

## Submission to the public consultation on the Fourth Review of Ireland's Nitrates Action Plan, Stage 1 Public Consultation Paper

15<sup>th</sup> January 2021

#### 1. Introduction

The Irish Farmers Association is Ireland's largest farming organisation with approximately 71,000 members in 940 branches nationwide. We welcome the opportunity to make a submission to the Stage 1 Public Consultation paper on the 4<sup>th</sup> review of Ireland's Nitrates Action Programme (NAP).

It is a key priority for the Association that <u>the current nitrates derogation is maintained</u>, without further onerous requirements. Farmers in derogation make a substantial contribution to the sector, the wider rural economy, and farm to a higher environmental standard.

Farmers have made significant investment based on existing fertilisation and stocking rates as well as slurry requirements. <u>These limits must not be reduced or further eroded</u>, so farmers can be economically sustainable while addressing water quality issues. These investments as well as changes in farming practices have increased efficiency while addressing nutrient loss.

However, farmers are frustrated by the failure of the State to make similar investments in the treatment of waste water. There are over 40 Local Authority and/or Irish Water sites that still discharge untreated sewage into our rivers and lakes. This must be addressed urgently, as it would greatly assist our compliance with water regulations and improve water quality.

It would appear from the consultation paper that the Department of Housing, Local Government and Heritage's (DHLGH) intention is to expand the scope of the NAP to address wider biodiversity and climate change challenges. While there are indirect benefits to biodiversity and climate from the actions undertaken as part of NAP, it is paramount that NAP's focus is on the implementation of the Nitrates Directive. The Nitrates Directive is solely concerned with the *"protection of waters against pollution caused by nitrates from agricultural sources"*, by promoting the use of good farming practices.

#### 2. Vulnerability assessment of the sector

The single biggest issue that has been avoided by the DHLGH in this consultation paper is the financial vulnerability of many farms.

The Department must consider as part of the NAP review the impact on land rental values. Any changes that lead to an increased requirement for land will increase the demand and ultimately land rental prices. This has the potential to reduce net margins for all farmers, including drystock and tillage, whose farm incomes are already under severe pressure.

Based on the commitments set out in the Programme for Government, it would appear that the measures proposed in the next NAP will rest largely with dairy farmers. It is vital that the wider community understand and appreciate the economic challenges faced by these farmers. A recent National Dairy Council (NDC) survey<sup>1</sup> found that 82% of Irish consumers want to see dairy farms protected and supported. We have attached a recent report produced by the IFA on dairy farmers' financial performance, which highlights this issue acutely (see Appendix 1).

Pig and poultry farmers are reliant on customer farmers. Pig slurry and poultry litter are valuable nutritional resources to replenish and improve soil fertility and increase the soil organic matter content. Both these sectors are not supported through the basic payment scheme (BPS) and are exposed to volatile commodity markets. Any further restrictions under the nitrates derogation could have negative consequences on the pig and poultry sectors' ability to distribute valuable pig slurry and poultry litter to end users.

<sup>&</sup>lt;sup>1</sup> National Dairy Council (2020). Dairy Sustainable Ireland. Retrieved from

https://e.issuu.com/embed.html?backgroundColor=%23bc8454&backgroundColorFullscreen=%23bc9754&d=factbook\_2020\_national\_dairy\_council\_single\_page&u=thenationaldairycouncil

#### 3. Communication

The DAFM communication with farmers in advance of the new measures that were introduced on the 1<sup>st</sup> January 2021, such as the changes to roadways, fencing and water troughs requirements, was wholly unacceptable. The delay in providing detailed specification and clarity forced many farmers to carry out work during the winter, when the optimal time would have been during the summer months.

IFA is concerned that this ineffective communication will continue unless the Department make a concerted effort to increase awareness, this must start immediately in relation to the changes to the recording of slurry movements that are expected in 2021.

Farmers are willing to work with the Department but they must be given sufficient information and time to adapt their farming practices and undertaken necessary works. Effective and timely communication is critical if farmers are to be supported to make the necessary changes to improve water quality.

Given the poor communication and the restrictions imposed as a result of COVID-19 it would be wrong for any farmer to be penalised in 2021 for failing to fully implement these changes.

#### 4. Lag times and evidence-based approach

The time lag between the adoption of management changes and the detection of measurable improvements in water quality can be significant and may not show definitive results during a monitoring period. It is vital that policy recognises lag times and expectations are adjusted accordingly.

Determining the length of the time lag is of critical importance from a policy and monitoring perspective<sup>2</sup>, as correlation of the success of a legislative instrument (even assuming 100% implementation) and the current water quality status is not always possible<sup>3</sup>. In addition, observations may also be compounded by inter-annual meteorological variability<sup>4</sup>, which was evident from the spike in nitrate levels seen in 2018 due to the widespread drought.

The Water Quality in Ireland 2013-2018 report<sup>5</sup>, which was published in 2019, would not have captured the positive impact of the newly implemented legislative requirements, as well as the impact of voluntary programmes such as Agricultural Sustainability Support and Advisory Programme (ASSAP) that have been introduced post 2018 since the monitoring period of this report closed.

It is IFA's position that time must be given to accurately evaluate the effectiveness of these measures on improving water quality. It is critical that our scientists and policymakers better explain the complex nature of improving water quality so that stakeholders appreciate that immediate solutions should not be expected. Indeed, a lack of understanding of hydrological principles may understandably lead the public to believe that current intervention measures are not working, when in reality time is required to demonstrate the effectiveness of the measure on water quality.

<sup>&</sup>lt;sup>2</sup> Daniel J. Bain, Mark B. Green, John L. Campbell, John F. Chamblee, Sayo Chaoka, Jennifer M. Fraterrigo, Sujay S. Kaushal, Sherry L. Martin, Thomas E. Jordan, Anthony J. Parolari, William V. Sobczak, Donald E. Weller, Wilfred M. WolLheim, Emery R. Boose, Jonathan M. Duncan, Gretchen M. Gettel, Brian R. Hall, Praveen Kumar, Jonathan R. Thompson, James M. Vose, Emily M. Elliott, David S. Leigh (2012). *Legacy Effects in Material Flux: Structural Catchment Changes Predate Long-Term Studies*. BioScience, Volume 62, Issue 6, Pages 575–584.

<sup>&</sup>lt;sup>3</sup> Owen Fenton, Mark G. Healy, Tiernan Henry, Mohammed I. Khalil, James Grant, Anne Baily, Karl G. Richards (2011). *Exploring the relationship between groundwater geochemical factors and denitrification potentials on a dairy farm in southeast Ireland*. Ecological Engineering, Volume 3, Issue 9.

<sup>&</sup>lt;sup>4</sup> Bechmann, M., Deelstra, J., Stalnacke, P., Eggestad, H.O., Øygarden, L., and Pengerud, A. (2008). *Monitoring catchment scale agricultural pollution in Norway: Policy instruments, implementation of mitigation methods and trends in nutrient and sediment losses*. Environmental Science and Policy 11: 102–114.

<sup>&</sup>lt;sup>5</sup> Environmental Protection Agency (2019). *Water Quality in Ireland 2013-2018*.

#### 5. Actions taken by farmers to improve water quality

The Departments paper fails to highlight the enhanced measures aimed at improving water quality that have taken place on farms, particularly farms stocked above 170kgN/ha in the past year.

The wider community may not be aware of the significant investment that has taken place on farms to reduce and improve the efficiency of fertiliser use to protect and enhance water quality.

To date:

- Over €79.6m has been invested in Low Emission Slurry Spreading (LESS) equipment by farmers.
- Sales of protected urea have more than doubled in the past year amounting to 49,284 tonnes (21,409 tonnes sold in 2019).
- Over 96% of participating farmers have positively engaged with the ASSAP programme, agreeing to put in place farm specific measures to help improve water quality.
- To date 555 dairy farmers have been enrolled in the ASSAP programme and this figure will increase in 2021.
- From 2021 all farmers must divert run off from farm roadways away from waterbodies.
- Farms stocked above 170kgN/ha must keep water troughs 20m away from water courses and fence off water courses.
- Following the interim review of the nitrates action programme in 2018 farms stocked above 170kgN/ha will face enhanced requirements:
  - Use of Low Emission Spreading of Slurry (LESS) from 15<sup>th</sup> April 2021.
  - Must participate in a liming programme.
  - Reduce the crude protein content of concentrate fed to cows from April to September to below 15% (to commence in 2021).
- Following the same review farmers in receipt of a derogation also have to face enhanced requirements
  - All slurry produced on the farm must be spread with LESS by 15<sup>th</sup> April 2021.
  - Farmers must attend environmental training.
  - Farmers must incorporate clover in new reseeds.
  - Incorporate a biodiversity measure on their farm aimed at improving the quality of the hedgerows on their farms.

Farmers have engaged positively with these new requirements and have found the ASSAP, and other voluntary programmes such as Smart Farming as well as training programmes very informative and helpful to improve management practices to optimise efficiency at farm level.

IFA argue that traditional top-down regulation, contains serious shortcomings when it comes to managing agricultural nutrient interaction with water, and that the current regulatory framework does not necessarily have the adaptive capacity to facilitate new, bottom-up solutions. IFA favours programmes that work collaboratively with farmers at farm level to identify site-specific solutions, and a more targeted approach to improve water quality.

#### 6. Current requirements

The following is IFA's response to the detailed issues set out by the DHLGH to be considered in the consultation paper (see Appendix 2):

#### 6.1. Cattle access to watercourses

There should be no extension of existing requirements. The last iteration of the NAP focussed on preventing cattle accessing watercourses, time must be given to allow these measures to work and the positive impact on water quality to be assessed.

#### IFA proposes that there is no further extension to the current requirements.

#### 6.2. Phosphorous build-up

IFA supports the assessment of the uptake and effectiveness of this measure, as this is important to optimise fertiliser use. We believe that there needs to be greater communication and promotion of this measure, as many farmers have a poor understanding of the P build up allowance.

There are opportunities to increase the available land area that could sustainably receive additional organic manure, which would improve the overall fertility of the land. This could also benefit the tillage sector.

#### IFA proposes that:

- (i) The P build-up programme should be expanded to include farmers with stocking rates of 100kgN/ha and higher; and
- (ii) Training should be provided to increase understanding and encourage wider uptake of this measure.

#### 6.3. Record Keeping

IFA support the suggestion to streamline and make the management, maintenance and submission of records less onerous for farmers. Any improvements are welcomed and must be appropriate to scale and farming system. However, the introduction of a similar regime for pesticides is not appropriate.

### IFA propose that any changes to the current process must be done in consultation with stakeholders, that training be provided to farmers and sufficient lead in time is allocated.

6.4. Training (for farmers and advisers)

IFA welcomes the proposal to increase training for farmers to improve farmers knowledge of Good Agricultural Practices (GAP), regulations and share best practices.

### IFA propose that any training provided is subsidised similar to the GLAS training scheme, and participants are reimbursed for attending the training course.

6.5. LESS slurry spreading

Under existing requirements all farms stocked over 170kgN/ha must use LESS, this requirement covers the majority of slurry produced in this country. Farmers have already invested, with grant support, an estimated  $\in$ 79.6 million in LESS equipment. IFA opposes extending this requirement to smaller farms as the impact would be minimal, the focus on these farmers should be the timing of slurry application rather than application type.

## IFA proposes that DAFM increase the grant to 60% for LESS equipment under TAMS and that LESS equipment be VAT exempt.

6.6. Nutrient Management Planning

IFA recognises the benefits of Nutrient Management Planning (NMP) in optimising the use of chemical and organic nutrients. However, despite several attempts to simplify the planning process nutrient management plans remain complex to understand and apply.

However, this additional layer of management requires a change of mindset. Previous attempts have failed to bring the farmer along with the process; therefore, it is proposed that the next NAP creates a greater understanding and appreciation of soil science and nutrient management.

### IFA proposes that prior to mainstreaming the use of NMP, that the process is simplified and a new online tool is developed to be used by farmers.

6.7. Slurry storage requirements incl. soiled water

The majority of farmers have invested in slurry storage at considerable cost, but continued investment is needed.

#### IFA propose that:

- (i) The Nutrient Storage Scheme under TAMS is available to <u>all</u> farmers;
- (ii) Development charges must be waived and planning permission must be simplified for any development that increases slurry capacity and
- (iii) Current closed periods should be reviewed to give more flexibility to farmers to spread slurry when weather conditions are appropriate.
- 6.8. Assessment of Tables in Schedule 2

The increase to the excretion rate for dairy cows from 85kg to 89kg was only introduced in December of 2020 and must be given time to work. No consideration should be given in the next review to revise this again. Farmers must be afforded sufficient transitionary periods when facing upwards revision of nitrogen excretion rates.

The existing fertilisation rates are adequate and allow farmers to maximise the amount of grass that is fed to cows. To optimise nitrogen use efficiency, it is important that the timing of application supports maximum growth. As previously outlined, ensuring that the NMP is a practical tool that can be readily used by farmers will optimise nitrogen use and will be more impactful than simply reducing rates.

Slurry storage is a considerable expense on farms, yet many farmers that require storage are ineligible for TAMS funding for slurry storage. Instead of increasing slurry storage requirements, there should be a dedicated fund created to enable all farmers to invest in slurry storage.

### IFA proposes that any changes to the criteria set out in Schedule 2 must be based on robust scientific evidence, and done in consultation with stakeholders.

#### 6.9. Drinking water source protection

It is IFA's position that the regulation of existing requirements relating to Drinking Water Directive should be carried out before applying additional legislation.

#### 7. Potential Additional Requirements

The following is IFA's response to the detailed issues set out by the DHLGH to be considered in the consultation paper (see Appendix 3):

#### 7.1. Liming

IFA would support financial incentives for liming programmes for all farmers as set out in the Programme for Government.

7.2. <u>Soils</u>

Maximising nutrient use efficiency is crucial to minimise nutrient loss. Farmers need to be encouraged and supported to develop and implement plans at farm level. More effort is required by the Department to make these plans as user friendly as possible and provide concise recommendations to farmers in units of measurement they are familiar with.

### IFA proposes that the phosphorus build-up programme, which has proven beneficial to farmers with low soil indices for P is retained in order to reduce the use of Nitrogen.

#### 7.3. Grazing intensity/zero grazing

Grazing intensity is currently assessed and farmers stocked above 170kgN/ha, must adhere to additional requirements. As stated in the Teagasc submission to the Interim Review of the NAP, farms stocked below 170kgN/ha should not be considered intensive.

There is no scientific evidence available to imply that farms that zero graze impact water quality. In fact, the option to zero-graze has allowed farmers to overcome fragmentation and maximise the amount of grass to the cow and reduce their dependence on concentrate in the diet. Therefore, zero grazing should not be considered as part of this review.

As previously mentioned, and highlighted in our position paper (see Appendix 1), any further reduction of stocking limits would have grave consequences for dairy farmers and threaten their financial sustainability.

IFA proposes that, similar to the format of the ASSAP programme, a dedicated resource is put into managing critical source areas for nitrates leaching. This would equip farmers with the necessary skills and tools to actively protect vulnerable hotspots within specific areas and would have a greater impact than blanket application of regulations.

#### 7.4. Exports of livestock manure

The Nitrates Expert Group review of the NAP in 2019 recommended the introduction of further measures for these holdings. These were introduced in the amendment to Good Agricultural Practice (GAP) regulations (SI 40 of 2020). Given their recent introduction they must be afforded time to make a positive impact on water quality.

IFA proposes that the production of both pig slurry and poultry litter which is exported directly off the farm of production, should not be included for calculation of N and P on the farm. (see Court of Justice European Union (CJEU) case C-113/12 Donal Brady v. Environmental Protection Agency).

#### 7.5. Large herds

The term used by the Department "large herds" is subjective and does not appropriately describe the herd size in Ireland, which has an average dairy herd of 86 (by comparison average herd size in New Zealand is 435 while in USA it is 273).

Stocking rate is the correct and *only* measure of grazing intensity, absolute herd size regardless of land area is an irrelevant measure. Implications are being made without scientific evidence. The complex nature of addressing water quality requires a tailored approach highlighted by the findings of the Agricultural Catchments Programme (ACP) and the work of ASSAP.

IFA proposes that funding and resources be directed into addressing hot spot areas by diagnosing the cause of the problem and addressing it with prescriptive actions. Uniform

### policy responses are often ineffective and will not have the desired impact of improving water quality, but could have a huge impact on farmers livelihoods.

#### 7.6. Interim Review of the Action Programme

Reviewing the programme every two years is unnecessary and very disruptive.

Studies<sup>6</sup> have clearly shown that even assuming full and timely implementation of new regulations, it is impossible to observe the effects of intervention measures before the minimum lag time has elapsed, and before sufficient amounts of legacy N accumulated within the soil and groundwater have been flushed.

It is vital that policy makers appreciate and acknowledge the complex nature of improving water quality and the time required to evaluate the effectiveness of measures. There is ample evidence to suggest that a consideration of time lags must now become standard in the design of water quality policies, and that specific targets and deadlines prescribed by current policies may need to be reviewed in light of current research.

#### 7.7. Compliance with Birds & Habitats Directives

Previous iterations of the NAP were designed to prevent pollution of surface waters and ground water from agricultural sources and to protect water quality as required under the Nitrates Directive. The actions undertaken to improve water quality have also benefited biodiversity.

IFA agree that more can be done to promote biodiversity on our farms, but it is more appropriate that this is done through incentives under separate programmes.

#### 8. Conclusion

The review must fully recognise the changes that have occurred in farming as well as farmers positive engagement with programmes, advice and schemes that support them to minimise the impact on water quality. There has been significant changes and improvements made as recently as 1<sup>st</sup> January 2021, that must be given time to work, the review must recognise lag times so that the effectiveness of these measures can be accurately evaluated.

It must consider the financial vulnerability of many farms and ensure that a short-term and long-term vulnerability assessment of the sector is undertaken to determine the impact of proposed changes.

Traditional top-down regulation, contains serious shortcomings when it comes to changing behaviour and farming practices. The current regulatory framework does not have the adaptive capacity to facilitate new, bottom-up solutions. IFA favours programmes such as ASSAP and Smart Farming that work collaboratively with farmers at farm level to identify site-specific solutions, and a more targeted approach to improve water quality.

We trust that these comments are useful. If you wish to discuss any aspect of this submission, please contact Geraldine O'Sullivan, IFA Senior Policy Executive by email on <u>geraldineosullivan@ifa.ie</u> or on 087 9385283.

Ends.

<sup>&</sup>lt;sup>6</sup> Owen Fenton, Mark G. Healy, Tiernan Henry, Mohammed I. Khalil, James Grant, Anne Baily, Karl G. Richards (2011). *Exploring the relationship between groundwater geochemical factors and denitrification potentials on a dairy farm in southeast Ireland*. Ecological Engineering Volume 37, Issue 9.

APPENDIX 1

**IFA DAIRY POSITION PAPER 2021** 

# Review of economic sustainability of the Irish Dairy Sector and its impact on the rural economy

(Abridged version for submission to the public consultation on the review of Irelands Nitrates Action Plan)

#### 1. Introduction

The dairy sector in Ireland is robust supporting almost 17,000 farm families. Within the last five years the dairy sector has under gone significant expansion. As a direct consequence of this expansion, considerable revenue streams were created throughout the rural economy. In 2019 alone, dairy farmers invested, on average, €33,091 on their farms (Teagasc). The purpose of this paper is to highlight the gains achieved by the sector in the past ten years but also to highlight that profits at farm level for many remain modest and those farmers are vulnerable to reductions in milk price and/or costs associated with environmental or other restrictions.

#### 2. Industry Gains

Food Harvest 2020<sup>1</sup> outlined an ambitious 50% growth in milk production by 2020 for the dairy sector with associated downstream benefits in value added to the wider economy. Irish dairy farmers delivered on this target ahead of schedule and in so doing, delivered real long-term economic benefits to the Irish economy including an increase in export value of €2.2bn over the past decade (Bord Bia).

#### 3. Impact of the dairy sector on the rural economy

While 17,000 farmers are directly employed at a primary level, a further 30,000 are employed indirectly, in processing, haulage, sales and services etc. Crucially, this employment is in areas throughout the country where employment prospects are limited and purchasing power is lower. In Ireland, those living in rural areas have, on average, about half the purchasing power of those in urban areas (European Commission). Therefore, the investment by the dairy sector, both at primary and processor level, has played a vital role is somewhat rebalancing economic development in the Irish economy.

Since 2015, we estimate that over €2.2bn has been invested by dairy farmers (NFS) and over €1.3bn invested by milk processors (see Appendix) which has benefitted secondary sectors across Ireland. Crucially, for every €1 of exports of dairy products, 90c is spent within the Irish economy. In contrast, the Multinational sector only spends 10c per euro exported in the Irish economy (Teagasc). In 2020, dairy exports amounted to €5.3bn (Bord Bia).

The appendix at the end of this document gives an outline of 7 of Ireland's largest milk processors and their contribution to the local economy.

#### 4. Impact of Expansion on dairy farmers income

As referenced earlier, the 2015-2019 period has seen a substantial increase in Irish milk production with on-farm production increasing by almost 50% and average herd size increasing from 67 cows to 86 cows. However, during this time we have not seen a corresponding increase in dairy farm incomes. In fact, based on National Farm Survey analysis, dairy incomes for 2019 were lower than that earned in 2014. Much of this is related to a lower milk price prevailing in 2019 but even accounting for this, farm net margins have not kept pace with the expansion that has occurred. The following table outlines income and production figures for 2014 and 2019:

	2014	2019	% Change
Dairy FFI (€)	67,598	65,828	-3%
Milk production (litres)	308,661	456,354	+48%
Family Labour input (labour units)	0.36	0.37	+3%
Dairy income (€ excl. family labour)	49,704	48,049	-3%
Average full-time industrial wage (€)	44,829	48,946	+9%
Dairy Farmer Income/Ave Full-time industrial wage	1.11	0.98	-12%

Source: Teagasc, National Farm Survey, CSO

On the face of it, even though incomes have not increased in the 2015-2019 period, income levels in dairy farming appear high relative to other agricultural sectors and indeed the wider economy. However, as the National Farm Survey confirms, there is a substantial level of unpaid family labour evident on Irish dairy farms. When a wage is attributed to family labour, average dairy farm incomes in 2019 were actually lower than the equivalent Irish full-time average industrial wage. It is also important to note that any capital repayments on loans dairy farmers have must come from their farm income, which would further reduce dairy farm income compared with average industrial wage. In addition, any return on the substantial farm assets dairy farmers have employed in their business must also come from this income.

#### 5. <u>Dairy Sector Vulnerabilities impact of a drop in milk price or drop on stocking rate on farm</u> income

Based on National Farm Survey analysis, the average milk price paid to farmers in 2019 was 34.5 cent/litre. A key feature of dairy farming over the past number of years has been milk price volatility. At current levels, dairy farmer net margins are susceptible to any significant milk price drop. For example, a 2 cent drop in milk price would reduce average dairy net margin by over  $\in$ 9,300 and would drop average dairy farmer income (after accounting for family labour input) to c.  $\in$ 41,200. This illustrates how vulnerable Irish dairy farmers are to a significant downward shift in output prices.

Furthermore, EU Green Deal proposals, if implemented, will reduce artificial nitrogen usage levels for dairy farmers. Recent analysis by Teagasc has shown that a 20% reduction in inorganic nitrogen usage would reduce dairy farm net margins by c. 10%. Clearly, Irish dairy farm net margins are quite vulnerable to either negative milk prices movements or increased fertiliser restrictions.

#### 6. Return on Assets

The recent Teagasc/CIT study on Irish dairy farms post quota outlined that Irish dairy farm businesses have the highest net margins in Europe. While an important measure, net margin is one of a number of comparative measures that are used to assess the financial performance of a business. Another widely used method is Return on Asset (ROA) – what percentage return the business owner is getting for the assets they have tied up in their business. Using 2018 Farm Accountancy Data Network (FADN) it is possible to compare the performance of Irish dairy farms from an ROA perspective relative to their European counterparts. This is outlined in the overleaf table:

Selected EU Member States and UK	Return on Asset (%)
Italy	8.9
France	8.8
Belgium	6.9
Germany	5.7
Finland	5.0
Ireland	4.4
United Kingdom	3.6
Denmark	2.9
Sweden	2.2
Netherlands	2.1
EU/UK Average	5.3

Source: 2018 FADN data

As this table shows, ROA achieved on Irish dairy farms in 2018 (4.4%) was lower than the European average (5.3%). So, while Irish dairy farmers appear to be achieving relatively higher margins compared to their European neighbours the overall percentage return, they are achieving on their asset base is still below the European average. Of course, the above ROA calculation is before accounting for the farmer and family's own labour input. If we attribute Ireland's average industrial wage for the farmers own labour input, the % return on asset reduces to 1.4%, outlining the low return dairy farmers in Ireland (and other EU countries) receive for the level of assets they have employed in their business.

#### 7. Conclusion

The expansion in milk production has delivered substantial economic benefits to the wider Irish economy both in terms of employment and net foreign earnings associated with the processing sector but also in terms of the economic activity generated from the on-farm investment farmers have undertaken. There is no doubt that dairy expansion has provided many Irish farmers with the opportunity to increase their overall farm profitability. However, it must also be recognised that dairy farm incomes remain at modest levels when compared with the average industrial wage. Furthermore, dairy farm margins are also quite vulnerable to a downward movement in milk price and increased restrictions in fertiliser usage or other costs. Similarly, in a European context, the actual return dairy farmers are receiving on the substantial assets tied up in their business is below the EU average. While Irish dairy farming net margins are favourable when compared with our EU counterparts, there are other considerations which put these apparent high margins into a more appropriate context.

Tadhg Buckley, Director of Policy/Chief Economist Aine O'Connell, Dairy Policy Executive

#### **References**

- Teagasc National Farm Survey
- Food Harvest 2020
- Bord Bia Export Performance and Prospects 2020/21
- FADN
- CSO
- European Commission CAP Strategic Review Recommendations 2020

### Appendix 1

	Economic footprint of Irish Dairy Industry
CARBERY	<ul> <li>Employ 300 people in West Cork</li> <li>€78m capital investment for Mozarella cheese processing – 250 local contractors</li> <li>Process 567m litres milk which is exported to 50 countries</li> <li>Total revenue €434m</li> </ul>
Aurivo 🍥	<ul> <li>Employ 275 people in Sligo, Roscommon and Donegal</li> <li>Subcontract 19 haulage companies for the collection and supply of dairy goods.</li> <li>Process 500m litres which is exported to 50 countries</li> <li>€37m investment in dairy processing capacity</li> <li>34 retail stores</li> <li>Total revenue €446m</li> </ul>
glanbia	<ul> <li>Over 2,000 employees</li> <li>Collects milk from 17 counties</li> <li>Process almost three billion litres from 4,800 milk suppliers</li> <li>Milk payments surpassed €1bn in 2019</li> <li>Invested over €343 million since 2015 in processing facilities</li> <li>52 agri-branches in Ireland</li> <li>Export to over 100 countries</li> <li>Annual revenue of €1.9 billion</li> </ul>
DAIRIES	<ul> <li>Employ over 1,000 people.</li> <li>Process 1.85bn litres of milk from 3,200 suppliers.</li> <li>Group Revenues (2019) €1.03bn.</li> <li>8 facilities (Food Ingredients, Foodservice, Consumer, Agribusiness)</li> <li>Exporting over 200 dairy products to 80+ markets worldwide.</li> <li>€550m in milk payments to dairy farmers (2019) across 16 counties</li> <li>€185m invested in milk processing capacity since 2015</li> </ul>
KERRY	<ul> <li>Employ 1,300 people across Kerry, Limerick, Clare and North Cork.</li> <li>3000 Milk Suppliers across 6 counties.</li> <li>3 Primary Dairy Manufacturing sites – Listowel, Charleville &amp; Newmarket</li> <li>32 Farm &amp; Home Stores and Compound Feed Mill, Farranfore, Co. Kerry</li> <li>€200m invested in Dairy sites since 2013.</li> <li>Milk payments exceeded €441m in 2019.</li> </ul>
Arrabawn <sub>Co-op</sub>	<ul> <li>Process 440 million litres.</li> <li>Annual revenue of €270m.</li> <li>Milk payments of €140m.</li> <li>420 direct employees.</li> <li>€63 million investment in past five years.</li> </ul>
Colder Vallagi, Growing Naturalit	<ul> <li>Process 1.42 billion litres of milk from 2,700 milk suppliers across Munster</li> <li>Milk payments of €490m</li> <li>Employ 1,150 in Munster</li> <li>€450m investment in milk processing</li> <li>Group Revenue (2019) €1.02bn</li> </ul>

**APPENDIX 2** 

Current Requirements in Consultation Paper

#### CURRENT REQUIREMENTS

#### Cattle access to watercourses:

The current regulations prevent cattle access to watercourses, effective from 1<sup>st</sup> January 2021, on farms with a grassland stocking rate of 170 kg N/ha or above. The measure requires water courses to be fenced 1.5 metres from the top of the river bank or water's edge as the case may be.

Should the current requirements of farms be extended and if so, to what extent?

#### Phosphorous Build-up:

The provision allowing for P build-up on farms with stocking rates of 130 kg N/ha or above was introduced in the most recent review of the Nitrates Action Programme. It allows for landowners to introduce higher levels of Phosphorous onto lands with a Phosphorous Index of 1 or 2 in order to optimise soil productivity.

An assessment of the uptake and effectiveness of this measure will be undertaken as part of this review of the Nitrates Action Programme to determine if it should be removed, retained or expanded in the next NAP.

#### Record Keeping:

Management, maintenance and submission of records is becoming a more important element of demonstrating compliance with the GAP regulations. At present all farmers are required to maintain up to date paper records and failure to produce these records during an inspection can lead to significant penalties for farmers.

A more streamlined process may be required to ensure more farmers are able to manage their records and free up additional time for farm advisers, whose time is often taken up with record-keeping on behalf of farmers. In addition, the need for a regime similar to that for pesticides where sales are recorded on a farm by farm basis will be considered.

#### Training (for farmers and advisers):

Knowledge transfer, both from adviser to farmer and peer-to-peer, has clear benefits in sharing best practices and helping to develop farmer's knowledge of the requirements of the GAP regulations. It also provides farmers with a better understanding of environmental protection in general and the impacts poor farming practices can have on local watercourses.

A requirement to participate in training programmes specified by DAFM is included for farmers engaging in P build-up, and, from January 2020 for any farmer wishing to avail of a derogation.

Do you think increased requirements to participate in training courses or knowledge transfer events for all farmers would have an impact on Water Quality?

#### LESS slurry spreading:

Low Emission Slurry Spreading (LESS) has been demonstrated to ensure less nutrients are lost to run off and that atmospheric emissions of Ammonia from slurry-spreading are reduced. This method of slurry spreading is a requirement for all derogation farmers from 2020.

The environmental benefits of LESS methods are well documented. How can these methods be further implemented to improve fertiliser management practices going forward?

#### Nutrient Management Planning:

Nutrient Management Planning (NMP) is one of the most efficient means of ensuring a farmer maximises the value of their chemical and organic nutrient inputs.

NMP is also a cornerstone of compliance with the derogation requirements. The advent of online nutrient management planning tools in recent years has greatly simplified this task and many farmers that are not in derogation are also using these tools to maximise their nutrient usage.

Mainstreaming the use of these tools will be a key component of any successful NAP and will be linked to the training programmes specified by DAFM.

#### Assessment of Tables in Schedule 2:

Schedule 2 of the 2017 GAP regulations includes 22 tables that set out various criteria as to storage capacity and nutrient management. These include several tables relating to permitted fertilisation rates, animal excretion rates, slurry storage capacities, etc.

While some of this information was updated or introduced during the last review of the Nitrates Action Programme, a full assessment of the robustness of the information contained in the tables is being considered. This assessment must take account of improvements in scientific knowledge relating to nutrient management, climate change data and climate adaptation measures. Scientific evidence is currently available to demonstrate that the excretion rates for the dairy cow should be updated.

Slurry Storage requirements incl. soiled water:

It has become clear in the past number of years that the slurry storage available on farms is not always sufficient. This is linked to a variety of factors, not least of which is changed rainfall patterns brought about as a result of climate change. Cost of installation of storage infrastructure is also an obvious factor.

Grants are available for installation of additional slurry storage on farms and DAFM always encourage farmers to ensure that they future-proof their storage requirements during design and installation.

The storage periods in Schedule 3 of the GAP regulations will be examined by the Nitrates Expert Group as part of this review of the NAP.

#### Drinking Water Source Protection:

The protection of drinking water sources is a key element of the GAP Regulations, and the regulations include several measures to protect drinking water sources from contamination by agricultural pollutants and pathogens. These can be caused by poor slurry or chemical fertiliser application practices (i.e. application timing, rates, types) or by applying slurry or fertiliser too close to the water source.

This is an area of the NAP that needs to be strengthened and it also needs to link with ongoing source protection work under the Water Framework Directive and the provisions of the recast Drinking Water Directive, which is expected to be published later in 2020.

**APPENDIX 3** 

Potential Requirements in Consultation Paper

#### POTENTIAL ADDITIONAL REQUIREMENTS

#### Liming:

The 2020 Good Agricultural Practice (Amendment) Regulations introduced a requirement for farmers availing of a derogation to incorporate a liming programme into their fertilisation plan.

The control of soil pH through application of lime is a common practice on many farms, however, it had not previously been prescribed in the regulations until the recent amendment. The uses and benefits of liming will form part of the discussions around the NAP review and the input of stakeholders will be key to these discussions.

#### Soils:

Optimising soil fertility to ensure efficient use of nutrient inputs will be a key component of the next review. The proportion of soils tested with levels of soil fertility at the agronomic optimum (pH >6.3, P and K > Index 3) remains low at approximately 18% in 2018.

Balancing both macro- and micro- nutrients to meet optimum soil fertility will be reviewed.

#### Grazing intensity/zero grazing:

Grazing intensity relative to whole farm stocking will be reviewed. This will be reviewed based on most recent research available.

Zero grazing is a practice being adopted more and more at farm level and a review on best practice for grazing and nutrient management will be undertaken as part of this review.

#### Exports of livestock manure

Over 4,500 farms export livestock manure to remain compliant with stocking rate limits in the regulations. The impact of these farmers and potential additional controls will be examined. Some additional measures were introduced by the GAP amendment regulations (SI 40 of 2020) however the practice of exporting livestock manure is one which needs a full assessment. The Nitrates Expert Group review of the NAP in 2019 recommended the introduction of further measures for these holdings.

#### Large herds:

There is an increasing disparity between those with the largest herds in the country and those other farmers that are running average-sized herds.

With the intensity of these large operations having the potential to put significant pressures on the water quality and quantity in their local catchment, should additional measures be considered to address this issue?

#### Interim Review of the Action Programme:

The existing Nitrates Action Programme (NAP) sets out the requirements for managing agricultural nitrogen and phosphorous for a 4-year period. While a similar period is expected for the next NAP it is proposed to undertake an interim review of the programme nationally towards the end of Year 2 of the programme to assess progress nationally in achieving the objective of reducing pollution from agricultural sources. Where considered necessary for the purpose of achieving this objective amendments to the programme will be proposed.

#### Compliance with Birds & Habitats Directives:

Compliance with the Birds and Habitats Directives is an integral part of the development of any plan or programme, including reviews of those plans or programmes. While the overall NAP review will be subject to a high-level appropriate assessment, this assessment must be detailed enough to incorporate impacts at a ground level on each individual holding.

One of the main concerns in this regard is the derogation process, and ensuring that derogation from the stocking rate limits of the Nitrates Directive does not result in non-compliance with the Birds and Habitats Directive or the WFD.