

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.1254
ANSWERED ON 09.02.2023**

HYDRO ELECTRIC INFRASTRUCTURE PROJECTS

1254. SHRI JAI PRAKASH:

**Will the Minister of POWER
be pleased to state:**

- (a) whether it is a fact that the residents of Joshimath attributed land subsidence to NTPC Tapovan, Vishnugad hydro electric infrastructure project and if so, the details thereof;**
- (b) whether the Government has conducted any survey to rule out the apprehensions made by the affected persons; and**
- (c) if so, the details thereof?**

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (c) : The land subsidence in Joshimath is a very old issue. It was observed way back in 1976. This was noted by the then Govt. of Uttar Pradesh and they constituted a Committee headed by Shri M.C. Mishra, Commissioner, Garhwal to examine reasons for the instability of the land in Joshimath. The Committee observed that Joshimath is not situated on in-situ rocks. It is situated on weathered, landslide mass of big un-settled boulders in the loose matrix of fine micaceous sandy and clayey material. The rocks are crystalline consisting of schistose gneissic and quartzitic. Probable cause of subsidence/ cracks can be hill wash, natural angle of repose, cultivation area because of seepage and soil erosion. The Committee recommended to stop open drain water to avoid seepage, closing of soaking pits and construction of concrete sewage line for sewerage flow.

The construction work of 4x130MW Tapovan Vishnugad HEP was started in Nov'2006 after detailed studies for Environmental Impact, Geological Studies, Hydrological Studies, Seismic Studies through reputed institutional bodies/agencies such as Water and Power Consultancy Services (WAPCOS), Geological Survey of India (GSI), Central Water Commission (CWC), National Council of Seismic Design Parameter (NCSDP) and concurrence from Central Electricity Authority (CEA). Actual construction of the project started after obtaining Environmental Clearance (EC) from Ministry of Environment, Forest & Climate Change (MoEF&CC) in 2005.

Due to continuing subsidence in Joshimath town, a Committee was constituted by DM (Chamoli) in Aug'22 comprising experts from Uttarakhand State Disaster Management Authority (USDMA), Council for Scientific and Industrial Research-Central Building Research Institute (CSIR-CBRI), IIT Roorkee, Geological Survey of India (GSI) and Wadia Institute of Himalayan Geology (WIHG). There is no mention in the report of the Committee about NTPC Tapovan Vishnugad Hydro Power Project causing land subsidence in Joshimath.
