

# *Editorial*

ROBERTO CAPONE\*, YASMINE SEGHIRATE\*, GIULIO MALORGIO\*\*, TEODORO MIANO\*

*\*General Secretariat CIHEAM, Paris*

*\*\*Alma Mater Studiorum - Università di Bologna*

Multiple global crises have highlighted the fragility and the volatility of global food systems, particularly evident during shocking and extreme weather events, combined with the remnants of the COVID-19 pandemic and the current exacerbation of the conflicts around the Mediterranean area.

Food production, smallholder farmers, fishing communities and other businesses/producers at local and national level are increasingly vulnerable and are the first to suffer the negative effects of climate change (water stress, salinization, desertification...), environmental pollutions, unsustainable practises and rising costs of inputs (energy, fertilizers and improved seeds...); at the same time, global food systems contribute up to a third of greenhouse gas emissions, induce up to 80% of biodiversity loss and utilize up to 70% of the available freshwater resources. Nowadays the majority of the vertebrate animal population on our planet represent farmed animals. These farms contribute to GHG emissions, use several hundred liters of drinking water to produce one kilogram of meat and can contribute to deforestation.

The global commitment of the international community for a shift towards more sustainable food systems has increased significantly over recent years, with numerous UN and Ministerial Declarations, international reports and scientific articles supporting this transformational change. Nowadays, it's clear that more sustainable food systems will be vital for all populations of the world. Moreover, the Mediterranean region is facing unprecedented and interdependent environmental, economic, and social challenges that affect food security, health, nutrition, and sustainability, and thus the livelihoods of all Mediterranean people.

Mediterranean countries exhibit significant diversity in demographic, cultural, and governance aspects. The region also experiences pronounced disparities in economic growth and development, both between nations and within individual countries, particularly between rural and urban areas.

Population growth, unequal demographic changes, urbanization phenomena, and globalization trends are all driving increased food demand and affecting food choices, resulting in profound changes in the food production/transformation processes, as well as in the food consumption patterns and lifestyles. In the region, the birthplace of the Mediterranean diet, diet-related illnesses are rising to alarming levels, particularly among young people. Obesity, diabetes, and hypertension are spreading rapidly, imposing a growing burden on public health systems. Simultaneously, in certain areas, the specter of hunger and famine is re-emerging due to devastating conflicts. Finally, the agriculture and fishing sectors are increasingly struggling to attract new talent and inspire vocations. The lack of appeal is

attributed to the demanding nature of the work and the low social status often associated with these professions. Consequently, many young people are turning away from these fields in search of careers perceived as more rewarding or prestigious. Addressing this issue is crucial to ensuring the sustainability of these essential industries and fostering a new generation of skilled professionals.

To accelerate more sustainable development in the Mediterranean region, fostered by the 2030 Agenda, transformative changes in food systems are imperative.

Urgent action is requested to face escalating water scarcity, degradation of land and marine resources, impacts of climate change, and progressive nutrition unbalances. Additionally, challenges such as youth and women unemployment, demographic shifts towards urbanization, vulnerability of rural livelihoods, political conflicts, and distress migration underscore, also in this region, the necessity for immediate intervention. It's essential to address these issues while acknowledging the diverse cultural dimensions across the region. In order to move towards more sustainable food systems, it is essential to foster innovative multi-stakeholder strategies and transdisciplinary knowledge by means of combined actions among the countries of the Mediterranean. On this purpose, a heightened emphasis on scientific research and data collection for impact assessment is necessary, alongside capacity building and innovation efforts encompassing technological, institutional, and social dimensions.

In this context CIHEAM following the previous declarations of the meetings of Food, Agriculture and Fisheries Ministers of the CIHEAM Member countries, the Matera G20 statement and the independent dialogues of the Summit 2021 of UN on Food Systems interprets the transition towards Mediterranean Sustainable Food Systems as a whole, a conceptual model but also a functional product of innumerable real actions in which the production of food moves towards human consumption in respect of the environment, durable management of natural resources, social and economic considerations, rural and urban community dynamics, trade practices, food distribution, access, and ultimately, human wellbeing.

In a synthetic way, we strongly believe that food systems connect two large biological entities. From one side Nature, which includes land and water, soils, biodiversity and climate: on the other side Human beings in variable frameworks of socio-economic and cultural drivers. A very simple equation links the production and the consumption of food. The relationship though is extremely complex either because the production of food is related to intricate systems of different domains or because the consumption is not simply an individual act but involves aspects and conditions.

The focus towards sustainable and resilient food systems also reflects a cultural and social change on the demand side of food goods to allow a greater sustainability of the Mediterranean food system, and at the same time, to improve human health.

But to change the demand for food, it is necessary to act on that part of the food system where the consumer makes his choices to buy, prepare, consume food, i.e. the so-called "food environment", which also includes nutritional, cultural and social actions. Only by creating a new sustainable food demand will it be possible to transmit those necessary signals to influence the way of production, thus creating newer supply and value chains.

Thus, the concept of sustainability is combined diet patterns in which solutions are explored to face the problems of malnutrition in its various forms, while addressing the loss of biodiversity and the erosion of indigenous and traditional food cultures.

A sustainable diet can help reduce the use of water and minimize CO<sub>2</sub> emissions, promote food biodiversity and enhance traditional and local foods thanks to their numerous varieties, which are also nutritionally rich.

In the process of transformation and adaptation of the agri-food system of the south-eastern Mediterranean countries, also the organization of the supply chain takes on particular importance. It is estimated that only a small part of the food expenditure incurred by consumers contributes to remunerating farmers, when they represent a very high part, on average 25%, of the employed population. This discourages farmers from investing in innovations and increasing commitment to the productivity, quality and sustainability of agricultural production. Therefore, this requires greater attention from public decision makers in allowing a fair and profitable distribution of value among actors along the supply chain.

Multiple innovations technological, social and organizational, will be needed to achieve the most suitable conditions for guaranteeing food security in the Mediterranean region. Science and innovation will play a fundamental role in this process.

The mechanisms and strategies of the EU agricultural policy were deliberately not taken into consideration in this special issue of *New Medit*, as they are well known and debated between the first pillar of direct aid and the second pillar of rural development.

The aim was to focus attention on the agri-environmental and rural development policies of the South-East Mediterranean countries in order to increase the knowledge and strategic orientations of the individual countries and undertake a coherent and effective Euro-Mediterranean cooperation activity.

This can be achieved by focusing on promoting human development, strengthening regional integration South-South and supporting sustainability, creating synergies and promoting projects that stimulate social and inclusive development, thus integrating migration into regional development and integration. In this context, we ask ourselves what role Europe will play in building a renewed Mediterranean cooperation? The establishment of the new European Commission has given positive signals in this regard with the promise of a new separate portfolio dedicated to the Mediterranean that bodes well for a new perspective of cooperation.

In this context, CIHEAM, in its institutional mission, has promoted this special issue in order to provide an analytical framework of knowledge of the conditions of the agri-food system and the relative forms of intervention of the policies applied in the various countries of the Mediterranean region.