



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 showcase 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



Cows on the farm

AGRICULTURAL DEMO SITE

The farm in Craughwell is home to 100 dairy cows, milked twice a day. Around 5,000 litres per day of wastewater goes to the dairy parlour sump, containing animal waste and parlour washings waste.

BENEFICIARIES: The INNOQUA system will treat some of the wastewater produced by parlour washings from the facility, while the rest will be stored in a holding tank then emptied by slurry spreading at specific times and within regulations. Beneficiaries include farms and similar agricultural facilities.

DESIGN CAPACITY: 100 to 200 L/day

SOURCE OF WASTEWATER: Milking parlour washings and animal waste

SPECIFIC SCIENTIFIC RESEARCH OBJECTIVES

To demonstrate the versatility of the INNOQUA process in treating agricultural wastewater and enable improved management of wastewater at dairy farms.

CONFIGURATION: The INNOQUA system consists of a lumbrifilter and primary settlement tanks.

LOCATION: Privately owned dairy and cattle farm in Craughwell, County Galway, 31 km from NUI Galway

To arrange a visit to this site, please contact the INNOQUA partner whose details are provided below.



Dairy cows in the milking parlour yard

This demo site is run by the INNOQUA partner



NUI Galway
OÉ Gaillimh

WEBSITE: www.nobatek.inef4.com

CONTACT: Louise Hannon
Senior Research Associate
louise.hannon@nuigalway.ie

