





CIHEAM

SUSTAINABLE FOOD SYSTEMS

ACTIVITY PORTFOLIO 2020- 2022

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14 - 15 SEPTEMBER 2022   CHANIA, CRETE, GREECE	
CONVENED BY THE MEDITERRANEAN AGRONOMIC INSTITUTE OF CHANIA, CIHEAM MAI.Chania	

### MASTER COURSES

#### **CIHEAM BARI**

MASTERS ACRONYM AND TITLE	SARE: MASTER IN SUSTAINABLE AGROECOSYSTEMS AND RESILIENCE
ECTs	First Year: 60 ECTS Second Year: 60 ECTS
OFFERED/ MANAGED BY	CIHEAM BARI
START/END DATE	Every year Diploma: Master of CIHEAM Bari - Duration: 9 months (Oct 2022 – June 2023) - Diploma: Master of Science - Duration: 12 months (July 2023 – June 2024)
CRITERIA OF ADMISSION	Candidates may hold different university degrees related to agricultural, environmental, social, and economic sciences, with diplomas awarding at least 180 ECTS (three-year Degrees). The selection of students is based on: - Screening of documents as part of the students' application. - Online interviews
GENERAL DESCRIPTION	<ul> <li>The Master's course focuses on farming and food systems evolution, identifying <ul> <li>the agro-ecosystem as a unit for action, a complex system with economic, social, and ecological components.</li> <li>the local community as the main stakeholder relying on the agroecosystem functions and aims to conserve and improve its ability to resist and respond to changes.</li> </ul> </li> <li>The course presents methodologies and tools for assessment and diagnosis of agroecosystem sustainability and community resilience, and how to design and implement projects for sustainable development of the agri-food sector and communities.</li> <li>During the second year, students will carry out research projects under the supervision of topic experts.</li> </ul>
OBJECTIVES	<ul> <li>At the end of the program, students will master the system thinking required to understand, assess, and promote agroecosystem resilience, and they will be able to: <ul> <li>use different research methodologies and tools embedding multidisciplinary and intersectoral perspectives; promote multi-stakeholder participation, dialogue, and vision-building processes proficiently applying an action-oriented approach.</li> <li>comprehend and analyze the complexity of agroecosystems, their relations with food systems and people's behaviors, and the nature of their development challenges.</li> <li>design and drive community development processes according to agroecological principles to build up resilience against biophysical and socio-</li> </ul> </li> </ul>

	<ul> <li>economic stresses.</li> <li>identify and fill stakeholders' knowledge gaps to facilitate the transition to resilient agroecosystems.</li> <li>analyze and promote multi-actor networks, and agricultural knowledge and innovation systems that support sustainable land management processes, green economy development, social inclusion, and environmental protection.</li> <li>support community farms towards greater competitiveness and socio-economic sustainability in the agri-food system.</li> </ul>
TOPICS	<ul> <li>Unit I – Sustainability and resilience in agriculture and food systems</li> <li>Unit II - Climate "smart" agroecology</li> <li>Unit III – Water and land resources</li> <li>Unit IV – Sustainable farm management</li> <li>Unit V – Knowledge and innovation development</li> <li>Unit VI – Agri-food networks</li> <li>Unit VII – Smart tools for the management of natural resources in agriculture</li> <li>Seminars and laboratories, the Action Learning project, individual project.</li> </ul>
How does it contribute to the inclusion of young people and the empowerment of women?	The Master of Science Programme in "Sustainable Agroecosystems and Resilience (SARe)" provides a two-year curriculum and is an innovative educational path that aims at preparing professionals to tackle the complex challenges to sustain food production in rural areas.
FEES AND SCHOLARSHIPS	Registration fee: 200.00€/year. Tuition fee: 500.00€/month (travel, accommodation, and insurance expenses not included), CIHEAM Bari grants full or partial scholarships to candidates according to a ranking list. Priority is given to students coming from CIHEAM Member Countries and the other Mediterranean, Western-Balkan, Middle Eastern, and African Countries.
CERTIFICATES/ (professional) DIPLOMA	First Year Diploma: Master of CIHEAM Bari Second-Year Diploma: Master of Science
WEBSITE	https://iamb.ciheam.org/en/education/masters/sustainable_agro- ecosystems_and_resilience_(sare)

MASTERS ACRONYM AND TITLE	MASTER IN MEDITERRANEAN ORGANIC AGRICULTURE (MOA)
ECTs	First Year: 60 ECTS Second Year: 60 ECTS
OFFERED/ MANAGED BY	CIHEAM Bari
START/END DATE	Every year Diploma: Master of CIHEAM Bari Duration: 9 months (Oct 2022 – Jun 2023) Diploma: Master of Science Duration: 12 months (Nov 2023 – Oct 2024)
CRITERIA OF ADMISSION	<ul> <li>Requirements: <ul> <li>Holding a university degree awarding at least 180 ECTS.</li> <li>Having completed four out of five years of university studies, upon agreement between the sending University and CIHEAM Bari (the year attended at CIHEAM Bari is recognized as the final year to graduate at the University of origin).</li> <li>Good knowledge of spoken and written English.</li> <li>Personal access to computer facilities.</li> </ul> </li> </ul>
GENERAL DESCRIPTION	The program considers organic food production as a systemic approach: from primary production to consumption, to achieve the transition to fair, healthy, and environmentally friendly food systems. It provides the knowledge, skills, and mindset needed to promote the sector's growth and the critical skills and perspectives for doing it through a combination of multi-disciplinary approaches to respond to global challenges.
OBJECTIVES	<ul> <li>At the end of the course, students will possess the ability to <ul> <li>understand the importance of more sustainable organic food production and advocate for ecologically sound solutions.</li> <li>Know legal requirements for organic food production, and how to drive farms/operators towards transition/conversion processes.</li> <li>Identify the best management practices based on a multi-dimensional assessment framework.</li> <li>Apply the value chain approach.</li> <li>Facilitate multi-actors' engagement processes.</li> </ul> </li> </ul>
TOPICS	<ul> <li>Unit I - Sustainability in agriculture and food systems (delivered in distance learning)</li> <li>Unit II - Agroecology and climate change</li> <li>Unit III - Organic principles, concepts, and frameworks</li> <li>Unit IV - Soil management and fertility</li> <li>Unit V - Pests and diseases control</li> <li>Unit VI - Sustainable farm management</li> <li>Unit VII - Organic food value/supply chains and marketing</li> <li>Applied Project</li> </ul>
Inclusion of young people women empowerment	The two-year Master of Science Programme offers unique opportunities for motivated students to become the next generation of professionals and researchers in organic farming and food systems able to support further development of the sector in the Euro-Mediterranean countries and worldwide.

FEES AND SCHOLARSHIPS	Registration fee: 200.00€/year Tuition fee: 500.00€/month (travel, accommodation, and insurance expenses not included)
CERTIFICATES	First Year Diploma: Master of CIHEAM Bari Second-Year Diploma: Master of Science CIHEAM BARI grants full or partial scholarships to candidates according to a ranking list. Priority is given to students coming from CIHEAM Member countries and other Mediterranean, Balkan, Middle Eastern, and African Countries
WEBSITE	https://www.iamb.it/en/education/masters/moa

MASTER ACRONYM AND TITLE	Master in Sustainable Food Systems and Mediterranean Diet (SFSMD)
OFFERED/ MANAGED BY	National Association of Biologists of Italy
PARTNERS	<ul> <li>CIHEAM Bari</li> <li>University Parthenope of Napoli</li> <li>Observatory of Mediterranean Diet of Italy</li> <li>Observatory of Banks and Enterprises</li> </ul>
START/END DATE	15.03.2022 to 15.07.2022
CRITERIA OF ADMISSION	Graduates in Biological Sciences who have gained adequate professional experience and are looking for a higher professional qualification or an update of the skills already possessed. Graduates of the old system, first-level graduates, and master's degrees can access the Master.
GENERAL DESCRIPTION	The course aims to provide multidisciplinary theoretical and operational skills to be used in various economic and self-entrepreneurial sectors.
OBJECTIVES	<ul> <li>understand the peculiar nature of the soil, its functioning in the framework of global ecosystem balances, soil organisms, their contribution to fertility, and the completion of bio-geo-chemicals in the soil.</li> </ul>
	<ul> <li>to understand agricultural production in the light of crop needs and biotic threats to crops and the dictates of agroecology.</li> </ul>
	<ul> <li>understand organic agricultural production in the light of innovative production systems, organic farming techniques, organic production regulations, and environmental, social, and productive sustainability of organic crops.</li> </ul>
	<ul> <li>understand the nutritional implications of the Mediterranean diet and its potential in terms of organic detoxification.</li> </ul>
	<ul> <li>understand the implications of the new Mediterranean geo-policy in the development of resilient and sustainable agricultural systems.</li> </ul>
TOPICS	<ul> <li>UD1 The soil is a living matrix</li> <li>UD2 Soil quality in theory and practice</li> <li>UD3 Sustainable Agrifood Systems</li> <li>UD4 Agroecology</li> <li>UD5 Mediterranean diet</li> <li>UD6 Marketing of sustainable consumption: the case of organic food products</li> <li>UD7 Organic nutrition and detoxification</li> <li>UD8 Circular economy</li> <li>UD9 Small-scale agriculture and fisheries</li> <li>UD10 Sustainability and sustainable management of crop systems</li> <li>UD11 Geopolitics of the Mediterranean</li> <li>UD SEM Seminars</li> </ul>
Inclusion of young people women empowerment	The Master is aimed at graduates in Biological Sciences who have gained adequate professional experience and are looking for a higher professional qualification or an update of the skills already possessed, particularly young professionals.
FEES AND SCHOLARSHIPS	Enrollment fee of 350 euros.
CERTIFICATES/ DIPLOMA	Master Diploma of 1 st level, after testing
WEBSITE	https://www.onb.it/2022/03/15/master-di-i-livello-in-sostenibilita-dei-sistemi-alimentari- e-della-dieta-mediterranea-organizzato-da-onb-e-iamb-di-bari-procedure-per-accedere- alla-piattaforma-e-learning-ii-avviso/?msclkid=d6f1262eb5aa11ec8cd1a2fc1719c4c3

MASTERS ACRONYM	EDAMUS-INTERNATIONAL MASTER IN "SUSTAINABLE MANAGEMENT OF FOOD
AND IIILE	QUALITY"
ECTs	First Year: 60 ECTS Second Year: 60 ECTS
OFFERED/ MANAGED BY	Université de Montpellier (UM) and Institut Agronomique Méditerranéen de Montpellier (CIHEAM-IAMM), France (coordinators of the programme)
PARTNERS	The EDAMUS Consortium: Università degli Studi della Basilicata (UNIBAS) and Mediterranean Agronomic Institute of Bari (CIHEAM-IAMB), Italy; Mediterranean Agronomic Institute of Zaragoza (CIHEAM-IAMz), Spain; Université Frères Mentouri Constantine 1 (UC1), Algeria; Mediterranean Agronomic Institute of Chania (CIHEAM-MAICh), Greece; Universidade Católica Portuguesa (UCP), Portugal; University of Tsukuba (UT), Japan; University of Sherbrooke, Canada.
START/END DATE	2019 to 2021
CRITERIA OF ADMISSION	Students must hold (or be expecting) a bachelor's, master's, engineering degree, or equivalent in a discipline compatible with the area of specialization (food science, nutrition, economics, health/medicine/pharmacy, food management, business administration, biology, agriculture, law, human sciences).
GENERAL DESCRIPTION	It offers a cross-disciplinary (biology, technology, sociology, economics, law, etc.) and transnational approach to food quality and security. It is a two-year academic curriculum with theoretical, methodological, and practical courses throughout the different EDAMUS institutions. The last semester is dedicated to an internship in a research laboratory or a company.
OBJECTIVES	The EDAMUS PROGRAMME trains professionals able to control issues related to food/nutrition / public health, ensure food safety and hygiene, understand the different perspectives on the development of agricultural resources and healthy food, master the techniques of epidemiological investigation, master the international laws governing agricultural resources, carry on studies in the field of research (Ph.D.).
TOPICS	Nutrition, Food Security and Safety, Law, Food Economics and Sociology; Food Production and Quality, Organic Food; Strategies for Safe, Healthier, and more Sustainable Foods; Food Quality Management Food Technologies and Microbiology
inclusion of young people and women empowerment	60 % of the last cohort found a job one month after getting graduate.
FEES AND SCHOLARSHIPS	<ul> <li>The cost to participate is 8,000 euros per year, including:</li> <li>Tuition fees (teaching staff, teaching material, e-learning courses).</li> <li>Fieldwork costs.</li> <li>Administrative staff (in each university there will be specific staff from the administrative bodies who will work in close relation with the EDAMUS coordinator and Secretariat).</li> <li>Insurance costs; Monitoring/supervision: each student has a local counselor and student life coordinator in the coordinating institution.</li> <li>It doesn't include Living expenses, approximately 700 € per month, and travel expenses.</li> </ul>
CERTIFICATES/	The qualification consists of multiple European master's degrees.
WEBSITE	https://www.iamb.it/en/education/european_programmes

#### **CIHEAM CHANIA**

MASTERS ACRONYM AND TITLE	MASTER IN BUSINESS ECONOMICS AND MANAGEMENT (BEM)
ECTs	First Year: 60 ECTS Second Year: 60 ECTS
OFFERED/ MANAGED BY	CIHEAM-Chania
START/END DATE	Every year Diploma: Master of CIHEAM Chania - Duration: 9 months (Oct – June) - Diploma: Master of Science - Duration: 09 months (Oct – June)
CRITERIA OF ADMISSION	Applicants must have the academic level that qualifies them to undertake postgraduate level studies in their home country or equivalent to a minimum of four years of undergraduate studies. Their degree must also be in a discipline compatible with the area of specialization requested. Selection is based on the files submitted by applicants – priority is given to applicants from CIHEAM member countries, and takes account of their academic results, professional experience acquired in the chosen field of specialization, reference letters, and their competence in English.
GENERAL DESCRIPTION	The Master of Science in Business Economics and Management (BEM) is an intensive postgraduate two-year full-time program specifically designed for highly qualified students. It combines courses with research work, and field and computer laboratory exercises, providing an interdisciplinary approach to learning.
OBJECTIVES	It aims to provide students with a solid theoretical and practical background to complete their scientific research work in areas related to Business Economics, Management, Marketing and Finance, Sustainability of the Agrofood sector, and rural areas. By the end of the program students can use different research methodologies and tools embedding multidisciplinary and intersectoral perspectives; understand economic complexity, key societal issues and challenges of our time, systemic interactions, and the underlying issues regarding development, technological change, income inequality, spatial disparities, and resilience and the necessity to improve prediction and political decision- making.
TOPICS	<ul> <li>Economics of Resource Allocation</li> <li>Business Economics</li> <li>Operational Management Methods</li> <li>Financial Investment Decision Making</li> <li>Management - Marketing</li> <li>Agro-food Policy and CAP</li> </ul> Indicative M.Sc. Research Topics: Management, Sustainable Management, Financial Management; Corporate Finance, Energy Finance; Sustainable Agrifood Supply Chain, Agrifood Policies; Marketing, Market Research Surveys, Green Marketing; Bio-economy and Circular Economy; Regional and Rural Development Planning.
How does it contribute to the inclusion of young people and the	The Master of Science Program in "Business Economics and Management" not only encourages but moreover fosters and supports the participation of all men and women and the inclusion of young people in the program as well as in all its academic and research activities. Furthermore, the BEM program plays an active role in assisting and coaching its

empowerment of women?	young graduates to pursue Ph.D. studies with full scholarships at well-known universities all over the world as well as in pursuing positions in academic / research institutes and state organizations.
FEES AND SCHOLARSHIPS	Qualified candidates may be eligible for scholarships covering fully or partly: tuition, teaching material, board, lodging, health insurance, and compensation.
CERTIFICATES/	First Year Diploma: Master of CIHEAM Chania
(professional) DIPLOMA	Second-Year Diploma: Master of Science
WEBSITE	https://www.iamc.ciheam.org/en/education/master_of_science/bem

MASTERS ACRONYM AND TITLE	MASTER IN FOOD QUALITY AND CHEMISTRY OF NATURAL PRODUCTS
ECTs	First Year: 60 ECTS Second Year: 60 ECTS
OFFERED/ MANAGED BY	CIHEAM Chania
START/END DATE	Every year Diploma: Master of CIHEAM Chania - Duration: 9 months (Oct – June) Diploma: Master of Science - Duration: 09 months (Oct – June)
CRITERIA OF ADMISSION	An academic level that qualifies them to undertake postgraduate level studies in their home country or equivalent to a minimum of four years of undergraduate studies. A degree compatible with the area of specialization requested. Selection is based on the files submitted by applicants – priority is given to applicants from CIHEAM member countries and takes account of their academic results, professional experience acquired in the chosen field of specialization, reference letters, and their competence in English.
GENERAL DESCRIPTION	The Master's programme aims to provide students with a comprehensive theoretical background and laboratory skills to successfully address current research and application issues in Natural Products, Renewable Sources Valorization, and Food Quality. Furthermore, at the end of the program, students will possess the ability to understand the importance of more sustainable use of natural products and be familiar with the legal requirements for sustainable food production, the exploitation of inexpensive renewable sources, and agro-industrial waste in view of obtaining added-value products and how to drive operators towards transition/conversion processes.
OBJECTIVES	<ul> <li>to impart advanced knowledge in the area of food chemical composition and food technology aspects.</li> <li>to introduce indispensable notions of quality, authenticity, and safety in all levels of production of food or other products.</li> <li>to present current advances in the isolation, characterization, and application of natural products.</li> <li>to provide laboratory experience in the food and natural product analysis.</li> </ul>
TOPICS	<ul> <li>First-year of MSc <ul> <li>ADVANCED FOOD CHEMISTRY.</li> <li>CHEMISTRY OF NATURAL PRODUCTS.</li> <li>TOPICS IN FOOD SCIENCE - Food safety management; Food Legislation; Products of Appellation of Origin; Quality Assurance.</li> </ul> </li> <li>Research topics are: <ul> <li>natural product isolation and structural determination</li> <li>chemical fingerprinting as a tool for authentication</li> <li>the exploitation of inexpensive renewable sources and agro-industrial waste in view of obtaining added-value products</li> <li>the use of eco-friendly solvents for producing value-added commodities with nutritional and pharmacological potency</li> <li>analyses of food products/analyses of natural products</li> </ul> </li> </ul>
inclusion of young people and women empowerment	The two-year Master of Science Programme offers unique opportunities for motivated young students and empowers women to become the next generation of professionals and researchers in the sustainable use of natural products and sustainable food systems able to

	support further development of the sector in the Euro-Mediterranean countries and worldwide.
FEES AND SCHOLARSHIPS	Scholarships: Qualified candidates may be eligible for scholarships covering fully or partly: tuition, teaching material, board, lodging, health insurance, and compensation.
CERTIFICATES/	First Year Diploma: Master of CIHEAM Chania
(professional) DIPLOMA	Second-Year Diploma: Master of Science
WEBSITE	https://www.iamc.ciheam.org/en/education/master_of_science/fqc

MASTERS ACRONYM AND TITLE	Master in Sustainable Agriculture (SAG)
ECTs	<ul><li>F First Year: 60 ECTS</li><li>S Second Year: 60 ECTS</li></ul>
OFFERED/ MANAGED BY	CIHEAM Chania
START/END DATE	- Every year Diploma: Master of CIHEAM Chania. Duration: 9 months, (Oct – June) Diploma: Master of Science. Duration: 09 months (Oct – June)
CRITERIA OF ADMISSION	An academic level that qualifies them to undertake postgraduate level studies in their home country or equivalent to a minimum of four years of undergraduate studies. A degree compatible with the area of specialization requested. Selection is made based on the files submitted by applicants – priority is given to applicants from CIHEAM member countries and takes account of their academic results, professional experience acquired in the chosen field of specialization, reference letters, and their competence in English.
GENERAL DESCRIPTION	The MSC program in SAG enables the graduates to understand the theoretical background of sustainable agriculture and familiarize themselves with integrated crop management and organic farming applications, capabilities, and limitations.
OBJECTIVES	<ul> <li>to conjugate environmentally friendly scientific advances, trends, and applications in agriculture with critical thinking and research hypothesis formulation ability.</li> <li>to provide the tools to measure the impact as well as manage the biotic and abiotic production inputs to farming systems.</li> <li>to introduce the frame of the legal requirements and the methodological approach to certification systems of environmentally friendly, sustainable, and safe agrofood production.</li> <li>to analytically present modern and environmentally friendly crop protection approaches in both integrated pest management and organic farming systems.</li> <li>to provide a thorough insight into modern and environmentally sound recycled hydroponics greenhouse production methods.</li> </ul>
TOPICS	<ul> <li>Introduction to Sustainability</li> <li>Natural Resources Management.</li> <li>Assessment of Genetic Resources.</li> <li>Crop Protection</li> <li>Current Topics in Sustainable Agriculture</li> <li>Systems Thinking / Innovation &amp; Communication</li> </ul>
inclusion of young people and women empowerment	CIHEAM-MAICh's organizational culture is based on creating both a working and a campus environment in which everyone fits in and is inspired to flourish regardless of their religion, gender, or nationality. The Master of Science Program in SAG encourages, fosters, and supports the equal participation of men and women and the inclusion of young people in the program as well as in all its academic and research activities.
FEES AND SCHULARSHIP	tuition, teaching material, board, lodging, health insurance, and compensation.
CERTIFICATES/ (professional) DIPLOMA	First Year Diploma: Master of CIHEAM Chania Second-Year Diploma: Master of Science

#### **CIHEAM MONTPELLIER**

MASTER'S ACRONYM AND TITLE	SUSTAINABLE AGRI-FOOD VALUE CHAINS: LOGISTICS, ENVIRONMENT, STRATEGIES – CDVALES
ECTs	Master 2 : 60 ECTs Master of Science : 60 ECTs
OFFERED/ MANAGED BY	CIHEAM-MONTPELLIER
PARTNERS	Joint accreditation with the University of Montpellier- Montpellier Management and the Institut Agro.
START/END DATE	September 2022- September 2023
CRITERIA OF ADMISSION	<ul> <li>Places are awarded based on an application file reviewed by a commission of representatives of accredited institutions.</li> <li>The course is open to economists, agronomists, geographers, and ecologists who want to specialize in economics.</li> <li>Admission level: baccalaureate + 4 or level allowing access to postgraduate studies. Prerequisites in economics are required.</li> </ul>
FEES AND SCHOLARSHIPS	TRAINING FEES: 3527 EUR for candidates who are not citizens of CIHEAM member countries. SCHOLARSHIPS are available for candidates from CIHEAM member countries to cover subsistence and training costs.* Applicants coming from a member Ciheam member country are excluded from tuition fees and subjected only to inscription costs: 243 EUR.
GENERAL DESCRIPTION	<ul> <li>Mobilizing multidisciplinary approaches, this master targets the acquisition and command of theoretical concepts, analysis, and sustainability evaluation methods and their application to professional situations, to analyze: <ul> <li>Stakeholders' behavior and strategies.</li> <li>Modes of stakeholder organizations and coordination from upstream to downstream, from production, processing, and distribution to the end consumer.</li> <li>The evaluation of performance and value creation.</li> <li>Role of logistics as a cross-cutting strategic function of the supply chain.</li> </ul> </li> </ul>
OBJECTIVES	To train and specialize future executives and project managers in the management and coordination of value and supply chains, from farm to fork to support the ecological transition of agri-food chains.
TOPICS	<ul> <li>Stakes, challenges, and stakeholders of the ecological transition and the circular economy.</li> <li>Agri-food value chains and sustainability: concepts and methods.</li> <li>Technical aspects of logistics, innovations, sustainability, and cost management.</li> <li>Regulations, and social responsibility standards for logistics and the environment.</li> <li>Distribution and supply chain management.</li> <li>International trade and marketing.</li> <li>Company organization, human resources management, and corporate responsibility.</li> <li>Research methods in social science.</li> </ul>

MASTERS ACRONYM AND TITLE	CLIMATE CHANGE, AGRICULTURAL AND TERRITORIAL MANAGEMENT - CGAT
ECTs	Master 2 : 60 ECTs Master of Science : 60 ECTs
OFFERED/ MANAGED BY	CIHEAM MONTPELLIER
PARTNERS	Joint accreditation with Paul Valéry Montpellier 3 University (UPVM)
START/END DATE	September 2022- September 2023
CRITERIA OF ADMISSION	Places are awarded based on an application file reviewed by a commission of representatives of accredited institutions.
	Admission level: baccalaureate + 4 or level allowing access to postgraduate studies. Prerequisites in economics are required
FEES AND SCHOLARSHIPS	TRAINING FEES: 3527 EUR for candidates who are not citizens of Ciheam's member countries.
	SCHOLARSHIPS: available for candidates from CIHEAM member countries to cover subsistence and training costs * Applicants coming from a member Ciheam member country are excluded from tuition fees and subjected only to inscription costs: 243 EUR.
GENERAL DESCRIPTION	This master's helps economists, ecologists, geographers, and agricultural engineers to learn to work together by providing them with the common language required for teamwork. It offers both an apprenticeship in theoretical and practical tools and the acquisition of professional experience, bringing trainees in contact with local actors and real-life situations so that they may be operational by the end of the course.
OBJECTIVES	To provide professional training in the development of new technologies for agriculture and analyze territorial adaptation policies and projects in agricultural rural sectors. It enables students to master new models and tools that structure territorial public action and farm management decisions.
TOPICS	<ul> <li>Integrated and sustainable development of territories: from stakeholders to tools</li> <li>From sustainable development to territorialized climate policies, territorial agriculture vulnerability, and adaptive capacity</li> <li>Mediterranean agriculture in the context of climate change</li> <li>The cartographic analysis applied to a territory in the context of climate change</li> <li>Data analysis, accounting, and evaluation of territorial resources applied to rural territories in a situation of adaptation</li> <li>Farm management</li> <li>Biophysical optimization and simulation models</li> <li>Stakeholders and natural resource management</li> <li>Research and workshop: problematics and methods</li> </ul>
inclusion of young people and women empowerment	13 female participants on a TOT of 16 participants for the 2021/22 edition (81,25%).

MASTERS ACRONYM AND TITLE	AGRICULTURAL, AND ENVIRONMENTAL DEVELOPMENT ECONOMICS AND FOOD - ECODEVA
ECTs	Master 2: 60 ECTs Master of Science: 60 ECTs
OFFERED/ MANAGED BY	CIHEAM MONTPELLIER
PARTNERS	Joint accreditation with the University of Montpellier – Montpellier Management and the Institut Agro
START/END DATE	September 2022- September 2023
CRITERIA OF ADMISSION	Places are awarded based on an application file reviewed by a commission of representatives of accredited institutions.
	The course is open to economists, and agronomists, who want to specialize in agricultural, environmental development economics, and food.
	Admission level: baccalaureate + 4 or level allowing access to postgraduate studies. Prerequisites in economics are required.
FEES/ SCHOLARSHIPS	TRAINING FEES: 3527 EUR for candidates who are not citizens of Ciheam member countries.
	SCHOLARSHIPS are available for candidates from CIHEAM member countries to cover subsistence and training costs. * Applicants coming from a member Ciheam member country are excluded from tuition fees and subjected only to inscription costs: 243 EUR.
GENERAL DESCRIPTION	This Master's enables students to acquire extensive know-how in the fields of agri-food and natural resources management.
OBJECTIVES	Focused on the transmission of fundamental theoretical and methodological knowledge (qualitative and quantitative), it values the use of advanced modeling techniques in current economic analysis and the approaches of institutional economics, management sciences, and economic sociology.
TOPICS	Theoretical courses: (Economics and agriculture, food and rural policies, Environment economics and policies, Development economics and policies, Circular economy and food systems).
	Methodological courses (3 Units to choose from): (Applied econometrics; Modeling of the agricultural and environmental policies; Qualitative and quantitative methods; Topic in experimental and behavioral economics; Implementation of Choice Experiment Approach).
	Theoretical courses: (New institutional economy; Economic public calculation; Economical sociology and anthropology; Theoretical approaches in management sciences) Specialization courses: (Consumers, foods, sustainability; Institutions and development; Coordination in the firms and agri-food chains: Information and environmental certifications)
	and up i lood chains, mornation and charonnental certifications).

MASTERS ACRONYM AND TITLE	MEDITERRANEAN FARMING SYSTEM DESIGN FOR A SUSTAINABLE FOOD SYSTEM- MIDAS
ECTs	Master 2: 60 ECTs Master of Science: 60 ECTs
OFFERED/ MANAGED BY	CIHEAM MONTPELLIER
PARTNERS	Co-accredited with the University of Montpellier and the Institut Agro. The program is in partnership with the Universidad Politecnica de Madrid, the University of Thessaly, ICARDA, the Faculty of Agriculture- Cairo University, and the faculty of Agronomy- Lebanese University.
START/END DATE	September 2022- September 2023
CRITERIA OF ADMISSION	minimum 4 years of Higher education in a university or a cycle in agronomy, economics, and geography.
FEES AND SCHOLARSHIPS	TUITION FEES: 3527 EUR for candidates who are not citizens of Ciheam member countries.
	* Applicants coming from a member Ciheam member country are excluded from tuition fees and subjected only to inscription costs: 243 EUR.
	SCHOLARSHIPS are available for candidates from CIHEAM member countries.
GENERAL DESCRIPTION	The master's programme focuses on the plot-farm-territory nexus in relation to socio- technical territorial dynamics, in a context of climatic uncertainty, socioeconomic changes, and natural resource degradation.
OBJECTIVES	This Master provides students with the knowledge, know-how, and skills to address:
	<ul> <li>Agricultural systems diversification and food security issues.</li> <li>Integrated assessment approach for designing innovative farming systems</li> <li>Co-designing adaptation strategies to promote resilient and sustainable farming systems.</li> </ul>
TOPICS	<ul> <li>Prerequisites and prospective analysis on climate change issues</li> <li>The transition of agricultural systems under socioeconomic and environmental uncertainty</li> <li>Modeling of Mediterranean Cropping Systems</li> <li>Methods of Data Collection and Analysis</li> <li>Modeling of Mediterranean Agricultural Systems</li> <li>Modeling of Mediterranean Agricultural Systems</li> <li>Multi-agent analysis for designing resilient agricultural systems</li> <li>Economics of biodiversity and natural resources</li> </ul>
inclusion of young people and women empowerment	14 female participants on a TOT of 16participantst for the 2021/22 edition (87, 50%).

#### CIHEAM ZARAGOZA

MASTER ACRONYM AND TITLE	SUSTAINABLE WATER MANAGEMENT AND GOVERNANCE IN NATURAL AND AGRICULTURAL ENVIRONMENTS
ECTs	120 ECTS
OFFERED/ MANAGED BY	CIHEAM ZARAGOZA
START/END DATE	LAST EDITION: 21 September 2020 – 11 June 2021 / June 2022 NEXT EDITION: September 2022 – July 2024
CRITERIA OF ADMISSION	<ul> <li>The basic requirements are:</li> <li>Degree and Academic record</li> <li>Language</li> <li>Reasons for applying to the Master</li> </ul>
GENERAL DESCRIPTION	One big concern is to guarantee the availability of water and sustainable management for the population, making efficient use of water resources, especially in arid and semi- arid regions, which increasingly suffer from water scarcity, deterioration of its quality, and uncertainty in the face of climate change.
OBJECTIVES	Learn to face the challenges of water management and governance through an integrated and interdisciplinary approach, involving hydrological, biophysical, economic, institutional, regulatory, policymaking and planning efforts.
TOPICS	3 thematic areas – water governance, quality, and management:
	<ul> <li>Conceptual aspects of water resources management</li> <li>Institutional and regulatory framework and socio-economic aspects</li> <li>Water quality and pollution control</li> <li>Tools to support water planning and management</li> <li>Integrated water management and restoration of aquatic systems</li> <li>Applied water management in Agriculture and forest systems</li> </ul>
inclusion of young people and women empowerment	<ul> <li>154 applications were received, and 55% of the candidates were women.</li> <li>69% of the participants were women (value of the last edition).</li> </ul>
FEES AND SCHOLARSHIPS	<ul> <li>Registration fees were 2950 euros per academic year. The sum covered only tuition fees.</li> <li>13 scholarships were awarded in the first year and 12 in the second year.</li> </ul>
DIPLOMAS	<ul> <li>FIRST YEAR: CIHEAM's Post-graduate Specialization Diploma.</li> <li>SECOND YEAR: Master of Science Degree.</li> </ul>
WEBSITE	http://www.masterwatermanagement.com

MASTER ACRONYM AND TITLE	SUSTAINABLE FISHERIES MANAGEMENT
ECTs	120 ECTS
OFFERED/ MANAGED BY	Alicante University
PARTNERS	The Master is jointly organized by the University of Alicante, CIHEAM Zaragoza, and the Spanish Ministry of Agriculture, Fisheries and Food (MAPA). The Fisheries Division of the United Nations Food and Agriculture Organisation (FAO) provides technical support.
START/END DATE	(4 October 2021-12 June 2023)
CRITERIA OF ADMISSION	<ul> <li>Degree and academic record in Marine Science, Biology, Agronomy, Fisheries, Economics, Administration, Business Management, and Law</li> <li>Knowledge of Spanish</li> <li>Reasons for applying to the Master</li> </ul>
GENERAL DESCRIPTION	Fishery resources are an excellent source of food, in addition to being an engine for the generation of employment in coastal areas. According to FAO, the supply of extractive and aquaculture fish provides 17% of the total animal protein. Currently, 36% of the world's production of fish and fishery products is traded. However, there is concern about fishing resources, which implies an improvement in management to ensure stable and sustainable exploitation in the long term.
OBJECTIVES	To provide high-level specialization in issues related to the economics and management of fishing activity.
TOPICS	<ul> <li>Introduction to the marine ecosystem, fishery resources, and aquaculture</li> <li>Statistical analysis and database use</li> <li>Dynamics of exploited fish populations</li> <li>Theory and models for fisheries evaluation</li> <li>Basic economics and production factors in fisheries</li> <li>Fish trade and processing</li> <li>Theory and application of bioeconomic models and economic and social indicators</li> <li>Institutional framework: cooperation and research</li> <li>Maritime law and socio-cultural perspective</li> <li>Objectives and instruments for fishing policies</li> <li>Applied fisheries policies</li> </ul>
inclusion of young people and women empowerment	In the last edition of the Master, 89 applications were received, and 35% of the candidates were women. 41% of the participants were women (average value of the last three editions).
FEES AND SCHOLARSHIPS	<ul> <li>Registration fees were 2400 EUR per academic year. The sum covered only tuition fees and technical visits.</li> <li>2 scholarships were awarded in the first year and 2 in the second year. (Average value of the last 3 editions)</li> </ul>
DIPLOMAS	<ul> <li>FIRST YEAR: CIHEAM's Post-graduate Specialization Diploma.</li> <li>SECOND YEAR: Master of Science Degree.</li> </ul>
WEBSITE	322 (ciheam.org)

MASTER ACRONYM AND TITLE	AGRO-FOOD MARKETING Module 3: The agro-food system and institutions
ECTs	120 ECTS
OFFERED/ MANAGED BY	CIHEAM Zaragoza
START/END DATE	23 September 2022 – 3 June 2022 / June 2023
CRITERIA OF ADMISSION	<ul> <li>Degree and academic record preferably in agronomy, economics, business administration, food science, or other related degrees.</li> <li>Knowledge of English</li> <li>Reasons for applying to the Master</li> </ul>
GENERAL DESCRIPTION	The Master provides a global and integrated vision of the components of agro-food marketing, placing particular emphasis on the international dimension of agribusiness marketing strategies. The comprehensive teaching system combines lectures, practicals, tutored group work, visits to firms, and round table discussions with experts from firms in the sector. It is delivered in English.
OBJECTIVES	<ul> <li>The Master enables participants to:</li> <li>Become acquainted with theoretical and practical elements of agro-food marketing, from commodities to end products, and its institutional and political environment.</li> <li>Criteria to value the advantages and disadvantages of a variety of strategies and methods that, according to the economic objectives and different institutional and market situations.</li> <li>Capacity to advise companies or public institutions in conducting market research projects and formulating marketing strategies.</li> </ul>
TOPICS	<ul> <li>Supply, demand, and prices of agricultural products</li> <li>International trade and modeling of agricultural products</li> <li>Agro-food market structure and policies</li> <li>The agro-food system and its institutions</li> <li>Agro-food policy</li> <li>Marketing and market research</li> <li>Programming the marketing mix</li> <li>Marketing strategy and control</li> <li>International marketing and case studies of firms</li> <li>Marketing project</li> </ul>
inclusion of young people and women empowerment	In the last three editions of the Master, 201 applications were received and, on average 58% of the candidates were women. 88% of the participants were women. (Average value of the last 3 editions).
FEES AND SCHOLARSHIPS	<ul> <li>Registration fees were 2244 EUR per academic year. The sum covered only tuition fees.</li> <li>13 scholarships were awarded in the first year and 13 in the second year (Average value of the last three editions).</li> </ul>
DIPLOMA	<ul> <li>FIRST YEAR: CIHEAM's Post-graduate Specialization Diploma.</li> <li>SECOND YEAR: Master of Science Degree.</li> </ul>
WEBSITE	http://www.masteragrofoodmarketing.com/

### ADVANCED TRAINING COURSES

#### **CIHEAM BARI**

TRAINING COURSES	Advanced Specialised Course in Sustainable Development of Coastal Communities
OFFERED/ MANAGED BY	CIHEAM Bari-Tricase
START/END DATE	Every year the course is organized in weekly units for a total duration of 10 weeks.
CRITERIA OF ADMISSION	<ul> <li>The course is addressed to about 15 officials from the Ministries of Agriculture and Fishery, of the following countries: <ul> <li>Mediterranean region: Morocco, Algeria, Tunisia, Libya, Egypt, Lebanon, Palestine, Turkey, Albania, etc.</li> <li>Other ACP, and IORA countries: Mauritania, Kenya, Mozambique, Eritrea, etc.</li> </ul> </li> <li>They are nominated by the competent Ministries in which they are employed, who authorize the pre-selected candidates to apply for this course through the online procedure of the CIHEAM BARI website.</li> </ul>
GENERAL DESCRIPTION	The course promotes an integrated and smart development vision of the coastal area, transferring both technical and practical knowledge for planning and implementing the best and most sustainable interaction among all coastal development drivers.
OBJECTIVES	The course aims to strengthen 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.
TOPICS	<ul> <li>Fishery, aquaculture, and sustainable coastal development are the major areas developed in the course, focusing in particular on management, technical and legal aspects and taking into account administrative issues.</li> <li>Module SUSTAINABLE AQUACULTURE <ul> <li>The state of the World and Mediterranean Aquaculture</li> <li>Sustainable and Responsible Aquaculture Practices</li> <li>Recent Technological Innovation in Aquaculture</li> <li>Integrating Aquaculture Activities into Coastal Zone Areas</li> <li>Filed/practical works</li> </ul> </li> <li>Module COASTAL AND MARITIME SUSTAINABLE TOURISM <ul> <li>State of play: Importance of Coastal and Maritime Sustainable Tourism</li> <li>Sustainable development model of coastal and maritime tourism</li> <li>Management, quality, and attractiveness of sustainable marinas</li> <li>Field/practical works</li> </ul> </li> <li>CROSS-CUTTING TOPICS <ul> <li>Blue Economy and Blue Growth concept</li> <li>Planning methodologies</li> <li>Sustainable seafood value chain</li> <li>Fisheries, aquaculture, and coastal tourism legislation</li> </ul> </li> </ul>

	<ul> <li>Business model for fisheries and aquaculture</li> <li>Marine Knowledge</li> <li>Project management and Financing opportunities</li> </ul>
FEES AND SCHOLARSHIPS	The about 15 final participants benefit from full scholarships covering all course expenses (travel, board, lodging, insurance, and pocket money).
CERTIFICATES/ (professional) DIPLOMA	At the end of the course, successful participants are awarded a Certificate of Attendance accompanied by a transcript of records. The results of the learning activities are monitored throughout the life of the course through the submission of tests at the end of the didactic modules. For a final result higher than (70) 20 credits are attributed. These credits are recognized in the case of further participation in CIHEAM Bari courses.

TRAINING COURSES	Training course on Olive supply chain, Networking Activities and Exhibiting local
ACRONYM AND TITLE	Products, and Youth Communicators for development.
	In the framework of activities of the Project Poverty Reduction through Rural Development in Balochistan, Khyber Pakhtunkhwa, Federally Administered Tribal Areas, and Neighboring Areas of Pakistan).
OFFERED/ MANAGED BY	School of Business and Management of University LUISS Guido Carli, in Rome (Italy)
PARTNERS	CIHEAM Bari, Ministry of National Food Security & Research (MNFSR), Pakistan Agricultural Research Council (PARC), Pakistan Poverty Alleviation Fund (PPAF)
START/END DATE	From 1.7.2019 to 15.7.2019./ From 10.12.2019 to 14.12.2019./ From 2.1.2021 to 15.3.2021
CRITERIA OF ADMISSION	Selection of experts in rural development and the olive sector, done by the Ministry of National Food Security & Research (MNFSR), Pakistan Agricultural Research Council (PARC).
GENERAL DESCRIPTION	The course aims to support Pakistan's olive oil supply chain players, local administrators, and communicators in developing the olive oil business and the technical skills in olive oil production.
OBJECTIVES	<ul> <li>At the end of the program participants will be capable of: <ul> <li>Describing the different varieties and qualities of olive oil</li> <li>Identifying the criteria for the choice of the land</li> <li>Describing the cultivation and production techniques</li> <li>Improving the farm management, cooperation, technical assistance, environmental, social, economic, and health impacts</li> <li>Develop inter-organizational associations to coordinate the value chain</li> <li>Develop a marketing plan for their olive oil</li> <li>Divulgate, especially with skills at conveying information, ideas, or policy to the rural development and olive culture</li> </ul> </li> </ul>
TOPICS	<ul> <li>Species ecology (varieties and adaptation)</li> <li>Land, environment, and climate</li> <li>Traditional growing system and new techniques</li> <li>Nurseries and propagation</li> <li>Planting techniques</li> <li>Harvesting and post-harvesting</li> <li>Product processing (for oil and table)</li> <li>Farm management</li> <li>Environmental, economic and social impacts</li> <li>Associations in olive growing and management of mills</li> <li>Quality of olive oil</li> <li>Marketing aspects</li> <li>Planning rural development, and promoting an olive culture</li> </ul>
inclusion of young people and women empowerment	The course will provide local community leaders and members knowledge, tools, and networking opportunities for (i) empowering and developing engaged communities; (ii) creating livelihood opportunities for communities and marginalized groups (especially young and female members of the communities); (iii) increasing health promotion and education through lifestyle and service delivery restructuring (ICTs).
CERTIFICATES/ (professional) DIPLOMA	Completion certificate after taking the final evaluation exam
WEBSITE	https://businessschool.luiss.it/

### CIHEAM ZARAGOZA

TRAINING COURSES ACRONYM AND TITLE	Olive growing and climate change (Online modality)
ECTs	3 ECTS maximum, after a test or assignment
OFFERED/ MANAGED BY	CIHEAM Zaragoza
PARTNERS	The course was jointly organized by CIHEAM Zaragoza and the International Olive Council (IOC).
START/END DATE	27 September – 1 October 2021
CRITERIA OF ADMISSION	The course is designed for 35* participants with a university degree public and private planners and decision-makers, agronomists, environmentalists, technical advisors, and experts from R&D institutions involved in the management of the environmental effects on olive growing in the context of climate change. Knowledge of English, French, or Spanish is mandatory.
GENERAL DESCRIPTION	The Mediterranean area has been identified as one of the hot spots of global climate change. In this view, the Olive is a strategic crop of huge importance for the temperate regions, not only grown for its economic relevance but also for preserving social, cultural, and environmental values. Appropriate management of olive groves can contribute to mitigating the adverse effects of climate change on Mediterranean ecosystems by enhancing soil carbon sequestration. On the other hand, adaptive management measures may reduce the vulnerability to climate change, help to protect water and biodiversity, and diminish risks.
OBJECTIVES	<ul> <li>Provide the most up-to-date information to: <ul> <li>Raise awareness about the additional challenges that climate change imposes on olive growing and the selection of the most appropriate varieties</li> <li>Provide guidance on the usefulness and use of models to better understand the impact of climate change and predict its consequences</li> <li>Offer an integrated vision of the strategies that must be required to mitigate climate change and adapt to it.</li> </ul> </li> </ul>
TOPICS	<ul> <li>Current situation and perspectives on olive growing</li> <li>Climate change context and policy</li> <li>Olive biophysical aspects affected by climate change</li> <li>Mitigation of climate change</li> <li>Adaptation of olive growing to climate change</li> <li>Case studies</li> </ul>
inclusion of young people and women empowerment	This course received 129 applications, and 46% of the candidates were women. 49% of the participants were women.
FEES AND SCHOLARSHIPS	Registration fees: 400 euros, 65 scholarships were awarded, 43% were for women.
CERTIFICATES/	A certificate of attendance is granted without a test
WEBSITE	https://edu.iamz.ciheam.org/OliveClimateChange/en/

TRAINING COURSES	Mediterranean forest health in the context of global change
ACRONYM AND	(Online modality)
ECTs	3 ECTS maximum, after a test or assignment
OFFERED/ MANAGED BY	CIHEAM Zaragoza
PARTNERS	The course was jointly organized by CIHEAM Zaragoza and the European Forest Institute (EFI), with the collaboration of the International Union of Forest Research Organizations (IUFRO).
START/END DATE	22 November – 1 December 2021
CRITERIA OF ADMISSION	<ul> <li>Participants with a university degree, professionals from health services, environmentalists, technical advisors, and experts from R&amp;D institutions involved in forest health management.</li> <li>Knowledge of English, French or Spanish.</li> </ul>
GENERAL DESCRIPTION	Mediterranean forests are complex socio-ecological systems characterized by extensive biodiversity and a long history of deep interconnection with human populations. They are considered a hotspot of global change impacts and risks (habitat loss, air pollution, droughts, fires, insect, and disease outbreaks, etc.). Promoting forest adaptation to global change is particularly challenging because of considerable uncertainty in future socio-economic and climatic scenarios, ecosystem responses, and impacts of forest management practices, among other factors.
OBJECTIVES	To present the current knowledge, concepts, criteria, and methods related to the evaluation, monitoring, and management of forest health in a context of global change.
TOPICS	<ol> <li>Mediterranean forest and global change</li> <li>Direct and indirect effects of climate change on forest health</li> <li>Non-native pests</li> <li>Forest health surveillance         <ul> <li>4.1. Principles and methods of existing monitoring and surveillance programme.</li> <li>4.2. Need for improved surveillance and methods</li> </ul> </li> <li>Management strategies to cope with the effects of global change on forest health</li> </ol>
inclusion of young people and women empowerment?	<ul> <li>This course received 59 applications, 37% of the candidates were women.</li> <li>52% of the participants were women.</li> </ul>
FEES AND SCHOLARSHIPS	<ul> <li>Registration fees for the course amounted to 400 euros.</li> <li>9 scholarships were awarded, and 33% were for women.</li> </ul>
CERTIFICATES	A certificate of attendance is granted without a test
WEBSITE	https://edu.iamz.ciheam.org/ForestHealth/en/

TRAINING COURSES	Predictive breeding tools for intensive and sustainable production under
ACRONYM AND TITLE	climate change scenarios. (Online modality).
ECTs	3 ECTS maximum, after a test or assignment
OFFERED/	CIHEAM Zaragoza
MANAGED BY	
PARTNERS	The course was jointly organized by CIHEAM Zaragoza, the EU Projects ERA- Net SusCrop BARISTA (Advanced tools for breeding BARley for Intensive and SusTainable Agriculture under climate change scenarios), and PRIMA GENDIBAR (Utilization of local genetic diversity to understand and exploit barley adaptation to harsh environments and for pre-breeding), and the International Center for Agricultural Research in the Dry Areas (ICARDA).
START/END DATE	17 – 21 January 2022
CRITERIA OF ADMISSION	<ul> <li>Professionals with a university degree and background in plant breeding, molecular genetics, or physiology</li> <li>Knowledge of English</li> </ul>
GENERAL DESCRIPTION	Improving the genetic potential of seeds is the most effective way to introduce the innovation in agriculture needed to meet the UN Sustainable Development Goals (SDGs). Integrating conventional breeding with high-precision phenotyping, genetic modeling, and crop growth simulation methods can improve current predictive breeding to offer new strategies and toolsets, leading to new high-yielding varieties selected to address anticipated future weather conditions.
OBJECTIVES	<ul> <li>to raise awareness of the additional challenges imposed by climate change on food security and the improvement of cereals.</li> <li>to provide guidance on the potential of the crop and climate models to improve predictions.</li> <li>provide an integrated overview of strategies to consider increasing breeding effectiveness by combining recent advances in genomics and phenomics with crop and climate models.</li> </ul>
TOPICS	<ul> <li>Framework for prediction in plant breeding under climate change scenarios</li> <li>Climate change scenarios</li> <li>Traits for sustainability in cereal breeding</li> <li>Genomic selection</li> <li>5Crop modeling</li> <li>Linking genomic prediction (GP) with crop simulation models (CSM)</li> </ul>
inclusion of young people and women empowerment	<ul> <li>The course received 138 applications, and 39% of the candidates were women.</li> <li>45% of the participants were women.</li> </ul>
FEES AND	- Registration fees: 500 euros.
SCHOLARSHIPS	- 22 scholarships were awarded, 41% were for women.
CERTIFICATES	A certificate of attendance is granted without a test
WEBSITE	https://edu.iamz.ciheam.org/PredictiveBreedingTools/en/

TRAINING COURSES	Recent trends in conservation agriculture in Mediterranean environments
ACRONYM AND TITLE	(Online modality)
ECTs	3 ECTS maximum, after a test or assignment
OFFERED/ MANAGED BY	CIHEAM Zaragoza
PARTNERS	The course was jointly organized by CIHEAM Zaragoza, the Project "Research-based participatory approaches for adopting Conservation Agriculture in the Mediterranean Area, CAMA, GA No. 1912" funded by the PRIMA programme supported by the EU's Horizon 2020 research and innovation programme, and the International Center for Agricultural Research in the Dry Areas (ICARDA).
START/END DATE	14 – 23 February 2022
CRITERIA OF ADMISSION	<ul> <li>Professionals with a university degree. It is intended for technical specialists, researchers, and decision-makers involved in or concerned with the development and application of Conservation Agriculture.</li> <li>Knowledge of English, French or Spanish.</li> </ul>
GENERAL DESCRIPTION	Conservation Agriculture (CA) is a sustainable and profitable system of agricultural production and land management based on three interlinked principles: no or minimum mechanical soil disturbance, maintenance of soil organic cover, and crop diversification. With CA, production costs and negative environmental impacts can be minimized, while improving productivity and resilience, including climate change adaptation and mitigation.
OBJECTIVES	The course addressed recent trends, advances, and innovations in CA research and practice, and the major concerns that farmers face in the adoption of CA, including limited knowledge sharing and technical assistance.
TOPICS	<ul> <li>Introduction and overview</li> <li>Bases of CA under Mediterranean environments</li> <li>Technical challenges and advances in crop management under CA</li> <li>Socioeconomic and environmental implications</li> <li>Policy and institutional options</li> <li>Case studies</li> <li>Virtual technical visit</li> </ul>
inclusion of young people and women empowerment	<ul> <li>The course received 157 applications, 42% of the candidates were women</li> <li>49% of the participants were women.</li> </ul>
FEES AND SCHOLARSHIPS	- There were no registration fees as the course was part of the CAMA project.
CERTIFICATES	A certificate of attendance was granted without a test
WEBSITE	https://edu.iamz.ciheam.org/ConservationAgriculture/en/

TRAINING COURSES ACRONYM AND TITLE	Advances in weed management for sustainable agriculture
ECTs	3 ECTS maximum, after a test or assignment
OFFERED/ MANAGED BY	CIHEAM Zaragoza
PARTNERS	The course is jointly organized by CIHEAM Zaragoza, the International Center for Agricultural Research in the Dry Areas (ICARDA), the Agrifood Research and Technology Centre of Aragón (CITA), the European Weed Research Society (EWRS), and the Spanish Weed Science Society (SEMh).
START/END DATE	28 March – 1 April 2022
CRITERIA OF ADMISSION	<ul> <li>Participants with a university degree, professionals from public and private organizations involved in weed management, as well as decision-makers, plant protection specialists, technical advisors, and researchers.</li> <li>Knowledge of English, French or Spanish.</li> </ul>
GENERAL DESCRIPTION	Weeds cause serious crop yield losses, which, along with environmental and health concerns, make weeds one of the most important biotic constraints on agricultural production. The Mediterranean region, characterized by severe water scarcity, is especially vulnerable to damage caused by weeds. All these problems are recently exacerbated by invasive weeds, the rapid evolution of herbicide-resistant weeds, and the potential threat of global climate change. This course addresses the need for advanced knowledge of sustainable weed management.
OBJECTIVES	The course will emphasize applied weed management practices from a system perspective using modern tools and knowledge.
TOPICS	<ul> <li>Framing sustainable agriculture in a 21st-century perspective</li> <li>Current challenges in weed control</li> <li>Framing weed management in the context of sustainable agriculture</li> <li>Guided discussion</li> <li>Applied weed biology and ecology</li> <li>Building an IWM system</li> <li>Hands-on sessions</li> <li>Final debate and closing remarks.</li> </ul>
inclusion of young people and women empowerment	<ul> <li>The course received 94 applications, and 37% of the candidates are women.</li> <li>45% of the participants are women.</li> </ul>
FEES AND SCHOLARSHIPS	<ul> <li>Registration fees: 500 euros. This sum covers only tuition fees.</li> <li>9 scholarships have been awarded, 44% are for women.</li> </ul>
CERTIFICATES	A certificate of attendance is granted without a test
WEBSITE	https://edu.iamz.ciheam.org/WeedManagement/en/

TRAINING COURSES ACRONYM AND TITLE	Livestock and climate change: assessment of emissions, mitigation options, and adaptation strategies. (Online modality)
ECTs	3 ECTS maximum, after a test or assignment
OFFERED/ MANAGED BY	CIHEAM Zaragoza
PARTNERS	The course was jointly organized by CIHEAM Zaragoza, the Global Research Alliance on Agricultural Greenhouse Gases (GRA), the Food and Agriculture Organization of the United Nations (FAO), the International Center for Agricultural Research in the Dry Areas (ICARDA), the Red REMEDIA (Scientific network for greenhouse gas mitigation in the agroforestry sector) and the 4 per 1000 Initiative.
START/END DATE	19 – 30 October 2020
CRITERIA OF ADMISSION	<ul> <li>Participants with a university degree, public and private planners and decision-makers, technical advisors, livestock producers, environmentalists, and R&amp;D professionals involved in the management of the environmental consequences of livestock farming in the context of climate change.</li> <li>Knowledge of English, French, or Spanish</li> </ul>
GENERAL DESCRIPTION	The livestock sector is responsible for approximately 14.5% of anthropogenic GHG emissions worldwide. There is a challenge in developing complementary adaptation and mitigation strategies for the sector, in accordance with the Paris Agreement on climate change and the Sustainable Development Goals. Livestock has particularly high potential in the region to improve food security while mitigating emissions in a changing climate. However, understanding GHG emission sources from biogenic processes within complex production systems is critical to developing effective strategies.
OBJECTIVES	To provide knowledge on the processes underlying GHG emissions and soil carbon sinks (according to the goal of 4 per 1000), measurement methodologies, and modeling tools in livestock systems. Methods for national GHG inventories and analysis of mitigation options, including socio-economic assessment.
TOPICS	<ul> <li>Context</li> <li>Greenhouse gases from livestock systems</li> <li>Main strategies for mitigation</li> <li>Reporting National GHG Inventories</li> <li>Improving GHG estimations and National GHG Inventories</li> <li>Climate change adaptation strategies for livestock</li> <li>Socio-economic assessments and policies</li> <li>Round table discussion</li> </ul>
inclusion of young people and women empowerment	<ul> <li>The course received 181 applications, and 38% of the candidates were women.</li> <li>49% of the participants were women.</li> </ul>
FEES AND SCHOLARSHIPS	<ul> <li>Registration fees for the course amounted to 200 euros.</li> <li>19 scholarships were awarded by other institutions, and 32% of scholarship recipients were women</li> </ul>
CERTIFICATES	A certificate of attendance was granted without a test
WEBSITE	https://edu.iamz.ciheam.org/LivestockClimateChange/en/

TRAINING COURSES	Food sustainability assessment: a methodological approach. (Online modality)
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ECTs	3 ECTS maximum, after a test or assignment
OFFERED/ MANAGED BY	CIHEAM Zaragoza
START/END DATE	15 – 24 February 2021
CRITERIA OF ADMISSION	<ul> <li>Participants with a university degree. It was intended for professionals from public and private organizations involved in weed management, as well as for decision-makers, plant protection specialists, technical advisors, and researchers.</li> <li>Knowledge of English, French or Spanish. The Organization provided simultaneous interpretation.</li> </ul>
GENERAL DESCRIPTION	Food systems are challenged to achieve nutritional security, food safety, and healthy diets for a growing world population while minimizing the impact on the limited natural resources available and protecting human well-being and social equity. Despite various efforts and initiatives toward more sustainable food systems, which sometimes also include discussions on possible metrics, it is still not clear what would be an adequate set of indicators for countries and stakeholders to measure progress in the transformation of their food systems.
OBJECTIVES	The course aimed to offer a comprehensive look at the different methodologies that have been developed from perspectives and alternative conceptual approaches. Specific attention was paid to the complexity of food systems, as well as to the resolution of conflicts arising from trade-offs between indicators.
TOPICS	<ul> <li>Good governance</li> <li>Measuring sustainability</li> <li>Assessment methodologies         <ul> <li>Global food systems sustainability indicators: type of indicators</li> <li>Environmental assessment</li> <li>Social assessment: Social Life Cycle</li> <li>Economic assessment</li> <li>Food and nutrition composite indicators</li> </ul> </li> <li>Synergies and trade-offs among environmental, social, economic, and nutritional assessments. Resolution of conflicts</li> <li>The example of the nexus of water-energy-food</li> <li>Round table discussion: how to engage public and private actors in assessing the sustainability of food systems?</li> </ul>
inclusion of young people and women empowerment	<ul> <li>The course received 151 applications, and 48% of the candidates were women.</li> <li>44% of the participants were women.</li> </ul>
FEES AND SCHOLARSHIPS	<ul> <li>Registration fees for the course amounted to 400 euros.</li> <li>15 scholarships were awarded, and 40% were for women.</li> </ul>
CERTIFICATES	A certificate of attendance was granted without a test
WEBSITE	https://edu.iamz.ciheam.org/FoodSustainability/en/

TRAINING COURSES	Wastewater reuse for agriculture. (Online modality)
ACRONYM AND	
TITLE	
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ECIS	3 ECIS maximum, after a test or assignment
OFFERED/ MANAGED BY	CIHEAM Zaragoza
PARTNERS	The course was jointly organized by CIHEAM Zaragoza, CIHEAM Bari, the International Center for Agricultural Research in the Dry Areas (ICARDA), the International Water Management Institute (IWMI), and the ReWater-MENA Project, in collaboration with the Regional Office for Near East and North Africa of the Food and Agriculture Organization of the United Nations (FAO) and the Action Plan for the Water Strategy of the 5+5 Dialogue.
START/END DATE	17 – 21 May 2021
CRITERIA OF ADMISSION	<ul> <li>Participants with a university degree, professionals from public and private organizations involved in weed management, as well as decision-makers, plant protection specialists, technical advisors, and researchers.</li> <li>Knowledge of English, French or Spanish. The Organization provided simultaneous interpretation.</li> </ul>
GENERAL DESCRIPTION	where the available water for agriculture is decreasing, the safe use of treated wastewater should be largely adopted. Currently, the challenge is to provide end-users with economically feasible water treatment technologies, protocols, guidelines, and effective practices for reclaimed water use, considering safety, environmental, socio-economic, and legal constraints. It focuses on the adoption of evidence-based solutions for the reuse of treated wastewater at watershed and farm levels and its environmental and safety impacts, according to the principle of integrated water resources management and the circular economy approach.
OBJECTIVES	To integrate the key elements and technologies involved in the reuse of wastewater for agriculture to enhance the capacity of professionals working in this field.
TOPICS	<ul> <li>Water reuse in perspective</li> <li>Water quality parameters for assessing wastewater suitability for irrigation</li> <li>Regulations and standards at the national and international level</li> <li>Water reclamation systems and implementation of treatment technologies</li> <li>Irrigation with wastewater in arid and semi-arid zones</li> <li>Institutional framework and socio-economic aspects</li> <li>Experiences in reclaimed water use: Spain, ReWater-MENA Project, Jordan</li> </ul>
inclusion of young people and women empowerment	<ul> <li>The course received 356 applications, and 42% of the candidates were women.</li> <li>46% of the participants were women.</li> </ul>
FEES AND SCHOLARSHIPS	<ul> <li>Registration fees for the course amounted to 500 euros. This sum covered only tuition fees.</li> <li>10 scholarships were awarded by CIHEAM, 40% were for women</li> <li>Other institutions awarded 19 scholarships, 32% for women.</li> </ul>
CERTIFICATES/ (Professional)	A certificate of attendance was granted without a test
WEBSITE	https://edu.iamz.ciheam.org/WastewaterReuse/en/

TRAINING COURSES ACRONYM AND TITLE	Recyclable, biodegradable, active, and intelligent food packaging (Hybrid format)
ECTs	- 3 ECTS maximum, after a test or assignment
OFFERED/ MANAGED BY	- CIHEAM Zaragoza
START/END DATE	- 14 – 18 November 2022
CRITERIA OF ADMISSION	Participants with a university degree and working in public and private institutions involved in food packaging, or interested in developing opportunities in this field (food producers, processors, distributors, and retailers; quality and safety managers; marketing managers; packaging producers, suppliers, and recyclers; public sector agents; technical advisors; and experts from R&D institutions and universities). Knowledge of English or Spanish is mandatory.
GENERAL DESCRIPTION	Active and intelligent packaging technologies can maintain product quality and freshness, extend shelf life, contribute to food waste reduction and facilitate marketing and export. The course will provide an overview of these technologies and give some examples of their use and commercial applications.
OBJECTIVES	<ul> <li>At the end of the course, participants will have: <ul> <li>A clear concept of the role of packaging in the circular economy.</li> <li>Sound knowledge of recycling processes and materials for food contact applications and the impact on packaging design.</li> <li>A broad vision of biodegradable and compostable material for Food Packaging.</li> <li>A good understanding of innovative packaging technologies such as active</li> <li>and intelligent packaging applied to food, as well as nanotechnology for packaging.</li> <li>An overview of the tools required to assess the impact of packaging systems on the environment.</li> <li>supporting tools and approaches for decision-making in food packaging.</li> <li>packaging design for sustainable performance of the food-packaging combination.</li> </ul> </li> </ul>
TOPICS	<ul> <li>roles, significance, and types of packaging in the food supply chain</li> <li>Circular Economy and packaging</li> <li>Recycling in packaging</li> <li>Biodegradable and compostable packaging</li> <li>Active packaging</li> <li>Intelligent packaging</li> <li>Nanotechnology in food packaging</li> <li>Tools for assessment of the environmental sustainability of packaging</li> </ul>
Inclusion of young people and women empowerment	<ul> <li>The course received 78 applications, 55% of the candidates were women</li> <li>55% of the invited participants are women</li> </ul>
WEBSITE	https://edu.iamz.ciheam.org/FoodPackaging/es/
TRAINING COURSES ACRONYM AND TITLE	The exploitation of Cereal Genomic Diversity for Crop Improvement under Climate Change (Hybrid format)
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ECTs	3 ECTS maximum, after a test or assignment
PARTNERS	The course was jointly organized by CIHEAM Zaragoza, the PRIMA GENDIBAR Project, the International Center for Agricultural Research in the Dry Areas (ICARDA), the University of Sfax through the Institute of Biotechnology, and Tunisia's National Institute of Field Crops (INGC).
START/END DATE	3-7 October 2022
CRITERIA OF ADMISSION	The course was designed for 20 students, young researchers, and future professionals with a university degree and with a background in plant molecular biology and physiology, plant biotechnology, plant breeding, and related fields to attend the lectures face-to-face.
GENERAL DESCRIPTION	Recent developments in genomics and plant biotechnology are delivering novel approaches that are becoming widely applied in plant breeding. The course will introduce the concepts and methods of structural and functional plant genomics to harness cereal diversity (in particular barley and wheat) for improving tolerance to abiotic stresses (with a focus on heat and drought).
OBJECTIVES	<ul> <li>to raise awareness of the extra challenges imposed by climate change for ensuring food security and improving cereals.</li> <li>to upskill students and young researchers expanding their capabilities for using genomic and biotechnological tools.</li> <li>to provide an integrated overview of the strategies that must be considered to increase breeding effectiveness, combining recent advances in genomics and phenomics. Although the course will focus on barley and wheat, the tools presented apply to other crops.</li> </ul>
TOPICS	<ul> <li>Accessing cereal genetic diversity</li> <li>Types of germplasm</li> <li>Genotyping</li> <li>Phenotyping</li> <li>Breeding cereals under climate change</li> <li>Advanced breeding tools</li> <li>Genomic selection</li> <li>Introduction to functional crop modeling for breeding</li> <li>Functional genomics, from QTL to genes</li> <li>Genetic transformation (genome editing, overexpression, silencing RNA, genotype dependence of genetic transformation)</li> <li>Speed breeding</li> </ul>
Inclusion of young people and women empowerment	<ul> <li>The course received 84 applications, 45% of the candidates were women</li> <li>55% of the invited participants were women</li> </ul>
WEBSITE	https://edu.iamz.ciheam.org/CerealGenomic/en/

TRAINING COURSES ACRONYM AND TITLE	Modeling, Measurement, and Mitigation of the Environmental Impact of Environmental Impact of the Livestock Production Systems (Hybrid format)
ECTs	3 ECTS maximum, after a test or assignment
OFFERED/ MANAGED BY	The course is jointly organized by CIHEAM Zaragoza, the Global Research Alliance on Agricultural Greenhouse Gases (GRA), and FAO. The course will count on the collaboration of Red Remedia.
START/END DATE	12-16 December 2022
CRITERIA OF ADMISSION	university degree, public and private planners and decision-makers, technical advisors, livestock producers, environmentalists, and R&D professionals involved in the management of the environmental consequences of livestock farming in the context of climate change.
GENERAL DESCRIPTION	Climate change is probably the most important challenge mankind is facing nowadays. It is important that professionals involved in livestock production at the local scale understand basic concepts of the environmental impact assessment of individual livestock production units as well as feasible options to mitigate their impact and better estimate global emissions in the future.
OBJECTIVES	<ul> <li>Increase their understanding of how to estimate the environmental impact of different types of livestock farming systems and mitigation measures.</li> <li>Know the sources and drivers controlling main emissions in livestock farming systems (i.e. C, N, P).</li> <li>Improve skills in tools for modeling C, N, and P emissions at farm/local/regional scale.</li> <li>Learn different techniques to measure emissions in livestock farming systems.</li> <li>Develop a critical perspective on mitigation strategies and their technical and economic feasibility.</li> </ul>
TOPICS	<ul> <li>Livestock and climate change, sector trends, contribution to C, N, and P Emissions, and mitigation strategies at global and regional levels. GHG impacts</li> <li>and emission sources in livestock production systems.</li> <li>C, N, and P fluxes in livestock systems</li> <li>Modelling and measuring emissions</li> <li>Models to estimate emissions in livestock production systems</li> <li>Measuring nutrient fluxes</li> <li>Mitigation options. Technical and economic feasibility</li> <li>Economic implications and decision-making at the farm scale</li> </ul>
Inclusion of young people and women empowerment	The course received 183 applications, and 33% of the candidates were women Candidates are in the selection process
WEBSITE	https://edu.iamz.ciheam.org/LivestockProductionSystems/en/

# **RESEARCH PROJECTS**

#### **CIHEAM BARI**

ACRONYM AND TITLE	Sustainable Regeneration Plan of Salento in Apulia Region – Xylella DAJS
SDGs	3, 8, 11, 13, 15, 17
COUNTRY/ IES	Italy
LEAD PARTNER	District of Agrofood Quality in Jonico-Salentina area (DAJS)
PARTNERS	<ul> <li>University of Salento (Unisalento)</li> <li>Università of Bari Aldo Moro (Uniba)</li> <li>Politecnico of Bari (Poliba)</li> <li>Institute for the Sustainable Protection of Plats of the CNR (IPSP-CNR)</li> <li>Mediterranean Agronomic Institute (CIHEAM-Bari)</li> </ul>
OVERALL PROJECT VALUE (EUR)	5 mln EUR
FUNDED BY	MIPPAF (ITALY)
START – END DATE	07.12.2021 to 30.09.2023
GENERAL DESCRIPTION	The research project has the ambition of redesigning the agricultural production systems of the jonico-salentino area to support the most vulnerable and fragile rural communities in a durable and compatible way, with the aim of preventing their abandonment and further migratory processes, connecting production systems with different markets, feeding virtuous and sustainable paths also thanks to new practices and new development models.
OBJECTIVES	Generate a complex system of decision support, capable of overall re-elaborating contextual, naturalistic, climatological, infrastructural, and social data and translating them into intervention strategies, expert systems, medium and long-term forecasts, and production solutions.
MAIN ACTIVITIES	The project includes seven work packages related to Context analysis (WP1), Natural capital (WP2), Climate and climate change (WP3), Infrastructure capital (WP4), Innovation and Sustainability (WP5), and Decision support system (WP6), Scientific coordination (WP7). CMCC will contribute in particular to the WP3 with the definition of the pathways towards a "Carbon Neutral" agriculture in the Salento area of the Puglia region.
WEBSITE	http://www.dajs.it/index.php/it/

ACRONYM AND TITLE	An assessment of risks of Xylella fastidiosa and its potential socio-economic impacts in NENA countries - LoA FAO Xylella 2019
SDGs	8, 12, 17
COUNTRY/IES	NENA Countries
LEAD PARTNER	CIHEAM Bari
OVERALL PROJECT VALUE (EUR)	40,000 USD
FUNDED BY	FAO
START/END DATE	11.06.2019 to 28.02.2020
GENERAL DESCRIPTION	The outbreaks of Olive Quick Decline Syndrome (OQDS) caused by Xylella fastidiosa in the Apulia region in Italy, and the following findings in Spain, France, Germany, and recently Portugal and Israel, represent a serious threat to agriculture in the Mediterranean countries. The risk of introduction and establishment of X. fastidiosa in the NENA countries could be high due to the increasing trade of planting material, the prevalence of host plants, and insect vectors, and the suitability of environmental conditions. Potential losses in host plant crops caused by X. fastidiosa could be a major threat to the NENA region's food security and economic growth. There is a persistent need to have a study on the potential economic and social impact of X. fastidiosa introduction and establishment in NENA countries, to estimate the direct losses and trade consequences for the main crops, and to identify the most vulnerable production sectors and farmer communities This research project aims at contributing to reducing the risk of entrance and diffusion of X. fastidiosa in NENA countries.
OBJECTIVES	Carry out a report assessing the risks and the potential socio-economic impacts of X. fastidiosa introduction on the main crops in selected NENA countries, and provide recommendations to policymakers Carry out a study forming the bases for any economic justifications for prevention measures to be taken by stakeholders to eliminate or reduce the risk of X. fastidiosa introduction. The final report aims at raising awareness of the risk of X. fastidiosa and increasing preparedness in implementing a sound pathway to be laid down in a strategic plan.
MAIN ACTIVITIES	<ul> <li>Assessment of the risk of X. fastidiosa introduction and establishment</li> <li>Analysis of the perception of the risk and level of preparedness to counteract X. fastidiosa among policymakers and agro-food chain stakeholders</li> <li>Estimation of the socio-economic impact (cf. productivity, the value of production, and profitability) of X. fastidiosa on the main crops (olive, grapevine, citrus)</li> <li>Drafting orientations and recommendations to assure an effective, efficient, and sustainable region-wide management of X. fastidiosa risk</li> <li>Editing the final report and publishing an article on NEW MEDIT.</li> </ul>

ACRONYM AND TITLE	Pastoral ACTORs, Ecosystem services and Society as key elements of agro- pastoral systems in the Mediterranean – PACTORES
SDG	2, 8, 11, 12, 17
COUNTRY/IES	Spain, Greece, Italy, Tunisia, Algeria, Turkey
LEAD PARTNER	Center for Agro-food Economics and Development – CREDA (Castelldefels, Spain)
PARTNERS	<ul> <li>CIHEAM-Bari</li> <li>the University of Vic - UVIC (Spain)</li> <li>the Aristotle University of Thessaloniki - AUTH (Greece)</li> <li>Polytechnic University Marche – Ancona - UNIVPM (Italy)</li> <li>National Research Council (Sassari) - ISPAAM (Italy)</li> <li>Institut des Regions Arides - IRA (Tunisia)</li> <li>Algerian National Agronomic Research Institute - INRAA (Algeria)</li> <li>Sétif University - UFA (Algeria) Suleyman University - SDU (Turkey)</li> </ul>
OVERALL PROJECT VALUE	1.111.312,10 €
FUNDED BY	ERANET MED
START-END DATE	January 2018 to January 2021
GENERAL DESCRIPTION	The PACTORES project is a collaboration across an interdisciplinary consortium, with 10 research centers working collectively on 7 case studies spanning 6 countries around the Mediterranean basin. PACTORES aims to examine the (mis/) matches between pastoral communities and social expectations, using a multi-disciplinary approach to view Mediterranean APS as complex socio-ecological systems. It provides unique transdisciplinary expertise, innovative methodological proficiency, and an in-depth understanding of the vulnerability of agropastoralism in the Mediterranean region. The international and cross-disciplinary nature of the investigation will promote communication between participating countries and support the development of a coherent scientific and policy framework.
OBJECTIVES	<ol> <li>Identification of the main bottlenecks hindering the viability of agro-pastoral communities, with a focus on best practices in terms of environmental, socioeconomic, and policy considerations.</li> <li>The conveyance of information to key audiences on the actual capacity of Mediterranean APS to provide numerous societal benefits.</li> </ol>
MAIN ACTIVITIES	<ul> <li>identification of main ecosystem services and functions in APS and their dependence on livestock management.</li> <li>identification of the needs and aspirations of pastoralists and society towards these APS and to what extent current policies enhance/hinder their aspirations.</li> <li>identification of social demand for these systems and their related products.</li> <li>identification of economic rationality of pastoralists, value, and power allocation along the value chain of APS related products.</li> </ul>
WEBSITE	http://www.pactores.eu/

ACRONYM AND TITLE	Losses of Xylella fastidiosa in MED Value Chain" - MED XF SCENARIO
SDG	8, 12, 17
COUNTRY/IES	European region (EU and Balkans) and the MENA region
LEAD PARTNER	CIHEAM Bari
PARTNERS	University of Bari (Italy)
OVERALL PROJECT VALUE	50,000.00 €
FUNDED BY	SLM Partners LPP (https://slmpartners.com/)
START-END DATE	January 2018 to January 2021
GENERAL DESCRIPTION	Following the detection of Xylella fastidiosa (Xf), European countries and some countries in the Middle East and North Africa (MENA) have implemented several risk options to prevent its entry and spread and to combat it. Despite these actions, there is a high risk that Xf will continue to spread to new countries and regions through the movement of infected host plants (asymptomatic or unknown hosts) or the unintentional transport of insect vectors on goods or vehicles. This risk is higher in countries with a climate and land use suitable for the establishment and spread of Xf outbreaks. Therefore, there is a need for an overall nationwide study conducted simultaneously in the European region (EU and Balkans) and the MENA region, which allows the selection of priority countries for more detailed country-specific pest risk analyses.
OBJECTIVES	The main objectives of the study are the assessment of the socio-economic and financial impacts of the spread of Xf in the wider Mediterranean region, including MENA, and the assessment of the gaps and remedies available and necessary to engage potential donors in support of actions.
MAIN ACTIVITIES	<ul> <li>An assessment of the socio-economic impacts of probabilistic entry and spread of Xylella fastidiosa in European Mediterranean countries, the Balkans, and the MENA region.</li> <li>An analysis on preventing Xylella fastidiosa establishment and spread: compensation measures and replanting costs in the Euro-Mediterranean area.</li> </ul>
WEBSITE	n.a.

### **CIHEAM CHANIA**

ACRONYM AND TITLE	BIOVALUE / Fork-to-farm agent-based simulation tool augmenting BIOdiversity in the agri-food VALUE chain
COUNTRY/ IES	Greece, Norway, Hungary, Cyprus, Estonia, Germany, Turkey, Italy, Germany, Georgia, Spain, Serbia, Germany
LEAD PARTNER	ARISTOTLE UNIVERSITY OF THESSALONIKI (AUTH)
PARTNERS	17 partners – 12 EU countries Consortium - Biovalue (biovalue-project. eu)
OVERALL PROJECT VALUE (EUR)	5,994,000 €
FUNDED BY	Horizon2020 / RIA Research and Innovation action / SFS-01-2018-2019-2020: Biodiversity in action: across farmland and the value chain
START – END DATE	48 months (2021-25)
GENERAL DESCRIPTION	The project focuses on a demand-driven approach, from fork-to-farm, explicitly modelling agent interactions and behavior throughout the value chain, as well as various present and future climatic and water availability scenarios in Europe and beyond. The outcome of the project will include complete novel food dishes and novel processed food products that successfully incorporate underutilized, genetically-diverse crops and pave the way for their introduction into the market and therefore the corresponding agricultural production. Furthermore, it will produce a set of key performance indicators to measure policy quality and impact, environmental evolution, and compliance with regulations on the introduction of underutilized, genetically-diverse crops into the value chain, and is by design expandable to further enhance biodiversity in the value chain.
OBJECTIVES	The overall objective of the BIOVALUE project is to establish the use of a holistic approach to the analysis of the links between biodiversity, the agro-food value chain, the environment, and consumer preferences by employing a bottom-up approach. A dynamic and customizable tool will be developed to optimize the introduction of underutilized genetically-diverse crops into the agri-food value chain throughout Europe and to spur a self-growing dynamic process of biodiversity by mobilizing the market and social drivers.
MAIN ACTIVITIES	<ul> <li>Assessment of the current framework of agri-food value chain tools</li> <li>Mapping of the value chain agents and their interlinkages</li> <li>Breeding program to exploit genetic biodiversity</li> <li>Evaluating consumer preferences for novel foods</li> <li>Development of a simulation framework and evaluation of the BIOVALUE tool</li> <li>Product certification, testing, and labeling</li> </ul>
WEBSITE	- <u>https://www.biovalue-project.eu/</u>

ACRONYM AND TITLE	HONEYBEE ROUTES: Emblematic action for the promotion of Greek honey, practical beekeeping and bee flora
COUNTRY/ IES	Greece
LEAD PARTNER	Aristotle University of Thessaloniki, School of Agriculture
PARTNERS	<ul> <li>Mediterranean Agronomic Institute of Chania (MAICH),</li> <li>the Agricultural University of Athens,</li> <li>Hellenic Agricultural Organization (ELGO-DIMITRA),</li> <li>National and Kapodistrian University of Athens,</li> <li>University of the Aegean,</li> <li>University of Thessaly,</li> <li>University of Patras,</li> <li>Hellenic Mediterranean University (ex TEI Crete)</li> </ul>
OVERALL PROJECT VALUE (EUR)	1.470.000,00 €
FUNDED BY	Greek General Secretariat for Research and Innovation (GSRI)
START – END DATE	May 2019- March 2022
GENERAL DESCRIPTION	Creation of a national research network in the value chain of "Honey"
OBJECTIVES	<ul> <li>Integration of new technologies in beekeeping practice,</li> <li>Influence of beekeeping practices on the quality of honey produced, Sharing knowledge and preserving traditional knowhow;</li> <li>Increased yield and reduced production costs of beekeeping products, etc) could motivate young people to start a beekeeping business.</li> </ul>
MAIN ACTIVITIES	Identification-Promotion of Greek honey: study of the physico-chemical, microscopical and sensory characteristics of Greek honey using official and new innovative analytical methods, for authenticity reasons and for documenting their biological actions. Practical Beekeeping-Bee Flora: study on various management systems for apiaries and bee plants to improve honey productivity, cost reduction, and quality preservation.
WEBSITE	https://honeybeeroutes.gr/en/

ACRONYM AND TITLE	METROFOOD-RI - Infrastructure for Promoting Metrology in Food and
	Nutrition

COUNTRY/ IES	Italy, Belgium, Switzerland, Czech Republic, Germany, Spain, Finland, France, Greece, Hungary, Moldova, North Macedonia, Netherlands, Norway, Portugal, Romania, Slovenia, Turkey
LEAD PARTNER	ENEA, Italy (AGENZIA NAZIONALE PER LE NUOVE TECNOLOGIE, L'ENERGIA E LO SVILUPPO ECONOMICO)
PARTNERS	The Consortium involves 48 Institutes from 18 European Countries
OVERALL PROJECT VALUE (EUR)	3,999,890 €
FUNDED BY	H2020-INFRADEV-02-2019 CSA METROFOOD-PP GA 871083
START – END DATE	October 2019- March 2022
GENERAL	The project represents the Preparatory Phase of the METROFOOD research initiative to promote scientific excellence in the field of food quality and safety by providing high- quality metrology services in food and nutrition, comprising an important cross-section of highly interdisciplinary and interconnected fields throughout the food value chain, including agrifood, sustainable development, food safety, quality, traceability and authenticity, environmental safety, and human health. In this phase, the main objectives are to attain firm commitments to better align governance and financial management models and to set up all the legally-binding agreements necessary to establish the ERIC status. The continuance of this initiative, the Implementation Phase, is planned to start in 2022, with full operation foreseen in 2024.
OBJECTIVES	<ol> <li>Knowledge and know-how,</li> <li>Managing natural resources and energy,</li> <li>Food Chain,</li> <li>Food Safety &amp; Quality,</li> <li>Agricultural markets.</li> </ol>
MAIN ACTIVITIES	CIHEAM/MAICh will contribute to task 11.1 ""Links with European Initiatives"" as a third party to the project partner Aristotle University of Thessaloniki (AUTH), School of Chemistry"\$
WEBSITE	https://www.metrofood.eu/

ACRONYM AND TITLE	Dynamic information management approach for the implementation of climate-resilient adaptation packages in European regions", IMPETUS
COUNTRY/ IES	IT, GR, DE, NL, ES, NO, FR, LV, CH
LEAD PARTNER	FUNDACIO EURECAT, ES
PARTNERS	32 partners from 9 countries
OVERALL PROJECT VALUE (EUR)	14872468,13
FUNDED BY	H2020-LC-GD-2020-2, IA

START – END DATE	1 October 2021 - 30 September 2025
GENERAL DESCRIPTION	The EU-funded IMPETUS project will support Europe's climate adaptation strategy as well as its efforts to become the first climate-neutral continent by 2050. The strength of the IMPETUS conceptual framework lays in the fact that it is rooted in the consideration that decisions on adaptation and resilience solutions have to be: 1) strongly anchored in knowledge as the basis for resilience; 2) co-designed and co-created with quintuple helix stakeholders, at multiple governance levels; 3) "low-regret" and scalable, depending on the evolution of climate change and other drivers; and 4) cost-effective and environmentally, economic and socially sustainable.
OBJECTIVES	The goal of the project is to turn climate commitments into tangible, urgent actions to protect communities and the planet.
MAIN ACTIVITIES	IMPETUS will develop and validate a coherent multi-scale, multi-level, cross-sectoral climate change adaptation framework to accelerate the transition towards a climate- neutral and sustainable economy. Resilience knowledge boosters will build a robust quintuple helix stakeholders' community, and they will be deployed and validated in all seven EU biogeographical regions (continental, coastal, Mediterranean, Atlantic, Arctic, boreal, and mountainous).

ACRONYM AND TITLE	Giving Rural Actors Novel data and re-Useable tools to Lead public Action in Rural areas GRANULAR, HORIZON-CL6-2021-COMMUNITIES-01
LEAD PARTNER	CENTRE INTERNATIONAL DE HAUTES ETUDES AGRONOMIQUES MEDITERRANEENNES (IAMM), France
PARTNERS	NORDREGIO (NOR), WAGENINGEN UNIVERSITY (WU), Netherlands, INTERNATIONALES INSTITUT FUER ANGEWANDTE SYSTEMANALYSE (IIASA), Austria UNIVERSITA DI PISA (UNIPI), Italy GEOPONIKO PANEPISTIMION ATHINON (AUA), Greece ASSOCIATION EUROPEENNE POUR L'INFORMATION SUR LE DEVELOPPEMENT LOCAL (AEIDL), Belgium CESKA ZEMEDELSKA UNIVERZITA V PRAZE (CZU) Czechia, CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS (CNRS), France EUROPEAN RURAL DEVELOPMENT NETWORK (ERDN), Poland, JOHANN HEINRICH VON THUENEN-INSTITUT, Germany, ECORYS BRUSSELS NV (ECR), Belgium, UNIVERSIDAD DE VIGO (UVIGO), Spain, PARTENARIAT POUR L'EUROPE RURALE (PRE), Belgium, REGION VASTERBOTTEN (VÄS), Sweden GEMEENTE OPSTERLAND (P10), Netherlands ASSOCIAZIONE DISTRETTO RURALE DELLAVAL DI CECINA Italy LUONNONVARAKESKUS (LUKE), Finland Pays Pyrénées-Méditerranée (PPM), France, POLITECHNIKA KOSZALINSKA (KUT), Poland, MEDITERRANEAN AGRONOMIC INSTITUTE OF CHANIA (MAICh), Greece, UNIVERSITA DEGIL STUDI DI MILANO (UMIL). Italy
OVERALL PROJECT	6 633 494.72 euros
VALUE (EUK)	

FUNDED BY	HORIZON-CL6-2021-COMMUNITIES-01-01, HORIZON-RIA,
START – END DATE	October 2022-September 2026
GENERAL DESCRIPTION	GRANULAR will generate new insights for characterising rural diversity based on a multi-actor and interdisciplinary approach.
OBJECTIVES	Based on insights from Multi-Actor Labs, it will generate novel datasets using a wide range of methods and primary data, such as remote sensing, crowd-sourced data, mobile phone data, and web-scraping. This data will then be combined with existing institutional data to derive indicators relevant to rural communities for the implementation of the Long-Term Vision for Rural Areas (LTVRA), so to measure resilience, well-being, quality of life, and attractiveness and finally to create a Rural Compass, that take into account the factors affecting rural communities and their functional characteristics, informing policymakers and rural actors for the design of tailored rural policies.
MAIN ACTIVITIES	Co-creation and multi-actor engagement is at the core of GRANULAR approach. GRANULAR will run 7 Living Labs in different regions of Europe (France, Netherlands, Italy, Poland, Spain, Sweden, United-Kingdom). Living Labs will bring together actors from science, policy, and civil society, to co-design, test, and validate GRANULAR work. In addition, 9 Replication Labs will assess how to replicate the tools and methods of the project in other countries, namely Albania, Finland, Greece, Italy, Latvia, Lithuania, Moldova, Romania, and Serbia.

ACRONYM AND TITLE	A Holistic Fire Management Ecosystem for Prevention, Detection, and Restoration of Environmental Disasters
LEAD PARTNER	RISE Fire Research AS, NO
PARTNERS	47 partners from 12 EU countries
FUNDED BY	Horizon 2020 research and innovation program
GENERAL DESCRIPTION	TREEADS tackles several major challenges that wildfires pose by building upon state- of-the-art high TRL products and uniting them in a holistic Fire Management Ecosystem consisting of various innovative technologies and systems to optimize and reuse the available Socio-technological Resources in all three main phases of Wildfires. By adopting a multi-stakeholder, multi-actor approach at its core, the TREEADS solutions will contribute to sustainable development as an inclusive societal process and secure sustainability and resilience of the natural environment, as well as local human societies. Considering the socio-ecological transition of Europe 2030, and towards a more resilient and informed community, focusing on the forests that are near wildfire risk the project aims to build upon state-of-the-art high TRL products and unite them in a holistic Fire Management platform that optimizes and reuses per phase the available Socio-technological Resources in all three main phases of Wildfires
OBJECTIVES	<ul> <li>Improving the efficiency of current fire-fighting operations</li> <li>Advancing operational reaction and mitigation algorithms</li> </ul>

	<ul> <li>Deploying, validating, and testing the solution in realistic live demonstrations over eight different climate scenarios, and biogeographical and socio-economic contexts.</li> <li>Deliver a strong impact in addition to assisting the emerging need of protecting human lives, the environment, and property</li> </ul>
MAIN ACTIVITIES	TREEADS is developing and validating an innovative, sustainable, and applied holistic wildfire management ecosystem, featuring a plethora of systems and tools which collaborate seamlessly and in harmonization. In total, over 26 different technologies will be optimized, developed, and validated in the implementation of TREEADS providing advanced capabilities before, during, and, after extreme fire events.
WEBSITE	https://treeads-project.eu/

ACRONYM AND TITLE	A Holistic Approach to Sustainable, Digital EU Agriculture, Forestry, Livestock and Rural Development based on Reconfigurable Aerial Enablers and Edge Artificial Intelligence-on-Demand Systems, CHAMELEON
LEAD PARTNER	ACCELIGENCE LTD, Cyprus
PARTNERS	<ul> <li>UNIVERSIDAD DE SALAMANCA (USAL), Spain,</li> <li>ADRESTIA EREVNITIKI IDIOTIKI KEFALAIOUXIKI ETAIREIA (ADRESTIA), Greece</li> <li>AIDEAS OU (AIDEAS OU) Estonia</li> <li>DIPUTACION DE AVILA (AVILA), Spain,</li> <li>DELAIR (DELAIR), France,</li> <li>UNPARALLEL INNOVATION LDA (UNPARALLEL), Portugal,</li> <li>MEDITERRANEAN AGRONOMIC INSTITUTE OF CHANIA (CIHEAM/ MAICH), Greece</li> <li>LIETUVOS AGRARINIU IR MISKU MOKSLU CENTRAS, (LAMMC), Lithuania,</li> <li>UNIVERSIDAD DE CASTILLA - LA MANCHA (UCLM), Spain,</li> <li>JOHANNITER OSTERREICH AUSBILDUNG UND FORSCHUNG GEMEINNUTZIGE GMBH (JOAFG), Austria,</li> <li>SQUAREDEV (SQUAREDEV), Belgium</li> </ul>
OVERALL PROJECT VALUE (EUR)	5 949 746.25
FUNDED BY	H2020-CL6-2021 GOVERNANCE -01-21
START – END DATE	July 2022 – June 2025
GENERAL	CHAMELEON is a Horizon Europe Project that aims to optimise production and identify potential problems in agriculture, livestock, forestry, and rural areas. To achieve this, the CHAMELEON Project uses a novel reconfigurable drone, able to modify its configuration and sizing upon demand, which can be deployed in homogeneous or heterogeneous groups to support complex scenarios, as well as a set of existing heterogeneous, modular, interoperable, networked unmanned vehicles systems.
OBJECTIVES	Introduce a new business model and ecosystem-oriented AI development and Big Data Platform, allowing the innovation of agriculture, forestry, and livestock services and

	enabling new forms of communication and transactions between actors within the agriculture, forestry, and livestocks business process. Address the needs of the most complex agricultural, forest, livestock ecosystems, and rural environments, through UAV hardware and software system Introduce an advanced large-scale agriculture and forestry surveying, mapping, and assessment framework including different platforms (UAV, RPAS) for a hierarchy of observation scales Provide a suite of novel UAV - enabled AI applications and tools for sustainable agriculture, forestry, livestock ecosystems, and rural area services
MAIN ACTIVITIES	CHAMELEON Automatic UAV Based Segmentation Approach for Carbon Sequestration and Biomass Estimation in Vineyards, Olive Trees and Almond Crops. CHAMELEON UAV in Irrigation and water stress monitoring and management.
WEBSITE	https://chameleon-heu.eu/

#### **CIHEAM MONTPELLIER**

ACRONYM AND TITLE	SEMIARID- Sustainable and Efficient Mediterranean farming systems: Improving Agriculture Resilience through Irrigation and Diversification
COUNTRY/IES	Algérie, France, Maroc
LEAD PARTNER	CIHEAM- IAMM
OVERALL PROJECT VALUE (EUR)	1 081 047 €
START/END DATE	2017-2021
OBJECTIVES	The project aims at assessing the efficiency of the use of resources and the resilience of Mediterranean farming systems by using an Integrated Assessment of Agricultural Systems (IAAS) approach in interaction with local stakeholders.

ACRONYM AND TITLE	VALUE TEAM- Local and international valorization of Mediterranean agri-food products through quality certifications. The case of the Dates Sector
COUNTRY/IES	Algeria, Morocco, Tunisia, France
OVERALL PROJECT VALUE (EUR)	402 310 €
START/END DATE	2018-2020
OBJECTIVES	to explore ways of improving the value in the dates supply chains in three Southern Mediterranean countries (Algeria, Morocco, and Tunisia called "South") and one Northern country (France, called "North"). The overall objective of the project is to analyze the constraints and opportunities associated with the national and international development of the Dates sector in the southern countries targeted by the project, through the implementation of quality marks.

ACRONYM AND TITLE	LAB4SUPPLY: Multi-agent Agri-food living labs for new supply chain Mediterranean systems.
	Towards more sustainable and competitive farming addressing consumers' preferences and market changes
COUNTRY/IES	Algeria, Egypt, France, Greece, Italy, Morocco, Spain
OVERALL PROJECT VALUE (EUR)	1 477 020 €
FUNDED BY	ANR – PRIMA Section 2
START/ END DATE	June 2021-June 2024
GENERAL DESCRIPTION	Aimes at providing practical solutions to address the current difficulties of Mediterranean smallholders and traditional farmers, who face the main challenges that arise in the Agrifood value chain.
OBJECTIVES	The Project will offer innovative and viable solutions and opportunities to allow local smallholders to increase their competitiveness and profitability, using an optimized Agrifood supply chain and improving adaptation capacity to unexpected market changes, which at the same time are better perceived by the consumers.

ACRONYM AND TITLE	MED-LINKS: Data-enabled Business Models and Market Linkages Enhancing Value Creation and Distribution in Mediterranean Fruit and Vegetable Supply Chains.
COUNTRY/IES	Egypt, France, Greece, Italy, Morocco.
OVERALL PROJECT VALUE (EUR)	1 414 676 €
FUNDED BY	ANR – PRIMA Section 2
START/END DATE	June 2021-June 2024
OBJECTIVES	to provide small-scale producers with tailored and effective solutions enhancing efficiency, sustainability, and fairness along fruit and vegetable supply chains in Mediterranean countries.

ACRONYM AND TITLE	HEALTH FOOD AFRICA
COUNTRY/IES	Finland, Kenya, Ethiopia, Italy, Norway, Uganda, Benin, Ghana, Zambia, The Netherlands
OVERALL PROJECT VALUE (EUR)	€ 6 917 551,25
FUNDED BY	UE-H2020
OBJECTIVES	to make food systems in 10 African cities in six countries more sustainable, equitable, and resilient by reconnecting food production and food consumption in effective ways. The context-specific insights gained through 10 localized Food System Labs will be analyzed through five thematic focuses.
WEBSITE	Healthy Food Africa

ACRONYM AND TITLE	Des FILières TERritoriales vectrices de pratiques agricoles agroécologiques
COUNTRY/IES	France
OVERALL PROJECT VALUE (EUR)	409 061 €
FUNDED BY	Agence de la Biodiversité - Plan Écophyto II+
GENERAL DESCRIPTION	The project supports the change of scale in the development of territorialized agricultural value chains and vectors of agroecological practices by relying on the experience of actors in agricultural development who have been engaged for many years in the promotion of models of alternative collective organizations for the production, processing, and marketing of agricultural products on the scale of local food systems.
OBJECTIVES	The project aims to complete the understanding of the development dynamics of these value chains, by focusing less on the conditions for the emergence of these sectors, which have already been the subject of numerous works, but on the conditions of their development, economic and organizational sustainability and their contribution to the consolidation of agroecological practices.

ACRONYM AND TITLE	SCIC AGRI Agriculture facing contemporary societal and environmental challenges: contribution of an organizational form that promotes social innovation, the Cooperative Society of Collective Interest (SCIC)
COUNTRY/IES	France
FUNDED BY	ANR JCJC
START/END DATE	2022-2026
OBJECTIVES	To study the arrival of a new cooperative actor in the agricultural sector – the Cooperative Societies of Collective Interest (SCIC). The ambition of this research project is thus to determine to what extent, why, and how SCICs destabilize the agricultural sector facing the dominant productivist model not adapted to the challenges of sustainability. Indeed, the SCIC can be recognized as a carrier of social innovation due to its different characteristics: multi-membership, democratic governance, social utility,y, and territorial anchoring. Social innovation, from an institutionalist perspective, results in the emergence of new methods of coordination between actors to meet a social need (Chiffoleau and Prevost 2012; Harrisson and Vezina 2006). In the agricultural sector, this may, for example, concern the living conditions of producers, the creation of agricultural jobs, including in integratiologics, or the development of sustainable and agroecological practices expected from consumers. This response is rooted in the territory, with social innovation responding to local issues and needs (Cloutier 2003) and relying on the mobilization of territorial resources (Peres 2017).

ACRONYM AND TITLE	TRANS SCIC AGRI Role of agricultural SCICs in the ecological, economic, and social transition
COUNTRY/IES	France
FUNDED BY	ADEME
START/ END DATE	2022-2023
OBJECTIVES	To analyze the methods of transformation of agricultural Cooperative Societies of Collective Interest (SCIC) governance and management practices as well as the conditions and mechanisms allowing a multidimensional transition of the agricultural sector from these potentially disruptive cooperative actors. Cooperative models are very present in the agricultural sector through Agricultural Cooperative Societies (SCA) and Cuma (cooperative use of the material), which incrementally integrate ecological and social issues. It is, however, the multi-membership of the SCICs that makes it possible to pose the hypotheses of more open and democratic governance, and original organizational practices favoring proactivity with regard to the ecological, economic, and social transition in agricultural cooperation.

ACRONYM AND TITLE	GRANULAR: Giving Rural Actors Novel data and re-Useable tools to Lead public Action in Rural areas
COUNTRY/ IES	Suède, Finlande, Pays-Bas, UK, Belgique, Espagne, Allemagne, Autriche, Tchéquie, Pologne, Italie, Grèce, France
OVERALL PROJECT VALUE (EUR)	7 446 913€
FUNDED BY	EU – Horizon Europe & UKRI
START – END DATE	June 2022-May 2026
OBJECTIVES	GRANULAR will generate new insights for characterizing rural diversity based on a multi- actor and interdisciplinary approach. Based on insights from Multi-Actor Labs, it will generate novel datasets using a wide range of methods and primary data, such as remote sensing, crowd-sourced data, mobile phone data, and web-scraping.

ACRONYM AND TITLE	Data4Food 2030: Pathways towards a fair, inclusive, and innovative Data Economy for Sustainable Food Systems
COUNTRY/ IES	the Netherlands, Greece, France, Germany, Belgium, Luxembourg, Latvia, Poland, Spain, Slovenia, Czechia, Finland
OVERALL PROJECT VALUE (EUR)	9 999 416
FUNDED BY	EU – Horizon Europe
START – END DATE	September 2022-August 2026
OBJECTIVES	Data4Food2030 aims to enlarge the knowledge base and insight into the data economy for food systems (DE4FS), establish a system that monitors and evaluates development, performance, and impact of DE4FS on EU policies, identify drivers and barriers, and turn these into opportunities, recommendations and solutions, test solutions and evaluate recommendations using case studies and stakeholder exchange, and provide tools to support policy development and accelerate desired outcomes. Nine case studies will provide real-world examples of DE4FS at micro- and meso-economic levels, promoting data-enabled business models

ACRONYM AND TITLE	AGREEMED- Innovative Aquifers Governance for Resilient Water Management and Sustainable Ecosystems in Stressed Mediterranean Agricultural Areas
COUNTRY/ IES	Maroc • Espagne • Allemagne • France • Tunisie • Jordanie • Italie
FUNDED BY	EU – PRIMA – ANR
OBJECTIVES	to deliver scientific knowledge about the quantity and quality status of groundwater and dependent ecosystems, evaluate non-conventional water technologies, promote innovative water treatment, and brine management technologies, leverage Nature- Based Solutions, foster institutional water management practices (Aquifer Agreement), promote Data-based models added values, and introduce the collective intelligence concept in water resources management.

ACRONYM AND TITLE	NATAE: Fostering Agro-Ecological Transition in North Africa Through Multi-Actor Design, Evaluation, and Networking
COUNTRY/IES	France • Tunisia • Greece • Italy • Germany • the Netherlands • Morocco • Portugal • Egypte • Algeria • Libya • Mauritania • South Africa • Switzerland
OVERALL PROJECT VALUE (EUR)	7 446 913 €
FUNDED BY	EU – Horizon Europe & Switzerland
START/END DATE	December 2022 – November 2026
OBJECTIVES	NATAE global objective is to develop a methodology to foster agro-ecological transitions in North Africa (NA), to increase the global sustainability of agriculture and the local resilience of territories, thus contributing to global food security and safety, together with environmental and sustainable development targets.
Keywords	bio-economic modelling, Living Lab, participatory approaches

ACRONYM AND TITLE	ALLIANCE: A hoListic framework in the quality Labelled food supply chain systems' management towards enhanced data
COUNTRY/IES	<ul> <li>Croatia •Serbia •France • Italy •Greece •Luxembourg •Cyprus •Spain •Germany •Turkey</li> <li>•Belgium • United Kingdom</li> </ul>
OVERALL PROJECT VALUE (EUR)	4 416 233 €
FUNDED BY	EU – Horizon Europe & UKRI
START/END DATE	2022 – 2026
OBJECTIVES	ALLIANCE represents a paradigm shift in the Food Supply Chain Systems' management for the combat against Food Fraud, distinguishing from the traditional approaches that leverage monolithic digitalized logistic solutions and standalone FSC interoperability protocols.
Keywords	Traceability, authenticity, data integrity, interoperability, food chain systems, quality label organic.
Website	na

### CIHEAM ZARAGOZA

ACRONYM AND TITLE	The FAO-CIHEAM Inter-regional Cooperative Research Network on Nuts
SDGs	2, 8, 12, 13, 15, 17.
	scientists from different countries, but also targeting farmers, nurserymen, processors, and other actors in the value chain.
COUNTRY/ IES	Hungary, Iran, Italy, Spain, Turkey.
LEAD PARTNER	IRTA, SPAIN
PARTNERS	<ul> <li>IRTA, Spain</li> <li>Ankara University, Turkey University of Tehran, Iran University of Harran, Turkey</li> <li>Università degli Studi di Torino, Italy</li> <li>Agricultural Research and Biotechnology Officer, Hungary CIHEAM Zaragoza, Spain</li> <li>Professionals from the private sector (farmers, industrials, commercialisers, and their organizations' representatives), the Administration (officers in charge of agriculture, farm policies, technology transfer, etc.).</li> </ul>
START – END DATE	Created in the 90s upon an agreement signed by CIHEAM and FAO
GENERAL DESCRIPTION	The Network is currently working on the following species: Almond, Hazelnut, and Walnut, Pistachio, Chestnut, and Stone pine. Wide topics are targeted, covering all aspects of cultivation and industrialization of these species: plant breeding, physiology, agronomical techniques, pests and diseases, fruit quality, processing, and markets.
MAIN ACTIVITIES	<ul> <li>Exchange scientific knowledge, from methodologies to results, through the promotion of periodical international meetings where researchers from Mediterranean countries can participate</li> <li>prospecting and testing plant material from different origins to be characterized and tested</li> <li>conducting joint research works targeting common issues affecting nut farming in the Mediterranean areas.</li> </ul>
WEBSITE	https://networks.iamz.ciheam.org/nuts/index.html

ACRONYM AND TITLE	Inter-regional FAO/CIHEAM Network for Research and Development in Sheep and Goats
SDGs	1, 2, 8, 12, 15, 17.
LEAD PARTNER	IRESA, Tunisia CIHEAM Zaragoza, Spain
START – END DATE	In 1996, the collaboration between the three entities (FAO-REU, FAO-RNE, and CIHEAM) became official upon the signature of an agreement to create a joint Network. This Network is one of the networks of the European System of Cooperative Research Networks in Agriculture (ESCORENA).
GENERAL DESCRIPTION	This Network is one of the networks of the European System of Cooperative Research Networks in Agriculture (ESCORENA). The Network collaborates actively with other international networks and institutions such as EAAP, the RME network (Réseau Méditerranée Élevage) and IDF.
OBJECTIVES	To study and improve the sheep and goat production systems in the Mediterranean Region.
MAIN ACTIVITIES	<ul> <li>Exchange of information</li> <li>Organisation of periodic meetings and seminars (every two or three years)</li> <li>Working groups with common methodologies Research projects</li> <li>Technical stays and support to researchers for participation in scientific events</li> <li>Training</li> </ul>
WEBSITE	https://www.iamz.ciheam.org/research/networks/sheep_and_goats_

ACRONYM AND TITLE	FAO/CIHEAM International Network for the Research and Development of Pasture and Forage Crops
SDGs	SDGs: 1,2, 8, 12, 13, 15,17.
COUNTRY/ IES	France, Italy, Spain.
LEAD PARTNER	<ul> <li>CNR-ISPAAM, Italy</li> <li>Università degli Studi di Torino, Italy</li> <li>Mediterranean Forage Resources. Magali Jouven, SupAgro, France</li> </ul>
PARTNERS	Members are persons whose professional interest is the Nuts sector. Although most of the members are scientists of Research Centres and Universities, professionals with other profiles are welcome to participate from the private sector (farmers, industrials, commercialisers, and their organizations' representatives) to the Administration (officers in charge of agriculture, farm policies, technology transfer, etc.).

START – END DATE	The FAO/CIHEAM Network has been in operation since 1995. This Network is one of the networks of the European System of Cooperative Research Networks in Agriculture (ESCORENA).
OBJECTIVES	Study and improvement of forage crop production on irrigated and rain-fed land, development, and management of typically Mediterranean rangelands. Study of forage feeding value; by-products and rangelands of the Mediterranean.
MAIN ACTIVITIES	<ul> <li>Exchange of information</li> <li>Organisation of periodic meetings and seminars (every two or three years)</li> <li>Working groups with common methodologies</li> <li>Research projects</li> <li>Technical stays and support to researchers for participation in scientific events</li> <li>Training</li> </ul>
inclusion and empowerment of young people and women	Formal meetings and seminars and a large number of publications have been held. In addition, almost all researchers working on pasture and forage crops in the Mediterranean Region participate in this network. There is also a very strong participation of experts from Anglo-Saxon or Northern European countries, which ensures a very good connection with European research centers. The impact of the Network can be measured not only by the research activities of the participating teams but also by the development activities of the Mediterranean countries since almost all the large Mediterranean development organizations interested in small ruminants actively participate in this network.
WEBSITE	https://www.iamz.ciheam.org/research/networks/pasture and forage crops

## **CIHEAM BARI**

ACRONYM AND TITLE	Managing Biodiversity to Increase Returns from Landscape Investments: Value Chains for Local Crop Varieties, focusing on Durum Wheat - AGREED ETHIOPIA
SDGs	1, 2,3, 12, 13
COUNTRY/IES	Ethiopia
LEAD PARTNER	Biodiversity International
PARTNERS	<ul> <li>Ethiopian Biodiversity Institute (EBI)</li> <li>CIHEAM Bari</li> <li>Ministry of Agriculture and Livestock Resource (MoALR of Ethiopia)</li> <li>GIZ</li> <li>Italian Agency for International Cooperation (AICS-MAECI)</li> </ul>
OVERALL PROJECT VALUE (EUR)	61,164 euros (CIHEAM Bari)
FUNDED BY	The World Bank
START/END DATE	14/08/2020 to 30/11/2021
GENERAL DESCRIPTION	The project links with the newly developed Resilient Landscape and Livelihood Program and offers an opportunity to generate income for selected watershed communities. However, the recommendations made are relevant for the government and the private sector that wants to invest in this important value chain. The overall goal of promoting traditional varieties is to develop a high-quality unique product, which can at the same time enhance resilience and adaptation to climate change. In order to enhance the quality of the product and to target healthy food and organic matters, the project also proposes organic protocols that can be tested in Ethiopia.
OBJECTIVES	<ul> <li>Objectives <ul> <li>identify and analyze opportunities to develop value chains for local crop varieties that present resilience and economic advantages, with a focus on durum wheat,</li> <li>prepare a proposal for pilot investments under the Resilient Landscapes and Livelihoods Project (RLLP) that target these opportunities.</li> </ul> </li> </ul>
inclusion and empowerment of young people and women	The recommendations carried out focus on 2 different approaches: the creation of local capacity for small-scale production of pasta linked, for example, to eco-tourism. It fosters the horizontal and vertical integrations as a multitude set of actors, that work together to make a short value chain profitable for all parties involved.

MAIN ACTIVITIES	Main activities:
	- Inventory of the known major local varieties of durum wheat
	- Assessment of Ethiopian durum wheat semolina and pasta quality
	<ul> <li>Assessment of present and future domestic and international markets for local varieties of durum wheat and teff</li> </ul>
	<ul> <li>Assessment of the local value chain for durum wheat identifying opportunities for improvement</li> </ul>
	<ul> <li>An analysis of (a) the prospects for horizontal integration of durum wheat producers through cooperatives or other means, (b) the prospects for vertical integration of durum wheat producers, agri-processors, and marketers, (c) regulatory features and market structures favorable for the development of the domestic durum wheat sector, based on global best practice, and (d) recommendations for the registration, branding, and labeling of major local varieties of durum wheat.</li> <li>A proposal for pilot investments under the RLLP to boost productivity and resolution of a productivity and resolution of a productivity and resolution.</li> </ul>

ACRONYM AND TITLE	SUSTaining and improving local crop patrimony in Burkina Faso and Niger for better LIVes and EcosystemS – SUSTLIVES
SDGs	1, 2 ,3, 12, 13
COUNTRY/IES	Burkina Faso and Niger
LEAD PARTNER	Italian Agency for Development Cooperation (AICS) – MAICI
PARTNERS	CIHEAM-Bari, Bioversity, CNR, University Roma Tre, LUKE, University of Ouagadougou, University of Niamey
OVERALL PROJECT VALUE (EUR)	6.0 mln EUR (1.567 mln Euros to CIHEAM Bari)
FUNDED BY	EU Commission (DG DEVCO)
START/END DATE	From 2021 to 2024
GENERAL DESCRIPTION	In the frame of the DeSIRA Programme - Climate-relevant Development Smart Innovation through Research in Agriculture and food systems in developing countries, SUSTLIVES Project aims for the improvement of food and nutrition security and livelihoods of rural communities in Niger and Burkina Faso through agrobiodiversity.
OBJECTIVES	The main objective is to develop inclusive value chains of neglected and underutilized species (NUS) and to improve income generation activities developed through the production and commercialization of NUS.
inclusion and empowerment of young people and women	Value chain actors (farmers, processors, etc.) and their organizations, women and young people, local administrations, research institutions, and extension services.
MAIN ACTIVITIES	<ul> <li>identification and assessment of Stress-tolerant crops, target areas, local stakeholders, and their needs.</li> <li>Communities and consumers' awareness of stress-tolerant NUS.</li> <li>Empowerment of local actors, (especially youth and women) in inclusive NUS value chains.</li> <li>Support for Policymaking and sustainable planning on agrobiodiversity ensuring coordination with EU planning and priorities.</li> </ul>
WEBSITE	https://ouagadougou.aics.gov.it/sustlives

ACRONYM AND TITLE	Red Palm Weevil (RPW) Eradication from the Near East and North Africa (NENA) Region – SeePalm
SDGs	2 ,3, 12
COUNTRY/ IES	Saudi Arabia, Egypt
LEAD PARTNER	FAO-RNE
PARTNERS	<ul> <li>Mediterranean Agronomic Institute (CIHEAM-Bari),</li> <li>Italy Arab Organization for Agricultural Development (AOAD)</li> <li>International Center for Agricultural Research in the Dry Areas (ICARDA</li> <li>International Center for Biosaline Agriculture (ICBA)</li> <li>The Near East Plant Protection Organization (NEPPO)</li> <li>The Phoenix Research Station (PRS), Spain</li> <li>The University of Genoa, Italy</li> <li>The Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD)</li> </ul>
OVERALL PROJECT VALUE (EUR)	84,000 USD (CIHEAM Bari)
FUNDED BY	FAO
START – END DATE	7.10.2021 to 30.9.2023
GENERAL DESCRIPTION	the programme facilitates the coordination of regional efforts to ensure an integrated and sustainable approach to controlling the RPW and reducing its devastating effects on date-palm production, the food and income security of rural communities, and the ecology of affected areas. It aims mainly for outlining a set of rules for the certification of date palm propagative material, and conducting ex-ante and ex-post impact assessments (impact evaluation of the proposed interventions) of the Red Palm Weevil (RPW) in the NENA region.
OBJECTIVES	<ul> <li>the Completion of work proposals for five TWGs in the areas of RPW monitoring and early detection,</li> <li>the participation of farmers,</li> <li>the development of control protocols and techniques,</li> <li>the study of the social and economic impact of the RPW,</li> <li>the development of phytosanitary systems, and border protocols,</li> <li>the production of certified palm propagation materials for sustainable management of the RPW.</li> </ul>
MAIN ACTIVITIES	The main activities in the Near East and North Africa (NENA) region are on "Production, conservation, and utilization of certified propagative material of date palms in the NENA countries" and "Socioeconomic impacts assessment of the Red Palm Weevil in the NENA Region".
WEBSITE	https://www.fao.org/publications/card/fr/c/CA3665EN/

ACRONYM AND TITLE	Stabilisation et développement socioéconomique des Régions côtières tunisiennes - NEMO KANTARA
SDGs	2 ,3, 12
COUNTRY/ IES	Tunisia
LEAD PARTNER	CIHEAM Bari
PARTNERS	National Gene Bank of Tunisia (BNG) – Tunisia
OVERALL PROJECT VALUE (EUR)	5 mln €
FUNDED BY	Italian Cooperation – MAECI
START – END DATE	October 2019 - October 2022
GENERAL DESCRIPTION	This initiative was designed to support the sustainable development of coastal communities in Medenine and Gabes and create a planning system for participatory and integrated development of coastal areas that will serve as a framework for future initiatives and actions in five governorates (Bizerte, Gabes, Medenine, Nabeul, Sfax).
OBJECTIVES	GENERAL OBJECTIVE Improve the resilience of coastal communities through the integrated and sustainable management of natural resources and participation in local development. SPECIFIC OBJECTIVES Improve and diversify the production and incomes of fishing operators and coastal communities in the governorates of Gabes and Medenine, with the dual objective of reducing poverty by improving access to support services and management, but also through concrete financial instruments that target the weakest categories: young people and women. Strengthen capacities for sustainable coastal planning in the 5 pilot regions (Médenine, Gabes, Nabeul, Sfax, Bizerte), stemming from the need to offer decision-makers and donors coastal local development plans drawn up by the community with the community and for the community. This opportunity also arises to improve institutional capacity building, which governance often considers a cause of social exclusion and poverty.
MAIN ACTIVITIES	<ul> <li>Institutional Capacity Building and Lobbying</li> <li>Enhancing Professional Schools and Training Centers</li> <li>Improvement of Fishermen's infrastructure (Donation)</li> <li>Co-management and certification of clams</li> <li>Training and Technical Assistance</li> <li>Funding and supporting new income-generating activities (especially start-ups managed by young people and women)</li> <li>Financing of Masterplan drafting</li> </ul>

ACRONYM AND TITLE	Sustainable economic development and environmental protection of areas with natural constraints in Bosnia and Herzegovina - ANC BiH
SDGs	2 ,3, 12, 13
COUNTRY/ IES	Bosnia-Herzegovina
LEAD PARTNER	CIHEAM Bari
PARTNERS	Ministry of Foreign Trade and Economic Relations (MoFTER) of Bosnia and Herzegovina - Bosnia-Herzegovina.
OVERALL PROJECT VALUE (EUR)	2.4 mln €
FUNDED BY	Italian Ministry of Foreign Affairs and International Cooperation (MAECI)/Italian Agency for Development Cooperation (AICS).
START – END DATE	May 2021 - April 2024
GENERAL DESCRIPTION	This initiative represents a continuation of synchronized efforts of the Italian government & Agency for Development Cooperation (AICS) to support the agricultural sector, food security, and rural development of Bosnia and Herzegovina.
OBJECTIVES	The general objective of the project is to support "sustainable economic development and environmental protection of the Areas with Natural Constraints (ANC) in Bosnia and Herzegovina, in conformity with Acquis Communautaire". Enhancing the capacities of local institutions in designing sustainable development plans in identified ANCs; Enabling the communities in identified ANCs to gain benefits of sustainable development plans and implemented innovative management practices.
MAIN ACTIVITIES	<ul> <li>NCs mapping - identification through (EU Reg. 1305/2013).</li> <li>Assessment of the ANCs in Bosnia and Herzegovina.</li> <li>Training and mentoring of institutional cadres.</li> <li>Definition of priorities and identification of pilot areas.</li> <li>Definition of strategic plans/measures for the ANCs.</li> <li>Training of local stakeholders for the implementation of development measures on the ground.</li> <li>Tendering works and financial support for the selected pilot initiatives at the territory of ANCs</li> <li>Coaching – on-the-job support and evaluation for pilot initiatives.</li> </ul>

ACRONYM AND TITLE	Enhancement of Jordanian SMEs inclusiveness, competitivity, and sustainable innovation – JOSME
SDGs	2 ,3, 12
COUNTRY/ IES	Jordan
LEAD PARTNER	CIHEAM Bari
PARTNERS	Ministry of Industry, Trade & Supply of Jordan
OVERALL PROJECT VALUE (EUR)	2.3 Mln €
FUNDED BY	Italian Ministry of Foreign Affairs and International Cooperation (MAECI)/Italian Agency for Development Cooperation (AICS)
START – END DATE	1.1.2021 to 30.6.2023
GENERAL DESCRIPTION	The initiative aims to strengthen Jordanian SMEs operating in the production, processing, and marketing of agricultural products.
OBJECTIVES	<ul> <li>Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production.</li> <li>Encourage and promote effective public, public-private, and civil society partnerships.</li> <li>Promote the development, transfer, dissemination, and diffusion of environmentally sound technologies to developing countries on favorable terms.</li> <li>Achieve higher levels of economic productivity through diversification, technological upgrading, and innovation, including through a focus on high-value-added and labor-intensive sectors.</li> <li>Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity, and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises.</li> <li>Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.</li> </ul>
MAIN ACTIVITIES	Training, Start-up, Innovation, Credit, Marketing
inclusion and empowerment of young people and women?	By 2022, substantially reduce the proportion of youth not in employment, education, or training
WEBSITE	https://www.facebook.com/JoSMEproject

ACRONYM AND TITLE	Programme for Food Security and Resilience of Rural Communities in Libya - PROSAR
SDGs	2 ,3, 8, 12
COUNTRY/ IES	Libya
LEAD PARTNER	CIHEAM Bari
PARTNERS	<ul> <li>Ministry of Agriculture Livestock and Marine Wealth (MoALMW)</li> <li>Ministry of Local Government (MoLG)</li> <li>Implementation of National Agencies/Entities:</li> <li>University of Tripoli</li> <li>University of Sebha</li> <li>Municipalities of Sebha, Oubari, and Murzuk</li> </ul>
OVERALL PROJECT VALUE (EUR)	3.5 mln €
FUNDED BY	Italian Ministry of Foreign Affairs and International Cooperation (MAECI)/Italian Agency for Development Cooperation (AICS).
START – END DATE	9th June 2020 –8th February 2023
GENERAL DESCRIPTION	Improving food safety, resilience, and stabilization of rural communities in Libya through income improvement, of higher agricultural production, and a better and more efficient agro-food value chain.
OBJECTIVES	<ul> <li>Allowing farmers and breeders in Fezzan a more efficient use of natural resources, better access to agricultural inputs, and a better capacity of producing and trading their products.</li> <li>Libyan Institutions are able to improve territorial agricultural development planning and assist farmers in improving their production better and more efficiently.</li> </ul>
MAIN ACTIVITIES	Training, Socio-economic analysis, Development actions, Credit.

ACRONYM, AND TITLE	Program to encourage the participation of local communities and improve energy and water supply services and create new job opportunities in Fezzan – EWA4E
SDGs	1, 2, 16
COUNTRY/ IES	Libya
LEAD PARTNER	CIHEAM Bari
PARTNERS	<ul> <li>Ministry of Agriculture, Livestock and Marine Resources (MoALMR);</li> <li>Ministry of Local Government (MoLG);</li> <li>Ministry of Electricity and Renewable Energy (MoERE);</li> <li>Università di Tripoli;</li> <li>Università di Sebha</li> </ul>
OVERALL PROJECT VALUE (EUR)	300,000 €
FUNDED BY	Italian Ministry of Foreign Affairs and International Cooperation (MAECI)/Italian Agency for Development Cooperation (AICS)
START – END DATE	01.06.2021 to 31.12.2022
GENERAL DESCRIPTION	The project aims to contribute to the improvement of the livelihoods of the population of the Fezzan through the improvement of their incomes, better management of natural resources and the creation of new jobs, with regard to three fundamental sectors: energy, water, and use in the agro-food sector.
OBJECTIVES	<ul> <li>improving the management of natural resources - in particular water and their agricultural use - as well as the production, transmission, and distribution of electrical energy.</li> <li>Identify potential synergies with other interventions funded by other donors for the same issues.</li> <li>The realization of a pre-feasibility study capable of identifying the areas and supply chains of agro-food that can create new jobs.</li> </ul>
MAIN ACTIVITIES	The first activity is the establishment, in partnership with the local and central Libyan authorities, of an Italian-Libyan technical-scientific committee (CTS), of which CIHEAM - Bari will perform the functions of the Secretariat. The second activity concerns the implementation of a pre-feasibility study capable of identifying the areas and supply chains of agro-food that can create new jobs in the region, including the potential recovery of a public pasta factory located in the Municipality of Sebha, quantifying the costs.

ACRONYM AND TITLE	Holistic and Multi-professional Mechanism for a Pakistani Olive Oil Value Chain - OliveCulture
SDGs	2, 4, 5, 8, 13
COUNTRY/ IES	Pakistan
LEAD PARTNER	CIHEAM Bari
PARTNERS	Ministry of National Food Security and Research of Pakistan, PODB Pakistan Oilseed Development Board, PPAF CEO Pakistan Poverty Alleviation Fund, PIDSA Pak-Italy Debt Swap.
OVERALL PROJECT VALUE (EUR)	1.5 mln €
FUNDED BY	Italian Ministry of Foreign Affairs and International Cooperation (MAECI)/Italian Agency for Development Cooperation (AICS).
START – END DATE	17.01.2022 to 30.03.2024
GENERAL DESCRIPTION	to provide the Pakistani State and the suitable Provinces (including neighboring areas with Afghanistan) with holistic support aimed to secure food and nutrition, environmental resilience, cultural enhancement, and income certainty.
OBJECTIVES	<ul> <li>Institutionalizing Olive Oil's attention through a high-level Pakistan Olive Oil Council (POOC) with the representation of public and private sector stakeholders.</li> <li>Coupling Research and Training of excellence in 3 Provinces.</li> <li>Reducing dependence on imports of vegetable edible oils,</li> <li>Bring Many virgin pieces of land under olive cultivation, by small farmers.</li> <li>Boosting a wide range/number of sustainable new jobs from the public and private sector in all steps, starting with small farmers - including women - the key first ring of the Value Chain.</li> <li>attracting local and foreign investments in the Mechanism of the Olive Oil Value Chain.</li> <li>Enhancing the population's nutritional and health levels.</li> <li>Promoting economic, cultural, including tourism actions to catalyze their territory's development.</li> <li>reducing environmental impact.</li> <li>invest in the preparation and trading of by- and olive value-added products i.e. Cosmetics, Tea, Pickles, Jams, and Multi-purpose solutions</li> </ul>
MAIN ACTIVITIES	<ul> <li>Analyze the agronomic, cultural, and social heritage of the olive tree and its potential.</li> <li>Carry out an adequate policy that supports the rural development of the Olive Value Chain</li> <li>Improve and characterize the Pakistani Olive Value Chain at its different steps</li> <li>Engage women and youth in income-generation activities related to it</li> <li>Foster Pakistani society acknowledges an Olive Culture of its own, through a portal (Youth-led).</li> </ul>
inclusion and empowerment of young people and women	Women and youth are engaged in income-generation activities.

ACRONYM AND TITLE	Institutional strengthening of the Albanian Ministry of Agriculture and Rural Development for the management of food safety – SAFIAL
SDGs	2, 3, 12
COUNTRY/ IES	Albania
LEAD PARTNER	CIHEAM Bari
PARTNERS	<ul> <li>MARD - Ministry of Agriculture and Rural Development – Albania</li> <li>AKU - Autoriteti Kombëtar I Ushqimit (National Food Authority) - Albania</li> <li>AKVMB - Autoriteti Kombëtar i Veterinarisë dhe Mbrojtjes së Bimëve (National Veterinary and Plant Protection Authority) - Albania</li> <li>ISUV - Instituti I Sigurisë Ushqimore Dhe Veterinarisë (Institute of Food Safety and Veterinary) - Albania</li> </ul>
OVERALL PROJECT VALUE (EUR)	2.4 mln €
FUNDED BY	Italian Ministry of Foreign Affairs and International Cooperation (MAECI)/Italian Agency for Development Cooperation (AICS)
START – END DATE	May 2021 to April 2024
GENERAL DESCRIPTION	The proposal aims to strengthen the capacities of the Albanian Ministry of Agriculture and Rural Development in carrying out controls and inspections on foodstuffs of plant and animal origin in order to have an improved sanitary level of the same.
OBJECTIVES	The general objective of the initiative is to help ensure that The Albanian population uses foodstuffs with an improved sanitation level. the specific objective is to strengthen the ability of the Albanian authorities to carry out checks and inspections on plant material and to operate in the veterinary sector.
MAIN ACTIVITIES	<ul> <li>interventions of capacity building for Albania Authorities (AKU) to perform efficient inspections on incoming foodstuffs at the port of Durres.</li> <li>interventions of capacity building for Albanian Institutions (ISUF, AKU) to verify the levels of safety (pesticide residues) in food of plant origin and to develop expertise in the field of plant quarantine (diagnosis of potential quarantine agents).</li> <li>To provide assistance to MARD and AKVMB in strengthening and reorganizing the veterinary service through livestock assessment and data computerization (farm livestock analysis).</li> </ul>

ACRONYM AND TITLE	Sustainable and innovative agri-food and fisheries value chain for SME's cross-border market - FOOD4HEALTH
SDGs	2,3,8, 12, 17
COUNTRY/ IES	Albania, Italy, and Montenegro
LEAD PARTNER	Ministry of Agriculture and Rural Development Albania (LP)
PARTNERS	Agricultural Technology Transfer Centre of Korca (PP2); Agricultural Technology Transfer Centre of Vlora (PP3); Puglia Region - General Secretariat of the Presidency "Health Market Place" (PP5); Molise Region (PP6); Ministry of Agriculture and Rural Development; Montenegrin (PP7); Institute for Marine Biology (PP8); CIHEAM-BARI
OVERALL PROJECT VALUE (EUR)	4.964.651,20 €
FUNDED BY	Interreg IPA-CBC Italy-Albania- Montenegro Programme 2014/2020
START – END DATE	01/06/2019 to 30/06/2022
GENERAL DESCRIPTION	it is aimed to strengthen the competitiveness of SMEs in the cross-border area by improving production techniques and by transferring, sharing, and adopting European quality standards for the transformation and improvement of typical and traditional products of the agri-food and fisheries sector, to facilitate market access.
OBJECTIVES	General Objective: enhance the competitiveness of MSMEs and favor the access to the market in the cross-border area through the improvement of production techniques, the transfer, sharing, and adoption of European quality standards, and the enhancement of typical and traditional products of the agri-food sector and fisheries. Specific Objectives: To establish common procedures, guidelines, and instruments for the valorization of the agri-food and fishery value chain. To ensure knowledge transfer, pilot demonstration projects, and innovative solutions for the strengthening of the local production system.
MAIN ACTIVITIES	<ul> <li>Adoption of common protocols addressed to MSMEs, knowledge exchange on best practices, and adoption of a cross-border policy paper on quality food and consumer health.</li> <li>establish a cluster among enterprises/university/research centers of the related value chain, a local workshop for the co-design of the Food4Health community Lab, and the creation of a local Food4Health community Lab).</li> <li>creation of a Food4Health platform, incubator activities addressed to smallholders and SMEs, supporting actions for the creation and development of innovative enterprises and start-ups).</li> </ul>
inclusion and empowerment of young people and women	by setting up new enterprises and employment in the local area that can provide new job opportunities
WEBSITE	https://food4health.italy-albania-montenegro.eu/

ACRONYM AND TITLE	Boosting cross border Organic Ecosystem through - ORGANIC ECOSYSTEM
SDGs	2, 3, 12, 17
COUNTRY/ IES	Jordan, Lebanon, Italy, Tunisia, Greece, Spain
LEAD PARTNER	Ministry of Agriculture - Jordan
PARTNERS	<ul> <li>JEPA - Jordan Exporters and Producers Association for Fruit and Vegetables - Jordan</li> <li>Chamber of Commerce, Industry and Agriculture of Zahle and the Bekaa - Lebanon</li> <li>CIHEAM Bari</li> <li>SYNAGRI - Tunisian farmer's syndicate - Tunisia</li> <li>INNOPOLIS - Centre for Innovation and Culture - Greece</li> <li>ASCAME - Association of the Mediterranean Chambers of Commerce and Industry – Spain</li> </ul>
OVERALL PROJECT VALUE (EUR)	2.4 mln € (EU Contribution) of which 2.1 million € through ENI CBC Med Program
FUNDED BY	EU Contribution and ENI CBC Med Program
START – END DATE	December 2019 to December 2022
GENERAL DESCRIPTION	organic agriculture is still relatively underdeveloped in Mediterranean countries with heterogeneous situations from country to country. The main shared challenges are inconsistent or lacking support policies from national/local governments, low innovation capacities, limited knowledge of sustainable farming practices, and a weak value chain where MSMEs operate in a disaggregated way. The project intends to establish a cross-border agro-food ecosystem that will set the ground for the development of the Mediterranean whole organic sector. This will be encouraged through new business alliances, the creation of innovative value chains, and specialized support provided to MSMEs to increase the quality and the commercialization of products and their capacities to access new markets.
OBJECTIVES	General objective Improvement of the organic sector competitiveness through the creation of a cross- border Organic Ecosystem supporting the development of businesses and SMEs in cooperation with public institutions. Specific objective Strengthening innovative organic value chain through the establishment of Mediterranean business alliances.
MAIN ACTIVITIES	<ul> <li>Set up 1 organic cross-border network for cooperation, dialogue, and knowledge transfer among stakeholders of the organic sector.</li> <li>Organize 40 training days and consultancy services to provide MSMEs with tools and methods aimed to facilitate SMEs' entry into innovative organic value chain creation and access to new markets as well as participation in international agro-food fairs.</li> <li>Set up 1 International business to facilitate networking among organic producers, researchers, business angels, public authorities, and stakeholders.</li> <li>Carry out National and CB Labs to share knowledge and provide added value products through new business alliances.</li> </ul>
VVERZILE	https://www.enicocmed.eu/projects/organic-ecosystem
ACRONYM AND TITLE	Building Resilient food system in the Mediterranean area - MEDIET
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SDGs	1, 2, 8, 12,17
COUNTRY/IES	Albania, Lebanon, Tunisia, Italy
LEAD PARTNER	CIHEAM Bari
PARTNERS	National Ministries of Agriculture of each country
OVERALL PROJECT VALUE (EUR)	1.500.000 euro
FUNDED BY	Ministry of Foreign Affairs of Italy
START/END DATE	March 2022 to February 2024
GENERAL DESCRIPTION	The initiative aims at an extensive strengthening of the web platform (SFS-MED platform) and enhancement of knowledge and collaboration among stakeholders, and activation of healthy and sustainable dietary patterns in strategic areas of the Mediterranean region, namely Albania, Lebanon, and Tunisia. Starting from pilot territorial actions in these 3 countries, the action will extend to detect, as well as to promote, knowledge and best practices of sustainable food systems based on the local Mediterranean diet.
OBJECTIVES	The overall objective is to contribute to the improvement of consumption and production patterns in the Mediterranean region through the promotion of sustainable food systems closest to the Mediterranean Diet. The specific objective is to Increase the support of institutions and stakeholders to the promotion of the Mediterranean Diet through the creation of a holistic mechanism based on sharing knowledge and activation of new diet models in strategic areas of the Mediterranean region.
MAIN ACTIVITIES	In framework of the enhancement of the SFS-MED platform through its Coordination Desk at CIHEAM Bari (R1): 1.1 Development and enhancement of the SFS MED platform; 1.2 Establishment of interregional working groups for round tables and meetings; 1.3 Exchange of innovation and best models; 1.4 Data collection and systematization in the SFS MED Platform; 1.5 Advocacy and lobbying actions at regional level. In the framework of the implementation of pilot actions in three selected countries (R2): 2.1 Characterization of food systems in selected areas and identification of locally produced foods closest to the Mediterranean Diet; 2.2 Nutritional and nutraceutical characterization; 2.3 Comparative analysis of the three local models of the Mediterranean diet and development of voluntary guidelines; 2.4 Return of collected data to institutions and stakeholders; In the framework of the dissemination and sharing of knowledge about methodologies used and documentation collected in selected areas (R3): 3.1 Identification of international certification systems and standards; 3.2 Capacity building to institutions and laboratories for the Mediterranean Diet promotion; 3.3 Identification of methodologies and approaches to be applied in larger Mediterranean areas; 3.4 Consumer awareness campaign; 3.5 Launch of the SFS MED Platform at the 3rd Conference on the Mediterranean diet and dissemination of project results through visibility actions.

ACRONYM AND TITLE	< <cibo "start"="" buono="" l'human="" per="" pole="" puglia="" tutti:="" uno="">&gt; - Ci.Bu.S.</cibo>
SDGs	2, 3, 12, 17
COUNTRY/ IES	Italy, Albania, Montenegro, Tunisia, Egypt, Lebanon
LEAD PARTNER	CIHEAM Bari
OVERALL PROJECT VALUE (EUR)	80,000 €
FUNDED BY	Apulia Region
START – END DATE	27.02.2020 to 30.11.2021
GENERAL DESCRIPTION	Ci.Bu.S. is part of the project partners' activities aimed at creating a reference pole in Puglia, in Tricase (LE), the "Human Pole on Food, Nutrition, and Well-being" for the improvement of the sustainability of Mediterranean food systems from the point of view environmental, economic, socio-cultural, health and nutritional, encouraging sustainable and responsible consumption.
OBJECTIVES	The general objective of the project is to pick up, map, and promote the best research and innovations in the Puglia region on sustainable agriculture, according to innovative models of responsible production and consumption in the countries of the Mediterranean basin (Albania, Montenegro, Tunisia, Egypt, Lebanon) in contrast to malnutrition and to improve the health and well-being of all. The specific objective is to increase the level of knowledge and skills of ministerial officers of the countries of the Mediterranean basin in the agricultural and food sector on the nexus between agriculture, food, nutrition, and health.
MAIN ACTIVITIES	<ul> <li>Mapping of researches of the Apulian context systematized and enhanced.</li> <li>Mapping of innovations and best practices of the Apulian business system.</li> <li>Mapping of local productions characterizing them for nutritional and health components for economic enhancement and promotion</li> <li>Analysis of the Apulian consumer with respect to the mapped agri-food productions.</li> <li>The organization of a training event in favor of ministerial officers to transfer the results of the project also involves local communities both as bearers of good practices and as beneficiaries of the project results.</li> <li>Final event organization at the regional level for the presentation of the project.</li> <li>Organization of meetings for the transfer of knowledge by ministerial officers to colleagues from target countries.</li> </ul>

## **CIHEAM CHANIA**

ACRONYM AND TITLE	ECOlogical VINEyards GOvernance and Activities for Landscape's Strategies\ECOVINEGOALS
COUNTRY/ IES	Italy, Slovenia, Croatia, Serbia, Montenegro, Greece
LEAD PARTNER	LAG EASTERN VENICE, VEGAL, Italy
PARTNERS	<ul> <li>Autonomous Province of Trento, PAT, Italy</li> <li>Institute of Agriculture and Forestry Nova Gorica, KGZS-Zavod GO, Slovenia</li> <li>Research Centre of the Slovenian Academy of Sciences and Arts - ZRC SAZU, Slovenia</li> <li>Agency for Rural Development of Istria Ltd. Pazin, AZRRI, Croatia</li> <li>Association for the Promotion of Employment, Vocational Training, and Education – INFORMO, Croatia</li> <li>Business Development Centre Kragujevac, BDCKG, Serbia</li> <li>Foundation Business Start-up Center, BSC Bar, Montenegro</li> <li>CIHEAM – CHANIA</li> </ul>
OVERALL PROJECT VALUE (EUR)	1,939,505.59
FUNDED BY	INTERREG ADRION /ADRIATIC-IONIAN
START – END DATE	30 months (01/2020-06/2022)
GENERAL DESCRIPTION	ECOVINEGOALS tackles the challenge of viticulture intensive systems and their negative effects. The project helps develop strategies, action plans, tools, and capacities for the agroecological transition of viticulture areas towards low input and low emission management systems. The expected changes are achieved by acting through pilot initiatives and local action plans. The transnational and interdisciplinary dimension of the partnership allows for achieving long-lasting results such as the constitution of a new innovative transnational network (AVINE) in the Adrion area and the participation of already existing EU networks that support the definition of project main outputs referred to as agroecological practices, landscape and habitat protection, active participation, and social awareness.
OBJECTIVES	<ul> <li>Main objective: to develop strategies, action plans, tools, and capacities for the agroecological transition of viticulture areas towards low input and low emission management systems, and for reconciliation of production, social, environmental, and landscape needs in wine-growing areas in the ADRION area.</li> <li>Specific objectives: <ul> <li>Sharing concepts and tools for the transition of intensive viticultural systems towards agroecological management that protect habitat and landscape.</li> <li>Improvement of stakeholders' skills in participatory local governance.</li> <li>Greater transnational cooperation towards objectives of protection of environmental vulnerability, promotion of ecosystem services, prevention of climate change, and prevention of social conflicts in land use.</li> <li>Construction of transnational instruments to support planning and management of the agroecological transition.</li> </ul> </li> </ul>

MAIN ACTIVITIES	<ul> <li>The main Activities of the project are:</li> <li>Agroecological Practices in Vineyards</li> <li>Landscape and Habitat in viticultural areas</li> <li>Participatory Governance for agroecological transition of vineyards.</li> </ul>
inclusion and empowerment of young people and women?	ECOVINEGOALS activities have been planned to respect all national and Community rules on non-discrimination and equal opportunities will be maintained for the duration of the project. Non-discrimination means equal treatment of any form of racial or ethnic origin, religion, disability, age, or sex. In accordance with the equal opportunities principle, equality is fully respected between men and women. Gender will not be a factor to influence any kind of participation in the project activities (preparation, design, participation, work, implementation of activities, evaluation processes, etc.).
WEBSITE	https://ecovinegoals.adrioninterreg.eu/

ACRONYM AND TITLE	A Holistic Fire Management Ecosystem for Prevention, Detection and Restoration of Environmental Disasters.
LEAD PARTNER	RISE Fire Research AS, NO
PARTNERS	47 partners from 12 EU countries
FUNDED BY	Horizon 2020 research and innovation program
GENERAL DESCRIPTION	DRYADS will tackle several major challenges that wildfires pose by building upon state- of-the-art high TRL products and uniting them in a holistic Fire Management Ecosystem consisting of various innovative technologies and systems to optimize and reuse the available Socio-technological Resources in all three main phases of Wildfires. By adopting a multi-stakeholder, multi-actor approach at its core, the DRYADS solutions will contribute to sustainable development as an inclusive societal process and secure sustainability and resilience of the natural environment, as well as local human societies. Considering the socio-ecological transition of Europe 2030, and towards a more resilient and informed community, focusing on the forests that are near wildfire risk, DRYADS aims to build upon state-of-the-art high TRL products and unite them in a holistic Fire Management platform that optimizes and reuses per phase the available Socio-technological Resources in all three main phases of Wildfires.
OBJECTIVES	<ul> <li>Objectives</li> <li>Improving the efficiency of current fire-fighting operations</li> <li>Advancing operational reaction and mitigation algorithms</li> <li>Deploying, validating, and testing the solution in realistic live demonstrations over eight different climate scenarios, biogeographical and socio-economic contexts.</li> <li>Deliver a strong impact in addition to assisting the emerging need of protecting human lives, the environment, and property.</li> </ul>
MAIN ACTIVITIES	For prevention and preparedness, DRYADS proposes the use of a real-time risk evaluation tool that can receive multiple classification inputs and work with a new proposed neural network-powered Risk factor indicator. To create a model of Fire adapted communities (FAC) in parallel to insurance incentives, DRYADS will use alkali-activated construction materials (AAM) integrating post- wildfires wood ashes (PWA) for fire-resilient buildings and infrastructure. DRYADS also uses a variety of technological solutions such as the Copernicus infrastructure, and a swarm of small drones customized for accurate forest supervision. In the area of Detection DRYADS propose a variety of toolsets that will accommodate most needs. Stemming from Virtual reality for the training, wearables for the protective equipment of the emergency responders. to UAV (drones), UAG, and airships for improving capacity in the temporal and spatial analysis as well as to increase the inspected area coverage. Last, DRYADS will build new land and field-based restoration initiative that will use all modern techniques such as agroforestry, drones for seed spread, and Internet of things sensors that will be able to adapt the seeding process based on the ground needs and on the same time with the help of AI to determine post-fire risks factors.
WEBSITE	- https://dryads-project.eu/introduction/

ACRONYM AND TITLE	Agrosilver project "Integrating silver knowledge from agroecology into the VET systems"
COUNTRY/IES	France, Bulgaria, Spain, Greece, Malta
LEAD PARTNER	Chambre d'agriculture de Lot et Garonne, France
PARTNERS	<ul> <li>Chambre d'agriculture de Lot et Garonne, France</li> <li>EcologyKM Ltd, Bulgaria</li> <li>Extremadura Regional Government, Spain</li> <li>Funding EU Training and Development</li> <li>Mediterranean Agronomic Institute of Chania, Greece</li> <li>Ministry of Gozo, Malta</li> </ul>
FUNDED BY	Erasmus +
START/END DATE	September 2020
GENERAL DESCRIPTION	This project provides a new approach to the development of professionals in the agriculture sector. It develops innovative content and tools to support the sector in the learning of students, allowing especially teachers to increase their teaching methods and content. The project tools can support teachers and students with new attractive content, video content, and work-based, and allow them to improve their current learning methodologies. With the provided tools, the attractiveness of agricultural teaching can be increased, both for the teacher and the student.
OBJECTIVES	To provide students and teachers with attractive video content to support their learning in Agroecology.
inclusion and the empowerment of young people and women?	Young people are encouraged and supported to adopt agroecological practices.
MAIN ACTIVITIES	The main activities/outcomes of the project are the video processing software allowing the users to process training videos, create new learning content, rereview existing content, and use resulting videos for teaching. Another tool, the data platform, is integrated with hundreds of videos recording practices of silver farmers and teachers about agroecology. Hours of videos, with explanations of work-based practices, are provided by experienced actors, which have both high-quality information and a very attractive format. The videos will include talking about the farmer/teacher, mixed with on-field explanations of specific practices or methods.
WEBSITE	https://agrosilver.eu/

ACRONYM AND TITLE	GreenBE Green Education for Green Biotech Enterprise
COUNTRY/IES	Romania, Spain, Italy, and Greece
LEAD PARTNER	UNIVERSITATEA DE STIINTE AGRONOMICE SI MEDICINA VETERINARA DIN BUCURESTI, Romania București
PARTNERS	<ul> <li>UNIVERSITATEA DE STIINTE AGRONOMICE SI MEDICINA VETERINARA DIN BUCURESTI, Romania Bucureşti</li> <li>ASOCIATIA CENTRUL DE BIOTEHNOLOGII MICROBIENE – BIOTEHGEN, Romania BUCURESTI</li> <li>UNIVERSITAT POLITECNICA DE VALENCIA, Spain</li> <li>UNIVERSITA DEGLI STUDI DI PERUGIA Italy</li> <li>CIHEAM CHANIA</li> <li>UNIVERSITATEA ROMANO AMERICANA ASOCIATIE Romania Bucureşti</li> </ul>
OVERALL PROJECT VALUE (EUR)	218.892 €
FUNDED BY	Erasmus +
START/END DATE	February 2022 – Febr 2024
GENERAL DESCRIPTION	The main scope of the proposal is to develop an innovative educational framework for Biotech & Economics graduates from Romanian, Spanish, Italian and Greek partners toward a Biotech Green Entrepreneurial pathway, able to support the Biotech sector to solve environmental and climate change problems
OBJECTIVES	<ul> <li>Specific Objectives:</li> <li>To deliver innovative educational resources (new module course, training materials, mentoring guide, teaching/learning digital portal) for Master and Ph.D. students in Biotech &amp; Economics covering the topic of Biotech Green startups/ enterprises.</li> <li>To develop specific knowledge and competencies in Biotech Green Entrepreneurship by direct training of 55 teachers/tutors and 25 Master and Ph.D. students from the Biotech &amp; Economics areas.</li> <li>Strengthen the integration of the project's partners into the national and European Biotech Green Entrepreneurial Ecosystem.</li> </ul>
MAIN ACTIVITIES	<ul> <li>Critical Assessment of the teaching and learning practices in Green Biotech Education.</li> <li>development of a course syllabus in "Biotech Green Entrepreneurship" to be taught by blended-learning tools to Master and Ph.D. students in Life Sciences/Biotech &amp; Business.</li> <li>development of a guide for the mentors involved in the biotech green entrepreneurial mentorship programs delivered for Life Sciences/Biotech &amp; Business students.</li> <li>Portal of Biotech Green Entking and entrepreneurial ecosystem development.</li> <li>Multiplication events.</li> <li>Training activities: A job shadowing activity f/trainers/tutors with biotech green Entrepreneurship. A student Summer School in Biotech Green Entrepreneurship to work in multicultural/international teams on green entrepreneurship and green behavior/practices and to get in touch with green mentors.</li> </ul>

## **CIHEAM MONTPELLIER**

ACRONYM AND TITLE	MED-Amin Mediterranean Agricultural Market Information Network
COUNTRY/ IES	Albania, Algeria, Egypt, Spain, France, Greece, Italy, Lebanon, Malte, Morocco, Portugal, Tunisia, and Turkey
OVERALL PROJECT VALUE (EUR)	390,000 €
START – END DATE	2014-up to today
GENERAL DESCRIPTION	CIHEAM member states have launched the "Mediterranean Agricultural Markets Information Network (MED-AMIN)" initiative. This network aims to foster cooperation and experience sharing between national agricultural market information systems. It will initially be dedicated to cereal products (wheat, corn, barley, and rice), which are strategic for the food security of Mediterranean countries.
OBJECTIVES	<ul> <li>To build trust between the members of the network as well as better mutual knowledge and joint work on the monitoring of cereal markets in the Mediterranean</li> <li>To improve the knowledge of cereal markets (production, use, stocks, prices, trade) in the region, with an anticipatory orientation ("market intelligence")</li> <li>Share information and methodologies and create a common understanding of market monitoring in the different countries</li> <li>Strengthen countries' capacities to produce, collect and analyze better quality data through training, expert missions, methodological exchanges, joint projects, etc.</li> <li>Produce analyses, particularly on the short-term prospects for the markets of the selected products, as well as advocacy (on food security and cereal issues) to better communicate with decision-makers and the media on the subject.</li> </ul>
WEBSITE	MED Amin

ACRONYM AND TITLE	ECOWASTE 4 FOOD: Supporting eco-innovation to reduce food waste and promote a better resource-efficient economy.
COUNTRY/ IES	France, Italy, Spain, Greece, UK, Poland, Finland
OVERALL PROJECT VALUE (EUR)	1,4000,000 €
FUNDED BY	ERDF (Interreg Europe Programme)
START – END DATE	2017-2020
GENERAL DESCRIPTION	The project promotes eco-innovations against food waste as a source of an efficient and environmentally friendly economy for the territories. Within each participating territory, a group of local stakeholders will be actively involved in the selection of good practices to be transferred and in the validation of the action plan to be implemented.

ACRONYM AND TITLE	SUPMED- Stratégies collectives et contextualisées pour promouvoir une Production agricole résiliente et durable dans les zones rurales Méditerranéennes
COUNTRY/ IES	Egypt, France, Lebanon
LEAD PARTNER	CIHEAM-Montpellier
PARTNERS	LEBANON         –       Le Centre Agricole Privé de Hermel         –       Le Plan Vert         –       L'Union des municipalités de Baalbek-Hermel et l'Union des coopératives de Herme         –       Lé Ministère de l'Agriculture         –       La Faculté d'agronomie de l'Université libanaise (Département d'Économie Rural         EGYPT       –         –       Executive Agency for the Comprehensive Development Projects (EACDP)         –       Egyptian Association for Sustainable Development (EASD)         –       Le Centre d'études de développement rural (Université du Caire, Faculté d'agronomie)         –       Le Département de statistiques et de développement agricole et rural du Ministère de l'agriculture égyptien
OVERALL PROJECT VALUE (EUR)	6 563 000 € 1.7
FUNDED BY	FEM, Plan Vert, EACDP, CIHEAM-IAMM, EASD, FSC Hermel
START – END DATE	2020-2024
GENERAL INFORMATION	The project aims to reduce in a structural and sustainable way the overexploitation of water resources and to improve the income of agricultural households in Lebanon and Egypt in the context of climate change.
OBJECTIVES	<ul> <li>Preserve water resources by reducing the waste of irrigation water on the supply side by strengthening the basic irrigation infrastructure which is currently very deficient.</li> <li>Improve irrigation water demand management and farm household incomes by adopting agroecological practices. The main objective is to collectively build, implement and evaluate adaptation and mitigation strategies for climate change based on agroecology.</li> <li>To capitalize on the results and contribute to national strategies related to climate change by evaluating the modalities of replication of the initiatives from the cases studied and by contributing to the structuring of the private-public partnership in terms of agricultural advice.</li> </ul>
OBJECTIVES	The project improves policy instruments and territorial capacities for protecting the environment and promotes resource efficiency and consumers behavior
WEBSITE	EW4Food

ACRONYM AND TITLE	TRAC: Trajectoire d'évolution de l'organisation du travail pour les exploitations en circuit court
COUNTRY/ IES	France – Italie – Belgique
FUNDED BY	Casdar – Ministère de l'Agriculture
START – END DATE	2019-2023
OBJECTIVES	The project will co-construct a support method to better take into account the work dimension in the strategic thinking of farmers during the creation or reorientation of their short circuit activity.

ACRONYM AND TITLE	EXCEL4MED: Excellence hub in green technologies: Introducing innovation ecosystems in the Mediterranean food value
COUNTRY/IES	• Greece • Malta • France
OVERALL PROJECT VALUE (EUR)	4 416 233 €
FUNDED BY	EU – Horizon Europe
START/END DATE	2022 – 2026
OBJECTIVES	The excellence hub EXCEL4MED is an initiative to strengthen Mediterranean innovation excellence in innovation ecosystems focusing on the production of nutritious food products and the valorization of food industrial side-streams. It is a cross-border collaboration between Greece, Malta, and France on a common strategy for strengthening the Mediterranean food added-value chains. EXCEL4MED innovation ecosystems will be interconnected with umbrella company organizations, research institutions, governmental bodies, and societal actors that will be mutually reinforcing each other in a Mediterranean context and together will raise the level of innovation excellence in their regional fabric.
Keywords	green technologies, ecosystem, food innovation, resilient food chain, business plan

ACRONYM AND TITLE	SHERPA (2019-2023) - Sustainable Hub to Engage in Rural Policies with Actors
COUNTRY/ IES	Belgium, France, Greece, The Netherlands, Italy, Spain, United Kingdom, Germany, Slovenia, Poland, Portugal
PARTNERS	17 partners that are part of the Consortium: CIHEAM MONTPELLIER; AGRICULTURAL UNIVERSITY OF ATHENS; CONSULAI; ECORYS; AEIDL; ALDA; EUROPEAN RURAL DEVELOPMENT NETWORK; INSTITUTE EUROPEAN ENVIRONMENTAL POLICY; NODREGIO; UNIVERSIDAD POLITECNICA DE MADRID; THE JAMES HUTTON INSTITUTE; THUNEN; UNIVERSITA' DI BOLOGNA; UNIVERZA V LJUBJIANI; USC- UNIVERSIDAD DE SANTIAGO DE COMPOSTELA; WAGENINGEN.
OVERALL PROJECT VALUE (EUR)	4,999,747 €
FUNDED BY	EU – Horizon 2020
START – END DATE	2019-2023 (4 YEARS)
GENERAL DESCRIPTION	<ul> <li>Provision of inputs for the design of future research policies, with a focus on the preparation of work programs under Horizon Europe.</li> <li>Support for implementation of policies relevant to rural areas in the programming period 2021-2027; and</li> <li>Supporting setting the direction of rural policy in the next programming period.</li> </ul>
OBJECTIVES	<ul> <li>to gather relevant knowledge and opinions that contribute to the formulation of recommendations for future policies relevant to EU rural areas. It will create a science- society-policy interface that provides a hub for knowledge and policy.</li> </ul>
MAIN ACTIVITIES	<ul> <li>Map the main drivers of future trends and dynamics of EU rural areas.</li> <li>Establish Multi-Actor Platforms (MAPs) as effective and sustainable Science-Society-Policy interfaces.</li> <li>Create a shared knowledge base relevant to EU rural policy by taking stock of the results of past and ongoing research projects.</li> <li>Engage in a dialogue between citizens, researchers, and policymakers across EU territories.</li> <li>Formulate recommendations linked to different scenarios for the development of modern rural policies at European, national and regional levels, as well as for the future rural research agenda.</li> </ul>
WEBSITE	https://rural-interfaces.eu/

ACRONYM AND TITLE	SmartAl - Sustainable management of Albanian Territories, rural areas and agriculture: Instrument, policies, strategies
COUNTRY/ IES	France, Greece, Germany, Albania
LEAD PARTNER	CIHEAM IAMM
PARTNERS	<ul> <li>an S. Noli University Korce (UNKO) - Albania</li> <li>Universiteti Europian i Tiranës (U.E.T. SHPK) - Albania</li> <li>Universiteti Bujqesor i Tiranës (UBT) - Albania</li> <li>Panteio Panepistimio Koinonikon Kaipolitikon Epistimon (UPSPS) - Greece</li> <li>Universitaet Hohenheim (UHOH) - Germany</li> <li>Université Paul Valéry de Montpellier (UPV) - France</li> <li>(Associated partner) Ministry of Education and Sports - Albania</li> <li>(Associated partner) Albanian Network for Rural Development - Albania</li> <li>(Associated partner) Ministry of Agriculture and rural development - Albania</li> <li>(Associated partner) Ministry of urban development - Albania</li> <li>(Associated partner) Korçe regional Council - Albania</li> </ul>
OVERALL PROJECT VALUE (EUR)	758,308 €
FUNDED BY	UE – Erasmus+ CBHE"
START – END DATE	(2017-2021)
GENERAL DESCRIPTION	The project aims at strengthening the capacities of three Albanian universities through the creation of a level 2 Master's degree, meeting European specifications.
OBJECTIVES	Focused on the sustainable management of Albanian territories, and rural and agricultural areas through the implementation of instruments, policies, and strategies, the final objective is to enable the accreditation of this Master''s degree in accordance with the Albanian legal framework and European standards (Bologna Process).
MAIN ACTIVITIES	<ul> <li>Identification of employment needs (Job Market Review), training contents to be developed, and the European universities likely to provide them will be identified.</li> <li>Training and coaching by European universities with a view to co-build the pedagogical content of the future Master.</li> <li>The European universities (teachers and students), and the partners implied in the consortium as a whole, will be mobilized for training seminars (in and ex-situ), field studies, Ph.D. internships, and public feedback conferences.</li> </ul>
Website	https://www.smartal.uet.edu.al/

ACRONYM AND TITLE	IPAUP- Pedagogical Innovation & AUP
COUNTRY/ IES	France, Morocco
OVERALL PROJECT VALUE (EUR)	118,000€
FUNDED BY	ADESFA 2020
START – END DATE	(2019-2021)
GENERAL DESCRIPTION	Educational innovation to enhance the attractiveness of agricultural training courses with high social and environmental responsibility. Example of urban and peri-urban agriculture (AUP) in the regions of Meknes (Morocco) and Occitania (France).
OBJECTIVES	The IPAUP project aims to create a resource center for pedagogical innovation at ENA Meknes for the teaching and learning of Urban and Peri-urban Agriculture (AUP), by initial training as agricultural engineers and continuing education for AUP actors, including the trainers of trainers. It benefits from the experience of the multidisciplinary group of French project partners in Montpellier and Toulouse.

ACRONYM AND TITLE	RUR'UP Innovative education for sustainable development in peripheral rural areas
COUNTRY/ IES	Bulgaria, Hungary, Finland, France, Greece, Ireland
OVERALL PROJECT VALUE (EUR)	758,308 €
FUNDED BY	UE – Erasmus+ CBHE
START – END DATE	2020-2022
GENERAL DESCRIPTION	RUR'UP is an international cooperation project between Higher Education Institutions (HEI), intergovernmental organizations, and rural development stakeholders, funded by the EU Programme Erasmus+.
OBJECTIVES	The project aims to support Higher Education institutions in equipping their graduates with skills and competencies relevant to the specific labor market and societal needs of peripheral rural regions in the EU (HNV areas).

ACRONYM AND TITLE	SALSA- Small farms, small food businesses, and sustainable food nutrition security
COUNTRY/ IES	Portugal, Italy, Latvia, United Kingdom, Norway, Poland, Spain, Greece, Cape Verde, Ghana, Kenya, Romania
PARTNERS	Institute for Rural and Regional Research (Norway), the University of Agriculture in Krakow; UPV – Universitat Politècnica de Valencia; IIED – International Institute for Environment and Development, London, United Kingdom; AUA – Agricultural University of Athens; Uni-CV – Universidade de Cabo Verde; UDS – University for Development Studies, Tamale, Ghana; ACTS – African Centre for Technology Studies, Nairobi, Kenya; Highclere Consulting S.R.L. Brasov, Romania; Savanah Young Farmers Network, Tamale, Ghana; COLDIRETTI – Confederazione Nazionale Coldiretti, Rome, Italy; FAO – UN Food and Agriculture Organization, Research and Extension Unit
OVERALL PROJECT VALUE (EUR)	4 958 172,50 EUR
FUNDED BY	UE-H2020
START/ END DATE	2016- 2020
GENERAL DESCRIPTION	SALSA aims to provide a better understanding of the current and potential contribution of small farms and food businesses to sustainable food and nutrition security. SALSA pioneers a novel integrated multi-method approach in 30 regions in Europe and Africa, using the most recent satellite technologies, transdisciplinary approaches, food systems mapping, and participatory foresight analysis.
OBJECTIVES	<ul> <li>SPECIFIC OBJECTIVES</li> <li>To thoroughly assess the current role of small farms and small food businesses in achieving sustainable Food and Nutrition Security (FNS) in Europe and in selected African regions.</li> <li>To evaluate how small farms can respond to the expected increase in demand for food, feed, and fiber of an increasing population in an increasingly resource-constrained world.</li> <li>To assess the capacity of small farms and small food businesses to contribute to FNS under alternative future scenarios for 2030/50, and to identify the main determinants of the capacity to respond.</li> <li>To help better tailor international cooperation (in particular EU-Africa) and research and to develop tools to guide decision-makers in enhancing the role of small farms in FNS.</li> <li>To establish a Community of Practice and to enhance the use of FAO's channels as well as European and African networks and platforms such as the European Network for Rural Development (ENRD), the European LEADER Association for Rural Development (ELARD), the European Innovation Partnership 'Agricultural Productivity and Sustainability (EIP Agri), the Platform for African-European Partnership on Agricultural Research for Development (YPARD) in order to strengthen the voice of small farms in the global debate on FNS.</li> </ul>
WEBSITE	SALSA

## CIHEAM ZARAGOZZA

ACRONYM AND TITLE	CAMA: RESEARCH-BASED PARTICIPATORY APPROACHES FOR ADOPTING CONSERVATION AGRICULTURE IN THE MEDITERRANEAN AREA
SDGs	1 2 8 12 17
COUNTRY/ IES	Algeria, France, Greece, Italy, Morocco, Portugal, Spain, Tunisia
LEAD PARTNER	CONSIGLIO PER LA RICERCA IN AGRICOLTURA E L'ANALISI DELL'ECONOMIA AGRARIA (CREA) – Italy
PARTNERS	<ul> <li>13 Partners:</li> <li>Agromnia (AGROMNIA), Italy</li> <li>International Centre for Arvalis Institut du Végétal (ARVALIS), France</li> <li>International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM Zaragoza), Spain</li> <li>University of Lleida – Departamento de Producción Vegetal y Ciencia Forestal (UdL), Spain</li> <li>Spanish National Research Council (CSIC), Spain</li> <li>Portuguese Association for Mobilization of Soil Conservation (APOSOLO), Portugal</li> <li>Instituto Nacional de Investigação Agrária e Veterinária (INIAV), Portugal</li> <li>Hellenic Agricultural Organization (HAO-Demeter), Greece</li> <li>Institut National de la Recherche Agronomique de Tunisie (INRAT), Tunisia</li> <li>The Association for Sustainable (APAD), Tunisia</li> <li>High National School of Agronomy (ENSA), Algeria</li> <li>Institut National de la Recherche Agronomique de Maroc (INRA), Morocco</li> </ul>
OVERALL PROJECT VALUE (EUR)	1 500 000,00 €
FUNDED BY	Partnership for Research and Innovation in the Mediterranean Area Programme (PRIMA) Contract number: 1912.
START – END DATE	01/04/2020 to 30/04/2023
GENERAL DESCRIPTION	To identify the main barriers that hinder the adoption of Conservation Agriculture (CA) by small farmers in Mediterranean countries and overcome them.
OBJECTIVES	The objective of the project CAMA is to identify the main barriers and overcome the main barriers to the adoption of Conservation Agriculture (CA) by small-scale producers in the Mediterranean countries
MAIN ACTIVITIES	The project consists of field experiments and pilot case studies under several conditions and in the development of an extensive programme of dissemination and training.
WEBSITE	https://www.iamz.ciheam.org/en/research/research_programmes/one_programme?pro gramme=research-based-participatory-approaches-for-adopting-conservation- agriculture-in-the-mediterranean-area&id=27

ACRONYM AND TITLE	IPMWORKS: AN EU-WIDE FARM NETWORK DEMONSTRATING AND PROMOTING COST-EFFECTIVE IPM STRATEGIES
SDGs	2, 3, 4, 13, 15, 17.
COUNTRY/ IES	15 countries involved: Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, United Kingdom.
LEAD PARTNER	INSTITUT NATIONAL DE RECHERCHE POUR L'AGRICULTURE, L'ALIMENTATION ET L'ENVIRONNEMENT (INRAE) – France.
PARTNERS	31 Partners
OVERALL PROJECT VALUE (EUR)	6 000 005,00 €
FUNDED BY	European Union's Horizon 2020 Programme under grant agreement No. 101000339
START – END DATE	01/10/2020 to 30/09/2024
GENERAL DESCRIPTION	Integrated Pest Management (IPM) is based on a diversity of pest management measures (prevention, non-chemical control, best practices for optimizing pesticide efficiency, etc.). These are combined at the farm level to enable reduced reliance on pesticides, and therefore a decrease in the exposure of the environment and people to pesticides. Pioneer farmers throughout Europe are testing such IPM strategies and are succeeding in achieving good outcomes with low pesticide inputs. However, the majority of European farmers still rely heavily on pesticides, with major environmental and societal impacts, because most of them have not adopted a comprehensive, farm-level, and holistic IPM strategy so far.
OBJECTIVES	The objective of IPMWORKS is to promote the adoption of IPM strategies, based on an EU- wide network of farmers, who will both progress further in the adoption of IPM – through peer-to-peer learning and joint efforts – and demonstrate to other farmers that holistic IPM "works"; i.e., allows a low reliance on pesticides with better pest control, reduced costs, and enhanced profitability.
MAIN ACTIVITIES	IPMWORKS will coordinate existing networks promoting IPM and launch new hubs of farms in regions or sectors where IPM pioneers are not yet engaged in a relevant network. Advisors coordinating hubs will have a major role in facilitating knowledge sharing, coaching farmers to find their own IPM solutions, and organizing local demonstration activities. IPMWORKS will stimulate access to the 'IPM Decisions platform and provide information on the IPM methods. It will collect data for comparing IPM strategies and share results and dissemination material through channels widely used by farmers, broadcasting IPM success stories. It will organize training, and produce training material, targeting both farmers outside the network and advisory services, in order to prepare for the future dissemination of the peer-to-peer learning approach and the general adoption of IPM throughout the EU.
WEBSITE	https://www.iamz.ciheam.org/en/research/research_programmes/one_programme?pro gramme=an-eu-wide-farm-network-demonstrating-and-promoting-cost-effective-ipm- strategies-integrated-pest-management&id=28

ACRONYM AND TITLE	NEWTECHAQUA: NEW TECHNOLOGIES, TOOLS, AND STRATEGIES FOR A SUSTAINABLE, RESILIENT, AND INNOVATIVE EUROPEAN AQUACULTURE
SDGs	2, 8, 12, 14.
COUNTRY/ IES	9 countries involved: Belgium, Croatia, Cyprus, France, Greece, Italy, Norway, Spain, United Kingdom.
LEAD PARTNER	Alma Mater Studiorum – Universita di Bologna (UNIBO), Italy
PARTNERS	26 Partners:
OVERALL PROJECT VALUE (EUR)	6 723 843,00 €
FUNDED BY	European Union's Horizon 2020 Programme
START – END DATE	01/01/2020 to 31/12/2023
GENERAL DESCRIPTION	The vision of the EU aquaculture industry is to grow substantially in the next decade and to provide annually 4.5 million tons of sustainable food products.
OBJECTIVES	NewTechAqua's main purpose is to extend and diversify European aquaculture production of finfish, mollusks, and algae through the development and validation of resilient, sustainable, and technologically advanced applications.
MAIN ACTIVITIES	The organizational approach of NewTechAqua is to group the solutions into 6 different categories: feed, Industry 4.0, sustainable farming, genetics, new species, and new products. They will be validated on conventional (Atlantic salmon, rainbow trout, seabass, and seabream) and emerging (greater amberjack, meager, Senegalese sole,e, and grey mullet) finfish species, mollusks (Pacific oyster, mussel), and microalgae. NewTechAqua is structured in 9 WPs.
WEBSITE	https://www.iamz.ciheam.org/en/research/research_programmes/one_programme?pro gramme=new-technologies-tools-and-strategies-for-a-sustainable-resilient-and- innovative-european-aquaculture&id=25

ACRONYM AND TITLE	SMARTCULTOUR: SMART CULTURAL TOURISM AS A DRIVER OF SUSTAINABLE DEVELOPMENT OF EUROPEAN REGIONS
SDGs	1, 11
COUNTRY/ IES	8 countries involved: Austria, Belgium, Croatia, Finland, France, Italy, Netherlands, and Spain.
LEAD PARTNER	KU Leuven – Belgium
PARTNERS	<ul> <li>10 Partners: <ul> <li>Stichting Breda University of Applied Sciences (BUAS), Netherlands</li> <li>Lapin Yliopisto (LAY), Finland</li> <li>University of split, Faculty of Economics, Business and Tourism (FEBR Split), Croatia</li> <li>Universita Ca'Foscari Venezia (UNIVE), Italy</li> <li>Modul University Vienna GMBH (MU), Austria</li> <li>United Nations Educational, Scientific and Cultural Organization (UNESCO), France</li> <li>Mediterranean Agronomic Institute of Zaragoza / International Centre for Advanced Mediterranean Agronomic Studies (IAMZ-CIHEAM), Spain</li> <li>Toerisme Vlaanderen (TVL), Belgium</li> <li>Quantitas SRL, Italy</li> </ul> </li> </ul>
OVERALL PROJECT VALUE (EUR)	2 980 000,00 €
FUNDED BY	European Union's Horizon 2020 Programme under grant agreement No. 870708
START – END DATE	01/01/2020 to 31/06/2023
GENERAL DESCRIPTION	The project redefines cultural tourism through a contemporary lens and provides a comprehensive measurement framework for supply, demand and impacts
OBJECTIVES	SmartCulTour aims to support regional development in European regions, with special attention to rural peripheries and the urban fringe, through sustainable cultural tourism. Besides a contribution to conceptual development and cultural tourism measurement, the main objective is related to the facilitation of community-led rural development through field experimentation in 6 living labs.
MAIN ACTIVITIES	In order to support knowledge-led destination management, a decision-support system (DSS) will be developed for widescale monitoring purposes across European regions. The DSS will synthesize both traditional and non-traditional data sources, the latter particularly related to big data analytics, thereby assisting smart regional development. A toolkit will be designed to help destinations implement local actions toward sustainable cultural tourism development.
WEBSITE	https://www.iamz.ciheam.org/en/research/research_programmes/one_programme?pro gramme=smart-cultural-tourism-as-a-driver-of-sustainable-development-of-european- regions&id=26

ACRONYM AND TITLE	PASTINNOVA: INNOVATIVE MODELS FOR SUSTAINABLE FUTURE OF MEDITERRANEAN PASTORAL SYSTEMS
SDGs	1, 2,3, 5, 8, 12, 13, 15, 17.
COUNTRY/ IES	12 countries involved: Algeria, Croatia, Cyprus, France, Greece, Italy, Lebanon, Morocco, Slovenia, Spain, Tunisia, and Turkey.
LEAD PARTNER	Elgo-Dimitra, Greece
PARTNERS	20 Partners
OVERALL PROJECT VALUE (EUR)	2.750.000€
FUNDED BY	Partnership for Research and Innovation in the Mediterranean Area Programme (PRIMA)
START – END DATE	01/05/2022 to 30/04/2025
GENERAL DESCRIPTION	PASTINNOVA examines grazing systems that, despite the multiple challenges they face, can provide a wide range of ecosystem services (ES) along with high-quality products (dairy, meat, wool, and processed) under a variety of agroecological conditions and socioeconomic Mediterranean economic scenarios. The project proposes a holistic interdisciplinary approach to improve the weak position of pastoral smallholders in pastoral product value chains (VCPs), with a particular focus on vulnerable groups (e.g., women, young farmers, migrant workers)
OBJECTIVES	The objective of PASTINNOVA is to reinforce the sustainability, profitability, and resilience of small pastoral farms, creating innovative business and organizational models (IBM) to the valuation of all their potential as drivers of the agroecological transition in livestock production.
MAIN ACTIVITIES	PASTINNOVA will offer improved, accessible, and profitable IBM adapted to the characteristics of pastoralists and Mediterranean territories and will propose a supportive political framework and arrangements for market access. PASTINNOVA proposes to improve the role of pastoralism by pooling a rich variety of project partners' existing resources, experience, and networks, including the results of numerous pastoral-related projects.
WEBSITE	available soon

ACRONYM AND TITLE	<b>RE-LIVESTOCK:</b> Resilient livestock farming systems under climate change
COUNTRY/ IES	13 Countries involved: Australia, Austria, Denmark, Germany, Irelands, Italy, Poland, Portugal, Spain, Sweden, Switzerland, The Netherlands, the UK
LEAD PARTNER	Agencia Estatal Consejo Superior de Investigaciones Científicas (CSIC), Spain
PARTNERS	RE-LIVESTOCK - CIHEAM Zaragoza
OVERALL PROJECT VALUE (EUR)	11 996 408,00 €
FUNDED BY	European Union – Horizon Europe
START – END DATE	September 2022 - August 2027
GENERAL DESCRIPTION	The overall objective of Re-Livestock is to evaluate and mobilize the adoption of innovative practices applied cross-scale (animal, herd, farm, sector, and region) to reduce GHG emissions from livestock farming systems and increase their capacity to deal with potential climate change impacts.
OBJECTIVES	<ul> <li>to improve the sustainability of feeding resources for livestock across European regions,</li> <li>to accelerate the development and application of new breeding tools and strategies to achieve permanent and timely reductions in GHG emissions and adaptation to climate change,</li> <li>to evaluate system-specific farm-level husbandry practices</li> <li>to reduce net GHG emissions and increase adaptation to different scenarios,</li> <li>to refine and apply innovative holistic farm-scale environmental and socioeconomic assessment tools</li> <li>to enhance the adoption of the practices,</li> <li>to enable the resilience of livestock production systems today and in the future under different climatic scenarios from a regional to a global scale by adopting innovations based on circularity principles,</li> <li>to design action-based pathways for the transition towards resilient livestock farming systems and</li> <li>to understand the factors influencing the adoption and efficacy of mitigation and adaptation practices with multi-actor engagement.</li> </ul>
MAIN ACTIVITIES	<ul> <li>identify alternative feeds with reduced carbon footprints and greater resilience in the face of heat events, drought, and flood, for which the nutritional value is properly quantified, and emissions can be saved without any negative effect on animal performance or farmer income.</li> <li>collating detailed measures of CH4 emissions and heat tolerance on animals with wider production and fitness (i.e. health, fertility, longevity) data and across breeds, a major knowledge gap on the true relationships between CH4 emissions and production, efficiency, heat tolerance, and fitness traits will be filled.</li> <li>identify husbandry practices that improve system efficiency, reduce nutrient losses and promote C sequestration.</li> <li>address the risks to animal welfare related to climate change, identifying potential hazards and associated risks for different production systems and regions.</li> <li>facilitating the adoption of a range of innovations and practices</li> <li>develop and use improved and adapted emissions factors for different systems and will place particular emphasis on C sequestration.</li> </ul>

	<ul> <li>Develop a range of tools relevant to assessing climate change and mitigation strategies aimed at differing levels (farmers through to scientists).</li> <li>integrate several models of the LPJmL model - the state-of-the-art Dynamic Global Vegetation Model (DGVM) including crop and grass production in a consistent framework, simulating the global terrestrial carbon and nitrogen cycle and the response of carbon and vegetation patterns under climate change - to the Circular Food Systems (CiFoS)-model, a biophysical food optimization model that accounts for circularity in livestock production.</li> <li>assessing the C footprint of conventional and novel alternative feed resources for a wide range of cattle and pigs' production systems together with a deep analysis of the potential of multispecies grasslands in multiple locations.</li> <li>contributing to advanced knowledge of heat tolerance traits in cattle and pigs across a range of regions and breeds (cosmopolitan and local) that will be defined based on existing variability in the slope of (re)productive efficiency in relation to meteorological records and will be eventually incorporated into practical breeding programs.</li> <li>developing: <ul> <li>a data collection framework that builds on current models and sustainability assessment tools,</li> <li>ii) improved LCA-based indicators, including the assessment of natural carbon sinks in livestock production systems,</li> <li>j specific animal welfare assessments in relation to climate change,</li> <li>iv) a model suite (CiFoS, LPJmL, LSAM, RothC) linking and expanding existing state-of-the-art models of assess circularity in terms of biomass, land use, soil carbon, nitrogen, phosphorus, water, and biodiversity,</li> <li>improved modeling of grassland productivy!</li> </ul> </li> </ul>
	during the whole management chain, promoting nutrient recycling and C sequestration. Agroforestry systems will be redesigned to optimize production efficiency while promoting C sequestration.
WEBSITE	https://www.iamz.ciheam.org/project/re-livestock/

## SEMINAR AND WORKSHOPS

TITLE	Xylella fastidiosa (Xf) in the Mediterranean region: spread, socio-economic impacts, actions, and measures adopted to avoid or counteract its entry, establishment, and dissemination
TARGET	INTERNATIONAL WORKSHOP
LOCATION	CIHEAM Bari, Apulia region
PARTNERS	Apulia Region
START- END DATE	27 – 31 March 2022
TOPIC / OBJECTIVE	<ul> <li>State of the art of Xylella fastidiosa in the Mediterranean area;</li> <li>European and National actions to counter Xylella fastidiosa;</li> <li>Puglia Region strategies for the regeneration of areas devastated by Xylella fastidiosa</li> <li>Xylella fastidiosa in Puglia Region: Action Plan implementation;</li> <li>Xylella fastidiosa in NENA Region: context and actions;</li> <li>Socio-economic impacts of Xylella fastidiosa in the Mediterranean region;</li> <li>Technical visit to the Conservation and production centre of "Pre-basic" material of grapevine, citrus, olive, and stone fruits;</li> <li>Technical visit to "Fortunato Nursery", producer of "certified" olive and stone fruit plants;</li> <li>Technical visit to olive-growing areas infected by Xylella fastidiosa;</li> <li>Technical visit to a grapevine nursery in Otranto.</li> </ul>

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## **PAST INITIATIVES**

#### **SFS- MED DIALOGUES**

In 2021, the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM), the Food and Agriculture Organization of the United Nations (FAO), the Secretariat of the Union for the Mediterranean (UfMS), the One Planet Network's Sustainable Food Systems Programme, and the Partnership for Research and Innovation in the Mediterranean Area (PRIMA) Foundation have convened independent dialogues to focus on the specificities of food systems across the Mediterranean, connecting 300 diverse stakeholders from over 30 countries, including ten Member State Dialogue Convenors.

# SFS-MED INDEPENDENT DIALOGUE 1: WHAT ACTIONS FOR MORE SUSTAINABLE FOOD SYSTEMS IN THE MEDITERRANEAN?

Tuesday, 27 April 2021, 14:00-17:30 hrs CET.

Convened by CIHEAM; FAO; UfMS; UN One Planet Network Sustainable Food Systems Programme; PRIMA Foundation.

Objectives:

- Ensuring a deeper understanding of the interconnections and interdependences within Mediterranean food systems at every stage (from production, processing, distribution, and marketing to the consumption of food, including food waste), based on consolidated scientific evidence and local knowledge.
- Catalyzing joint action, using the Mediterranean Diet as a lever to improve the sustainability and resilience of Mediterranean food systems, by bridging Sustainable Consumption and Production (SCP).
- Engaging a wide network of food systems stakeholders within the broader frameworks of green, blue, and circular economy, to design future scenarios of sustainable food systems in the Mediterranean region

# SFS-MED INDEPENDENT DIALOGUE 2: FUTURE OF SUSTAINABLE FOOD SYSTEMS IN THE MEDITERRANEAN.

#### ENABLING ACTIONS FOR MORE SUSTAINABLE FOOD SYSTEMS IN THE MEDITERRANEAN

#### 21 JUNE 2021, 14:30-18:00 (CEST)

Convened by the CIHEAM, FAO, UfMS, OPN-SFSP, and PRIMA Foundation.

#### Objectives:

Catalyzing joint action to improve the sustainability, understanding, and resilience of Mediterranean food systems by bridging Sustainable Consumption and Production (SCP), using the Mediterranean diet as a lever of change, among others.

Engaging a wide network of SFS stakeholders within the broader framework of green, blue, and circular economy, where the SFS-MED Platform can play a key role in strengthening regional cooperation at the service of Mediterranean youth and women to accelerate the regional implementation of the 2030 Agenda

#### SFS-MED INDEPENDENT DIALOGUE 3. PATHWAYS FOR THE FUTURE OF SUSTAINABLE FOOD SYSTEMS IN THE MEDITERRANEAN. WAY FORWARD FOR REGIONAL COLLABORATION.

9 DECEMBER 2021, 10:30 - 12:30 (CET) / online event

Objectives:

take stock of regional and national efforts in support of the follow-up to the UNFSS. exchange on the way forward and identify opportunities for collaboration at the national and regional levels

#### ITALIA IN AZIONE: LA SOSTENIBILITÀ DEI SISTEMI ALIMENTARI E DELLA DIETA MEDITERRANEA INDEPENDENT UN FOOD SYSTEMS SUMMIT DIALOGUE

#### 5 JULY 2021 10:00-12:30. Convened by CIHEAM Bari, 132 participants.

Objectives:

- To identify convergences and synergies between the visions and commitments of three previous "Independent Italian Dialogues" and CIHEAM-Bari's "Integrated Action Program" on Sustainable Food Systems and the Revitalization of the Mediterranean Diet presented at the second independent SFS-MED Dialogue, organized by CIHEAM, FAO, UfMS, PRIMA Foundation, and One Planet Network-Sustainable Food Systems Program.
- The Dialogue on July 5 aims to promote the development of a joint Italian proposal towards the Summit involving all stakeholders interested in initiating collective, multi-stakeholder actions for a sustainable transformation of the world's food systems starting from Italy.

## **INITIATIVES IMPLEMENTED IN 2022**

#### 182ND EAAE SEMINAR: SUSTAINABILITY VIA BIODIVERSE AGRI-FOOD VALUE CHAINS

#### 14 - 15 SEPTEMBER 2022 | CHANIA, CRETE, GREECE

#### CONVENED BY THE MEDITERRANEAN AGRONOMIC INSTITUTE OF CHANIA, CIHEAM MAI.Chania

The event has gathered 120 scholars, professors, researchers, and scientists who exchanged ideas, practices, and research initiatives covering challenges and current developments in biodiversity, sustainability, and agrifood supply chain, With the aim to address critical issues related to the sustainable food systems such as disease outbreaks, food insecurity, increasing trade costs, environmental biodiversity loss. and to assist in policy-making decisions in agriculture and the agrifood industry of the global economy. The seminar highlighted pathways towards sustainable agrifood systems Key outcomes:

- Understanding factors driving sustainable food production and consumption patterns, is a crucial issue for the future wellbeing of humans, food systems sustainability and the protection of the environment.
- Complexity of agri-food systems requires a more holistic and coordinated approach.
- Recognizing the importance of Biodiversity conservation measures.
- A diverse range of food systems is critical to ensure that agri-food value chains are developed in such a sustainable way that minimizes the negative impacts of the current pressing issues that seriously trouble the agri-food industry of the global economy.

#### 3RD WORLD CONFERENCE ON MEDITERRANEAN DIET:

28-30 SEPTEMBER 2022 in Bari (Italy)

Convened by the MEDITERRANEAN AGRONOMIC INSTITUTE OF BARI, CIHEAM BARI

## Change of Course Towards More Sustainable and Resilient Food Systems in Mediterranean Countries: The Mediterranean Diet as a Strategic Resource to Accelerate the Agenda 2030 in the Region.

This event, held in the frame of the 60th anniversary of CIHEAM, was organised by CIHEAM in Bari under the auspices of the Ministries of Foreign Affairs and International Cooperation, Agriculture, Food and Forestry Policies, Health, Ecological Transition and the Union for the Mediterranean, Puglia Region, and the Municipality of Bari, with the technical support of FAO.

During the three-day conference, with 21 sessions and 8 side events, 250 participants, including 150 experts and researchers from 30 countries, important priorities, and lines of action have been set. Among these, participants have identified the necessity to:

- Develop scientific research and innovation to improve the stages of the local supply chain, such as logistics and storage, to reach areas beyond the Mediterranean borders but also

- Create financial mechanisms to support farms, promote local production, and
- activate training initiatives that, focusing on "smart agriculture", may contribute to scaling up the Mediterranean Diet in areas increasingly vulnerable to climate change.
- Develop blue, green, and circular economies along the production chain to lessen the environmental impact with the lowest carbon production.
- Create inter-institutional and multidisciplinary dialogue panels to advocate the Mediterranean Diet following the One-Health holistic approach, a conceptual model that integrates human and animal health, the environment, and lifestyle, and organise training courses to promote its value.
- Encourage the creation of youth enterprises that support the Mediterranean Diet supply chains through innovation
- Foster multi-stakeholders safeguarding measures,
- Support the creation of a task force with the Federation of European Nutrition Societies and the International Union of Nutrition Sciences-Sustainable Diets, and other potential actors, for coping with the erosion of the Mediterranean Diet.

CIHEAM Bari, in particular, commits to join the FAO initiative on the establishment of the Regional Observatory on Food Security as a tool also for enhancing the Mediterranean Diet and its supply chains and initiate a pathway to establish the International Day of the MEDITERRANEAN DIET.



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**Cover image: CIHEAM Bari** 

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