### **Target group Survey Summary Report - Ireland**



### **ITFARM**

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

### WP1 - Survey on Farms and Current Situation and Demand

#### Introduction and profile of the participants

The Survey on Farms and Current Situation and Demand has been conducted in Co. Meath, Co. Cavan and Co. Westmeath. 10 farmers in total agreed to complete the questionnaire with the following findings:

All the farms are smaller farms operating on up to 100 ha, ranging from 15 ha upwards. All the farms are operated mainly by the farmers themselves with no employees, only 2 from the 10 farmers are involving employees, one on a full-time and one on a part-time basis.

The age groups of the farmers completing the questionnaire were very various, with 5 farmers from the 50-59 age bracket; 2 farmers from the 30-39 age bracket; 2 farmers from the 60+ age bracket and one farmer aged between 40-49 years.

The year of establishment is also very various, ranging from 1978 until 2018, with the most of the farms established between 1978 and 2002.

The surveyed farmers main scope of activities in Agriculture involved:

- Beef farming (including suckler farming and trading weanling bulls and finishing heifers);
- Sheep farming;
- Dairy farming;
- Husbandry and silage production;
- Contract rearing.

#### Technologies currently in use in businesses

According to data of the Central Statistics Office from 2020 the average farm size in Ireland is 33.4 hectares and the largest farms by area were in the Specialist Dairying category (65.1 hectares) while Specialist Beef Production farms were on average 26.9 hectares.

Irish farmers surveyed are operating on an average size, mainly smaller family farms and are not currently using a wide range of advanced agricultural technologies.

The most frequently used technologies amongst the surveyed Irish farmers are:

Soil sampling technologies as part of Soil Management;

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- Animal Care technologies used include weight management and animal health and welfare technologies (e. g. Moo call for cows that are calving, calving cameras in black and white and in colour)
- Smartphone technologies to track the weather.

One of the surveyed farmers also applies rainwater-harvesting technologies, field mapping and heat detection devices.

#### Summary:

The majority of (surveyed) Irish farmers are currently applying IT technologies on a very small scale. Technologies currently in use are mainly very practical technologies supporting their daily activities. Considering the average size of farms in Ireland and the ageing population of the farmers it is expected, that this trend will continue in the near future as well. The surveyed farmers feedback in relation to the technologies suggested in the survey was, that they are relevant more for farmers operating on significantly larger areas or with a much higher volume of livestock. These technologies are not as much required and less affordable from the average Irish farmers' perspective. According to one of the surveyed farmers the farm size in Ireland do not justify the extensive use of technologically driver resources.

#### Positive impacts and possible obstacles or challenges in relation to their use:

Some of the surveyed farmers currently do not apply any ICT technologies, therefore were not in a position to share these findings with us.

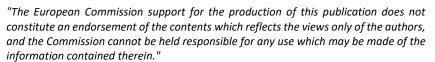
Surveyed farmers applying ICT technologies in their farming activities shared the following positive impacts of using these technologies:

- Keeping up to date with the weight of the animals allows the farmer to better utilise
  the feed and it also helps to ensure and improve the overall welfare of the animals;
- ICT solutions are much quicker than traditional methods;
- ICT technologies provide the farmers with very accurate result;
- ICT technologies are essential to farm operations planning;
- Applications for BPS online are a great advantage.

According to the farmers, one of the most significant obstacle in relation to introducing new technologies would be the financial investment, although it is inevitable that in the long term ICT technologies will be a major part of all farming enterprises. Amongst other obstacles and challenges the farmers mentioned the age of the farmers, expiration date of some of the technologies and the needs/requirements to calibrate some of the equipment annually.

As a negative impact, one of the farmers mentioned, that while some of the farmers can use IT, the older generation of small-scale farmers are being pushed out due to extensive bureaucracy and poor IT skillset. It is inevitable that only the intensive farm enterprises are financially able to invest and upskill or employ someone to keep up to date.

Summary: Older farmers (according to the CSO in 2020, almost one third of all farm holders were aged 65 or over) are lacking ICT skills required to introduce and adapt advanced





technologies in their activities. Farmers prefer to receive support through individual advisors on on-to-one basis. The main challenge for younger farmers or farmers interested in introducing new technologies is the financial investment required, although they still consider ICT technologies to become the major elements of farming enterprises in the near future.

## Factors affecting the process of decision-making about introducing and applying new advanced ICT technologies in the businesses

The majority of the farmers is considering the high capital investment as the main factor impacting the process of decision making about introducing and applying new advanced ICT technologies in business. This is followed by short life of new technologies and lack of financial resources to research and purchase new technologies; Return to investment; complicated use; cost and accessibility; Economy, legislation – government support and legal problems, obstacles and challenges were also mentioned. According to one of the surveyed farmers the farm size in Ireland do not justify the extensive use of technologically driven resources, therefore the introduction and applying of new advanced ICT technologies in Ireland are prioritised less compared to other European countries.

# Preferred types of additional training opportunities to support the process of introducing new ICT technologies in business

The surveyed farmers' first preference would be training opportunities delivered face-to-face, followed by presentations by specific companies during various workshops. A smaller number of respondents also preferred training delivered through e-learning.

#### Practical skills lacking the most in order to apply advanced ICT technologies

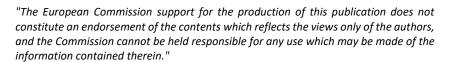
The findings of the survey identified the following skills lacking the most in order to apply advanced ICT technologies:

- Lack of confidence using ICT technologies;
- Lack of basic ICT skills;
- Lack of practical knowledge of processes related to ICT technologies (applicable software, equipment etc.);
- Lack of skills to effectively identify and address the existing challenges and problems where ICT technologies could be successfully and effectively applied;
- Lack of financial resources to research and purchase new technologies;
- Lack of soft skills related to introducing and operating ICT technologies (research, innovation etc.);
- Lack of theoretical knowledge of processes related to ICT technologies (applicable software, equipment etc.

One of the respondents stated, that some of the above are reflective of an aged farm ownership and enterprise. This in time will change as younger trained farmers come on board as they have the skillset to work with IT and adapt to changing practices.

#### **Conclusions:**

The majority of Irish farms are operated by the owners themselves, with a very little involvement of employees. Ageing is one of the main elements affecting a slower trend of introducing and adapting advanced agricultural technologies. In terms of obstacles and challenges, lack of confidence using ICT technologies, lack of basic ICT skills, lack of financial





resources to research and purchase new technologies as well as lack of theoretical and practical knowledge of processes were identified as main barriers.

Farmers prefer to use their smartphones as main devices to track any updates in relation to ICT equipment in use and prefer face-to-face training opportunities (preferably one-to-one) rather than e-learning training opportunities.

#### Opinions from practice:

"Some of the lacking skills are reflective of an aged farm ownership and enterprise. This in time will change as younger trained farmers come on board as they have the skillset to work with IT and adapt to changing practices"

"The farm size in Ireland do not justify the extensive use of technologically driven resources" "While some of the farmers can use IT, the older generation of small-scale farmers are being pushed out due to extensive bureaucracy and poor IT skillset. It is inevitable that only the intensive farm enterprises are financially able to invest and upskill or employ someone to keep up to date"

#### **Recommendations:**

- The results of the survey are suggesting, that in order to support a wider introduction and usage of advanced ICT technologies in agriculture in Ireland, it is very important to:
- Raise global awareness about the positive impact of ICT technologies on various processes in agriculture (increasing time and financial effectiveness etc.);
- Raise awareness about different technologies and equipment available on the market;
- Raise awareness about potential funding opportunities farmers can avail of in order to increase their ability to purchase, introduce and successfully adapt these technologies in their businesses;
- Create and offer further training opportunities to support the process of introducing these technologies including development of skills related to planning, purchasing, adapting these technologies as well as the ability to determine the different positive impacts of the technologies on the processes.

