

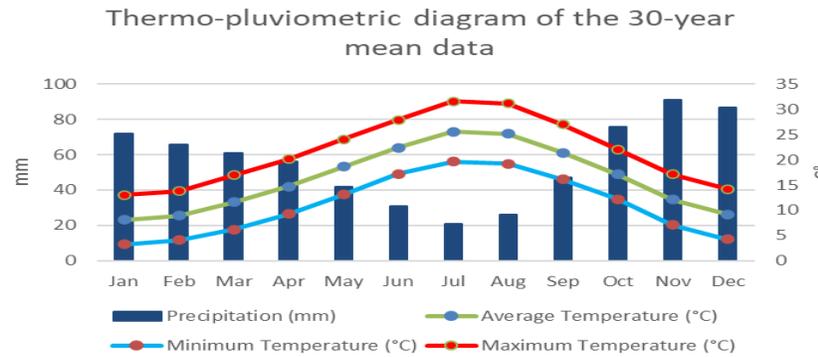
CREA-IT Flexible Water Tank System case study I Monterotondo (Rome), Lazio, Italy



2. Agro-Ecological Context

Climate: Typical Mediterranean climate with wet winters and dry summers. The 30-year mean data shows precipitation peaks in November/December (>90 mm) and minimums in July/August (<20 mm) and a total of ± 600-800 mm for year.

Soil-Texture: Silt Loam. Composition: Sand 30%, Silt 50%, Clay 20%.



4. Intervention:

Analysis of the correlation between rainfall and available water, utilizing detailed thermo-pluviometric data and the volume of collected water.

Assessment of system replicability to mitigate the risk of water scarcity during the summer period and optimize resource valorization within the farm system.

Comparative yield analysis between rainfed crops and those irrigated with water stored via the FWHS.

Evaluation of economic viability and potential income.

3. Crop Systems

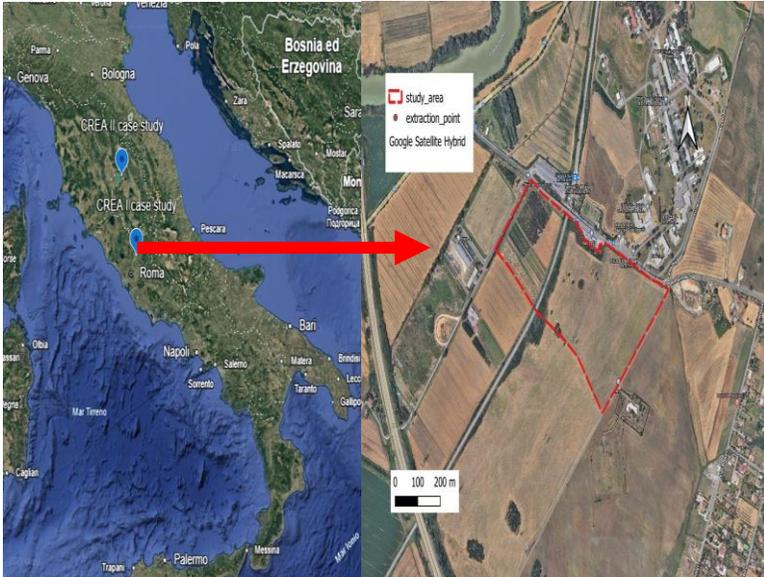
Target Crops: Sorghum and Quinoa

The field are prepared using traditional tillage methods.

Seed rate of 25-30 kg/ha for both species

Pre-emergence fertilization was carried out using 25 kg/ha of urea fertilizer and 20 kg/ha of 20-10-10 NPK"

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Sorghum						←	←	←	←	←	←	←
Quinoa						←	←	←	←	←	←	←



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