ICARDA
Science for Better Livelihoods in Dry Areas

Project OVERVIEW

MIND THE GAP
Improving Dissemination Strategies to Increase Technology Adoption by Smallholders

The Challenge

Proven agricultural technologies that can improve lives often have low adoption rates due to lack of effective service delivery systems and enabling policy environment. Agricultural extension is a common method to introduce technologies. However, little is known about which extension approaches are the most effective with farmers.

Improving Dissemination Strategies to Increase Technology Adoption by Smallholders:
Understanding which extension approaches have the greatest success rate will help improve future agricultural technology dissemination efforts. This project will compare different extension approaches and evaluate their impacts on technology adoption rates and farm household livelihoods. In addition to agricultural training, extension approaches will include business training for farmers and access to market information.

Improved packages for the livestock-barley system in semi-arid Tunisia are able to save up to 40% of livestock feeding costs but are not widely adopted. Low adoption rates are typical for many proven technologies in developing countries. While developing improved technologies is important for rural livelihoods, new technologies can only affect livelihoods positively if they are adopted by farmers. A better understanding of how extension services can be modified to make them more effective in the small farm sector can help to promote rural growth and poverty reduction. Research outcomes from this project can help utilize limited agricultural and development budgets more efficiently.

Research Approach: What is a RCT?

To improve the rigor of the comparison, the project will implement a randomized controlled trial (RCT) approach. RCT compares randomly selected groups that receive ("treatment") with those that do not receive ("control") the extension approaches that are being tested. Different treatment groups receive different types of extension approaches. These groups are compared with each other and against the control group receiving no treatment.

Project Facts

Dates: April 2016 to March 2019

Partners:

- Institution de la Recherche et de l'Enseignement Supérieur Agricoles (IRESA)
- Institut National de la Recherche Agronomique de Tunisie (INRAT)
- Office de l'Elevage et des Pâturages (OEP)
- Agence de la vulgarisation et de la formation agricoles (AVFA)
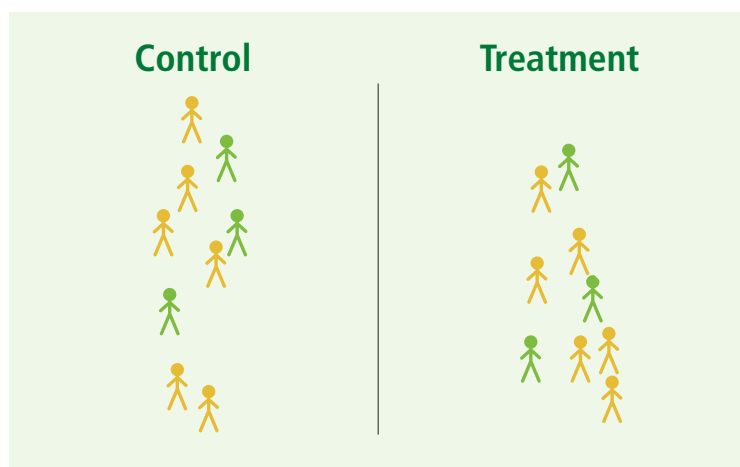- Georg-August University of Goettingen (Germany)

Budget: 1.2 million Euros (BMZ, Federal Ministry for Economic Cooperation and Development, Germany)

Location: Zaghouan and Kairouan governorates in Tunisia

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Control **Treatment**

Control groups will receive extension after collection of household survey data is finished.

This approach is unique in that it allows for:

- Randomization that allows impacts to be attributed to a particular treatment
- One or different treatment groups and a control group
- Comparison AND evaluation of different extension approaches

Sustaining the Benefits

The project will lead to increased agricultural productivity within the group of 700 participating farmers. However, the scientific interest goes far beyond these specific improvements for the farmers directly participating in the research. To raise awareness and disseminate the findings for larger impact, a policy guideline, brochures, and blogs for extension services will be developed. The most effective extension approaches will be presented to the Tunisian Ministry of Agriculture. In collaboration with the Tunisian agriculture extension and key stakeholders, an effective strategy will be developed on how to implement improved extension approaches in a cost-effective and gender sensitive way.

Spreading the Gains

Scaling up to other regions will be facilitated with interactive similarity maps that identify similar socio-cultural and environmental contexts across the West Asia and North Africa (WANA) region.