

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

LATVIA

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

- Latvia's agriculture mainly produces cereals, milk, non-food crops and animals (Eurostat, 2019).
- The agricultural sector³ accounted for 1% of the total water consumption in the country in 2017 (Latvian Environment, Geology and Meteorology Centre, 2017).
- Diffuse pollution from agriculture, point-source pollution and morphological alterations are the main pressures on water bodies (OECD, 2019a). Nutrient pollution was the most significant impact on surface water in 2018 (47% of surface water bodies) (European Commission, 2019). The nitrogen balance has doubled between 2000 and 2017 (from 11 to 22 kg/ha), and the phosphorus balance has slightly increased from 0 kg/ha to 1 kg/ha during the same period (OECD, 2020a).

Table 1. Main challenges related to water in agriculture

Water use	Water pollution	Water-related risks
+	++	++
<p>Agricultural water abstractions represent 1% of total water abstractions</p> <p>Latvia has abundant resources of surface waters and groundwater, with about 17 000 m³ of renewable freshwater resources available per capita</p>	<p>Key pollutants from the agricultural sector are manure and mineral fertilisers (nitrogen and phosphorus), plant protection products and pharmaceuticals (including veterinary drugs)</p>	<p>Abundant precipitations provoke frequent floods. The Baltic region experienced drought in 2018, resulted in sharp falls in the cereal harvest</p>

Note: +: Minor issue; ++: Problematic issue; +++: Major issue. Sources: Eurostat (2019), FAO (2020), OECD (2019a, 2019b).

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>.

³ Crop and animal production, hunting and related service activities

B. Key Agriculture and Water Policies & Main Evolution from 2009 to 2019⁴

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

Table 2. Key agriculture and water policies and policy changes

Key Policies	<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>In line with the EU Water Framework Directive, Latvia developed river basin management plans (RBMPs) for the Daugava, Lielupe, Venta and Gauja river basin districts for 2009-15 and 2016-21. The RBMPs provide information on the status of surface water and groundwater, analyse pressures on water quality and quantity, and list measures for improving water management.</p>
Main Evolution from 2009 to 2019	<ul style="list-style-type: none"> ▶ Cabinet Regulations Regarding Water Bodies at Risk⁵ adopted in 2011 and amended in 2017 designates surface water bodies that area failing to meet good surface water status and determine general requirements for the protection of water bodies. ▶ Revised and re-issued Regulations (No. 834, 2014) on the protection of water and soil from nitrate pollution caused by agricultural activity. Regulations include new requirements for using fermentation residues for fertilisation. ▶ Revised and re-issued Regulations (No.829, 2014) on special Requirements for the Performance of Polluting Activities in Animal Housing. These include new requirements for manure storage for farms with less than 10 livestock units and less than 5 livestock units in Nitrate Vulnerable Zones. ▶ Large scale intensive agriculture activities (rearing of pigs and poultry) are regulated by best available techniques (BAT) conclusions for the intensive rearing of poultry or pigs which were adopted in 2017 and be fully implemented in 4 years' time from adoption⁶.
Consistency between Agriculture and Water Policies	<i>Unspecified</i>

⁴ Agriculture and water policies are defined here as all policies that affect the interaction between agriculture production and water.

⁵ <https://likumi.lv/ta/en/en/id/231084-regulations-regarding-water-bodies-at-risk>

⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017D0302&from=EN>

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

Table 3. Key instruments for the management of water use

<p>Quantified national future targets for the use of water resources in the agriculture sector No</p> <ul style="list-style-type: none"> ▶ Projections prepared for the 2016-21 river basin management plans show no significant changes in water demand to 2021. 	<p>Metering, monitoring and reporting</p> <ul style="list-style-type: none"> ▶ Metering: Yes ▶ Monitoring: Yes ▶ Reporting: Yes <p>There were changes (with even greater emphasis on metering) for household water supplies, but not for agricultural uses</p>
<p>Quantity targets accounting for climate change <i>Unspecified</i></p>	<p>Scarcity pricing No</p>
<p>Water entitlements</p> <ul style="list-style-type: none"> ▶ Water entitlements/allocation system does not exist. The permit holder is entitled to abstract water, but needs to attest either the land ownership rights or rights to use water resources⁷. ▶ Permits for water abstraction (public water) are issued by the State Environmental Service (a national-level authority with regional branches, not connected with water basins) based on the environmental impact category (The Law on Pollution and its <u>2010 implementing regulation</u>) ▶ The legislation does not limit the persons who may apply for a water use permit – it may be done by private persons and companies, farmers, water suppliers, industries 	<p>Enforcement measures <i>Unspecified</i></p>
<p>Proportion of cost recovery for surface water</p> <p>Latvia does not have a quantitative assessment of the cost recovery level in agriculture. Based on the economic analysis for the Latvian river basin management plans (2015), farmers mainly rely on self-supplied individual water abstraction, and costs are covered. It can be assumed that the environmental costs are partly covered.</p>	<p>Other policy instruments used to encourage water use efficiency</p> <p>Natural Resources Tax: Latvia has applied a broad-based tax on pollution and natural resource use since 1991. The tax for the extraction of surface water and groundwater shall be paid if the extraction of water exceeds 10 cubic metres daily. If the limit for the extraction of water has been specified less than 10 cubic metres daily in the relevant permit of the taxpayer, the tax shall only be paid for the volume of water which has been extracted above the limit. <u>The tax rates for surface and groundwater abstraction were raised from 2017 to promote sustainable use of resources.</u></p>

Note: Underline indicates changes since 2009

⁷ Subterranean depths and all mineral resources present therein (i.e. also groundwater) belongs to the landowner. Therefore, a person applying for a water resources use permit shall provide a document attesting to the land ownership rights or rights of land use. Besides, such person shall present an abstraction borehole passport or (if the planned amount of water abstraction exceeds 100 m³/day) a passport of groundwater deposit. A passport of groundwater deposit means that the groundwater resources in the specific area are evaluated and allowable amounts of abstraction are established. Therefore, these are rather rights to use land for establishment of a borehole combined with an evaluation of available groundwater resources, not rights to use water resources as such.

B.3. Policies to Control Agricultural Water Quality

Table 4. Key instruments to improve water quality

<p>National water quality data collection tools</p> <ul style="list-style-type: none"> ▶ State environmental monitoring, which includes gathering of data on ecological, hydromorphological, physical and chemical parameters. ▶ <u>Chemical monitoring of surface water and groundwater within the Agricultural runoff monitoring programme</u> ▶ <u>During the development of RBMPs, an assessment of anthropogenic loads (including agricultural loads) is carried out</u> 	<p>Main policy instruments</p> <ul style="list-style-type: none"> ▶ <i>Regulatory:</i> Legislation which sets emission standards and quality standards for various types of waters and which determines maximum allowable concentrations of dangerous substances in waters. <u>In 2015, the list of dangerous chemical substances was extended and for some substances, allowed concentrations were set lower; Legislation laying down requirements for manure storage, spreading and management as well as determining environmental requirements for animal housing; Legislation on protection zones</u> ▶ <i>Economic:</i> Natural resources tax; payment for Agri-environment & Organic farming and investments in physical assets both based on Rural development programme; <u>Since 2015, the Rural Support Service of the Republic of Latvia offers financial support for reconstruction and renovation of the existing drainage systems including implementation of nutrient and water retention measures such as sedimentation pods, two-stage ditches, bottom dams, meandering, controlled drainage, and constructed wetlands.</u> ▶ <i>Information:</i> Various authorities and projects are providing information to agricultural sector on more environmentally friendly activities
<p>Spatial tools (e.g. topological, geometric, or geographic data analysis) to target policies in specific areas</p> <ul style="list-style-type: none"> ▶ Yes: Spatial tools were used to designate “Vulnerable Zones”, where stricter requirements on manure storage, spreading and management apply ▶ <u>Topographical information has been used for controlling the implementation of requirements for using fertilisers on slopes in the 2014 No. 834 “Regulations on protection of water and soil from nitrate pollution caused as a result of agricultural activity</u> 	<p>Enforcement measures</p> <ul style="list-style-type: none"> ▶ Regular inspections of the farms based on Cabinet Regulation No.834 2014 “Regulations on protection of water and soil from nitrate pollution caused as a result of agricultural activity” and Cabinet Regulation No.829 2014 “Special Requirements for the Performance of Polluting Activities in Animal Housing”

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	<p>The duration of drought periods in the present day compared to climatic reference periods in Latvia has not changed unequivocally.</p> <p>Water scarcity is not a typical problem in Latvia. However, water scarce periods may occur more often and become longer due the climate change.</p>	<p>Precipitations have increased by 6% and the number of days with strong and very strong precipitation has increased. The projections are that this trend will continue in the future, increasing the likelihood of flash floods.</p>
Key Policies	-	<p>Preliminary flood risk assessment is updated every six years, including information on previous floods, adverse consequences and risks due to climate change.</p> <p>Flood risk management plans analyse the situation, assess flood risk, set targets and indicate measures to be taken. The flood risk information system includes flood hazard and risk maps and early warning systems.</p>
Main Changes from 2009 to 2019	-	<p>One of the measures included in the Latvia's Climate Change Adaptation Plan for the period up to 2030 is to restore and adapt amelioration systems, as well as, where possible, restore the natural flow of watercourses to reduce the impacts of floods and stabilise ecosystems.</p>
Factoring of Climate Change in Policies	<p>3/5: The Ministry of Environmental Protection and Regional Development of Latvia recently developed Latvia's Climate Change Adaptation Plan for the period up to 2030. It introduces more than 80 measures to help the population and economy of Latvia better adapt to climate change and thereby reduce the damage caused by climate change. In the Plan, there is a specific section that describes the risks posed by climate change specifically on agriculture. Seven measures are specifically related to agriculture and two of them also relate to water management.</p>	

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