Submission to the public consultation on the Fourth Review of Ireland's Nitrates Action Plan, Stage 2 Public Consultation Paper

20th September 2021

1. Executive Summary

- The purpose of the Nitrates Action Programme (NAP) is to introduce measures to protect water quality through the promotion of good agricultural practices. The outcome of the current review of the NAP will have significant implications for farmers across all sectors of Irish Agriculture, it must reflect the different production systems and management practices on farms. This must not be a one size fits all programme.

- The Department of Agriculture, Food and Marine (DAFM) must engage in genuine negotiations with farmers to agree a NAP that achieves its objectives without placing unnecessary and excessive requirements on farmers.

- IFA is deeply concerned that the Department of Housing, Local Government and Heritage (DHLGH) is attempting to use the NAP review to introduce measures that have unsubstantiated benefits to water quality but clearly deliver on the recommended actions set out by the DAFM in Ag Climatise[1] to improve the climate and air quality footprint of our sector. The review must not be used by the Government to limit its responsibility to support farmers in the transition to a low carbon economy.

- It is not appropriate to extend the requirement to fence watercourse and implement a Nutrient Management Plan to all farms, as these measures would have imposed an unnecessary cost burden on extensive farms.

- The single biggest issue that has been avoided in this consultation paper is the financial implications of the proposed measures and the risk of increasing the financial vulnerability of more farms. Where a measure has financial implications for farmers, grant aid and Accelerated Capital Allowance (ACA) schemes must be introduced to support their adoption to enable farmers to realise greater environmental standards, which would benefit the entire country.

- IFA is seeking additional resources to be allocated to increase frequency of water sampling to more accurately capture water quality data and trends. In addition, this information should be made available on a public database, which is accessible to all.

- The more extensive farming systems (livestock and sheep), which are typically the most financially vulnerable and their management practises must be recognised under the NAP review. Stocking rates on these farms are at the lower end of the scale and do not impact water quality. While not specifically referenced in the proposals sheep and sheep farmers are exposed to the measures outlined. Sheep and sheep farms must be excluded from proposed measures and farm calculations in the programme.

- It is a key priority for the Association that the current nitrates derogation is maintained, without further onerous requirements. Farmers in derogation make a substantial contribution to the sector, the wider and rural economy.

- Adequate time must be provided for farmers to adopt proposed measures, the proposed timelines for some of the measures are not feasible and must be extended.

- The key proposed measures of serious concern to IFA that would impose significant financial burden on farmers, but which are either not scientifically justified or whose benefits to water quality are negligible are as follows:

[1] Department of Agriculture, Food and the Marine (2020). *Ag Climatise - A Roadmap towards Climate Neutrality*. Retrieved from: https://www.gov.ie/en/publication/07fbe-ag-climatise-a-roadmap-towards-climate-neutrality/.

- The outwintering eligibility must be retained for farms with stocking rate less than 140 kg/N/ha. Farmers are legally responsible for the health and welfare of animals under their care. As a critical component ~~of~~ the NAP must ensure farmers are not prohibited in meeting their legal obligations on health and welfare of their animals by ensuring best practice in the feeding and maintenance of animals is facilitated. Animal health and welfare must take precedence in recognition of their sentient beings' status established in EU law.

- The proposal to reduce the period for slurry spreading by moving the deadline to the 15th September and the impact of this measure on water quality is not supported by science. A more effective measure would be to encourage farmers to spread slurry produced from the previous winter earlier in the season when its nutrients can be optimised.

- The covering of slurry stores has no direct benefit to water quality, its primary benefit is to reduce ammonia emissions, and must be rejected. This is outside the remit of the Nitrates review and must not be used by Government to deliver climate policy objectives, and renege on its responsibility to support farmers in the low carbon transition.

- The soiled water storage and management proposals, which are imposing restrictions on all farms in order to address slurry storage capacity issues on some farms, is unacceptable and would set a dangerous precedent, especially when there is no scientific evidence to support measure.

- IFA are seeking that the introduction of proposed bands is postponed beyond the 1st January 2022, to provide adequate time for the DAFM to properly consult with stakeholders. The introduction of livestock excretion rates bands has the potential to lead to increased competition for land, potentially undermining the ability of the livestock and tillage sector to compete for land.

- There are concerns that applying a linear 10% reduction in nitrogen allowance across all farms, based on stocking rates, will have a disproportionate effect on livestock farms, who are already using lower levels of chemical fertiliser.

- The proposal to only include land within 30km in stocking rate calculations is strongly rejected. Many farm holdings are fragmented with distances of 30km not unusual. There is no rationale for this proposal where the lands are genuinely farmed. Distance does not determine stock levels on livestock and sheep farms in particular.

- The compulsory use of Low Emission Slurry Spreading (LESS) on farms operating above 100 kg /N/ha from 2023 would be severely cost prohibitive and have minimal impact on water quality. While the use of LESS is encouraged, it must be supported via grants rather than enforced under regulation.

2. 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 2 Public Consultation paper on the 4th review of Ireland's Nitrates Action Programme (NAP).

The outcome of the current review of the NAP will have significant implications for farmers across all sectors of Irish Agriculture. IFA fully recognise the important role the NAP plays within the industry.

The objective of NAP is to protect water quality through the promotion of good farming practice, if there are wider co-benefits to climate and biodiversity, this is welcomed. However, the review must not be used by

Government to legislate for other policy objectives including emission reduction targets that provide minimal benefits to water quality.

The Department of Agriculture, Food and Marine (DAFM) must engage in genuine negotiations with farmers to agree a NAP that achieves its objectives without placing unnecessary and excessive requirements on farmers. Farmers are tired of consultation processes' which are amounting to no more than a box ticking exercise. IFA has the expertise in place and want to sit down with the Government to discuss the highly technical issues and agree a programme that gives certainty to farmers for the next four years.

As custodians of the environment, farmers understand their responsibility to comply with regulations to protect and improve water quality. They will continue to engage positively with measures that are scientifically proven to improve water quality. They will not accept the introduction of excessive regulations that could undermine the viability of the family farm and do little to improve water quality.

IFA welcomes the decision taken by Department of Housing, Local Government and Heritage (DHLGH) not to extend the requirement to fence watercourses and develop Nutrient Management Plan to all farms, as it would have imposed an unnecessary cost burden on extensive farms.

It is vital that the more extensive farming systems (livestock and sheep), which are typically the most financially vulnerable are excluded under the NAP review. Stocking rates on these farms are at the lower end of the scale, they provide a range of environmental benefits in the management of these lands and do not impact water quality.

It is a key priority for the Association that the current nitrates derogation is maintained, without further onerous requirements. There are approximately 7,000 farmers that depend on the derogation to maintain their livelihoods. Farmers in derogation make a substantial contribution to the sector and the wider rural economy.

3. Actions undertaken by farmers to improve water quality

Farmers have made significant investments and changes to farming practices since the introduction of the last NAP. The Water Quality in Ireland 2013-2018 report, which was published in 2019, did not capture the impact of the new measures and programmes that were introduced on farms.

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 15th 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 15th 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.

4. Overreach of Nitrates Action Programme

IFA is deeply concerned that the DHLGH is attempting to use the NAP review to introduce measures that have unsubstantiated benefits to water quality but clearly deliver on the recommended actions set out by the DAFM in Ag Climatise to improve the climate and air quality footprint of our sector.

The purpose of the NAP is to introduce measures to protect water quality through the promotion of good agricultural practices. IFA considers that some of the proposals in the consultation document; including external covers for slurry stores, compulsory use of Low Emission Slurry Spreading (LESS) and increasing the closed period for slurry spreading to be outside the remit of the review. The primary function of these measures is to reduce emissions, their potential to improve water quality is not scientifically proven and disproportionate to the investment costs.

It is IFA's position that the inclusion of these measures in the regulation is an attempt by Government to limit its responsibility to support farmers in the transition to a low carbon economy.

5. Addressing Financial Implications

The single biggest issue that has been avoided in this consultation paper is the financial implications of the proposed measures and the risk of increasing the financial vulnerability of more farms.

IFA undertook a review of the economic sustainability of the Irish dairy sector**,** which highlights farmers vulnerability to costs associated with environmental requirement and/or restrictions to production (see Appendix 1).

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

The cost of proposed measures must be proportionate to the scientifically proven benefits to water quality. Where a measure has financial implications for farmers, grant aid and Accelerated Capital Allowance (ACA) schemes must be introduced to support their adoption. By supporting farmers to invest in additional slurry storage capacity and Low Emission Slurry Spreading (LESS) equipment, the Government will enable farmers to realise greater environmental standards which would benefit the entire country.

6. Improved Water Monitoring

The EPA are currently monitoring approximately 2,400 rivers, some rivers have not been measured at all during 2020 while others are measured with varying frequencies. The current water testing analysis does not take account of once-off weather events such as drought which is potentially leading to inaccurate portrayal of the long-term water quality trends. More resources should be committed to sample each river in much greater frequency to more accurately capture water quality data and trends.

In addition, the existing database and presentation of results within the Catchments website makes much of the data inaccessible. A greater frequency of more detailed measurement on a publicly available database, which is accessible to all, is urgently needed. Such a database could then facilitate statistical trend analysis taking account of both localised and seasonal weather impacts.

This would be to the benefit of all stakeholders and would be welcomed by farmers.

7. Proposed Measures

The following is IFA's response to proposed measures set out by the Department of Housing, Local Government and Heritage (DHLGH) in the consultation paper:

7.1. Chemical Fertiliser Register

The Chemical Fertiliser Register must be developed in full consultation with farmers.

The rules and guidelines must allow flexibility including the ability for farmers to take advantage of market conditions and stockpile chemical fertiliser when prices are keen, as well as purchase chemical fertiliser for land they do not own or have entitlements for, for example, when land is let for summer grazing/silage.

7.2. Improving Compliance

The IFA does not condone non-compliance but considers improved communication and the provision of adequate supports integral to improving compliance.

A review of cross compliance inspection outcomes has not been published since 2016, it would be beneficial if yearly updates were provided to the sector to improve understanding and avoid unintended breaches.

It is vital that the measures introduced under the Nitrates Action Programme are properly communicated with farmers to support compliance. Sufficient time must be provided to adopt measures with information events and training courses provided for farmers and advisors to ensure all changes are properly communicated. Technical guidance must be provided **prior** to the introduction of any new regulation. The Department must endeavour to ensure that there is not a repeat of the situation that occurred in 2021, where detailed specification and clarity were not provided to farmers in advance of the new measures being introduced.

IFA suggests the introduction of a yellow card system for minor non-compliances so that farmers are afforded the time to rectify the non-compliance without incurring a fine.

7.3. Agricultural Sustainability Support and Advice Programme (ASSAP)

IFA is supportive of the expansion of the ASSAP programme, as set out in the Programme for Government. It clearly demonstrates that working collaboratively with farmers to identify and implement targeted measures on farms is the most effective method to improve water quality.

The consultation paper states:
"….evidence from the Agricultural Catchment Programme indicates that supporting farmers to make better decisions regarding how they manage nutrient applications is likely to be the single area with the greatest potential to improve outcomes for water quality on Irish farms - delivering better profits for the farmer while reducing risk of nutrient loss to water…."

This is a hugely pertinent statement and must be full recognised when formulating this current and future Nitrates Action Programme. In consulting with farmers to prepare this response they have repeatedly voiced serious concerns about the "one size fits all" regulatory approach being adopted by the Department with regards to water quality. Rather than a more targeted approach that is proven to deliver results the current method is imposing costs and impacting production on farms that may not be a pressure on water quality.

The EPA Water Quality in 2020 report reinforces the ACP findings and shows that targeted actions are helping to improve water quality. Of the 81 Prioritised Areas for Action (PAA) that have completed field work and reports under the programme, 57 of the water bodies or 70% have shown net improvements in the biological quality.

KPI	Number
Number of Priority Areas for Action (PAA's)	190
Desk studies commenced	163
Desk studies completed and uploaded to EPA WFD app	118
Field work active in PAA's	127
Field work and report completed in PAA's	81
Action plans completed for PAA	81

Table 1. LAWPRO activities to date under ASSAP

96% of farmers approached have engaged with the programme, while 92% have agreed actions between advisor and farmer. This demonstrates farmers willingness to adopt targeted measures that can deliver both better profits and reduce nutrient losses to water.

7.4. Slurry Storage and Management

7.4.1. Outwintering

The outwintering eligibility must be retained for farms with stocking rate less than 140kg/N/ha.

Within the NAP there is already a requirement that the stocking rate for the closed period must not exceed 85kgN/ha. Therefore, given that this provision is already in place there is no additional benefit to lowering the overall farm stocking rate from 140kgN/ha/year to 100kgN/ha/year.

Farmers are legally responsible for the health and welfare of animals under their care. A critical component of this is ensuring adequate feed for these animals. The NAP cannot legislatively prohibit farmers from managing their farms in a manner that ensures they have adequate feed for the production cycle of the animal on the farm, for example ensuring enough winter forage is available.

There are significant gaps in our understanding on the impact of out wintering on water quality. IFA proposes that rather than reducing stocking rate, that potential strategies to mitigate against any potential negative impacts are evaluated. These could include soil management, management practices, drainage management, feeder types, potential to collection rainwater, post treatment of the fields etc.

There are many benefits to out-wintering cattle including improved animal health and reduced input and labour costs which are particularly prevalent to protecting the financial viability of some farms.

7.4.2. Slurry spreading guidelines

IFA opposes the introduction of the new slurry spreading guidelines, which propose to restrict spreading from the 15th September from 2023. An alternative measure, which would be more beneficial to water quality, would be to encourage farmers to spread slurry produced from the previous winter earlier in the grass growing season when nutrients can be optimised. Farmers should be allowed to spread small volumes of slurry produced over the summer up to 15th October to optimise usage of organic fertiliser.

Slurry is a valuable asset on farms and farmers should be encouraged to make the best use of the nutrients in slurry by spreading during the growing season. Grass growth rates are still in the region of 30-50 kg DM/day in September and October therefore the nutrient value of the slurry can be taken up by the plant, preventing loss over the closed period.

There is no scientific evidence that limiting the spreading of slurry to the 15th September will benefit water quality. It is critical to point out that DAFM requested Teagasc to model the impact of a number of farm nitrogen mitigation measures on nitrate load reduction. However, they never requested Teagasc to assess this proposals impact on nitrogen loss.

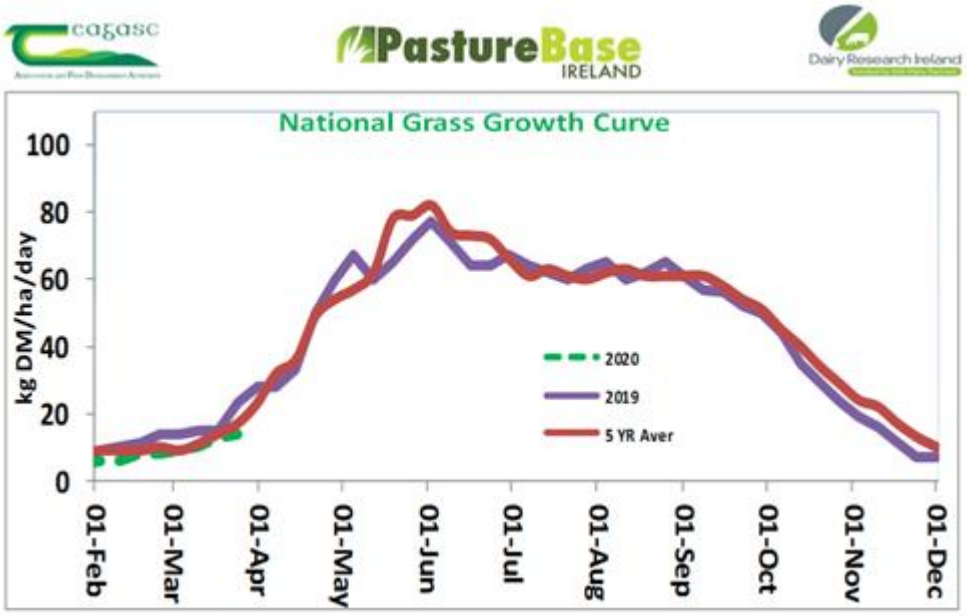

Figure 1. Grass Growth Curve 2020

In order to encourage and promote the use of organic manures to improve soil fertility on tillage lands, the current spreading guidelines should be retained. The first half of September is often an exceptionally busy period on tillage farms with harvesting, baling and the establishment of oilseed rape taking place. An additional requirement to have slurry spread and incorporated within 24 hours by this date is just not feasible.

Farmers across all sectors have serious concerns about the practicality of implementing the proposed measure, it is paramount that any changes to slurry spreading guidelines must have flexibility due to the weather conditions.

7.4.3. Slurry and clean water separation

It is unclear what the Department is seeking in the proposal to keep slurry and clean water separate in the farmyards of farms stocked above 170kgN/ha, as this is an existing requirement under cross compliance - SMR 1. IFA would welcome an opportunity to get clarity on what is being proposed under the measure.

7.4.4. Covering of external stores

IFA oppose the proposal to cover external slurry stores being included as a measure under the NAP. The principal benefit of covering slurry stores is to reduce ammonia emissions, there is no direct benefit to water quality and therefore it is outside the scope of the programme

The purpose of the NAP is to introduce measures to protect water quality through the promotion of good agricultural practices. By including the proposal to cover external slurry stores in the regulation, it would restrict the ability to grant aid these investments. IFA considers this a blatant attempt by Government to renege on its responsibility to support farmers in the transition to a low carbon economy.

It is our understanding that there has been no research undertaken in the Republic of Ireland to evaluate the benefits to water quality from this proposal. This research needs to be undertaken prior to the introduction of such a costly measure. In addition, no guidance has been developed for farmers on the technical specifications of suitable covers for different store types, the safe use of covers to mitigate hazardous health and safety conditions when agitating or the associated costs of covering slurry stores.

7.5. Soiled Water Storage & Management

7.5.1. Separate storage of soiled water

IFA opposes the proposal that soiled water must be collected and stored separately to slurry on all farms.

There is no scientific justification for soiled water to be kept separate from slurry where there is ample storage on farms to store them together. On the contrary the dilution of slurry increases the availability of nitrogen for plants. This is a costly proposal that will not improve water quality but would impose significant costs on farms.

It is unclear as to how farmers can calculate the volume of soiled water storage required on farms. The provision of any reference values is likely to be largely redundant as the volume of soiled water generated on farms is not only impacted by the number of cows but also impacted by the presence or absence of various farm infrastructure. Therefore, the assessment of whether such a proposal or indeed the subsequent proposal is being implemented appropriately becomes almost impossible.

7.5.2. Prohibit spreading of soiled water

The proposal to prohibit the spreading of soiled water from the 15th November to the 15th January is excessive.

IFA has serious concerns with regards to imposing this restriction on all farms in order to address slurry storage capacity issues on some farms. This is a dangerous precedent. Measures must only be introduced that are scientifically proven to benefit water quality, rather than being used as a mechanism by DAFM to manage compliance.

Within the existing NAP there is a clear definition for soiled water:

In these Regulations "soiled water" includes, subject to this subarticle, water from concreted areas, hard standing areas, holding areas for livestock and other farmyard areas where such water is contaminated by contact with any of the following substances— (i) livestock faeces or urine or silage effluent, (ii) chemical fertilisers, (iii) washings such as vegetable washings, milking parlour washings or washings from mushroom houses, (iv) water used in washing farm equipment. (b) In these Regulations, "soiled water" does not include any liquid where such liquid has either— (i) a biochemical oxygen demand exceeding 2,500 mg per litre, or [605] 9 (ii) a dry matter content exceeding 1% (10 g/L).

There are also clear specifications regarding the application of soiled water to the land. Therefore, there is no requirement for additional regulations of soiled water.

Soiled water contains 3.3 units of N per 2,500 gallons of slurry[2], in contrast cattle slurry contains approximately 16 - 18 units of N per 2,500 gallons. The trace amounts of nitrogen applied to land via soiled water during the closed period is minimal.

It is abundantly clear that this proposal would incur large investment costs at farm level yet yield no improvement in water quality. Such a proposal would prove particularly costly for farmers that milk cows over the winter. On such farms it is estimated that 65 litres of soiled water are generated per cow per day. It is unrealistic that such farms would be expect to store such large volumes of soiled water over 8 weeks when it has no positive impact on water quality. For this reason, there is no reason why the practice of spreading soiled water during the closed period cannot continue.

7.5.3. <u>Increased soiled water storage</u>

IFA is opposed to the proposal to double the soiled water storage capacity requirement on farms by 31st December 2024.

Increasing the storage capacity for soiled water on farms is a significant cost, particularly when the benefits to water quality have not been demonstrated. Farmers have serious reservation that this cost prohibitive regulation that will have limited impact on water quality.

Furthermore, the timeline for the introduction of this measure is too short and not practical due to the backlog and delays in the planning and construction sector.

7.6. Livestock excretion rates

IFA are seeking that introduction of proposed bands is postponed beyond the 1st January 2022, to provide adequate time for the DAFM to properly consult with stakeholders. IFA would welcome an opportunity to discuss the proposed introduction of bands on livestock excretion rates along with their structure, as the proposal has significant implications for the dairy sector and will indirectly impact other sectors.

[2] Minogue et al. (2015). *Characterisation of dairy soiled water in a survey of 60 Irish dairy farms*. Irish Journal of Agricultural and Food Research, 54(1), 1–16.

The introduction of bands has the potential to lead to increased demand for land which will have knock-on implications for all farming sectors. Farms with high yielding cows will be forced to lease or purchase additional land to retain current stocking rates, potentially undermining the ability of the livestock and tillage sector to compete for land. Prior to any introduction of dairy cows' excretion bands, further analysis is required on the number of farmers who will now exceed 250kgs of organic N stocking rate as a result.

Farms that require more land as a consequence of the introduction of this proposal should be offered flexibility as to what can be done with the extra land. Currently farms in derogation must ensure that 80% of the farm is in grassland. Offering flexibility on this requirement would enable affected farmers to sow more arable crops on the extra land required to meet stocking rate requirements, therefore reducing their demand for imported feed.

As stated in the consultation document only a preliminary analysis has been undertaken and as the proposal will have far reaching consequences it is vital that there is further engagement prior to this proposal being introduced.

7.7. Dairy Industry N reduction initiative

It is critical that farmers, as key stakeholders, are involved in the development of any farmer programmes.

IFA is not aware of the Dairy Sustainability Ireland Working Group referred to in this proposal and understands that this grouping does not currently exist. Therefore, no formal plan has been submitted to DAFM and no financial support has been agreed.

It is recognised that milk processors can play a positive role in supporting farmers through ASSAP, Joint Programmes with Teagasc and the provision of lending structures such as Milk Flex and Dairy Flex and such activities should be encouraged. However, there are concerns that this is an attempt by the DAFM to shift responsibility to ensure compliance with nitrates regulations onto milk processors.

It is not the remit of milk processors to ensure compliance with the Nitrates Action Programme.

7.8. Chemical Fertiliser controls

Reducing the nitrogen allowances by 10% and potentially by up to 15% in some areas will present significant challenges on farms. It is estimated that a 15% reduction in chemical nitrogen will impact family farm incomes in the region of €5,000, this is too severe.

IFA recognises the potential opportunities offered by bio-based fertilisers as well as protected urea or CAN, but there are significant knowledge gaps surrounding nutrient release, field performance as well as economics. These knowledge gaps need to be addressed so proper guidance and support can be provided to famers to adapt to these technologies.

There are also concerns that applying a linear percentage reduction across all farms based on stocking rates will have a disproportionate effect on livestock farms, who are already using lower levels of chemical fertiliser. There should not be the same reduction in chemical nitrogen allowances on these farms.

It is vital that the benefits of a 10% reduction in chemical nitrogen to water quality are demonstrated prior to increasing this reduction to 15%.

7.9. P Build up Allowances

IFA supports the extension of P Build Up Allowance programme.

Given the ambition to reduce chemical N applications, further steps are required to facilitate farmers to establish white clover within grazing swards. Among the main limitations in establishment of clover is soil phosphorous (P) which plays a key role in the root development of clover. Phosphorous allowances should be further reviewed to allow P build-up on farms where sub-optimal soils conditions exist. This will also help address P deficiencies which was particularly prevalent among livestock earlier this year.

7.10. Green cover on Tillage Ground

The proposed 7-day interval for cultivation after harvesting is unworkable. Instead, allowing natural regeneration of crop volunteers without cultivation for 28 days post harvesting will enable re-growth to trap nutrients. Furthermore, a requirement to cultivate almost immediately post-harvest could compromise the cultural control of certain invasive grassweeds such as brome species and wild oats, which require sunlight on the soil surface to germinate. After the 28-day interval has expired, the field could be cultivated or sown with a crop.

The funding for the Straw Incorporation Measure (SIM) scheme should be increased to enable quicker turnaround times for post-harvest management techniques on a wider area of tillage.

For farmers practising zero or strip till establishment systems, the use of straw rakes or rollers to encourage natural regrowth/ regeneration of a green cover post harvesting must be permitted instead of shallow cultivation.

A requirement for cover crops ahead of spring crops should be established in tillage areas which have been identified as especially vulnerable to nitrate loss or leaching. Significant funding for this practice must be provided under the Pillar 2 in the new CAP.

Later maturing crops such as potatoes and beet will require an annual derogation which takes into account weather and soil conditions in respect of the requirement to shallow cultivate and/or establish a following crop.

IFA suggests that on farm trials for inter-row sowing of maize crops with grass species should be investigated especially in counties where critical source areas have been identified.

7.11. Organic Matter Determination

The Department needs to provide greater clarity on how the soil test information provided from all soils in the indicative Teagasc/EPA layer for >20% organic matter will be used.

To minimise costs on farm, where land has been certified by a Farm Advisory System Advisor that soils on a holding/field in such areas are mineral soils there should be no requirement to be soil tested for Organic Matter.

7.12. Soil Test

The review of the Morgan P test is supported as farmers need a test that accurately determines the amount of available P in the soil.

7.13. Grazing Land Management

The Department need to clarify the definition of short-term grazing. There are concerns about the use of a nominal distance (30 km) to determine whether land should be included for overall farm stocking rates. Many farm holdings are fragmented with distances of 30km not unusual, this land cannot be removed in calculating stocking rates. The principle of removing any grazing land be it short term or other from the calculations for stocking rates is strongly rejected. There is no rationale for this proposal where the lands are genuinely farmed. Distance does not determine stock levels on livestock and sheep farms in particular.

While fertiliser and slurry are not typically spread on commonage or rough grazing land, this land can provide valuable grazing. Therefore, in such a scenario we recommend that rather than this land being excluded entirely from the stocking rate calculation that its contribution to grazing is considered in the overall farm stocking rate.

These proposals will have a significant impact on land availability, farmers may not be able to secure land in their locality for their livestock.

7.14. Review of Technical tables

The Review of Technical tables must be done in full consultation with stakeholders. IFA is proposing the establishment of a NAP Working Group to review and provide opportunity for proper consultation on proposed changes to the technical tables.

Any changes to these tables must be based on science and would require a long transition phase (10 years minimum) as amendments are likely to require substantial long-term investment by farmers.

7.15. Air Quality

IFA is opposed to the compulsory usage of LESS on farms operating above 100 kg livestock N/ha from 2023 and for all pig farmers from 2023 onwards.

The Department needs to demonstrate the benefits to water quality from this proposal. LESS is a key mitigation strategy to reduce ammonia emissions and a recommended action in the AgClimatise roadmap for the sector. The NAP review must not be used by Government to deliver on the climate targets which are outside the remit of the review.

This requirement has limited potential on small farms where only small volumes of slurry are generated. On such farm the imposition of compulsory LESS equipment usage would be severely cost prohibitive and have minimal impact on water quality. Research[3] has shown that when slurry is spread with a splash plate in spring the amount of nitrogen recovered is similar to that from slurry applied by trailing shoe in the summer. Therefore, lower stocked farms should be encouraged to spread slurry in the Spring rather than imposing the compulsory use of LESS equipment on these farms.

This proposal will add significant costs to extensive livestock farmers, who either own their own equipment for slurry spreading or hire contractors. Setting this level at 100kg N/ha directly impacts suckler, beef and sheep farmers. The costs associated with this requirement will also impact farms below this level as it is unlikely that contractors will offer the alternative means of spreading as it would require additional investment in machinery.

---

[3] Lalor et al. (2011). *Nitrogen fertilizer replacement value of cattle slurry in grassland as affected by method and timing of application.* Journal of environmental quality, 40(2), pp.362-373.

.

This proposal is not practical to implement in the timeframe provided due to delays getting LESS equipment and limited availability of contractors. The use of LESS is encouraged, however, it must be supported via grants and Accelerated Capital Allowance schemes rather than enforced under regulation.

IFA propose that the current guidelines that all organic manures must be incorporated within 24 hours of application must be maintained, the proposed timeline of 12 hours is too restrictive.

8. Conclusion

The outcome of the review of the NAP will have significant implications for farmers across all sectors of Irish Agriculture. It is vital that only measures that are scientifically proven to protect water quality are introduced.

The review cannot be used to deliver on other policy objectives outside the remit of the Nitrates Directive, ~~or~~ as a mechanism by DAFM to manage compliance or adopt a one size fits all approach. This is a dangerous precedent and could undermine the legitimacy of the programme to improve and protect water quality.

DAFM must ensure that there is sufficient lead in time for measures introduced and adequate consultation with stakeholders to develop measures that are workable on farms. In addition, grant aid and Accelerated Capital Allowances schemes must be made available to support farmers.

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 geraldineosullivan@ifa.ie or on 087 9385283.

Ends.

APPENDIX 1 **IFA review of economic sustainability of the Irish Dairy Sector**

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[1] 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. **Dairy Sector Vulnerabilities impact of a drop in milk price or drop on stocking rate on farm 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 €9,300 and would drop average dairy farmer income (after accounting for family labour input) to c. €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.

Tom Phelan
National Dairy Chair

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

- Employ 300 people in West Cork
- €78m capital investment for Mozarella cheese processing – 250 local contractors
- Process 567m litres milk which is exported to 50 countries
- Total revenue €434m

Aurivo

- Employ 275 people in Sligo, Roscommon and Donegal
- Subcontract 19 haulage companies for the collection and supply of dairy goods.
- Process 500m litres which is exported to 50 countries
- €37m investment in dairy processing capacity
- 34 retail stores
- Total revenue €446m

glanbia

- Over 2,000 employees
- Collects milk from 17 counties
- Process almost three billion litres from 4,800 milk suppliers
- Milk payments surpassed €1bn in 2019
- Invested over €343 million since 2015 in processing facilities
- 52 agri-branches in Ireland
- Export to over 100 countries
- Annual revenue of €1.9 billion

Lakeland DAIRIES

- Employ over 1,000 people.
- Process 1.85bn litres of milk from 3,200 suppliers.
- Group Revenues (2019) €1.03bn.
- 8 facilities (Food Ingredients, Foodservice, Consumer, Agribusiness)
- Exporting over 200 dairy products to 80+ markets worldwide.
- €550m in milk payments to dairy farmers (2019) across 16 counties
- €185m invested in milk processing capacity since 2015

KERRY

- Employ 1,300 people across Kerry, Limerick, Clare and North Cork.
- 3000 Milk Suppliers across 6 counties.
- 3 Primary Dairy Manufacturing sites – Listowel, Charleville & Newmarket
- 32 Farm & Home Stores and Compound Feed Mill, Farranfore, Co. Kerry
- €200m invested in Dairy sites since 2013.
- Milk payments exceeded €441m in 2019.

Arrabawn Co-op

- Process 440 million litres.
- Annual revenue of €270m.
- Milk payments of €140m.
- 420 direct employees.
- €63 million investment in past five years.

dairygold

Golden Valleys, Growing Naturally

- Process 1.42 billion litres of milk from 2,700 milk suppliers across Munster
- Milk payments of €490m
- Employ 1,150 in Munster
- €450m investment in milk processing
- Group Revenue (2019) €1.02bn