

PROCEEDINGS OF THE MEETING FOR CREATION OF A CORE GROUP FOR THE LANDSLIDE MITIGATION AND PREPARATION OF DETAILED PROJECT REPORT (DPR) HELD ON 5TH DECEMBER 2018 AT 12PM UNDER THE CHAIRPERSONSHIP OF SMT. MANISHA NANDA, ADDITIONAL CHIEF SECRETARY (REVENUE & PUBLIC WORKS) TO THE GOVERNMENT OF HIMACHAL PRADESH.

List of Participants is at Annexure –A

At the outset, the Special Secretary (Rev-DM) welcomed Additional Chief Secretary (Revenue & PW), Director GSI, Engineer-in Chief (HPPWD), Faculty from IIT Mandi and other participants, and briefly explained about the background of the NDMA's Centrally Sponsored Umbrella Pilot Scheme to Demonstrate benefits of Landslide Mitigation and DPR preparation.

2. The Additional Chief Secretary (Revenue and Public Works) apprised that the State has faced a total loss and damage of approximately Rs.2000 Crores this monsoon and half of the loss and damage is reported by HP PWD for roads and bridges. The landslides reported this monsoon were 405 in the state, therefore there is definite need for proper landslide mitigation measures to be taken in the State by the Government. It was also shared that Engineer-in-Chief (HP PWD) has been directed to come up with 5 vulnerable landslide spots in each zone for treatment with special emphasis on Bio-engineering methods involving the Forest department wherever required.
3. During the discussion it was noted that the DPR template shared by NDMA requires multi-disciplinary expertise, hence the GSI, IIT Mandi, Geological Wing of Directorate of Industries and PWD Department need to work together to prepare DPRs.
4. Thereafter the agenda items of the meeting were taken up by the Special Secretary (Rev-DM) by sharing a brief about the NDMA's project for DPR Preparation. It was informed that under this scheme NDMA has sought Detailed Project Report (DPR) for landslide mitigation from the State. For this purpose NDMA had provided a copy of template for preparation of Detailed Project Report (DPR). The department has identified 21 vulnerable sites of landslide for treatment under this scheme.
 - a. The list of the 21 vulnerable sites which have been identified by the State for DPR Preparation was shared with the participants. The List of the sites is as per Annexure B.
 - b. That on the submission of the DPR and after evaluation from the Technical Evaluation Committee (TEC) at the NDMA level, NDMA will provide funds at the ratio of 80:20 limited to about 15.00 crores per State.
 - c. Recently NDMA has organized 5 days training programme at IIT Mandi, Himachal Pradesh to sensitize and strengthen capacities of officials from all the stakeholder departments (List enclosed at Annexure C) for the preparation of DPRs and methods for dealing with the mitigation of landslide in technical and scientific manner.
 - d. As per recommendations of NDMA and a copy of approved DPR from Uttarakhand was discussed that the PWD department may be the implementing agency for DPR preparation and Geological Department of the state will be the supporting agency along with the BRO and Geological Survey of India, Chandigarh.
 - e. Faculty from IIT Mandi informed that the institute has capacity for geotechnical investigation and can be involved as the technical advising agency during the DPR preparation.
 - f. It was informed that NDMA has shared DPR of one landslide from Uttarakhand which has been approved by Technical Evaluation Committee and the same may be shared with all concerned for reference.

After detailed discussion the following decisions were taken:

- 1) A Core Group for preparation of DPR will be formed consisting of the following members:
 - a. The Engineer-in-Chief, HP PWD (Identification of sites and getting DPRs prepared)
 - b. The Director, Geological Survey of India, Chandigarh (Geological Investigation)
 - c. 3 Associate Professors (Prof. Uday Kala, Prof. Dericks P Shukla and Prof. Mousumi Mukherjee) from the IIT Mandi (Technical Assistance and Geotechnical Investigation)
 - d. 2 Geologists (Sh. Sarit Chander, Asstt. Geologist and Sh. Uday Sharma, District Mining Officer) from Geological Wing, Industries Department (Provide assistance in Geological Investigation)
 - e. 4-5 Engineers already trained at IIT Mandi will be appointed by the En-in-C, PWD (To prepare site plans and DPRs of landslides).
 - f. Sh. Vivek Sharma, DM Specialist from HPSDMA, Disaster Management (Coordination).
- 2) The En-in-C, HPPWD will select and share at least 2-3 sites to be taken under this project for DPR Preparation. It was decided that PWD may take up landslide sites from Naina Devi, Bilaspur and one site from Sirmaur District.
- 3) HP PWD will prepare the site specific contour maps for the selected sites with the support from IIT Mandi using Total Station.
- 4) The En-in-C, PWD shall share the contour maps with the GSI, Chandigarh. GSI shall then take up the Geophysical and Geological study of the sites and share report with En-in-C, PWD.
- 5) After above mentioned technical studies, the DPR will be prepared by the trained PWD engineers of the Core Group along with the other members.
- 6) The Prepared DPRs will be sent to DM Cell, Department of Revenue for onward submission to NDMA for approval and sanction of funds for mitigation measures to be taken as per DPR.
- 7) BRO shall also share the details about the DPR prepared for their roads and taken up for mitigation in the State.
- 8) IIT Mandi may support in installing the landslide sensors in Sirmaur district and other landslide prone districts in coordination with the HPPWD and respective DDMA's.

The meeting ended with a vote of thanks.

-Approved by-

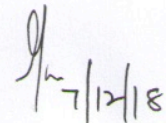
Manisha Nanda

Additional Chief Secretary (Revenue) to the
Government of Himachal Pradesh.

Endst. No. No. REV (DMC) (F) 11-09/2013-VI Dated December 2018

Copy forwarded for information and necessary action to: -

- i. The Additional Chief Secretary (PWD) to the Government of Himachal Pradesh.
- ii. The Director, IIT Mandi
- iii. The Engineer-in-Chief, HP PWD, Shimla – 02
- iv. The State Geologist, Geological Wing, Industries Department, Shimla
- v. All the Participants



D.C. Rana

Special Secretary (Rev-DM) to the
Government of Himachal Pradesh.