bedded Barytes of Mangampeta in Cuddapah district of Andhra Pradesh, the Akal Fossil Wood Park in Jaisalmer, Rajasthan and others.

State-wise details of the geological heritage sites/ national geological monuments.

S. No	Geological heritage site / National geological monument	S. No	Geological heritage site / National geological monument
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	ANDHRA PRADESH	18	Kishangarh Nepheline Syenite, Ajmer Dist.
1	Volcanogenic bedded Barytes, Mangampeta, Cuddapah Dist.	19	Welded Tuff, Jodhpur Dist.
2	Eparchaeon Unconformity, Chittor Dist.	20	Jodhpur Group – Malani Igneous Suite Contact, Jodhpur Dist.
3	Natural Geological Arch, Tirumala Hills, Chittor Dist.	21	Great Boundary Fault at Satur, Bundi Dist.
4	Erra Matti Dibbalu- the dissected and stabilized coastal red sediment mounds located between Vishakhapatnam and Bhimunipatnam.		MAHARASHTRA
	KERALA	22	Lonar Lake, Buldana Dist.
5	Laterite near Angadipuram PWD rest house premises, Malapuram Dist.		CHATTISGARH
6	Varkala Cliff Section, Thiruvananthapuram Dist.	22	Lower Permian Marine bed at Manendragarh, Surguja Dist.
	TAMILNADU		KARNATAKA
7	Fossil wood near Tiruvakkarai, South Arcot Dist.	24	Columnar Lava, St Mary Island Udupi Dist.
8	National fossil wood park, Sattanur, Tiruchirapalli Dist.	25	Pillow lavas near Mardihalli, Chitradurga Dist.

9	Charnockite, St. Thomas Mount, Madras.	26	Peninsular Gneiss, Lalbagh, Bangalore
10	Badlands of Karai Formation with Cretaceous fossils along Karai – Kulakkalnattam Section, Perambalur District.	27	Pyroclastics & Pillow lavas, Kolar Gold fields, Kolar Dist.
	GUJARAT		HIMACHAL PRADESH
11	Sedimentary Structures – Eddy Markings, Kadan Dam, Panch Mahals Dist.	28	Siwalik Fossil Park, Saketi, Sirmur dt.,
	RAJASTHAN		ODISHA
12	Sendra Granite, Pali Dist.	29	Pillow Lava in Iron ore belt at Nomira, Keonjhar dist.
13	Barr Conglomerate, Pali Dist.		JHARKHAND
14	Stromatolite Fossil Park, Jharmarkotra Rock Phosphate deposit, Udaipur Dist.	30	Plant Fossil bearing Inter-trappean beds of Rajmahal Formation, upper Gondwana sequence around Mandro, Sahibganj dist.
15	Gossan in Rajpura-Dariba Mineralised belt, Udaipur Dist.		NAGALAND
16	Stromatolite Park near Bhojunda, Chittaurgarh Dist.	31	Nagahill Ophiolite Site near Pungro,
17	Akal Fossil Wood Park, Jaisalmer Dist.		SIKKIM

		32	Stromatolite bearing Dolomite / Limestone of Buxa Formation at Mamley, near Namchi, South district.
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