

Livestock Systems Department

Title

Water Conservation strategies for Irish dairy farms

Abstract

The ethos of the Food Harvest report is to promote growth in a smart and green manner. The vision for green agriculture includes environmental protection, energy reduction, and supply chain sustainability. The inextricable link between energy and food prices exacerbates the industry's vulnerability to future spikes in oil, making the energy reduction policy a high priority. Water use and energy use are inextricably linked due to the fact that large volumes of cold water are used each day on dairy farms for the purposes of milk cooling. The recommended ratio of milk to water in the plate cooler is 1:2. Teagasc is responsible for implementing many of the guidelines set out in the Food Harvest report. The Moorepark Livestock Systems Research and Innovation Centre is primarily concerned with facilitating the expansion in milk production arising from the removal of quotas. If Teagasc are to be successful in delivering innovating solutions to farmers then sustainable strategies for utilising these volumes of plate cooler water must be found with urgency. Furthermore water charges are high on the governments' agenda for public supplies and the possibility of metering private supplies is a reality as this has already been implemented other European countries. These charges will make the implementation of rainwater harvesting on dairy farms more attractive particularly given the large roof area of dairy facilities and the relatively high summer rain fall experienced in Ireland. The implications of collecting and storing this water for a number of days/weeks, for use later, must be examined from a water quality point of view and suitable water cleaning and filtration technologies must be evaluated to guarantee water quality at all times as poor water quality may lead to reduced consumption and suppressed milk yields.

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