

**PRIN: RESEARCH PROJECTS OF RELEVANT NATIONAL INTEREST – Call 2020
Prot. 20205L79R8**

“Towards a holistic approach to Sustainable Risk management in agriculture” Sus-Risk



Report

Deliverable D6.1

Document Title	Report	Author	Samuele Trestini, Elisa Giampietri, Alice Stiletto
Document type	Deliverable 6 . 1	Due date	01/02/2023
First issue		Ref.	
Dissemination level	Internal	Revised	

PROJECT	Towards a holistic approach to sustainable risk management in agriculture	Prot.
Call identifier	PRIN: RESEARCH PROJECTS OF RELEVANT NATIONAL INTEREST – 2020 Call for proposals Prot. 20205L79R8		
Work Package	6		
Deliverable n°	D6.1	Lead beneficiary:	
Coordinator			
Project Manager	...		
Project Start date	...		
Project Duration	36 month		

Report on Farm Survey.

By Samuele Trestini, Elisa Giampietri, Alice Stiletto

1. Introduction

Investigating the factors that influence farmers' risk management choices is crucial for improving agricultural resilience. A deeper understanding of these determinants can support the adoption of existing strategies and guide the development of more tailored, effective tools that align with farmers' actual needs and preferences. Because of the central role of the end users (i.e. farmers), the project strongly relies on the active involvement of stakeholders (farmers, insurance companies and policy-makers). Farmers are involved both by focus groups and surveys. This report describes what kind of survey has been conducted and why.

2. What kind of surveys have been conducted?

The surveys described in this report are part of three research tasks: Task 3b - Farmers' preferences for the characteristics of innovative RM tools; Task 3c - Determinants of the adoption of innovative RM tools; and Task 5b - Assessing farmers' preferences for contract farming.

As regards Task 3b, an ongoing survey aiming at collecting 300 Italian winegrowers uses a discrete choice experiment to explore how the operational structure of the AgriCat national mutual fund (first or second loss), namely an innovative risk management risk, affects their willingness to adopt insurance and shapes their preferences for key attributes such as premium, maximum indemnification, and deductible. In parallel, an additional survey was conducted under this task, involving 89 Italian fruit growers. This survey aims to identify which features of mutual funds for phytosanitary risks are most valued by farmers, with the objective of supporting the development of more attractive and effective risk management instruments aligned with their preferences.

As for Task 3c, a parallel survey aiming at collecting 300 Italian arable crop producers investigates the factors influencing their intention to adopt two innovative risk management tools such as mutual funds for plant diseases and index-based insurance. The analysis applies the Unified Theory of Acceptance and Use of Technology (UTAUT) model (Venkatesh et al., 2003).

Lastly, Task 5b involved an online survey of 84 Italian arable farmers to examine the factors affecting participation in marketing contracts, a key risk mitigation strategy.

3. How have the surveys been conducted?

As for Task 3b and Task 3c, the surveys have been conducted in cooperation with the Consiglio Per la Ricerca in Agricoltura - Research Center: Politiche e Bioeconomia (CREA-PB) of Rome. This institution oversees managing and conducting the Farm Accountancy Data Network (FADN) survey. This survey collects standardized microeconomic data on farms. FADN is a tool aimed at exploring the European agricultural economic situation and Programming/assessing the Common Agricultural Policy (CAP) as well as conducting several economic analyses. Further information can be found at: <https://www.crea.gov.it/en/web/politiche-e-bioeconomia/-/fadn-farm-accountancy-data-network>.

The main idea has been to conduct our own survey of the farms already belonging to the FADN survey and to integrate primary data (from the surveys) with secondary information from the FADN database. In this way, the results of our specific and specialized survey results have been linked to already existing economic and structural data provided by the FADN database. Clearly, this is done to ensure full confidentiality and the fulfillment of current data privacy policies. In particular, all analysis has been conducted in a way to avoid the possibility to trace back the name of the farms or other possible sensitive characteristics of the surveyed farms.

A formal agreement with CREA was signed, allowing data collection for Task 3b and Task 3c to begin in April. Both surveys are still ongoing. Task 5b, on the other hand, was not conducted through a CREA partnership, due to the delays in finalizing the agreement with CREA. Instead, a separate survey was carried out involving 84 farmers and data were collected through social media and online advertisements.

4. How the Collected Data Have Been Used and Will Be Used

The data and information collected have been and will continue to be used for dissemination through scientific publications and presentations at conferences, contributing to the broader academic and policy dialogue on agricultural risk management. Additionally, a lecture based on the survey of Task 3b was delivered as part of the PhD program at the University of Tuscia in spring 2025.

5. Main Issues Encountered

Several key issues were encountered during the project. Delays in signing the agreement between the university and CREA led to the postponement of the survey launches, and also to the replacement of some planned activities with alternative research involving a smaller number of farmers than originally proposed in the project plan. Moreover, the response rate from farmers has been consistently low, requiring multiple follow-up emails to encourage participation. As a result, the target of 300 respondents for each of the two surveys outlined in Task 3b and Task 3c, as originally proposed in the project plan, has not yet been achieved. Both surveys are therefore still ongoing.

Regarding Task 3b, due to the delays in finalizing the agreement with CREA, an additional survey was conducted involving 89 Italian fruit growers. This survey aimed to identify which features of mutual funds for phytosanitary risks are most valued by farmers. Similarly, in response to the same issue, an online survey was carried out under Task 5b, targeting 84 Italian arable farmers. This survey, promoted through social media and online advertisements, explored the factors influencing participation in marketing contracts. This was a revision of the initial plan, which envisioned a survey involving 150 farmers in Italy and combining primary data from the survey with secondary data from the FADN database.

6. Outcomes

The main outcomes related to the three farm surveys are as follows:

Task 3b

- Abstract submitted at the AIEAA Conference 2025 (Pisa, June 2025) and at the EAAE Conference 2025 (Bonn, Germany, August 2025).
- Scientific paper submitted to INSERIRE RIVISTA PAPER IST
- Paper submitted to Pest Management Science Journal
- Paper presented at AIEAA Conference 2023 (Milano, June 2024) and at the AISSAunder40 Conference 2024 (Firenze, June 2024)

Task 3c

- Paper submitted to the IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor) 2025 (Bologna, October 2025).
- Report on the determinants of farmers' adoption of innovative risk management tools (Task 3c).
- Policy brief on the key factors influencing farmers' risk management choices.

Task 5b

- Publication: Penone, C., Giampietri, E., & Trestini, S. (2024). Exploring farmers' intention to adopt marketing contracts: empirical insights using the TOE framework. *Agricultural and Food Economics*, 12(1), 39.
- Report on farmers' preferences for contract farming (Task 5b).

These outputs reflect the project's continued commitment to disseminating results and contributing to scientific and policy discussions on agricultural risk management and innovation adoption.