

The challenges for the Mediterranean countries

EURAGRI BOARD¹

Food insecurity and lack of development of rural areas have been at the root of recent social and political unrest in Southern and Eastern Mediterranean countries, with consequences reaching far beyond the Region.

Climate change, biodiversity loss, water scarcity and soil depletion are strongly felt all around the Mediterranean rim. Food systems are becoming more vulnerable resulting from rapid globalisation, price instability and food safety concerns caused by emerging threats.

The vulnerability of food systems is compounded by social tensions resulting from massive unemployment levels, especially for the youth. The co-occurrence of economic slow-down in the North and demographic growth in the South provides for an explosive mix. It calls for imaginative and bold development models and policies.

The EU cannot afford to have its Southern neighbours engaged in a downward spiral, because the spiral is bound to engulf the EU itself, sooner or later. Furthermore the EU is to benefit from a deeper engagement with its Southern neighbours.

Countries from the South and the North share challenges faced by Mediterranean agriculture and food systems. The Mediterranean is like a magnifying mirror for all of Europe: the concerns about sustainable food systems, inclusive growth, striving rural areas, giving hope to the youth through employment opportunities, and about how to engage globalisation best, are shared concerns, only more acute in the South. Testing robust and adapted solutions in the South will provide invaluable experience and

references before challenges become unmanageable in the North.

And that also holds for Regions beyond the Southern and Eastern Mediterranean. Neighbours of our neighbours are our neighbours too, and the decades to come call for spelling a vision of our common destiny with the whole of Africa and the countries of the Persian Gulf.

Such a set of inter-connected problems calls for common, co-ordinated, solutions, as discussed in the EURAGRI meeting, held in Montpellier in September 2014.

The need for new approaches

In the first place, there is a sense of urgency in changing our approaches to production, consumption, processing, storage, recycling and disposal of bio-resources. Modern food systems have failed to deal appropriately with resource scarcity, and in some cases they have been at the roots of new scarcities.

A new approach should start from human, natural and social capitals, which are the most abundant resources in South Mediterranean areas. The huge cultural and biological diversity in the Mediterranean basin are an immense resource for diversified products based on labour- and knowledge-intensive production systems.

These resources are under threat, as they are being marginalized, wasted, or exploited without respecting reproduction cycles. A new production and consumption paradigm should learn from the principles of circular economy – transforming production systems that reuse resources and conserve energy. Applying these principles would prevent waste generation and encourage the development of bio-based economies.

¹ Pascal Bergeret, Gianluca Brunori, Bettina Heimann, Külli Kaare, Christian Huyghe, Paul Steffen, Uno Svedin, Leon Wietor.

Agro-ecology is a possible answer to the need for a renewed approach to agricultural production. Functional biodiversity can be the resource base for ecological intensification, that responds to the need for increasing productivity while respecting natural cycles.

Appropriate technologies for small scale farming – that represent the vast majority of farms in this region – integrated with organizational and social innovation can develop business models and local production systems that can boost access to markets and creation of added value and employment.

Such a renewed approach goes hand in hand with new inclusive policies aimed at revitalising rural areas, better connecting producers and consumers of food in an improved urban/rural nexus. Co-ordinated animal and vegetal health management systems are also keys to alleviating food safety concerns and stabilising agricultural production systems. Similarly, co-ordinated infrastructures and logistics for optimised agricultural trade flows could go a long way in enhancing food security all around the Mediterranean basin.

Coordinating research/innovation/development policies

Finding new, adequate solutions to the challenges facing agriculture, rural development and the food systems in the Mediterranean requires a strong and efficient research and innovation effort. New knowledge has to be generated and all available knowledge has to be put to good use. One cannot afford un-co-ordinated activities any more. Efficiency of research and knowledge mobilisation is the essence.

Co-ordination of research and innovation activities within the EU has shown significant progress during the FP7 programmatic period, with the development of instruments and tools like EraNets, JPIs, ETP, the EIT, etc. However, co-ordination with the agricultural research and innovation systems in Southern and Eastern Mediterranean countries remains very weak. The opening of topics and funding within H2020 to research teams in the South (including the Mediterranean) is a substantial evolution but does not suffice for effective coordination of research

policies and programming. There is a strong and urgent need for an ambitious approach linking research systems of the Euro-Med and aiming at co-constructing and co-funding a research programme in the field of agriculture and food, of a magnitude that is related to the magnitude and urgency of agricultural and food security challenges in the Mediterranean.

Exploiting the potential of Big Data

The data issue will be a key to innovation. More and more, data is produced in massive amount, through increasing use of sensors, more surveys of performances in farms, or crowd-sourcing, and ICT developments. Analysing these new types of data through adapted data-mining models will be essential. There is an urgent need to promote Open Data approaches that could at the same time deal with the question of intellectual property while maximizing the use of data to produce new fundamental and applied knowledge, and boost innovations.

Furthermore, it is essential to ensure convergence between research and development activities. Such convergence is to be looked for at all levels: local, national and regional. It is not spontaneous and needs concerted efforts between the two spheres. For the Euro-Med it seems important to explore the possibilities to link research instruments with the instruments of the Neighbourhood Policy. Such bridges could be built in respective programming activities. The link between research instruments and the CAP through the EIP initiative is a good reference for Euro-Med activities.

Implementation of innovation in the agro-food system requires a mobilization of all players, including research, development, education and economic actors. Industries, from SMEs to groups, must be partners of these new overall policies, and associated from the very beginning to the definition of objectives strategies.

Putting new and already existing knowledge to use is key to ensuring a sustainable future: research and education must be considered as priorities, and waste of knowledge has to be avoided.