Introduction

With the abolition of milk quotas in 2015, a 50% increase in the volume of milk being processed in Ireland by 2020 is expected. This, along with stringent measures on emissions from the industry and growing commercial drive for operational efficiencies, is driving the need for innovative technological and operational solutions within the dairy processing industry.

In this context DairyWater, a new multi-stakeholder research project, is developing innovative solutions for the efficient management of water consumption, wastewater treatment and the resulting energy usage within the Irish dairy processing industry. The project can be divided into three main research areas:

- Dairy wastewater treatment technologies;
- Water re-use and rainwater harvesting; and
- Environmental life cycle assessment (LCA).

The project started in March 2014 and has a completion date of November 2017. Over the past 12 months the project has grown, employing new staff and PhD students along with creating close ties with industry. For further details and to follow the progress of the project log onto: www.dairywater.ie or follow the project on twitter: @dairywater

Kick-off meeting

The kick-off meeting for the DairyWater project took place on the 15th April 2014. The research team was joined by members of the project’s advisory board, representing Teagasc, the EPA, and industry representatives (Glanbia and Dairygold).

End-of-year consortium meeting

On the 12th December 2014, the first annual DairyWater research team meeting took place. This gave the opportunity for the PhD students to present and discuss their respective project tasks.
Communications with the dairy processing industry

In 2014, the research team began gathering information from the dairy processing industry through site visits and surveys. The companies who have agreed to help with the project are:

- Abbott Ireland
- Arrabawn Dairies
- Aurivo
- Carbery
- Dairygold
- Glanbia
- Kerry Group
- Lakeland Dairies

The project team would like to thank all of our industry partners for their input and support throughout the project.

New PhD Students

As of September 2014, three new PhD students began work on the DairyWater project: Emma Tarpey (NUI Galway); Kelly Fitzhenry (NUI Galway/Athlone IT); Fei Gao (Trinity College Dublin).

Emma graduated from NUI Galway in 2012 with an Honours Bachelor Degree in Civil Engineering. She was awarded a Dell/SFI scholarship for Women in Engineering and completed a research internship in the University of Limerick as part of this. She spent two years working for Accenture as a Systems Analyst.

Kelly graduated with an Honours Bachelor Degree in Zoology from the University of Aberdeen. In 2012, she was hired as a Research Assistant on an EPA STRIVE funded project in collaboration with NUI Galway and the Marine Institute. Throughout her time working on this project, she also obtained a Masters Degree of Applied Science in relation to the study topic.

Fei was awarded a Bachelor Degree in Software Engineering from Tianjin University of Finance and Economics in China. He completed a Master Degree in Applied Environmental Science in University College Dublin.

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