

SJVN Partners with IIT Patna to Improve Tunneling Project Performance

Why in News?

Recently, SJVN Limited has signed a Memorandum of Understanding (MoU) with the Indian Institute of Technology Patna (IIT Patna) to use advanced geological models in SJVN's tunnelling projects, thus significantly reducing time and cost overruns.

Key Points

- One of the key outcomes of this partnership will be the development of predictive analytics algorithms.
 - These algorithms, leveraging integrated geotechnical data, will forecast potential risks and provide early warning systems specifically tailored for tunnelling projects.
 - Such proactive measures are expected to substantially mitigate time and cost overruns during project execution.
- The primary focus of the MoU is to develop cutting-edge methodologies which integrate diverse geotechnical data sources.
 - These would include geological surveys, borehole data, geophysical measurements and monitoring data from projects of SJVN.
- The collaboration also aims to evaluate the intricate relationship between overburden and deformation, thereby enhancing the evaluation and design of support systems crucial for tunnelling projects.
 - By harnessing integrated geotechnical data and 3D geological models, SJVN and IIT Patna aim to identify and analyze potential risks and hazards.

Satluj Jal Vidyut Nigam (SJVN Limited)

- It is an Indian public sector undertaking involved in hydroelectric power generation and transmission.
- It was incorporated in 1988 as Nathpa Jhakri Power Corporation, a joint venture between the Government of India and the Government of Himachal Pradesh.

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