

Target group Survey Summary Report - Ireland



ITFARM

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

WP2 – Survey on the ICT Technologies supplied in precision agriculture

Part 1. Introduction and profile of the participants (Questions in the part: “Enterprise information”)

Local Power, Ltd. (www.localpower.ie) – based in Dunboyne, Co. Meath has been established in 2016 and currently employs 7 employees and around 20 sub-contractors. The company provides world-class renewable and sustainable solutions locally, including:

- Commercial rooftop and ground-mounted solar projects
- Battery storage solutions
- EV charging solutions powered by ChargePoint, the world’s largest EV charging network
- A range of other smart solutions including air sterilisation, LED lighting and biomass

The company’s promise is “to advise customers wisely in helping them reduce their energy costs and deliver commercially smart renewable solutions for their business, farm or home.”

Agrinet (www.agrinet.ie) – based in Kells, Co. Meath has been established in 1994 and since have been providing software to Irish farmers to reduce their workload while achieving a more profitable farm.

The company currently employing 10 employees launched AgriNet Grass in 2010 and AgriNet HerdApp in 2018. Both are user-friendly farm management apps that make grass and herd management easier and more successful.

This mother company of Agrinet is **Progressive Genetics** (www.progressivegenetics.ie) Progressive Genetics is 100% Irish farmer owned. Through National Cattle Breeding Centre operates the largest dairy and beef stud in Ireland and provides a full range of bulls from all breeds for both dairy and beef producers.

Progressive Genetics offer a wide-range of services to their shareholders and farming customers from:

- Dairy and Beef DIY semen sales
- An AI technician service
- Milk recording – both DIY and manual



- Disease testing through milk samples
- Heat detection through the market leading Heatime – the world’s most popular heat detection system
- Farm computing software through its subsidiary Irish Farm Computers

Part 2. Results

Result 1. Current situation of ICT agro-Techno input suppliers (Questions in the part “Enterprise current situation” Q1-Q7)

Agrinet’s activities are related to the crop and livestock sector, while Local Power Ltd. is a progressive company conducting its main activities in the commercial sector and farming, supporting businesses to reduce their energy costs by delivering commercially smart renewable solutions. Both companies classify themselves as service providers/advisors, Local Power, Ltd. provides installation of the system, while Agrinet is offering technical assistance and provides training to farmers as well. Their clients are small farmers, family farmers, larger farmers and in the case of Local Power Ltd. also a wide range of business clients from other fields.

80% of Agrinet’s clients are dairy farmers and 20% beef farmers, both on national and international level, based mainly in Ireland, UK and New Zealand. As the company’s main profile is to support dairy and beef farmers with herd, grass and financial software, the ICT revolution in agriculture is having a significantly positive impact on the business results.

Local Power Ltd.’s main clients are 20% farmers, 40% businesses, 20% corporate clients and 10% domestic. The clients are based all across Ireland. Considering the company’s profile, the ICT revolution in agriculture had a slightly positive impact on the business results considering the increasing number of farmers availing of the services.

Result 2. Identify and understand current and future suitable technologies for EU precision agricultural farms (Questions in the part “current and future suitable technologies for EU precision agricultural farms”, Q8-Q10)

There is a wide range of different ICT technologies offered between the two surveyed companies. While Local Power Ltd. offers IoT-based renewable solar energy systems helping farmers to reduce their operational costs, Agrinet is supporting the farmers and their decision making by providing grass yield monitoring; animal behaviour; animal health and welfare; feed and with management and automatic milking systems.

Both companies decided to offer their services based on the needs of their current and future clients as well as existing demand on the market. Local Power Ltd. also provides its services based on the existing need to reduce energy costs and carbon emissions in order to ensure a good quality of life for future generations.

According to the surveyed companies, the main factors negatively affecting the use of new ICT technologies by farmers are their simplicity and user friendliness as well as lack of support and clarity of government policies around their application. The second factor is more related to introducing and application of IoT-based renewable solar energy systems.

The main obstacles identified were: High capital investment; complicated use of technologies and short life of new technologies, with a significant need to purchase updates or more up-to-date technologies.



The surveyed companies mentioned precision weed and pest control and fertiliser applications as well as satellite data (if this can be accurate) as advanced ICT technologies to be developed for precision agriculture in the future.

Result 3. Technology training programmes on ICT for precision agriculture employees. This part includes two sections 1) Training for clients (farmers), Q17-Q29 and 2) Training for enterprise' employees, Q11-Q23.

Both companies offer technology training for their clients in a form of case-by-case and after-sale product training. In both cases, the training of new technologies offered extra surplus profit to the companies. The training is offered on demand with a duration of a couple of hours up to one day. In one case they are being delivered by the enterprise itself, in the other case by hired services. In the first case the costs related to the training are paid by the enterprise fully, the other company is paying for the training services of the hired service only partially.

Agrinet is delivering the training remotely, while Local Power Ltd. is implementing the training in their client's premises.

Both companies are offering training specific to their products, therefore they were not in a position to share information about any other training opportunities lacking in other areas, Local Power Ltd. expressed that it would be beneficial for their clients to obtain new products such as Solar PV and battery storage.

The training is considered to be important, as they equip their clients with skills improving their decision making related to farming, profit making, effectiveness of the processes as well as showcasing the process of the return on investment.

Result 4. Financial support programmes for ICT development at suppliers' level Questions from Q24 to Q25.

Although there are financial support programmes available for ICT development at suppliers' level in Ireland, there is still a lack of information available in this field. Identification of potential financial resources requires detailed research that can be considering the fast-paced environment of these companies quite time consuming. The same refers to the process of submitting applications in order to apply for the funding available.

Result 5. National and international legal/regulations/policy on new ICT technologies applied in agro sector. Questions from Q26-Q27.

The surveyed companies are aware that there is a global need to progress to a "greener" society and suggested steps and measures are regulated by many national and international regulations. Both companies are interested in following the progress in this field and staying up-to-date with future plans and visions of the European/World wide trends and measures in this field.

In Ireland, Teagasc is taking a national lead in SMART Agriculture where a wide variety of data sources and sensors are distilled into usable information for farmers.

Conclusions:



Based on the findings from the desk-based and field-based research it is evident that introduction of ICT technologies in agriculture is continuously progressing. While there are many different technologies available on the market, the demand is still not equal to the offer, as the size of the farms as well as skills of the farmers are not yet sufficient to comply and meet the demand.

On the other hand, companies offering different ICT services and products are offering training specific to their products, while there is still a lack of training programmes for farmers providing information and skills required to assess the need and importance of introducing new technologies in their activities (cost efficiency, investment return etc.).

From the financial perspective, there is still a lack of information about the available sources of funding for the farmers to purchase the ICT technologies as well as information for the suppliers of ICT technologies about funding programmes available to support their activities.

Recommendations:

According to the findings, it would be beneficial to plan and implement the training in cooperation with companies already having previous experience in this field. It is also crucial to take into consideration their feedback and recommendations in order to ensure a high quality of the resources developed.

In order to raise awareness and interest of Irish farmers to introduce and apply new ICT technologies in their activities, it would be also beneficial to raise awareness about the potential funding resources available to purchase such applications and equipment and also to organise general trainings and information sessions/meetings to inform them about the need and benefits of applying ICT technologies on their farms from a long-term perspective.

