

INTEGRATED RURAL URBAN WATER MANAGEMENT FOR CLIMATE BASED ADAPTATIONS IN INDIAN CITIES (IAdapt)

Report on Hydrological Modelling of RURBAN Basins - Training Program and Exposure Visit to Vijaywada 5-7 February 2020

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Training program

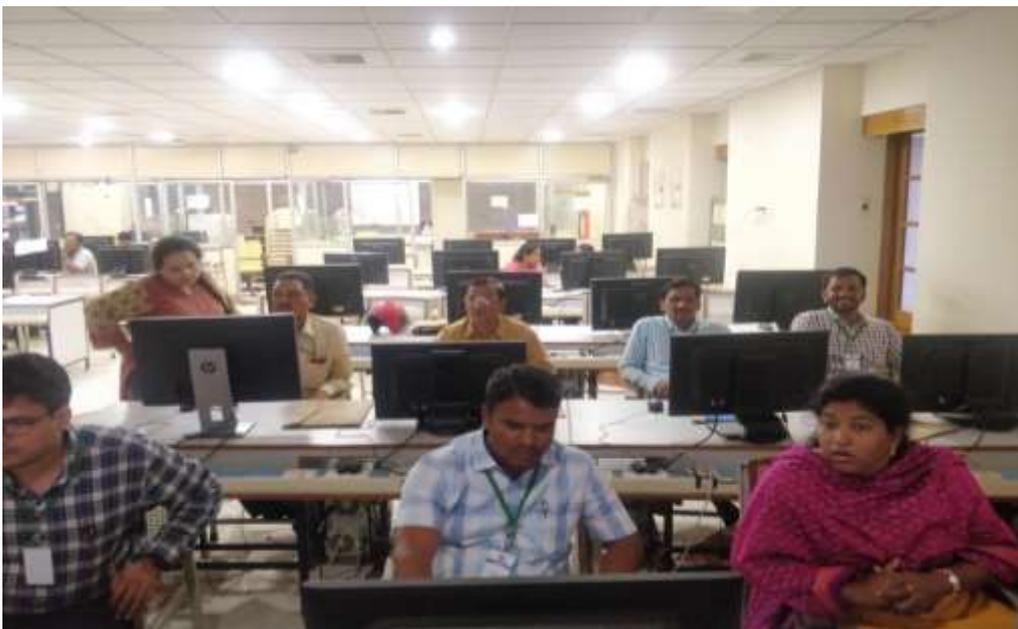
A training program was organized by IAdapt project team on Hydrological Modelling of Rurban Basins at Indian Institute of Technology, Chennai (IITM) on 5th and 6th February, 2020. The main objective of the training program was to build capacity of local governments to understand hydrological and climate considerations in water management at basin level. This training was focused on to provide basic glimpses of simulations, its use in decision making and hands on training for operating simulation models.

This training program was attended by the officials of Solapur Municipal Corporation, Solapur Zillha Parishad, Vijaywada Municipal Corporation and Vijaywada District Administration listed as follows.

- Mr. Sachin Jadhav - District program manager, Swachh Bharat Mission
- Mr. Vyankatesh Choube, Deputy Engineer, Water Supply, PHED, Solapur Municipal Corporation
- Mr. Devidas Madgundi, Deputy Engineer, Groundwater recharge, PHED, Solapur Municipal Corporation
- Mr. Bhurale Onkar, Asst. Professor, Dayanand college, Solapur
- Ms. D. Priya Sudha, DEE (T), WRD, Irrigation Circle
- Mr. Suresh, A.Hg. GW & WAD
- Mr. M.S.V. Venugopal, EE. K.E. Division

Dr. Mohan and his team from IIT, Madras delivered lectures on various topics of hydrology and climate change highlighting its need and consideration in decision making. In the introductory session basics of hydrological modeling consists of modelling inland water dynamics and water resources availability followed by hydrological aspects in MIKE simulation software were discussed. In the later part of the training program MIKE Flood and MIKE SHE were introduced along with their frameworks. Participants also received hands on training as tutorials for simulating data of a basin.

Overall the training program helped local governments to understand basics of simulation with considerations of hydrology and climate for planning and maintaining resilient water systems in their basins. The insights of hydraulics, comprehensive and well-proven simulation studies will increase technical capacity of the officials which is essential for optimal water resources planning and management.



Details of Exposure Visit:

An exposure visit by Solapur government officials to Vijayawada was organised on 7th February 2020. Four officials from Solapur travelled to Vijayawada to understand the water management initiatives and to encourage some cross learnings through shared dialogue.

Participated by:

- Mr. Sachin Jadhav - District program manager, Swachh Bharat Mission
- Mr. Vyankatesh Choube, Deputy Engineer, Water Supply, PHED, Solapur Municipal Corporation
- Mr. Devidas Madgundi, Deputy Engineer, Groundwater recharge, PHED, Solapur Municipal Corporation
- Mr. Bhurale Onkar, Asst. Professor, Dayanand college, Solapur
- Geeta Sandal, ICLEI South Asia
- Anupama V S, Athena Infonomics

The participants first visited the Supervisory Control and Data Acquisition (SCADA) centre in Vijayawada. The Vijayawada Municipal Corporation (VMC) has entrusted SCADA work to Efftronics Systems Private Limited. The Efftronics team gave a tour of their office to the participants, showing the equipments and stages involved in the whole system. Various uses of SCADA including its applications in water supply, water quality check, traffic lighting system, sanitation system, security etc was exhibited. After a comprehensive tour, a detailed was made by the Efftronics team to help participants understand the water intake, distribution and SCADA's role in water supply to the city of Vijayawada.

With the working of the system in mind, the participants then visited the Prakasam Barrage. With a maximum flood discharge of 11.9 lakhs cusecs, the barrage was constructed in 1957 with the purpose of irrigation and water supply, Today, it serves the ayacut located in Guntur & Prakasam Districts too.

To add to their experience of understanding SCADA better, the participants then visited an Elevated Storage Reservoir (ESR) which served as one of the monitoring points in Vijayawada's SCADA network. The working of the machines installed and the way to go about the reading the meters were also showed to the participants.



Figure 1 Participants understanding the SCADA system in Vijayawada



Figure 2 SCADA presentation by Efftronics team

During the second half of the site visit, the participants met and interacted in a special session arranged with Mr.Surya Prakash Rao, CEO, Zilla Parishad. During this interaction, the CEO invited the Solapur officials to visit Vijayawada in future for any possible collaborations which Vijayawada will be happy to discuss about. Exchanges on activities carried out under the IAdapt project were made between the officials and the CEO.

The participants then headed to the Vijayawada Municipal Corporation premises to attend a round table meeting with the counterparts in Vijayawada. This was chaired by the Additional Commissioner of Vijayawada Municipal Corporation, along with the Chief Engineer. Initially, a presentation was made by the corporation, highlighting the city's work and ongoing projects. Subsequently, specific details were discussed on the water sector situation in Vijayawada and corresponding activities which have taken place during the IAdapt project tenure. This interactive discussion facilitated a good dialogue on how both the catchments could learn from each other. The session ended on a positive note with both parties welcoming future collaborations to learn from each other.



Figure 3 Participants at the ESR



Figure 4 Participants along with officials from Vijayawada Municipal Corporation