

#### The environment

-> Tunisia is heavily impacted by water scarcity (450 m3/capita/year) and among the most vulnerable to climate change effects

-> South is arid or semi arid (less than 200 m3/capita/year)

-> South-East agriculture is mainly mono production based: olive trees

# Existing model out of date

- Olive trees productivity is low and irregular
- Plantations are old
- Heavily impacted by climate change: more frequent draughts
- Soils have been eroded
- Activity limited to a short period in the year



- Desertification
- People migration

#### Need for new model: Innovative - Sustainable - Replicable – 'Bankable'

- Sufficient revenues to attract youth
- Regular activity along the year to retain the population on site and stop migration
- Speculations adapted to climate change
- Diversified production (fruits, aromatic and medicinal plants...)
- Optimisation of the value chain
- Improvement of primary resources (water, soil and energy): desalination using RE, soil rehabilitation

### Description of the project

- **Component 1.** Rehabilitation of the olive tree and fruit and vegetable species diversification
- **Component 2.** Introduction of aromatic and medicinal plants
- Component 3 Correction and rehabilitation of soil
- Component 4 Nexus water energy: desalination and establishment of an underground irrigation system
- Component 5 Recovery and processing of agricultural products

#### Outcomes and outputs of the project

- Promote innovative technologies and practices related to agriculture
- Encourage the creation of rewarding jobs in the technological and agricultural areas
- Create added value and promote regional development
- Offer platforms of experimentation of high level to the needs of businesses and from friendly countries of the Tunisia and Tunisian research centres

# Prototype site: South-East Tunisia 33 °30'55.81"N; 10°53'26.08"E



#### Interaction with Research

- Search for innovative... but workable solutions & approaches to the main challenges:
- -> Solar energy model economically sound
- -> Sea water desalination at affordable cost (green house model??)



- -> Soil rehabilitation: environment friendly
- -> diversified production and optimised value chain

# THANK YOU

### DANKE

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