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# Team up for healthy fish in aquaculture systems of the Prut river basin

www. teamup-healthyfish.com



# Lead beneficiary Institute f Zoology Chişinău - IZ

# Beneficiary 1 "Ion Ionescu de la Brad" Iași University of Life Sciences - IULS

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The project areas (Prut hydrographic basin, the communities of the Republic of Moldova and Iasi County, Romania) are confronted with several common economic, social and environmental challenges. Aquaculture sector has a good potential for local economy of both countriesowing to its role as an important food resource with high demand at local level as well as availability of wetlandsand ponds in the hydrographic Prut riverbasin. However, the this economic sector is of low efficiency.

During the last decades the aquaculture sector from both Romania and Moldova are witnessing important questions regarding fish health and welfare.

The project will offer the local and central authorities opportunities for initiating a dialogue with the fish farmers and address their problems and constrains in regard to fish health management. This will enable them to better understanding of the current situation on fish farming, the potential for its development and the required policy mechanisms that will contribute to its development. The project will offer useful information and project deliverables that can be consulted by the localand central public authorities for the development of national programsas well as for achievingthe goals stated in the nationalprogram (e.g. the case of Romania)promoting environmental sustainability and offering quality fish, produced to the higheststandards of the EuropeanUnion, improved animal health and human protection.

## TeamUp HealthyFish will apply an approach for tackling the needs of the target groups and beneficiaries of the project via the following actions:



Consulting, informing and involving researchers, fish farmers, local public authorities in the activities of the project on fish health management

As a first step, all available information diseases and parasitoses, diagnostic and treatment methods, water quality and fish farming practices (food feedingrate composition, fish and density) for stocking intensive and systems extensive aquaculture of Romania and the Republic of Moldova will be reviewed.

#### Focus group discussion

The project focus group discussion will be carried out with researchers, fish farmers and representatives of ministries of Agriculture/Environment, where it will be possibly to assess the situation and potential economic losses of the fish farms due to diseases/the environmental conditions and management/treatment practices.

The information extracted from the first stage of project implementation will used for design of a participatory focus group discussion to be carried out with researchers and fish farmers.

During the focus group discussion carried out in lasi, experts from IZ will participate and the one carried out in the Republic of Moldova experts from UAVSM will take part.

In this way, it will be possible to get a more holisticand transdisciplinary view, as well as share the best practices and issues of a common concern.

#### **Field expeditions**

Both partner institutions will carry out field expeditions on selected fish farms of Prut river basin on both sides to investigate the ecological status of water quality and disease and parazitoses status.

#### Sharing of research results and joint research activities

Researchers will make short term research visits, when it will be possible to organize joint discussions, to plan the laboratory experiments, to share the results from field works on water quality and fish diseases and treatment methods.

# TeamUp HealthyFish will apply a participatory approach for tackling the needs of the target groups and beneficiaries of the project via the following actions:



#### Laboratory research experiments

Will be focused on three main following directions:

- The application of lacticacid bacteria (LAB) on the improvement of water quality in fish ponds.
- The use of the mix of inorganic forms of trace elements for improving the fish resistance to disease.
- USAVM will focus on including new complexedmolecules of drugs using a nanoconjugated method with B-cyclodextrine as carrier, for better treatment or prevention of the main protozoosis on cultured fish.

Also, new pellets compoundsused in preventing diseases will be tested.

It is expected that the experimental work will provide sustainable environmentally friendly and innovative approaches in fish health diagnosisand control that will enablea reduction of the economic losses and of the costs linked to medical treatment.

#### Joint Research Workshop on Innovations in Fish Farming

The purpose is to share common challenges on the subject of fish diseases and parasitoses, highlight innovations in the field and propose, sustainability of fish farming management practices and fish disease treatment mehods.

At this event, will be also invited representatives of local and central authorities from the Republic of Moldova and Iasi county, Ministry of Education, Culture and Research, Ministry of Agriculture, Regional Development and Environment, Moldova, Agency for Regional Development South-East, Romania.

### Transfer of knowledge and strengthening the capacity of researchers, farmers and veterinarians

The generated common knowledge in the project will be transferred to researchers and fish farmers and local public authorities in form of trainings on the subject of fish diseases and parasitoses and sustainability of fish farming management practices organized by each partner institution.

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#### Project Framework

General objective: Improving the health status of cultured fish and strengthen research and fish farming capacity for ensuring a more efficient production in aquaculture systemsof the Prut river basin.

#### Specific objectives:

- To orient research investigations on fish disease control in aquaculture systems of the Prut hydrographic basin towards fish farmers concerns and needs
- To develop jointly the environmentally friendly methods for the reduction of diseases and parasitological outbreaks in farmed fish stocks
- To improve the capacity of students, researchers, veterinarians and fish farmers for timely prevention, diagnoses and treatment of fish diseases and parasitoses and application of sustainable management farming practices

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#### Project Framework



#### Expected results:

- A participatory baseline assessment performed on economic lossesof fish production due to diseases and fish health status based on farmers knowledge and scientific research investigations.
- Innovations developed in the field of fish disease and parasitological control, as well as of sustainable management of aquaculture systems are used by at least 2 fish farms and 2 research or education institutions in the projectarea.
- Capacity transferred to 40 researchers, 10 veterinarians and fish farmers, 10 decision makersand 60 students on increase of fish farm productivity in the hydrographic basin of the Prut river via fish disease control, sustainable fish farming methods and sustainable management of water quality

#### **Activities:**

- GA 0 Project preparation
- GA 1 Project management A1.1 Project kick off, A1.2 Project coordination, A1.3 Financial management, expenditure verification and financial reporting
- GA 2 Information and communication A 2.1 Preparation and distribution of communication and visibility materials, A2.2 Project launching, A 2.3 TV and radio talks and interviews, A 2.4 Elaboration and updating of projectwebsite, A 2.5 Organization of press conferences
- GA 3 Project implementation A 3.1 Undertake a literature review, A 3.2 Organize focus group discussions, A3.3 Organize field work expeditions, A 3.4 Undertake short research visits, A 3.5 Perform laboratory and in-field experiments, A 3.6 Systematize information and prepare the necessary documents for invention patent application, A3.7 Organize a Joint Research Workshop, A 3.8 Elaborate, publish and distribute the methodological guide, A 3.9 Organize knowledge transfer trainings