



A CHANGE OF ROUTE

TOWARDS MORE SUSTAINABLE AND RESILIENT FOOD SYSTEMS IN THE MEDITERRANEAN COUNTRIES

THE MEDITERRANEAN DIET AS A STRATEGIC RESOURCE FOR ACCELERATING THE AGENDA 2030 IN THE REGION

BARI 28-30 SEPT 2022



3rd WORLD CONFERENCE REVITALIZATION OF MEDITERRANEAN DIET The report presents the contents and the outputs of 21 thematic sessions (2 of which related to the United Nations Summit on Food Systems) and 8 "side events" through which was articulated in three days the 3rd World Conference on the Revitalization of the Mediterranean Diet, organized by the CIHEAM-Bari, on 28-30 September 2022. 320 representatives of more 50 national institutions and international organizations, coming from 37 countries, participated at the Conference, linking sustainability with food security and nutrition through the Mediterranean Diet from different perspectives. Numerous proposals were made highlighting the need of a "change of course" towards more sustainable and resilient food systems to accelerate the 2030 Agenda for Sustainable Development in the region, with the Mediterranean Diet acting as a strategic resource of sustainable development for Med countries by bridging food consumption and production in a healthy and sustainable way.

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SUMMARY REPORT

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THE MEDITERRANEAN DIET AS A STRATEGIC RESOURCE FOR ACCELERATING THE AGENDA 2030 IN THE REGION

> EDITED BY SANDRO DERNINI AND ROBERTO CAPONE

THE 3RD WORLD CONFERENCE ON THE REVITALIZATION OF MEDITERRANEAN DIET

BARI 28 - 30 SEPTEMBER 2022

S U M M A R Y

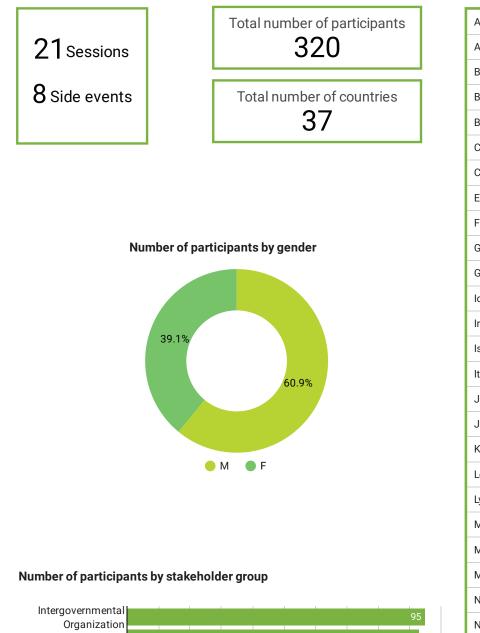


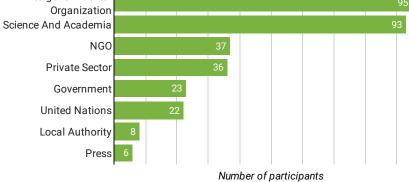


R E P O R T









Albania
Algeria
Belgium
Bosnia and Herzegovina
Bulgaria
Canada
Congo
Egypt
France
Germany
Greece
Iceland
Iraq
Israel
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Switzerland
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Turkey
United Kingdom
United States



Dear readers,

this volume, which collects the contents and outputs of the 21 sessions and 8 side events, held as part of the 3rd World Conference on the Revitalisation of the Mediterranean Diet, is the most valuable legacy of this three-day meeting organised by CIHEAM Bari from 28 to 30 September 2022.

These pages, in fact, are the point of departure for the path towards the revitalisation referred to in the title of our conference; their content is the result of an important individual and collective effort to consolidate insights that have already arisen and to expand the debate on a topic that is key to achieving development and, accordingly, the UN Sustainable Development Goals.

The Mediterranean area, where we proudly stand as citizens, has been the cradle of culture and civilisation for millennia; its most enlightened inhabitants have to strive to preserve its heritage and to pass it on to future generations, through renewed energy and significant insights.

The Mediterranean Diet, the focus of the conference, is certainly one of the most significant legacies with its multifaceted nuances of extraordinary lifestyle, knowledge and tradition. It is a heritage that, at one and the same time, looks to the past and resolutely turns to the future knowing that it can be a valid, I would say irreplaceable, player.

I would therefore like to acknowledge all those who have made this event possible: the colleagues who organised it, the institutions for their support, the Scientific Board that ensured its high level of quality, and all the contributors for sharing valuable content and enriching knowledge. Thanks to each and every one of you!

> **Maurizio Raeli** CIHEAM Bari's Director

To celebrate the 60th Anniversary of the International Center for Advanced Mediterranean Agronomic Studies (CIHEAM), the Third World Conference on the Revitalization of the Mediterranean Diet, entitled *"Change of Route 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"* has been organized on 28-30 September 2022, at the Cosimo Lacirignola Campus, CIHEAM-Bari Institute, in Valenzano, Bari.

THE MEDITERRANEAN CONTEXT

The Mediterranean is historically the meeting area of **ancient millenary civilizations**, characterized by a multiplicity of countries with marked environmental, cultural, social, economic and political differences.

Located at the crossroads between Africa, Asia and Europe, today the Mediterranean is a region where growing interdependent challenges are undermining the sustainability of food systems, and negatively impacting on their populations and natural resources.

Across the Mediterranean region, there is an **"inegalitarian drift"** in the current relations between Northern Mediterranean countries and Southern-Eastern ones, where many difficulties are encountered due to the existing economic, social/cultural disparities and conflicts. In the Mediterranean there is a great heterogeneity between countries and an ever-growing gap between developed economies and those that are less so.

The GDP (Gross Domestic Product) / per capita is higher in the Mediterranean countries of the European Union than that of the countries of the South and East of the Mediterranean, which highlights a profound difference between Mediterranean economies which inevitably has repercussions on the social, environmental, and social dimensions of people livelihoods.

Currently, further aggravated by the Covid-19 pandemic, the region is marked by a **"post nutrition transition state"** in which the prevalence of undernutrition (wasting, stunting, underweight) and micronutrient deficiencies are overshadowed by the prevalence of overweight, obesity and diet-related chronic non-communicable diseases with undesirable impacts not only on the health and related public expenditure, but also on the cultural, social, economic and environmental sustainability dimentions.

Accelerated climate change has further exacerbated existing environmental problems in the region that are caused by the combination of changes in drought and desertification processes, increasing pollution and declining biodiversity.

Disruptions of imports from Ukraine and Russia will further expose Mediterranean countries to food shortfalls with increasing in prices, with combined effects on production cuts, export restrictions, energy prices and difficulties in logistics with negative impacts on both producers and consumers, worsening food insecurity in the region.

THE 3RD WORLD CONFERENCE

The Conference, as part of the **UN Food Systems Summit movement for change**, hasl accommodated multiple perspectives to improve the sustainability and resilience of food systems in the Mediterranean. The Conference involved a **broad spectrum of stakeholders**, equally representing women and men, from both South/Eastern and Northern Med countries, to enable a SFS change of route in the region for coping with growing challenges and accelerating the Agenda 2030.

CHALLENGES FACING THE MEDITERRANEAN REGION

1. Environmental Challenges

Over-exploitation of natural resources and adverse impacts of environmental degradation by climate change, water scarcity, desertification and drought, land degradation, carbon sequestration, loss of biodiversity, fish stocks depletion, lack of good sustainable practices in agriculture and fisheries, urban sprawl, chemical contamination, marine pollution, marine invasive non-indigenous species.

2. Economic Challenges

Unequal economic drift between Northern and Southern-Eastern Mediterranean countries, population growth, increased demand for food, poverty and unemployment (especially among young people), conflict areas, food insecurity, migration from rural areas and other countries, urbanization, changing food procurement, predominance of imported food, internationalization of markets, low profitability for smallholders, lack of efficient rural sustainable development policies (particularly for women and youth, in connection to employability and careers) and incentives for ecosystem services, mismatch between education and job market, lack of innovation, food loss and waste, economic shock of hundreds thousands of agro-food SMEs due to the pandemic of Covid-19 and Ukraine's food export crisis, with expected rise in global food prices.

3. Social and Cultural Challenges

Changes in Mediterranean societies and roles of women (cf. gender equality and inclusion), emerging new unsustainable globalized lifestyle behaviors, population growth, progressive urbanization, migration from rural areas and from other countries, erosion of food cultures and traditional knowledge, lack of social and cultural innovation, education and communication.

4. Health and Nutritional Challenges

Malnutrition and nutrition transition (undernutrition, hidden hunger, and obesity), unsustainable unhealthy dietary shifts, sedentary lifestyles and lack of physical activity, erosion of the Mediterranean diet heritage, food safety and food insecurity, Covid 19 pandemic, growing public health expenditures, diffusion of new emerging pandemic diseases, animal welfare.

The Conference **addressed priority issues** identified from the reflection initiated at the Second World MD Conference in 2019, and from the three SFS-MED independent Food Systems Summit Dialogues , held in 2021, by CIHEAM, FAO, Union for the Mediterranean (UfM), Prima Foundation and United Nations One Planet Network Sustainable Food Systems Program (OPN-SFSP).

National pathways, UNFSS coalitions and commitments of relevant interest to Mediterranean countries from the Summit's process were also presented within a reinforced multistakeholder regional and interregional collaboration perspective. The Conference was addressed **to reinforce the movement for change** initiated by the UN Food Systems Summit for a food systems transformation in the Mediterranean region towards sustainability and resilience.

THE 3RD WORLD CONFERENCE REVITALIZATION OF MEDITERRANEAN DIET

Independent side events were staged to allow more voices and spaces for dialogues to the business system and the civil society, to structurally fulfill the Conference's impact.

In line with **the Call to Action of the G20 Matera Declaration**, a change of route towards more sustainable and resilient food systems was enhanced at the Conference, with the Mediterranean diet acting as a Sustainable Consumption and Production lever, within a collaborative One-Health framework.

Boosted by the 2021 **UN Food Systems Summit's** process, global commitment of the international community for a shift towards more sustainable food systems (SFS) has increased significantly over recent years to accelerate the 2030 Agenda of Sustainable Development.

However, tackling food system transformation towards more sustainability and resilience is a very complex systemic process that requires considering sustainable food systems as a whole rather than in separate components, **going beyond disciplinary approaches and silos**, and engaging a wide range of interests from different groups and agendas, with diverse institutional settings and agro-ecological constraints in countries and territories on all shores of the Mediterranean.

By considering the **complexity of multiple entangled challenges** facing the Mediterranean, a systemic approach on sustainable food systems (SFS), context-specific for the diversity of the Mediterranean countries, is urgently needed to cut across sectors and create synergies overcoming "silo" effects. There is a need to overcome **fragmented sectoral approaches**, within the framework of sustainability, ensuring coherence and coordination of actions, regarding **green**, **blue and circular economies**, linking sustainable food consumption and production through the Mediterranean diet as a SFS-MED lever, within a **One Health** approach.

These growing challenges are **complex and deeply entangled**, and thus require solutions that are systemic and dynamic. This will be especially challenging because of the persistent Covid-19 constraints that are further deteriorating the context. For coping with these multiple and interdependent challenges, which is putting a strain on food supply chains more than previously, **a change of route is needed**, requiring urgent actions to trigger SFS win-win solutions on the ground at the country level, while taking into account the widely differing cultural and developmental dimensions across the region.

A better understanding of the multidimensionality of the sustainability of food systems, as well as interconnections between individual Sustainable Development Goals (SDGs) will allow to strengthen science diplomacy dialogues between Northern and Eastern/Southern countries of the Mediterranean, to accelerate the 2030 Agenda.

Cultural innovation **changes in the mind-set** of people are also required for building the necessary consensus to enable the food environment in the Mediterranean to move to more effective cooperation among all actors engaged to transform food systems, towards the achievement of the Agenda 2030 SDGs, despite the specificity and diversity of the territorial contexts.

However, Mediterranean countries have a common precious heritage, such as the Mediterranean diet which constitutes a powerful sustainable development resource for young people and women in the region on which the future of sustainability lies in their hands.

Although the fact that the **Mediterranean diet** is well documented and acknowledged as a healthy diet, sadly, it **is abandoned**, mainly by the young generations, in most Northern, Southern and

Eastern Mediterranean countries, in which problems of under-nutrition coexist with overweight, obesity and diet-related chronic diseases. **The erosion of the Mediterranean diet** heritage, by the loss of its adherence among Mediterranean populations, **is alarming** as it has undesirable impacts not only on health, but also on social, cultural, economic and environmental trends in the Mediterranean region.

The revitalization of the Mediterranean diet needs to be strongly enhanced for halting the malnutrition in all its forms, the degradation of ecosystems, enhancing people's livelihoods, counteracting climate change, and stopping the collapse of biodiversity in the region, for the benefit of people and nature.

The Mediterranean diet can play an important strategic role as culturally diverse countries unite that have embraced this dietary model as a Mediterranean lifestyle, healthy and sustainable, without thereby distorting the identity of each country. The Mediterranean diet as a lever of change needs to be enhanced for re-directing demand towards more sustainable food consumption, thereby influencing production and reducing the overall negative impacts on ecosystems, in a context of increasing social disparities and in the shadow of climate breakdown, in which food systems are also drivers of environmental degradation.

OBJECTIVES

▼ To enhance a change of route in the Mediterranean for a shift towards more sustainable and resilient food systems for accelerating the Agenda 2030 at the country level;

▼ To enhance the SFS-MED Platform, with its Coordination Desk hosted at the CIHEAM-Bari, by strengthening multi-stakeholder partnerships across the entire region;

▼ To catalyse more collaborative multi-stakeholder "green", "blue" and "circular" SFS- on the ground in Mediterranean countries, MED territorial context specific, within a **One Health** approach development framework with the Mediterranean diet acting as a SCP (sustainable consumption and production) lever;

▼ To foster a change in the current perception of the Mediterranean diet as a resource of sustainable development in the Mediterranean, at country and regional level, taking in consideration their contextual differences;

▼ **To consolidate** the initiative of World Mediterranean Diet Conference as permanent forum for multi-stakeholder and transdisciplinary SFS-MED dialogues and actions to accelerate the Agenda 2030 in the region.

The **SFS-MED Platform,** a multi-stakeholder initiative on sustainable food systems, is a collaborative effort initiated in 2019 as outcome of the 2nd World MD Conference by the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM), the Food and Agriculture Organization of the United Nations (FAO), and the Secretariat of the Union for the Mediterranean (UfMS) as an affiliated project of the UN One Planet Network Sustainable Food Systems Programme.

This **multi-stakeholder** collaborative effort, within the **tripartite Memorandum of Understanding (MoU)** signed by the three Organizations on 14 January 2021, is under codevelopment with the PRIMA Foundation to provide a framework for collaboration among all interested stakeholders, from Northern and Southern/Eastern Mediterranean countries, to accelerate progress on the 2030 Agenda in the Mediterranean region.

New forms of innovative multi-stakeholder strategies and transdisciplinary knowledge-sharing will be fostered by the SFS-MED Platform, between the Northern and the Southern shores of the Mediterranean region.

The SFS-MED Platform will identify **interlinkages between the SDGs**, challenges, drivers, and trade-offs at every stage of food systems (production, processing, distribution, sale, consumption, including food losses and waste), to enhance innovation, scientific research and data for impact assessments.

The **SFS-MED Platform** will enhance more sustainable food supply chains and the role of the cities as hubs of innovation and opportunity connecting people and ideas, to accelerate the **shift** towards an **equitable and inclusive sustainable transformation** of Mediterranean food systems in the region.

THE SFS-MED PLATFORM INITIATIVE

◆ A forum for dialogue and collaboration on priority themes for sustainable food systems in the Mediterranean, acting as a neutral facilitator of multi-stakeholder exchange to enhance policy coherence, build trust, and promote the effective implementation of actions.

◆ An ideal setting to rebalance sustainability and finance. Dedicated support for the co-creation of flagship projects and investment proposals will enable actors in Mediterranean food systems to access funding and scale up sustainable investments.

◆ A network for strengthening knowledge sharing and capacity building related to sustainable food consumption and production across the Mediterranean.

• **Opportunities for regional cooperation** for data sharing, science diplomacy, and the advancement of green and blue practices, as well as inclusive and digital innovation.

The development of a **SFS-MED Platform Community of Practice** (CoP) will accelerate the transformation of Mediterranean food systems towards sustainability and resilience, by promoting and disseminating, through technological and organizational innovation, best practices knowledge and the excellence of territories and their actors, linked to food production and consumption patterns, characteristics of the Mediterranean diet.

Best Practices of local experiences, living labs generating innovation/research and cooperation, and a community of practice social approach, fostering knowledge shared on green, blue, circular economy and sustainable food systems will be identified and promoted as potential powerful SFS-MED Platform tools.

In the light also of the new challenge posed by the unprecedented **COVID-19 crisis**, which is putting more strain on food supply chains, the **SFS-MED Platform initiative** will be developed through an inclusive, participatory multi-stakeholder collaborative effort, based on knowledges and partnerships, context-specific for the Mediterranean.

EXPECTED RESULTS

◆ Issuing a SFS-MED Call for a Common Action: A Change of Route in the Mediterranean to Accelerate the 2030 Agenda

◆ **Identifying** game-changing solutions for improving the sustainability and resilience of Mediterranean food systems for achieving the SDGs of the Agenda 2030 at the countries level;

• **Strengthening** SFS regional and interregional dialogues between Northern and Southern/ Eastern Mediterranean countries towards an equitable transition to a climate resilient society, through better understanding growing interdependent challenges that all populations are facing in the region;

◆ **Unlocking** the potential of research, innovation, sharing knowledge and capacity building, between public and private partnerships from Northern and Southern/Eastern Mediterranean countries, through the **SFS-MED Platform's** activities with a specific attention to support youth, women, small and medium scale farmers, producers and artisanal fisheries, in their access to national and international market;

• **Developing** a **SFS-MED multistakeholder joint action framework** for the sustainability of Med food system and the Mediterranean diet, tailored to multiple sectors and disciplines;

◆ **Implementing** the systemic approach of the SFS-MED Platform, context specific, to respond to the multiple and interdependent challenges that MED countries are facing;

• Changing the perception of the Mediterranean diet, from just only an healthy diet to a strategic resource of sustainable development, linking consumption and production in a healthy and sustainable way, with multiple benefits, and country variations;

• **Building up** the initiative of the World Conferences of the Revitalization of the Mediterranean Diet as a permanent forum for SFS-MED regional and interregional dialogues, actions and solutions to accelerate in the region the shift towards the Agenda 2030.

HISTORICAL BACKGROUND

Since 2002, CIHEAM-Bari with the Forum on Mediterranean Food Cultures, Las Palmas University of Gran Canarias, Sapienza University of Rome, and ICAF (International Commission of the Anthropology of Food and Nutrition), has developed a continuous collaboration on the Mediterranean diet.

In 2003, the Second Euro-Mediterranean Forum "Dialogues among Mediterranean Civilizations on Food Security" was organized in Corigliano Calabro.

In 2005, **the Third EuroMed Forum** "**Dialogues between Civilizations and People** of the Mediterranean: The Food Cultures" was organized , at the Sapienza University of Rome". At the end, "The Call of Rome for a Common Action on Food in the Mediterranean" was issued.

In 2009, the 3rd International CIISCAM Conference "The Mediterranean Diet Today: A Model of Sustainable Diet", was organized by CIISCAM, in collaboration with the Forum on Mediterranean Food Cultures, CIHEAM-Bari, Bioversity International, and the technical support of FAO.

In 2010, the talk show "BIODIVERSITY? Sustainable Food for All: The Mediterranean Diet, an Example of a Sustainable Diet", a TV Talk Show was organized at the Parco della Musica, Rome within the Biodiversity Week.

In 2010, **the International Scientific Symposium** "**Biodiversity and Sustainable Diets**: United Against Hunger" was organized at FAO in Rome, in which a scientific consensus on the definition of "sustainable diets", with the Mediterranean diet as an example was reached.

In 2011, **the international CIHEAM-FAO workshop** on "Guidelines for the Sustainability of the Mediterranean Diet" was organized at the CIHEAM-Bari in which the Mediterranean diet was identified as a joint case study for the characterization and evaluation of the sustainability of food consumption and diets in the Mediterranean.

In 2014, **the International Workshop** "Assessing Sustainable Diets within the Sustainability of Food Systems. New Challenges For Mediterranean Diet And Organic Food was organized at the CREA-NUT in Rome."

In 2015, the International Conference "Does the Mediterranean Diet Still Exist? Nutrition-Health-Quality-Sustainability-Innovation-Evolution" was jointly organized at the Milan EXPO by CIHE-AM-Bari, CNR, CREA, ENEA and Forum on Mediterranean Food Cultures, On this occasion the "Med Diet EXPO Milan 2015 Call: Time to Act", was issued by CIHEAM and endorsed by 81 institutions.

In 2015, at the **EXPO Milan**, CIHEAM and FAO jointly published "Mediterranean Food Consumption Patterns: Diet, Environment, Society, Economy and Health", as a white paper of the priority 5 of the Feeding Knowledge Programme of the Milan EXPO Legacy.

In 2016, **the First World Conference on the Mediterranean Diet** "Revitalizing the Mediterranean Diet from a Healthy Dietary Pattern to a Healthy Mediterranean Sustainable Lifestyle" was organized in Milan by IFMeD (International Foundation of Mediterranean Diet), in collaboration with CIHEAM, FENS (Federation of European Nutrition Societies) and the technical collaboration of FAO.



On this occasion, **The Call for Action on the Revitalization of the Mediterranean Diet** was issued and endorsed by 37 scientific societies, research institutes and national and international organizations.

In 2017, **the FAO /CIHEAM International Workshop** on "Development of Voluntary Guidelines for the Sustainability of the Mediterranean Diet in the Mediterranean Region" was organized at the CIHEAM-Bari, the in the context of the One Planet Sustainable Food Programme Systems of the United Nations (OPN-SFSP).

In 2019, **the Second World Conference on the Revitalization of the Mediterranean Diet** "Strategies towards More Sustainable Food Systems in the Mediterranean. The Mediterranean Diet as a Lever Bridging Production, Transformation and Consumption in a Sustainable and Healthy Way", was organized in Palermo by CIHEAM-Bari and Forum on Mediterranean Food Cultures.

In 2019, **a program of web dialogues** "Towards a **Joint Design of a Conceptual Framework** for a Sustainable Food Systems (SFS) Approach, Context-Specific for the Mediterranean Region, for the Co-Development of a Mediterranean Multi-stakeholder SFS Platform, was organized from October to November by CIHEAM-Bari with FAO and Union for the Mediterranean.

In 2019-2020, **the codevelopment of the SFS-MED Platform** was initiated by CIHEAM, FAO and Union for the Mediterranean with a common ground paper.

In 2021, three SFS-MED independent Food Systems Summit Dialogues on "Pathways for the Future of Sustainable Food Systems in the Mediterranean" were organized on 27 April, 21 June and 9 December by CIHEAM, FAO, Union for the Mediterranean (UfM), Prima Foundation and One Planet Sustainable Food Programme Systems of the United Nations (OPN-SFSP).

CONFERENCE FORMAT

The 3rd World MDConference was articulated through plenary sessions, tematic sessions and side-e-vents in four different locations in the CIHEAM-Bari Campus.

All sessions were designed to facilitate synergies, parterneships and collaborations withing a broad range of partners from across the region, equally representing women and men from South/ Eastern and Northern Med countries.

All sessions were structured in thematic working groups as entry points for Identifying game-changing solutions for improving the sustainability and resilience of Med food systems and the Mediterranean diet, presented as output of the Conference.



MEDITERRANEAN MINISTERIAL DIALOGUE: AREAS OF COLLABORATION AND CONCRETE PROPOSALS.

Organized by the Italian Ministry of Foreign Affairs and International Cooperation

Moderator: **Stefano Gatti,** Special Envoy for food security, Ministry of Foreign Affairs and International Cooperation

Rapporteur: **Roberta Trevisi**, Senior Advisor, Ministry of Foreign Affairs and International Cooperation.

Speakers: Maximo Torero Cullen, Chief-Economist, FAO;

Alvaro Enrique Albacete Perea, Deputy Secretary General, Union for the Mediterranean; **Leonard Mizzi,** Head of Unit, sustainable agri-food systems and fisheries, DG INTPA, EU Commission;

Angelo Riccaboni, Chair, PRIMA foundation

Dina Saleh, Director for Near East, North Africa and Europe Division (NEN), IFAD **Jean-Pierre Demargerie**, Deputy Director of the Programme – Humanitarian and Development Division, Programme Department, WFP

Biagio Di Terlizzi, Deputy Director, CIHEAM Bari

Other international organisations interventions of Mediterranean countries national delegates.

Objective: To discuss international food security priority areas and operational proposals for the Mediterranean region with food security national delegates to contribute to the efforts of the international community for immediate and concrete responses to the food security crisis. This will be a follow up of the "Ministerial Mediterranean Dialogue on the Food Security Crisis" of last June and the results will converge in the next edition of the dialogue in December.

Global food insecurity has been increasing since 2014, with COVID-19 and climate change as aggravating factors. The war in Ukraine and the subsequent spike in food prices is turning this situation into a dramatic international food crisis.

In 2021, G20 Countries recognized that food security and sustainable food systems are key not only to ending hunger, but also to reducing socio-economic inequalities both between and within countries, and to promoting overall inclusive economic growth and sustainable development. Under the Italian Presidency, the G20 agreed to enhance collective efforts for achieving SDG 2 targets and ending all forms of malnutrition by adopting the G20 Matera Declaration. This was an important milestone, as

there has never been a Call to Action by the G20 to the entire international community for improving food security, nutrition and food systems, so strong and so specific in its priority thematic areas. In the spirit of the Matera Declaration, Italy intends to contribute to the efforts of the international community both for immediate and concrete responses to the food crisis exacerbated by the war in Ukraine, and for longer-term actions to make food systems more sustainable and resilient to ongoing and future crises.

These responses are currently discussed in all relevant multilateral and regional fora. Within the United Nations, the Coalitions of Action that emerged from the Food Systems Summit – whose pre-Summit was hosted by Italy in July 2021 – are shifting their attention and their programs of action towards the consequences of the Ukrainian conflict and how to develop the resilience of food supply chains to the great systemic shocks of pandemics and wars. The United Nations General Assembly adopted a Resolution on food insecurity promoted by Lebanon and supported by several other Countries (State of Global Food Insecurity, A/RES/76/264, 27 May 2022);the issue is at the top of the current political agenda also within the EU with the scaling-up of measures and financial resources to fight food insecurity in the most vulnerable regions.

Coordination of the numerous international initiatives currently launched and discussed is key to effectively address the crisis. Among these initiatives, G7 Leaders have set up a Global Alliance for Food Security open to interested Countries and key international organizations as a strategic international coordination and information mechanism.

In defining the collective actions of the international community, Italy believes that we need first to reach out to the most affected Countries, understand the way they are impacted by the situation and involve them in identifying the measures that need to be implemented. Such outreach initiatives are more effective if conducted at regional level. Therefore, on June 8 Italy organized, in the G7 framework, a Mediterranean Ministerial Dialogue on the Food Crisis, chaired by the Minister of Foreign Affairs and International Cooperation, Mr. Luigi Di Maio. The Italian initiative involved Mediterranean food security national delegates, benefited from the support and collaboration of the UN Rome-based Agencies and led to a joint Italy-FAO document concerning the priority areas of work (namely, • investments in countries severely affected by the increase in food prices, • reduction of food loss and waste, • sustainable water management, • better and more efficient use of fertilizers, and • innovation, science, skills and expertise).

The current session, chaired by the Special Envoy for Food Security of the Italian Ministry of Foreign Affairs and International Cooperation, Min. Plen. Stefano Gatti, aims at discussing the common Mediterranean priority areas and operational proposals by FAO, EU Commission, CIHEAM-IAMB and other partner organizations. This will provide a space for Mediterranean food security national delegates to share their challenges and opportunities in order to move forward in food security in view of the next edition of the Mediterranean Ministerial Dialogue, scheduled on 2 December 2022 in the contextof the MED Dialogues in Rome.

Outputs:

• The Italian Ministry of Foreign Affairs organized a Mediterranean Ministerial Dialogue in order to discuss areas of collaboration and concrete proposals for immediate and concrete responses to the current food crisis with international organizations and food security national delegates. This was the first technical follow-up of the Dialogue on the Food Crisis, organized last June and is preparatory to the second edition of the Mediterranean Dialogue, which will take place on December 2nd.

• The discussion was concrete and pragmatic, focusing on 5 specific areas of collaboration; among them there are the national strategies to reduce food loss and waste, sustainable water management and financial investments for the Countries most affected by the food crisis.



THE UN FOOD SYSTEMS POST- SUMMIT PROCESS: SFS-MED DIALOGUES FOLLOW-UP LINKING NATIONAL PATHWAYS AND MULTISTAKEHOLDER ENGAGEMENTS TOWARDS MORE SUSTAINABLE FOOD SYSTEMS IN THE MEDITERRANEAN

Moderator: **Sylvia Lopez-Ekra**, Deputy Director, UN Food Systems Coordination Hub; Rapporteur: **José Valls Bedeau**, Policy officer, Food Systems and Food Safety Division, FAO Introduction: **Alwin Kopse,** Lead Representative, One Planet Network's Sustainable Food Systems Programme, Federal Office for Agriculture Switzerland Keynote Speech:

Stefano Gatti, Minister Plenipotentiary, Special Italian Envoy for Food Security, Ministry of Foreign Affairs, and International Cooperation of Italy Speakers:

Albania: **Emira Gjeci**, Deputy Minister of Agriculture and Rural Development Egypt: **H.E. Amb. Ehab Badawy**, Assistant Minister for Multilateral Affairs and International Security, Ministry of Foreign Affairs

Italy: **Stefano Gatti**, Minister Plenipotentiary, Special Italian Envoy for Food Security, Ministry of Foreign Affairs, and International Cooperation of Italy

Jordan: Mohammad Al-Heari, Secretary-General, Ministry of Agriculture;

Mahmoud Rabai, Secretary General Ássistant for Project and Rural Development, Ministry of Agriculture

Malta: **John Busuttil**, Director, Directorate General Global Issues, International Development and Economic Affairs, Ministry of Foreign and European Affairs

Spain: Samuel Jesus Juarez Casado,

Senior Advisor- General Secretary for Agriculture and Food, Ministry of Agriculture, Fisheries and Food

Turkey: **Nihan Atay Haspolat**, Ministry of Agriculture and Forestry

Wrap-up: Sandro Dernini, Coordinator, SFS-MED Platform Coordination Desk, CIHEAM Bari

Organized by the SFS-MED Platform coordination desk

Objective: to connect food systems knowledge and expertise from diverse constituencies through the SFS-MED Platform initiative to support Med countries for accelerating the Agenda 2030.

Session 1 provided us with the opportunity to gather - here on this very same stage a multiplicity of actors across the Mediterranean to engage in dialogues around sustainable food systems, identify the interconnections between food systems and the region's pressing challenges, and explore collaborations to promote an inclusive and resilient transformation towards sustainability. As part of the UNFSS process, countries and stakeholders across the Mediterranean region convened more than 65 Member State and Independent Food Systems Summit Dialogues at cross-national, national and subnational levels, involving more than 5,000 participants. The outcomes of this process led to the formulation of national pathways for the transformation of food systems in several Mediterranean countries. By taking into consideration a plurality of voices and priorities, these pathways shall serve as points of reference across governments and for all relevant stakeholders in their efforts towards more sustainable food systems in coming years.

This session was built on the findings of a series of SFS-MED independent UNFSS dialogues organized in 2021 by CIHEAM, FAO, UfM, PRIMA Foundation and One Planet Network's Sustainable Food Systems Programme. Such dialogues emphasized the role that the SFS-MED Platform, as a multi-stakeholder initiative for Sustainable Food Systems in the Mediterranean, can play as a regional and independent forum to facilitate exchanges and foster activities to transform food systems. The 3rd World Conference took place one year after the Summit and one year before the 2023 global stocktaking moment of national pathways, therefore providing an opportunity for Mediterranean countries to review progress and possible accelerators for the implementation of national pathways towards the 2023 stock-take and beyond.

As part of their journey towards food systems transformation, countries across the Mediterranean have already formulated a national pathway, or are in the process of developing roadmaps and action plans to integrate food systems approaches in national strategies. Building on these strategic efforts, national stakeholders are now starting implementation of the pathways. However, possible challenges emerge with regards to ensuring effective multi-stakeholder coordination, leveraging needed financial resources, enabling access to knowledge and capacity building for all stakeholders; and building a common understanding of food systems through research, data and innovation sharing.

This session provided a space for countries to share initial lessons learned from the implementation of their national pathways, in particular regarding enabling factors and challenges they have experienced during their journey. Discussions also aimed to understand how regional and inter-country collaboration across the Mediterranean should contribute to pursue joint solutions in addressing common food systems challenges. Finally, the session allowed to propose concrete actions at regional, national and local level to accelerate the change of route towards food systems sustainability, which has contributed to the SFS-MED action framework presented at the end of the Conference.

Outputs:

1. Countries in the Mediterranean are taking great steps in operationalizing their food systems transformation vision through specific policies in support of economic, social and environmental objectives, health and nutrition, etc.

2. Collaboration is key, in the current challenging context, to finding common solutions and exploring new opportunities. Mediterranean diet comes across all these efforts and can also be a lever –or a guide- for collaboration, to ensure a change in perception of the Med diet, from a legacy of the past, to a strategic resource for the future of sustainable food systems.

3. Efforts like the SFS-MED platform are important mechanisms to support this collaboration among countries. Some concrete proposals are presented below.

4. Good practices presented focused on specific programmes that contribute to key entry points for sustainability of food systems and contribute to the pathways implementation, including on sustainable agritourism development, food loss and waste, food security, water management, cash transfer and school feeding programmes, among others

5. Legislation has also an important role to play in moving towards sustainable food systems and in operationalizing concrete actions from the national pathways.

6. Mechanisms to bridge the innovation and technology gaps between Northern, Southern and Eastern shores of the Mediterranean also emerged as key, expanding collaborative efforts in research and innovation.

7. Regional collaboration is needed to support identifying innovative financing programmes and investment proposals to support implementation of activities that can accelerate the transformation of food systems.

8. Concrete proposals for collaboration among Mediterranean countries in the framework of the Food Systems Summit follow-up include working on a joint position within the "coalitions for action", such as the one on healthy diets, and the one on food loss and waste and arrive to the Stocktake moment in 2023 presenting concrete results from such participation of Mediterranean countries in strategic coalitions.

9. Strengthen collaboration not only in the scientific field, but also regarding public policies and management, among decision makers. There are many fields that are very relevant for the region, e.g healthy diets, food loss and waste, water scarcity/governance; a concrete proposal is to identify some fields of interest and establish a mechanism for exchange on specific issues and policy solutions/ experiences.

10. Global and regional initiatives, such as the SFS-MED Platform, the OPN-SFS Programme or the UN FS Coordination Hub, will continue engaging with countries and stakeholders across the Mediterranean, as well as support the processes initiated in the framework of the Food Systems Summit at regional and country levels.



FOOD SECURITY IN THE MEDITERRANEAN REGION IN TIMES OF MULTI-LEVEL CRISIS: RESILIENCE, OPPORTUNITIES AND PROSPECTS

Moderator: **Mouin Hamzé**, Former Secretary General, National Council for Scientific Research-CNRS-L, Lebanon

Rapporteur: Virginia Belsanti, CIHEAM Bari

Speakers: Wafaa El Khoury, Service Chief, Investment Centre Division, FAO

Abdelhamid El Zoheiry, President, Euro-Mediterranean University (EMUNI)

Hammou Laamrani, United Nations Economic and Social Commission for Western Asia (ESCWA)

Charalampos Kasimis, University of Athens

Amel M. Azab, SDG Climate Facility Project Coordinator, Arab Water Council (AWC), Co-chair, Gender Equity and Women Empowerment Voluntary Group for Climate Change, UNDRR **Maria Cristina Russo**, Director for Global Approach & International Cooperation, EU DG Research & Innovation

Thierry Dupeuble, Director, CIHEAM Montpellier

Objective: to highlight regional concerns and impacts of the crises of the last 10 years (health, social unrest, global warming, economics and finances, and weakening of regional solidarity/collective responsibility) on food security. To provide successful and promising initiatives, focusing on the contribution of emerging technologies in alleviating vulnerability and securing sustainability in the face of accumulating challenges.

Context: The COVID pandemic, climate change and regional conflicts of recent years, underlined the devastating consequences on the environment and the fragility of global supply chains, posing an existential threat to existing food security strategies. Multiple environmental, health, political and economic crises in the Middle East have put this region's food security at major risk. Largely dependent on food imports, the Middle East and North Africa is one of the most food insecure regions in the world. FAO estimated that, in this part of the world, 69 million people were undernourished in 2020. With the Russian war in Ukraine – and both countries being the "breadbasket" of the world, accounting for as much as a quarter of the world's yearly wheat sales – an escalating conflict poses a significant risk, leaving the MENA region in need of intensifying efforts to minimize further obstruction to its food security. In an attempt to tackle the increasing risks of food insecurity, emphasizing innovation and cooperation,

are crucial to boosting productivity and sustainable natural resources management, with the agricultural sector standing to benefit significantly from crucial improvements in export-oriented strategies, regional coherence integration, sharing knowledge and new emerging technology. The Plenary was organized around the following topics:

• What was the impact of the recent COVID-19 pandemic on food security in the region, and how effective were State responses?

• Why the Russian war in Ukraine led to food insecurity in the Arab region?

• Which countries will be the most affected by this double crisis, and what are the most effective social protection and international programmes put in place to ensure long-term resilience in the face of other crises in the future?

• How to prevent the current multidimensional crises from turning into social unrest and a regional economic recession spiral?

• What contributes to a successful food security policy dialogue at the regional level and what measures should be taken to make the MENA region more food secure and climate resilient in the future?

• What steps could be taken to enhance productivity and technological developments in the agricultural sector? How to create value for investing in agriculture? And in what ways can the international community support local agricultural production in the face of water scarcity and climate change?

When it comes to securing food for humanity, all actors need to face reality, take stock of risks and challenges, and through an exhaustive search of regional strategies for building resilience of the Mediterranean in food security, face the challenges of the current historical passage and turn them into opportunities.

Outputs:

1. Sustainable diversification is the cornerstone of building resilience of food systems in the Euro-Med region: of diets, imports, production, consumption; financial resources need to support this process by rethinking subsidies, enhance efficiency of procurement, developing capacities for innovating.

2. Adoption of a systemic approach towards food insecurity based on multi-stakeholder action will increase the effectiveness of place-based policy interventions such as social protection, disaster risk reduction, procurement, agriculture, economic recovery, natural resource management, environment. Policies need to be reviewed in terms of preparedness and adaptation. Policy interventions need to be disseminated and civil society informed to engage and participate in solution co-creation.

3. Short supply chains, local markets and investing in local communities for sustainable food production and to support diversification of sustainable food consumption are crucial for access to food, its availability and affordability. Local communities bring balance in the agri-food systems in time of crisis.

4. To optimize the resilience of food systems policy dialogue needs to review priorities to tackle cross-sectoral challenges and address more than one SDG at a time. Regionally resilience needs to be pursued under a macroeconomic perspective (jobs, social protection, poverty).

5. International organisations need to increase their actions for financing emergency imports but also improve adoption of financial mechanisms of solidarity (e.g. debt swapt to support countries in need), innovative financing mechanisms for heavily indebted countries.

6. Euro-Med challenges can be addressed by strengthening partnerships between stockholders in the region and a more integrated approach to R&I, in terms of better empowerment of coordination platforms, e.g. the Union for the Mediterranean, that can harmonise funding instruments. Capacity building for skills needed to face intertwined and multidimensional crisis benefits from initiatives such as Horizon Europe and PRIMA. They support research excellence in rapidly changing environments, promote and facilitate innovation diffusion, adaptation and technology transfer promoting experiential and action-based approaches.



RESILIENCE AND TRANSFORMATION OF MEDITERRANEAN FOOD SYSTEMS: THE ROLE OF THE MEDITERRANEAN DIET

Moderator: **Gianluca Brunori**, Chair, Report of the 5th SCAR Foresight Exercise Expert Group EC; University of Pisa

Rapporteur: **José Valls Bedeau**, Policy Officer, Food Systems and Food Safety Division, FAO Speakers: **Dominique Barjolle**, ETHZ Switzerland

Mirjana Gurinovic, Centre of Research Excellence in Nutrition and Metabolism Belgrado **Maria Partalidou**, University of Tessaloniki

Francesca Galli, University of Pisa

Paolo Prosperi, CIHEAM Montpellier

Objective: to contribute to the 'change of route' by developing a policy framework that qualifies transformation of food systems to resilience.

The Ukrainian war is only the last of a series of systemic crises the world is experiencing and occurs when the COVID-19 pandemic is still showing its effects. Global change and global interconnection have increased the frequency and the intensity of catastrophic events and their systemic impact. Systemic crises affect dramatically vulnerable groups and make food systems more vulnerable to other hazards.

Built in different historical contexts, current food systems are not prepared to face systemic crises. They are heavily specialized, rely on long-distance trade, are calibrated to maximize yields in ideal conditions and not to resist to adversities, depend heavily on fossil fuels, generate high pressure on the natural capital. To work properly, a stability of external conditions (trade, climate, geopolitical) that no longer exist is assumed.

One of the key reasons for "a change of route" that brings to a transformation of current food systems is the need to substantially improve food systems' capacity to anticipate, prevent, absorb, adapt to shocks and stresses. The complexity of such a task is related to the rigidity of the paradigms that have governed them so far, fully focused on supply and production, while it is more and more clear that the resilience of food systems can be achieved only when the interplay between the way food is consumed, processed and distributed, and produced is addressed adequately.

One of the key properties of resilient food systems is their capacity to mitigate the risks through diversification, which implies increasing the diversity of production systems, of supply chains, and of diets, and of the related actors and activities.

Mediterranean countries have experienced in the last year a push to diversification of production and distribution systems and, to a certain extent, of consumption patterns, thanks to multifunctional agriculture, agroecological practices, short supply chains, quality certifications, food movements. New actors - innovative farmers and enterprises, public administrations and civil society - have contributed to this trend, but the magnitude of change is still largely unsatisfactory, and the dominance of the old paradigm on public policies, private strategies, consumers' behaviour is still strong.

As the debate in the last months has shown, the crisis can be both a catalyst of change ("building back better") or a justification for conservative forces to delay or to halt the transformation. Old paradigms, as the one that conflates food security with availability, can push the system in the wrong direction, putting into discussion the choices made to advance towards sustainability.

A change of route is necessary. New policy frameworks need to consider risk as constitutive component of food systems, and the structures, the strategies, and the practices of resilient food systems need to be built on the awareness of the possibility that worst scenarios could occur. This will change the policy agenda and the policy mix, and will generate new policy evaluation criteria.

The panel has addressed this theme focusing on the role of the Mediterranean Diet as a catalyst for change in Mediterranean countries. It discussed to what extent consumption, production, processing, distribution, trade patterns consistent with the principles of the Mediterranean Diet can meet the sustainability and resilience goals. It interrogated the participants on which resources - natural, cultural, social, institutional - peculiar of each context diversification strategies can be based. Best practices at all levels - private, public, civil society - were reported, and a policy roadmap - considering priorities, identifying actors' responsibilities, defining targets - was discussed.

Outputs:

1. Diversity is a key asset for the resilience of food systems and a systems/integrated approach is needed to ensure diversity. Transformative policies that ensure resilience need to consider diversity across the food system.

2. Diversity –and therefore increased resilience- can be brought into integrated food systems policies/strategies through different channels: e.g. diversifying food supply chains, valorizing Neglected and Underutilized Species, through production-marketing-consumption of origin-linked products, production approaches such as agroecology, business models in agri-food value chains, dietary diversity, but also food governance and democracy.

3. It is necessary to reflect on agroecology as a resilience vision for the traditional products of the Mediterranean diet. Their mass production over the past 50 years has caused an unsustainable damage to essential resources such as water, soil and biodiversity, and has been accompanied by price drops that have been fatal for many small producers. PDO-PGI regulations, together with Participatory Guarantee Systems, strengthening the links between producers and consumers, can be part of the solution to ensure sustainability in all its dimensions.

4. The contribution of Neglected and Underutilized Species to systems' diversity needs to be assessed, as well as its feasibility in practice. Overcoming the barriers to NUS valorisation needs experimentation and creativity to be realised in practice. It also needs connecting all stakeholders in the supply chain, with a systems approach, to assess and promote potential of NUS in promoting diversity and resilience of food systems.

5. Business models of Mediterranean small farms show a strong diversity and thus an improved resilience potential to build more resilient systems and sustainable Mediterranean diets.

6. For building innovative and more sustainable agri-food value chain business models that contribute to the sustainability of diets we need to further invest in shared and agreed coordination rules for good sustainability governance. The Mediterranean diet can be a source of values and principles that fosters coordination between actors. 7. Diversification of diets is essential to diversification of the food system. Evidence on the status of food consumption is needed for informing policy decisions, but also to feedback decisions upstream in the supply chain. Longitudinal monitoring of the dietary patterns, including dietary diversity, and nutrient intake is essential for evidence-based policy making and dietary shift to sustainable healthy diet and food systems transformation at country and regional level.

8. The accurate dietary intake assessment in dietary surveys requires a harmonized methodology and validated nutritional data collection tools. Research infrastructure and capacity development are essential for monitoring diet diversity towards transformation to sustainable healthy diet.

9. Choices that consumers make have consequences, and a well-established food democracy is needed to make sure that all stakeholders have a voice –but also access to data and information-, from consumers to small farmers. Social innovations are also important to bridge gaps, for example between rural and urban areas, in ensuring the adherence to the Mediterranean diet, to promote diversity and therefore strengthening resilience of the related food systems.

10. The Mediterranean diet plays a role in this democratic process. The concept of moderation is strongly embedded in the Mediterranean diet, and could also be embodied from a systems perspective –not only from the consumption, but also from the production side-, for more sustainable and resilient food systems.

11. Governance and coordination are key to give voice to diversity and to ensure that it is implementable through policy frameworks. Multi-stakeholder collaboration across the food systems linked to the Mediterranean diet needs to be strengthened to ensure their sustainability and increase their resilience to shocks and crisis.



ASSESSING AND PROMOTING ADHERENCE TO THE MEDITERRANEAN DIET

Moderators: **Barbara Burlingame**, Chair, IUNS Sustainable Diets Task Force Jacques Delarue, Secretary FENS Rapporteurs: **Furio Brighenti**, University of Parma Marcela Gonzales-Gross, Universidad Politécnica de Madrid Speakers: **Antonia Trichopoulou**, President, Health Hellenic Foundation Sandro Dernini, Senior Advisor, CIHEAM Bari Nahla Hwalla, American University of Beirut, Lebanon Rekia Belhasen, Chouaib Doukkali University Francesco Sofi, University of Florence

Objective: to address the health and nutrition challenges associated with adherence, and lack thereof, to the Mediterranean diet and propose actions, framed within the context of the Right to Food and the six principles of food security.

The aim of this session is to address the health and nutrition challenges associated with adherence, and lack thereof, to the Mediterranean diet and propose actions, framed within the context of the Right to Food and the six principles of food security.

Traditional MedDiet was the predominant dietary pattern among populations in the Mediterranean basin before the mid-1960s. Despite the health benefits associated with MedDiet, an industrialised Western diet has gradually replaced MedDiet in Mediterranean countries, -to the detriment of both human and ecosystem health. The so-called "nutrition transition" is dramatically evident in every country of the Mediterranean basin. It is therefore important to understand and measure this phenomenon in order to develop policies and programs to encourage a return to the traditional MedDiet.

To this end, several scoring systems have been developed to operationally assess the (mainly health) effects of MedDiet. Historically, the first was the MedDiet Score (MDS) defined by Trichopoulou et al. to assess the association between MedDiet adherence and mortality in a population of elderly people in Greece. The MDS (0-9 points) consisted of eight components: six beneficial components (monounsaturated/saturated fat ratio, vegetables, fruits and nuts, legumes, fish, cereals), two harmful components (meat/meat products, dairy products), and moderate alcohol consumption (5-25 g/d for women, 10-50 g/d for men). One point was assigned to positively weighted items if consumption was superior or equal to the sex-specific median, and one assigned to negatively weighted items if consumption was inferior to the sex-specific median. The MDS was further modified by the same authors to include fish consumption as a beneficial component. The MDS has been used in many studies since its definition. Fidanza et al. have defined the MAI for the Seven Countries study report after 25 years of follow-up. The PREDIMED Screener score (0-14 points) was defined by Estruch et al. for their RCT aiming to evaluate the primary prevention effects of MedDiet on CHD events in a high CV risk population.

Several other indexes of adherence have emerged over the years until recently to study the association of MedDiet adherence with health outcomes, and at least indirectly with environmental sustainability outcomes. Searching PubMed through October 2014, Hernandez-Ruiz et al., in their review, found 22 indexes with differences regarding the number of components (7-28), scoring (0, 1, 2, 3, 4, 5, 8, or 10, if adherent), range (0-100), and type of components (foods, food groups, nutrients, and/or lifestyle factors). Fruits and vegetables were the most common beneficial components, and meats were the most common detrimental components. Moderate alcohol consumption was common to all indexes and was considered positive, but its definition differed among indexes: 10-20 g/day, or 5-25 g/day in women and 10-50 g/day in men, or 0 g/day in women and up to 10 g/day in men.

Another difference between indexes was the scoring system and the cut-off points (in medians, terciles or established portions). Milà-Villarroel et al. evaluated the reliability of 10 MedDiet adherence indexes, including the MDS, MAI, and PREDIMED scores. They found that all 10 indexes satisfactorily assessed MedDiet adherence, but that there was a lack of internal consistency among the indexes, arguing for standardization. Sofi et al. in their meta-analysis of 27 cohorts, addressing the association of MedDiet with health status, reported all selected cut-offs for different MedDiet adherence indexes. Because of the wide distribution of median consumption of some food groups (legume consumption ranged from 2 to 75 g/d), the data were log-transformed. This highlights the difficulty and the value of harmonizing the adherence indexes to allow for better comparability between studies.

Despite benefits associated with the MedDiet the Mediterranean region has experienced significant shifts toward industrialised and globalized diets. As discussed above, the MOLI-SANI study has shown that socioeconomic factors, nutrition knowledge and education were important contributors to the loss of adherence to MedDiet. However, what is also important is the ability of populations to adhere to a Mediterranean dietary pattern over the long term, which may require policies and promotional actions to affect the "change of route" for a return to traditional food systems and food choices for both human and planetary health. The six dimensions that define food security have a direct relationship with measurement and promotion of adherence to the Mediterranean diet. Those dimensions are Availability, Access, Utilization, Stability, Sustainability and Agency. Thus, for all these reasons, we must [i] try to reach a consensus to better define, if possible, by a single index, the adherence to MedDiet and (ii) develop through a voluntary code of conduct recommendations for different sectors (primary producers, food industry, health, environment, food service and consumers, etc.) to improve adherence to sustainable Mediterranean Diets, using a rights-based approach, grounded in tradition, respectful of biodiversity and ecosystems, and consistent with Sustainable Development Goals.

Outputs:

1. Acknowledgement of the difficulties and limits of using "health-derived scores" to describe the four benefits of an ideal dietary pattern (low environmental impact, positive economic return for local communities, high socio-cultural value, major health and nutritional effect).

2. Currently, there are at least 22 different MD scores for analyzing adherence to Med Diet and deriving measures of effect on health.

3. There are differences in country-specific food habits that may affect the scores, and (often) limits in methodology.

4. There is a consensus that some common metric can be useful for assessment and management at both population and individual level. However, developing a "unified" metric is a methodological challenge.

5. First step is to agree on the need to move forward. Then set consensus on methodology.

6. Importance of what to measure (something that can be measured) and how it should be measured.

7. Ideally, we should move towards a methodology with a more holistic approach, i.e. able to include sustainable (environmentally and economically), local Mediterranean diets.

8. Continue to promote adherence to the Mediterranean diet through multisectoral programmes and campaigns, while concurrently developing the consensus methodology.

9. Develop a set of guidelines for different sectors and professional groups, modeled on successful codes of conduct and/or voluntary guidelines, to encourage adherence.

10 The way of moving forward is creating a taskforce including FENS and IUNS, but also other potential actors.

11. Role of this TF is setting the path for creating, evaluating and implementing a common frame for a new Mediterranean Dietary Pattern for the 21st century



SFS-MED GAME-CHANGING SOLUTIONS FOR A GREEN CIRCULAR ECONOMY

Moderator: Alessandra Sensi, Head of Sector Environment and Blue Economy, UfM Rapporteurs: Afef Tlili, UfM Consultant ; Johanna Klein, UfM Consultant Speakers: Philip Mikos, Head of Unit, European Commission, North Africa, DG NEAR Mohamed El-Shinawi, Co-Chair, PRIMA Foundation Roberta de Palma, UNIDO/SwitchMed Laila Naffaa, President, Arab Women Organisation Jordan Antonella Autino, PRIMA Foundation Joan Colón Jordà, BETA Tech Center, UVic-UCC InterregMed Projects Alessandro Galli, Global FootPrint Network Vito Intini, UNDP, Arab States Region Ines Maghzaoui, Agency for the Promotion of Agricultural Investments, Tunisia (APIA) Florence Tartanac, Officer, FAO Eduardo Cuoco, Director, Organic IFOAM Europe Essma Ben Hmida, Endaa InterArabe, Micro-finance institution, Tunisia Fatima Zahra Zerouati, Journalist and activist for environment communication

Objective: to contribute to Mediterranean food systems change of route towards sustainability by identifying green and circular economy game changing solutions in the food value chains, and the requirement for their replication.

Increasing demand for food, overexploitation of natural resources, and the adverse impacts of climate change on water availability, land fertility and agricultural productivity put severe pressure on food systems, especially in fragile Mediterranean ecosystems. At the same time, intensified and industrial-scale food systems come along with the growing use of synthetic fertilizers and pesticides, intensive irrigation and breeding, and the use of heavy machinery - all of which contribute to air, soil and water pollution and degradation, high agri-food carbon footprint, biodiversity loss and negative health impacts (both under- and over-nutrition) while failing to achieve fair economic returns and livelihoods for all actors, in particular for primary producers.

While some Mediterranean countries are already experiencing food insecurity, the covid-19 sanitary crisis, which induced economies and trade shutdowns, as well as the ongoing war in Ukraine, showcased the relevance of resilient and shorter food chains to achieve national and regional goals of food security and safety.

The green and circular economy (GCE) practices along food systems value chains were highlighted as potential drivers for communities' socio-economic well-being, safeguarding already threatened

resources and ecosystems, as well as creating jobs and economic opportunities while producing healthy, affordable and sufficient food for the Mediterranean communities.

As shown in the "Stocktaking Exercise on Food systems transformation – processes and pathways in the Mediterranean",tackling Mediterranean food systems transformation towards resilience and sustainability relies on a systemic approach to be dynamic, multi-sectoral, context-specific and based on science-guided innovative practices. Food systems transformation is necessarily coupled with circular and green concepts, as highlighted by the EU 'from farm to fork' strategy. The UN SDG 2 achievement also depends on a leap toward greener solutions through circular food production practices as levers for a 'zero hunger' farming system.

Hence, this required transformation of food systems relies firstly on a shared understanding of green and circular economy concepts and applicability to farming systems, particularly tailored to local producers' technical and financial capacities.

This session was an opportunity to exchange around these topics, putting the transition of the Mediterranean farmer and farming systems at the centre of the debate, trying to answer the questions i) why should a farmer switch from existing farming systems towards SFS through GCE;, ii) what are the actual challenges to food systems transformation through GCE; iii) what is needed to make this transformation happen; and iv) what is already in place enabling SFS.

To act as a key enabler for a greener economy and accelerate the circularity of current agricultural practices, a significant transformation of the agri-food sector should be based on recognizing the interconnected social, cultural, ecological, and economic dynamics of agricultural value chains and products.

Applying circular economy principles in Sustainable Food System models improves the socio-economic and ecologic system performance and resilience. The circular food production patterns enhance local and small farming models, creating in-sector dynamics and benefiting local producers and consumers in terms of economic opportunities, decent food prices, and healthy fresh markets. In this sense, one key pillar of food systems transformation towards sustainability is the adherence of small-scale farmers to GCE practices, based on a sound understanding of this economic model ahead with the potential benefits in terms of societal, environmental, and mainly financial sustainability. Circular economy principles also lead to a reduction in food waste, as was highlighted throughout a webinar series on "Food losses, food waste reduction and organic waste management in the Mediterranean region", organized by the Union for the Mediterranean, FAO, PRIMA and the Interreg MED Green Growth community.

While food producers need to be aware of the enabling legal, institutional, financial, and fiscal environment, food consumers and their consumption habits play a significant role in influencing the supply chain and markets towards sustainability. This interconnection between sustainable production and consumption is the mainstay of GCE and food systems transformation in the Mediterranean.

Outputs:

INTEGRATION OF POLICY FRAMEWORKS

• Systematize the already existing regional (Med and Euro-Med) and sub-regional policy frameworks as part of one-single policy making package' addressing green, circular economy with a focus on sustainable food systems; at regional-national level, harmonize/align national policy frameworks with agreed regional and sub-regional policy ones.

• Connect and integrate the existing operational tools and solutions – both regional and national – in order to build the needed critical mass to let the green, circular economy transition start moving forward on its own.

COMMUNITY/IES OF PRACTICE:

• WEFE CoP (water energy food ecosystems) community of practice, launched by PRIMA.

• "Power of Possibility portal" by Global Footprint Network with local best practices (including the Foodnected community of practice); Foodnected consists of a community of communities of practices across the Mediterranean region with pilot sites across Italy, Spain, Montenegro and Turkey.

• SFS Med Diet Platform, CIHEAM.

KEY PROGRAMMES AND PROJECTS:

• SwitchMed regional and Switch national programs (Algeria, Lebanon, ...).

• The new 2021-2027 Interreg EuroMed MEDSEC Thematic Community, addressing among others carbon farming and entering the voluntary carbon market as relevant business opportunity for Mediterranean farmers in near future, and the 21/27 calls interregEuroMed s open to south Med countries as associates.

• CBC/InterregNextMed ongoing capitalization calls and new 2021-2027 programming.

• PRIMA 2021-2027 calls targeting innovative solutions applied to agro-food value chains; small farmers/holders.

• UNDP initiatives at regional and national levels in Syria, Lebanon, etc on Green Commodities Program, Good Growth Partnership, FOLUR Food Systems, Land Use and Restoration, Private Sector engagement – Value Beyond Value Chain, etc.

• The Global Footprint Network on food system, including the CoP.

• FAO tool for GI producers....

• National pilot experience on microfinance targeting rural and sustainable women entrepreneurship, such as the Tunisian one; ENDA green micro-credits i.e. micro-shams credit line.

PENDING ISSUES TO BE ADDRESSED, INCLUDE:

• Fiscal Reforms.

• Access to finance, in particular tailored financial instruments/package (national/regional) on Green Innovative and Circular food systems specifically targeting farmers and smallholders (women and youth in particular) and risks management and guarantees i.e EU EFSD+ guarantee.

• Create a dedicated digital platform to educate investors and national banks on green investments/ entrepreneurships, share information, knowledge on GCE and access to public and private funds and markets (specifically in the Soutth and Eastern Mediterranean countries).

• Green Circular Economy monitoring, upscaling, communication at national and regional level ((resource efficiency i.e. raw materials/water/energy savings; eco-labeling/geographical indications/etc and related trade implications; traditional knowledge on crops resilience; organic farming; etc) and fully communicated with targeted messages to the different food chain actors, in particular farmers and small holders, also using 'multidimensional' communication strategies (including popularization, publicity, scientific and socio-economic debates and portraits of successful experiences).

• Linking with employment aspects/opportunities of green jobs (skills development, re-skilling and up-skilling for green and blue jobs, etc).

SESSION 6



REINFORCING THE INTER-RELATIONS BETWEEN MEDITERRANEAN AGRICULTURAL HERITAGE AND FOOD HERITAGE FOR SUSTAINABLE DIETS AND FOOD SYSTEMS

Moderator: **Parviz Koohafkan**, President, World Agricultural Heritage Foundation Rapporteur: **Andrea Ferrante**, Schola Campesina Speakers: **Samira Nafzi**, RDD Association, Tunisa **Stefano Grego**, World Agricultural Heritage Forum **Kazem Vafadari**, Asia Pacific University Beppu Japan Hasrat Arjjumend, Grassroots Institute Montréal **Thomas Price**, IUCN Dakar **Shantanu Mathur**, IFAD Rome **Alireza Khosravi**, CIRPS Rome **Hildegard Lingnau**, Executive Secretary, GFAR

Objective: to enhance Dynamic Conservation of the Mediterranean Agricultural and Food Heritage Systems through labelling and certification of products and services and contribute to a Change of Route for the revitalization of Mediterranean family agriculture and sustainable food systems.

In all parts of the world, traditional food systems constitute a significant part of diets, food heritage and culture. In 2013, UNESCO declared the Mediterranean diet and the Japanese traditional diet (Washoku) as World's Intangible Cultural Heritage, thereby giving global recognition to the health protecting nature of these diets. Descriptions of these two regions diets indicate that they are characterized by diversified agroecosystems with rich and often unique agrobiodiversity with high intakes of diverse varieties of vegetables, fruits, legumes and cereal grains but also recording the long-life expectancy in these regions.

It is not clear from available information what percentage of the Mediterranean population depends on their traditional food system for their food needs. Anecdotal evidence suggests that a significant percent of the rural population still depend on their traditional food systems for their food needs particularly in rural areas of the Southern Mediterranean countries. Many of the traditional food systems are maintained by local communities who retain knowledge of the agroecosystems and food resources rooted in historical continuity, local knowledge and social organization leading to strong food cultures within their region of residence, and include traditional foods through local farming or wild harvesting. Traditional Mediterranean food systems are often adaptive and nutritionally rich and diverse, are local



and biodiverse, are subsistence and risk averse, and are socially and culturally rooted.

Many Rural communities in developing countries that continue to grapple with serious development problems still cherish their culture including their food systems which are indeed their intangible natural and cultural heritage. Protecting, revitalizing and promoting these food heritage Systems and their documented health giving attributes would contribute significantly to food security, healthy diets and Sustainable Development Goals.

The Globally Important Agricultural Heritage Systems (GIAHS) programme, which was launched in 2002, has already laid the foundation for pursuing the issues of recognizing traditional food systems as food heritage. The overall goal of GIAHS initiative was to identify and safeguard outstanding and diversified traditional agricultural heritage systems rich in biodiversity, indigenous knowledge and cultural values and their associated landscapes thereby enhancing the benefits that are derived through their conservation and sustainable use. Celebrating traditional food systems as national and global heritage gives utmost recognition and support to the custodians of these food systems who are often the small holders, family farmers and indigenous communities.

Between 2011 to 2021, many Globally Important Agricultural Heritage Systems (GIAHS) were identified and designated both in Northern and Southern Mediterranean countries by FAO and many others qualify such designation. In this session, it was suggested to enhance the Dynamic Conservation of Globally, Nationally and Family Agricultural Heritage Systems (GIAHS, NIAHS and FIAHS) and related Food Heritage in Mediterranean Region and the labelling and certification of related products and services by expanding community food base, diversified food and nutrition intakes of populations to ensure improved nutrition and healthy diets.

The Change of Route includes the creation of a Mediterranean Agriculture and Food Heritage Partnership Initiative for the revitalization of Mediterranean family agriculture and sustainable food systems based on the experiences of GIAHS around the world and capitalizing on its achievements, networks and potentials along with a feasibility study to be implemented in selected Agricultural Heritage Systems in Mediterranean countries reviewing the GIAHS concept extended to traditional food, nutrition, culinary and curative(medicinal) systems with the goal of recognizing their Food Heritage and supporting income generation activities by labelling, marketing and certification of Mediterranean food heritage and agrotourism certification schemes.

Outputs:

Promote and implement a new "Agriculture and Food Heritage Initiative" for the Mediterranean Region

Mediterranean agricultural and food systems are Nationally and Globally Important Heritage that need to be valorized, mobilized and sustainably used to expand community food base, diversify food and nutrition intakes of populations and ensure healthy diets. This initiative will also include research and study topics for the revitalization of traditional health and medicinal products under the label of "curative heritage."

"The Agriculture and Food Heritage Initiative" for the Mediterranean Region will aim:

1. To identify, preserve, protect and add value to traditional food and curative heritage systems and support their revitalization within selected Mediterranean regions and countries through certification schemes of Geographical indication and labeling of the Mediterranean agriculture and food heritage products and Services (including Sustainable Rural Tourism).

2. To Study the diversities/similarities of the agriculture heritage of Mediterranean food systems to enhance the relation between the North and South of the Mediterranean food system.

3. To enhance and increase sustainable local agricultural production through innovative approaches and enhancement of local knowledge supported by agroecological approaches and principles (seed availability, pest and disease control that takes advantage of indigenous/ traditional knowledge of farmers) bringing also at central stage marginal groups such as pastoralist and transhumant communities.

4. To promote Mediterranean Food Systems and market access for traditional foods items – strengthening local and regional markets for traditional food crops and connecting producers and consumers through Crowed-Sourcing tools (e.g. Aglegacy).

5. To gather Research and studies on the compositional attributes of traditional foods to enhance public awareness campaigns.

6. To promote sustainable and local food policies and Advocate with governments for the review of regional and national agriculture policies that promotes the role of young generation in the production and consumption of traditional foods linked to Mediterranean food system.

7. To promote information and education campaigns in food and agricultural heritage systems of Mediterranean young generations and public awareness.

SESSION 7



THE ROLE OF SMALLHOLDERS AND FOOD BUSINESS IN ENHANCING SUSTAINABLE AND HEALTHY DIETS

Moderator: **Mohamed El-Shinawi**, Co-Chair, PRIMA Foundation Rapporteur: **Giovanni Stanghellini**, Prima Foundation Speakers: **Peter Shmidt**, European Economic and Social Committee (EESC), President of the EESC Section for Agriculture, Rural Development and the Environment (NAT) **Florence Tartanac**, Senior Officer, FAO **Cristina Chirico**, Head, international office, CIA-Agricoltori Italiani **Paola Giavedoni**, Director of Innovation di EITFOOD **Mohamed Wageih**, Project Officer, PRIMA **Francesco Bottalico**, CIHEAM Bari

Objective: to highlight the role of farmers and businesses in implementing the MED Diet, assessing and promoting more just, environmentally friendly, profitable, healthy and secure food systems.

Agri-food systems are at the center of the global debate on sustainable development, for their impact on climate change, CO2 emissions and biodiversity loss, for the importance that food security is assuming worldwide, for the spread of obesity and malnutrition, and for the effects of it on the well-being and health of individuals and societies. The recent geopolitical crisis occurring in Ukraine confirms the relevance of this sector, from an economic, social, humanitarian and strategic standpoint.

In the path towards more sustainable agri-food systems, companies can play a central role, adopting production and distribution models that are more attentive to the use of environmental resources and social equity, promoting dietary patterns in line with sustainable diets. The Mediterranean and the MED diet constitute a case in point, where it would be interesting to engage with the smallholders and companies to call upon them to take responsibility in adopting more sustainable institutional, economic, social and environmental practices. If there is no doubt that companies' behaviour might have negatively impacted on some of the current problems, the very same sector can also be part of the solution.

Large companies have already grasped the importance of this evolution. On the other hand, smaller companies are less committed to this process, with the risk of losing market opportunities and competitiveness. At the same time, precisely the smallholders and small companies are the backbone of the productivity system of several Mediterranean Countries and economies. To avoid sustainability being seen as a burden, instead of an opportunity, it is necessary to start with the promotion of the

grammar of sustainability in smaller companies. That is to make them understand what sustainability means for agri-food companies, how to introduce it into operational activities, how to monitor it and how to communicate it. This evolution, as it can benefit the environment and society, could also benefit the companies themselves, in terms of new market opportunities, financial resources, better relations with stakeholders and regulators.

Perceptions around sustainability performances' measurement and reporting have also evolved significantly. While years ago, this type of performance was considered as not very common, today, the alignment to sustainability is an act of leadership and an expected conduct. The establishment of accounting and sustainability reporting mechanisms, meant to assess the alignment of companies' practices to SDGs and related targets, has played a positive role in pushing companies to improve their behaviours, also triggering sustainable investments for economic growth.

Therefore, the issue of how to assess business practices becomes crucial for the future of the food sector. The current debate around food systems has clearly shown that the global objective cannot be achieved independently of the different local contexts where citizens, businesses and consumers live. In particular, the G20 Agriculture Communique has investigated that there is no one size fits all strategy to promote sustainable food systems. On the contrary, the appropriate implementation of the strategy shall also bear in mind and adequately valorize the cultural, traditional, and historical **elements**. If not, we might experience the risk of universalistic measurements unable to value adequately the local production systems.

The seminar has investigated how key aspects such as short chain production, virtuous connections with the territories and communities, stable and positive relations between consumers and producers can favor a model of food production, which is sustainable, healthy, and profitable and how adequate measurement systems can respect and valorize this model.

Outputs:

Critical points and main challenges:

- Strong inequality between big companies & SMEs including mismatch of information for small farmers
- It is important to ensure profitability for farmers
- It is important to ensure food affordability, social tensions could shortly arise.
- Change of business-as usual model (eg. use of pesticides)

Recommendations:

• Advocate for adequate Governance, Policies and binding Legislations: Subsidies shall be revised in a way that can promote green transition process by farmers. Regulations (eg. on sustainable food production guidelines, food policies councils, public procurements, EESC) shall be strengthened. Marketing regulations, labelling, standards and monitoring frameworks are also of great relevance not to hamper green transition. On the contrary, finance, incentives and taxation are useful instruments to enhance sustainable performances (eg. favoring local markets).

• Support and invest on quality-products such as MED-DIET products: Strengthen Geographical Indication model (e.g. Regional Quality Scheme CIHEAM) and organic production are two concrete examples. Quality can constitute a lever for SMEs as they are the best actors that are able to valorize quality products and local production.

• Support and Invest on capacity development: online courses for SMEs and farmers on e.g. nutrition and business opportunities (FAO), innovation, challenge-based and start-ups pathways (EIT Food), research capacity and transfer of innovation (PRIMA), advisory services and training (WFO).

• Promote inclusive Partnership, especially research Partnership that are key to promote access to knowledge and innovations, knowledge exchange, replicability of best practices, with a multi-sta-keholder approach. Emulation is also a lever for improving sustainability performances of SMEs.



LAND USE PLANNING FOR COPING WITH IMPACTS OF WATER SCARCITY AND LAND DEGRADATION ON MEDITERRANEAN FOOD SYSTEMS

Moderators: **Pandi Zdruli**, Senior Research Scientist, CIHEAM Bari **Feras Ziadat**, Land Resources Officer, FAO Rapporteur: **Siad Si Mokrane**, CIHEAM Bari Speakers: **Hammou Laamrani**, United Nations Economic and Social Commission for Western Asia (ESCWA) **Ioannis Daliakopoulos**, Coordinator, PRIMA project REACT4MED, Hellenic Mediterranean University, Heraklion, Greece **Eddy De Pauw**, expert on soil and land management and land use planning **Vincent Gitz**, Director, Programs and Platforms, CIFOR-ICRAF

Objective: to deepen into the problems, challenges, and solutions. It will show and document that land and water scarcity could be better managed through efficient use of irrigation water and implementation of innovative irrigation systems and sustainable land use planning.

Why this session?

Mediterranean region is best characterized with the scarcity of fertile land suitable for crop production (14% region wide and 5% in Middle East and North Africa (MENA) and in extreme cases such as Libya this percentage is less than 2%). Several studies for the MENA region show that only about 0.21 ha/per person is suitable for farming. Water is the other limiting factor for crop production. Nevertheless, agriculture remains the major user of water with more than 85% in the MENA despite only 35% of the total agriculture land is irrigated.

Small-scale family farming provides more than 80% of crops and livestock products and 75-85% of agricultural land holdings are held by family farmers. They face daunting challenges including rainfall variability, water shortage, a rise in drought frequency, land degradation and desertification, and increased infections from pests and diseases. These factors are further exacerbated by inadequate support from authorities and institutions, weak market infrastructure and integration, as well as limited access to innovations and new technologies. Finally, these impacts are reflected in decreased

agricultural productivity and reduced livelihood opportunities which in turn escalate a cycle of poverty and food and nutritional insecurity, especially in the least developed countries. The increased migration to urban areas is impacting agriculture in the rural areas and is putting more pressure on food production in the rural areas. Therefore, land use planning is crucial to enhance synergies on food production and accessibility across the rural-urban areas continuum.

Agriculture production is dominated by the rainfed system that is typical for the arid and semi-arid areas that annually receive less than 400 mm of precipitation. They represent 85% of the total land area of MENA but are crucially important for the livelihoods of around 60% of the total population. It is paramount therefore that sustainable land and water management becomes a priority not only for the MENA but for the whole world. Data show for instance that even the Northern Mediterrane-an EU countries are facing severe problems of land degradation and desertification that are already being amplified by the impacts of climate change.

Approach

This session has delved deeper into the problems, challenges, and solutions. It has shown and documented that water scarcity could be better managed through efficient use of irrigation water and implementation of innovative irrigation systems. This has been done by describing results deriving from projects that were able to make the difference through a combination of innovative technology and participatory approach involving all stakeholders, farmers in the first place.

Then it has described with concrete examples the important role of research to tackle land degradation and desertification (LDD). This will be done by addressing the human- and climate-induced threats, through deeper scientific knowledge and better environmental monitoring that would allow researchers to improve their assessments of the status of the LDD drivers of and trends and to propose innovative sustainable land and water management (SLWM) and ecosystem restoration solutions.

However, all of the above could not be reached without sustainable land use planning. There are too many competing interests for land in the region (especially in the urban-rural fringe). Just to mention urban sprawl especially along the Mediterranean coast. Above all, if the trend of soil sealing and land take at the expense of the fertile soils will continue this will put enormous pressures to the food systems, especially in the MENA region that relies extremely on food imports. Egypt is the largest world importer of wheat and the war in Ukraine could make the situation much harder. A detailed overview of principles of land use planning and the toolbox prepared by the FAO will be shown and documented also with a case study from Morocco.

Major contributions to the 3d International Med Diet conference:

- Document that land and water management is possible if all the actors are involved, and the right policy framework is drafted and implemented
- Provide concrete solution of best sustainable land and water management and land use planning in support of sustainable food systems
- Describe the important role of research as a lever for improved natural resources management and sustained crop productivity
- Support knowledge sharing and dissemination among all stakeholders and increase institutional and capacity building for land, water, and food security

Outputs:

1. There is an urgent need to improve water use efficiency and land productivity using economic instruments coupled with preservation of ecosystems, social equity, and justice. This requires addressing locals' needs based on strategic planning.

2. Investing in mitigation of high risks associated with depletion of groundwater, land degradation and desertification requires a cost-benefit standpoint for adaptation to climate change that is severely affecting the Mediterranean region. 3. Mainstreaming land and water management for food security- from a nexus perspective- is a paramount prerequisite for the national development agendas to achieve SDGs, NDCs targets and Sendai Framework accompanied by the necessary budgets and implementing frameworks.

4. The historical anthropic impacts of land degradation in the Mediterranean continue to degrade soils, water, forests, biodiversity, and ecosystems. Reversing these negative trends require implementation of existing policy frameworks, wider dissemination of best management practices and innovations through ample participation and involvement of local communities. Promoting regional collaboration is very much needed to reach success.

5. Integrated Land Use Planning is an efficient instrument to promote and support Sustainable Land and Water Management (SLWM), ecosystem restoration and Sustainable Food Systems. It must be widely used by a large range of stakeholders.

6. Promoting private and public investment opportunities can enhance the adoption of SLWM and provide the needed support for a significant number of stakeholders. Nevertheless, focusing on we aker groups such as youth and women should be a priority.

7. The important role of Forests, trees and agroforestry play a crucial role in support of ecosystem services, soil health, water management, biodiversity preservation, and for adaptation to climate change, and overall food systems performance should be promoted and adopted throughout the Mediterranean.



SFS-MED BLUE GROWTH: BENEFICIAL PRODUCTION AND CONSUMPTION WITH LESS ENVIRONMENTAL PRESSURE

Moderator: **Arni Mathiesen** Senior Advisor, Iceland Ocean Cluster Rapporteur: **Massimo Zuccaro**, CIHEAM Bari Speakers: **Raúl Compés López**, Director, CIHEAM Zaragoza **Vera Agostini**, Deputy Director NFI, FAO **Melanie Siggs**, Director, Global Seafood Alliance **Stephanie Vella**, National Hub for Malta, WestMED Co-Presidency 2022-2023 **Roberto Ugolini**, CIHEAM Bari

Objective: to provide solutions to improve the role of Aquatic Blue Foods, in the context of its inclusion and role in the Mediterranean Diet, with the aim of reducing its environmental impact and enhancing the beneficial effects on the environment and our human socioeconomic, food and nutrition systems.

The role played by Aquatic Blue Foods in the achievement of the sustainability of the food systems is too often overlooked. It could play a central role in food and nutrition security for billions of people thanks to its nutritional benefits (i.e.: animal protein, zinc, vitamin A and omega-3 fatty acids), as well as in livelihoods, economies, and cultures of many coastal and inland communities, contributing to their resilience, good jobs, gender equity, and poverty alleviation.

Aquatic Blue food System: a vision for the future sustainable growth

Nevertheless, despite the potential of Aquatic Blue Foods For delivering progress on 10 of the 17 Sustainable development Goals (SDGs), they are often left out of the sustainable and equitable food system strategies, governance, planning, and resource allocations. Governments and International alliances must embed aquatic foods in food, health, and development policies and foster innovation and entrepreneurship to develop Aquatic Blue Foods that offer affordable, sustainable nutrition. In this regard, our present-day aquatic/blue foods system management needs an effort to improve, in principle, the environmental and social impact of the fishery and aquaculture sectors, dealing with the following main challenges:

- broadening a diverse sense of aquaculture, both traditional and novel
- encouraging new uses of bioprospecting within present catch or production
- finding and developing new species for sustainable harvesting or production (incl. seaweed and jellyfish, and microalgae and insects for feed needs)
- eliminating land-based pollution (incl. plastics) as the primary polluter of oceans
- strengthening circular economy and other coastal activities for diversifying income generation of coastal communities.

The Mediterranean Diet lever

The Mediterranean Diet due to its inherent value, and inclusion of Aquatic Blue Foods, regarding both health and environment can be used as a lever to reduce pressures from current food systems. It could help to improve the processes of harvesting or production, promote healthier consumption, and contribute to dealing with social challenges related to the Mediterranean communities' resilience. The Cultural Heritage element of the Mediterranean Diet can never be overestimated, and it should be used to promote improvements in consumption both within the region as well as internationally due to its wide and valuable name recognition. In this regard, Mediterranean Diet and Aquatic Blue Foods can promote dietary elements with lighter environmental footprints and value, for instance, healthy micronutrients, or additional global protein production or protein replacement. This could be guaranteed through e.g., a quality system for Mediterranean Diet seafood products able to ensure the sustainability of food systems and nutritional aspects of its Aquatic Blue Foods.

Socio-economic changes

All activities need to be well founded in policies relating to gender equality, youth, and the disadvantaged, including migrants. Essential to this is opening opportunities for training and education as well as work opportunities and SME establishment.

The challenges of this session, therefore, were to improve the understanding of the role of Aquatic Blue Foods, in the context of its inclusion and role in the Mediterranean Diet, with the aim of reducing its environmental impact and enhancing the beneficial effects it can have on the environment and our human socioeconomic, food and nutrition systems.

Outputs:

1. Multi-Stakeholder Platform for regional cooperation, planning, and governance for enhancing Blue Food and its role in the Mediterranean Diet

2. Promoting and including Blue Foods in the Mediterranean Diet as fundamental components of Mediterranean food pyramid.

- 3. Promoting a common label on Mediterranean seafood (related to fisheries and aquaculture) able to certify origin, environmental footprint, sustainability of the production and processing, and nutritional quality.
- 4. Sustainable management and exploitation of fish stocks.
- 5. Promoting the short value chain, and local market and consumption for increasing resilience of the coastal communities.

6. Facilitating the knowledge transfer and investment in digital, technological and management innovations related to the Blue Transformation sector, in particular aquaculture, fisheries and value chain.
 7. Implementing high-level training courses aimed at transferring knowledge and increasing skills in favour of technicians of local and national institutions, researchers from public and private sectors and related to the following main topics: territorial planning and management (i.e. AZA, MPA, etc); sustainable aquaculture and fishery system, new technologies for production and market, policy.
 8. Providing organizational, technical and business skills for fishermen and fish farmers.



SCALING-UP AGROECOLOGICAL INNOVATIONS IN THE TRANSI-TIONS OF MEDITERRANEAN FOOD SYSTEMS: AN ENTRY POINT FOR THE REVITALIZATION OF THE MEDITERRANEAN DIET

Moderator: **Massimo lannetta**, Head, Biotechnologies and Agroindustry Division, ENEA; Chair, Technical Scientific Committee Italian AgriFood Technological Cluster CL.A.N. Rapporteur: **Milena Stefanova**, ENEA

Speakers: Andrea Segrè, Professor, University of Bologna

Dessislava Dimitrova, Senior researcher, Institute of Biodiversity and Ecosystem Research of Bulgarian Accademy of Science; coordinator of Slow Food - Bulgaria

Lisa Paganelli, President, Distretto Bio-Simbiotico di Val Bidente e dell'alta Val Rabbi **Tarek Elarabi**, Associate Professor of Agricultural Microbiology, Ain Shams University, Egypt Ain Shams University,

Lydie Stella Koutika, Glinka World Soil Champion 2021, soil scientist, CRDPI, Pointe-Noire, Congo

Marina Carcea, Technology Director, Food and Nutrition Centre, CREA

Nicolas Tinois, co-chair, ÉU Standing Committee on Agricultural Research, Strategic Working Group on Agroecology, Project management Jülich GmbH

Objectives: to elaborate on the basis of the discussion a route of change enabling scaling-up of agroecology for territorial development and the Med Diet Revitalization; to promote and support the launching of a permanent forum with the SFM-MED platform on enabling game-changing solutions for scaling-up agroecology across the Mediterranean Region.

The new global strategy post-2022 for sustainable consumption and productions considers the transformation of food systems a priority not only in reference to their profound contradictions but also in recognition of their potential as one of the drivers for achieving ten of the Sustainable Development Goals (SDGs).

One of the recognized potential approaches for such profound transformation of the agro-food system is based on agroecology as a science, a set of practices and a social movement. Numerous world-wide experiences with past and present agroecological innovations have demonstrated the game-changing potential of agroecology in addressing environmental as well as social challenges faced by contemporary societies.

Recently, thirteen principles for scaling-up agroecological innovations have been consolidated in the report "Agroecological and other innovative approaches for sustainable agriculture and food systems that enhance food security and nutrition" by the High Level Panel of Experts (HLPE) of the Committee on World Food Security (CFS). These principles are: recycling; input reduction; soil health; animal health; biodiversity; synergy; economic diversification; co-creation of knowledge; social values and diets; fairness; connectivity; land and natural resource governance; participation.

Aligning these principles within the current MED Diet 4 Framework can guide the processes of scaling-up agroecological innovations across the Mediterranean Region in order to be able to realize the transformative potential of the agroecological approach to innovation when addressing the environmental societal challenges.

This session, building upon the current MED Diet 4 Framework and upon the consolidated principles for the agroecological transitions for food systems aims at launching an effort for the identification of game-changing solutions for scaling-up agroecology that lead to the revitalization of the Med Diet in the Mediterranean countries.

The session has contributed to all of the expected results of the 3d International Med Diet conference and in particular to:

- Issuing a SFS-MED call for a Joint Action
- Identifying game-changing solutions
- Unlocking the potential of knowledge co-creation and capacity building
- Implementing systemic approach for the SFS-MED platform
- Changing the perception of the Med Diet

Concept and Approach

In order to elaborate a change of route and enable game changing solutions for scaling-up agroecology, a game-changing in thinking is needed as well when addressing environmental societal challenges. Hence, the session concept is based on an extended One-Health perspective, which circularly links the health of living beings (including humans) and their ecosystems with the cultural health of communities across the world. The session has adopted a food-systems approach, comprising all value-adding activities and actors directly involved in food value chains, as well as indirect processes influencing food production, including among others processes reflecting food consumption, knowledge, innovation and/or food governance and the respective stakeholders involved.

Outputs:

1.Need a paradigm shift in thinking about innovations in order to scale-up agroecological innovations which enable the transformation of food systems into a lever for achieving the SDGs: from emission reduction perspective to extended One Health perspective (ecosystems health – human health – cultural health).

2. Need systematic investigation of contextual socio-cultural and environmental drivers of negative as well as positive impacts, in order to address the contradictions of the contemporary food systems.

3. Urgent need for comparative assessment of products and best practices in adoption and

scaling-up agroecological innovations in order to transfer know-how and preserve communities which conserve the bio-cultural memory about the Mediterranean Diet as a model for sustainable diets, including into the revitalization efforts also communities and territories at the cross-roads between Med countries, such as the central Balkan countries.

4. Need to consider a "Planetarian Diet"-approach adapting desirable dietary patterns and lifestyles to local socio-cultural and environmental conditions.

5. Need to identify and foster market drivers and limit the impediments for access to market of artisan food producers and farmers.

6. Need to define systemic innovations addressing contextual drivers at territorial level to address food system contradictions through scaling-up of agroecological innovations: a potential pilot case of systemic investigating the issue of preventing food waste (including also metabolic waste) in three different geo-political regions with advanced levels of scaling-up of agroecological innovations at territorial level (Italy, Balkan countries, Egypt) and identifying interlinked innovation needs for advancing the transitions.

7. Need for research roadmaps to support systemic innovations under the Extended One-Health perspective and establishing sound and consistent relationships between science and societal needs: soil, human, bio-cultural health (e.g., eating behavior of local communities remains invisible in official statistics).

8. Short-term session follow-ups: Issuing a position paper to (a) support advocacy at institutional level for funding actions to enable paradigm shift in thinking about innovations (systematic investigation of contextual social and environmental factors, systemic innovation & research roadmapping); (b) promote the creation of a permanent forum within the SFS-MED Platform for roadmapping the scaling-up of agroecological innovations at territorial level, national and Med Region levels (Tier 1 funding acquisition).

9. Mid-term session follow-ups: Advocacy actions from the SFS-MED forum at R&I public or private investors for funding the implementation of systemic innovations included in Tier1 R&I roadmaps following open innovation models such as Living Labs as well as services provided by research infrastructures (Tier 2 funding acquisition).

10. Long term session follow-ups: support the creation of permanent forum within the SFS-MED platform on agroecological innovations and their scaling-up for the revitalization of the Med Diet as a model for sustainable diets (Tier 3 funding acquisition).



SFS AS A TRIGGER FOR ONE HEALTH TO PROMOTE RESILIEN-CE AND SUSTAINABLE GROWTH IN THE MEDITERRANEAN AND BEYOND

Moderator: Biagio Di Terlizzi, Deputy Director, CIHEAM Bari

Rapporteur: **Rula Atweh**, Project Officer and Coordinator, National Council for Scientific Research of Lebanon

Speakers: **AbdulHakim Elwaer,** Assistant Director-General and Regional Representative for the Near East and North Africa, FAO

Arnì Mathiesen, Senior Advisor, Iceland Ocean Cluster

Carlo La Vecchia, University of Milan

Abdelhamid El Zoheiry, President, Euro-Mediterranean University EMUNI **Nicola D'Alterio**, Director General, Istituto Zooprofilatico Sperimentale dell'Abruzzo e del Molise, on behalf of the World Organization for Animal Health **Emilio Ciarlo**, Head of External Relations, Italian Agency for Development Cooperation

Objective: to share experiences and ideas of concrete application of One Health approach, with the view to identifying concrete tools for its enhancement in contexts where production systems are crucial for food security and human health. To dig out how the diversification of food systems through research and innovation might increase food security and boost resilience vis-à-vis fragilities and crises, also building on science-policy dialogue and public-private partnerships.

One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and inter-dependent (OHHLEP One Health definition, 2021). The approach is based on the concept that humans, animals and the environment are part of the same eco-system.

The Mediterranean region is a living example of how the different elements of the eco-system (both inland and marine) need to exist in reciprocal harmony. Historically, this region has always been considered as a powerful example for both the high quality of its local food products and diet as well as the social behaviours leading to an integrated and sustainable ecosystem, which in turns safeguards One Health. In this context, it is still relevant that the Mediterranean Diet is both an important world heritage of humanity and a means of reducing health risks such as cardiovascular diseases and cancer. Nevertheless, an increasing number of countries bordering the Mediterranean are getting into an eating "Westernized" habit, which may cause undesirable and

negative consequences not only on health and nutrition but also on the cultural, social and economic issues concerning the environment sustainability. This is represented by certain risks.

The rural de-population; the socio-economic instability, conflicts and migration crisis or other health threats like pandemic put at risk and create a widespread vulnerability. In this framework, the nexus between the environment's 'health', healthy and sustainable agricultural production and human health clearly raises a bigger and more complicated challenge. It is therefore necessary in this crucial historical moment to systematize the agriculture/food/health nexus. As outlined on the occasion of the 2nd World Conference on the Revitalization of the Mediterranean Diet, transforming the food systems to make them more sustainable, equitable and resilient will be the key to protecting both our health and the health of the planet now and in the future.

The Mediterranean Diet might thus be considered a good example of concrete application of One Health approach. Sustainable Food Systems (SFS) too might in practice contribute to the enhancement of One Health, while guaranteeing food security and safety. In fact, SFS are at the core of the intersection among human, animal and environment health. The transformation of agrifood system through an inclusive, sustainable, efficient and resilient approach could ensure economic and social inclusion and improved health for all food system actors, from producers to consumers. In this context, the private sector should play a role together with the public sector in the promotion of innovation and in uncapping the potential of youth and women. All these elements will allow to address local communities' needs and to reduce negative environmental impacts and resisting future shocks

Outputs:

1. Reiterate the importance of Inter-Institutional Multidisciplinary Dialogue towards common and joint activities in Onehealth, taking into consideration diversity and fragility of ecosystems.

2. Access to Knowledge: collaborate to the already established NENA FOOD SECURITY OBSERVA-TORY, and sub-regional observatory (in Jordan) in recognition of the importance of data availability (over-time), global networks, platforms for discussion and policy, and knowledge sharing.

3. Capacity Development: to develop OneHealth transdisciplinary educational programmes (Courses) in support of transformative jobs and new skills, with a focus on courses practitioners, on job-learning and lateral knowledge across disciplines of OneHealth.

4. Enhance links of Research-Innovation-Development, considering the merger of 4 ecosystems: Animal, Human, Plants and Environment.

5. Development Cooperation for a green and blue foods approach, with the involvement of private sector for the implementation.

6. Strengthening the dialogue among actors to sustain a one health approach (and its operationalization) to strengthen the issue on the agenda of the Italian Presidency of the G7 (2024).

7. Session suggests the promotion of a Dedicated Day to Celebrate Mediterranean Diet.



CONTRIBUTING TO THE SUSTAINABILITY OF THE MEDITERRANEAN DIET

Moderator: Alexandre Meybeck, Center for International Forestry Research (CIFOR) Rapporteur : Hamid El Bilali, CIHEAM Bari Speakers: Barbara Burlingame, HLPE Steering Committee Member Roberto Carcangiu, Chief, President, Associazione Professionale Cuochi Italiani (APCI) Denis Lairon, Emeritus research Director, INSERM Konstadinos Mattas, Leader, BIOVALUE project Roberta Billitteri, Vice President, Slow Food Italy Daniele Rossi, Chair, Copa Cogeca Research & Innovation Elliot Berry, Hebrew University Gianluigi Cardone, Scientific Administrator, CIHEAM Bari

Objective: To identify actions that contribute to improve the sustainability of the Mediterranean Diet and that can ground individual and collective commitments.

The positive contribution of the Mediterranean Diet to nutrition and health is well documented. More recently an important corpus has highlighted its positive contributions to sustainable food systems in all dimensions of sustainability, environmental, economic and social. With its emphasis on plant-based foods, on moderation, diversity and balance, the Mediterranean Diet has a lower impact on natural resources, particularly on land and water, as well as on greenhouse gas emissions. The importance of diversity of foods and diets, linked as they are to territories, grounds the recognition of the key role of biodiversity, a first step for its sustainable use. The Mediterranean diet, in its diversity, can trigger local economic development, with important economic and social benefits; particularly when fully integrating the cultural dimensions of diets and their links to landscapes and communities, as has been highlighted by participants in the 2nd World Conference on the Revitalization of the Mediterranean Diet, held in 2019, in Palermo.

Diets in the Mediterranean are experiencing the same evolutions as at global level. Adherence to the Mediterranean Diet is declining; the sustainability of the Mediterranean Diet and of Mediterranean food systems are under threat. Concerned experts have repeatedly called for action, to revitalize the Mediterranean Diet.

The purpose of this session was to identify actions that contribute to improve the sustainability of the Mediterranean diet and that can ground individual and collective commitments. Actors and experts, from different backgrounds and at different steps in food systems from consumption to production, have each briefly presented actions that can trigger change towards more sustainability and better adherence to the Mediterranean Diet. The group has considered the actions proposed, questioned their pertinence, potential undesired impacts and potential to effectively trigger the expected change. Participants in the room and on-line have been invited to contribute to this critical exercise. The idea is that these actions can ground individual and collective commitments of various categories of actors that will catalyze favorable dynamics at all levels.

Outputs:

• Promoting education, learning and knowledge on the Mediterranean diet: It is important to raise awareness about the multiple benefits and sustainability of the Mediterranean diet through innovative education and training/learning approaches (cf. experiential learning, action learning, school gardens) especially targeting children, teens and youth. For that, different sources of knowledge/evidence should be considered and combined e.g. knowledge from academic/research and traditional/ indigenous/endogenous/family – parents, grandparents, etc.

• Combining tradition and innovation: There is no dichotomy or contradiction between them and innovation can help promoting the Mediterranean diet and its typical products. This regards, among others, food preservation techniques as well as use of digital technologies/ICT in marketing especially among the young. The promotion of Mediterranean diet should not represent a journey to the past and should not jeopardize the achievements of women in society.

• Highlighting the true value of food: It is crucial to reconsider the value of food and raise awareness about the multifaceted value of food; food is not a commodity, it has not only an economic value (cf. price) but also socio-cultural value, as well as values linked to the production system and its positive contribution to the environment and biodiversity, which can and should be valued in sustainability/ labels.

• Conserving and enhancing biodiversity: There is a strong relation between the conservation of biodiversity and the promotion and revitalization of Mediterranean diet. This should be taken into consideration and highlighted at all levels. The use of biodiversity in the local Mediterranean diets can help in its conservation and the use of local products can make easier the revitalization of the Mediterranean diet.

• Integrating agroecology, organic agriculture and One Health approach: The Mediterranean diet can be used as a tool to promote agroecological approaches and to show their connections with the One Health approach.

• Valorising the role of cuisine: Cuisine (especially "daily cuisine" not "star cuisine") can serve as a vehicle to promote the Mediterranean diet and make it "fashionable" and "trendy" among the youth. In that respect, cuisine can serve as the "last mile" in the promotion of the Mediterranean diet that connects it to the table.

• Fostering collaboration and coordination within food chains: Collaboration among actors along the value chain (producers, processors, retailers/distribution, consumers) is crucial to promote the Mediterranean diet. In this respect, models such as short food supply chains, where there is a strong interaction among the actors, are good examples.

• Striving for economic fairness: Fair and competitive value chains are crucial for the promotion of the Mediterranean diet and its emblematic products (e.g. olive oil). This refers, among others, to a fair distribution of benefits and burdens among actors along the food chains.

• Highlighting the centrality of evidence-based policy, with the understanding that 'strength of evidence' acknowledges traditional knowledge as legitimate science; and there is no contradiction between tradition and innovation.

• Emphasizing the need for a holistic approach to promote and revitalize the Mediterranean diet: This holistic approach takes into consideration and is determined by the diversity of diets in Mediterranean countries (inter-diet diversity), diversity of diet components (biodiversity within diets/intra-diet diversity)), diversity of sources of knowledge/wisdom, diversity of suitable actions at different levels of intervention (individual/collective), diversity of actors/stakeholders involved.



GAME-CHANGING SOLUTIONS FROM LESSONS LEARNED FROM WOMEN, YOUTH AND INCLUSIVE SUSTAINABLE LIVELIHOODS IN THE MEDITERRANEAN COUNTRIES

Moderators: **Wafaa El Dikah**, Senior Adviser, Ministry of Agriculture, Lebanon **Maroun El Moujabber**, Chair of the Scientific Advisory Committee PRIMA Foundation, CIHEAM Bari

Rapporteur: Vasia Madesi, Yellow Window

Speakers: Margreet van der Burg, Wageningen University

Rosanna Quagliariello, CIHEAM Bari

Sandrine Dury, Assistant to the Director, Environments Department and Societies, CIRAD **Amel M. Azab**, SDG Climate Facility Project Coordinator, Arab Water Council (AWC), Cochair, Gender Equity and Women Empowerment Voluntary Group for Climate Change, UNDRR **Stefano Magno**, Policlinico Gemelli, Rome

Objective: Addressing gender & generation aspects in the Mediterranean diet to optimize research to a more sustainable and resilient food system approach in line with the 2030 Agenda.

Expected outcomes

This session was expected to set the stage towards addressing gender and generation aspects in the Mediterranean diet to optimize research to a more sustainable, equitable and resilient food system approach in line with the 2030 Agenda.

"From Fork to Farm" it systemically presents and discusses the gender & generation aspects in each stage of the Mediterranean Diet Food chain to (better) include the perspectives of women and of male and female youth, and to disclosure and overcome gender inequalities & address the generation bias in research, in projects and support services. Examples to ongoing and new issues and urgencies around the Mediterranean diet will be highlighted as well as focus on existing legal barriers and gender gaps and the need to address them through policies and through adopting gender transformative approaches.

The session was also expected to explore the linkages of food insecurity with the livelihoods of women and girls, the structures and activities at farm level, including diversity in the production systems and



Women's and girls' critical roles as front liners in relation to climate change adaptation and mitigation strategies, as well as their pivotal role as farmers and across the food systems; and in producing and consuming healthy and nutritious food was also been showcased. The session has highlighted "game changing" practices related to public health challenges faced by women and linked to healthy dietary patterns of the Mediterranean diet.

Practical recommendations to establishing inclusive, sustainable, and resilient food systems through adoption and implementation of stronger gender responsive approaches have been put forward.

Outputs:

1. Gender equality and food systems are intertwined as tackling gender injustice is a goal in itself; exploring the aspect of gender (in)equalities in the global food crisis will help us deepen the understanding of just and transformative food systems.

2. The recent financial and pandemic crises underlined the change of traditional roles, encouraging men to share cooking responsibilities like never before. At the same time, currently, food choices are linked with physical and psychological well-being. Historically, the Mediterranean diet as a lifestyle is appreciated as it is associated with the seasonality of food and the local sources of products which could act as a control and provide an individual and collective answer to a sustainable food system ensuring human, animal and environmental safety.

3. Gender integration in research became an important aspect of projects and programmes after introducing the eligibility criterion for funding by Horizon Europe. Understanding the need for gender+ integration in research and avoiding a simplistic approach of a binary system is essential from farm to fork and goes beyond funding as there is a need to include societal aspects from the farm to the diet.

4. The SDGs goals 5 and 10 are interlinked as promoting gender equality contains the goal of reducing inequalities.

5. Overcoming gender bias in concepts and methodology is crucial to understanding who to include and address, from farming to meal preparation from labourers to employers; identities, relationships and structures are important for a systemic and transformative change.

6. Impact assessment and gender analysis across the value chain are critical to improve transparency and reveal complexities and intersecting inequalities.

7. Leadership and accountability are key in sustainable food systems; all the actors and stakeholders are accountable for achieving gender equality, especially in the moments of crisis which create setbacks in gender equality and the way forward.

8. Women's healthy food and diet can impact risk, management and treatment for breast cancer; more holistic and person-centred care can prevent cancer risk by encouraging a healthier lifestyle. A plant-based and Mediterranean diet reduces the risk of breast cancer and affects the

results of the treatments. A careful examination of the internal and external environment can create a new paradigm for preventing cancer and providing a better life for patients.

9. Nutrition is a critical aspect of body composition, and the Mediterranean diet is effective for the gut microbiota affecting the human mood, hormonal balance and metabolism with positive outcomes for patients.

10. Undertaking and funding research and gender-sensitive data collection on localised nuances of climate, migration, and gender nexus to inform targeted policies that address the distinct priorities of men and women.

11. Ensuring that climate policies address: a) Women's priorities in climate change, such as better access to agricultural assets and resources to build women's climate resilience» b) Women migrants' priorities in climate change, e.g, social and economic protection at all stages of migration and displacement due to climate change and related actors.

12. Building capacities of national partners to design and implement climate, migration, and gender nexus policies.

13. Enhancing financial allocations and expenditures on gender climate migration nexus policies especially targeting women's priorities in climate change and migration.

14. Linkages between food production and food consumption, between agriculture and food security are not simple and should be assessed at macro, meso and microlevels; poverty, and low access to land and water have negative impacts on Food security, while women working on business farms are more food insecure and wages are not sufficient to reduce food insecurity.

15. A few improving factors include familial agriculture; the improvement of women's status within the farming household; sharing decisions having a positive impact.

16. Gender equality and addressing gender (in)equalities must include more men. Raising awareness about the importance of gender equality is relevant and beneficial for the entire society and not only for women.



SCIENCE DIPLOMACY, KNOWLEDGE, EDUCATION, AND EMPLOYABILITY FOR EMPOWERING THE MEDITERRANEAN YOUTH

Moderator: Giuseppe Provenzano, Higher Education and Research, UfM Rapporteur: Yasmine Seghirate, CIHEAM Paris Speakers: Amb. Senén Florensa, Executive President, European Institute of the Mediterranean (IEMed) Mohamed El-Shinawi, Co-Chair, PRIMA Foundation Alicia Perez-Porro, Scientific Coordinator, CREAF Sonia Abdelhak, Principal Biologist, Institut Pasteur de Tunis Damiano Petruzzella, CIHEAM Bari Constantin Tsakas, Centre for Mediterranean Integration (CMI) Giuseppina Miuli, CIHEAM Bari

Objective: to identify how cooperating on knowledge and skills can make food systems more sustainable and employable

Knowledge and skills are essential tools for empowering the Mediterranean youth and innovate our economic systems towards sustainability. This applies more than ever to food systems in the Mediterranean which needs to achieve a greater degree of resilience in face of growing climate threats, unprecedented disruption in food chains, economic challenges (especially for smallholders), and youth unemployment contributing to the deep roots of migration.

This requires the full involvement of higher education and research centres in order to mobilise the youth and empower it, by advancing science, raising awareness on the challenges, and offering new skills to what is effectively the most educated generation ever in the Mediterranean. Especially if we consider that in the Mediterranean unemployment is highest among graduates, reaching an average of 30% across the region.

UfM has partenered with FAO, CIHEAM and PRIMA in the last years for promoting the sustainability of food systems, highlighting the importance of "bridging the gap between Science, Policy and Business requires investing in specific competences and professional figures, such as innovation brokers and science diplomacy advocates, to facilitate an innovative ecosystem, connect with local needs and enhance the transfer of knowledge from research centres to applied fields". This session has explored the contribution of higher education and research in supporting a shift towards more sustainable food system models in the Mediterranean, by showcasing some key items in their toolbox, which contribute to support our youth. Science diplomacy, knowledge sharing, research and innovation. Science diplomacy has long been an instrument for finding a common ground across Countries, finding ambitious initiatives where working together achieves more than the sum of its elements, and lays the foundation for mutual understanding and peace.

In the Mediterranean, scientific cooperation means sustainability, from environmental, economic and social standpoints. The Mediterranean has seen the development of joint initiatives such as PRI-MA and BLUEMED, which have tried to make our food more sustainable from land and sea, MEDECC that has tried to assess the impact of climate change on the region, among many others. Bringing further focus on this topic, this year marks also the first UfM Ministerial Declaration on Research and Innovation, where 42 Ministers of R&I endorsed three research roadmaps on topics closely connected to the sustainability of food systems: climate change, renewable energy, and health.

Education, skills and employability for the Mediterranean citizens. In modern societies, education has contributed to support social mobility on one side, on the other it has cultivated the human capital of the region by increasing the skills of its future workforce.

The new challenges created by the need of adapting food systems to the future offer the opportunity of exploiting the potential of a very young region, especially in its Southern Shore, equipping them with useful skills and knowledge for supporting this transition. This requires a deep reflection on skills, curricula, study paths, and crucially a dialogue with the private sector in order to support the role of academia in contributing towards the local development, especially since 32% of enterprises in the Southern Mediterranean consider skill gaps as a major constraint to hiring.

Outputs:

• Mediterranean Dialogue and cooperation: There is a need to align more the regional research and innovation agenda and the national regulations.

- The support of young researchers and networks of young researchers is essential. More capacity building is needed not only for researchers but also for administrative work and SMEs.
- More students and young researcher mobility is necessary, not only from South to North, but also from North to South and South to South.

• Traditional science career paths are focused on research and becoming a researcher. Scientific education should include other perspectives, as communication, policy, diplomacy, management, etc., to broader science career path options. There is a need also to have more scientists in non-scientific positions (governments, IGOs, private companies, etc.). We need to support science diplomats because they can "speak" both languages and "understand" both worlds, it is necessary to facilitate the creation of links between these two worlds.

• We need to include health in the food-climate change-energy nexus. This nexus leads to sustainable food systems. There is a need to support system thinking approaches: rethink the decisions to subsidize unhealthy products like white flour and sugar that in addition are transported in a non-green transport. We need to have "science shops/living labs", facilities for transdisciplinary (interdisciplinary and participatory) research and link them to employability issues. The set of skills and the field experience that are acquired by the young researchers when they work with Civil Society Organizations open for them new job opportunities outside academia. We need to find a way to support the mobility of researchers from universities to civil society organizations and vice-versa

• We need to invest in human capital to develop new skills in a regenerated innovation chain that integrates training, research and entrepreneurship in an "agile interactive system". We should have more programs & Masters related to "open innovation and youth entrepreneurship in the Mediterranean food system transition". These interactive systems include a strong collaboration with enterprises and other stakeholders.

• We should provide high-level training programs on business creation even to people with low education. Often judged not capable, the existing initiatives however show that with right approaches to change their mindset and with support (communication, mentorship, coaching...), their entrepreneurial projects can be financed. This can generate employment opportunities to young entrepreneurs in the Mediterranean area.

• Mediterranean stakeholders (local and national policymakers) need to be informed about underlying challenges and solutions for sustainable food systems. Their capacities should be strengthened and they should ultimately be empowered with adequate "nexus solutions". We should cooperate in organizing Regional leadership training workshops, by the youth and for the youth, designed to accelerate collaborative innovation, knowledge-sharing that improve food security. Such workshops would encourage future food and water leaders to think holistically, design innovatively, and communicate effectively across cultures.

• We should encourage a wider set of ministries and local and national public bodies in urban and rural municipalities to participate in this training, labs, events and regional workshops. We need to involve youth at all levels, especially in leadership positions related to water management and food security, policymaking and governance (national youth councils, youth organizations/networks, youth researchers and other relevant actors).

• We need to support academic research via cross-border collaboration among the different scientific communities that work on sustainable food systems. It could be an obligation to integrate this research into decision-making.

• We need to listen more to the needs of students and young researchers. They need more training in communication, marketing and fundraising. They also want to learn how to work in teams in a collaborative way with various stakeholders. All these "soft skills" need to be strengthened.



INNOVATIVE COOPERATION APPROACH BETWEEN RESEARCH AND ENTERPRISES IN SFS MED: OPEN INNOVATION ECOSYSTEMS AND LIVING LABS

Moderators: Lamiae Ghaouti, Institut Agronomique et Vétérinaire Hassan II Teodoro Miano, University of Bari Rapporteur: Damiano Petruzzella, CIHEAM Bari Speakers: Antonio Logrieco, Director CNR-ISPA Omar Bizri, international expert Marta Laranjo, UNIMED Mahdi Khomsi, BUSINESSMED Damiano Petruzzella, CIHEAM Bari Isidora Stojacic, ENOLL Maria Canelhas, EIT Food Giacomo Scarascia Mugnozza, Politecnico of Bari

Objective: to compare skills and experiences to overcome the limits of current models and provide concrete guidance to improve the cooperation between research and enterprises in SFS MED.

The unequal economic drift between Northern and Southern-Eastern Mediterranean countries, the low level of competitiveness of business, the limited collaboration between research and private business, the weak policies and services to support technology transfer and business creation, and the waste of knowledge, require a change in culture of innovation among all the actors of the innovation ecosystem in order to foster business development, to promote job increase and resilience, in particular for the new generations.

The session concerns a very challenging theme about a novel paradigm of interaction between the institutional research systems and the enterprises, a novel methodology driving the scientific, technological and cultural transfer and a productive transformation of knowledge and innovation which involves new co-designed processes between scientists and private companies (open innovation approach). A change of paradigm that includes a re-direction of the current scientific isolation with a better declined definition of company issues and problems.

The challenge is to develop models and activities that move the research bodies towards a direct interaction with private companies, with the paramount goal of promoting economic and social growth of the territory, electing the knowledge sharing as the instrumental tool for obtaining social, cultural and economic benefits. The winning approach creates models based on systematic user co-creation approach, integrating research and innovation processes in real life communities and settings. The strategic target of this fundamental change, reached out through the transformation or the partial conversion of the scientific knowledge into solution oriented knowledge applied to real cases, is the promotion of social and economic growth.

This is going to strengthen the relationships, to reinforce networking at various levels, to overcome cultural barriers and build a new culture of innovation and new professional profiles, to adopt "open" models that involve all the actors of the ecosystem (quadruple helix approach - Living labs), mainly young people, at last to find the most effective "keys " with respect to the diversity of socio-economic and territorial contexts.

Open Innovation proposes a very novel methodological approach of analyzing and facing complex relationships existing in our society among the extremely wide range of bodies and individuals. Each of them assumes the role of actor, and all together compose the final "piece". In addition, the cross-contaminated context produces a new class of individuals, specifically educated and trained to plan and co-design solutions by matching the issues raised by the production systems with the skills and the inventions generated by the scientists.

Outputs:

1. Creation of the OPEN INNOVATION HUB on the MEDITERRANEAN FOOD TRANSITION as nnovative interactive space to integrate actors (students, researcher and staff of enterprises) and activities (high education, research and knowledge transfer) to support the entrepreneurial mind-set for the creation of start ups and innovative solutions for the enterprises.

2. Creation of the RURAL LIVING LABS in the Mediterranean region as "orchestra" that involve an ecosystem of stakeholders (quadruple helix approach) in co-creation of sustainable innovative solutions and economic social value (benefit).

3. New mechanisms (financial and technical) to support the innovation process in the SMEs through a regenerated partnership research-enterprises in the frame of beneficial approach (open data and intellectual property).

4. GUIDELINEs to accompany digital and green transition of agrifood enterprises in particular for vulnerable and rural communities.



RESILIENCE OF FOOD SYSTEMS AND THE MEDITERRANEAN DIET IN TIMES OF CRISIS

Moderator: Elliot M Berry, Hebrew University Rapporteur: Eduardo Mocini, Sapienza University of Rome Speakers: Dorit Nitzan, Incident Manager Ukraine, WHO Antonia Trichopoulou, President, Health Hellenic Foundation Rekia Belhasen, Chouaib Doukkali University Alessandro Galli, Global FootPrint Network Suzanne Piscopo, University of Malta Lorenzo M. Donini, Director, School of Specialization in Food Science, Sapienza University of Rome

Objective: to provide solutions for coping with food insecurity and the erosion of the Mediterranean diet in times of crisis through a sociotype framework approach as ecological systems construct for increasing the resilience of food systems in the Mediterranean

Ensuring Food Security (FS) for all citizens is a fundamental human right and should be a policy for all countries. Dealing with Food Insecurity (FINS) is a challenge causing stress at many levels—national, household, and individual. The conceptual framework of the Sociotype has been developed as a summary ecological construct to organize the multiple, dynamic, reciprocal inputs from the environment that interact with the genotype to determine the expression of phenotypic behaviors such as coping with stress. The Sociotype ecological framework has three domains (with some examples): Individual (intra-personal, physical and mental health and well-being), Relationships (inter-personal, family, community, cultural systems and social media), and Context (socio-economic, political, environment - ecosystems)-and their interactions determine an individual's or a country' coping and resilience to adversity.

We have applied the principles of the Sociotype to classify both the stresses of, and the coping strategies to, FINS in relation to the four values of the Mediterranean Diet 4.0. The stresses of FINS may occur at any place along the dimensions of the FS pathway-Availability (international, national level), Accessibility (household), Utilization (individual) in association with the time dimensions of Stability (short-term) and Sustainability (long-term). The Mediterranean Sea as a major shipping and trade pathway is involved critically in food, commodities and energy supply chains. The current pandemic, geo-political unrest in Europe and consequent food and energy crises threaten FINS throughout the Mediterranean region (and world-wide).

Food prices have increased leading to severe financial hardship especially for the lower-socio-economic groups who may have to choose, in the forseeable future, between "starving" or "freezing". There may be political unrest throughout the region which, together, will harshly affect adherence to the Mediterranean Diet, its sustainability and North-South relationships. Flexible, new coping strategies will be required at each level of the Sociotype and at each dimension of FS. International Mediterranean cooperation, which was so successful in vaccine production, will be the cornerstone for combating the erosion of the Mediterranean diet and lifestyle, enabling country-specific protocols to prioritize and deal with short-term disasters (such as new pandemics and natural / man-made misfortunes) and to plan long-term sustainability programs to ensure water management and mitigate climate change towards the SDGs.

The aim of our session was to harness the sociotype framework to help identify the stresses of food insecurity through discussing different at-risk situations including – man-made disasters, livelihoods of fisher folk, women's empowerment, old age, and adherence to the Mediterranean diet. We have then examined some of the coping strategies needed to relieve FINS at the different levels of the sociotype. Coordinated responses will be needed from all the actors – such as those who are present at this meeting – to apply the conclusions from the Sustainable Food Systems dialogues in order to increase the resilience of food systems in the Mediterranean.

Outputs:

1. INDIVIDUAL:

a. Promote Women's empowerment, individual and parental responsibilities for wellbeing.

b. Increase knowledge about food, about flavors and cooking methods to increase consumption of the Mediterranean diet.

c. Encourage children and families to learn to value frugality, not wasting resources and making responsible food choices.

2. RELATIONSHIPS:

a. Prevention, preparedness and readiness are key for household resilience (back to the roots)

b. Family food choices, around sustainable Mediterranean diet, involving parents in educational programs. c. Critical use of social media in transmitting nutritional literacy.

d. Strategic sourcing of food within financial means, especially by those with limited incomes, through interaction with food producers, food retailers, school services and food banks.

3. CONTEXT:

a. Develop National emergency plans for food, water, energy & social security (short and long term).
b. Enthuse Children - putting them at center of a curriculum to have the competences to adopt, support and promote the Mediterranean diet through enjoyable activities, through positive nutrition and lifestyle messages.
c. Trigger curiosity of consumers with nutritional and dietary education (formal and non-formal).
d. Consider and react to war as a "disease"; understanding and including countries in war and countries in crisis and emergency situations (such as COVID pandemic) and their specific needs.
e. Increase knowledge and appreciation of food producers, especially those that produce sustainably.
f. Increase local production of Mediterranean foods, decrease dependency and ensure solidarity

g. Consider economic, sociocultural, health and nutrition aspects of sustainability to promote individual, environmental and institutional actions to revitalize the Mediterranean diet.



CITIES AND LOCAL GOVERNMENTS FOR FOOD SYSTEMS TRANSFORMATION

Moderator: **Florence Egal**, International Expert, Territorial food systems and Urban-Rural Linkages

Rapporteur: Francesca Volpe, CIHEAM Bari

Speakers: Luigi Ranieri, Director, Piano Strategico Città Metropolitana of Bari Mohamed Al-Shaqra, Coordinator Internal Cooperation, Gaza Municipality Carles Llorens, Secretary-General, ORU FOGAR

Cecilia Marocchino, Urban Food Agenda coordinator, FAO

Aida Robbana, Head of Tunis Office, UN Habitat ROAS

Egidio Dansero, Coordinator, Rete Italiana Politiche Locali del Cibo; University of Turin **Vicente Domingo**, Director, Centro Mundial de València para la Alimentación Urbana Sostenible (CEMAS)

Objective: to discuss the role of Mediterranean cities and local governments in food systems transformation, the implications in terms of multi-level food systems governance, and the importance of cities networks.

The last decade has seen the emergence of cities and local governments in food systems transformation. It confirmed the importance of urban-rural linkages for territorial development and of food systems transformation as a pre-requisite for sustainable development. The role of small and intermediate cities will be a priority in the coming years, as they play a key role in connecting rural and urban areas and are projected to grow much faster than megacities, driven by population growth and rural-urban migration. The COVID19 crisis and recent conflicts have confirmed the role of cities at the forefront of crisis management and sustainable food systems as essential dimensions of resilience.

The cities were expected to present their experience and lessons learnt in terms of metropolitan food systems governance, with specific attention to participation of local actors, collaboration with national or international institutions, and networking with other cities or local governments. They were asked to identify key opportunities and challenges and present their vision of the way forward.

A variety of cities and local governments networks have developed in the last decades, but food has only recently emerged as an obvious integrating topic. These networks bring on the one hand

experience and resources, and on the other hand can benefit from engaging more effectively in food systems transformation.

The 2021 UN Food Systems Summit has reiterated the role of the UN System to support Food Systems Transformation. The UN Food and Agriculture Organization (FAO) and the UN Human Settlement Programme (UN HABITAT) are logical partners to join forces to learn from cities and local governments, ensure coherence with national policies and provide technical assistance, but the present institutional structure of the UN generates challenges, since the Mediterranean shores, in spite of their common bioregional characteristics, are parceled out in different regional areas in which they often remain marginal.

Cities and local governments can also benefit from a variety of urban and local food systems networks (national, international, thematic...). Mediterranean cities and local governments are no exception and often belong to several networks but synergy for food systems transformation remains a major challenge.

Outputs:

1. We are heading towards a multidimensional crisis (demographic, economic and climate crisis) and more sustainable food systems can contribute to resilience. Cities, local and regional governments are in the frontline to face related problems. The WEFE (Water Energy Food Environment) nexus is central and social inclusion is a priority.

2. Migration (including refugees and IDPs) is a major challenge in the Mediterranean.

3. Poor governance is a major cause of food insecurity, we need multi-level and multistakeholder governance.

4. Territorial approaches and urban rural linkages are essential to food systems transformation. Food systems transformation needs to be integrated into urban and metropolitan planning. Small and intermediate cities should not be forgotten.

5. We need a participatory approach to reorient existing food systems building on local knowledge, practices and experience.

6. The private sector plays a crucial role in unlocking the potential of food systems at territorial level (e.g. Gaza).

7. Food systems transformation will require effective networking and partnerships at national, thematic and Mediterranean level for technical support, knowledge management and data collection, funding, action research and advocacy.

8. Food is an entry point at citizen and institutional level for engagement, dignity and communication. There is a lot to learn from Mediterranean food culture and practices. Chefs and cooks are key actors to revive the Mediterranean diet and contribute to education and communication.



CULTURAL UNITY AND DIVERSITY OF THE MEDITERRANEAN DIET: IDENTITARY CUISINE AND SUSTAINABLE TOURISM

Moderators: **Zain Fashho**, Royal Institute for Inter-Faith Studies (RIIFS, Jordanian ALF HoN)

Enrico Molinaro, Italian Network for the Euro-Mediterranean Dialogue (RIDE, Italian ALF HoN); Mediterranean Perspectives

Rapporteur: **Sandy Qaqish**, Royal Institute for Inter-Faith Studies, Jordan

Speakers: Wadii Abdelwahdi, ALF Co-Head of the Moroccan Network

Merna Shalash, ALF Head of the Egyptian Network

Tzofnat Peleg-Baker, ALF Israeli Network

Fadwah Khawaja al-Shaer, ALF Head of the Palestinian Network

Necdet SaÐlam, ALF Co-Head of the Turkish Network

Caroline Robertson-Von Trotha, German Representative at the ALF Advisory Council

Objective: to provide practical and concrete ways to enhance cultural values and exchanges between Mediterranean collective identities regarding the following four issues:

The objective of the panel's speakers was to provide practical and concrete ways to enhance cultural values and exchanges between Mediterranean collective identities.

The Mediterranean diet and cuisine helps to discover different Mediterranean cultures, collective identities, and the cultural roots of various countries in the region. As Mediterranean food habits were naturally formed through contacts between different cultures and civilizations, we may view food as one of the keys to cultural dialogue. Food is an important element of collective identity, providing people with a sense of social belonging, a meeting point between peoples from similar identitary backgrounds. Interest in the Mediterranean diet and increasing awareness of its health benefits may facilitate a constructive debate about the challenges implied in the way large-scale commercialization influences current global dietary trends.

The role of women in this context is crucial, since they embody the collective memory of their respective communities, also in the dietary aspects of heritage and socialization, without implying any discriminatory manipulation, nor stereotype roles. The rediscovery of the various Mediterranean identities' historical culinary memory leads to the development of cultural dialogue, cultural harmonization, and may facilitate peace-making processes.

Identitary cuisine is a link to a natural balanced combination between traditional recipes of cereals, vegetables, and proteins in their five different tastes (salty, acid, bitter, sweet, and hot), as well as

to suitable and effective methods of treating raw materials, respecting the environment, promoting sustainable agriculture, and educating towards a more balanced and saluber nutrition. With this goal in mind, the panel offers an opportunity for a productive in-person coordination of the selected representatives of the Anna Lindh Foundation (civil society national networks and Advisory Council) who have been cooperating together since October 15, 2019, when they launched together the Identitary Cuisine proposal, in the context of the Ponza Prima-Med/Pontine Medi-Jer annual Euro-Med inter-institutional initiative at the Italian Foreign Ministry in Rome.

In this context, the Ponza Prima Med project, winner of the 2020 ALF call for proposal, brought together Italian, Egyptian, and Palestinian agriculture and food experts, exploring a broad range of topics, where people apply Mediterranean Diet both in the countryside and in the cities to traditional food and crafts, with social practices as a stable part of the respective collective identity. In this respect women, as the preservers of their own traditions, may use food as a symbol of their struggle for freedom and resistance (in the Palestinian case, olive trees and local sustainable fishing practice).

Complex global issues and challenges such as the Coronavirus pandemia or climate change represent objective barriers to inclusive, sustainable cultures. showing more than ever that our prosperity depends on our capabilities to think together across differences, and to co-create the best solutions. Radical Western contemporary individualist values position the individual at the forefront, which makes the other peripheral and less valuable. Such views deepen a hierarchical relational structure, perpetuate social fragmentation, and act as a barrier to a vibrant, inclusive, and democratic community.

In this context Sustainable identitary tourism represents a dynamic of social cohesion driving its growth not only in the economic, social, and environmental fields connected to tourism, but also improving tourists' experiences along with addressing the needs of host communities. In this context, the aforementioned Pontine Medi-Jer initiative represents a relevant case-study aimed at bringing people to a Mediterranean island fully respecting the local environment, culture, and community, planning to develop at the Turtledoves Villa on the island of Ponza (south of Rome, Italy) a potential cradle of Mediterranean cultural dialogues and exchanges. The shared goal is to use this location to set up a Euro-Med Center for Innovation, Higher Education, and Science Diplomacy on Sustainability (circular economy, climate change, and food security), hosting a new Identitary Restaurant where different collective identities can express themselves, and discover each other.

Outputs:

1. The Mediterranean diet and cuisine help to discover different Mediterranean cultures, collective identities, and the cultural roots of various countries in the region. Food is an important element of self-identity and provides people with a sense of belonging, representing a meeting point between people from similar identitary backgrounds.

2. Mediterranean diet and increasing awareness of its health benefits may limit dietary trends that are often influenced by large-scale commercialization.

3. The rediscovery of the various Mediterranean identities' historical culinary memory leads to the development of intercultural dialogue, cultural harmonization, and may facilitate peace-making processes.

4. Identitary cuisine is a link to traditional recipes, as well as to suitable and effective methods of treating raw materials, respecting the environment, promoting sustainable agriculture, and educating towards a more balanced and saluber nutrition. 5. Indicators of public change can be observed through the changing patterns of supply and demand for eating places, recipe books and cookery lessons.

6. Women have a very important role to be a part of this change, as they are leaders, they have a strong impact on the Mediterranean food and cuisine, they have the power to show how each country has its own food, dishes, cuisine, and ingredients.

7. Activating the national and international "cultural" tourism, in diplomatic cooperation with the Mediterranean Diet State Parties.

8. Cooperation with governmental and non-governmental entities to put directly the Mediterranean Diet at the action of the national sustainable development plan.

9. Promoting nationally and internationally the Mediterranean Diet events.

10. National and regional tourism agencies can promote emerging destinations, less overcrowded spots or nature-based locations in order to better distribute sustainable travel flows, reduce environmental pressures and generate jobs in less-travelled areas or hinterlands.

11. Integrate local communities in the tourism planning and policy process; support sustainable activities based on biodiversity or cultural values; guarantee social rights, adequate salaries and training programs for workers.

12. Shift from defensive reactions to relating to one another in more inclusive way- Dialogic Relations (DR). Our task is to reduce toxicity, to realize the opportunities in our differences.

13. We need to start from the education system, to go back to schools, where kids can be taught how they should follow a heathy life style and a healthy diet, and show them the importance of starting their day with a healthy organic meal instead of processed food and how it affects their well-being.



FINANCE AND INVESTMENTS SDG DRIVEN AS FUNDAMENTAL PUSH FACTORS FOR AN SFS-MED CHANGE OF ROUTE

Moderator: **Roberto Ridolfi**, President, LINK2007: Cooperazione in Rete Rapporteur: **Francesco Rampa**, ECDPM Speakers: **Leonard Mizzi**, Head of Unit, Food Security Agriculture, DG INTPA, European Commission **Paolo Di Stefano**, Head of International Affairs, Coldiretti **Stephen Mari**, Senior Manager, Cassa Depositi e Prestiti - CDP **Dhalia Abdel Kader**, Chief sustainability Officer Commercial International Bank Egypt **Hans Loth**, RABOBANK **Nouran El Said**, Business Development Director, Plug'n'Grow **Thouraya Triki**, Director, Sustainable Production, Markets and Institutions Division, IFAD

Objective: to contribute to the change of route providing some solutions to relevant questions in the area of financing SFS MED systems.

The aspects of providing one framework and one metric for sustainability due diligence in financing is essential for the financial ecosystem of sustainability.

In order to develop functioning structures and systems for SDG compliance the financial players can profit of guarantee schemes subsidies and other blending facilities that were or are being developed, External Investment Plan, from farm to fork, next generation EU and the various plans to relaunch economic prosperity by governments (such as the PNRR in Italy) and institutions like the European Commission that run an agreed policy of principles and approaches on financing sustainability.

But who is seriously working on this today? Several think tanks, NGOs and research institutes, some governments and DFIs and a few enlightened entrepreneurs, very few bankers. This isn't enough. The goals of Agenda 2030 and moreover the SFS in the Mediterranean area require the commitment of a much wider turnout of participants, starting with those who are able to mobilise the necessary financial resources.

The "promised land" of big money to achieve the SDGs has not yet materialized. On the other hand the Pandemia of COVID-19 and the wars have generated Pan-crisis which will suffocate any attempt of resurrecting investments for the achievement of SDGs.

The annual financing gap to achieve the SDGs by 2030 has been estimated at USD 2.5 trillion. Until now, development finance institutions (DFIs) are key for this objective. How to fill this gap?

In the MED arena with the challenging climate change scenario, the food systems are probably one of the most complex geopolitical-sector scenarios on our planet.

The discussion was aim to show how the essential catalyst role of blended finance can play out in the sustainable development finance architecture EURO-MED.

Grants, equity, loans, debt and risk mitigation products (guarantees and insurance products, including hedging): all of these can include a "blended" (concessionary) component. The concessionary element can be used to address different goals imposed by the use of public funds: most remarkably it can be used to impose SDG compliance of the investments.

The SDGs that were launched as a blueprint for a more just, sustainable and prosperous future, through the UN, are gaining recognitions within the private sector. Impact investors and private companies in Food Systems aiming for a corporate disclosure on the SDGs are looking for tools and ways to analyse and present their performance on the SDGs. And while blended finance has potential to support financing for development, it is important to embed sustainability in commercial investors actions. Pension funds and big investors like Black Rock slowly but certainly are moving towards sustainability. How to ensure that institutional investors preferring standardised financial instruments, embed SDG compliance in their strategies?

The approach of multi-stakeholders platform could be an opportunity to gather best practices and innovative approaches which have the potential to ensure investors about sustainability in various communities of practice.

The idea of an SDG-SFS MED platform implies better standardisation of processes at the level of SDG indicators and data, as well as at the level of blended-finance frameworks. Data-driven analysis for understanding the full impact of a business across its value chain can be useful in understanding where to minimize risks and maximize both SDG and financial returns. Leveraging the SDGs through multi-stakeholders platforms is a framework not only for sustainable development, but also for innovation towards generating new, more future-ready revenue streams, can help identify business opportunities that simultaneously serve the needs of the SDGs.

Finance for the SFS MED is to be scaled up, leverage ratios will need to increase, which means that DFIs will need to better mobilise private finance, managing and mitigating the higher level of risk this implies. De-risking mechanisms will include improvement of the official blended finance framework and of data availability while increasing transparency and accountability building public trust. Concretely sustainable finance can be aimed at by a dialogue among stakeholders reaching some recommendations starting from:

A. It is essential to develop metrics and tools to guide Food systems companies and even more so for the finance sector investors, increasing transparency and disclosure, reporting more and link up strongly to the SDGs.

B. It is fundamental that the work and the actions on SDGs by institutions be translated into business practices to create a mechanism to put a price on externalities linked to nature, sustainability, social cohesion.

C. It is imperative that policy makers exert all their leeway to create incentives along value chains in various sectors for players along the chain to meet SDG-aligned targets.

D. The push factor from investors is fundamental. Transparent reporting and communication between players in the markets and investors are essential.

Outputs:

1. This Session on Finance was perceived as sort of reality check for the whole Conference, since a Change of Route and all proposed solutions during the Conference will not happen without adequate Finance. There is need for massive upscaling of finance for food systems and more SDG compliance or at least alignment of investments: this is everyone's stated objective, but it is not happening.

2. Better Metrics & Tools are needed since Greenwashing is everywhere and growing: sustainable investment claims need to be translated into simple and common ways to measure Ecosystem services provided by farmers, Water use, Carbon capture, women incomes, etc. (e.g. there are international climate benchmarks now but not biodiversity metrics of investments).

3. Blended finance and patient capital from Public Development Banks is crucial to de-risk investment for commercial banks and private investor in agriculture, especially to reach smallholders and SMEs, also since Sustainable investments need more time than non-sustainable ones to give returns. However commercial banks need simpler procedures, common standards and more opportunities to access blended finance, and always the right risk/return profile of the investment.

4. Indeed blended finance still faces many challenges, it's a new concept for donors and banks, and in many cases it takes 3-4 years for project deployment. Also, without the right framework conditions and overall business environment, this finance will not flow. Strong TA/capacity building is needed for all actors involved in blended finance, including for banks and for farmers.

5. On the other hand, public capital needs to gradually phase out and purely commercial credit and institutional investors are the targets in medium terms, or the financial system will not be economically sustainable. Commercial Banks are key for sustainable food systems for their potential volumes of finance and as they are in the Kitchen; they should not rely on concessional finance.

6. This requires different business models, convincing business cases in the value chain, better governance mechanisms to involve all stakeholders in public-private partnerships and systematic Institutional Dialogue between public and private banks (sharing the mapping of who does what, common reporting practices and simplified blended finance processes). This brokering & dialogue is a fulltime job with many dimensions and the SFS MED Platform was created exactly for this.



THE MEDITERRANEAN DIET AS A STRATEGIC RESOURCE OF SUSTAINABLE DEVELOPMENT IN THE REGION

Moderators: **Roberto Capone**, Principal Administrator, CIHEAM Bari **Sandro Dernini**, Coordinator, SFS-MED Platform Coordination Desk, CIHEAM Bari

Rapporteur: **Francesco Bottalico**, CIHEAM Bari Key speakers:

Pier Luigi Petrillo, President, Evaluation Body Intangible Cultural Heritage, UNESCO **Lluis Serra Majem**, Rector, University of Las Palmas of Gran Canaria

Objective: to provide concrete actions for coping with the challenge of the revitalization of the Mediterranean diet by promoting a change of route in its perception: from just only a healthy diet to a strategic resource of sustainable development in the region, with multiple benefits and country variations.

The session has involved a broader spectrum of moderators from the previous sessions of the Conferences to present and discuss their concrete solutions for coping with the challenge of the revitalization of the Mediterranean diet for present and future generations within the context of the improvement of the sustainability of the food systems in the region. The session has looked at the Mediterranean diet not only from a nutritional point of view but also from environmental, economic, social and cultural perspectives, within a food systems Med context-specific approach, from food production, transformation, distribution, consumption, intake and waste, highlighting the value of the Mediterranean diet, an expression of the diversity of Mediterranean food cultures and their different food production, processing and culinary systems, has not yet been recognized as a resource for sustainable development in the Mediterranean region, towards more sustainable Mediterranean diet, if valorised, can drive a variety of demands, therefore influencing food production with a positive claim for more biodiversity.

Despite its increasing popularity worldwide and its well documented health benefits of the Mediterranean diet there is the paradox that it is becoming less and less the diet of choice in most Mediterranean countries. This poses important sustainability threats to the preservation and transmission of the Mediterranean Diet to present and future generations. The growing erosion of the Mediterranean diet heritage, by the loss of its adherence among Mediterranean populations, is alarming as it has undesirable impacts not only on health, but also on social, cultural, economic and environmental challenges in the Mediterranean region.



Over the course of time Mediterranean dietary patterns have shown numerous variations influenced by changes in the socio-cultural, economic and environmental context of the Mediterranean region. The concept of the Mediterranean diet has also evolved, from the 1950's model of a healthy diet to a model of a sustainable diet in the early 2000's.

In 2010, the Mediterranean diet was inscribed in the UNESCO Representative List of the Intangible Cultural Heritage of Humanity. This important acknowledgement required safeguarding measures to counteract the increasing distancing of the Mediterranean people from the Mediterranean diet.

The session, through the outputs of the Conference's sessions, has aimed to foster the codevelopment of multistakeholder collaborative safeguarding measures for the Mediterranean diet, across sectors and disciplines.

Outputs :

1. Foster the co-development of multistakeholder collaborative safeguarding measures for the Mediterranean Diet, across sectors and disciplines.

2. Support the development of the Mediterranean Diet by integrating research efforts to generate innovations that enhance the diet and sustainable production systems at the basis of the products in the local diet basket.

3. Create inter-institutional and multidisciplinary dialogue panels to advocate the Mediterranean Diet as a strategic component of the One Health strategy and propose the organisation of courses focusing on the Mediterranean Diet as a tool for a healthy and sustainable diet.

4. Change the perception of the Mediterranean Diet (as they have been doing for years, CIHE-AM Bari, together with FAO and other research institutions present today, through cycles of seminars, workshops and International Conferences) by revitalising it through a new intercultural and inter-sectoral dialogue among Mediterranean peoples.

5. Face the erosion of the Mediterranean Diet by developing and implementing safeguard measures, as educational programs for schools, guidelines for the sustainability of Mediterranean Diet, etc. taking into account all the multilateral benefits of this sustainable diet on the environment, culture and society, economy and nutrition & health.

6. Extend the emblematic community of the Mediterranean Diet of UNESCO to other countries in addition to the current seven.

7. Raise the interdisciplinary insights, for the future of food system research and Mediterranean Diet, on food systems governance and regulations; local food policy; commercial determinants of health; sustainable healthy diets; food literacy; food equity and sovereignty; traditional Mediterranean Diet patterns and tourism/migrations impact.

SIDE EVENTS



SIDE-EVENT 1 Organized by CIHEAM

THE CONTRIBUTION OF CIHEAM TO THE OBJECTIVES OF A SUSTAINABLE FOOD SYSTEM IN THE MEDITERRANEAN

Objective: to present a virtuous path, starting from the latest significant and tangible activities carried out by the CIHEAM institutes, to achieve future actions, all aimed at the transition towards Sustainable Food Systems

Introductory remarks: Plácido Plaza Lopez, Secretary general of the CIHEAM



SIDE-EVENT 2

Organized by CIA-Agricoltori Italiani

BEST PRACTICES AND AGREEMENTS IN THE MEDITERRANEAN AREA TO INCREASE THE ADDED VALUE OF FARMERS IN OLIVE OIL, FRUIT AND VEGETABLE, CITRUS PRODUCTION SECTORS

Objective: to increase the added value of farmers in the production sectors of olive oil, fruit and vegetables, citrus fruits: business best practices and agreements in the Mediterranean area.

Moderator: Elisabetta Guidobaldi, Agenzia ANSA



SIDE-EVENT 3 Organized by LINK2007

COMMUNITY FOOD SYSTEMS

Objective: to present significant experiences on Community Food developed from the last mile with our partners in Africa and the Middle East where good practices with measurable and replicable impact have been developed to support local production systems from a food sovereignty perspective and continue the effort to provide inclusive and sustainable responses to the food crisis

Conducted by Roberto Ridolfi, President, LINK2007



SIDE-EVENT 4

Organized by Forum on Mediterranean Food Cultures/Plexus International Forum Onlus

COLLECTIVE CATERING AS A CULTURAL TOOL TO PROMOTE THE MEDITERRANEAN DIET DEDICATED TO CARLO CANNELLA.

Objective: to promote the multiple benefits of the sustainability of the Mediterranean diet, through the development of a joint research project on collective catering, open to all interested partners, supported by a communication campaign associated with the regional cuisine of the Mediterranean diet.

Conducted by **Roberto Carcangiu**, Chief, President, Associazione Professionale Cuochi Italiani **Sandro Dernini**, President, Forum on Mediterranean Food Cultures/Plexus International Forum Onlus **Lorenzo M. Donini**, Director, School of Specialization in Food Science, Sapienza University of Rome



SIDE-EVENT 5 Organized by Slow Food Italia

TERRA MADRE, URBAN REGENERATION THROUGH AGROECOLOGY

Objective: to protect the rural biodiversity of Puglia through the recognition of 5 new Slow Food Presidia, born precisely to help small producers and to rediscover quality artisanal products.

Moderator: Raul Tiraboschi, Vice President, Slow Food Italy



SIDE-EVENT 6

Organized by Parliamentary Assembly of the Mediterranean (PAM), with the network of the Italian UNESCO Chairs and the Campania Region

A NEW INTERNATIONAL MASTER ON MEDITERRANEAN DIET FOR ECOLOGICAL TRANSITION IN THE FRAMEWORK OF THE PAM ACADEMIC PLATFORM

Objective: the new strategies of the "Next Generation EU/PNRR" Program offer the main support for food security and the fight against climate change in the Euro-Mediterranean Region, through the ecological transition, the protection of biodiversity and the transformation of the agri-food system.

Moderator: Salvatore Alessandro Giannino, Delegate of PAM to UNESCO



SIDE-EVENT 7 Organized by Agrifood Cluster CL.A. N

CLUSTER AGRIFOOD AND MEDITERRANEAN DIET: RESEARCH AND BUSINESSES FACING SUSTAINABILITY.

Objectives: to present the Cluster's position and priorities on Issues related to nutrition and health with particular reference to the Mediterranean Diet and the sustainability of the Italian agri-food model

Moderator: **Massimo lannetta**, Chair, Technical Scientific Committee Italian AgriFood Technological Cluster CL.A.N.



SIDE-EVENT 8 Organized by Coldiretti/Campagna Amica

MEDITERRANEAN DIET, UNESCO INTANGIBLE HERITAGE: FOOD BETWEEN LOCAL ACTION AND GLOBAL SYSTEMS

Objectives: to present the UNI reference practices by the Observatory on the Mediterranean Diet UNESCO intangible heritage, useful for promoting a lifestyle favorable to sustainable development, with good practices implemented by the Campagna Amica Foundation through the integrated system of agro companies in Italy and abroad, to generate real and lasting changes for the benefit of the populations.

Moderator: **Vito Amendolara**, Delegate Confederale Coldiretti, President Osservatorio Dieta Mediterranea The Conference represents an evolution from the previous two editions, not only because of the many sessions of discussion and dialogue that took place, but also because all participants were able to experience our Campus, which fostered informal encounters, contaminations, networking and synergies.

This Conference had an ambitious goal: a change of route.

From the analysis of the main outcomes of each session I could already see that these days have allowed us to identify not only strategic orientations, but also concrete solutions to achieve a "change of route." In the coming weeks you will all receive a document containing the summary of these orientations and solutions.

Today, I can report some lines of action that emerged from the working sessions:

• Support the development of the Mediterranean Diet by integrating research efforts to generate innovations that enhance the diet and sustainable production systems at the basis of the products in the local diet basket.

• Create scope for integrated collaboration where sustainable innovation and advanced technologies can support agricultural production behind diets.

• Activate training initiatives that, focusing on "smart and precision agriculture", may contribute to scaling up the Mediterranean Diet in areas vulnerable to climate change.

• Develop research to improve the stages of the local supply chain, such as logistics and storage, to reach areas beyond the Mediterranean borders and create financial mechanisms to support farms that promote local production.

• Support innovative approaches and technologies to develop blue, green, and circular economy along the production chain to reduce the environmental impact with the lowest carbon production.

• Create inter-institutional and multidisciplinary dialogue panels to advocate the Mediterranean Diet as a strategic component of the One Health strategy.

• Propose the organisation of courses focusing on the Mediterranean Diet as a tool for a healthy and sustainable diet, capable of curbing health disorders, as part of the One Health strategy.

• Promote the creation of youth enterprises that support the Mediterranean Diet supply chains through innovation.

• Foster the co-development of multistakeholder collaborative safeguarding measures for the Mediterranean Diet, across sectors and disciplines.

• Support the creation of a taskforce 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.

Furthermore, CIHEAM Bari is willing 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;

- Study and initiate a pathway to establish the International Day of the MEDITERRANEAN DIET;
- Envisage, where possible, that the diet could be one of the strategic political issues for the upcoming Italian G7 Presidency due in 2024.

I would therefore welcome these lines to be part of the discussion during the Ministerial Conference in Rome due to be held on 2 December 2022 on the occasion of the MED Dialogue.

Before closing let me say that our commitment as of today is, with all of you, to keep the dialogue and discussion alive in view of the next edition of this Conference.

If in the opening of the conference I quoted the great Fernand Braudel and his vision of the Mediterranean, I would like to greet you with the thoughts of another great Mediterranean writer and thinker: Predrag MatvejeviÐ. In his "Mediterranean Breviary" he in fact wrote that: "The Mediterranean is not just geography. Its borders are not defined either by space or in time". I 'd like to think that the Mediterranean Diet can also be borderless and, after all, timeless, and that future generations not only from Mare Nostrum but also from many other faraway places can make this virtuous way of life their own.

> **Maurizio Raeli** CIHEAM Bari's Director



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