

AGRICULTURE AND WATER POLICIES: MAIN CHARACTERISTICS AND EVOLUTION FROM 2009 TO 2019¹

SLOVENIA

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 Secretariat² and additional official sources.

A. Agriculture and Water Characteristics

- Slovenia's agriculture mainly produces forage plants, fruits and wine, as well as milk and cattle (Eurostat, 2019).
- Agriculture represented 0.3% of total water abstractions in 2018 (OECD, 2020b).
- For groundwater bodies, the most significant pressure is diffuse pollution from agriculture, with 14% of groundwater bodies affected, whereas nutrient pollution affects 72% of all surface water bodies (European Commission, 2019). The nitrogen balance decreased between 2000 and 2017 from 86 to 65 kg/ha, and the phosphorus balance went down from 15 kg/ha to 5 kg/ha during the same period (OECD, 2020a).

Table 1. Main challenges related to water in agriculture

| Water use + | Water pollution ++/+++ | Water-related risks ++ |
|---|---|---|
| Slovenia has abundant water resources. Agricultural water abstractions represent 0.3% of total water abstractions | Key pollutants from the agricultural sector are: nutrients (nitrogen and phosphorus) and pesticides | Droughts and floods are recurring phenomena |

Note: +: Minor issue; ++: Problematic issue; +++: Major issue. Source: OECD (2012, 2019, 2020b).

¹ 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.

² 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 2019³

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

Table 2. Key agriculture and water policies and policy changes

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| <p>Key policies</p> | <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>The 2002 Water Act transposed most of the provisions of the WFD. It defined water as a public natural asset and transferred responsibility from local authorities to the national government for establishing water protection zones for drinking purposes.</p> <p>Two administrative river basin management units were designated in 2003: the Danube and the Adriatic. River Basin Management Plans (RBMPs) were adopted in 2011.</p> <p>The Ministry of the Environment (ME) is the authority responsible for policy design and implementation of tasks in the areas of water regulation and protection, decision-making on water use, investments and economic management, cohesion and reduction of the consequences of natural disasters.</p> <p>ME prepares key instruments for water management for setting water targets for every six-year period, providing an up-to-date overview of the impacts of human activity on waters. There are two plans: “Water Management Plan for the Danube River Basin Area 2016-2021” and “Water Management Plan for the Adriatic Sea 2016-2021”.</p> |
| <p>Main Evolution from 2009 to 2019</p> | <ul style="list-style-type: none"> ▶ The main instrument for agriculture policy in Slovenia is the EU Common Agriculture Policy (CAP). The most important measures for protection of water are in a form of general orientation of CAP toward sustainable management of natural resources and climate action. In order to receive whole CAP direct payment funding, farmers must practice mandatory practices that benefit the environment (i.e. greening payments) and comply with targeted cross-compliance requirements (i.e. conditionalities), some of which directly or indirectly target water (i.e. nitrate directive, Natura 2000, establishment of buffer strips along water courses, limited use of pesticides etc.). ▶ The RBMPs were updated for the period 2016-2021. The main goal of the plans is to establish a framework for the protection of surface waters, coastal waters and groundwater for achieving good water status, prevent further deterioration of water status, promote sustainable water use, and provide greater protection and improvement of the aquatic environment. ▶ Additionally within Rural Development Programme 2014-2020 (RDP 2014-2020) there are different direct (i.e. investments into irrigation and hail and frost protection, etc.) in indirect measures (i.e. agri-environment-climate payments, ecological farming, knowledge transfer and innovation, etc.), which importantly contribute to national water policies. |
| <p>Consistency between Agriculture and Water Policies</p> | <p>RDP 2014-20 has introduced better targeted and new compulsory requirement which directly benefit to sustainability of agriculture production.</p> |

³ 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)

Table 3. Key instruments for the management of water use

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| <p>Quantified national future targets for the use of water resources in the agriculture sector</p> <p>No: Slovenia has not established any specific quantified national future planning targets in the agriculture sector. Policy targets for water quantity (good groundwater status) are determined in accordance with EU legislation</p> | <p>Metering, monitoring and reporting</p> <ul style="list-style-type: none"> ▶ Metering: Yes ▶ Monitoring: Yes ▶ Reporting: Yes |
| <p>Quantity targets accounting for climate change</p> <p>No</p> | <p>Scarcity pricing</p> <p>No</p> |
| <p>Water entitlements</p> <ul style="list-style-type: none"> ▶ Issuance of water use permits (water rights and concessions): Use of water in agriculture for irrigation purposes is subject of issuing of special water permit (water rights). The Water Permit is issued by special implementing agency carrying out water management ▶ According to the Water Act, water right must be acquired for each every year if the use of surface water is beyond general use. | <p>Enforcement measures</p> <p><i>Unspecified</i></p> |
| <p>Proportion of cost recovery for surface water</p> <ul style="list-style-type: none"> ▶ The Water Act defines payment for the water right and water compensation payment. A contribution (water use fee) is paid for irrigation of agricultural land or other lands ▶ The amount of water use fee is determined on the basis of the annual volume of water used, alluvial deposits and water land, as determined by the water right | <p>Other policy instruments used to encourage water use efficiency</p> <ul style="list-style-type: none"> ▶ Agricultural advisory service organised as a public service financed by public funds: advice on adaptation and new technologies related to climate change mitigation and adaptation, biodiversity, water management and irrigation, nature conservation and environmental protection ▶ Beside EU financed measures within RDP 2014-2020 (construction and technological modernisation of multi-user irrigation systems and land consolidation) there are also nationally financed measures for land operations for management and investment maintenance of state irrigation systems and drainage systems |

B.3. Policies to Control Agricultural Water Quality

Table 4. Key instruments to improve water quality

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| <p>National water quality data collection tools</p> <ul style="list-style-type: none"> ▶ Surface and groundwater monitoring ▶ Remote and real-time sensing ▶ Modelling | <p>Main policy instruments</p> <ul style="list-style-type: none"> ▶ <u>Objectives and targets for agricultural sector to reduce agricultural pressures and to improve water quality are determined with RBMPs and direct and indirect measures within CAP in the context of Direct Payments and RDP 2014-20.</u> ▶ <u>Decree on the protection of waters against pollution caused by nitrates from agricultural sources, according Environmental Protection Act which is an operational program for the implementation of measures to reduce nitrogen input to and from soil.</u> ▶ <u>EU harmonised Plant Protection Products Act and National Action plan for Sustainable Use of Plant Protection Products for the period 2018 – 22, which among other measures, determines the conditions of use of plant protection products for protecting water environment.</u> |
| <p>Spatial tools (e.g. topological, geometric, or geographic data analysis) to target policies in specific areas</p> <p>Yes: spatial tools are used to target policies in agricultural areas where water quality impacts stemming from agriculture are most acute</p> | <p>Enforcement measures</p> <ul style="list-style-type: none"> ▶ <u>Measures to reduce nutrient and pesticide loads and hydro morphological loads (updated in 2016)</u> ▶ <u>Prohibition of use of fertilizers and plant protection products according Water Act within defined zones of the shoreline around water.</u> ▶ <u>EU harmonised legislation on Plant Protection Products (PPP) determines protection zones which has to be taken into account when PPP are applied.</u> |

Note: Underline indicates changes since 2009

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

Table 5. Water risks and responses

| | Droughts | Floods |
|--|--|---|
| Reported Trends | Droughts have occurred almost every year. Despite the fact that the plants are irrigated, there are damages on crops due to sunburn. | The incidence and severity of floods is increasing. |
| Key Policies | On-farm diversification of agricultural production is part of a wider set of measures to encourage better farm resilience. | <p>The 2007 EU Floods Directive was adopted and implemented with the aim to establish a framework for flood risk assessment and management. The main objective is to reduce the adverse effects of floods on human health, the environment, cultural heritage and economic activity.</p> <p>National flood hazard assessment has been made. Preliminary flood risk assessment, flood hazard and flood risk maps, and Flood Risk Management Plan were all conducted for the 1st and 2nd flood risk management cycle.</p> |
| Main Changes from 2009 to 2019 | Slovenia has joined a Drought Management Centre for South-eastern Europe (DMCSE). Its mission is to coordinate and facilitate the development, assessment and application of drought risk management tools and policies in South-Eastern Europe with the goal of improving drought preparedness and reducing drought impacts. State aid and co-financing of projects (construction and equipment of irrigation systems and water retainers) under RDP 2014-2020. | The 2017-2021 Flood Risk Management Plan (FRMP) and 2016-2021 RBMPs encourage the use of non-structural measures to reduce floods, wherever that is possible and feasible. |
| Factoring of Climate Change in Policies | Impacts of climate change on floods were used in the preparation of the 2nd Preliminary Flood Risk Assessment. | |

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