

Residential Training Program on 'Flood Risk Mitigation & Management for NWRWS&K Dept. Newly Recruited Engineers/Officers'

Date: 10-12 June 2025

Venue: GIDM Campus; b/h PDEU, Gandhinagar

Tentative Schedule

Day 1: 10 June 2025

Time	Session	Speaker / Facilitator
10:30-11:00	Registration	GIDM
11:00-11:20	Welcome, Introduction about Training & Inaugural Session	
11:20-11:35	Coffee/Tea Break	
11:35-13:00	Session 1: From Global Trends to National Practices: An Introduction to Disaster Risk Management - Global Frameworks, Trends and Challenges, India's Approach, Best Practices - Community and Resilience	Shri Nisarg Dave, Director (DM)/ Shri Piyush
13:00-14:15	Lunch Break	
14:15-15:15	Session 2: Understanding Flood Disaster: Conceptualizing Hazard, Vulnerability, and Risk - Defining the Concepts, Assessing Flood Hazards, - Understanding Vulnerability and Risk.	Shri Yoki Vijay, Director, CWC, Gandhinagar
15:15-15:30	Coffee/Tea Break	
15:30-16:30	Session 3: Exploring the Drivers of Flooding: Natural Triggers, Human Impacts, and Damage Escalation - Natural and Human-Induced Causes - Aggravating Factors of Flood Damage - Consequences of Anthropogenic Actions	Prof. Suryanarayan, WREMI, Vadodara
16:30-17:30	Session 4: Flood Hazard and Vulnerability Assessment: Techniques and Comparisons - Assessment Techniques - Data Utilization and Analysis - Comparative Frameworks	Prof. Dhruvesh Patel, PDEU, Gandhinagar
17:30-17:35	Wrap-up Day 1	

Day 2: 11 June 2025

Time	Programme	Speaker/Facilitator
10:30-10:35	Recap and plan for the day	GIDM
10:35-11:45	Session 5: Evaluating Flood Threats: Comprehensive Risk Assessment Strategies -Risk Modeling -Uncertainty and Sensitivity -Application to Policy and Planning	Shri R. K. Suryavanshi, Dam Safety Expert
11:45-12:00	Coffee/Tea Break	
12:00-13:00	Session 6: Integrating Structural and Non-Structural Strategies for Flood Risk Mitigation	Dr. M. B. Joshi, Former CE, NWRWS&K

13:00-14:00	Lunch Break	
14:00-15:15	Session 7: Readiness Roadmap: Key Measures and Checklists for Flood Preparedness <ul style="list-style-type: none"> - Preparedness Planning - Checklists for Readiness - Technology and Infrastructure 	Dr. M. B. Joshi, Former CE, NWRWS&K
15:15-15:30	Coffee/Tea Break	
15:30-17:00	Session 8: Early Alerts for Floods: Understanding Warning Systems in Gujarat <ul style="list-style-type: none"> - System Architecture - Community Engagement - Challenges and Improvements 	Dr. A.K. Das, Director,IMD, Ahmedabad
17:00-17:10	Wrap-up Day 2	GIDM
Day 3: 12 June 2025		
Time	Programme	Speaker/Facilitator
10:30-10:35	Recap and plan for the day	GIDM
10:35-11:45	Session 9: Effective Flood Response: Key Elements and Operational Tactics <ul style="list-style-type: none"> - Emergency Response - Coordination Mechanisms - Recovery and Rehabilitation - 	Shri Chirag Patel, Under Secretary, Revenue Department
11:45-12:00	Coffee/Tea Break	
12:00-13:00	Session 10: Remote Sensing and GIS Applications in Flood Risk Mapping and Monitoring <ul style="list-style-type: none"> - Satellite-based flood mapping - GIS for vulnerability zones - Watershed and terrain analysis 	Dr. Shivangi Somvanshi Center Head, Center for Applied Geomatics (CAG) CEPT University, Ahmedabad
13:00-14:00	Lunch Break	
14:00-15:15	Session 11: Application of AI, ML, and Drone Technology for Canal Wear and Tear Monitoring <ul style="list-style-type: none"> - Drone-based visual inspections of canal structures - AI/ML models for detecting cracks and erosion - Predictive maintenance using image analytics 	Dr. Nirjar Lakhia, IGRI, Ahmedabad
15:15-15:30	Teak/Coffee	
15:30-16:45	Session 12: Smart Technologies for Flood Preparedness and Decision Support <ul style="list-style-type: none"> - Real-time decision tools - IoT for flood alerts - Digital dashboards and planning 	Prof. Dhruvesh Patel, PDEU, Gandhinagar
16:45-17:00	Closing Ceremony <ul style="list-style-type: none"> o Award of Certificates o Vote of thanks o Closing remarks from GIDM/GSDMA 	GIDM