



12nd World General Assembly of INBO, Bordeaux, France

6-10 October 2024, Centre de Congrès Cité Mondiale, 18
Parvis des Chartrons

Session 4.A. "Reconciling the natural and urban water cycles: basin-scale strategy for wastewater reuse and other non-conventional water resources for water security"

ARMENIA'S EXPERIENCE IN WATER REUSE TO IMPROVE WATER SECURITY

*Martiros Nalbandyan
Deputy Chairman, Water Committee
of the Ministry of Territorial Administration and Infrastructure,
Republic of Armenia
October 9th, 2024*

Country legal framework

- ▶ Water Code
- ▶ National Water Programme
- ▶ Law On the Principles of National Water Policy
- ▶ River Basin management Plans
- ▶ Sectorial Governmental Decrees

Country institutional framework

- ▶ Ministry of Environment
- ▶ Water Committee of the Ministry of Territorial Administration and Infrastructure
- ▶ Country level and regional organizations under the above listed 2 Governmental entities

The main challenges in the water sector

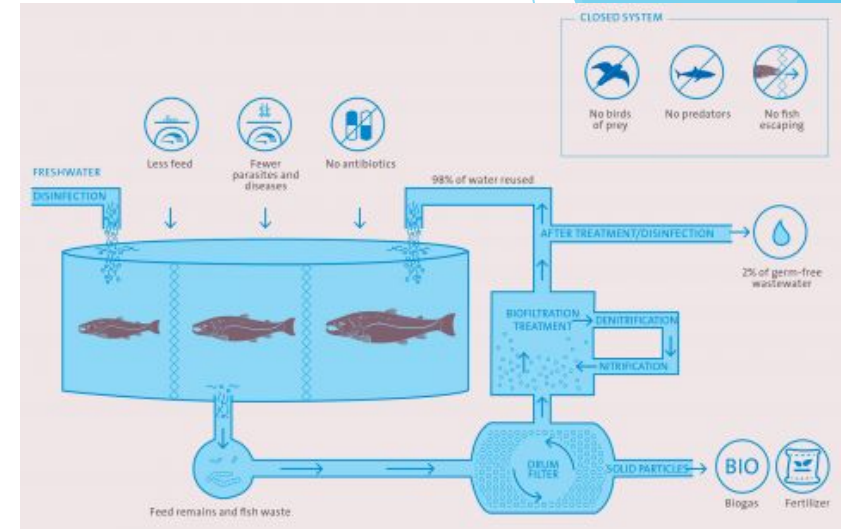
- ▶ Climate change and water scarcity
- ▶ Unequal seasonal flow of the surface water
- ▶ Unequal natural distribution of water resources in river basins
- ▶ High level of electricity consumption
- ▶ Traditional agriculture and irrigation

Mitigation measures and planning

- ▶ Small and medium size reservoirs' construction
- ▶ Daily regulatory reservoirs' construction
- ▶ Modernization of irrigation schemes and pumping stations
- ▶ Rehabilitation of the main and secondary channel
- ▶ Rehabilitation and construction of tertiary systems in the communities
- ▶ Improvement of water measurement
- ▶ Modernization of monitoring system

Water re-use case studies

- ▶ Installation of closed recirculating system in fish farms
(Governmental Programme)
- ▶ New pilot program preparation on water re-use from fish farms in Ararat valley
(Governmental Programme)
- ▶ Project on re-use of water from fish farms for irrigation,
(USAID funded project, 2018)



Re-use of return water from fish farm for irrigation

- ▶ Water scarcity in Ararat valley of Armenia has huge negative impact on food production and improving water security is a cross-sectoral challenge
- ▶ Pilot project on reuse of water from fish farms for irrigation in Sayat-Nova settlement proved to be very efficient
- ▶ Water use by the fishery became more efficient and the settlement does not require additional water to be pumped from the ground for irrigation
- ▶ Multiple effects, including saving electricity and helping to reduce soil degradation
- ▶ Economic incentives are yet now sufficient to replicate the approach at wider scale

International cooperation framework

- ▶ World Bank
- ▶ EU
- ▶ ADB
- ▶ EFSD
- ▶ KfW
- ▶ AFD
- ▶ UNDP
- ▶ USAID
- ▶ EBRD
- ▶ EIB

THANK YOU

The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the right side of the frame, creating a modern, layered effect against the white background.