VistaMilk - SFI Research Centre digitalising dairy production and processing

VistaMilk, the SFI Research Centre for precision-based dairy production and processing, will lead the Agri-Food technology sector through innovation and enhanced sustainability across the entire dairy supply chain.

While focused on pasture-based dairy production, the advances developed in the centre will be equally applicable to confinement dairy production and processing systems as well as acting as a catalyst for global growth in the Agri-Tech sector. This will be achieved by greatly improving the soil to gut supply chain connectivity, thereby improving resource efficiency, better meeting consumers' expectations and improving profitability and resilience.



(c) Katie Starsmore

Research Programmes

VistaMilk's interweaved platform and spoke research spans the entire dairy production food-chain from pasture to plate. The outcomes will facilitate the precise management of all of the steps in the food chain, ultimately enabling the delivery of responsibly-produced milk of specific composition and attributes, that can be better processed and have specific health benefits while being a new, high-value dairy product. VistaMilk has the three strategic goals: Sustainability, Food Security, and Prosperity and Societal Enrichment.

To achieve VistaMilk's goals, data from multiple sources, including on-farm sensors, will be transmitted and analysed; for instance, existing soil maps, weather records and weather predictions, previous years' production data and data from other farms will be used to develop more holistic models leading to superior predictions and value-creating decision-support tools. As well as generating novel knowledge-based products, the VistaMilk Centre will be a one-stop-shop for Agri-Tech companies in dairying, providing research services, evaluation and integration of technologies in dairy production. The novel combination of the expertise and critical mass in the VistaMilk Centre will also enhance Ireland's international reputation as a leader in Agri-Tech in dairy production systems, facilitating new international partnerships and successful competitive funding applications as well as attracting new foreign direct investment.





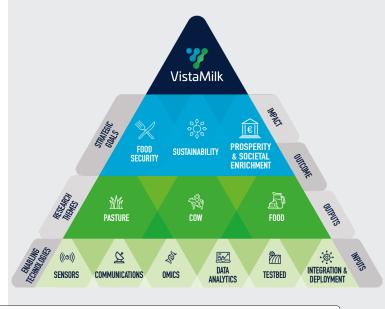


Research Areas

- > Pasture
- **>** Cow
- > Food

Facilities

- Teagasc state-of-the-art research laboratories, including the largest DNA sequencing facility in Ireland,
 >1500 experimental dairy cows and houses Ireland's grassland database
- > Tyndall fully serviced wet chemistry laboratory featuring highly sophisticated nanofabrication technology
- > **Insight -** specialised software for data analytics and for processing streamed data.
- > **TSSG** infrastructure for testing and measuring networking protocols
- ICBF Ireland's national database for all dairy and beef breeding information

























Industry and Commercialisation

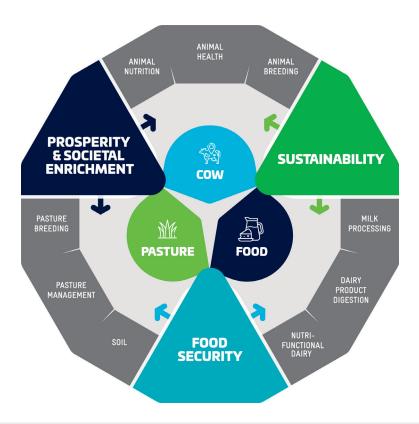
VistaMilk promotes an environment that is conducive to entrepreneurship where both scientific and industry partners of all sizes, be it MNCs, SMEs or start-ups, are empowered to identify commercial opportunities emanating from the research. Such entrepreneurial activities include spin-out companies, licensing agreements and access to Platform research and resources.

VistaMilk will develop and deploy scientific solutions and value-creating decision-support tools, informed by sophisticated data analytical approaches, to empower the dairy industry in advancing efficiencies across all components of the food chain, and, in doing so, develop a vibrant and dynamic Agri-Tech indigenous industry.

VistaMilk has over 50 industry partners, from start-ups to multinationals, including but not limited to:

- > Abbott
- Analog
- Anuland
- Dairygold
- > Glanbia

- > H&H
- > Kerry Group
- Nestle
- > YL-Verkot OY
- Zoetis



Education and Public Engagement:

The mission statement of the VistaMilk outreach program is to "promote an understanding and appreciation of the role of information and communication technology and other sciences in the sustainable delivery of consistently high quality, safe dairy products through engagement with stakeholders and the general public". The strategy of engagement will help the general public to judge the importance and relevance of science in achieving the goal of more sustainable and safe food production systems. Awareness will also be raised around the importance of dairy food in diets.

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