

Take-Home Messages

Based on commissioned research, An Fóram Uisce provides the following messages regarding how the reform of the Common Agricultural Policy (CAP) relates to Ireland's water environment. While the content of this discussion note reflects the view of An Fóram Uisce, it does not necessarily reflect the full views of any constituent stakeholder group.

1. Reforming the CAP to ensure that ecosystems are supported, climate change is mitigated, and households have access to sustainable, healthy and affordable food is a complex problem.
2. It is hard for farmers to be green if they are farming in the red.
3. Public monies should be directed to public goods.
4. Farmers need to be supported through CAP and other means to protect, restore and improve water quality through, for example, maintaining and re-establishing wetlands and native woodlands, installing buffer strips where appropriate and protecting water courses to improve water quality and provide co-benefits for climate and biodiversity
5. A catchment-based, integrated approach is essential for improving Ireland's water environment through managing its land and landscapes.

Background

The European Union (EU) Common Agricultural Policy (CAP) is a common policy for all EU member States which has provided financial support to farmers and rural development and has provided food production policy guidance since its establishment in 1962¹. Through CAP financial supports, farmers are encouraged to deliver environmentally sustainable farming practices. However, the CAP has been criticised for failing with respect to biodiversity, climate, soil, land degradation as well as socio-economic challenges².

In Ireland, agriculture has been identified as the greatest pressure acting on Ireland's water environment³. Despite significant investment through two river basin management planning cycles to achieve EU Water Framework Directive objectives, water quality has continued to decline at the national scale with 47.2% of surface waters failing to meet the required good ecological status³.

Ireland's third River Basin Management Plan (RBMP) for 2022-2027 is currently in development, with a draft RBMP due for public consultation from December 2020. This new RBMP represents an

¹ https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/cap-glance_en

² Pe'er, G. *et al.*, (2020). Action needed for the EU Common Agricultural Policy to address sustainability challenges. *People and Nature* 2:305-316. <https://doi.org/10.1002/pan3.10080>

³ EPA (2019). Water Quality in Ireland 2013-2018. Report by the Environmental Protection Agency, Wexford, Ireland. [https://www.epa.ie/pubs/reports/water/waterqua/Water%20Quality%20in%20Ireland%202013-2018%20\(web\).pdf](https://www.epa.ie/pubs/reports/water/waterqua/Water%20Quality%20in%20Ireland%202013-2018%20(web).pdf)

opportunity to reverse the decline in the quality of Ireland's waters. However, action is also necessary outside of the river basin management planning process to address water quality issues.

The European Commission assesses the CAP through the Common Monitoring and Evaluation Framework (CMEF) which aims to demonstrate the achievements of the CAP and improve its efficiency through CAP indicators⁴ throughout its current cycle from 2014-2020. In parallel, work is ongoing in Europe to develop a new Performance Monitoring and Evaluation Framework to replace the CMEF.

In June 2018, the European Commission provided legislative proposals on the future of the CAP for the period after 2020¹. The opportunity exists to revise the future CAP to assist in addressing national and international failings regarding water quality, biodiversity and climate, as well as aligning the revised CAP to the new EU Green Deal⁵ and Farm to Fork⁶ policies.

To this end, An Fóram Uisce|The Water Forum commissioned a body of research to investigate optimising water quality returns from the reform of the CAP⁷. The aims of the report to An Fóram Uisce were:

1. To inform the Forum members on the details associated with CAP reform and water quality improvements; and
2. To inform the wider debate and policy decision making regarding how Ireland's land and landscapes are managed and how this management can contribute to improving water quality nationally.

The report proposes a series of recommendations which the Forum is now considering within a wider process of discussion and debate surrounding the reform of the CAP from a water quality perspective.

This discussion paper presents a summary of key points for consideration and debate.

A Complex Problem

Environmental problems are difficult to resolve. Traditionally, problems may be categorised as being simple, complicated or complex. Most approaches to evidence-based policy understand problems to be complicated. By this it is meant, in regards to agriculture, that it has been systematically siloed and treated as a question to be addressed at the level of the farmer via an environmental scheme, a subsidy, a regulation, a fine or some other incentive structure that fits into the wider complex of modern agriculture. While there are clear benefits to this approach, there are also failures which are difficult to resolve. The complexity of the problem is that it is ultimately non-linear and multi-dimensional, involving integration of multiple policy decisions. Such decisions cannot be made without reference to the wider context of the food system and the economy.

Increasingly, it is understood that policy problems are complex, meaning that they involve multiple inputs, behave in a nonlinear fashion, are subject to more than one driver, and are subject to uncertainty.

⁴ EC CAP indicators: https://ec.europa.eu/info/food-farming-fisheries/farming/facts-and-figures/performance-agricultural-policy/cap-indicators_en

⁵ European Green Deal: https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

⁶ Farm to Fork: https://ec.europa.eu/food/farm2fork_en

⁷ Larkin, C. (2020). Optimising water quality returns from the reform of the Common Agricultural Policy. Report to An Fóram Uisce|The Water Forum. Available online: https://thewaterforum.ie/app/uploads/2020/11/CAP-Reform-Report-to-An-Foram-Uisce_FINAL.pdf

Reforming the CAP to ensure that ecosystems are supported, climate change is mitigated, and households have access to sustainable, healthy and affordable food is a complex problem.

Our Food System Requires Examination

The current European food system is built on a dual requirement to provide cheap and plentiful food and to ensure for Europe a degree of food self-sufficiency, reflecting the original intent of the CAP. The study commissioned by An Fóram Uisce suggests that “there is no such thing as “cheap” food and no food system is simple”. The policies determining how our food is produced are impacting on the quality of our waters, our biodiversity, and are contributing to climate change.

The complexity of our food system makes simple solutions appear attractive, but these are not effective when faced with the challenges of implementation. Success in implementation is where the more positive environmental outcomes will be obtained but that implementation requires strategies enacted across multiple scales: for example, the macro (EU), the national (Ireland) and the micro (farm) scales.

Ultimately, the decisions made with respect to reforming the CAP will be reflected in the food system, but if the food system does not change is it plausible to expect even a reformed CAP to achieve the aims and objectives outlined in the EU Farm-to-Fork and Biodiversity Strategies?

Consequently, the report suggests that consideration should be given to changing (shortening) supply chains in Ireland where appropriate and developing food policies which encourage smaller producer purchase by multiples.

The report pays particular attention to the fact that households in Ireland are in a price sensitive situation due to the wider income inequality issues in the Irish economy. In addition, reforms to the CAP that are understood to be exclusively reforms for the purposes of biodiversity and the environment are incomplete. Complete reforms must therefore consider any changes to how the Irish population consumes food, providing co-benefits for public health as a reformed CAP should also work in concert to address Ireland’s emerging obesity and Type II diabetes crises.

Evidence in Ireland^{8,9} indicates that household expenditure is being redirected from food to accommodation, making any action that increases the price of food detrimental to the overall financial security of households. In addition, the position of many farms is also precarious, with farm incomes outside of the dairy sector being dominated by the CAP Pillar I single farm payment, up to 70% on average.

The most common way to address a market failure where a good or service is underproduced is to provide a subsidy. Changes in subsidy schemes directly impact on downstream prices for households, resulting in resistance to changes. Part of the process of focusing incentives towards minimizing damage is to understand that there is a quantifiable economic cost to “cheap” food.

This cost is borne by the wider environment and damage to water from agriculture may be a direct consequence of the project of “cheap” food. A method of accounting for this cost is to calculate the economic value of the natural world: natural capital. Ireland’s natural environment and ecosystems are providing a large economic role in Ireland, with the study undertaking a preliminary assessment

⁸ Eurostat: <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20191209-1>

⁹ OECD: https://stats.oecd.org/Index.aspx?DataSetCode=SNA_TABLE5

which valued the natural capital of Ireland at an estimated €4,401.5 million¹⁰. Although likely an underestimate, this valuation provides a useful tool for understanding the current natural capital stock in Ireland and provides an opportunity to take natural resource depletion into account. Calculating the public good provided by Ireland's ecosystems over time can provide a basis for calculating biodiversity related and results-based payments under CAP.

Action can be taken to address damage to ecosystems by looking at how we address current market failures. The report states that market failures are rife in the agricultural sector and food system. Under such conditions, public subsidies are designed to *correct* for market failures. Yet in the current environment, the report shows that subsidies do not correct, but in many ways amplify market failures.

It is Hard for Farmers to be Green when Farming in the Red

CAP payments are structured under two distinct 'pillars'. Pillar 1 includes direct payments (e.g. annual payments to farmers to help stabilise farm revenues in the face of volatile market prices and weather conditions) and market measures which tackle specific market situations and support trade promotions. Pillar 1 payments are based on hectares and have a profound impact on land use policy in Ireland. As they dominate as a source of income for most types of farming, they also have a strong impact on biodiversity decisions¹¹. The conditionality of Pillar 1 payments combined with new results-based Eco-Schemes provide the opportunity to deliver outcomes for water quality and biodiversity and ensure environmental protection.

Pillar 2 concerns rural development policy financed through the European Agricultural Fund for Rural Development (EAFRD) which aims to achieve balanced territorial development of rural economies, and sustaining a farming sector that is environmentally sound, competitive and innovative¹⁰.

In Ireland, different farming systems (i.e. dairy, tillage, sheep, cattle rearing, etc.) have different dependencies on CAP subsidies. For example, 22% of dairy farm income is dependent on CAP subsidies compared to 115% of income for sheep farming¹². This means that the different farming systems have different sensitivities to changes in CAP policy and payment structures.

Depending on the final treatment of Pillar 1 payments in the CAP reform process, Ireland could find itself with reduced resources after the next CAP reform. Pillar 2 payments require co-funding from the member State and are sensitive to the fiscal capacity of the member state. The fiscal capacity of Ireland will be inherently weakened by COVID-19 and by Brexit.

It is therefore difficult to reform CAP and make the new CAP focus on environmental issues aligned with the EU Green Deal, Farm2Fork and Biodiversity strategies when farmers are in financial difficulty. It is hard to be green when farming in the red.

Consequently, the report concludes that within the current macro-economic constraints alongside the current financial supports provided through Pillar 1 and Pillar 2 subsidies, any proposed reform of the CAP which ignores Pillar 1 will be unlikely to achieve any material improvement in the quality of Ireland's water environment, carbon emissions or biodiversity.

¹⁰ Limitations in data availability and data quality mean this preliminary assessment of natural capital is likely an underestimate. A more comprehensive analysis and calculation of Ireland's natural capital is currently being undertaken through the EPA-funded INCASE Project: www.incaseproject.com

¹¹ IFA: <https://www.ifa.ie/cap-pillar-i-and-pillar-ii-13-july/>

¹² Teagasc (2018). Teagasc National Farm Survey Results 2017. Available online: <https://www.teagasc.ie/publications/2018/teagasc-national-farm-survey-results-2017.php>

Public Money for Public Goods

The principle of using public money to pay for public goods has recently been introduced in policy in the UK through the proposal to link farm payments to ecosystems management^{13,14}. CAP was designed as a public subsidy for the private production of a private good (food), perversely resulting in the public paying twice: once as taxpayers and again as food purchasers¹³.

A wide variety of environmentally related public benefits can be produced by farming, including improved soil health, flood risk reduction, climate change mitigation, air quality improvements, biodiversity enhancement, water quantity regulation and water quality improvement. The direct delivery of such environmental benefits is likely to be a major public good provided by farms and therefore such provision can be supported through public subsidies¹³.

The concept of public money for public goods has been implemented through certain Pillar 2 rural development and agri-environmental schemes. A revised CAP has the potential to move further towards results-based payments where farmers receive subsidies based on the environmental results achieved on their farms. In order to achieve maximum environmental benefit, long-term results-based Pillar 2 payments would involve agreements between farmers and the relevant evaluation authority which have been co-developed and tailor made to their particular context, with clear key performance indicators. Successful agri-environment schemes delivered in Ireland include the Burren Project, The Bride Project and the Pearl Mussel Project, and consideration should be given to applying lessons from such projects at the national level with specific results-based objectives to improve water quality and biodiversity.

There is opportunity to implement the concept of public money for public goods to improve the quality of Ireland's water environments. Farmers need to be supported through CAP and other means to provide measures to protect and improve water quality. Examples of such measures include, but are not limited to, protecting and restoring wetlands; protecting and re-establishing native woodlands; incorporating buffer strips along water courses where appropriate; restoring modified water courses; restricting livestock access to water courses; undertaking soil nutrient analysis to optimise nutrient application to land; and adhering to best practice guidelines on the management of animal waste and its application to land. These actions will also provide co-benefits for climate and biodiversity.

A Future of Integrated Land and Landscape Management

Getting the balance between our food and economic needs now and into the future, and achieving environmental sustainability is an existential challenge. We live in an interconnected world where all the components of our natural environment – air, water, ecosystems, soils, rocks, land, landscapes – are interrelated and interlinked. Rather than addressing individual components of the environment as siloes, dealt with by particular specialists and organisations, An Fóram Uisce has proposed utilising an approach which takes account of all relevant aspects of land and landscape management in an integrated manner.

¹³ DEFRA (2018). Health and Harmony: The future for food, farming and the environment in a Green Brexit. Summary of responses. Available online: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/741461/future-farming-consult-sum-resp.pdf

¹⁴ Bateman, I.J. and Balmford, B. (2018). Public funding for public goods: A post-Brexit perspective on principles for agricultural policy. *Land Use Policy* 79: 293-300. <https://doi.org/10.1016/j.landusepol.2018.08.022>

This Framework for Integrated Land and Landscape Management (FILLM)¹⁵ builds on and reframes the Integrated Catchment Management approach used in water resources management, broadening it to include all aspects of our natural environment while retaining the river catchment as the geographical unit for management.

Taking such a whole-of-system approach provides the possibility for policy coherence and policy integration, supporting a balanced evaluation of all relevant issues while linking environmental components with human activities. The FILLM provides an opportunity for an evaluation of land suitability for various activities, including food production and the provision of environmental services, taking a collaborative approach in partnership at the local and national level.

The reform of the CAP and the responses of the agriculture and agri-food sectors have the potential to align strongly with the FILLM and how our land and landscapes are managed, providing the opportunity to deliver improvements in the quality of Ireland's water environment.

Contributing to the Debate

To contribute to the debate on CAP reform and its contribution to improving water quality in Ireland, An Fóram Uisce is holding a live webinar on December 4th, 2020. The results of the research on *Optimising water quality returns from the reform of the Common Agricultural Policy* commissioned by An Fóram Uisce will be presented by the author, Dr Charles Larkin. A panel of experts will respond to the research, followed by a question and answer session chaired by Dr Tom Collins, Chair of An Fóram Uisce. For further information and to register, please visit www.thewaterforum.ie.

¹⁵ An Fóram Uisce (2020). Protecting and Enhancing our Environment: A Framework for Land and Landscape Management. Available online: <https://thewaterforum.ie/app/uploads/2020/07/An-F%C3%B3ram-Uisce-Framework-for-Integrated-Land-and-Landscape-Management.pdf>