Preserving Geological Heritage

What is the issue?

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- Billions of years old geological features are being vandalised in many areas in the country in the name of developmental activities.
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- Efforts need to be taken to safeguard our geological structures.
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What is the significance of geological structures?

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- India’s tumultuous geological past is recorded in its rocks and landscapes.
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- They should be considered as our non-cultural heritage.
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- The eological impacts of the distruction of geological sites are also a major concern in this era of rapidly changing climate patterns.
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How vulnerable are these structures?

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- Land sections containing fossils & geo-faults are lost forever due to construction of highways and real estate development.
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- India accounts for more than 30% of stone production in the world.
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- This industry has been unscientifically mined and managed.
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- It is generally outside the pale of public scrutiny, and remains unregulated.

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- Along with weak environmental laws governing it, India’s topography and geological heritage stand to be lost forever.
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- The Geological Survey of India is the agency entrusted with the protection of geological features.
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- More than 26 sites have been selected for targeted preservation.
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- But not much has changed on the ground.
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What should be done?

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- A comprehensive inventory of geological structures in the country needs to be created by GSI.
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- A sustainable conservation approach for our natural geological heritage should be formulated as it has been done for biodiversity.
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- Geological features that should be declared as national assets include bodies of unusual rock or mineral types, landforms holding records of natural events of the past & significant fossil localities.
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- Geo-conservation should be made a major factor in land use planning.
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- Stringent legal framework needs to be evolved to support such conservation strategies.
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- Educational outreach programmes about these treasures need to be organised for officials, politicians and the public.
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How to educate people?

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- The collective memory reinforced through memorials & museums will make communities aware.
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- **Japanese initiative -** The Kobe earthquake memorial park in Japan preserves a section of the fault line (around 150m) which ruptured during the 1995 disaster through the town of Hokudan.
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- We could emulate this Japnese model to preserve the memory of major geological events.
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- On this line, the now-defunct Kolar gold mines could be developed into a geological museum with an educational outreach unit for students.
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Source: The Hindu

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