





Round Table

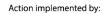
Resource efficiency and waste management in Armenian fisheries

AGENDA

UN Armenia Conference Hall, 14 Petros Adamyan St, Yerevan 0010, Armenia

Date: Thursday, 22 December 2022
Time: 11:00-13:30 Yerevan time

Format: hybrid event Language: English and Armenian (with simultaneous interpretation))













AGENDA

Moderator: Anahit Simonyan, UNIDO Country Representative in Armenia

Time	Item
10:30-11:00	Arrival and registration of in-person participants
11:00-11:20	Welcoming remarks:
	Gayane Gabrielyan, Deputy Minister of Environment, Republic of Armenia
	Arman Khojoyan, Deputy Minister of Economy, Republic of Armenia
	Frank Hess, Head of Cooperation Section, EUD in Armenia (TBC)
	Tatyana Chernyavskaya, EU4Environment Project Manager, UNIDO (online)
11:20-11:40	Session 1: Use of resources in fish production: focus on water
	The profile of the Armenian fish industry and its current challenges
	Representative of the Ministry of Economy
	Experience from technical assistance projects on water use and re-use in Armenia
	Examples from projects of USAID, FAO
11:40-12:10	Session 2: Resource Efficient and Cleaner Production (RECP) in fish industries
	RECP as a methodology to support SMEs in becoming more efficient
	Tatiana Chernyavskaya, UNIDO
	• Examples of RECP application at fishery industries in Armenia: cases of Sevani Ishkhan and Sevan Aqua
	Nune Harutyunyan, RECP National Coordinator and Liana Margaryan, RECP National Expert
12:10-12:30	Feedback from companies
12:30-12:45	Session 3: Waste Management in Fish Production sector
	Guide for producers on Waste Management from Fish Processing.
	Presentation by a representative from the Ministry of Environment
12:45-13:15	Q&A, feedback from companies, and discussion
13:15-13:30	Session 4: Recommendations on fish farming and water use
	Fish waste management based on international practices and success stories
	Karl Schebesta, Senior Expert, UNIDO
13:30	Closing remarks Gayane Gabrielyan, Deputy Minister of Environment, Republic of Armenia

Round Table Resource efficiency and waste management in Armenian fisheries Hybrid event

Meeting objectives, expected outputs and outcomes

The objective of the Round Table is to present the current profile of the Armenian fish industry, discuss existing regulatory frameworks and barriers to increase productivity and exporting capacity, and present the potential application of the Resource Efficient and Cleaner Production (RECP) methodology. The discussions will also focus on:

- The current situation and challenges fish farms face when aiming to increase productivity;
- Water use and re-use in fish farms;
- Sustainable management of waste generated from fish breeding and fish processing;
- Promoting Resource Efficient and Cleaner Production (RECP) benefits in the fish sector;
- Exploring new opportunities related to RECP as a stepping stone for introducing Circular Economy in Armenia

Successful projects supported by UNIDO, FAO, and USAID will also be presented during the meeting. It is expected that the Guide on Waste Management generated from the fish industry (approved by the Minister of Environment on 27 July 2022), will be presented to the audience to receive feedback for the development of a more user-friendly version.

Participants

The meeting will gather around 50 participants from the Government, state specialized agencies, business organizations, international development partners, and private companies.

Practical Information

The meeting will take place on 22 December 2022 in a hybrid format, at the UN Armenia Conference Hall, 14 Petros Adamyan St, Yerevan 0010 and online (via Zoom). Simultaneous interpretation in Armenian and English will be provided during the meeting.

For those joining the event online, please register by filling out this form.

Organizers:

- Ministry of Environment
- UNIDO

For more information and participation, please contact Ms Anahit Simonyan, UNIDO Country Representative in Armenia, at a.simonyan@unido.org

Background

The Resource Efficient and Cleaner Production (RECP) methodology is implemented by UNIDO in Armenia and other Eastern Partnership (EaP) countries under the EU-funded programme, EU4Environment. Specifically in Armenia, it aims to:

- Deliver RECP capacity-building and demonstration programmes to professionals and entrepreneurs, and technical assistance to industries in the adoption of RECP measures, promoting thus a transition to Circular Economy;
- Promote RECP implementation and scaling up among SMEs by extending the national capacity on RECP among experts and RECP demonstration audits in selected manufacturing enterprises.
- Promote RECP and Circular Economy policies and practices based on best international and national practices.
- Improve knowledge, awareness and communication with beneficiaries, and serve to transfer benefits of RECP through 1) resource productivity and environmental performance of Small and Medium-sized Enterprises, 2) improved quality of products and services, 3) creating additional economic and environmental benefits, strengthened health and safety conditions for businesses.

The EU-Armenia Comprehensive and Enhanced Partnership Agreement (CEPA) pushes the Government of Armenia to improve solid waste governance. Accordingly, this must be done with the following principles at its core (most being essential determinants of the RECP approach as described above):

- 1. Protection and preservation of human health
- 2. Environmental protection, conservation, and improvement
- 3. Reasonable and effective use of natural resources
- 4. Adoption of principles of Circular Economy
- 5. Application of the hierarchy of waste (Directive 2008/98/EC)
- 6. Increase in energy efficiency
- 7. Reduction of Armenia's dependence on imported resources

To move ahead on this reform agenda involving the fisheries sector, on July 27, 2022, the Government of Armenia approved the Ministerial Order No 262-d, regulating fish waste management and aiming to increase ecologic safety while avoiding the negative impact on the environment and human health. In addition, the newly amended water code obliges fish farms to use underground potable water and to introduce closed water systems in the near future. These newly established requirements for Armenian fish farmers are challenging, but there are already existing practices in other countries which present a strong and internationally viable path for fish production.

What at first might seem a challenge should be turned into an advantage for the stakeholders along the fish supply chains to contribute to a sound environment, and to competitive and sustainable enterprises. Most of what is currently seen as waste was at the beginning bought as a costly business component: whether it is water (carrying costs for piping, pumping etc.) or feed (reportedly at 30 per cent and more, which is discarded as sludge or solids in the water).

At the processors level, the sector lacks management of its fish waste. Treating fish waste presents a number of applications among which the most important are animal feed, biodiesel/biogas, dietic products (chitosan), natural pigments (after extraction), food-packaging applications (chitosan), cosmetics (collagen), enzyme isolation, Cr immobilisation, soil fertiliser and moisture maintenance in foods (hydrolysates) and newly blue fashion in the shoe and clothing industry.

Technologies are also available to turn today's fish waste into highly valued by-products in near future. To be appropriate for the national and individual context, these need to be accompanied by increased knowledge and skills.

International cases also show a positive impact on the environment and the increased economic sustainability of enterprises. Success stories report new jobs, with the import of materials being replaced by local produce. On the other side, exports of "new" raw materials and goods positively impact the earnings of foreign exchange.

The successful implementation of the necessary change calls for the cooperation of businesses, service providers, academia, and regulatory bodies to support sectoral upgradation. It also calls for a cross-cutting approach to support sustainable and inclusive solutions. Here, UNIDO is building on its broad experience in the fisheries sector utilising a holistic approach and aims to engage actors on multiple levels, simultaneously.

About EU4Environment

The "European Union for Environment" (EU4Environment – Green Economy) Action helps the Eastern Partnership countries preserve their natural capital and increase people's environmental well-being, by supporting environment-related action, demonstrating and unlocking opportunities for greener growth, and setting mechanisms to better manage environmental risks and impacts.

It is funded by the European Union and implemented by five Partner organisations - OECD, UNECE, UNEP, UNIDO, and the World Bank – over the 2019-2024 period, with a budget of EUR 20 million.

For more information, please visit: <u>www.eu4environment.org</u> or <u>www.recp.am</u>