

27. Secure Resources & Sustainable Water Supply

Contributing to the reduction of non-revenue water and stable supply of safe water by detecting leaks from buried water pipes

Suidou Technical Service Co., Ltd

Related SDGs of the Project



【Contribution to Adaptation Challenges】

- Technology and products on water leakage inspection by Suidou Technical Service Co. Ltd (STS) enable to inspect and identify water leakage on the buried water pipe which is main cause of Non-revenue Water (NRW). Improvement of the NRW contributes to adaptation for reduction and deterioration of the water resource due to the climate change.
- In the case of low water pressure or hurly water supply, leakage hole of the water pipe can take up alien substances and cause tap water contamination. In addition, underground leakage can cause secondary disasters such as road collapse.
- Contribute to the stable management of water utilities and the supply of safe and secure water to users.

【Project Details】

<Background>

India: By utilizing the JICA Project Formulation and Dissemination/Demonstration scheme between 2013 and 2017, it has contributed to reduction of water leakage rate, improvement of water supply service, soundness of water supply business for Bangalore Water Supply and Sewerage Board as counterpart organization. After the end of the project, a NRW countermeasure department was set up within the department. Subsequently, in 2017, with the support of the JETRO Specialized Program and JETRO Bangalore Office, STS received a direct contract from the Karnataka State Government to conduct training on water leakage surveys for the staff of the Waterworks Bureau. Currently, STS aims to expand its business in India in partnership with a local infrastructure company.

Vietnam: From 2013 to 2016, through a public-private partnership between JICA and Yokohama City Waterworks Bureau, STS participated in the "Safe Water Supply Project in Vietnam with Private Technology in Yokohama" and implemented a project for Hue Water Corporation in Vietnam. The corporation highly valued STS's leak detection technology and concluded an MOU with STS. STS is currently providing training on water leakage surveys to other water utilities in Vietnam in cooperation with Hue Water Supply Corporation, to improve the operation of water utilities by reducing non-revenue water, and to ensure safety and security in provision of water in Vietnam.

<Business Model of the Project>

The following three businesses related to water leakage investigation are core overseas businesses; (1) Provision of on-site water leakage investigation service by STS investigators, (2) Conducting training for measure on non-revenue water for water utilities, and (3) Sales of "L-sign", a water leakage monitoring device. In addition to the above two countries, it has been exhibited at domestic and overseas exhibitions.

【Product & Technology】

- 1) Water leakage survey including detection and location of potential leaks from buried pipes by sound hearing using water leak survey equipment by investigators
- 2) Training for human resources development to reduce non-revenue water, including technology transfer of water leakage investigation
- 3) Provision of L-sign & L-Chaser, water leakage monitoring equipment

In the adaptation business in developing countries, the focus is on technology transfer of intangible assets, such as knowledge, sound hearing technology, know-how, and processes for actually detecting leaks locally, rather than providing equipment.

If local staff can acquire STS's survey technology, NRW due to water leakage can be reduced. NRW reduction is equivalent to additional water resources development, which not only makes efficient use of water resources but also minimizes environmental impact. Energy efficiency in water intake, water treatment and water transfer can be improved, which can contribute to mitigating climate change.



▲ Water leakage monitoring equipment L-sign / L-chaser

▲ Water leakage survey training

▲ Identified water leakage point

【Key to Success & Challenges for Further Development】

First of all, utilizing subsidy schemes of government agencies and local governments such as JICA, JETRO, IDEC, and the Yokohama City Waterworks Bureau, they implemented projects internationally and built trusting relationships with government agencies of partner countries. In addition, it has taken an approach to collaborate with local private companies and work toward continuous project formulation for water utilities. Utilizing the Ministry of Economy, Trade and Industry's internationalization internship project, the company accepted an intern from Indonesia in 2019 for further development. The intern will be hired from 2020 to expand business in Indonesia. Aiming for diversity management.

【Profile of Project Company】

Suido Technical Service Co., Ltd. was established in 2002 as a specialized company for water leakage investigation. Its goal is to create a sustainable society where everyone can receive the benefits of water with peace of mind by contributing to the sustainable supply of safe and secure water through our business activities. Its mission is to provide a stable supply of safe water through prevention from water leakage.

In 2018, STS was selected by the Ministry of Economy, Trade and Industry's Small and Medium Enterprise Agency as "300 small and medium-sized enterprises and small businesses in 2018."

<http://www.suidou-tec.co.jp/>