



# Impact evaluation of the Food Security and Development Support Project in the Maradi Region: Republic of Niger

107<sup>th</sup> session of the Evaluation Committee

29<sup>th</sup> of October 2019, Rome

# Background of the project

**Duration:** 2011-2018.

**Total project cost:** 31.71 million USD (IFAD 70%).

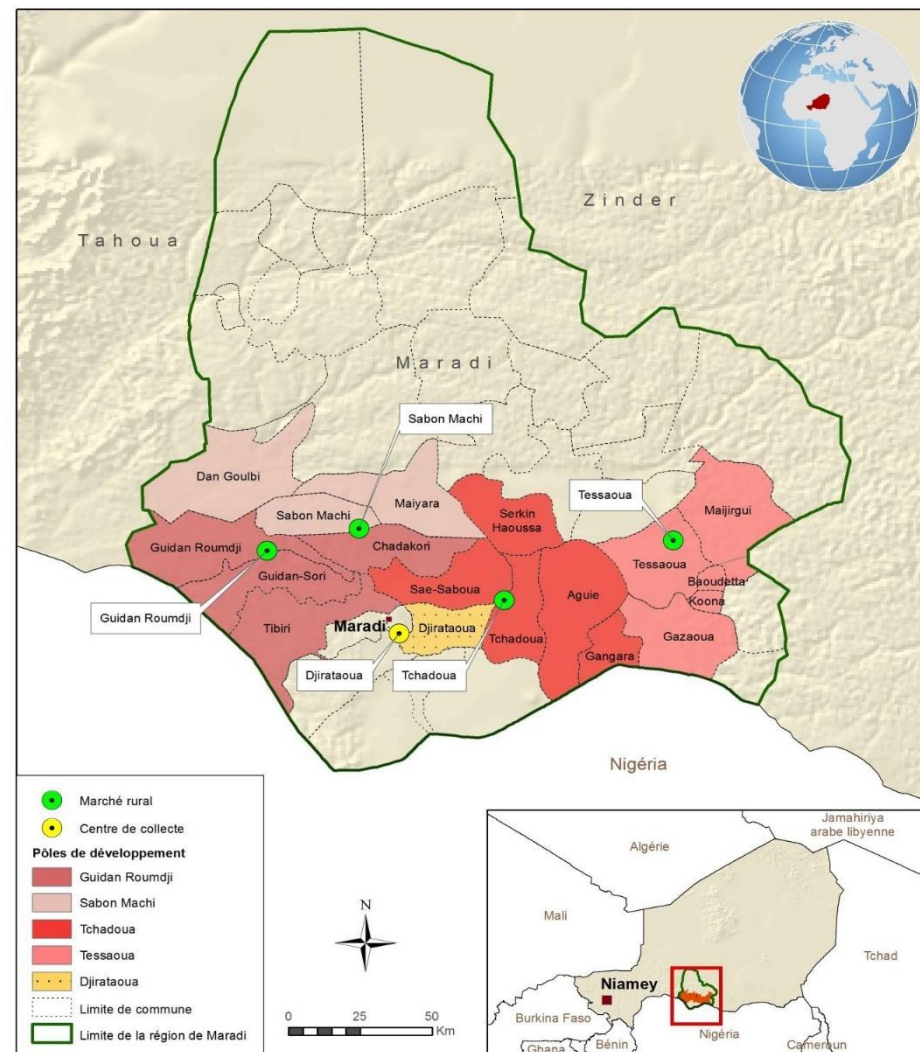
**Coverage of :** 357 villages (18 districts)

**Objective:** Improving the living conditions and crisis resilience of rural populations focusing on food and nutritional security.

**Strategy:** Development of five rural economic hubs focused on wholesale and intermediary markets of cereals.

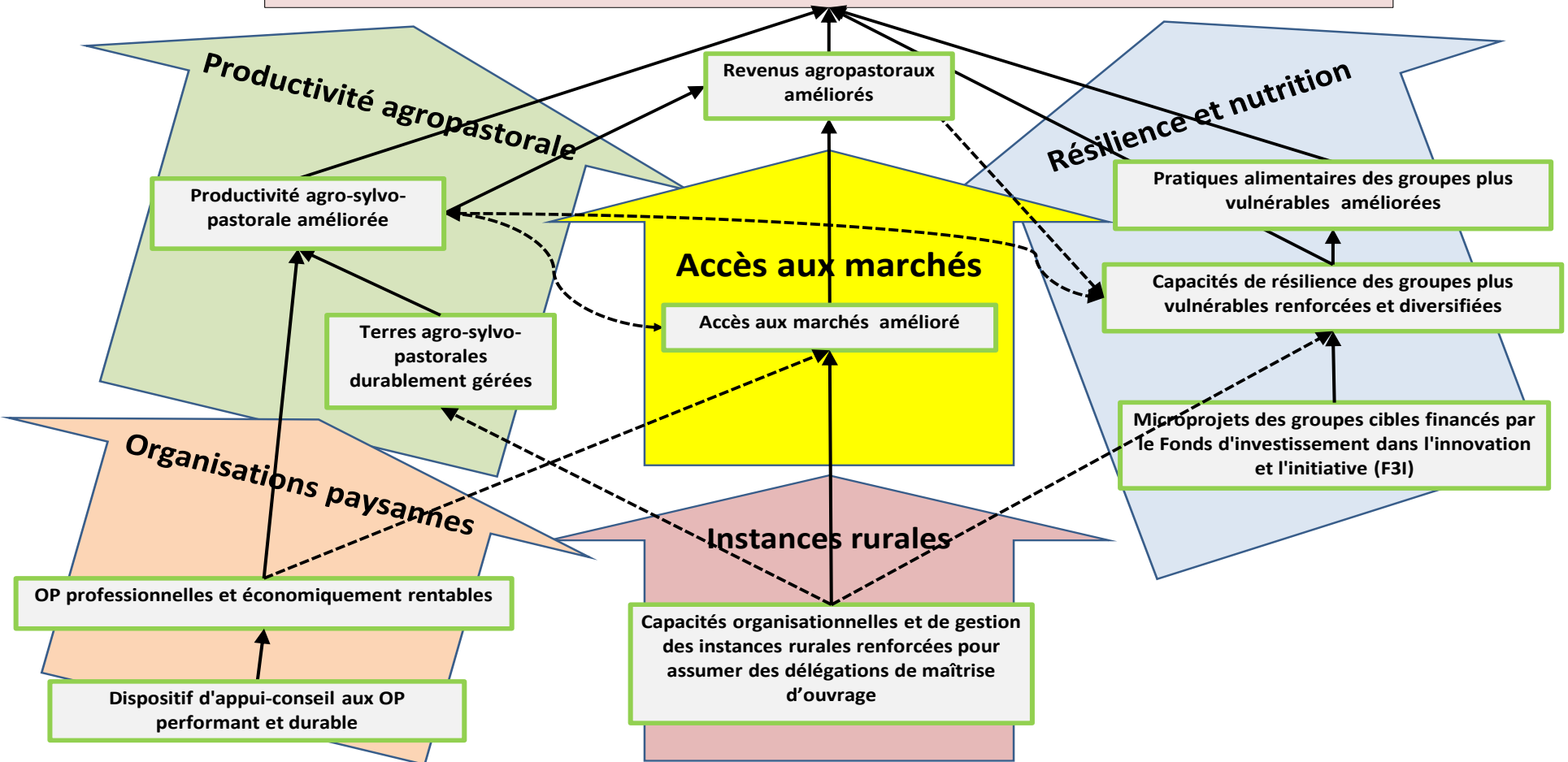
**Expected results:**

- Increased agricultural productivity;
- Improved access to agricultural markets;
- Improved household nutritional security and resilience;
- Sustainable management of communal resources;
- Strengthening of farmers' organizations.



# Theory of change

Conditions de vie, sécurité alimentaire et nutritionnelle et résilience améliorées de 65 000 ménages ruraux autour de 5 pôles de développement économiques dans 18 communes de la région de Maradi



# Impact evaluation methodology

**Quasi-experimental methods:** Propensity score matching and difference-in-difference.

- Sample size: 1 350 households: 614 treated and 736 control group.
- Sample strategy
  - stratified sample (group of treatments – agriculture; environment; market; food security).
  - random walk in the village (households).

**Participatory Narrative Inquiry (PNI):** is drawn on narrative analysis and it integrates

- Storytelling  
(around 560 stories)
- Sense making process
  - Participants provide personal micronarratives concerning life.
  - Experience Self-interpretation by respondent.
- Analysis of stories and variable associations.
  - Group discussion.

# Key findings

## Relevance:

- PASADEM aligned with main national development policies (“*Plan de développement économique et social*” and “*Initiative 3N*”)
- Responding to strong needs: (i) improved food security and (ii) market integration
- But underestimated costs and time to build infrastructure for market access

## Effectiveness

- Infrastructure progress below targets
- Project redesign shifted budget to infrastructure and away from production activities which were discontinued
- Even if infrastructure was incomplete, better market access, price information and a greater number of buyers (competition) raised prices to farmers

3 wholesale markets, vs. 5 planned  
11 intermediary markets, vs. 26 planned

# Key findings - Impact

Impact on **rural poverty** is generally positive:

- **Food security and resilience** improved, thanks to women's access to cereal warehouse; distribution of goats; cash for work.

However, no significant effect detected on **agricultural productivity**:

- It is still limited by a physical and economic **access to inputs** (especially fertilizers)
- The limited capacity of **farmer organizations** to provide agricultural services for production and post-production activities, is still a challenge

# Highlights of impact findings results: propensity score matching and difference-in-difference analysis

Criteria	Outcome of interest	Effect
Agricultural productivity	Yield of most important crops (millet, sorghum, cowpea, groundnut)	Not statistically significant
Household income and net assets	Livestock (goats and sheeps)	Positive, statistically significant
	Household material (wall material)	Positive, statistically significant
	Durable assets (ox-cart, plow, motorbike, bike)	Not statistically significant
<b>Food security</b>	Months of Adequate Household Food Provisioning (MAHFP)	Positive, statistically significant
	Food Consumption Score (FCS)	Positive, statistically significant
	Household Diet Diversity Index (HDDI)	Positive, statistically significant
	Coping Strategy Index	Positive, statistically significant

# Key findings – cont.

## **Sustainability**

### Supporting factors:

- (i) Institutional partnerships with the Regional Chamber of Agriculture, local governments
- (ii) Some improvements in the capacity of farmer organizations and their unions

### Threats:

- (i) Unclear arrangements for maintenance / repairs of market infrastructure
- (ii) Wholesalers and major collectors controlling the markets vs still weak bargaining capacity of farmer organizations

**Gender equality and women's empowerment.** Individual sphere: functional literacy; household sphere: helped women to contribute to hh food security; Social sphere: some increase in women's participation in managing position in local organizations (from 17.5% to 24.5%)

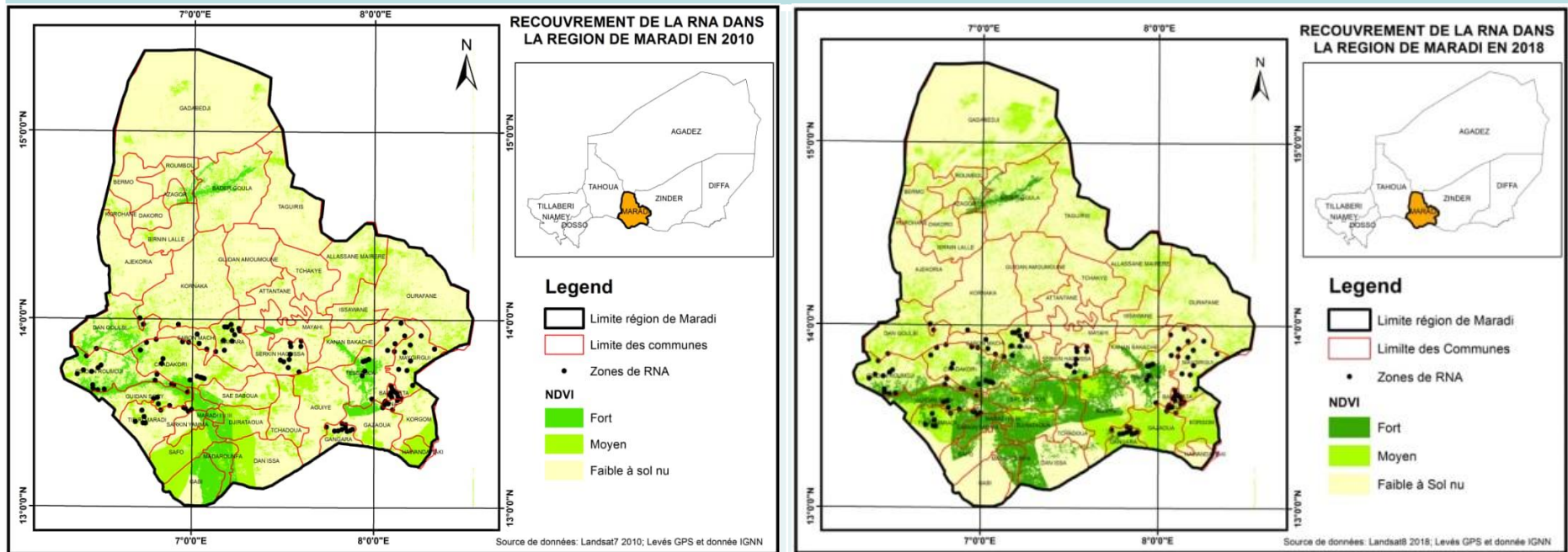
But choice of women-business activities was not optimal. They required managerial and technical skills (e.g. cereal mill) instead of simple processing (e.g. pancakes)



# Key findings - cont.

Some contribution to **natural resources management and climate change adaptation** thanks to assisted natural regeneration activities; half-moon ditches; soils bench treatment; zai holes; sand dune stabilization; fire breaks. (Satellite data)

## Changes of vegetation cover in the Maradi Region 2010-2018



# Key recommendations

**Recommendation 1:** Continue to support food security and resilience activities in order to reach poorest farmers in order to improve food and nutritional security

**Recommendation 2:** Develop at least one rural economic hub and related market infrastructure in each project area

**Recommendation 3:** Strengthen farmer organizations in order to provide assistance and services to farmers in production and post-production activities