



## THE POWER OF EARTHWORMS

INNOQUA is a four-year EU-funded Horizon 2020 project. Bringing expertise from multiple disciplines, the 20 project partners are seeking to demonstrate a novel, modular system for wastewater treatment based on the purifying capacity of earthworms, zooplankton and microalgae, operating under real conditions.

Due to its modular configuration, the INNOQUA system can address multiple aspects of wastewater treatment and water re-use in water stressed communities, rapidly expanding cities and industries – both in developed and developing countries. The decentralised approach helps to reduce pressure on inadequate wastewater networks while reducing the water and energy demands of typical centralised wastewater treatments – supporting sustainable development.

**INNOQUA has installed pilot and demonstration sites in 11 countries (France, Ireland, Italy, Romania, Scotland, Spain, Turkey, Ecuador, Peru, India and Tanzania) to demonstrate the long-term viability of modular and locally sustainable solutions under real conditions. The modules include lumbrifilter, daphnia filter, bio-solar purification and UV lamp. The sites provide a robust platform for scientific research and act as a focus for local training and dissemination activities.**

**KEEP IN TOUCH – [innoqua-project.eu](http://innoqua-project.eu)**



Bio Solar Purification

## DEMO SITE BEEDI WORKERS COLONY

The community consists of more than 150 households, with an average of five persons per household. The whole community will eventually be connected to mains sewerage, but in the meantime wastewater from half of the households is treated in a decentralised (DEWATS) system. The remainder is discharged without treatment.

**BENEFICIARIES:** The INNOQUA system will treat wastewater from 9 households and will benefit low-income people. The treated wastewater will irrigate a community garden that will provide fruit and vegetables to a nearby school, helping to improve the diet of local children who suffer from a high rate of malnutrition.

**DESIGN CAPACITY:** 1.5 m<sup>3</sup>/day

**SOURCE OF WASTEWATER:** Toilets and washing rooms

**SPECIFIC SCIENTIFIC RESEARCH OBJECTIVES:**  
To promote sustainability in the wastewater sector and to test new alternative sanitation systems

**CONFIGURATION:** In India the system configuration includes a presettler, a lumbrifilter as the first and secondary treatment stage, a daphniafilter and biosolar purification via algae and sunlight as tertiary treatment stages, and a UV lamp for final disinfection as the quaternary treatment stage.

**LOCATION:** Beedi Workers Colony, BSM Extension, Kengeri Satellite Town, Kommaghatta, Bangalore 560060, India



Serving 9 households in the Beedi Workers Colony

To arrange a visit to this site, please contact the INNOQUA partner whose details are provided below. This demo site is run by the INNOQUA partner

**BORDA**

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