LOTUS

LOW-COST INNOVATIVE TECHNOLOGY FOR WATER QUALITY MONITORING AND WATER RESOURCES MANAGEMENT FOR URBAN AND RURAL WATER SYSTEMS IN INDIA

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LOTUS officially launched in the most favourable of cooperation contexts!

The LOTUS (*'LOw-cost innovative Technology for water quality monitoring and water resources management for Urban and rural water Systems in India'*) project has now been officially launched. The project kick-off meeting took place in Delhi and Mumbai, India on February 15-16, 2019. It was preceded by a joint meeting of the seven India-EU Water sister Projects funded under the same call. The meeting was co-organised by the Ministry of Science and Technology (Department of Science and Technology & Department of Biotechnology), the Government of India, and the European Commission Directorate General of Research & Innovation under the scope and framework of India-EU S&T cooperation Agreement.

A momentum of advanced cooperation on water between the EU and India

Bérengère Lebental, project coordinator, presents LOTUS at the EU-India Water Forum

Started in 2002 with the Science and Technology Agreement, cooperation in the field of water is considered one of the key achievements of EU-India cooperation. Several projects were already co-funded in earlier funding programmes. In 2016, both parties signed the India-EU Water Partnership (IEWP) with the objective *"to strengthen technological, scientific and management capabilities of India and the EU in the field of water management on the basis of equality, reciprocity and mutual benefit."*.

As a result, the European Commission (EC) and the Department of Science and Technology (DST) of the Government of India decided, in 2016, to provide € 30 million to fund cooperation projects on water in line with the needs of India, where water quality and the rejuvenation of water resources is a major challenge. Co-creation of EU-India solution is at heart of the call, and seven projects, including LOTUS, have been selected.

Seven highly innovative projects to tackle water quality challenges

Highlighting the political momentum, a joint kick-of meeting of these seven projects took place in Delhi on February 14th following the 4th India-EU Water Forum.

The six other complementary projects all aim at improving and deploying technologies enabling automated, real-time monitoring and decision-making on water quality availability and treatment. **PAVITR** develops sustainable natural and advanced technologies for water and wastewater treatment, monitoring and safe water reuse in India. **PANIWATER** develops photo-irradiation and adsorption based novel innovations for water treatment. **INDIA-H2O** conceives low-energy water purification technologies for desalination. **PAVITRA GANGA** unlocks waste water treatment water-reuse and resource recovery opportunities for urban and peri-urban areas in India. **SARASWATI 2.0** aims at identifying the best available technology for decentralised waste water treatment. **SPRING** develops integrated water resource management for clean and safe water supply. The technological solutions created in each of the projects aim at being integrated in different combinations. The joint kick-off enabled all project partners to meet and to plan for further cooperation, in view of fostering synergies.

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LOTUS launch announces an amazing project

The LOTUS kick-off then launched a four-year cooperative project on the monitoring of water quality. It took place on February 15th and 16th in Delhi and Mumbai and gathered 30 participants from EU and India. It was organised around plenary sessions and hands-on work meetings and yielded important decisions regarding the initial steps to be carried out within LOTUS, thus setting the foundation for the future actions.

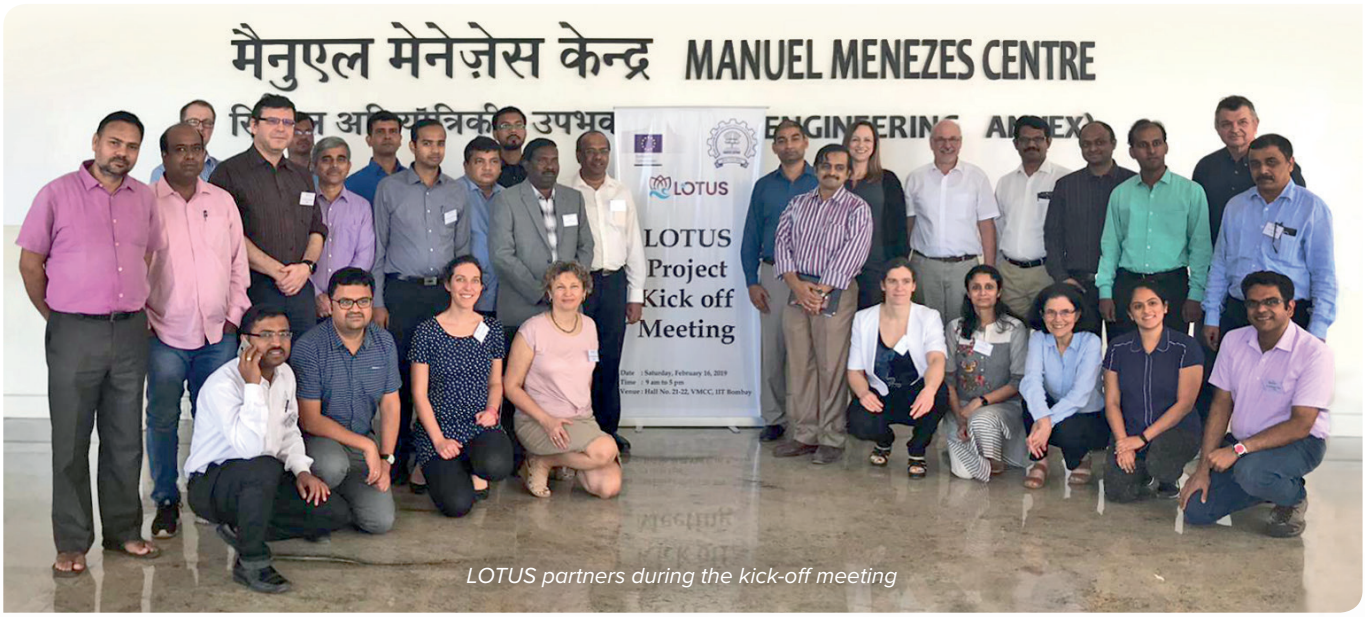
Expected outcome of LOTUS is a three-fold ICT-based water quality solution which is: firstly, a multi-contaminant, real-time and autonomous sensor, relevant to various types of Indian context and water sources, which will be turned into a pre-industrialised product by the end of the project; secondly, a water management solution analysing the data from the sensors thanks to ICT platforms, and, last but not least, social innovations to engage stakeholders all along the project lifetime.

This meeting was also the occasion to launch the set up of the LOTUS use cases, in which the sensors and ICT solutions will be deployed. Scenarios being investigated are water networks, groundwater, irrigation, algae-based waste water treatment and water distribution via tankers.

Visiting the new nanotechnology lab in IITB

Users of the technology (water distribution companies) and their end-users (inhabitants and farmers) are both involved in the co-creation of the technology: besides initiating technical construction of the use cases, the kick-off allowed to discuss the various stakeholder engagement methodologies which could be applied in the use cases. Use cases will also work as pilots for the pre-commercialisation of LOTUS prototypes, showcasing how the proposed LOTUS solutions meet the end user needs.

This promising launch, combined with a favourable policy context and the implementation of the sister projects, puts LOTUS on good track to address efficiently its part of the challenges India faces regarding to the provision of drinking water, wastewater treatment and management of water systems.



LOTUS partners during the kick-off meeting

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About the LOTUS Project

Project Title: LOTUS
'LOw-cost innovative Technology for water quality monitoring and water resources management for Urban and rural water Systems in India'

Call: H2020-SC5-12 – EU-INDIA Water Co-operation – Research and Innovation Action

Project ID: 820881

Start Date: 1st February 2019, duration: 48 months

Total budget: 5.48 Mln. €

Project website: www.lotus-india.eu
(under construction)

LOTUS Consortium Members

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