

Sommet des Deux Rives

Preparatory Forum of Palermo (Teatro S. Cecilia, May 16th 2019)

«Blue Economy, Green economy, Circular Economy: partnership proposals for an urban and coastal development in the Western Mediterranean»

The Forum has started by presenting the contribution of the Sicilian Fishery District, which organizes every year the Blue Sea Land Festival in Mazzara del Vallo (Sicily).

The major focus on fishery relates to the rediscovery of tradition, both in terms of small fishing towns and of culinary regional practices, with the final goal of sustaining the economic activities of artisanal fishery, by adding value through integration with other activities, such as sustainable tourism.

The Mediterranean Observatory of Fishery takes advantage of the scientific cooperation with Stazione Zoologica Anton Dohrn, established in Naples in 1872 by the German philanthropist Anton Dohrn, with the goal of developing a network of laboratories open to all researchers active in the study of the Mediterranean.

The Stazione A. Dohrn is today one of the Italian Research National Centers and it is active in the area of climate change and its impact on the Sea, environmental monitoring, blue biotechnologies

The Forum has then presented the proposals of the participating countries (5+5).

Italy, has presented its integrated strategy « **Circular economy for food: partnership for sustainable coastal cities in Western Mediterranean** » including three pilot actions within an overall strategic framework.

The Italian proposal focuses on coastal cities because more than 75% of the Mediterranean population lives in urban areas of more than one hundred thousand inhabitants, with the degradation of the territory equilibrium that coexisted and significant effects on the environment and on life quality, which calls for rapid and concrete actions also to cope with the challenges of Climate Change.

The major objectives of the proposal are to:

- favour the production of affordable and nutritious food from local and regional producers with the aim to improve consumer food security;
- change the access to traditional and alternative markets (i.e. farmers' markets, fish markets, community supported agriculture) improving livelihoods of both small-scale and large-scale producers;
- reduce food waste and stabilise livelihoods by means of local and regional food hubs and shorter value chains;
- propose methods to resource, recover and reuse water, nutrients and energy;
- set up participatory governance structures to include stakeholders from multiple sectors from both urban and rural areas in a given city region ;

The proposal is structured in 3 pilots, which can be launched independently and in a phased mode:

Pilot 1. *Innovating for fishing and aquaculture*

The actions of this pilot project are aimed at the implementation of a circular fish production and consumption system through the small-scale fisheries participation and their better integration into regional and international fish trade. The pilot is planned with a twofold approach focused on the implementation of the sustainability level of:

- a) fishing activities
- b) aquaculture production
- c) setting of an open space for the promotion of “sustainable values” about fishing and food

Pilot 2. ***Urban metabolism: hello jobs, goodbye waste***

The pilot proposes the creation of a **Community Laboratory** as physical point that unites and brings together the actors of the agricultural and fishing sector for an exchange and enhancement of the productions for entering the market. The eco-efficient structural and functional recovery of a number of historical buildings, currently disused and abandoned will be appropriately equipped for providing integrated and assistance services/processing to the Agri-food and fishery SMEs, in particular;

- accompany the creation and change of business to improve the quality of typical and traditional products while supporting the innovation of the traditional models reaching a higher level of sustainability without losing their typical and local
- strengthen competitiveness in the cross-border market through the transfer of process and product innovation;
- improve the production chains especially in depressed areas and marginal cross-border areas.

Albergo Diffuso: Agriturismo/ Ittiturismo is also proposed as a strategic economic activity that could engage peri-urban communities in a mix of activities that provide food related products and leisure within the productive property.

Valorization of by products: Capacity building, technological adaptation and technical backstop are the strategy for the systemic activation of individual composting systems in urban and peri-urban households, community composting in the “community lab” where to collect the organic waste of the area for valorisation, recycling of organic matter as a second resource in other industrial sectors (a.i. cosmetic, biomedical, textile).

Pilot 3. ***Intelligent supply chain: food quality, safety and traceability***

The proposed action consists in the development of systems to support the quality, safety, authenticity and traceability of fish products and the control of the catch, with the improvement of processes and waste reduction and valorisation of wastes and byproducts in support to sustainability and circular economy.

Paul Ricard Oceanographic Institute has then presented its proposal « Acquaculture demonstration - 13 Ocean », already integrated in the Italian proposal, aiming at disseminating research and enhancing awareness on sustainable fish farming and building a sample of highly sustainable aquaculture to be placed in a Community Lab Building (foreseen in Pilot 2).

Morocco has presented four project proposals:

-Assistance systems for small farmers, aimed at fostering sustainable agriculture and the introduction of healthy and nutritious foods;

-Water purification through nanotechnology for cities, tourism and agriculture, aimed at providing clean water especially to vulnerable communities;

-Clean and smart cities, through the diffusion of ICT & digital technologies (sensors, machine learning, blockchain) applied to sorting and recycling garbage in cities, by encouraging active participation of citizens (through dedicated apps);

-Observatory for innovative entrepreneurship at the macro, meso and microlevel, by empowering women, favouring matching between projects and financing training programs.

Malta has presented its proposal based on processing tuna waste into high value products, aimed at solving problems to fish factories as well as creating jobs.

Tuna waste is a highly proteinic matter, which can be processed into a variety of products: food for fish farmers and animals, oils for cosmetics.

The project is ready for implementation, with research phase concluded and feasibility carried out.

Portugal has presented four projects:

-Food within cities, aimed at create urban communities, designing innovative roadmaps from production to waste, covering all the phases of waste lifecycle (production, design, transportation, packaging);

-Creation of a research center to valorize oil mill waste: olive oil is a common production in the Mediterranean and valorize its highly polluting waste streams is of common interest to the whole area;

-Creation of a center of innovative water management, providing consultancy to other countries on water management, train water professionals, give sensitivity to the society on such an issue;

-Renewable energy for small communities, encouraging the self-production of energy in small grids , connected with electric vehicles and accessible to users through a dedicated app;

Spain, has presented two proposals:

- The binary plan: Earth and Sea, aimed at using basalts to capture CO₂ from the atmosphere and to fertilise plants in agriculture, providing also important nutrients and decreasing acidity; the ability of plants to capture CO₂ would be enhanced up to 430%;

-Upcycling Oceans, proposing an alliance with fishermen to collect, recycle and upcycle marine plastic litter, one of the major scourges of our seas and oceans;

France, in addition to the proposal of Paul Ricard Institute on aquaculture, has presented proposals on:

-Emerging Mediterranean, aimed at identifying the actors providing solutions in the digital field, accelerating the growth of start-ups, connecting with financing schemes;

-Blue Panda, using a cruise boat to raise awareness on the problem of plastic marine litter and illegal fishing around the Mediterranean;

-Med2050, aimed at identifying the emerging trends and the breakthrough solutions in the Mediterranean, involving young people and NGOs, building a shared vision across the Mediterranean, and anticipating the actions needed for the transition;

-Climate Changes in the Mediterranean, with 600 experts from 35 countries (19 from the Med Basin), fostering communication and dialogue, especially with the local communities, with a special focus on the coastal areas and the solutions based on nature (resilience, biodiversity);

-Protected marine areas (more fish, more species), focused on food security, based on trust fund (Medfund) for financing the marine areas;

-Mediterranean zero waste : reuse, recycle the waste, based on local best practices- such as the case of textiles in Kabylie;

Tunisia has presented its proposal on the promotion of alternative tourism, by developing a network of marinas on the South Shore of the Mediterranean, via the creation of a company of Tunisian and foreign capitals to develop such a network, with creation of jobs and valorization of the coastal cities of the Southern shore.

Algeria has focused on the rural development, by networking existing associations for rural development and extending it from Algeria and Morocco to the other countries.

Additional proposal and experiences have come from the discussion following the presentation:

Anna Lindh foundation, Italy has invited to present the follow up of the Summit at Blue Sea Land in November 2019, inviting UPM and all the relevant actors to the festival;

A **young entrepreneur from Catania** (Sicily) has presented its experience of valorizing agricultural lands not used any longer in the Etna area, by promoting agriculture through young entrepreneurs, including also disadvantaged categories;

Istituto Fernando Santi, together with Silician Confindustria and SICA, proposed the establishment of a canning excellence center in Sicily, based on the long standing tradition in the high quality canning of vegetables and fish, to be replicated in the countries of the Southern Shore, by exporting best practices for high-quality canning.

Main messages from the Forum:

The linear model of “produce, use, dispose” is unsustainable for the planet. Circular economy is an essentially different approach to all economic processes, not only in the area of sustainable exploitation of material resources, but also in the area of social responsibility and more equal economic development. It aims to redefine growth, focusing on positive society-wide benefits. To transform from a linear to a circular economy there is a growing need to take advantage of renewable resources, including energy. This transition is based on three principles:

- Design out waste and pollution
- Keep products and materials in use
- Regenerate natural systems

Urbanisation and climate change are urging cities to chart novel paths towards sustainable futures. Many cities are turning to the ‘circular economy’ concept to re-imagine how flows of resources moving through economies might be ‘closed’. Cities are also extraordinary laboratories where youth engagement and civic participation can be redefined.

Mediterranean civil society is very vibrant and there are many good stories on the ground. The challenge now is to set up clear frameworks where all these stories and experiences can be put together in systemic way and supported by specific instruments. If we keep excluding cities from the analysis of the region, the Mediterranean is doomed to fall into a relentless vicious cycle of political, economic, social and ecological fragility.

The initiatives presented in Palermo present common features such as the focus on citizens’ participation, the key role played by youth

and start-up in innovating traditional business sectors, the importance of adopting a systemic and integrated approach to food systems, water management and energy efficiency. In particular some synergies among the various initiatives can be already identified, providing the basis for the formulation of integrated, operational and truly Mediterranean projects for Marseille:

- 1. Innovating fisheries and coastal communities:** a) *Innovating for fishing and aquaculture/Italy* b) *13 Ocean / France* c) *Amendy Food/Marocco* d) *Marina network/ Tunisia*
- 2. Urban metabolism:** a) *Hello jobs, goodbye waste/ Italy* b) *MedFund /France* c) *Nano Irrigation/Amendy Foods Marocco* d) *Marina network/ Tunisia*
- 3. Intelligent circular communities:** a) *MED 2050/France* b) *Intelligent Cities/Portugal* c) *Intelligent Supply/Chain/Italy* d) *Clean cities/Marocco*
- 4. Zero-waste communities:** a) *ReCOOW/Portugal* b) *Fish waste into meal/Malta* c) *Clean Cities /Marocco*
- 5. Plastic Free sea:** a) *Upcycling oceans/Spain* b) *Blue Panda/France*