

# AGRICULTURE AND WATER POLICIES: MAIN CHARACTERISTICS AND EVOLUTION FROM 2009 TO 2019<sup>1</sup>

## IRELAND

This country profile reviews recent changes in agriculture and water policies. The content of the profile is based on a survey conducted in 2019 by the OECD Secretariat<sup>2</sup> and additional official sources.

### A. Agriculture and Water Characteristics

- The Irish agricultural sector primarily focuses on cattle-related activities; the output value of milk, cattle and forage plants together accounted for 70 % of the output value of the country's agricultural industry in 2018 (Eurostat, 2019).
- Agriculture represented 4% of total water abstractions in 2018 (OECD, 2020b).
- Eutrophication remains Ireland's most serious water pollution problem and agriculture is the largest source of nutrients to Irish waters, contributing an estimated 73% of phosphorus and 82% of nitrogen (OECD, 2008). The nitrogen balance had decreased between 2000 and 2015 from 64 to 42 kg/ha but had increased to 70 kg/ha in 2018. The phosphorus balance went down from 24 kg/ha to 21 kg/ha between 2000 and 2015 but had increased to 24 kg/ha in 2018 (OECD, 2020a).

**Table 1. Main challenges related to water in agriculture**

Water use +	Water pollution ++	Water-related risks ++
Agricultural water abstractions represent 4% of total water abstractions	Key pollutants from the agricultural sector are: nitrates, phosphorus and ammonium, sediments, E. coli and other infectious agents, and MCPA (herbicide) and pesticides	Over recent years, increase in the incidence and severity of inland and coastal flooding. Ireland was also affected by drought in 2018

Note: +: Minor issue; ++: Problematic issue; +++: Major issue. Source: OECD (2017, 2019, 2020b).

<sup>1</sup> This document, as well as any data included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

<sup>2</sup> For more details, Gruère, G., M. Shigemitsu and S. Crawford (2020), "Agriculture and water policy changes: Stocktaking and alignment with OECD and G20 recommendations", *OECD Food, Agriculture and Fisheries Papers*, No. 144, OECD Publishing, Paris, <http://dx.doi.org/10.1787/f35e64af-en>.

## B. Key Agriculture and Water Policies & Main Evolution from 2009 to 2019<sup>3</sup>

### B.1. Cross-Cutting Agriculture and Water Policies & Governance

**Table 2. Key agriculture and water policies and policy changes**

<b>Key Policies</b>	<p>The existing EU legislation imposes a protective framework with standards for all water bodies in EU countries and addresses specific pollution sources, including agricultural pollution. The three main directives involved are the Water Framework Directive (WFD) (2000/60/EC) (on water resources management), the Nitrates Directive (91/676/EEC) and the Floods Directive (2007/60/EC).</p> <p>Ireland transposed the EU WFD in 2003, thereby enhancing co-operation among local authorities within specified river basin districts regarding the preparation of River Basin Management Plans (RBMPs). The 2007 Water Services Act provides for the supervision of rural water supplies and conservation. Most of Ireland's water-related legislation is in the form of regulations under a variety of laws, such as the European Communities Act, the Local Government (Water Pollution) Act, the Environmental Protection Agency Act and the Waste Management Act.</p> <p>LAWPRO (Local Authority Waters Programme) is a shared service working with Local Authorities, state agencies and communities to develop and implement the RBMPs in Ireland. The Agricultural Sustainability Support and Advice Programme (ASSAP) was established as a government/industry collaboration to provide advice and support to farmers in Areas for Action where agricultural pressures have been identified by LAWPRO.</p>
<b>Main Evolution from 2009 to 2019</b>	<ul style="list-style-type: none"><li>▶ Three Nitrates Action Programme (NAP) including Nitrates Derogation have been approved and implemented. Ireland's fourth NAP (2018-2021) and Nitrates Derogation will conclude at the end of 2021. The Agricultural Catchments Programme (ACP) in 6 catchments established in 2008 is entering its 4<sup>th</sup> phase in 2020. The Sustainable Use of Pesticides Directive (SUD) was transposed into Irish legislation.</li><li>▶ Under the 2018-2021 RBMP ASSAP has been working with the Local Authority Waters Programme to identify and mitigate the impacts of agriculture on local water quality.</li><li>▶ Water services provision has been the responsibility of Irish water since 2014. Local Authorities (County Councils) are no longer involved.</li></ul>
<b>Consistency between Agriculture and Water Policies</b>	<p>ASSAP and the Dairy Sustainability Forum bring stakeholders together to identify and implement water quality and other sustainability measures.</p>

<sup>3</sup> Agriculture and water policies are defined here as all policies that affect the interaction between agriculture production and water.

## B.2. Policies to Manage Agricultural Water Use (Quantity)

Few water demand management policies have been introduced since 2009.

**Table 3. Key instruments for the management of water use**

<p><b>Quantified national future targets for the use of water resources in the agriculture sector</b></p> <p>No</p>	<p><b>Metering, monitoring and reporting</b></p> <p>Metering: No</p> <p><u>A new national abstraction control regime is in development which may include some agricultural activities abstracting water above certain thresholds</u></p>
<p><b>Quantity targets accounting for climate change</b></p> <p>No: Climate change research is underway and further projects are planned, but this is not especially focused on water</p>	<p><b>Scarcity pricing</b></p> <p>No</p>
<p><b>Water entitlements</b></p> <p>Publicly owned rights: water users need an abstraction licence</p>	<p><b>Enforcement measures</b></p> <p><u>Ireland is in the process of introducing a new control regime</u></p>
<p><b>Proportion of cost recovery for surface water</b></p> <p>Charges were applied for public water for a short time period. No charges are currently applied, except in cases of excessive use</p>	<p><b>Other policy instruments used to encourage water use efficiency</b></p> <ul style="list-style-type: none"> <li>▶ The Water Conservation Allocations scheme allows Councils to plan their water supplies</li> <li>▶ Targeted Agricultural Modernisation Scheme (TAMS) grants have been available for upgrading clean and dirty water capture and storage in yards and on farmlands</li> </ul>

Note: Underline indicates changes since 2009

### B.3. Policies to Control Agricultural Water Quality

The 1991 EU Nitrates Directive, transposed into Irish law in 2006, applies to the whole country, without regional or local differences. 190 priority Areas for Action were selected in a collaborative process as part of the RBMP. LAWPRO carries out localised catchment assessments and ASSAP works with farmers in these areas to implement the right measures in the right place.

**Table 4. Key instruments to improve water quality**

<p><b>National water quality data collection tools</b></p> <ul style="list-style-type: none"> <li>▶ The Environmental Protection Agency (EPA) and Local Authorities monitor water according to WFD requirements.</li> <li>▶ The Department of Agriculture conducts some water monitoring when requested.</li> <li>▶ The National Programme is supplemented LAWPRO which focuses on Priority Areas for Action. The LAWPRO programme is community based and encourages public participation in many areas of their work including ecological and chemical monitoring.</li> <li>▶ The ACP, managed by the Agriculture and Food Development Authority (Teagasc) monitors 6 catchments in Ireland as part of the RBMP</li> <li>▶ The EPA has developed databases and maps on hydromorphology, topography, soil and geology along with Land Parcel Identification System data. Source apportionment models and critical source area maps have also been developed. All of these are being made available for application in the development of water quality measures</li> </ul>	<p><b>Main policy instruments</b></p> <ul style="list-style-type: none"> <li>▶ <i>Regulatory:</i> Statutory Instruments transposed into Irish law such as; <u>WFD, SUD, Environmental Impact Assessment, Habitats Directive, Nitrates Directive, Climate Adaptation Plan for Agriculture</u></li> <li>▶ <i>Economic:</i> Incentives for infrastructural improvements (e.g. slurry storage). <u>Various grant aid schemes under Pillar 1 of the Common Agricultural Policy (CAP) have continued since 2009. Some agri-environmental schemes under Pillar 2 have co-benefits for water quality. Additionally, LEADER funding is available for environmental protection</u></li> <li>▶ <i>Information:</i> Knowledge Transfer among farmers is increasingly important and is a statutory obligation for some farmers and participants in agri-environmental schemes.</li> </ul>
<p><b>Spatial tools (e.g. topological, geometric, or geographic data analysis) to target policies in specific areas</b></p> <p>Yes: <u>The EPA has developed a range of databases, maps and models that are used to assess the extent and nature of the impacts of agriculture on water quality, and to identify the critical source areas for targeting measures</u></p>	<p><b>Enforcement measures</b></p> <ul style="list-style-type: none"> <li>▶ Regulatory schedule of inspections under Cross Compliance, WFD, Nitrates Derogation, SUD</li> <li>▶ <u>Penalties on CAP payments and follow-up inspections</u></li> <li>▶ <u>Fines and follow-up inspections</u></li> <li>▶ Legal proceedings</li> </ul>

Note: Underline indicates changes since 2009

## B.4. Policies to Manage Climate-Induced Water Risks

**Table 5. Water risks and responses**

	Droughts	Floods
<b>Reported Trends</b>	There was one significant extended dry weather period in 2018 but no significant trends in the frequency or severity of droughts since 2009.	Overall rainfall has increased as has the intensity of rainfall events resulting in an increase in the incidence and severity of inland and coastal flooding.
<b>Key Policies</b>	Various grant aid schemes under Pillar 1 of the CAP.	The Flood Policy Review Group (2003) recommended that land management practices should change to contribute to flood mitigation by, for example, improving drainage, restoring wetlands, developing buffer zones, and developing flood plain storage.
<b>Main Changes from 2009 to 2019</b>	Climate Adaptation Plan for agriculture.	The land management practices recommended by the Flood Policy Review Group have been expanded since 2009. Research is underway in Natural Water Retention Measures funded by the EPA. TAMS grant aid for storage facilities are being adapted to climate challenges.
<b>Factoring of Climate Change in Policies</b>	1/5: Climate change research is underway and further projects are planned, although they are not especially focused on water. Climate adaptation plans have been developed for all major sectors in Ireland, including agriculture. Significant research continues to focus on the increase in volume and intensity of rainfall due to climate change. This includes managing on-farm water, preventing dilution of slurries, in-field water flows, flooding, and groundwater protection. Research is also about to commence to identify climate-proofed agricultural measures. On December 9 <sup>th</sup> , 2020, the Department of Agriculture, Food and the Marine (DAFM) published <i>Ag Climatise – a roadmap to reduce greenhouse gas (GHG) emissions, build resilience and adapt to the impacts of climate change</i> . Its publication followed extensive engagement with industry, research, policy, farmer and environmental stakeholders <sup>4</sup>	

## Bibliography

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<sup>4</sup> Available at: [Ag Climatise - A Roadmap towards Climate Neutrality \(www.gov.ie\)](https://www.gov.ie/en/publication/07f8e-ag-climatise-a-roadmap-towards-climate-neutrality/)