



## Presenting the CIHEAM Working Group on Coastal Zone management and Fisheries (WG-CZMF)



# Contents

- 1. Introduction..... 3
  - 1.1. Background..... 3
  - 1.2. Our mission/strategy..... 4
  - 1.3. Partnerships with other Institutions and International Organizations ..... 5
    - 1.3.1. FAO ..... 5
    - 1.3.2. GFCM ..... 6
- 2. Our structure and resources ..... 7
  - 2.1. CIHEAM Bari ..... 7
  - 2.2. CIHEAM Chania..... 8
  - 2.3. CIHEAM Montpellier..... 8
  - 2.4. CIHEAM Zaragoza ..... 9
  - 2.5. Working Group Contacts..... 10
- 3. Our programme of work ..... 11
  - 3.1. Education..... 11
    - 3.1.1. Master of Science programmes ..... 11
    - 3.1.2. Specialised training..... 12
  - 3.2. Research and Cooperation ..... 13
    - 3.2.1. Research projects on Aquaculture (CIHEAM Zaragoza and CIHEAM Bari)..... 13
    - 3.2.2. Projects on Coastal Zone Management (CIHEAM Montpellier)..... 14
    - 3.2.3. Sustainable Socio-Economic Development (CIHEAM Bari) ..... 15
    - 3.2.4. Fishery and Diversification Activities (CIHEAM Bari)..... 16
    - 3.2.5. Aquaculture (CIHEAM Bari) ..... 17
    - 3.2.6. Environment Protection and Safeguard (CIHEAM Bari) ..... 17
- ANNEX 1. Previous Research and Cooperation Projects on Coastal Zone management and Fisheries 19



## 1. Introduction

Established in 1962, the CIHEAM (International Centre for Advanced Mediterranean Agronomic Studies) is a Mediterranean organisation that strives to improve sustainable agriculture and fisheries, to ensure food and nutrition security and to develop rural and coastal territories. The actions of the CIHEAM are based on bottom-up collaboration and are problem-solving oriented, in relation with the special needs of the countries. The CIHEAM is recognised for its postgraduate and professional training offer as well as for the management of international cooperation and research projects.

More recently, in line with the UN Sustainable Development Goals (SDGs) and the EU Biodiversity Strategy adopted in 2011, the CIHEAM has implemented its Action Plan 2025 for the Mediterranean (CAPMED 2025), which intends to propose solutions to back up transition and encourage multilateral initiatives able to pool countries, private and public stakeholders around themes which are at the core of SDGs.

SDG 8 “Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” and SDG 14 “Conserve and sustainably use the oceans, seas and marine resources for sustainable development”, addresses two important goals that the CIHEAM have been working on since its inception.

### 1.1. Background

Policies on sustainable development of rural environments including coastal areas and/or fisheries have been implemented for a long time by international organisations such as the FAO, the European Union, the General Fisheries Commission for the Mediterranean and the Union for the Mediterranean (UfM) as well as national authorities from both Mediterranean shores (for example the strategy AQUAPECHE 2020 in Algeria or the Aquaculture Strategy for the Maltese Islands towards Sustainability 2014-2025). Bilateral cooperation between countries should also help to exploit resources in a sustainable way. Last but not least, some of the most prominent international organisations involved in development like the United Nations and the World Bank, have highlighted the importance of the Mediterranean by setting up specific organisations for this region, which are respectively the PAM/Plan Bleu and the CMI.

However, despite the common interest shared by all these organisations for the Mediterranean and in particular the Blue Economy, their objectives and their tools to achieve them may be different.

Indeed, some of them deal with sustainable development in the Mediterranean in a global way or to improve stability of the region, and only a very small part of their activities is actually related to coastal areas and fisheries. On the contrary, other organisations were created specifically to focus on the issue of coastal environments and fisheries in the Mediterranean, and have expanded their activities to the broader field of development.

Whereas the European Union through the Common Fisheries Policy, the Mediterranean States with their power of regulation and control, and the General Fisheries Commission for the Mediterranean can take regulatory, compulsory measures to reach their goals, other organisations rather adopt



incentive measures, such as financial support to research or the dialogue with stakeholders. In some cases, both incentive and compulsory measures can be implemented by the same organisation, such as the EU.

The CIHEAM can play a major role in connecting both cooperation and political dialogue on the one side and specific training and research on aquaculture and fisheries on the other side, because all these activities have been equally paramount for the CIHEAM for nearly 60 years, considering it as a natural bridge between many organisations. The CIHEAM strongly believes that multilateralism is the right approach to tackle issues of coastal zones management and fisheries.

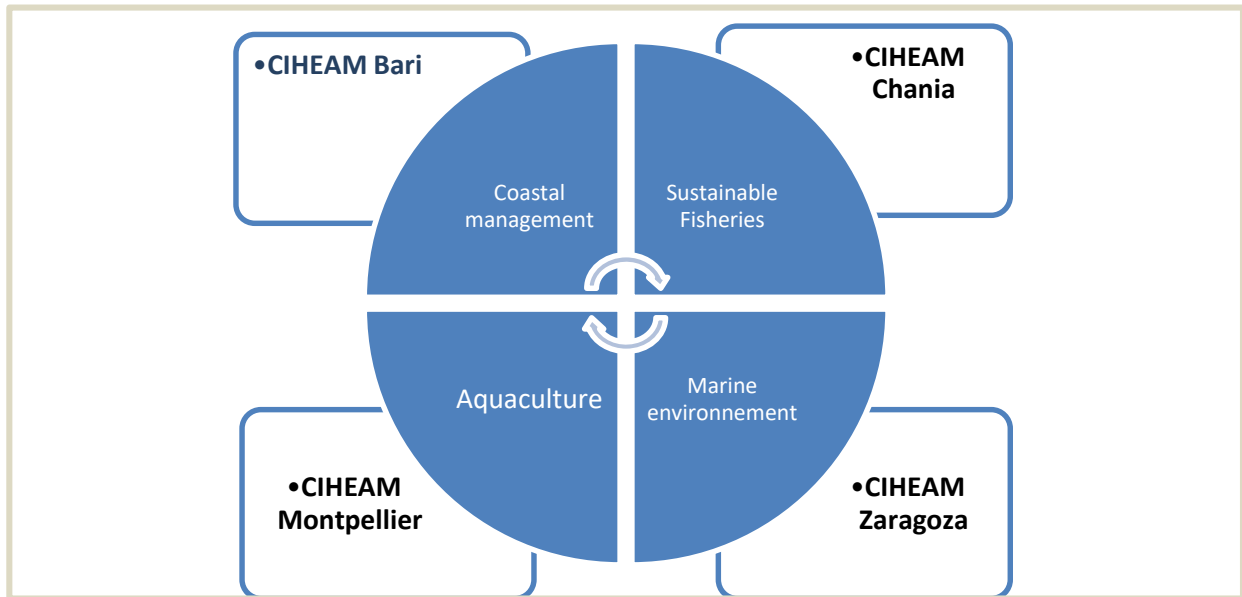
As far as technical aspects of sustainable coastal zones management and fisheries are concerned, the CIHEAM shares the need of collecting, gathering and communicating more relevant data on the sectors of aquaculture and fisheries, which implies a support to research in those fields and therefore access to funding. The CIHEAM also supports training for professionals for sustainable fishery as well as their integration into the decision-making process.

Regarding the general dimensions of development deeply linked with coastal zones management and fisheries, the CIHEAM fully supports the attention called upon issues such as capacity-building, women empowerment in the sectors of aquaculture and fishery, the role of aquaculture and fisheries as a job provider for the young, the promotion of human mobility and the contribution of coastal zones and fisheries to biodiversity and the fight against climate change.

To put it in a nutshell, CIHEAM can facilitate networking for all those involved in these issues, so that various actions in favour of coastal zones development and fisheries on the Mediterranean can be consistent and therefore more successful.

## **1.2. Our mission/strategy**

Aiming to coordinate objectives and increase synergies, in 2019, the CIHEAM decided to create an institutional **Working Group on Coastal Zone Management and Fisheries (CIHEAM WG-SCZMF)**, with the participation of experts from the four Institutes (Bari, Chania, Montpellier and Zaragoza) working in these areas of knowledge. By improving coordination and developing common work-plans, the CIHEAM expects to offer not only a stronger corporate vision, but also to contribute to capacity building in the region and better support policy recommendations and priorities defined by national and international organisations.



This important mission is expected to be accomplished by providing concrete solutions through a broad range of activities, including the analysis of current problems and needs in the region, the organisation of Master programmes and specialised training courses for professionals, by participating in international projects, and by supporting and improving coordination between institutions and networks of research.

### **1.3. Partnerships with other Institutions and International Organizations**

The CIHEAM has a long-standing history of cooperation with Institutions and International Organisations working in the field of CZMF.

#### **1.3.1. FAO**

The collaboration between the FAO and the CIHEAM is periodically updated through a Memorandum of Understanding, the last one renewed in June 2019. Among the priority areas and activities set in the Work Plan that will serve as the basis for collaboration with relation with CZMF, the following two topics have been identified: i) support development of regional strategies and policies on small-scale and family farming and small scale fisheries to enhance food security and improve rural live hoods, and ii) jointly implement the Blue Hope Technical Cooperation programme.

Every year, CIHEAM Zaragoza and FAO Fisheries Division organise an Advance course on different topics of interest of Fisheries and Aquaculture, addressed to professionals. These collaborations are formalised through ad-hoc Letter of Agreements (LoA).

In March 2019, the University of Alicante the Mediterranean Agronomic Institute of Zaragoza (CIHEAM Zaragoza), the Food and Agriculture Organization of the United Nations (FAO) on behalf of the General Fisheries Commission for the Mediterranean (GFCM), the General Secretariat of Fisheries (SGP) of the Spanish Ministry of Agriculture, Fisheries and Food (MAPA) signed a Protocol of Collaboration for the cooperation in the organisation of an International Master in Sustainable Fisheries Management.



In September 2018, the FAO and the CIHEAM Bari organised a workshop with the participation of country representatives from Algeria, Tunisia and Turkey in order to assess and agree upon the Work Plan for the **Blue Hope<sup>1</sup> Technical Cooperation Programme**. In the framework of this Programme, the CIHEAM Bari provided technical support to government agencies and communities in Algeria, Tunisia and Turkey to enhance their capacities for the sustainable management of coastal areas and the management of fisheries and aquaculture.<sup>2</sup>

Finally, both the FAO and the CIHEAM participate as partners in different research projects, i.e. the H2020 project MedAID.

### **1.3.2. GFCM**

In 2018-2019, the CIHEAM participated in a number of meetings organised by the GFCM to provide technical inputs to programmes and projects on sustainable fisheries in the Mediterranean and beyond. The CIHEAM acted as a technical partner in the GFCM's Forum on Fisheries Science in the Mediterranean and the Black Sea (FAO headquarters, 10-14 December 2018) and also participated in the coordination meeting of the "Friends of Sustainable Small Scale Fisheries" for the implementation of the Regional Plan of Action for Small-Scale Fisheries in the Mediterranean and Black Sea (RPOA-SSF, 15 February 2019, Rome) and the GFCM High-level conference on MedFish4Ever Initiatives: Advances and Renewed Commitments (11-12 June 2019, Marrakech, Morocco).

The CIHEAM also provided technical inputs to the GFCM technical working groups, including the Workshop on Guidelines in Support of Social Acceptability for Sustainable Aquaculture Development (8-10 April 2019, Monastir, Tunisia).



---

<sup>1</sup>The Blue Hope Initiative was launched following exchanges between the former Director-General of FAO, José Graziano Da Silva, and Pope Francis, with the goal of improving the livelihoods of the most vulnerable Mediterranean communities.

<sup>2</sup> For more information see [www.fao.org/blogs/blue-growth-blog/faos-blue-hope-initiative-launches-in-algeria-tunisia-and-turkey/en](http://www.fao.org/blogs/blue-growth-blog/faos-blue-hope-initiative-launches-in-algeria-tunisia-and-turkey/en).



## 2. Our structure and resources

The WG-CZMF is based on the infrastructures and resources of the four CIHEAM Institutes, whose activity is summarized here below, and will count on the Coordination of Bernardo Basurco (CIHEAM Zaragoza), and a team of experts and complementary profiles from CIHEAM Bari (Massimo Zuccaro), CIHEAM Chania (Chariton Kalaitzidis) and CIHEAM Montpellier (Zied Ahmed).

### 2.1. CIHEAM Bari

The **CIHEAM Bari** promotes an integrated development model based on “Social and Cultural Districts” as paradigm of coastal communities' development to strengthening the three “capitals” available in coastal communities (Human Resources Capital, Social and Productive Capital, and Environmental Capital) through community empowerment actions based on inter-sectorial integration, social inclusion and North-South and South-South dialogue and knowledge exchange. Since the last few years, the CIHEAM Bari has been promoting the sustainable development of the Mediterranean Coastal Vulnerable Communities (MCVCs), acting on the strengthening and integration of three key sectors of Blue Growth as Fisheries, Aquaculture and Coastal Tourism.

**The Tricase branch of CIHEAM Bari** is both a marine station and a place of cooperation for Mediterranean institutions, social and cultural organisations, associations and individuals, all engaged in a smart and sustainable growth in coastal communities. It was founded by CIHEAM Bari on the occasion of the territorial cooperation project BIG (Greece-Italy 2007-2013), in partnership with the Municipality of Tricase, the local Association Magna Grecia Mare, the University of Salento and the Regional Park "Costa Otranto, S. Maria di Leuca e Bosco di Tricase".



**The Tricase branch of CIHEAM Bari**



## 2.2. CIHEAM Chania

The **CIHEAM Chania** and in particular, the Department of Geoinformation in Environmental Management, has had some experience in research and collaboration activities related to coastal zone management. This was achieved mainly in the framework of EU-funded projects, as well as **CIHEAM Zaragoza** during the thesis of students attending the MSc course on Geoinformation in Environmental Management. The CIHEAM Chania maintains a close collaboration with some research institutions, such as the Hellenic Centre for Marine Research.



**The old Venetian harbour of Chania**

## 2.3. CIHEAM Montpellier

The **CIHEAM Montpellier** is the point of entry on the issue of coastal zone development through its territorial approach of development that takes significant consideration of the populations - including the most vulnerable - and their skills and the territories and their resources to promote a territorial economy that optimizes the local economic and social benefits and the sustainability of the economic diversification processes undertaken. Initiated in rural areas, this approach has been extended, according to the opportunities, to the coastal territories in a dynamic similar to the European LEADER approach.



The CIHEAM Montpellier is actively engaged in the implementation of territorial development actions on the coastal zones and the consolidation of interterritorial partnerships associating European coastal territories and coastal territories in the South of the Mediterranean.





## 2.4. CIHEAM Zaragoza

The **CIHEAM Zaragoza** offers a broad training programme on fisheries and aquaculture, which includes two Master of Science CIHEAM programmes as well as several advanced short courses. The Master programmes are organised in the coastal cities of Alicante (Sustainable Fisheries Management) and Las Palmas de Gran Canarias (Marine Aquaculture), whereas the specialized short courses can be organised in Zaragoza or in other locations, depending of the subject matter of the course and the collaborating institutions.



Recently, The CIHEAM Zaragoza has signed a Memorandum of Understanding with the Spanish Fisheries General Secretariat to establish a common framework of cooperation in support of the organisation of the University Master on “Sustainable Fisheries Management” and in support of the activities. Thanks to this agreement the CIHEAM Zaragoza is now collaborating in the implementation of practical training modules on the [Ship Intermares](#), a firm and innovative commitment of the Spanish Government to international fisheries cooperation.





## 2.5. Working Group Contacts

---

CIHEAM Corporate Website:  
<https://www.ciheam.org/>

Email of CIHEAM WG-CZMF  
[czmf@ciheam.org](mailto:czmf@ciheam.org)

---



**Bernardo Basurco**  
WG coordinator  
CIHEAM Zaragoza  
[basurco@iamz.ciheam.org](mailto:basurco@iamz.ciheam.org)



**Vincenzo Fersino**  
CIHEAM Paris  
[fersino@ciheam.org](mailto:fersino@ciheam.org)

---



**Zied Ahmed**  
CIHEAM Montpellier  
[ahmed@iamm.fr](mailto:ahmed@iamm.fr)



**Massimo Zuccaro**  
CIHEAM Bari  
[zuccaro@iamb.it](mailto:zuccaro@iamb.it)

---



**Chariton Kalaitzidis**  
CIHEAM Chania  
[chariton@maich.gr](mailto:chariton@maich.gr)

---



### 3. Our programme of work

The CIHEAM offers a broad programme of training addressed to graduates who wish to specialize in a given subject and professionals interested in updating their knowledge. This offer includes the Master of Science Programme duration of two academic years (120 ECTS) and the Advanced courses for professionals of shorter duration. Topics addressed included Management of fisheries and aquaculture, seafood, and different aspects of Coastal Zone Management.

#### 3.1. Education

##### 3.1.1. Master of Science programmes

The **Sustainable Fisheries Management Master** is jointly organised by the University of Alicante (UA), the Spanish Ministry of Agriculture, Fisheries and Food (MAPA), through the General Secretariat of Fisheries (SGP), and the CIHEAM Zaragoza. The General Fisheries Commission for the Mediterranean (GFCM) and the Fisheries and Aquaculture Department of the United Nations Food and Agriculture Organisation (FAO), also participates in its organisation by providing technical support.



The Master, which is offered since 2004, is held every two years (current edition 2019-2021) and it is structured in two parts (120 ECTS). It provides a multi-disciplinary approach of sustainable fisheries management from the perspective of different sciences such as biology, economics, law and sociology. [More information about this Master here.](#)

The **Marine Aquaculture Master**, is jointly organised by the University of Las Palmas de Gran Canaria (ULPGC), and the CIHEAM through the Mediterranean Agronomic Institute of Zaragoza. It is offered every two years (current edition 2018-2020), and is structured in two parts (120 ECTS) held over two academic years (120 ECTS).





It is an intense specialisation programme that addresses the principles of aquaculture, the cultivation techniques of the most representative species and the different areas of study that support this activity: nutrition, pathology, genetics, reproduction, engineering, economics and the environment.

[More information about this Master here.](#)

### 3.1.2. Specialised training

**Advanced specialized Training Programme on "Sustainable Development of Coastal Communities"** (10 weeks). The first edition organised in September-November 2019 was held at the Tricase branch (Port museum of Tricase – Lecce, Italy), and was implemented in collaboration with the FAO and funded by the Italian Cooperation, in the framework of the Blue Hope initiative. The course was aimed to strengthen the capacities of stakeholders capacities and develop and implement integrated management policies, strategies and tools, focusing especially on stakeholders' empowerment, offering a comprehensive view of the Blue Economy explored through a cross-sectoral approach ([watch promotional video](#)). A second edition of the training programme is planned in the year 2021.



Every academic year, the CIHEAM Zaragoza organises three or four **Advanced courses for professionals**, which last one week ([see here](#)). Most courses are organised with the support of different international and national institutions, as well as in collaboration with EU funded projects. Worthy of mention is the collaboration with the Fisheries Division. These courses are aimed to cover an important training need in the Mediterranean region for updating professionals' knowledge and capacities, and are normally provided in English, with simultaneous interpretation into Spanish and French. Courses are taught by invited renowned experts selected for their expertise in the subjects working in research centres, universities, administration bodies, private firms and international organisations from all over the world.

The topics are selected according to their current relevance and interest and, when considered appropriate, successive editions of the same course are organized in different years. The course contents are fundamentally applied and address socioeconomic or management issues, scientific and technical aspects or particular methodologies, which are grouped in the following four thematic areas: i) Sustainable management of Mediterranean fishery resources; ii) Marketing and increasing the value of Mediterranean fishery and aquaculture products; iii) Improvement of the efficiency of aquaculture production systems, and iv) Fish health management in aquaculture. Since 1995, more than 75 advanced courses have been organized on this field of knowledge.

The 2020-2021 Work-Plan includes the following courses:

- SUSTAINABILITY ASSESSMENT AND SOCIAL ACCEPTANCE OF AQUACULTURE PRODUCTION (24-28 Feb. 2020), jointly organised by the CIHEAM Zaragoza and the EU H2020 funded projects MedAID and TAPAS.
- INNOVATIVE TOOLS AND METHODS FOR ENSURING SEAFOOD AUTHENTICITY, jointly organised by the CIHEAM Zaragoza, and the EU Interreg project SEA-TRACES and the Department of Fisheries and Aquaculture of the FAO. The course was planned to be held in June 2020, and due to Coronavirus it has been postponed to April 2021 and will be online (live streaming).
- ORGANIZATION OF FISHERY STATISTICS SYSTEMS, jointly organized by the CIHEAM Zaragoza and the Department of Fisheries and Aquaculture of the FAO. The course was planned to be held in Zaragoza on 9-13 June 2020, and due to Coronavirus it has been organised Online from 9 to 19 November 2020.
- Online Advanced course on AQUACULTURE EPIDEMIOLOGICAL SURVEILLANCE, jointly organised by the CIHEAM Zaragoza and the EU H2020 funded project MedAID, from 23 September to 27 October 2020.

### **3.2. Research and Cooperation**

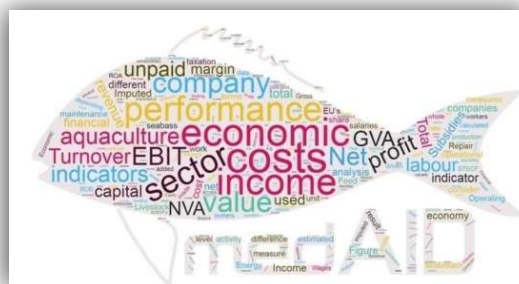
The CIHEAM promotes and facilitate the collaboration between experts belonging to research teams from CIHEAM member countries and other European and non-European countries. It seeks this key objective through the participation in Research and Cooperation projects funded by different sources, i.e. the Research and Innovation programme of the European Union., programmes, and networks that participation, the Interreg cooperation programmes, the LIFE programme and national Cooperation programmes (mainly Italia Cooperation).

The four Institutes have been active and have collaborated, participated as partners or also coordinated different projects. Here below, it us summarized the projects that CIHEAM is currently participating the field of Coastal Zone Management and Fisheries.

#### **3.2.1. Research projects on Aquaculture (CIHEAM Zaragoza and CIHEAM Bari)**

Currently, in the framework of the Horizon 2020 Programme, the CIHEAM Zaragoza coordinates the project MedAID (Mediterranean Aquaculture Integrated Development), a Research and Innovation Action (2017-2021) aiming to increase the overall competitiveness and sustainability of the Mediterranean marine fish-farming sector, throughout the whole value chain. MedAID is made up of a consortium of 36 partners from 13 countries across the Mediterranean region and Europe, with different profiles that will interact with each other to provide applied research results and recommendations for improving zootechnical performance, business plans and governance.

<http://www.medaid-h2020.eu/>





More recently, *the CIHEAM Bari and the CIHEAM Zaragoza* have joined efforts to participate in project **NewTechAqua (New Technologies, Tools and Strategies for a Sustainable, Resilient and Innovative European Aquaculture)**, a Research and Innovation Action funded by the Horizon

2020 Programme-2020-2023, leading the Work package on Communication, Dissemination and Training. The main goal of the NewTechAqua project is to expand and diversify European aquaculture production of finfish, molluscs and microalgae by developing and validating technologically-advances, resilient and sustainable applications. <https://www.newtechagua.eu/>

Moreover, the **CIHEAM Bari** is providing know-how, expertise and training tools for implementing the e-learning activities under the **FutureEUaqua project (Future growth in sustainable, resilient and climate friendly organic and conventional European aquaculture)**, a Research and Innovation Action funded by the Horizon 2020. <https://futureeuqua.eu/>



### 3.2.2. Projects on Coastal Zone Management (CIHEAM Montpellier)

Funded in the framework of the bilateral Neighbourhood Programme managed by the EU Delegation in Tunisia, the **CIHEAM Montpellier** coordinates the **Devlok Project**: implementation of a participative and inclusive approach to support the maritime, agricultural and rural economy of the Kerkennah islands based on a sustainable mobilisation of the local resources). The Devlok (2017-2020) objective is to strengthen the maritime, agricultural and rural economy of Kerkennah islands by supporting the emergence of economic and social projects based on sustainable use of local resources, and in particular its specific resources, for the benefit of the entire population.





The CIHEAM Montpellier also coordinates the TERRICOOP initiative (October 2019); a cooperation project between three French territories and the Kerkennah archipelago revolving around four themes jointly identified by the actors of these territories, namely: the invasion of the blue crab, the labelling of sea products, sea plastic pollution management and promotion of agroecology.

### **3.2.3. Sustainable Socio-Economic Development (CIHEAM Bari)**

The **CIHEAM Bari** has been engaged for years in numerous projects in the field of Coastal Zone Management, and it is currently active in projects within several cooperation programmes.

The project **NEMO KANTARA “Stabilisation et développement socioéconomique des Régions côtières tunisiennes.”** (2019-2022), funded by the **Italian Cooperation**, aims to improve the resilience of coastal communities through the integrated and sustainable management of natural resources and participation in local development. The approach of the project, which addresses the international definition of “Blue Growth”, contains innovative elements which emphasize the need to find a synthesis between the production processes, services and commercial networks of coastal communities through instruments for integrated capacity development and community management of natural resources.

The project **MarE “Institutional Assistance for the Development of the Albanian Maritime Economy”** (2018-2021), funded by the **Italian Cooperation**, provides technical assistance to Albanian Institutions for the planning of sectoral interventions on sustainable management of natural resources to be implemented through the financial opportunities provided to the Albanian coastal and maritime economy by the Italian Cooperation (Soft loan), international donors and national funds. The main output consists in three engineering projects for revamping the main three fishing ports in Albania (Durrës, Valona, Shëngjin); management plan of small pelagic stocks (anchovy and sardines) based on data collected by scientific campaigns and overall assessment of the fishery fleet capacity in Albania; development plan of Butrinti lagoon.

The project **SHAREBLUE “Sustainable horizons for the blue economy in the Kenyan coastal area”** (2020-2021), funded by the **Italian Cooperation**, is intended as a bridge towards the launch of the GOblue programme financed by the EU, which is focused on the development of the blue-economy on the Kenyan coastal areas. The main objective of the project consists in the technical and institutional strengthening of the JKP (Economic Block of the Coastal counties) in blue economy sector through the support in defining and adopting economic blueprints, sharing competencies and implementing flagship pilot projects.

The project **WaterMedyIn “Youth and Innovation for Sustainable Management of Water and Marine Resources in the Mediterranean”** (2019-2020) funded by **Italian Cooperation**, contributed to the sustainable development in line with the SDGs, promoting youth entrepreneurship, youth inclusion and socio-economic opportunities in the water and marine-coastal sectors in the 4 Mediterranean countries: Egypt, Lebanon, Palestine and Tunisia. A special attention was paid to the development of women-led businesses. The water and coastal resources sector has been chosen for its relevance with the main issues of the region, and for the possible multiple benefits and expected impact, in terms of: managing the demand for water resources, efficiency of water networks and health services, pollution reduction, contribution to the reconstitution of groundwater, improvement of access to water in areas



not served, better management of marine- coastal resources. The initiative has set-up a network of innovation, adopting a coherent and coordinated approach, contributing to the sustainability of socio-economic development, protection of natural resources and enhancement of the immaterial and material cultural heritage of the Mediterranean communities, to reduce the risk of unemployment and emigration of coastal communities east of Misratha in Libya.

The project **MUSE “Development and valorisation of port museums as natural and cultural heritage sites”** (2018-2020), funded by **INTERREG Greece-Italy 2014-2020 Programme**, aimed at developing, enhancing and establishing connections between port museums as natural and cultural heritage sites. The concept of ‘Port Museum’ was born from the idea of investing in culture and nature to guarantee the social and economic sustainable development in coastal and marine areas. , The Port Museum preserves the traditional lifestyle of the maritime community including the activities of carpenters, chefs, local associations and their “day-to-day” work (<https://greece-italy.eu/rlb-funded-projects/muse/>).

The project **ARCA ADRIATICA “Protection, promotion and touristic valorisation of Adriatic maritime heritage”** (2019-2021), funded by **INTERREG Italy -Croatia 2014-2020**, intends to develop a common tourism product, based on the principles of social and ecological sustainability which, at the same time, valorises, preserves, protects and promotes the rich maritime heritage of the border area present in small-medium cities with local ports. The project’s actions protect the existing intangible maritime heritage and systematically exploit it through a series of measures (adaptation of interpretation centres, organisation of educational-demonstrative manifestations, promotional campaign, etc.), in order to develop and revive a common tourism product. The CIHEAM Bari, thanks to its strategic Tricase branch located in the Port Museum of Tricase (further developed through the MUSE project), intends to strengthen and promote the value of the port’s maritime heritage (<https://www.italy-croatia.eu/web/arcaadriatica/about-the-project>).

#### **3.2.4. Fishery and Diversification Activities (CIHEAM Bari)**

The project **FISHMEDNET “Fishery Mediterranean Network”** (2019 – 2021), funded by **ENI CBC MED 2014-2020 Programme**, aims to establish cross-border collaborations between Mediterranean MSMEs active in fisheries diversification, providing them with training, professional assistance for new services' development, products and innovative tools to improve their marketing. Through the coordination of training activities and planning, the CIHEAM Bari will contribute to improving the expertise of fishing sector companies. The project capitalises upon the outcome of two previous initiatives (FISHINMED and READYMEDFISH) funded by ENPI CBC MED 2007-2013 Programme.

The project **ITACA “Innovative tools to increase the competitiveness and sustainability of small pelagic fisheries”** (2019-2021), funded by **INTERREG Italy-Croatia 2014-2020 Program**, promotes the competitiveness of Italian and Croatian fishery enterprises in the Adriatic area, for the fishing of small pelagic stocks in a sustainable way, especially anchovies and sardines. A predictive economic model, continuously updated, it has been set up to allow data analysis of fishing and fish markets in the Adriatic area. It determines in real time how many anchovies and sardines a single market can receive, also indicating the product’s quantity which each fishing company could catch in the period to maximize its profit. A software based on the aforementioned predictive model was developed and





addressed to fishing operators. As a result, this on demand fishing system will preserve the natural small pelagic populations, as they are no longer overexploited, in a sustainable way. (

### **3.2.5. Aquaculture (CIHEAM Bari)**

The CIHEAM Bari is participating in the implementation of the research and development programme entitled "**Common Actions for the Qualification of Aquaculture and Sustainable Fishing Products to Promote their Marketing and Transformation**" (2014-2023), funded by the European Operational Program for Maritime Affairs and Fisheries - EMFF 2014-2020. As part of the research programme, the "*Sustainable Aquaculture*" production regulations have been defined. They provide the quality and sustainability standards that companies are obliged to respect in order to adhere to the National Zootechnical Quality Regime recognised at Community level, according to Reg. EU no. 1305/2013. Furthermore, under the implementation of the 2014-2020 EMFF Operational Programme, the "*Decalogue for the sustainability of small coastal artisanal fishing*" has been developed with the aim of qualifying artisanal fishing products.

The project **MYANMED 2 "A Mediterranean model for the fishery sector and food security development in Myanmar"** (2021 – 2023) aims to support the food security in the fishery sector for the development of both the local market and the export sector. The Project is a flagship initiative considering that the Italian system has a comparative vantage in the sector in terms of scientific research, technologies, processing and in the hygienic and sanitary regulations. This private public dialogue between the two countries is aimed at the development technological and commercial agreements that are now also crucial for Italian enterprises. The Project intends to support the economic sector affected by the COVID 10 emergency; it supports Institutions, local markets and export sector developing a "social-economic post pandemic response", according also the Covid-19 Economic Relief Plan (CERP). Over the whole duration of the project, the CIHEAM Bari is implementing a sanitary protocol respecting the WHO indications to reduce the sanitary risks related to the project activities execution, both in Myanmar and in Italy.

### **3.2.6. Environment Protection and Safeguard (CIHEAM Bari)**

The main objective of the project **BLUE LAND "Participatory model for the sustainable management of marine and coastal resources and for cross border habitats, biodiversity and ecosystem services safeguard"** (2018-2020), funded by INTERREG-IPA CBC Italy - Albania - Montenegro Programme 2014-2020, is to develop and implement a participatory and ecosystem-based model for the protection and safeguard of marine and coastal resources, habitats, biodiversity and ecosystem services. The activities are implemented with the active involvement and collaboration of coastal communities in the three pilot areas: Tricase (Le, Italy), Porto Palermo (Albania), and Bojana Bay (Montenegro). An ecosystem services' mapping characterization and of the main environmental and socio-economic indicators have been conducted, establishing several areas for biodiversity protection, safeguarding and sustainable use of ecosystem services. Furthermore, an ICT platform was developed, consisting of Web-GIS for the coastal integrated planning and a Mobile App for the communities' involvement in monitoring the indicators linked to the ecosystem services detected (<https://blueland.italy-albania-montenegro.eu/>).

The project **COMMON "COastal Management and MONitoring Network for tackling marine litter in Mediterranean sea"** is aimed at building a collaboration network between Italy, Tunisia and Lebanon,



using the principles of Integrated Coastal Zone Management (ICZM), to promote the reduction of marine and coastal litter. As the head office of project coordination, the Tricase branch of the CIHEAM Bari is working together with the communities involved in setting up plans for the management and development of coastal areas, aimed at mitigating the marine litter dumping. Sampling and analysis activities are ongoing implemented in the Salento pilot area, on the waters and fish species in order to monitor the sea's state of pollution.



## **ANNEX 1. Previous Research and Cooperation Projects on Coastal Zone management and Fisheries**

Funded by the EU-FP7 Programme, the **CIHEAM Zaragoza** coordinated (2010-2014) the **Concerted Action CREAM (Coordinating research in support to application of EAF – Ecosystem Approach to Fisheries- and management advice in the Mediterranean and Black Seas)**. The participants in the project included national research institutes from Mediterranean and Black Sea countries with a long history and active participation in fisheries research and assessment, who provide advice to national, regional and international fisheries management organisms. The project aimed the active collaboration of regional and international fisheries management organisms as external participants in the project, in order to identify the gaps (in terms of data, knowledge, training, coordination) which hamper the application of the Ecosystem Approach in the management of Mediterranean and Black Sea fisheries. The project had a strong training and capacity building component in order to help harmonize data collection and methodologies used in fisheries assessment and management in the Mediterranean and Black Sea.

Also, the **CIHEAM Zaragoza** provided advanced training in collaboration with the **MINOUW project (The Science, Technology and Society Initiative to Minimise Unwanted Catches in European Fisheries)**, a Research and Innovation Action funded by the 7th Framework Programme made up of over 15 different maritime science institutes and bodies from across Europe, bringing together scientists, fisherman, NGOs and policy makers. The project aimed to encourage the adoption of fishing technologies and practices that reduce unwanted catches, and contribute to the eventual elimination of discards in European fisheries.

The **CIHEAM Chania** coordinated (2000-2006) the **project ECONET-COHASt (Ecological network for the promotion of convergent conservation strategies in coastal habitats of community significance)**, which was funded by the Interreg IIIB Archimed programme. The project aimed to promote convergent conservation strategies at landscape scale for coastal habitats considered to be of European Community significance. The project sought to establish a network of stakeholders and a knowledge base on impact assessment for coastal habitats, in order to support capacity building and policy actions throughout the region, thus providing a supporting framework for management planning within Natura 2000 sites in the Mediterranean. Capacity building activities included the organization of workshops and training sessions, in order to exchange knowledge and experiences in terms of best practices and intricacies encountered amongst different countries regarding the implementation of relevant management actions.





The CIHEAM Chania coordinated a second project funded by the LIFE+ programme (2009-2013) entitled **“Actions for the conservation of coastal dunes with Juniperus spp. in Crete and the South Aegean (Greece)” (JUNICOAST)**. The project was indirectly related to coastal zone management, as it focused on the promotion and enabling of the long term conservation of the coastal dunes with Juniperus spp habitats in Greece, a priority habitat (code: 2250\*) of the Habitats Directive (NATURA2000). The main threats for the habitat identified by the project are restricted natural regeneration, tourism, lack of public awareness, solid waste disposal, fire, woodcutting and grazing. The threats were quantified, appropriate actions were designed and implemented and a significant effort was made to increase public awareness, as well as involve and train relevant stakeholders to support efficient governance.

**WEBPORT “digital port of the Mediterranean”** funded by the Italian Cooperation (2018-2019) is a web portal that currently hosts the coastal communities of Tricase in Italy, Tiro in Lebanon, Marsa Matrouh in Egypt, Zarzis in Tunisia, Algiers in Algeria, Nador in Morocco and, since 2017, Porto Palermo in Albania. WEBPORT is a space for exhibiting and exchanging new practices and experiences, listening to the needs of communities and identifying concrete actions, fostering collaboration and encouraging cooperation projects for development. Several actions have been completed so far: from the identification of the major traditions and typical products of the territories to the analysis of local production processes and resulting potentials for development, from the design of infrastructures to the supply of technology, from dialogue on primary needs of more disadvantaged areas to vocational and entrepreneurial training. (<http://www.webport.cloud/>).

The **Master Plan for the Sustainable Development of the Lebanese Coastal Communities** (2017-2018), funded by the Italian Cooperation, was aimed at identifying specific sector interventions and setup integrated market systems, while encouraging the sustainable use of local natural resources. It developed a significant income-generating opportunities, especially in vulnerable coastal areas within South, Mount Lebanon and North Governorates, in particular among fishermen communities. The project was jointly implemented by the Council for Development and Reconstruction (CDR) - acting as the main Lebanese counterpart - and executed by the CIHEAM Bari, in close collaboration with the Lebanese Ministry of Agriculture (MoA).

The **NEMO project “Cross-Border rural coastal communities development in Libya and neighbouring Countries”** (2014-2017), funded by the Italian Cooperation, sought to improve socioeconomic conditions of rural coastal communities which are characterised by a higher sensitivity to climate change, emigration rates, social instability, difficulties in promotion and enhancement of their culture and productions. The project was focused on the needs of fishermen’s associations, involving the rural coastal communities of Sallum-Matrouh and Barrani (Egypt) to enhance their institutional, multifunctional and territorial roles; the coastal communities east of Misratha (Libya), to reduce the risk of unemployment and emigration, and the coastal communities in Medenine (Tunisia) and to promote sustainable socio-economic development process.

The **PESCA LIBANO project “Technical Assistance to the Ministry of Agriculture in the field of fishery development”** (2012-2014), funded by the Italian Cooperation, aimed at providing the Lebanese Ministry of Agriculture (MoA) with advanced tools designed for a proper management of marine and fisheries resources. This has been achieved through the strengthening of capacities of the MoA staff



and assessing the potentialities of marine coastal resources. On the one hand, the project gathered scattered data related to fisheries from different concerned institutions. On the other hand, it actively collected data that proved to be important for a correct management of the sector and still lacking. The project had been working on the land to map infrastructures and activities linked to fisheries, and at sea to assess the distribution and abundance of fisheries resources. It had been dedicated to assure and develop the identity of the project built on information sharing, collaboration, exchange of intents with different actors, and promotion of merging and melting of activities with different initiatives.

The **CANA project “Establishing monitoring and sustainable development of the Lebanese Sea”** (2010 - 2014), funded by the Italian Cooperation, sought to increase the knowledge of the marine coastal environment in Lebanon for drawing responsible and sustainable development outlines of the coast and protecting Lebanese biodiversity. The research project was implemented as an “action to accelerate social development” according to an environmentally sustainable approach. The main project output was the drafting of guidelines for a strategic approach for sustainable coastal development taking into consideration both the project technical/scientific results and the stakeholders’ interest analysis.

The **PESCAMED project “Development of cooperation in Mediterranean fishery sector: world of labour, producers’ organizations, consumers’ associations and training”**, (2009-2011), funded by Italian Ministry of Agriculture and Food and Forestry Policies, was intended to conduct a comparative analysis of the activities related to maritime fishery and fishery organisations and associations, accompanied by advanced education, training, applied research and knowledge transfer activities in support of the Institutions of the Mediterranean countries for promoting sustainable fishery in the Mediterranean area and for seeking innovatory tools for sustainable management of coastal and marine resources. The project involved 11 countries at the Mediterranean level: Albania, Algeria, Croatia, Egypt, Italy, Lebanon, Montenegro, Morocco, Syria, Tunisia, and Turkey. ([www.pescamed.it](http://www.pescamed.it))

The **MYANMED 1 project “Small fishery and aquaculture in Myanmar: Institutional Support for adopting European and Mediterranean good practices”** (2015-2017), funded by the Italian Cooperation, is intended to improve the efficiency (Capacity building) of the Ministry of Livestock, Fishery and Rural Development/Department of Fisheries (MLFRD/IFT), for sustainable and responsible management of natural resources and food security improvement. The actions mainly focused on IFT extension service organisation for assisting the aquaculture and the small-scale fisheries private sector, according to the example and guidelines offered by the Mediterranean Best Practices. Moreover, the objectives have been achieved also through training and capacity building activities in marine hatchery.

The project **MADE “Marine Aquaculture Development in Egypt”** (2012-2014), funded by the Italian Cooperation, aimed at the consolidation of the fishery and marine aquaculture sectors in the “Egyptian Mediterranean sea” targeting Egyptian stakeholders (Institutions and private sector). This programme included support provided to the Egyptian private sector by the establishment of a “Fishery Technical Centre” in Alexandria, consolidation of GAFRD/Fish Control Unit in Cairo to improve product quality, marine fishes reproduction know-how/technology and marine cage aquaculture technology.