

ADRION THEMATIC CLUSTER ON BLUE GROWTH AND RELATED SMART GROWTH

ARIEL AND BIOECO – R.D.I PROJECTS INTERREG ADRION

CONTRIBUTION TO INNOVATION SPEED-UP IN FISHERIES AND AQUACULTURE SECTOR OF THE ADRIATIC AND IONIAN REGION





NEWSLETTER #2

Message from Thematic Cluster Coordinator

Welcome to the 2nd newsletter edition of the Adrion Thematic Cluster on Blue Growth and related Smart Growth. The objectives of Cluster consisted from 10 related project funded under Ionian Adrion framework is to promote the cooperation, to examine common synergies, and to investigate new ideas for next programming period, having as final outcome a joint policy paper with scientific recommendations for influencing the policy debate in the topic of Blue Growth and related Smart Growth. The ADRION Thematic Cluster (TC) comprises a wide range of sectors that are each other inter-dependent and contribute to the overall Blue and Smart Growth frame: aquaculture; bio economy; biotechnologies; shipbuilding and nautical sector development. We hope that this newsletter will create new ways of sharing our knowledge and news with you! Each month you'll get informative articles about Cluster's objectives, as well as updates on programs, contests, and other-related news that will be prepared by two projects of TC each time, in collaboration with Cluster Coordinator.

In this issue we are presenting the contribution to innovation speed-up in fisheries and aquaculture sector of the Adriatic and Ionian region by ARIEL and BIOECO – R.D.I Projects, as two of the members of TC. The sector of fisheries and aquaculture is among of the TC areas that have been identified according to strategic key sectors of development and growth in the Adriatic-Ionian region and following the policy objectives of the new EU Cohesion Policy. In this newsletter you can get to know the two projects, to find out their common and complementary goals and to explore their contribution to innovation speed-up in the sector. Any suggestion from all of you could be send in my personal e-mail or through the projects participating in Cluster. Let's work towards valuable outputs!

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ARIEL at a glance

ARIEL aims to promote technological and non-technological solutions for innovation speed-up and up take in ADRION small-scale fisheries (SSF) and aquaculture (AQ) by means of an interactive cooperation between scientists-policy-makers-entrepreneurs. The project will act as a knowledge network, tackling in a single frame the complex ecological, economic and societal challenges. The project partnership is composed by 9 scientific and institutional organizations from Italy, Croatia, Montenegro and Greece, which operate in fisheries and aquaculture sectors.



ARIEL: the approach for innovation speed-up in ADRION small-scale fisheries and aquaculture sectors

The ARIEL project gives particular attention to the stakeholder engagement process for innovating the transnational small-scale fisheries and aquaculture sectors in the ADRION regions. Based on the successful experiences of the EIP-AGRI initiative launched by the EU Commission on 2012 to promote the innovation speed-up in the agriculture sectors, ARIEL worked to adapt and apply an interactive model of innovation into the SSF and AQ sector, delivering common guidelines for innovation brokering and stakeholder engagement methodology. The project partners acted within the project as public innovation brokers, facilitating the identification of the two sectors day-by-day needs and accompanying a bottom-up innovation discovery process. This by creating an open space where different actors of the SSF and AQ can spontaneously focus on issues of their interest, discussing and exchanging ideas, solutions and experiences as well setting the conditions for cooperation in projects and operations. The organization of 5 regional innovation brokering events, arranged by the project institutional partners, led to the identification of a number of ideas and projects, to the project purposes pilot actions where research cooperates with enterprise for on-field testing were further selected and implemented.

ARIEL PILOT ACTIONS BOX

SMALL-SCALE FISHERIES

- testing Dolphin Deterrent Devices (DDD) "pingers" to reduce/prevent dolphin damages to small-scale fisheries
- testing trammel nets with a special construction to reduce bycatch
- evaluating the "rainbow network" used by Tyrrhenian Sea fishing fleet to minimize the capture of bycatch
- development and testing of mobile application serving as Virtual Marketplace to promote to open and contribute to enforcing a market that recognizes and adds value to small-scale fisheries seafood products obtained by more sustainable fishing practices, socially fair and in a transparent way
- development of fishing tourism business plan, taking under consideration enterprisespecific characteristics.

AQUACULTURE

- testing acoustic pingers pilot studies reducing the impact of gilthead seabream *Sparus aurata* on shelfish farming
- installation of AKVA underwater cameras to increase the efficiency of feeding procedure in aquaculture process, reducing waste of food

ARIEL INNOVATION BROKERING IN FIGURES

5 INNOVATION
BROKERING EVENTS FOR
THE SMALL-SCALE
FISHERIES AND
AQUACULTURE SECTORS
HELD IN ADRION AREA

116 OPERATORS
PARTICIPATING TO THE
INNOVATION BROKERING
EVENTS

MORE THAN 40 INNOVATIVE IDEAS/SOLUTIONS COLLECTED

More info on ARIEL at: https://ariel.adrioninterreg.eu/

Project contacts:

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BIOECO-R.D.I. at a glance

The BIOECO-R.D.I. project focuses on the core idea of the use of biomass from agricultural, fisheries, and forestry waste and residues with the purpose to foster the green reconversion, blue growth, multi-functioning, technology innovation, and cross-sectoral integration. In this perspective, BIO-Economy aims at developing a Regional Innovation System for the Adriatic-Ionian area based on a structured bio-economy sector though the development of Research Driven Innovation (R.D.I.) strategies at regional and transnational level. The project partnership is composed of 6 scientific and institutional organizations from Italy, Croatia, Serbia, Slovenia, Albania and Greece, which operate in various sectors, one of them being fisheries and aquaculture.

BIOECO-R.D.I. fisheries and aquaculture (Croatian partner – Ruđer Bošković Institute)

The framework of activities in the fisheries and aquaculture sector within the project defines the base of the activities in which strategic intervention sets are established in terms of creating the basic conditions for implementation of the regional strategy for identifying and acquiring bioeconomy knowledge necessary for more substantial use of the current fish industry waste. This study is the first step in recognizing and identifying the current state of the fish industry in the Republic of Croatia in terms of by-products disposal. Based on the elaboration of this study, possible frameworks and methods of fish waste disposal will be defined for the purpose of further evaluation of the economic rationale for the fish waste industry. Therefore, all segments of fisheries in terms of resources, activities, and practice of current fish waste disposal were analysed. An analysis of current legislative norms as well as analyses of processing options is needed in order to draw clear and authoritative guidelines for partial and full use of fisheries and aquaculture waste. The overall objective in this sector thus was to contribute to a goal of establishing models of best practices in fish waste management through knowledge transfer, and assist in design and promotion of economically efficient fish waste management plans (FWMP) from wild catch, mariculture, aquaculture and processing in order to reduce the environmental impact which waste and by-products leave behind. The main beneficiaries are the stakeholders involved in aquatic animals farming, fishery, processing, algae production and waste disposal.

BIOECO-R.D.I. PILOT ACTION BOX

We found essential to contribute to the start-up and development of a well-organised competitive fish waste management strategy. Action includes preparation of work material, education and promoting of specific fish waste management plan (FWMP) categories, and carrying out an industry survey (questionnaire) to ascertain the quantities of by-products generated in the Republic of Croatia and to determine the priorities regarding the disposal value.

Output: FWMP in general and related to several industry branches:

- FWMP for discard/boat practices
- FWMP in marine fish farming
- FWMP in shellfish farming
- FWMP in processing industry

Objectively verifiable indicators in this sense are: a review of present status of fish waste management in the Adriatic - legislation and obligations; estimating parameters on fish quantity generated as fish waste in specific industry; applying best management decision to design and propose FWMP generally, and enterprise-driven; several models of FWMP prepared for specific industry - new management strategy and protocols.

The Pilot Action was conducted through a limited set of actions selected in scope with the readiness and feasibility, and according to the Strategy.

- The local network was composed, including the key actors/beneficiaries of the Pilot Action.
- A series of dialogues in form of meetings and round tables was conducted with the key actors (including SMEs and policy makers), as well as on-the-spot counselling. In that sense, we enforced collaboration with industry, activated knowledge transfer process, initiated collaborative research projects.
- Two collaboration agreements were signed between the Croatian partner and SMEs dealing with microalgae biomass utilization.
- Education was aimed at finding and promoting new technical and technological advances in product utilization and disposal, and at raising awareness and knowledge about the circular economy in fisheries, aquaculture (fish, shellfish and algae) and processing (conducted also via the two regional webinars and an international webinar, with a wide visibility)

BIOECO-R.D.I. INNOVATION BROKERING IN FIGURES

#80+ FOOD-PROCESSING, FISH AND SHELLFISH FARMING, AND FISHERY SMEs WERE INTERVIEWED VIA THE QUESTIONNAIRE TO ASCERTAIN THE QUANTITIES OF BY-PRODUCTS AND TO DETERMINE THE PRIORITIES REGARDING THEIR DISPOSAL VALUE

A NUMBER OF INITIATIVES WERE HELD, INCLUDING AUDIENCES FROM THE INDUSTRY, SCIENCE, HIGHER EDUCATION, AND

PUBLIC BODIES:

14 MATCHMAKING INITIATIVES # 6 AWARENESS EVENTS # 8 CAPACITY BUILDING EVENTS (SEMINARS, SYMPOSIUM, WORKSHOPS, TECHNICAL

More info on BIOECO – R.D.I at: https://bioecordi.adrioninterreg.eu/

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NEXT STEPS of THEMATIC CLUSTER

- Stay tuned in order to explore the next monthly newsletters of our Thematic Cluster, with informative articles about Cluster's objectives, as well as updates on programs, contests, activities, and other-related news;
- Next newsletter dedicated to Green shipping/shipbuilding by NEORION and SHIPmEnTT projects of TC;
- Development of a joint policy paper exploiting results and recommendations of the Cluster projects in order to provide clear recommendations for EU policy makers addressing Blue Growth;
- Development of a report on new areas/fields of intervention/project ideas developed by the TC to be financed in the next programming period.



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