

AN ASSESSMENT OF RESIDENTIAL GREYWATER REUSE SYSTEMS IN ATTENUATING THE EFFECTS OF DROUGHTS IN SANT CUGAT DEL VALLÈS

Specialisations: Global Change, Ecological Economics

Since 2002, the town of Sant Cugat del Vallès (in the Metropolitan Area of Barcelona and close to the UAB) has a Municipal Ordinance on Water and Energy Conservation and Savings including the requirement that all new residential buildings with eight apartments or more must install a Greywater Reuse System by which water from showers, baths and handbasins is recycled to fill up the toilet tanks. Since 2002, more than 200 of such systems have been installed in the city affecting some 30,000 people and contributing to reduce water consumption in the city.

The proposed Masters Thesis will attempt to produce an assessment of the performance of greywater reuse systems in Sant Cugat over the last 20 years focusing especially on the following five dimensions: 1) Technological evolution; 2) the perception of users; 3) Benefits; 4) Costs and Risks; and 5) Future challenges in the context of climate change and increasing water scarcity. The study will facilitate the understanding of the evolution of these systems in Sant Cugat comparing the data obtained with the data of a previous study done in 2008. (1)

Persons interested should have a working knowledge of Spanish since interviews with users, managers of the city council; planning and health officials; installers of the systems, and other stakeholders may be necessary.

If interested or needing more information, please contact David Sauri (david.sauri@uab.cat)

- (1) Domènech, L. and Sauri, D. 2010. Socio-technical transitions in water scarcity contexts: Public acceptance of greywater reuse technologies in the Metropolitan Area of Barcelona. *Resources, Conservation and Recycling*, 55 (1), 53-62.