



## Submission by Milk Quality Ireland

### Provision for Dairy Facilities and Equipment under the On Farm Capital Investment Scheme within Ireland's CAP Strategic Plan 2023-27

#### INTRODUCTION

The Irish dairy industry is a significant contributor to Ireland's rural economy supporting over 60,000 jobs across its supply chain and wider economy including 17,000 farm families. In 2020, the total output generated by the dairy sector was valued at €13.1 billion and exports of dairy products & ingredients were valued at €5.2 billion.

New investments have been made at farm and processing level since the ending of milk quotas in 2015. These investments were necessary to fulfil the legitimate aspirations of dairy farmers and the sector to grow and develop their industry following decades of stagnation under the milk quota regime.

The dairy sector is acutely aware of the new challenges it faces related to greenhouse gas emissions, water quality, ammonia emissions and biodiversity. The dairy sector is now entering a new phase of development; with a core focus on sustainability and responsible growth based on economic, social and environmental principles.

Ireland's grass-based system of milk confers significant environmental advantages. As the sector addresses these environmental challenges; it is vital to build on Ireland's green reputation, gain new market share in expanding high value international markets and improve the living standards and well-being of dairy farmers and their families.

The Targeted Agricultural Modernisation Scheme (TAMS) by supporting investments in dairy equipment is making a significant contribution to improved animal health and welfare standards, food safety and milk quality standards, improved labour efficiency, health & safety and energy efficiency improvements.

The dairy industry is extremely grateful for the supports provided under TAMS and the enormous benefits TAMS funding has provided to the sector, farm families and rural communities.

*Milk Quality Ireland strongly believes that the new CAP Strategic Plan should continue to fund dairy facilities and equipment in a manner that supports targeted improvements, modernisation and upgrades at dairy farm level that will support a sustainable and viable dairy industry.*

*We believe the new scheme under consideration can be successfully adapted to meet our environmental challenges. We further believe that the removal of dairy facilities and equipment supports would be very detrimental and damaging to the future success of the dairy sector including the provision of employment and its ability to build new export markets.*

*We strongly urge DAFM to take into consideration our submission and its recommendations.*

## **NEW ON FARM CAPITAL INVESTMENT SCHEME**

The introduction of the new CAP coincides with the development of a range of new policies at EU level including the EU's Green Deal, the Farm to Fork Strategy and the 'Fit for 55' legislative package.

At national level, the adoption of Ireland's Climate Action Plan 2021 and Carbon Budget Proposals sets ambitious targets of reducing Ireland's greenhouse gas emissions by 51% by 2030 and achieving net zero greenhouse gas emissions by 2050. The Climate Action Plan places farmers at the *very centre* and proposes a 22-30% reduction in agricultural emissions by 2030. The targets for agriculture will help make Irish farms become more carbon efficient and build a more resilient agri-food sector.

These objectives align perfectly with Ireland's CAP strategic plan 2023-2027, that proposes the new on-farm investment scheme, which would prioritise key environmental objectives through the provision of grant aid for new capital investments that contribute to the following:

- Environmental
- Farm safety
- Animal health and welfare objectives

Milk Quality Ireland identifies a fourth and all-encompassing objective for the provision of on farm capital investments, namely to support hygienic food safety standards and the production of quality milk.

- Milk Quality & Food Safety

Furthermore, continuation of these investment supports by DAFM is key to helping encourage farmers to take a step forward and improve their work environment, as well as efficiencies on farm. These types of investments can lead to labour saving, time saving and improvements in farm working conditions. This of course will impact on the farmers mental health and welfare and facilitate farm succession and employment prospects on farms.

### **Milk Quality & Food Safety Considerations**

The remit of Milk Quality Ireland is to enhance and improve milk quality standards across Irish dairy farms. In this area, we are facing significant challenges including new regulatory requirements and greater demands from our international customers, which has seen the industry transition away from chlorine-based cleaning products in recent years. In addition, the adoption of selective dry cow therapy will become a legal requirement from 2022. The continuation of grant aid for dairy facilities and equipment will be needed to ensure the sector maintains improvements in overall milk quality standards.

### **Environmental Considerations**

Milk Quality Ireland recommends prioritising the support of both energy efficient technologies (such as plate coolers, heat recovery units, variable speed drives and efficient milk cooling systems) and renewable energy technologies (such as solar photovoltaic panels) to drive adoption of greenhouse gas mitigating technologies at farm level. These technologies have all been proven as very effective in both research and on-farm contexts. However, adoption levels need to be dramatically improved in order for Ireland to meet its commitments in this respect.

*Milk Quality Ireland advocates for a standalone scheme for these technologies with a separate investment ceiling.*

## **Farm Safety Considerations**

Farm safety is of critical importance to the sustainability of the dairy industry in the future. Ensuring farm facilities are safe, reliable and efficient will improve health outcomes for farmers, encourage farm succession and promote professionalism in farm staff. A safe farm workplace ensures that work is carried out easily and efficiently. Critical areas for improvement at farm level are:

### 1) Milking facilities:

Dairy farmers spend over 30% of the working day in the milking parlour, therefore *Milk Quality Ireland strongly believes that upgraded milking facilities and equipment should be supported under the new on farm capital investment scheme*. The objective should be to support essential upgrades and modernisation. New criteria could be considered whereby new milking facilities and equipment would ensure that the milking process time (inclusive of milking and clean up) would be carried out in less than 90 minutes. This involves 7 to 9 rows/rotations of the parlour in practice. Therefore, we propose that milking machines and automatic milking systems should be grant aided to facilitate efficient milking of sustainable herd sizes, while ensuring that facilities promote high milk quality, cow comfort and operator ergonomics. An emphasis could be placed on applicants proposing a high degree of labour efficient technologies such as cluster removers, teat sprayers, automatic gates, automatic drafting and automatic feeders.

### 2) Animal housing and animal handling

Handling animals on farms is one of the major risk factors for farmer injury. Milk Quality Ireland supports the grant funding of suitably sized animal housing and animal handling facilities such as winter housing for adult stock as well as calf housing for young stock. In addition, purpose built calving facilities and bull housing are especially deserving of grant aid, as they are very important for farm safety and animal welfare. Applications could be prioritised that incorporate labour efficient technologies such as automatic manure handling facilities and automatic calf feeders. Farmer comfort and longevity are important considerations and investments in parlour mats for example to reduce fatigue and support comfort of the operator in the pit should be supported.

## **Animal Health & Welfare Considerations**

Good animal health and welfare is central to the future success of the dairy industry. There is increased concern regarding the risk to human and animal health due to antimicrobial resistance (AMR). It is incumbent on the agri-food sector to reduce antimicrobial use to minimise these risks. Increased levels of animal specific data will be necessary to move away from blanket antibiotic use and simultaneously improve individual animal welfare outcomes. For example, individual cow level milk quality data from milk recording is required to implement selective dry cow therapy at dry off. *Therefore, technologies that support the acquisition of animal specific data should be strongly supported*. In particular, items such as automatic identification, milk meters and animal health monitors. Other technologies that can facilitate the production of high quality and safe food products from healthy animals including on farm SCC testers, on-farm antibiotic testers for milk, cluster flushing systems, foot-bathing facilities, rubber mats for cow standing areas in parlours, cow brushes in winter sheds and mineral dosing systems for cow water supplies. Supporting farm roadway infrastructure is also extremely necessary to protect animal health and welfare by reducing the prevalence of lameness.

## **Avoiding leaving farms behind**

It is important that farmers who haven't taken steps until now to upgrade their dairy facilities and equipment are not 'left behind'. There are still a large number of farms that haven't availed of the

TAMS grant to install new or upgraded parlours. This may be due to family circumstances, succession etc.

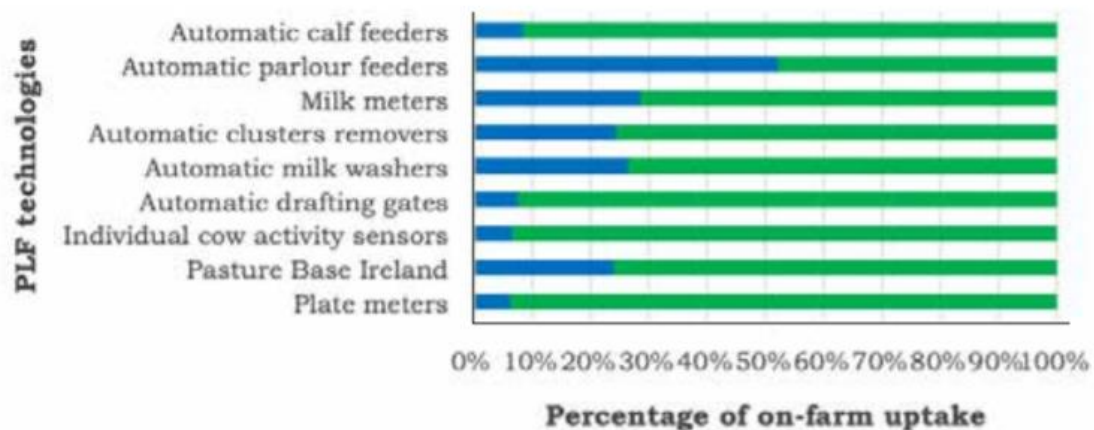
These farms are typically milking in small, outdated facilities that do not meet current expectations for producing high quality milk with proper animal welfare standards. It is important that these farms are encouraged to modernise their facilities and equipment in the future. The installation of extra units on existing plants will reduce current milking times and will mean better animal welfare, as cows will not be standing in yards as long before and after milking.

An analysis by Milk Quality Ireland of planning approvals for milking equipment in 2021, show that the majority of approvals are for moderate sized family farm operations. The majority of approvals were sought for parlours with 20 milking units or less / 2 milking robots or less. For example, 20 units x 8 rows = 160 cows or 2 robots x 70 cows = 140 cows. Our analysis, which can be shared with DAFM would indicate that these farms are seeking to improve and modernise their existing facilities.

**Adoption of Precision Livestock Farming Technologies at Farm Level**

The adoption of precision livestock farming (PLF) technologies can play an important role in improving efficiency, animal health & welfare and improving environmental outcomes at farm level. Research into the adoption of PLF technologies on pasture based Irish dairy farms by VistaMilk shows that only 52% of dairy farms have installed automatic parlour feeders and 25% of dairy farms have installed automatic cluster removers<sup>1</sup>.

**Figure 1: Technology adoption levels by dairy farmers**



The results of this research show that the adoption of PLF technologies varied considerably depending on age, herd size and discussion group membership. Milk Quality Ireland believes that the results of this research underline the importance of funding precision-based technologies to encourage much greater adoption at farm level through policy supports such as the new on farm capital investment scheme.

**Constraints to technology adoption by farmers**

The dilemma facing many who need to upgrade milking facilities and equipment is that it is generally impossible to do so in a small way or in a piecemeal fashion. Old milking parlours are too small, too narrow, with low roofs in poor condition, pits too shallow, floors are worn and drainage is poor, stall-work is deformed and unsafe, etc. Over the years farmyards have been enlarged so now existing milking facilities are generally located in the wrong place for good cow flow and for labour efficient safe operation. Cows generally have to enter and exit through the farmyard which makes it very difficult to maintain a clean farmyard throughout the grazing season. This is not such an issue in other

<sup>1</sup> Teagasc Moorepark Open Day Booklet 2021 - Irish Dairying; Delivering Sustainability Page 282

EU countries, as cows are housed most of the time and the milking facilities are within or close to the cow housing. Milk collection lorries are bigger also.

Modern milking machines require a wider milking premises, so upgrading existing facilities is seldom feasible. Automatic milking systems require purpose-built designs too. Milking equipment that achieves environmental, farm safety and health and welfare objectives have to be new and installed in a purpose designed milking parlour. In addition, dairy and plant rooms are larger and designed differently nowadays. A further benefit of upgrading facilities is that chemical storage rooms can be incorporated in modern designs. Designs and recommendations of modern milking facilities ensure that room is made available beside the milking premises for cow handling and drafting facilities. The relevant EU Directives, DAFM specifications and ISO/MQI standards for milking installations all support and dictate these design changes and improvements.

Milk Quality Ireland reiterates that grant aid for milking facilities and equipment is essential to maintain high standards across the industry. It is very evident that where farms are not availing of grant aid the standards of workmanship are considerably reduced and the safety of both the animal and operator are at increased risk as a result.

#### **Dairy Facilities and Equipment Investments that should be supported under the next CAP**

Milk Quality Ireland believe the following dairy farm investments should be supported under the next on farm capital investment scheme. We outline how each investment contributes to the new objectives of the scheme related to the environment, farm safety and animal health & welfare. We include the additional provision referenced earlier related to milk quality and food safety, which is of strategic importance to both the dairy industry and DAFM.

**Table 1: Summary of proposed technologies and their associated contribution to key objectives**

Item	Milk Quality & Food Safety	Environmental Sustainability	Farm Safety & Labour Efficiency	Animal Health and Welfare
Milking facilities including new milking plant equipment	x	x	x	x
Milk meters	x	x	x	x
Milk cooling systems	x	x		
Plate coolers	x	x		
Heat recovery	x	x		
Thermal energy storage systems	x	x		
Hot water heating systems	x	x		
Automatic Cluster Removers	x		x	x
Cluster Flushing Systems	x		x	x
Teat Sprayers	x		x	x
Automatic feeders including precision feeders	x		x	x
Automatic Identification (RFID) systems	x		x	x
Automatic parlour washer and food quality air-purge	x		x	

Variable speed drives	x	x		
SCC test equipment	x			x
Antibiotic testing	x			x
Back-up Generator	x		x	x
Mobile milking unit	x		x	x
Automatic manure handling	x		x	
Winter housing		x	x	x
Calf housing		x	x	x
Health & Fertility Monitoring Systems		x	x	x
Smart Meters		x	x	
Solar photovoltaic		x		
Smart Meters		x	x	
Automatic backing gates			x	x
Automatic drafting			x	x
Rubber matting			x	x
Mineral dosing			x	x
Calf feeders			x	x
Cow brushes				x
Parlour mats			x	

### Options for a more targeted funding approach

A number of additional data points may be required at the time of application and/or at project completion to ensure funding is being channelled in a manner that supports the sustainable development of the dairy sector.

We believe that the marking/assessment system can be weighted towards family farm, farm partnerships or singular operators undertaking essential investments to upgrade, modernise and future proof their farm business, whilst meeting the core objectives of environmental sustainability, farm safety and animal health & welfare. Furthermore, we underline that the investment ceiling is an existing limit, already in place in this respect.

- One option to achieve this objective could be to include animal records for the current year versus two previous years at the time of application, these numbers could be cross referenced with DAFM records for the farm while allowing for seasonal variation in cow numbers (i.e., +/- 20%). The applicant could back up the application with a signed milk volume forecast, where available to support their application.
- Similarly, a letter from the farm advisor or co-op milk quality advisor confirming that the farm needs an upgrade to the existing equipment/facilities for animal welfare/health and safety reasons or in a scenario where a farm is making a long-term investment for a successor starting in dairy farming. There is precedence for this approach as such a letter was used to facilitate exemption from paying planning contribution fees under the Nitrates scheme in the past.

- Farms will typically target a 90-minute milking process (i.e., 1 hour milking time plus 30-minute clean up time. This provides the best balance of capital investment, labour efficiency and animal welfare. Typically, farms will milk 7 – 9 cows per unit per hour, so a ratio of number of units to number of dairy cows could be used to determine if the investment being undertaken is for modernisation or growth. For example, if the ratio of current units to cows is greater than 9 or 10, then the farm is milking for more than 90 minutes and justifiably needs to reduce milking time. If the ratio of units after upgrade to current number of cows is 5 or less, then the farm is planning for growth. A similar approach could be looked at for automatic milking systems.
- Photographic evidence could be sought to enhance an applicant’s grant application in advance of approval, as per the example of the SEAI grant on variable speed vacuum pumps. A before and after photo of the plant room was required to validate grant drawdown. A similar process could be utilised to prove that equipment was in need of upgrading. Photographs could be geo-tagged if taken through an app by phone/mobile device.
- Another proposal could involve establishing checklists for any investments. For example, if a farmer is buying a bulk tank they could be asked to document: age of current bulk tank, energy rating, size and gas type. Similarly, if a farmer is applying to upgrade a milking parlour, they could be asked to document: the expected energy efficiency savings, the expected labour efficiency savings and improvements in their milking times.

## **Conclusion**

Milk Quality Ireland believes it is critical for Ireland’s CAP Strategic Plan to support a vibrant and sustainable, low carbon dairy sector and that the family farm model of dairy farming in Ireland is protected and supported by Government policy.

Our submission outlines a range of dairy facilities and equipment investments that will enhance our environmental credentials, support farm safety and labour efficiency and improve animal health and welfare standards. Critically, milk quality and food safety standards must not be neglected, as they support and underpin our valuable export market.

The provision of grant aid for dairy facilities and equipment for new entrants and farmers seeking to invest in their family farm to ensure it is viable and sustainable into the future is absolutely essential and we have outlined how we believe the marking system can be adjusted to ensure funding is targeted to meet these objectives.

Milk Quality Ireland looks forward to continued engagement with DAFM on our proposal and recommendations.

**ENDS**

**08 December 2021**