INDGEOID

Why in news?

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INDGEOID Version 1.0 is a new mathematical model which was launched by **Survey of India (SOI).**

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What's the problem in measuring heights?

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- A place's height is measured with reference to the surrounding sea.
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- E.g. Mount Everest is 8,848 metres when measured from the surface of the sea but may have a different value if measured from the ocean floor.
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- An expedition, in 1999, that measured Mount Everest using a GPS receiver found that it was 10 metres higher.
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- Similarly several measurements, of dams and skyscrapers are affected depending on **whether they are computed by traditional surveying or satellites.**
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What is an INDGEOID?

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- The Survey of India developed a system called INDGEOID Version 1 that will **automatically correct for the error in GPS and sea-level measurement of structures in India.**
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- A geoid model of the earth tries to account for the all the undulation and assumes an earth 'surface' **where the oceans were smoothened out and gravity the same everywhere.**
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- Map-making authorities employ a mathematical calculation to ‘correct for the geoid’ and thus, the true height of a structure or landform.
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- The most immediate and notable beneficiary of this would be Mount Everest.
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- **Mount Everest, it’s been claimed, has lost a few metres due to the Nepal earthquake of 2015** that killed thousands.
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- To re-ascertain this, the Survey of India will conduct a new GPS-based measurement of the mountain peak.
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- This will incorporate the new INDGEOID measurement.
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Source: The Hindu

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