**Comparative analyses of factors determining soil erosion rates based on network of Mediterranean monitored catchments for the innovative, adaptive and resilient agriculture of the future (FAIR-ER MED)**

**FAIR !**

These questions are answered by the AgreenSkills supported project:

**" Future Agriculture Innovative AdaptIve & Resilient"**

- Intensive precipitation enhance soil erosion
- They lead to removal of soil particles and decrease fertility of soil
- The effect could be tremendous, e.g. during one rainfall event of 80.64 mm in Kamech (Tunisia) 0.3 cm of soil eroded from each square meter!

**FAIR-ER MED**

- But not every rainfall produces runoff and sediment transport on the catchment scale
- Which factors than lead to the removal of soil particles, which protect the soil?
- What is particularly the role of land use and landscape structure? How it can prevent erosion under the ongoing climate change?

**SOME PRELIMINARY RESULTS...**

...show high variety of soil erosion responses in catchments well representing the Mediterranean area, their relationship to the catchment connectivity. Connectivity is very much influenced by land use!

**AND FUTURE PROJECT DELIVERABLES**

- understanding of the main drivers of soil erosion and the differences and similarities within catchment and landscapes in the Mediterranean
- understanding the influence of land use and landscape design on the connectivity and sediment delivery
- assessment of agriculture effects on sediment dynamic today and in future
- proposal of land use management protecting the soil against erosion
- background for interdisciplinary assessment of soil erosion and land use management adaptation strategies and definition of new research trajectories
Its first step is the FAIR-ER MED supported by Agreenskills. It aims to develop adaptive and resilient agricultural practices by understanding the main drivers of soil erosion and the differences and similarities within catchments and landscapes in the Mediterranean. This project seeks to maintain the soil function and ensure the soil is protected against erosion due to its high variety of soil erosion responses in catchments well representing the Mediterranean area, highlighting the relationship to the catchment connectivity, which is very much influenced by land use. Intensive precipitation enhances soil erosion, leading to the removal of soil particles and decreased fertility. Questions are answered by the AgreenSkills project through comparative analyses of factors determining soil erosion, understanding the influence of land use and landscape design on connectivity and sediment delivery, and assessing agriculture effects on sediment dynamics today and in the future. Supported by the European Commission under the 7th Framework Programme, this project will contribute to the innovative, adaptive, and resilient agriculture needed for the future.