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Wastewater recycling will improve agricultural production in India, EU: ICRISAT

Through this initiative, Europe and India will share experiences, technologies and knowledge to benefit farmers, researchers and policy makers.

HYDERABAD/INDIA(Commodity Online): Recycling and judicious reuse of treated wastewater, combined with enhanced water-use efficiency, promises increased crop productivity and improved livelihoods of smallholder farmers, and the rehabilitation of degraded lands in India and the European Union (EU), according to International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)

Aiming to address issues of water scarcity, poverty and food insecurity through wastewater reuse for agriculture, the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) headquartered in Hyderabad, Andhra Pradesh India, is now leading a consortium of national partners in the implementation of India's component of the project "Integrating bio-treated wastewater reuse with enhanced water use efficiency to support the green economy in EU and India."

The project, also referred to as 'Water4Crops-India', was launched in a kick-off meeting attended by the EU and Indian consortia partners from state agricultural universities, national research institutes, nongovernment organizations (NGOs), and private industrial partners. The initiative is a mirror of EU's Water4Crops project composed of 21 consortium partners led by the Istituto di Ricerca Sulle Acque – Consiglio Nazionale delle Ricerche (IRSA-CNR), Department of Bari, Italy.

Highlighting ICRISAT's pioneering role in the area of efficient water management in agriculture, Director General William Dar said that, "Water reuse is of critical importance to the semi-arid regions of the world. Following ICRISAT's successes with rainwater harvesting and management, we will now lead the Indian consortium in venturing into recycling industrial and domestic wastewater for agricultural use to improve the livelihoods of the rural poor particularly those in the country's dryland areas."

Under the Water4Crops-India project, ICRISAT along with its consortium partners will be embarking on recycling of treated wastewater (grey water) from domestic uses and industrial wastewater. The consortium is unique as national and international research organizations and universities have joined hands with private entrepreneurs to find a win-win solution to wastewater disposal using bio-treatments for reuse in agriculture. This initiative will benefit farmers, industries, researchers as well as government organizations.

Among the Indian consortium partners are: The Energy Research Institute (TERI); National Environmental Engineering Research Institute (NEERI); Euro India Research Centre (EIRC), University of Agricultural Sciences Bangalore (UASB); University of Agricultural Sciences Dharwad (UASD); MS Swaminathan Research Foundation (MSSRF); SABMiller, India; and Jain Irrigation Systems Limited (JISL).

Through this initiative, Europe and India will share experiences, technologies and knowledge to benefit farmers, researchers and policy makers. The consortium will be working on three types of industrial waste water mainly from the Charminar Breweries of SABMiller, India in Andhra Pradesh; the Onion and Fruit Processing Plant at JISL, Jalgaon in Maharashtra; and the Sugar Factory from Ugar Sugar in Karnataka.

Treatment of domestic wastewater will be studied and used in Hyderabad, Andhra Pradesh; Kolar, Karnataka; and Nagpur, Maharashtra; and saline wastewater from industries in the coastal regions. The consortium will also address the issue of rehabilitating degraded lands using untreated wastewater at certain sites to be identified.

The project is led in India by Dr Suhas P Wani, Assistant Research Program Director, Resilient Dryland Systems, ICRISAT and in Europe by Dr. Antonio Lopez, Head of Unit, National Research Council, Water Research Institute, Italy. Ten scientists from Europe are participating in this kick-off workshop.