Annex 2 - Target group Survey Summary Report Template – WP1



IT for Interconnection of Social, Economic and Environmental Aspects in Agribusiness

WP1 – Survey on Farms and Current Situation and Demand

(Please provide your findings from the Survey by 15th June 2022 by summarizing the feedback from the questionnaires in the following structure using the following formatting: Font Calibri, Font size: 12)

In total, 10 participants took part in the survey: 6 company owners, 3 production managers, 1 employee. Among these, 5 work in agri-food companies, 3 in small farms and 2 in an agritourism farm. Half of the companies surveyed are small businesses, having 10 or less hectares of arable land. Five companies can be considered medium-size enterprises, with 15, 23, 32 and 70 hectares of land. Nearly all the companies have less than 5 employees, only one has 15 workers.

Age distribution of the survey respondents is homogeneous: of all the professionals surveyed, the most represented age group is 30-39 (3), followed equally by the age groups 18-29 (2), 40-49 (2) and 60+ (2). Only one participant belongs to the age group 50-59.

When asked to what extent they felt confident with the use of 4.0 technologies, 20% declared to have a very poor knowledge, 40% rated their knowledge as poor, 30% stated to have a good knowledge and only 10% deemed themselves knowledgeable.

What technologies are currently in use in businesses? Positive impacts and possible obstacles or challenges in relation to their use. (Q3)

Most of the interviewees reported to not use 4.0 technologies in their work. Only three participants declared to use 4.0 technologies: the most used solutions are technologies for water management and seeding management, with two respondents using automatic irrigation systems and seed drill depth control systems. Weather connected stations and technologies for animal care are also employed.

Please let us know about the positive impacts and possible obstacles or challenges in relation to their use:



When asked which were the main benefits of adopting these technologies, respondents answered that their use contributes to the reduction of operating costs and the elimination of unnecessary expenses.

The interviewees who do not use 4.0 technologies were nevertheless asked what would be the main benefits arising from the introduction of these technologies into their business activities. The responses pertain to three main areas: cost reduction (5), mitigation of environmental impacts (3) and improvement of production efficiency (2).

In regard to the main obstacles to the adoption of 4.0 technologies into their business, respondents were mainly worried about: the high investments required (6), the necessity of highly qualified staff (7) and the short life of new technologies (2), which require periodic replacement.

Which are the main factors impacting the process of decision-making about introducing and applying new advanced ICT technologies in the businesses? (Q4) According to the respondents, the main factors affecting the choice of introducing advanced ICT technologies in the agrifood sector are: the availability of public funding and incentives for purchasing these technologies (5), the possibility to make collective purchases (4) and the training offer (5).

Preferred types of additional training opportunities to support the process of introducing new ICT technologies in business. (Q5)

Respondents stated to prefer the training to be delivered not only by technicians but also by other farmers who already experimented with these technologies. The respondents prefer the training to be delivered in person, as it fosters networking.

Conclusions:

In contrast with the data collected from the desk research (60% of Italian farmers used at least one 4.0 solution in 2021), the survey questionnaire depicts a situation where 4.0 technologies have not yet penetrated into the agricultural sector. These results might be explained in relation to the fact that the companies surveyed are small and mainly located in Sicily, a region with an important farming industry which, however, lags behind technological innovation.

The companies subject of the research have not undertaken the digital transformation process yet. They make little or no use of digital technologies not only because the machineries are expensive and not affordable but mostly because farmers lack the knowledge needed to use them (e.g: how to collect and analyse data from the field with ICT).

Recommendations:

In order to find the necessary respondents, the survey was sent to companies from all over Italy. However, the difficulty in getting farmers to fill the survey suggests that there is not a huge interest in the topic of agriculture 4.0. Therefore, it is fundamental to provide farmers



with information about the opportunities offered by agriculture 4.0, showing the positive impact that it brings to them. Moreover, to overcome the challenges faced by smallholder farmers in adopting new ICT, it is recommendable to provide on-the-job learning and practical training.

