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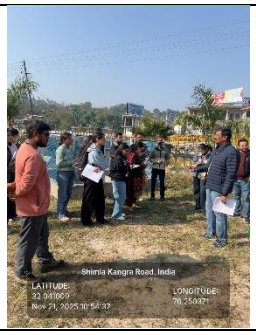
Event Report

Name of the Event	Tier II Training Program on "Local Ground Water issues and Spring Management-2025 of HP shed
Objective of the event	• To provide scientific understanding of groundwater occurrence and challenges in India, with special reference to Himachal Pradesh. • To introduce modern groundwater exploration and recharge techniques. • To impart practical knowledge of GIS and Remote Sensing applications. • To expose students to field-based groundwater assessment and monitoring techniques. • To build awareness regarding sustainable water resource management.
Date, Time and Venue	19-11-2025 to 21-11-2025; Hotel Angels Inn Resort, Khaniyara Road, Dharamshala, H.P.
Convener /Organising Secretary	NA
Organising Unit	Central Ground Water Board, NHR, Dharamshala
Participants	15 students excluding CGWB staff and CUHP staff
Outcome of the event	• Students gained comprehensive knowledge of groundwater occurrence, exploration, and conservation. • Practical exposure to GIS tools and hydrogeological mapping significantly enhanced technical skills. • Field training improved understanding of real-world groundwater systems and recharge mechanisms. • Participants developed awareness of sustainable water management practices.

	• Feedback indicated that students found the programme highly interactive and conceptually clear.
Expenditure & Funding Agency if anyone otherwise CUHP	**NA**
Photos (atleast one geo-tag)	



Event Detail Report

The Internal Quality Assurance Cell (IQAC) of the Central University of Himachal Pradesh documents the successful conduct of a three-day training programme on *Groundwater Science, Conservation, and Geospatial Applications* from 19th to 21st November 2025. The programme aimed to enhance students' understanding of groundwater systems, modern exploration techniques, conservation strategies, and geospatial tools. In this program the students and Assistant professors from the Department of Geology and Centre for Remote sensing and GIS participated and interacted with the scientists from Central Ground Water Board, NHR, Dharamshala.

Programme Summary

The programme commenced with registration and inauguration, followed by an insightful lecture by Sh. Prashant Kumar Rai, Regional Director, CGWB, on "Groundwater: Indian Scenario," where he discussed groundwater resources, associated challenges, and regional concerns of Himachal Pradesh, particularly Kangra district, along with recent artificial recharge initiatives. Dr. Sanjay Pandey elaborated on groundwater conservation and recharge techniques in rural and urban areas, emphasizing structures such as check dams and rainwater harvesting. Sh. M.L. Meena explained drilling techniques in the Himalayan region, including methodologies and equipment. A comprehensive session on Remote Sensing and GIS applications in hydrogeology was conducted by Sh. Shikhar Pandey, followed by a hands-on ArcGIS exercise where students prepared a groundwater level map of Kangra district. On the second day, sessions focused on springshed management, risk assessment, sustainability of drinking water sources, and

geophysical prospecting methods delivered by Sh. Chandan Kumar, including electrical resistivity surveys and methodological comparisons. Sh. Manohar Kumar discussed groundwater chemical quality, contaminants, and related health impacts in Himachal Pradesh. The third day involved a field visit to Taqipur, where students observed artificial recharge systems, including a recharge well installed at Government Degree College, and learned the use of instruments such as sounders and bailer samplers. Field measurements of springs included TDS (187), EC (374 mS), pH (7.8), and discharge rate (191.08 L/min).

Importance in IQAC

This programme holds significant importance in the IQAC framework as it reflects the university's commitment to quality enhancement through experiential learning, industry-academia collaboration, and skill development. The integration of theoretical knowledge with practical training, GIS-based learning, and field exposure aligns with outcome-based education and NEP-2020 guidelines. The involvement of experts from national organizations like CGWB strengthened academic excellence, while the hands-on training improved students' technical competencies, critical thinking, and problem-solving skills. Such initiatives contribute to holistic student development, capacity building, and improved teaching-learning processes, which are key indicators in NAAC accreditation and quality benchmarks.

Conclusion

The three-day training programme was highly informative, interactive, and successful in achieving its objectives. It significantly enhanced students' understanding of groundwater occurrence, exploration, conservation, and management through a balanced combination of lectures, practical sessions, and field exposure. Participants reported improved conceptual clarity and practical skills, particularly in GIS applications and hydrogeological assessment. The programme concluded with the distribution of certificates, marking a successful academic and skill-oriented initiative that contributed meaningfully to quality assurance and institutional development.

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