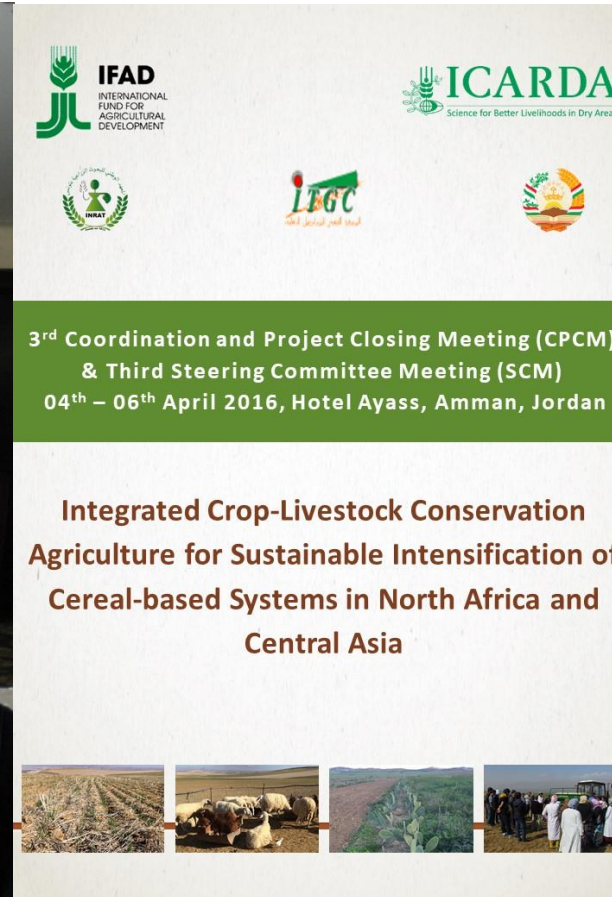


A Process Which Started 2 Years Ago



- Submission of a CN, August 2016
- Action After Review in Rome, December 2016
- Letter of intent, March 2017
- Submission of the full proposal, April 2017
- Winning the competitive call for proposals, May 2017
- Quality enhancement and quality assurance process, June – October 2017
- Approval by IFAD board, December 2017
- Finalization of the agreement, April 2018

Use of conservation agriculture in crop-livestock systems (CLCA) in the drylands for enhanced water use efficiency, soil fertility and productivity in NEN and LAC countries

Goal and Objective

Goal

To sustainably increase production and enhance climate resilience of small farmers' communities and their crop-livestock production systems in drylands.

Objective

To develop local adaptable soil conservation and water use efficiency technologies as well as forage crops and biomass management practices for different CLCA systems in the drylands using agro-ecological principles and participatory action research approaches.

- (i) the development of contextually-relevant soil conservation and water use efficiency practices;
- (ii) the introduction of more productive forage crops and enhanced practices for biomass management and livestock management;
- (iii) linking with and leveraging existing or upcoming IFAD projects (reference to investment projects) within the countries of engagement as well as developmental programmes being undertaken by national governments or multilateral and international organizations.



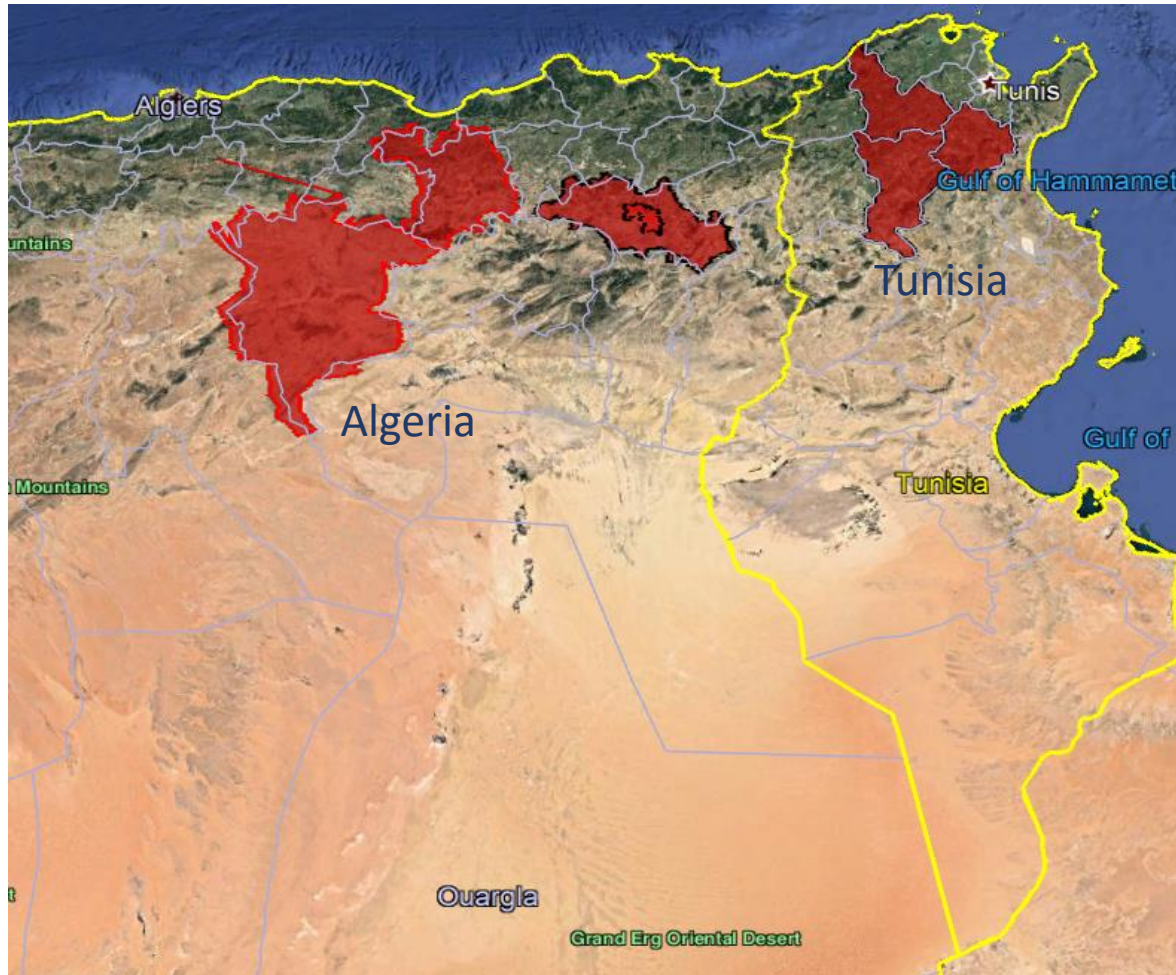
Target Numbers

The direct target group will be an estimated 3,000 (at least 50% women and 30% youth (below 35 years)) small crop-livestock farmers in drylands in LAC and NA participating in trials, action research, training and extension for the development and adoption of local adapted technologies and practices for CLCA systems;

Through the IFAD investment projects and project partners it is estimated that the training and adoption of technologies and practices for CLCA systems will reach an additional 10,000 small crop-livestock farmers;

In North Africa and over the four years, the grant will aim to target directly and indirectly 2,000 mixed cereal-sheep farmers whose farming practices stretch to over 50,000 – 60,000 ha.

Geography and Partners



Different Production Systems

North Africa

- Cereal – Livestock belt (barley – wheat – sheep)
- Mixed small to medium-scale holders
- Rainfall 200 - 450 mm, very irregular
- Poor soils, extremely low soil organic matter
- very high erosion risks
- Extended practice of fallow
- Supplementary irrigation of wheat in Algeria



Latin America

- Maize-red beans-based systems in the rain-fed dry corridor of Nicaragua
- Low integration of livestock mainly dual purpose cattle
- High impacts of drought on crop losses and livestock mortality
- Maize, and Andean cereals that include quinoa or amaranth in Bolivia
- High pressure on the land, extension of quinoa and competition with camelid production



Inter-Regional Exchange

South-south collaboration between LAC and NA will be operationalized

- Scientific level: NA-LAC scientists will exchange on the genericity and adaptation of tools to tackle the complexity of CLCA systems through workshops and seminars
 - ✓ Characterize the diversity of farming systems, identify the most marginal and fragile farming households, and target coherent interventions;
 - ✓ Develop and apply generic farm level models that can be adapted to take into account the specific local challenges related to crop-livestock optimization
- Development level: NA-LAC countries will exchange methodologies and learning from the scaling approaches
 - ✓ NA-LAC country exchanges through conceptualization of the establishment of innovation systems and the knowledge management plans towards upscaling and sustainability;
 - ✓ Yearly South-South e-learning events will be organized, including within the target countries to analyze and compare country specific approaches and case studies.

Significant Challenges



- Challenges of moving to no-till;
- Can conservation agriculture cropping and livestock co-exist?;
- Livestock sector encompasses feed production, animal production, and in some cases, a manure management chain all of which require high integration with crop production systems;
- Finding the right balance to meet the livestock nutrients requirements and retaining stubble to enhance soil health;
- Adoption of retention of crop residues by resource-poor and vulnerable smallholder farming systems due to strong competition for residues by livestock;
- Livestock management practices and forage inclusion tailored to fit conservation agriculture cropping systems.

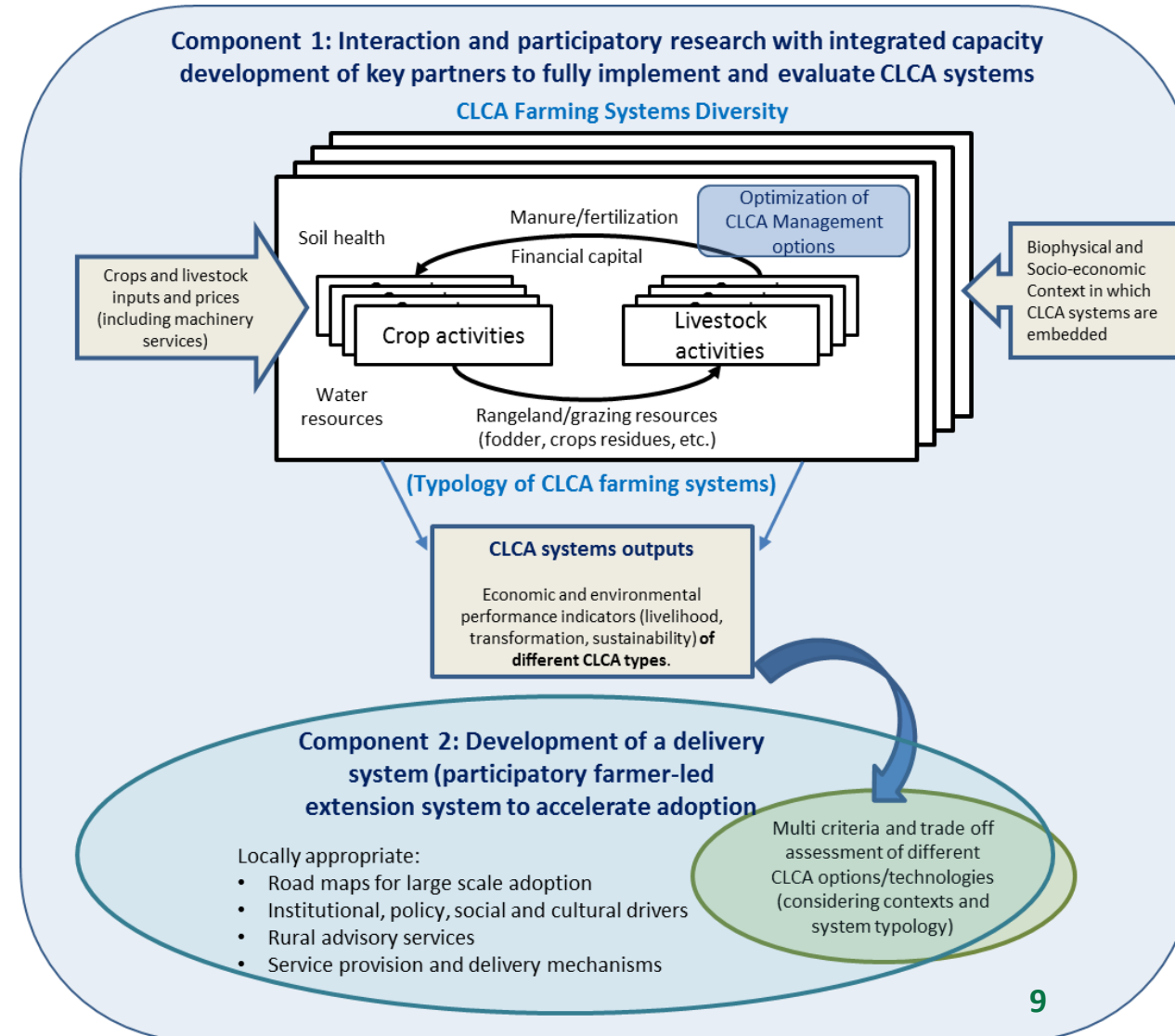
Project Components

➤ Moving our vision:

- From a “research for development”
- Towards “integrated research and development”

➤ The integrated research framework combines:

1. Development of fully integrated technical and institutional innovation packages for different production contexts;
2. Accurate evaluation of the social, economic and ecological impacts of these packages;
3. Integrated capacity development with active development of “delivery systems” for impact acceleration of CLCA packages.



Thank you



Members of the CLCA farmer association - Algeria