

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

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## Training Program on Acoustic Leak Detection System, in Solapur Municipal Corporation

25<sup>th</sup> September 2018, Solapur City

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<b>Project Consortium:</b>	ICLEI South Asia (Lead Member) Athena Infonomics LLC International Water Management Institute (IWMI) Indian Institute of Technology, Madras (IIT M)



## Introduction

ICLEI South Asia with the support of Solapur Municipal Corporation organised a Training Workshop on Acoustic Leak Detection System in Solapur City on 25<sup>th</sup> September 2018. The technical training was chaired by Head of PHE Department, Solapur Municipal Corporation and Additional Director, Town and Country Planning (TCPO), Solapur Municipal Corporation. The training was delivered by Mr Ashu Prajapati, Assistant Manager, TAISEI Technical Services Pvt.Ltd from Hyderabad. More than 40 Municipal engineers and 20 Zonal heads for water work attended the training program. Onsite training for municipal engineers was also conducted at sites selected under Smart City Mission for Area Based Development Work in the city.

## Inaugural Session and Welcome Address

Ms Geeta Sandal from ICLEI South Asia welcomed the participants with a brief background of the project and explained the project activities conducted till date. The meeting commenced with a welcome to Mr G.M.Dulenge Head, Public Health Engineer Department, Solapur Municipal Corporation, Mr L.Chalwadi, Additional Director, Town and Country Planning (TCPO), Solapur Municipal Corporation and Mr Ashu Prajapati, Assistant Manager, TAISEI PvtLtd by ICLEI SA.



Mr G.M.Dulenge addressed gathering and welcomed ICLEI team. He informed the participant about the need of efficient water management and requirement for latest technologies for

water management. He informed the gathering about major on-going and upcoming initiatives of SMC under various schemes and expected tangible solutions from the project towards water supply and water resource management of Solapur. He thanked all the stakeholders and project team for conducting much needed technical training program for the city to reduce T&D losses in the city.

Mr L. Chalwadi, Town and Country Planning (TCPO), SMC also shared his views on present issues in water management system in the city. He also mentioned the importance of integration and capacity building in various sectors especially planning department.

### **Technical Session on Acoustic Leak Detection System**

Mr Ashu Parajapati introduced the TAISEI Pvt Ltd, which is an ISO 9001:2008 certified organization and is based in Hyderabad. He presented the background and vision of TAISEI Pvt.Ltd and also shared the previous work experiences of the TAISEI with ICLEI SA in Siliguri Municipal Corporation. Mr Ashu informed about various technologies currently in market for leak detection and instruments like utility locators and leak detectors used by different cities in India and around the world. He then explained the Acoustic Leak Detection technology for the leakage detection for underground pipelines. He explained the functioning of Fujiticom equipment DNR18. Mr Ashu also explained the working of leak noise mechanism and showcased instruments used in the process and discussed about the factors that influence the efficiency of the system. Mr Ashu also trained the SMC engineers on data analysing and different methods to transfer the information from the site to excel sheets and graphs for documentation.



A short Q&A session was conducted to answer the queries of PHE engineers and staffs. Most of the questions were related to the cost, maintenance and accuracy of the instrument.



## Onsite Training

Onsite training was conducted for municipal engineers to provide hands-on training on Acoustic Leak Detection Instruments. Three sites were selected by PHE Department SMC for leak detection training for site engineers and Zonal staff

- 1) Vijapur Best- Selected under SMART City Mission
- 2) DSP Tank- near Municipal Corporation
- 3) Civil chock

Senior Municipal Engineers and site engineers were present at the sites. During the training 3 major leaks were detected (one at Vijapur Best, Two near DST Tank). The engineers were also trained on sound verification. Mr Ansu trained the engineers on sensor signals and ways to reduce the impact of extra/other sounds captured by the instrument due to high traffic along the roads. He also suggested that due to heavy traffic or use of other machineries in the nearby are makes it challenging to detect leakage sound and hence for effective working of the system it is important to understand the sensor signals. He also mentioned that lots of practise and concentration is must while the detecting the leak points.

Mr Ashu also explained the methods to read / calibrate the dataset on LCD displayer for preparing analytical reports and presentation.



## Conclusion

The Training program received positive response from the participants from Solapur Municipal Corporation. Mr Dulenge praises the ICLEI SA for conducting this much needed training program for technical staff in SMC. Lead detection for reducing NRW in the City was one of the prioritised interventions indicated by SMC during these RURBAN discussions. ICLEI SA concluded the training program by thanking all the participants from SMC and informed about the future activities of the project and urged for support and involvement of SMC at each step.