

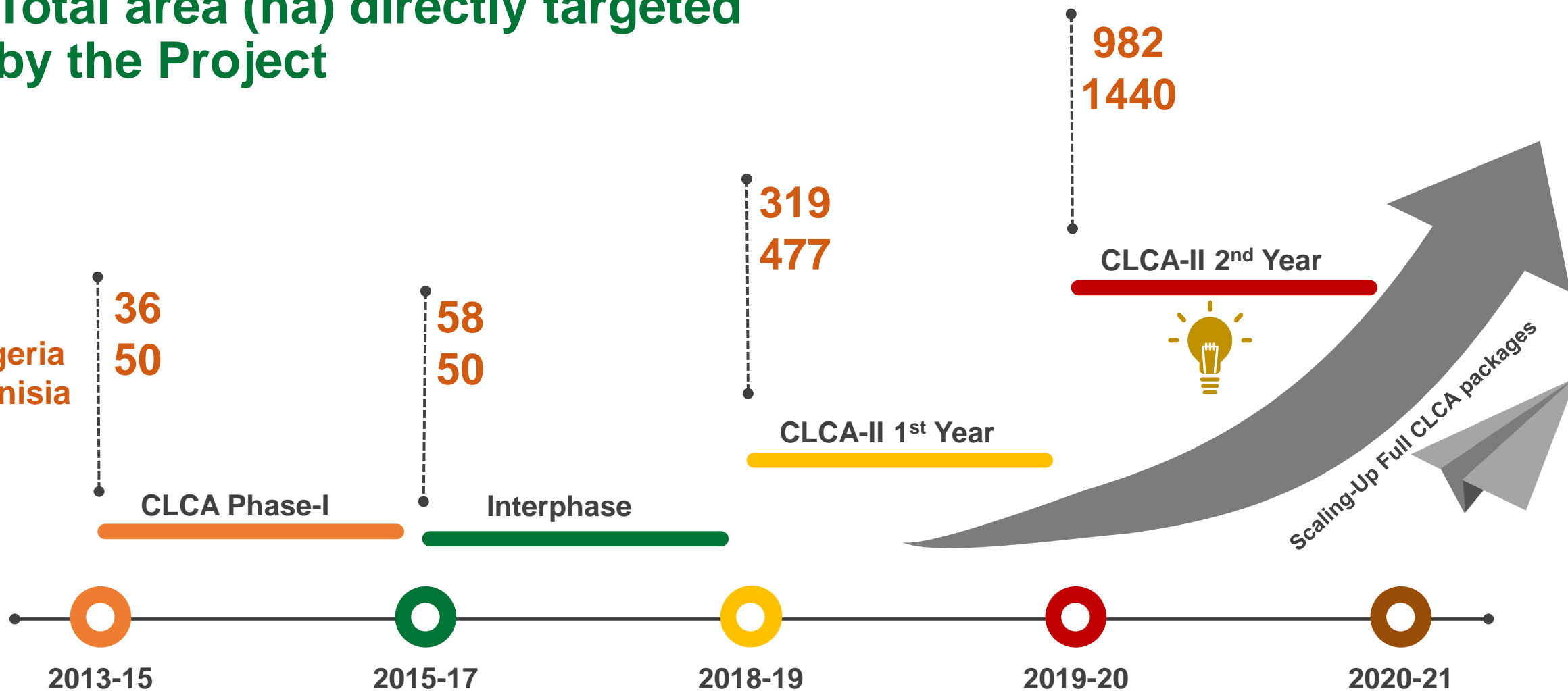
CLCA-II Project: Where are we now ?

Mourad Rekik, Zied Idoudi

Tunisia, 05th March 2020

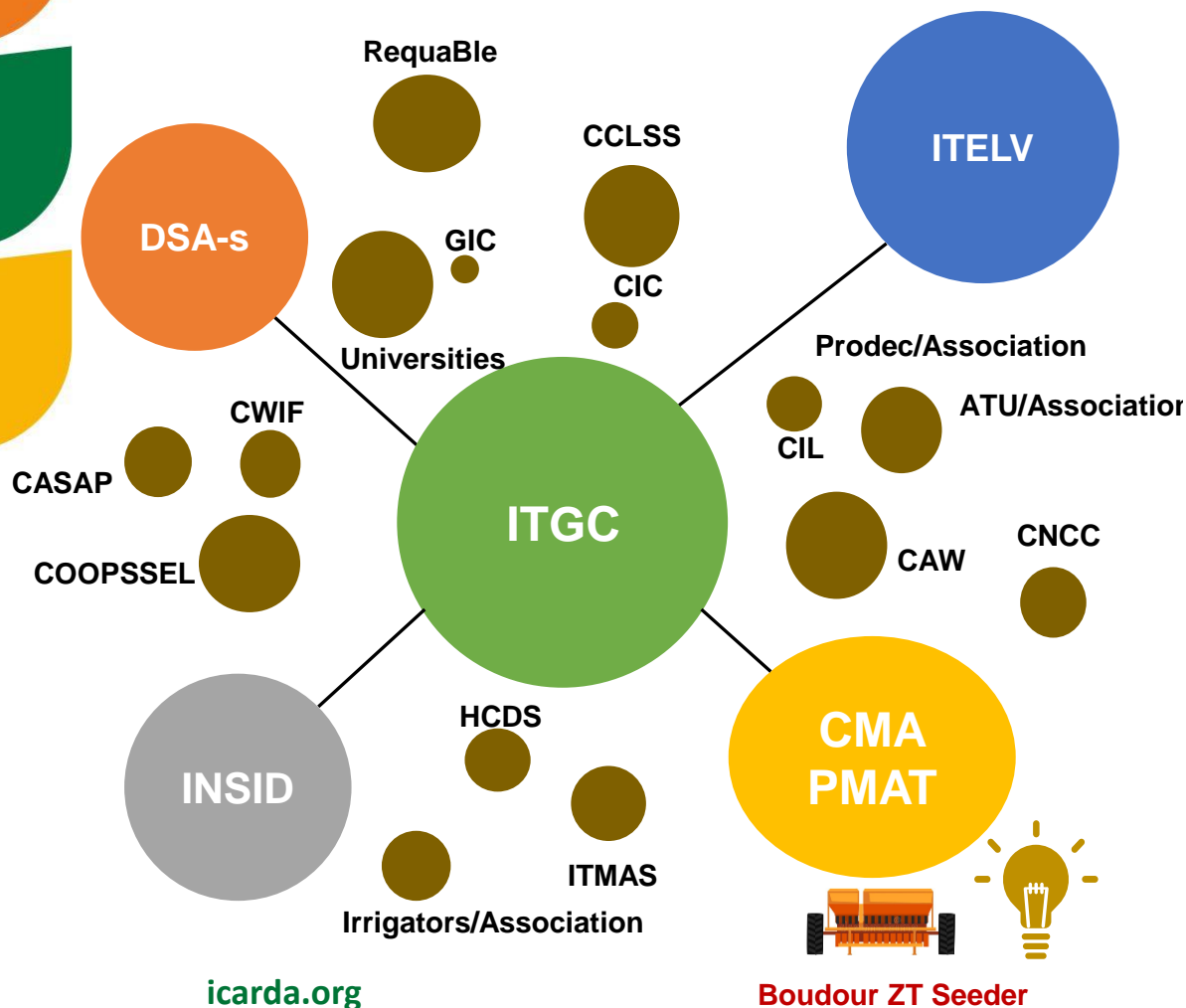
Total area (ha) directly targeted by the Project

Algeria
Tunisia



Algeria CLCA: 2019 – 2020

Extended Partnership



15 CapDev for Farmers and Extension Specialists

695



Farms affected directly by the project

242



Total area (ha) directly targeted by the project

982



Total area (ha) indirectly targeted by CLCA activities

1258

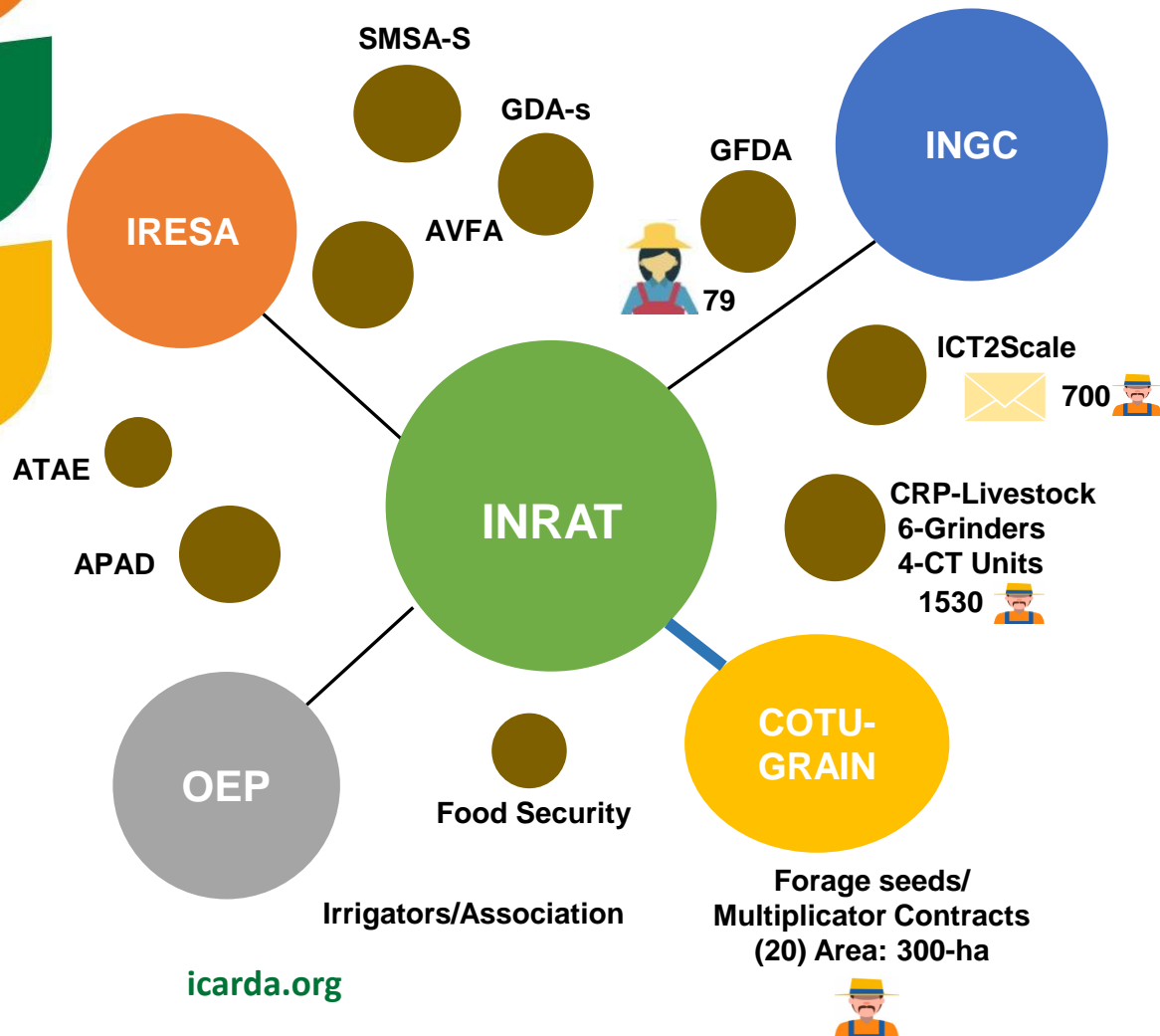


ESP, MSc, PhD (Defended, ongoing)

21

Tunisia CLCA: 2019 – 2020

Extended Partnership



16 CapDev for Farmers and Extension Specialists

560



Farms affected directly by the project

95



Total area (ha) directly targeted by the project

1440



Total area (ha) indirectly targeted by CLCA activities

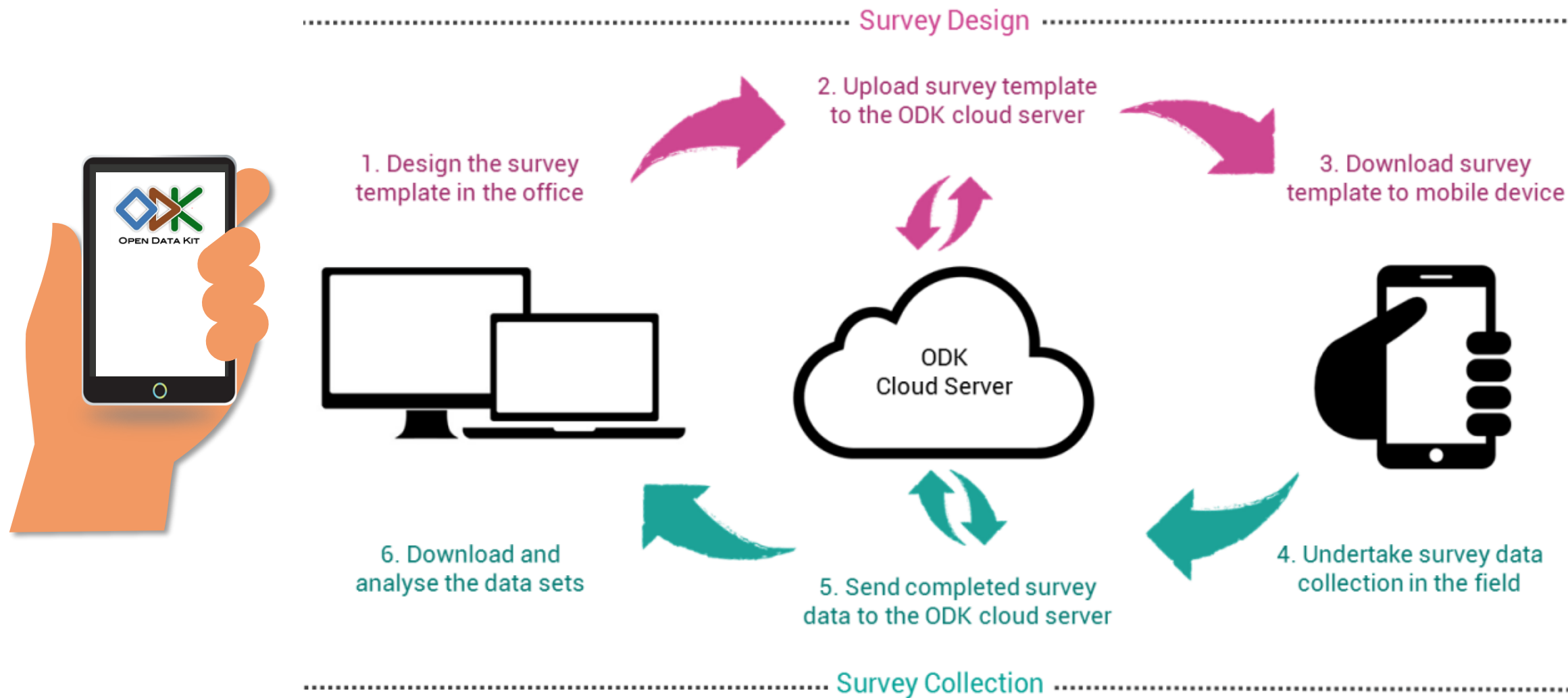
2500



ESP, MSc, PhD (Defended, ongoing)

17

CLCA Data Collection Tool/ODK: Open Data Kit



Scientific evidence: Conservation Agriculture (CA) to adapt wheat-based-systems to climate change in Tunisia

Science of the Total Environment 692: 1223 – 1233. 2019

IF: 5.589

Assessing the long-term impact of conservation agriculture on wheat-based systems in Tunisia using APSIM simulations under a climate change context

Haithem Bahri ^a, Mohamed Annabi ^b, Hatem Cheikh M'hamed ^b, Aymen Frija ^c

^a National Research Institute for Rural Engineering, Water and Forests (INRGREF), Tunisia.

^b Institut National de la Recherche Agronomique de Tunisie (INRAT), Tunisia.

^c International Center for Agricultural Research in the Dry Area (ICARDA), Tunis Office.

This evidence from Tunisia is important to demonstrate to policy and decision makers that the sustainable production of durum wheat under climate change conditions in Tunisia is possible through the adoption of CA practices in both sub-humid and semi-arid areas.

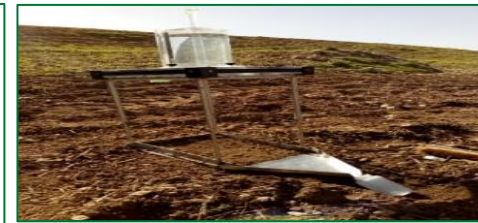
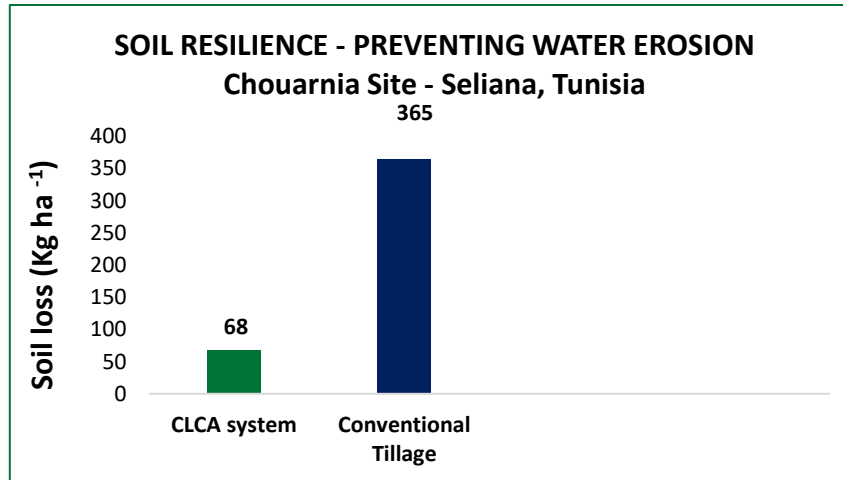
➡ This study shows how CA based on Zero-tillage and soil residue retention vs. Conventional Tillage over 260,000 ha contributes to make wheat production more resilient to climate change in Tunisia through:

- ❑ Enhancing wheat yield (15%),
- ❑ Improvement of water use efficiency (13% to 18%),
- ❑ Increase organic carbon accumulation (0.13 t ha⁻¹ year⁻¹ to 0.18 t ha⁻¹ year⁻¹);
- ❑ Reduction of soil loss caused by soil-water erosion (1.7 t ha⁻¹ year⁻¹ to 4.6 t ha⁻¹ year⁻¹ of soil loss).



Healthy Soils (under CA), Kef, Tunisia

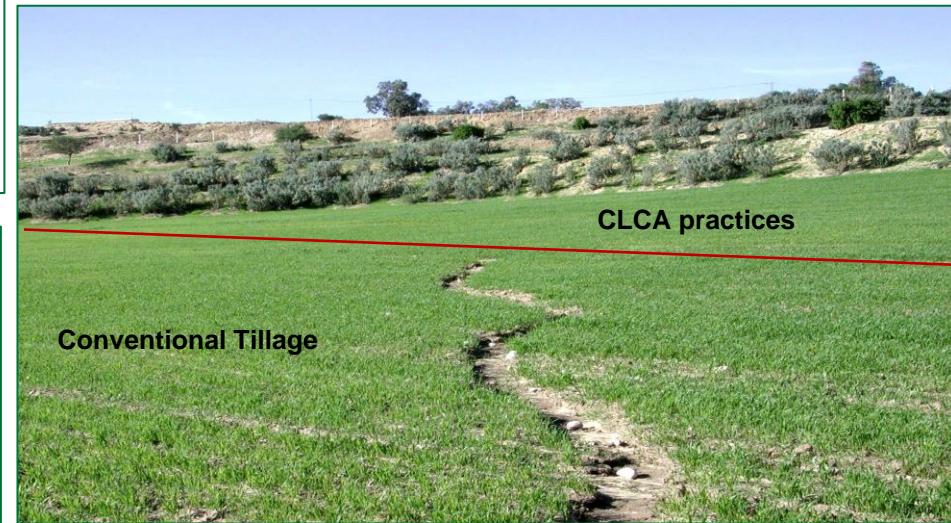
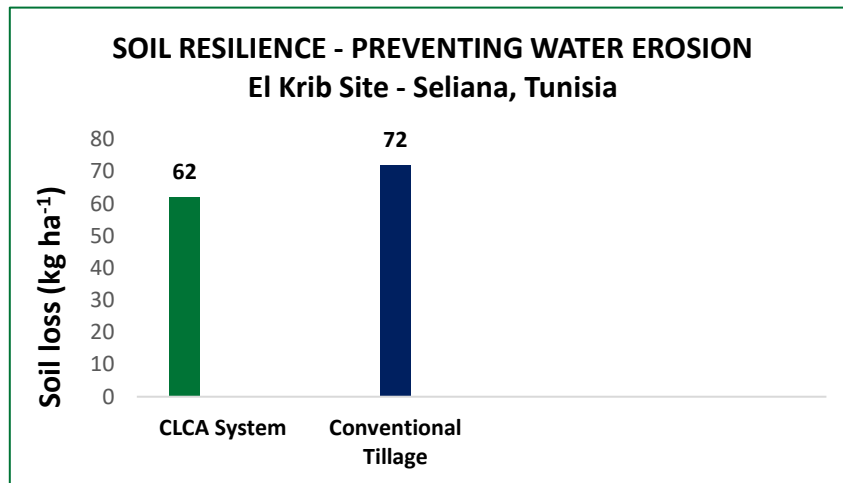
Scientific evidence: The value of CLCA system (6 consecutive years) to combat soil erosion



Rainfall simulator in Chouarnia Site – Seliana, Tunisia



Establishment of Wischmeyer plots in El Krib site – Seliana, Tunisia



CLCA practices for soil resilience, El Krib Site - Tunisia

At the end of the CLCA-II Project in 2022, results from these two (2) sites related to soil health and water use efficiency will provide invaluable information with regard to the impact of a CLCA system on natural resources.

Traveling Workshop: Improving the integration of crop-livestock systems and conservation agriculture in the sheep-cereal production systems of North Africa

Date & Place: 1st to 4th July 2019, Tunisia;

of Total participants: 23 (07 female) [Technical advisors, coordinators and collaborators];

of countries: 03 (Algeria, Morocco, Tunisia);

Places visited: Tunis, Fernena-Jendouba, Chouarnia/Makthar-Seliana, El Krib-Seliana, Laaroussa-SELIANA;

Blog: <https://www.icarda.org/media/news/improving-integration-crop-livestock-systems-and-conservation-agriculture>

- Validation of unified tools for the sustainable use of stubble consistent with CA package,
- Introduction of alternative feeding methods under CA,
- Intensification of forage options,
- Keeping livestock for profit,
- Development of KM tools for the packages under consideration.





Thank you!