Research in the Target Field (Algeria)

Localization in North Africa



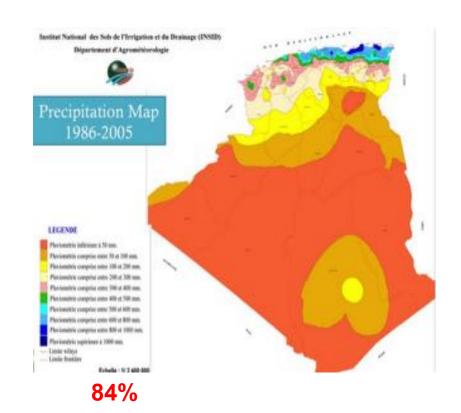
Surrounded by 7 countries

1200 km of seafront

Area 2,38 million Km2

Three classes or types of climate

Mediterranean climate Semiarid climate (Highland) Arid climate (Sahara Desert)



Although Algeria is the second-largest country in Africa, the **arable land** of about 8.2 million hectares accounts for only **3.4** percent of the total land area. The **vast Sahara** desert, which spans much of the south central part of the country, is not available for agriculture.

The agricultural sector is a **moderate** contributor to the Algerian economy, accounting for 10% of GDP (2013).

Drought conditions and soil quality are partly responsible for the low output of the agricultural sector.

To cope with this situation, we must think medium and long-term solutions.

To improve our food security we must resort to precision irrigation and improve soil fertility and crop productivity aspects.

Precision agriculture

Among the research works carried out that have a relationship with precision farming

- Spatial prediction of topsoil salinity in the Chelif Valley, Algeria, using local ordinary kriging with local variograms versus whole-area variogram (2001)
- Spatial distribution of heavy metal concentrations in urban, suburban and agricultural soils in a Mediterranean city of Algeria (2010)
- > USE OF LANDSAT TM FOR MAPPING LAND USE IN THE ENDORHEIC AREA--CASE OF GADAINE PLAIN (EASTERN ALGERIA). (2014)
- > <u>Fuzzy Logic Expert System for Classifying Solonchaks of Algeria</u> (2018)
- External validation of the ASTER GDEM2, GMTED2010 and CGIAR-CSI-SRTM v4. 1 free access digital elevation models (DEMs) in Tunisia and Algeria

- > STATUS OF PRECISION IRRIGATION EFFICIENT TECHNOLOGIES IN MEDITERRANEAN PARTNER COUNTRIES (2018)
- Contribution of Satellite Imagery to Study Salinization Effect of Agricultural Areas at Northern Eastern Oasis Algerian Region (2019)
- Assessing environmental sensitivity areas to desertification in Eastern Algeria using Mediterranean desertification and land use "MEDALUS" model (2010)
- Modelling hydrology and sediment transport in a semi-arid and anthropized catchment using the SWAT model: The case of the Tafna river (northwest Algeria) (2017)
- Modeling and mapping desertification risk in eastern Algeria with Geomatic data (2010)





Thank you for you attention!

