

Analysis of the water system of Asoule, Morocco

Internship for two students

Introduction

The village of Asoule is suffering from erosion. To be able to supply the village with sufficient and clean water for drinking and irrigation, it is necessary to develop methodologies against erosion, to avoid leakage of water and to re-use (waste) water for domestic and irrigation purposes. An example is to slow down rainwater by small walls and hedges, stimulating infiltration of water and improving the production of crops. The Foundation Kantara wants to stimulate the sustainability of the water system of the village together with the Watercompany ONEP and the Dutch companies Waternet and Ecofyt. The system of the village must become an example of other villages in the neighbourhood with similar problems.



Objective and approach of the internship

The objective of the internship is to collect data related to the water system in the village of Asoule. The data are related to the hydrological aspects (rainfall, run-off, infiltration, groundwater levels) and to the sanitary aspects (water use, water quality, treatment, leakage). In addition, alternative solutions for the (partial) solution of the problems are proposed and communicated with the stakeholders. These solutions can be directed to increasing the amount of water, improving the quality, and also to abstract valuable resources from the waste streams (energy, nutrients and water). When possible some practical improvements can be realised during the internship



The study can be carried out by a group of two students of which one has a specialization in hydrology/water resources management and the other in sanitary engineering. The optimal period of the internship is during the summer holidays (July-September 2010).



Supervision and support

The internship will both financially as logistically be supported by Kantara, dina El Filali (dinaelfilali@gmail.com).

The students will be supervised by Prof. dr.ir. L.C.Rietveld (TU-Delft, L.C.Rietveld@tudelft.nl)