# ITFARM

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)

Introduction and profile participants

The total amount of the participation was 10 farmers.
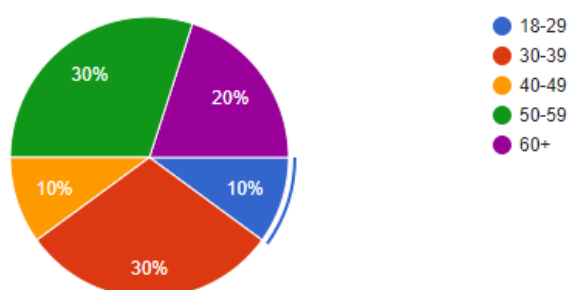
As it is shown and in the graph above the age of the farmers was in the range of 30-39 (3 answers), 50-59 (3 answers), two of them were over 60 years old, one was at the range of 40-49 and one at the range of 18-29. The years of establishment of the farms range between 1968 and 2013. The size of the farms varies between 10 he to 800 he, with an average of 100 he. Proportional to the extend of the farms was and the number of employees. For example the one that had 10 he was working on his own without paying any employee. The maximum amount of employees was 6 and the average amount was 4. The majority of participants was in the prefecture of Attica, one in Samos and one in Fthiotida. All farmers had only plant cultivations with most of them specializing in more than one sectors. Main cultivations included were fruits and vegetables and seed cultivations and often the combination of them.

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

The total amount of current technologies used in Greek businesses were 9. In more details, one participant uses wireless weather station, another two make use of ground conductivity sensor. We had one positive answer for using electric seeder for small vegetable seeds in the standards of power transmission technology and fiber optic detection. Three, use automatic water supply system. Moreover four participants answered that they use the following technologies :

- Smart irrigation system using GMS technology
- Smart Irrigation system using solar energy, LoT technology
- Smart irrigation system based on real-time soil moisture data
- Mist (This system wasn't included in the questionnaire)

Concerning the technological tools that are currently using in their businesses in terms of smart lubrication management, two participants answered that they make use of advanced Lot technology organic fertilizer mixing machine. Also, another farmer mentioned that he uses funnel lubrication.

Summary:

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

Summary:

As for the positive impacts in relation to the use of smart technologies most of the farmers reported the increase of productivity but also and the increase of the quality of their work, increase of crop yields, income increase and absence of insects. On the other side as obstacles or challenges in relation to smart technologies were identified the high investment cost and the lack of expertise. One farmer yet reported as obstacle and the possible non-absorption of increased productivity.

Which are the main factors impacting the process of decision-making about introducing and applying new advanced ICT technologies in the businesses? (Q4)

The majority of farmers (80%) reported the lack of financial resources to research and purchase new technologies as the main factor impacting the process of decision-making about introducing and applying new advanced ICT technologies to their businesses. Moreover, 70% also identified the high capital investment as critical factor, too. A 50% also reported the absence of economy and legislation- government support as main factors. A 30% answered the return on investment. Also, a 20% of the participants reported as main factors impacting the process of decision –making about introducing and applying new advanced ICT technologies the followings:

- Legal problems, obstacles and challenges
- Lack of detailed information
- High technical staff required

Eventually, a 10% equally voted as main factors the parameters of short life of new technology and the complicated use.

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

As for the types of additional training opportunities to support the process of introducing new ICT technologies in business the majority of the participants (50%) prefers the training in the form of face to face meetings. A 30% of farmers respectively expressed their preference in training in the form of e-learning and presentations by specific companies – workshops.

Moreover, most of the participants 40% evaluated the lack of theoretical knowledge of processes related to ICT technologies as the major need for their practical skills. Also, a 20% relatively reported the following skills as major need:

- Lack of soft skills related to introducing and operating ICT technologies
- Lack of basic ICT skills
- Lack of skills to effectively identify and address the existing challenges an problems where ICT technologies could be successfully and effectively applied

Eventually a 10% reported the lack of confidence using ICT technologies.

Conclusions:

The majority of the participants in the survey have in their occupation cultivations up to 100 He and most of them are older than 40 years old. They make use only 7 of the reported technologies with the most common 30% to be the use of automatic water supply system. Most of them are in the position to understand the benefits of applying smart technology but their main concerns still remains the lack of financial resources and the high capital investment. However, they remain positive to training opportunities with the majority of participants to prefer the face to face training and identifying the lack of theoretical knowledge of processes related to ICT technologies as the major need for their evolution.

Recommendations:

1. Include modules relative to the theoretical knowledge of processes related to ICT technology
2. Include case studies in terms of good practice, in order of confidence and trust
3. Include modules relative to legislation and government support
4. Include face to face training and workshops.