**Information provided by the Republic of Lithuania to the Special Rapporteur’s on the human rights to safe drinking water and sanitation thematic report on “Water and food nexus: a human rights approach to water management in food systems”**

1. *What are the problems linked to the overexploitation of aquifers, abusive extraction of surface water, or pollution due to agricultural or livestock activities in your country?*

At the moment, Lithuania is not facing any groundwater shortage, as only 15% of its exploitable resources are exploited. However, it should be noted that intensifying agricultural pollution and increasing demand for groundwater from industry will increase the risk of groundwater pollution in the future.

1. *Are there legal regulations or policies in place to control overexploitation or polluting discharges -pesticides, nitrates excess, slurry- from agricultural or livestock activities? And if they exist, are they effective? Can you provide examples?*

Detailed answer in paragraph 10.3.

1. *Are there problems with the drinking water supply due to overexploitation or contamination of sources by agricultural or livestock activities? If so, can you describe them?*

Groundwater is used for drinking water in Lithuania. The monitoring data do not indicate that there is a direct impact on drinking water from agriculture. Amount of groundwater is sufficient. Furthermore, surface water can be used for agricultural and industrial needs, so the use of groundwater and surface water between these activity areas does not compete with the abstraction of drinking water for the needs of the population. For those who supply themselves with water individually, a usage accounting system (permit system) has been installed for extracting drinking water from boreholes, so the amount of extracted water is regulated.

1. *How is water distribution regulated in drought situations in the country? What are the priorities, and to what extent are these regulations effective?*

The Environmental Protection Agency issues surface water permits for users with a daily intake of 10m3. It may also impose abstraction restrictions on users, e.g. during droughts, depending on the hydrological characteristics of the water body used for abstraction.

1. *Can you share the most recent statistics linked to the right to food and the right to water? These include:*

*5.1.1. Total population, population facing malnutrition, and the most affected populations (women, Indigenous Peoples, afro descendants).*

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*5.1.2. Main staple foods and sources (locally produced) and their linkage to water issues.*

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*5.1.3. Statistics on the intersection of water and food, including primary food sources and the amount of water used along the food systems chain.*

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*5.1.4. Statistics on challenges linked to food production and drinking water supply.*

According to statistics available from the Ministry of the Environment, 82 percent of population receives properly prepared and high-quality drinking water through a centralized supply system, the rest of the population supplies themselves with water individually.

1. *How much of the national budget is invested in addressing issues of food security in the country? Are specific budget lines supporting technology transfer for water-related infrastructure, inputs, etc.?*

From 2000 to 2020, ~1.5 billion euros from EU and national funds were invested in the infrastructure of drinking water supply, wastewater and sewage sludge management in Lithuania. It is planned to invest another ~278 million euros from EU and national funds into drinking water and wastewater management infrastructure until 2027.

1. *If there are trade-offs between the right to water and the right to food, can you please explain some of these trade-offs? If possible, please provide some examples.*

Lithuania has a sufficient water supply for all areas, so there is no need to seek for trade-offs at the moment.

1. *Is there competition or complementarity between the demands for water to produce food and for supply? Could you explain them? Are there laws to regulate them? These trade-offs include irrigation vs drinking water, fishing vs drinking water, live-stock vs drinking water, and processing of foods by industries vs drinking water. The trade-offs also can include issues on volume, access (rights, price, among others), and water quality/pollution. Provide examples and actions taken by the State.*

Not relevant. Lithuania has sufficient water for all needs for now.

1. *Are there transfers of water rights in the market, specifically between agricultural uses and drinking water supply? If yes, are they regulated by the State?*

The regulation of water use is described in question No 2 of the questionnaire.

1. *In areas where there is any activity linked to industrial agriculture (crop production, livestock, fishing, processing of foods, or any other industry linked to agriculture), are there any regulations, policies, or mechanisms in place that:*
	1. *Regulate the amount of water these industries can use?*

The Environmental Protection Agency (EPA) issues surface water permits for users with a daily intake of 10m3. Water abstraction for individual industries is not regulated. Regulation is based on the hydrological regime of the surface water body. The EPA can reduce the amount of water abstracted during droughts or temporarily prohibit water abstraction altogether.

* 1. *What are the primary sources they use, and how are the volumes they use set?*

Primary sources is surface and underground water bodies. The Environmental Protection Agency issues surface water permits for users with a daily intake of 10m3. Regulation is based on the hydrological regime of the surface water body. The EPA can reduce the amount of water abstracted during droughts or temporarily prohibit water abstraction altogether

* 1. *Is an effective regulation in place to control diffuse pollution from irrigation and contamination due to slurry discharge from intensive livestock farming?*

Lithuania implements the requirements of the Nitrates Directive throughout the territory. The requirements of the directive have been transferred to the description of environmental requirements for manure and slurry management, approved by the Minister of the Environment and the Minister of Agriculture in 2005. July 14 by order no. D1-367/3D-342 (current version No. D1-755/3D-844, 2020-12-09). The purpose of the description is to determine the requirements for handling manure and slurry to prevent surface and underground water pollution and reduce air pollution. The description establishes the following environmental requirements for slurry management:

Slurry and/or liquid manure must be stored in slurry barrels or devices adapted to store and store slurry or liquid manure;

Environmental air pollution and odor reduction measures must be applied in liquid manure and/or slurry accumulators selectively: hard tight roof coverings, flexible coverings (canopies), integral floating coverings (plastic sheets or granules, light bulk materials, air-inflatable, straw, naturally occurring crusts), biological filters, break down slurry aerobically (aeration) or anaerobically in a biogas plant and/or use other environmental air pollution and odor reduction measures (methods) specified in 2017 February 15 Commission Implementing Decision (EU) 2017/302 laying down best available production methods (BAT) conclusions for intensive poultry or pig farming in accordance with Directive 2010/75/EU of the European Parliament and of the Council (notified under document No. C(2017) 688 ), in the Code of Good Agricultural Practices published on the website of the Ministry of Agriculture;

When storing slurry, the smallest permissible sanitary distances from the barn or manure pit to the buildings on the plot or on the adjacent plot, which are determined by the construction technical regulation STR 2.02.09:2005 "One- and two-dwelling residential buildings", approved by the Minister of the Environment in 2005, must be observed. July 1 by order no. D1-338 "On the approval of the construction technical regulation STR 2.02.09:2005 "One- and two-family residential buildings", in Appendix 2, and to water catchment facilities, shaft wells, springs, which are defined in the Lithuanian hygiene standard HN 43:2005 "Wells and springs: installation and maintenance safety requirements for health", approved by the Minister of Health in 2005. June 22 by order no. V-513 "On the approval of the Lithuanian hygiene standard HN 43:2005 "Wells and springs: health safety requirements for installation and maintenance", as well as the sizes of sanitary protection zones established in the Law on Special Land Use Conditions of the Republic of Lithuania;

During a calendar year, the amount of nitrogen entering the soil (by fertilizing with manure, slurry and grazing animals) cannot exceed 170 kg per hectare;

Fertilizing the soil with manure and/or slurry is prohibited from November 15. until March 20, except for the cases specified in item 18 of the Description. It is forbidden to add or spread manure and/or slurry on frozen, soaked, flooded, snow-covered ground;

It is prohibited to fertilize with liquid manure and/or slurry on Saturdays, Sundays, and public holidays closer than 100 m from a residential building without the written consent of the resident, as well as closer than 300 m from the boundary of the urbanized area without the written consent of the ward elder;

It is forbidden to spread liquid manure and/or slurry closer than 2 m to the upper edges of the melioration ditches;

When fertilizing 30 ha or more of agricultural land with manure and/or slurry during a calendar year, you must have a fertilization plan and implement it. The fertilization plan must include, among other requirements, maps of fertilization fields with marked protective zones of surface water bodies and coastal protective strips, protection zones of water bodies, water catchment facilities;

It is recommended to fertilize at the lowest possible wind speed, lower air temperature, with the wind blowing from the most populated area;

When fertilizing no more than 30 ha of agricultural land, liquid manure and/or slurry shall be fertilized by sprinkling, watering or direct application to the soil. When fertilizing 30 ha or more of agricultural land, fertilization with liquid manure and/or slurry must be done by drip or direct application to the soil, unless other scientifically based measures for reducing ammonia release into the environment are applied (e.g., separation, slurry acidification, probiotics, spread rapid application of slurry or manure (fertilization or cultivation)).

1. *Are there any specific policies or guidelines on using wastewater and disposal in agriculture and food and health safety issues? For example, when crop fields are irrigated with sewage or aquifers or bodies of water at risk of contamination are used for cooking, among others. Can you provide any example of where this situation might be taking place?*

In accordance with the *Regulation (EU) 2020/741 on the minimum requirements for water reuse*, a member state may decide that it is inappropriate to reuse reclaimed water for irrigation in agriculture, taking into account the relevant criteria (geographical, climatic conditions, water resources (also and underground) condition, etc.).

After assessing all available water resources, including those used in agriculture, and taking into account the climatic conditions, noting the absence of need to reuse reclaimed water in Lithuania for irrigation in agriculture, the Ministry of the Environment of the Republic of Lithuania determined that urban wastewater collected by centralized wastewater collection systems is not reused in agriculture for irrigation purposes, as referred to the Regulation.

1. *What mechanisms are set in place to prevent, mitigate or restore the potential damages caused by the violations of the right to water and right to food? For example, when implementing a food security project, what is the process of consultation or formulation that can prevent damages or when an already implemented project, what mechanisms can be followed to restore or mitigate potential damages? E.g., using chemicals pollutes water bodies and affects the health of fisheries used for human consumption.*

There are appropriate safety requirements and damage recovery mechanisms set. Also, the "Polluter Pays" principle is implemented in the legal system. In practice, there are no recorded cases of drinking water sources (groundwater) being contaminated so far.

1. *Has the state transferred or is in the process of transferring water and/or land rights to large agricultural or livestock production companies to increase food production? Can you describe this process? Are there laws that guarantee customary rights to land and water to rural or indigenous communities that are not formally registered?*

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1. *Are there any good examples of practices linked to food systems that help ensure people's right to food and water? Please provide examples and details. Are these excellent practices part of any national or regional program or supported by policies and the government? For example, harvesting water for both agriculture and drinking water, etc.*

These activity areas in Lithuania are naturally separated and there is no conflict between, since groundwater is mostly used for drinking water supply, and surface water can be used for agricultural needs. The main direction of state sector activity is to ensure the quality and sufficient amount of drinking water by providing it by centralized infrastructure, wherever it is economically viable.