



Funded by  
the European Union

**EU4Environment**  
Water and Data in Eastern Partner Countries

## REPORT

on Action Program of the 91/676/EEC Directive  
on the protection of waters against nitrate pollution from agricultural sources  
Workshop

Chisinau, July 2024

Programme



Funded by  
the European Union

**EU4Environment**  
Water and Data in Eastern Partner Countries

Activity implemented by



Austrian  
Development  
Cooperation



---

Date: 03/07/2024

|                               |   |
|-------------------------------|---|
| <b>Project:</b>               | <b>EU4Environment – Water resources and environmental data</b>  |
| <b>Submitted by:</b>          | <b>OIKUMENA Public Association</b>  |
| <b>Contract No:</b>           | <b>EU4ENV-MD-04: Support for Development of the Nitrate Directive Action Programme in Republic of Moldova</b> |
| <b>Reported deliverables:</b> | Workshop with restitution report  |
| <b>According to contract:</b> | MD04 on Nitrate Directive   |

*Disclaimer*

*The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Implementing Partner Organisations, European Commission, the European Union, their member countries and the Eastern Partnership countries. This document, as well as any data and any map 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.*

---

**CONTENT:**

**1. Introduction.....4**

**2. Workshop Objectives.....5**

**3. The progress of the workshop.....6**

**4. Workshop conclusions .....10**

Annex 1: Workshop Agenda

Annex 2: List of Participants

Annex 3: Photo collage

Annex 4: Experts' Presentations

---

## 1. Introduction

The agriculture is one of the major branches of the economy in the Republic of Moldova, where farmland represents about 74% of the total area of the country. The application of fertilizers (especially nitrate, an essential nutrient for plant growth) in excessive amounts and without necessary precautions leads to pollution of surface and groundwater and the development of eutrophication in rivers, lakes and up to the Black Sea.

In this regard, it is of high importance to reduce the impact of agriculture. In fact, in 2020 at the national level was developed and started to be implemented on a voluntary base, the Code of Good Agriculture Practices, COGAP (*approved by Order no. 160 of 27 July 2020 of the Ministry of Agriculture, Regional Development and Environment at that time*). Another step to be done, is the implementation of the Nitrate Directive to foster this process and improve in the same time Moldova's convergence with the EU acquis in the frame of the candidacy to the European Union.

The initial proposal for Action Programme under the Nitrates Directive for the Republic of Moldova was presented during the Workshop which was organized on 2<sup>nd</sup> of July 2024.

The workshop was organized by the IWRM Policies Department of the Ministry of Environment with the support of the "EU4Environment – Water Resources and Environmental Data" Programme. International and national experts were involved for sharing good practices; the study results were provided by the international experts of OiEau, France and national experts of OIKUMENA NGO.

The EU4Environment – Water Resources and Environmental Data Programme aim is to operationalise several key mechanisms to preserve natural resources, enabling countries' green growth in line with the European Green Deal and a post-COVID-19 green recovery. The Programme specific objectives are:

- Specific Objective 1. "Water resources management": Water policies and practices support more sustainable use of freshwater resources and help reduce the adverse impacts of human activities on water quality and ecosystems.
- Specific Objective 2. "Environmental statistics and open data": The use of sound environmental statistics by the partner countries is extended and improved, and better availability of policy relevant data to decision-makers and citizens is ensured.

The Programme, primarily financed by the European Union and co-financed by Austria and France, is implemented by three Member State agencies: Umweltbundesamt GmbH (also called "UBA" or "Environment Agency Austria"), Austrian Development Agency (ADA) and International Office for Water (OiEau, France) and their final goal is to contribute towards longer-term environmental, climatic, and socio-economic resilience, and improved human health and wellbeing, as well as the achievement of the Sustainable Development Goals (SDGs).

---

## 2. Workshop Objectives

The workshop on the presentation of the Action Program on the protection of waters against nitrate pollution from agricultural sources for implementing Directive 91/676/EC brought together stakeholders from environmental, health and agricultural sectors (*Annex 2. List of Participants*).

The aim of the workshop was to present the draft action programme of the Nitrates Directive and its cost effectiveness for the Republic of Moldova, as well as to share the best practices of France in terms of Nitrates Directive implementation with an experience of aprox. 30 years (*Annex 1. Agenda of the Workshop*). The discussions were focused on 2 primarily areas:

1. Application of the Directive 91/676/EEC on the protection of waters against nitrate pollution from agricultural sources: actions needed to reduce/ combat nitrogen and phosphorus pollution, and
2. An operational action program: mandatory for the areas declared vulnerable to nitrates from agricultural sources.

The study results presented during the workshop that engaged the public and private sectors' representatives in the discussions were addressed to:

- Progresses made by the Republic of Moldova in the implementation of the Directive 91/676/EEC on the protection of waters against nitrate pollution from agricultural sources,
- Implementation of the Directive 91/676/EEC in France: successive progress – examples of good practice,
- Action program on the protection of waters against nitrate pollution from agricultural sources in the Republic of Moldova – the importance of implementation,
- Accessibility of the Water Protection Program against Nitrate Pollution: Costs or investments in modern agriculture in France?
- Economic analysis of the cost of implementing the Actions Program in the Republic of Moldova,
- Presentation of the 2 main options offered to the Member States for the implementation of the Nitrates Directive 91/676/EEC,
- Identification of current impacts of nitrate pollution and recommendations for designation of nitrate vulnerable areas in the Republic of Moldova,

Plans and future needs for the implementation of the Directive 91/676/EEC were highlighted during the general conclusions session, where the representatives of the Ministry of the Environment and Ministry of Agriculture and Food Industry, as key institutions, presented their opinion about.

---

### 3. The progress of the workshop

In the opening part of the workshop, Irina Punga, Deputy Secretary General of the Ministry of Environment of the Republic of Moldova, welcomed the participants and mentioned the importance of implementing the Directive 91/676/EEC on the protection of waters against nitrate pollution from agricultural sources in the context of the current candidate country status. The plans of Ministry of Environment in this regard were pointed out as well. The same commitment was pointed out by Victoria Gratii, Head of the Integrated Water Resources Management Policies Department (IWRM) and emphasised that the current event is a step forward for the Nitrates Directive implementation phase in Moldova that is due to start from 2026 based on the adhesion negotiation agreement with the EU.

About the progress made by the Republic of Moldova in the implementation of the Directive 91/676/EEC on the protection of waters against nitrate pollution from agricultural sources was noted by Anna Casuta, responsible for the implementation of the Nitrates Directive from the Integrated Water Resources Management Policies Department of the Ministry of Environment. It was presented the role of both institutions – Ministry of Environment and Ministry of Agriculture and Food Industry in achieving the results of Nitrates Directive implementation from 2026. The important tool that was highlighted is the constructive dialogue, firstly, with the agricultural sector, esp. with the zootechnical/ livestock sector and after that with other stakeholders. The agricultural sector, esp. farmers, should understand the Nitrates Directive implementation not as a limit for their activities, but as assurance of good environmental conditions for agriculture. Recently, in the EC Report regarding the Republic of Moldova progresses in the environmental field the special attention was on Nitrates Directive and tangible results related to national regulations are waiting from Moldova's side. It was stressed that the event was important for two reasons – to understand where Republic of Moldova stands for and what are the international (France example) good practices in this area. All stakeholders were encouraged to participate actively in the discussions in order to better understand their role (*Annex 3. Photo collage*).

Good practices in France were presented by international expert, Simon Barreau, OiEau, the main issues highlighted: National Action Program and Regional Action Program are part of the current regulations in France. In the Action Program some measures were taken from Nitrates Directive, but additional measures were added in order to achieve the results. Not the whole country is part of the vulnerable zone. As a tool, in France, is used Code of Good Agricultural Practices (COGAP). The Action Programme is updated each 4 years, including the delimitation of the vulnerable zones: new ones are added, others are erased. For all these updates some inputs are important and mandatory such as (1) data/ knowledge and (2) the specific characteristics of the area. In France, the Ministry of Environment is in charge of the Nitrates Directive monitoring, but not only – it is implemented in cooperation with Ministry of Agriculture.

From the lessons learnt shared to the moldovans' stakeholders could be mentioned: it is hard to find the balance between regulation and farmers. Regional action programmes are specific for some areas. The action programme is updated each 4 years. For the 1st cycle in Moldova it is ok to be focused on mandatory measures from Directive, but on the 2nd cycle need to be identified specific measures to improve the current situation.

---

Some key regulations at EU and national (France) level were reminded as the usefulness of Eionet platform presented - can be analysed some actions provided by the EU countries in particular - <https://www.eionet.europa.eu/>. The scientific researches and role of the peer reviewed journals were mentioned as very important for protection of waters against nitrates pollution from agricultural sources.

One of the questions raised during the discussions session is whether the number of vulnerable zones in France decreased or increased in time. The answer was that from the beginning the trend is an increase of the number of vulnerable zones were registered, which is work intensive to manage. Other issues on discussion session was about the dialogue with the farmers as one of the most challenging exercise in this process, and based on the France's experience there are a lot of investments in the monitoring programmes, there are a lot of monitoring points for the nitrates. It was underlined that the option of specifying vulnerable zones is very demanding in term of monitoring too.

The monitoring data availability is a key issue which in Moldova still is not solved and for some regions there is lack of data. Starting from this point, the opinion of the international expert Pierre Henry de Villeneuve, OiEau is that in this case one of the best decisions is to include the whole country in the vulnerable zone, but still include a geographic prioritisation by developing reinforced action programme for the areas that are most affected (using somehow the logic of specific regional action programme in use in France).

The discussion also involved the issue of institutional capacity in France related to Nitrates Directive implementation: the Ministry of Environment is responsible for the implementation and monitoring, but for Action programme – Ministry of Environment cooperate with the Ministry of Agriculture and some stakeholders are involved in this activity.

The other subjects discussed were:

- about the support/ facilities offered to the farmers who practice ecological agriculture in France and one of the example provided is the support in collecting the manure,
- some steps in the Nitrates Directive implementation could be time consuming, and one of the interventions was oriented on the period used for identifying the vulnerable zones, which in France was from 1991 to 1997 due to the fact it was on their first experience, the textual and reporting part had to be added, and it was without any good practices from other countries at that time; in case of Moldova the process can be much quicker and easier using the important experience accumulated by the different countries.

For the first part of the workshop - Application of the Directive 91/676/EEC on the protection of waters against nitrate pollution from agricultural sources: actions needed to reduce/ combat nitrogen and phosphorus pollution the following subjects were discussed:

- Action program on the protection of waters against nitrate pollution from agricultural sources in the Republic of Moldova – the importance of implementation,
- Accessibility of the Water Protection Program against Nitrate Pollution: Costs or investments in modern agriculture in France?
- Economic analysis of the cost of implementing the Action Program in the Republic of Moldova,

---

Lurie Bejan, national expert from OIKUMENA NGO presented some national regulations acts that were developed before and transpose the Directive 91/676/EEC on the protection of waters against nitrate pollution from agricultural sources, emphasising that the COGAP is now in the implementation phase, but on the voluntary base. The requirements for the manure storage were provided and the main actions that should be present in the Action programme. A study case on selected pilot area – Lunguța 2 water body from Tomai village, district Taraclia – was presented in details. An action programme was developed for the pilot area.

The discussion session highlighted following issues:

- Lunguța 2 water body was selected as pilot area because there is enough data (available data from 2014) for a detailed analysis and to set up a real action programme, there is a monitoring point, the nitrates sources pollution – the nitrates are mainly from agricultural sources,
- The pollution of groundwaters and surface waters to be analysed more globally, it is located upstream or downstream from the source of pollution, the level of pollution to be analysed at the river basin level,
- The surface waters are less polluted with nitrates comparing with groundwaters, a different approach to be applied,
- To be taken into consideration the historical pollution and to propose the real solutions for quality improvements (some of the proposed solutions: to identify these leaks and try to isolate them, the inventory of these areas from the zootechnical complexes which are approx. 8000 wells etc.).

The presentation of the Simon Barreau, OiEau expert, about accessibility of the Water Protection Program against Nitrate Pollution: Costs or investments in modern agriculture in France? – started with the idea that the nitrate contamination prevention saves money of the farmers, and this fact should be spread among the farmers – the Nitrates Directive is based on the winning approach– „win – win” for all interested parts – and it is related to Green Deal initiative of EC. The improvement of the public perception through all the actions provided in the Action Programme that it is regularly updating – some of the solutions from France: planting, creating storage area for manure, grassed strips as part of the Common Agricultural Policy.

The same idea about costs for Nitrates Directive implementation, but at the local/ national level was presented by the OIKUMENA’s expert, Petru Bacal - Economic analysis of the cost of implementing the Action Program in the Republic of Moldova. In the introduction part it was referred to the methodology used for cost calculation, regulations in force, with some remarks on the problem and opportunities related to economic analysis. The actions proposed in the Action Programme were classified accordingly: for assessment and monitoring, regulation measures, implementing measures (including the costs for COGAP implementation), for promotion and institutional capacity building. For each measure/ action the cost estimation and responsible institutions was provided.

The estimation of total cost was approx. 31 mln. MDL plus the budget resources from the local budget allocated in this sense. Beside these financial resources allocation, some costs for promotion are required, and some governmental programmes in farmers support are encouraged, for ex. the costs for the platform development for manure storage. Some structural measures proposed requires



---

high costs, once implemented it gives new opportunities for farmers, and environmental benefits as well.

The economic part raised some questions among the stakeholders as part of the costs are intend to be on the farmers's responsibility (beside those costs supported from the state budget) such as:

- investors need to integrate the costs in the price of the agricultural goods, will farmers accept this measures/ actions?
- The proposed measures/ actions are for the whole country or for the pilot area? It should be very clearly specified.
- The mandatory actions needed for monitoring points – what is the cost estimation for this concrete action?
- The methodology used for cost calculation was updated to the national requirements,
- The burden of these costs will also fall on economic agents, but on the responsibility category in the table, only state institutions are mentioned; should be analysed and added the responsibility of farmers/ private sector,
- Some of measures/ actions involves also the households, which is a clear burden on them. But, initially, in the Nitrates Directive implementation process the focus is not on households, but on the big farmers,
- The issue of way of transportation of the manure to the platform was discussed, and for small farmers (less than 5 UVM) and households there are no regulations in this regard, all costs are supported by the owners. There are no regulations in France too for this issue.

The second part of the workshop was focused on operational action program: mandatory for the areas declared vulnerable to nitrates from agricultural sources.

Simon Barreau, OiEau expert, in his presentation mentioned the 2 main options offered to the Member States for the implementation of the Nitrates Directive 91/676/EEC, and in this case was highlighted that the approach should be different for surface waters and groundwaters. The two options provided by the Directive are:

1. To declare the whole country or not as nitrate vulnerable zone,
2. To identify vulnerable zones, based on most affected area based on the scientific research and data available. One of the most challenging issue in this case is how to explain to the neighboring farmers why one is in the vulnerable zone and has some regulations/limitations to be applied, and the other – not.

Each 4 year the vulnerable zone should be updated and debate between Ministry of Environment and Ministry of Agriculture about the status of the vulnerable zones, to maintain, extend or decrease, or in some cases to add other vulnerable zones. This work is important and require to be backed up by a lot of monitoring efforts.

In the first case - *to declare the whole country as vulnerable zone*, there are some international practices where the whole country is declared as vulnerable zone, but reinforced action programme was done for specific areas most affected. As a result of what was agreed, at the moment for the

---

Republic of Moldova, based on the existing data, the zonal declaration of the areas vulnerable to nitrates will be carried out, and an action program applicable to all these areas will be developed.

The specific data for Moldova's case was presented by OIKUMENA's expert, Castravet Tudor - Identification of current impacts of nitrate pollution and recommendations for designation of nitrate vulnerable areas. The identification of nitrate vulnerable zones was based on the current regulatory documents – Water Law being the fundamental law in the field, and other 2 sets of data were considered: the data from zootechnical sector as the main source of pollution– the statistical data is on the district level, not at the commune level; and the data related to fertilization. The conclusion of the study is that there is a high demand of increasing the number of monitoring points, including in the area that there is a high concentration of nitrates and identified as vulnerable zones.

In the discussion session was emphasized the challenges that may occur in the implementation process:

- How to avoid the discrimination approach in case of neighboring farmers, one being in the vulnerable zone and the other – not; those in the nitrates vulnerable zone are limited in their actions, but at the same time they can apply for some governmental support/ subsidies, in case of farmers outside the vulnerable zone is vice-versa,
- The actions to be set based on the level of pollution by farmers – in this case a very detailed monitoring is needed. The limited actions to be seen as the consequence of the applied principle: *the polluter pays*.

#### **4. Workshop conclusions**

In practice, the process of Nitrates Directive implementation has already started with the development of the Code of Good Agricultural Practices, and continues with the Action Programme development. At the same time, Moldova took the engagement before the end of the 2025 to approve the Action Programme on the protection of waters against nitrate pollution from agricultural sources. But starting from now there is a priority need for the first cycle in Moldova to promote the importance of protecting water resources against nitrate pollution from agricultural sources to farmers, private sector, public institutions etc. and to send a clear message to the big investors interested in. In the process, EU member states should be consulted for good practices – as France, Germany, Romania, Denmark etc. but Republic of Moldova has to adopt its proper vision related to the subject of Nitrates Directive in tune with its current stage of development.

So, after the all presented materials by international and national experts and discussion sessions, the main conclusions of the workshop are:

- ❖ Ministry of Environment together with its subordinated institutions (Environment Agency, Inspectorate for Environmental Protection) is the lead institution in charge with the implementation and monitoring of Nitrates Directive,
- ❖ A strong collaboration with Ministry of Agriculture and Food Industry is required to achieve the expected results; a constructive dialogue should be set up. It is not an easy and simple pass, but the results simply depend on it.
- ❖ Using the results of the initial proposal for Action programme under the Nitrates Directive for the country, a constructive dialogue between the Ministry of Environment and Ministry of

---

Agriculture and Food Industry is going to start in order to take the best decision for Republic of Moldova - which option should be chosen for the Nitrates Directive, either to declare the whole country as vulnerable zone, or to identify some vulnerable zones according to the methodology; the zones will be declared depending on the monitoring data availability, with the consultation of all parties involved,

- ❖ Progress in implementation of Nitrates Directive is very important and quite demanding process in terms of time and money; each cycle is set for 4 years,
- ❖ The monitoring is the main issue that should be taken in account for accurate data; the increasing of monitoring points is a “must”,
- ❖ For the 1st cycle it is important to set feasible actions in the Action Programme to be really implemented and possibly deepen in the future cycle,
- ❖ The developed Action Programme to be addressed to the farmers located in areas declared vulnerable to nitrates,
- ❖ The Ministry of Environment opinion mentioned in the general conclusions session is that initially, should be started with identifying some nitrate target vulnerable zones, in the sense of already affected by nitrate pollution, and setting up the action programme,
- ❖ It is necessary to clarify the measures regarding the management of manure - as there are farmers interested in manure, and, in general, on the national market there is a high demand of it as some businesses in agriculture are based on this raw material,
- ❖ Lesson learnt from France – to monitor the manure from the big farmers, but not to make mandatory the same kind of disposition for small and household. For small and individual household the obligation could be simply communicate the existence. In the same spirit, some very basic obligations could be included in the action programme for the whole country and some reinforced action for the areas with already clear sign of pollution by the nitrates.
- ❖ The communication and public awareness is an important issue for achieving the results. The importance of the Action Programme for the protection of waters against Nitrate Pollution from agriculture, which is essential for environmental protection and for accession to the European Union, was emphasised during the workshop. In this regard, the dissemination part is an important issue for sharing to the general public the progress in the implementation of EU Directive 91/676/EEC; some press releases can be found on the official web pages of Ministry of Environment, Environmental Agency and EU4Environment Project and on their official fb pages (Fig. 1-3):

<https://www.facebook.com/share/p/ExsQ5vgG1rDdkzZP/?mibextid=qi2Omg>

<https://www.facebook.com/share/p/94txnsTK4oCRHfj/?mibextid=oFDknk>



Fig. 1. Ministry of Environment press release: <https://www.mediu.gov.md/ro/content/4969>

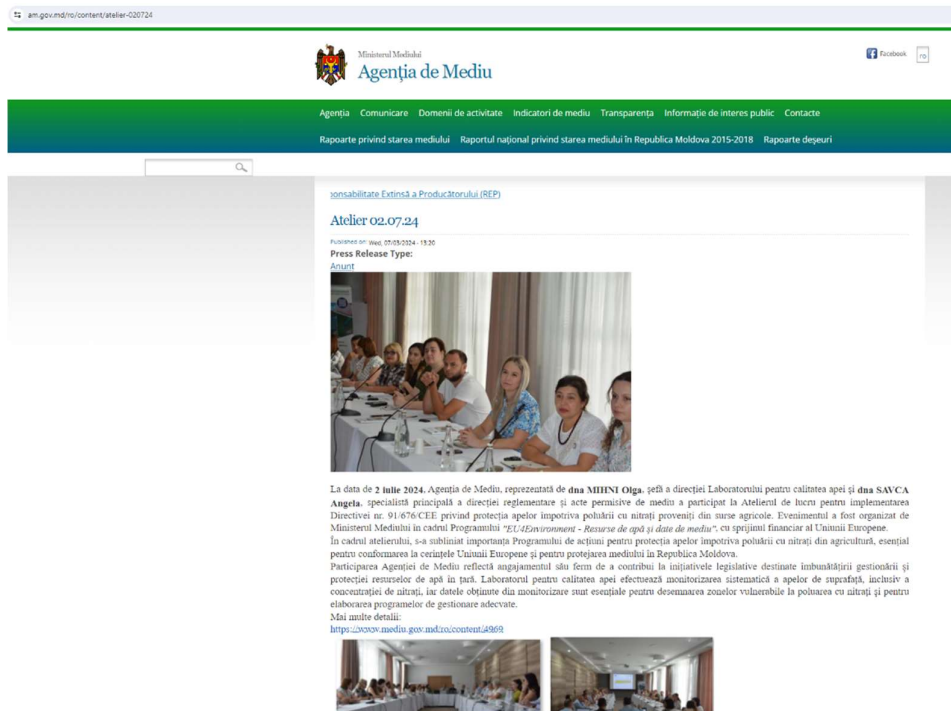


Fig. 2. Environmental Agency press release: <https://am.gov.md/ro/content/atelier-020724>

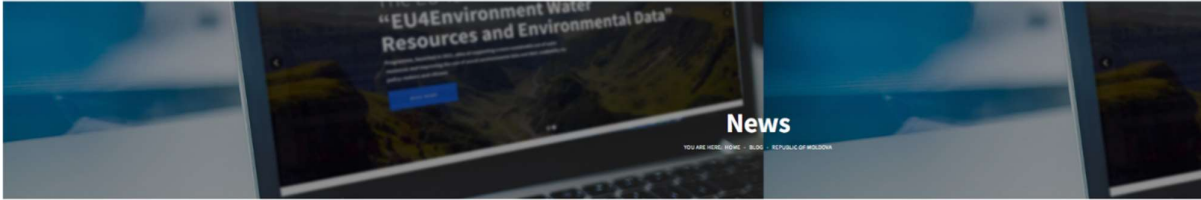
eu4waterdata.eu/en/blog-news/33-republic-of-moldova/361-workshop-in-moldova-discusses-eu-directive-on-protecting-water-from-nitrate-pollution-from-agriculture.html

Powered by the European Union


EU4Environment  
Water and Data in Eastern Partner Countries

English  
Machine translation

Home About Water resources Environmental Data Where we work News and Events Results



News  
YOU ARE HERE: HOME > BLOG > REPUBLIC OF MOLDOVA



### Workshop in Moldova discusses EU directive on protecting water from nitrate pollution from agriculture

03 JULY 2024

Country: Republic of Moldova

Component: Water resources

Moldova's progress in the implementation of European Union directive on protection of waters against nitrate pollution from agricultural sources was discussed on 2 July at a workshop (EU Directive 91/676/EEC). The event brought together representatives from the Ministry of Environment, the Ministry of Agriculture and Food Industry, as well as national and international experts.

Inna Pungu, Deputy Secretary General of the Ministry of Environment of the Republic of Moldova, presented the significant developments and the country's firm commitment to adopting sustainable agricultural practices to protect water resources.

The importance of the Action Programme for the Protection of Waters against Nitrate Pollution from Agriculture, which is essential for accession to the European Union and for environmental protection, was emphasised. The workshop was organised with the support of the EU4Environment - Water Resources and Environmental Data project.

Read the article (in Romanian) on the Ministry's website: <https://www.media.gov.md/no/content/4969>

Fig. 3. EU4WaterData press release: <https://eu4waterdata.eu/en/blog-news/33-republic-of-moldova/361-workshop-in-moldova-discusses-eu-directive-on-protecting-water-from-nitrate-pollution-from-agriculture.html>