

Rejupave technology

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The Border Roads Organisation (BRO) has successfully utilised an **indigenous road construction technology** to build **high-altitude bituminous** road sections at the **Sela tunnel** and **LGG-Damteng-Yangste (LDY)** road near the India-China border in Arunachal Pradesh.

- During the winter months, the majority of the work on the construction of bituminous roads either gets stopped or delayed as the production of hot bituminous mix for road construction requires increased heating time at high temperatures in a hot mix plant.



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About Rejupave technology:

- **Indigenous Technology 'Rejupave':** Developed by **CSIR-Central Road Research Institute (CSIR-CRRI)**, 'Rejupave' facilitates the **construction** of high-altitude **bituminous roads** in **low and sub-zero temperature** conditions.
- **Temperature Reduction:** 'Rejupave' lowers the **production and rolling temperature** of bituminous mixes by **30 degrees Celsius** to 400 degrees Celsius, with **minimal heat loss** during transit, even in snowy conditions.
- **Extended Working Window:** The technology **extends the working window** for road construction companies in challenging conditions, enabling the construction of a robust road network at a faster pace.
- **Bio Oil-Based Asphalt Modifier:** The asphalt modifier in 'Rejupave' is **bio oil-based**, reducing the heating requirement of bituminous mixes and **preserving mix temperature during transit**.

Benefits of Rejupave technology:

- **Environmental Benefits:** Usage of 'Rejupave' not only allows road construction in sub-zero temperatures but also **contributes to reducing greenhouse gas emissions** in the eco-sensitive mountainous environment of Arunachal Pradesh.
- **Enhanced Road Durability:** Roads built with 'Rejupave' asphalt modifier exhibit **improved long-term durability** and **better resistance to thermal cracking** under low-temperature conditions.
- **Strategic Importance:** Building a robust road infrastructure at an accelerated pace along the India-China border is a top priority for India to **enhance the operational capacity of the defense forces**.

