

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO.524
TO BE ANSWERED ON 06.02.2023

Land Subsidence in Joshimath

524. SHRI MANOJ KOTAK:
SHRI SUBBARAYAN K.:
SHRI M.K. RAGHAVAN:
SHRI ABDUL KHALEQUE:
SHRI DEEPAK BAIJ:
SHRI ADHIKARI DEEPAK (DEV):
SHRI SUSHIL KUMAR SINGH:
SHRIMATI RAKSHA NIKHIL KHADSE:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether it is a fact that Joshimath in Uttrakhand is sinking and numerous homes in Joshimath had significant damage and constituted a severe risk to the people living there, if so, the details thereof and the reasons therefor along with the remedial steps taken in this regard;
- (b) whether any research or study has been conducted before starting the development work in Joshimath, if so, the details in this regard;
- (c) the details of the hilly area projects given environmental clearance in the vicinity of Joshimath during the last six years and whether the Government had conducted necessary surveys before giving clearance certificate for infrastructure development projects in the mountain areas including Chardham Project, if so, the details of reports on the same and if not, the reasons for giving permissions to those projects;
- (d) whether the scientific organisations ever officially objected to such projects and if so, the details of the reasons/basis on which such development was allowed;
- (e) whether it is also a fact that several hilly areas are on the verge of facing the Joshimath like landslide conditions, if so, the details of the survey conducted for the hilly cities of the country along with the details of the action plan chalked out by the Government to save the hilly destinations and prevent such kind of incident in future; and
- (f) whether the Government is likely to review the environmental clearance of big projects such as National Thermal Power Corporation in view of the Joshimath mountain land subsidence and if so, the details thereof?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI ASHWINI KUMAR CHOUBEY)

(a) to (f) Land subsidence incidents were reported at various places around Joshimath in Chamoli District of Uttarakhand. Due to land-subsidence, many structures have seen reported to have

moderate to major damages. As reported by the State Government, cracks have been observed in 863 buildings and after taking into consideration safety of people, 296 families with 995 members have been shifted to safer places. After the incidence, all construction activities have been stayed by the State Government in the entire Joshimath area, including Tapovan-Vishnugad power project and Helong Marwari By-Pass Road. There are institutional mechanisms at the National, State and District level in the country viz. National Disaster Management Authority (NDMA), State Disaster Management Authorities (SDMAs) & District Disaster Management Authorities (DDMAs) respectively to develop appropriate preparedness, coordination and prompt response mechanism for effective management of natural disasters.

The situation is continuously monitored on 24X7 basis at various levels in the State and Central Government. Further, the Central Government and State Government are working in close coordination with all the agencies concerned to mitigate the effect of land subsidence in Joshimath area.

The Geological Survey of India (GSI) has prepared landslide susceptibility maps for the hill areas. These maps are to be taken into account by the local administration in development planning.

The Ministry has delineated a detailed procedure for comprehensive assessment of environmental and social impacts of the project in the Environment Impact Assessment Notification, 2006, as amended; which *inter-alia* provides for four stages of consideration process i.e., Screening, Scoping, Public Consultation and Appraisal by the Expert Appraisal Committee (EAC), for assessment of environmental and social impacts taking into account the location of the Project and also for monitoring of projects. Study of the aforesaid and other related factors in the context of specific projects forms the basis for preparation of the Environmental Impact Assessment/Environmental Management Plan.

The EAC comprising domain area experts, after detailed examination and deliberations on various environmental and social aspects of the project including appraisal of the studies/information related to seismology, geological profile, study of landslide prone areas, risk analysis studies, recommend the project for grant of Environmental Clearance (EC) by suggesting suitable mitigation measures and Environment Management to minimize the environmental and social impacts associated with the project. It is only after such detailed study and analysis that environmental clearances are issued subject to compliance of necessary environmental safeguards and general and specific conditions by the Project Proponent (PP) before undertaking construction of the project.

Project specific conditions related to safety measures like installation of Early Warning Telemetric system, implementation of Emergency Preparedness Plan, Disaster Management Plan, Catchment Area Treatment plan, stabilization of muck disposal sites, rim plantation, pasture development, nursery development etc. are also prescribed in the Environmental Clearances.

Projects involving forest land require Forest Clearance under the Forest (Conservation) Act, 1980. Whenever a proposal for diversion of forestland is received, it is examined and due diligence is exercised to keep it at bare minimum. In cases where it is unavoidable, the forest area is allowed to be diverted, subject to certain conditions including the Compensatory Afforestation (CA) and payment of Net Present Value (NPV) wherever necessary, the additional mitigation measures in the form of Soil and Moisture Conservation works, Wildlife Management

plan etc. are also stipulated on case-to-case basis. Prior to accordance of forest clearance for infrastructure projects in the mountain areas including the Chardham Project, Geological survey reports provided by the State Government are taken into account.

Besides the above, the projects, including the hydro-electric projects/roads/highways, which are not covered under the provisions of the EIA Notification, 2006, as amended, are also required to obtain Consents on regular basis from the concerned State Governments through the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) which stipulate the necessary conditions and environmental safeguards keeping in mind the spatial extent of potential impacts and potential impacts on human health and natural and man-made resources which are to be duly adhered to by the Project Proponent and to be monitored by the SPCBs.
