vol. 3

IFOAM Agribiomediterraneo **Newsletter**

Dear IFOAM ABM members, friends and affiliates,

The organic Mediterranean world is growing and operating following the new rules and priorities of a sustain(Ability) approach.

During 2016, many significant steps and activities took place and influenced the organic reality. The existing farming systems have to follow and adopt environmental-friendly methods for the preservation of nature, the protection of agro-biodiversity and the rational use of natural resources.

Organic agriculture should be the alternative proposal for the future of the rural development and for the mitigation of climate change. All organic inspirations, challenges, opportunities, synergies will be IFOAM AgriBioMediteraneo's wishes for a more organic 2017 in the Mediterranean.

Dr. Charikleia Minotou
President of IFOAM AgriBioMediterraneo

contents

2ND IFOAM AGRIBIOMEDITERRANEO - SANA INTERNATIONAL CONFERENCE "**ORGANIC 3.0 IN THE MEDITERRANEAN: TRUE COST ACCOUNTING AND FAIR PRICING FOR ORGANIC AGRICULTURE**" - A REPORT.

Contribution by Ilaria Barbonetti and Antonio Compagnoni

The 2nd IFOAM AgriBioMediterraneo - SANA International Conference, organised with the support of SOAAN (Sustainable Organic Agriculture Action Network), was held during the last edition of SANA in Bologna, Italy, on September 10th, 2016.

The topic of "Organic 3.0 in the Mediterranean: True Cost Accounting and Fair Pricing for Organic Agriculture" was presented by a wide panel of international prominent speakers, with the aim of highlighting an organic vision that goes beyond regulations and laws, embracing broader principles such as sustainability, ethics and legality.

IFOAM ABM President, Charikleia Minotou, opened the conference together with Erio Ricchi, councilor for agriculture and environment at Vignola Municipality, and Paolo Carnemolla, President of Federbio, while IFOAM ABM Secretariat coordinator Antonio Compagnoni was chairing and moderating the event.

During the first part of the event IFOAM ABM Regional Board members presented the state of the art of organic agriculture in their countries and the Mediterranean. In particular, datas were given about the sector by Xhevaire Dulja from Albania, Karen Hoberg from Spain, Charikleia Minotou from Greece, Paola Migliorini from Italy, Onn Chen from Israel and Drazen Lusic from Croatia, who gave a special focus to organic bee keeping in the Mediterranean.

During the second session, different but interrelated issues such as externalities of food production, true cost accounting and fairness, the development of organic agriculture in the Mediterranean and food quality were dealt with by Nadia Scialabba (FAO) (see article "The true cost of food" at page 5), Ricardo Guimares (Fairtrade International) and David Gould (IFOAM - Organics International/SOAAN). The HUMUS Group (Italian Organic Producers Social Network) also presented specific projects where the principles of organic 3.0 are being implemented, for instance the determination of a price that is fair both towards consumers and producers and the adoption of a code of conduct that excludes any form of exploitation of labour.

Eduardo Cuoco, Director of IFOAM EU, made an intervention on the crucial role of Mediterranean regions in the further development of the organic sector: if these countries are left behind while consumption and demand of organic products keep on growing, there will be an increasingly higher risk of fraud. It is of highest importance that organic farmers in these areas are kept in the loop of decisions at the national and EU level as well, so as to make sure their voice is heard.

Finally, Emilia Romagna regional minister for agriculture Simona Caselli, who attended the whole conference, stressed that the contribution of IFOAM Organics International, IFOAM EU and IFOAM AgriBioMediterraneo is an important source of inspiration and motivation for the concrete development of Organic Agriculture worldwide and in the Emilia Romagna Region as well. She also stated that it is crucial that people learn about the topics presented during this meeting if we want them to understand that we need to change things if we care about our planet and its inhabitants.

Visit the IFOAM AgriBioMediterraneo website to download the PDFs that were presented during the conference.

With the support of SOAAN (Sustainable Organic Agriculture Action Network):

SUCCESS FOR SANA 2016
47.221 VISITORS AT THE INTERNATIONAL EXHIBITION FOR NATURAL AND ORGANIC PRODUCTS

833 exhibitors (+19%), 50.000 m2 of exhibition space (+ 30%), more than 60 events including workshops and company presentations 2.300 B2B meetings with international buyers from 27 countries.

THE NEXT EDITION AT BOLOGNAFIERE FROM 8TH -11TH SEPTEMBER 2017.

SANA is getting bigger and better, in terms of visitor numbers, variety and interest from professionals and the public. The 2016 edition of the International Exhibition for Natural and Organic Products that took place at BolognaFiere in September 2016 achieved excellent results: 47,221 visitors attended the event in September to discover and buy the very best of Italian and international natural and organic production in the sectors of Food, Body Care and Green Lifestyles.

The five large pavilions of SANA 2016 were the reference point for the sector, confirming the event as the biggest of its kind in Italy and the second largest in Europe and a key meeting point for institutions, organizations, associations, producers, buyers and consumers,

This trend was also visible in the even stronger response of visitors to the event: Italian and foreign professionals interested in identifying business opportunities for a sector growing strongly and in which the 'made in Italy' brand boasts a significant position.

"We share the credit for the success of SANA 2016 with its key players," explained Antonio Bruzzone, Director General of BolognaFiere, at the conclusion of the event "the exhibitors, professionals from the sector and our partners who supported us: FederBio for strategic collaboration, the Ministry of the Environment and the Protection of the Territory and the Sea and the Ministry of Agriculture, Food and Forestry Policy and for important partners Cosmetica Italia for their contribution; IFOAM (the International Federation of Organic Agriculture Movements) and ICE (the Agency for the international promotion of Italian

businesses) for their support for the buyer programme and local institutions that are always sensitive to the theme of organic and natural produce."

The 2016 edition set new records with 833 companies (+19% on 2015), 50 thousand m2 of exhibition space (+30%) and an even larger number of international buyers in attendance from 27 countries (+29%) involved in over 2,300 B2B meetings.

There were approximately 4,800 participants in the events programme that involved over 60 conferences, the three meetings at the Academy and numerous events organized by the companies, associations and organizations from the sector, examining the latest themes and points of interest.

There were thousands of products on display within the three themes: organic food, fresh and packaged, technology, equipment for packaging for the food and agriculture sector, medicinal plants, treatments, dietary products, supplements and special natural food items, products and equipment for personal care, services, fabrics and natural items for hobbies and free time, products for ecological living, technology and eco-compatible products for the home and for daily life. The SANA Shop, the huge retail pint open to the public, also boasted a vast assortment of products.

The growth of SANA is in line with the market trend as illustrated by the SANA-ICE Observatory 2016 "All of the statistics for Organics" promoted and financed by ICE in collaboration with BolognaFiere and created by Nomisma with the support of FederBio and AssoBio. The research highlighted that seven out of ten families (approximately 18 million families) have purchased an organic product at least once during the last year and, more generally, all of the key indicators are on the increase: land used for organic production (+7.5% compared with 2014), operators in the sector (+8.2% compared with 2014), sales (+15% compared with 2014). But it is not only the domestic market that is hitting the heights, exports too have increased by a stunning +408% compared with 2008 and +16% in the last year alone.

Particularly lively was the activity on Facebook SANA that reached a figure of 16,000 fans, comparable with the event's international competitors (+53% on last year), +5,300 new likes for the 2016 edition alone, of which 1,400 during the week of the event with a total coverage of 1,842,461 (+75% on 2015). 3,443 Twitter followers (+75% on 2015), 792,828 tweets viewed in the last week with an average of 74,435 per day and over 4,200 tweets sent and more than 2,000 tweets mentioning the official hashtags.

One of the initiatives to experience the most impressive boom in participation from exhibitors and visitors was the SANA Novità Prize, the showcase for over 500 products submitted by the exhibitors and consisting of products launched on the market since October 2015.

SANA Novità prizes went to Baule Volante's Granomela in the Organic Food sector, Montalto Bellezza Bio's Baciamibio in the Natural and Organic Body Care section and the Dissuasore BioDinamico for Oidio della Vite di Agri.Bio. Piemonte in the Green Lifestyles category.

The event's official bloggers, meanwhile, selected: Cacao Crudo's chocolate and hazelnut cream; Le Erbe di Janas for their hydrating face mask with prickly pear and saffron; and the bamboo Ecotazze (Ecocup) produced by Eco Coffee Cup and distributed by Fior di Loto. The winners received the prize from sponsors BIOFARM: the adoption of an organic fruit tree including one year's harvest.

sana

salone internazionale del biologico e del naturale

THE TRUE COST OF FOOD

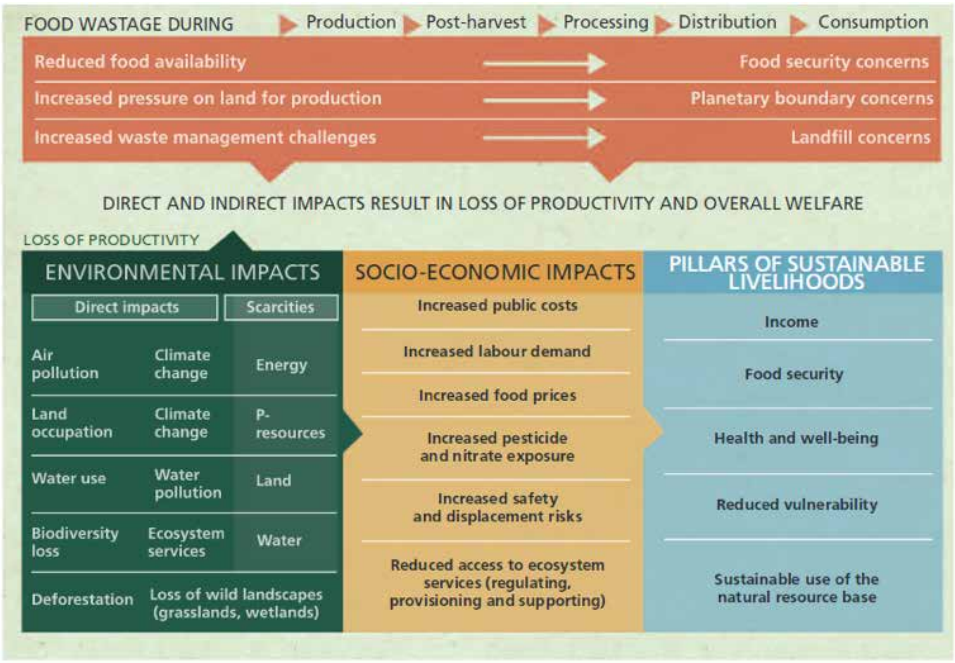
Contribution by Simone Rocchi, IFOAM ABM collaborator, former FAO Volunteer

Usually when we talk about environmental pollution we tend to blame several factors, such as industrial development and transportation, but often we don't think about the food sector.

This is a big misunderstanding, since agriculture takes a lion share of the Earth natural resources, thus representing a key sector for the conservation (or destruction) of our Planet.

Indeed, when talking about the food industry, it is mandatory to underline its iniquities and inconsistencies: even if we produce enough to feed the entire world population and even if information about food is available to almost everyone, there are still:

- 793 million hungry people, or 12% of the entire world population;
- 161 million children under-five years of age are estimated to be stunted;
- 2 billion people suffer from various forms of malnutrition (e.g. iron and vitamin A deficiency);
- 1.9 billion people are overweight;
- Approximately one-third of all food produced for human consumption lost or wasted.



Considering that both environmental and social costs of food systems are not reflected in the market, there is a need to tackle the topic of the true cost of food which, while being very complex, must become part of the discussion about environmental pollution and social well-being.

Trying to account for the situation of the food sector and to outline its boundaries, in 2014 the FAO published a report named 'Food wastage footprint: full cost accounting'. This was the result of the Full Cost Accounting Project (FCA) led by Nadia El-Hage Scialabba (Senior Natural Resources Officer of the Climate and Environment Division), in close cooperation with external partners, such as BioIntelligence in Paris and the Swiss Organic Agriculture Research Institute (FIBL). The aim of this work was the development of a methodology that would have allowed the calculation of the external costs of food production.

Thanks to this project we now know that the economic costs of food waste are substantial and amount to about USD 1 trillion each year. However, the hidden costs of food wastage extend much further: food that is produced, but never consumed, still affects the atmosphere, water, land and biodiversity.

To keep it simple, we can say that the costs of food waste equal to:

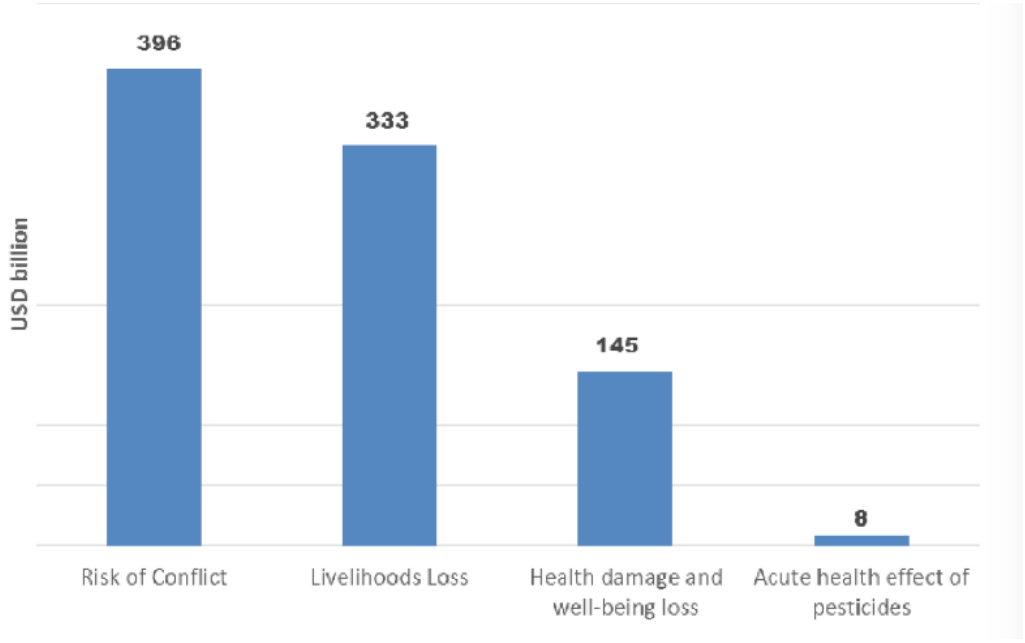
- 4.4Gt of CO2, (around 87% of road transport emissions);
- 250km3 of water (twice the surface of lake Geneva);
- 28% of agricultural land.

Society and future generations must bear the burden of these environmental costs. Furthermore, by contributing to environmental degradation and worsening the scarcity of natural resources, food wastage is associated with wider social costs that affect people's well-being and livelihoods. Quantifying the full costs of food waste improves our understanding of the global food system and enables actions to address supply chain weaknesses and disruptions that are likely to threaten the viability of future food systems, food security and sustainable development.

In addition to the USD 1 trillion of economic costs per year, environmental costs reach around USD 700 billion and social costs around USD 900 billion. Particularly noteworthy environmental and social costs of food wastage include:

- 4.4Gt CO2 of greenhouse gasses emissions. Based on the social cost of carbon, greenhouse gases are estimated to cause USD 394 billion of damages per year.
- Increased water scarcity, particularly for dry regions and seasons. Globally, this is estimated to cost USD 164 billion per year.
- Soil erosion by water is estimated to cost USD 35 billion per year through nutrient loss, lower yields, biological losses and off-site damages. The cost of erosion by wind may be of a similar magnitude.
- Damages to biodiversity, including the impact of pesticide use, nitrate and phosphorus eutrophication, pollinator losses and fisheries overexploitation, are estimated to cost USD 32 billion per year.
- Increased risk of conflict due to soil erosion, estimated to cost USD 396 billion per year.
- Loss of livelihoods due to soil erosion, estimated to cost USD 333 billion per year.
- Adverse health effects due to pesticide exposure, estimated to cost USD 153 billion per year.

The following chart better explains the distribution of the social costs of food wastage.



In addition to this, we must also consider the loss of social well-being due to global agricultural production .

These social costs should be measured in terms of losses to human welfare or quality of life in line with microeconomic theories. Broadly speaking, there are two components of social costs:

i) primary costs, felt by the individual in terms of direct impacts on quality of life or well-being;

ii) secondary costs, felt more widely by society as a whole, such as increased health expenditures (medical services, medication, etc.) due to adverse health effects.

Considering the full costs of food wastage (environmental, social and economic) the total amount is USD 2.6 trillion annually.

Cost categories	Costs (billion USD, 2012)	Cost range (billion USD, 2012)[c]
Atmosphere		
Greenhouse gas emissions (without deforestation/organic soils)	305	45-1500
GHG from deforestation	72	10-350
GHG from managed organic soils	17	3-90
Ammonia emissions	1	
Water		
Pesticides in sources of drinking water	3	
Nitrate in sources of drinking water	1	
Pollution impacts of N eutrophication	3	
Pollution impacts of P eutrophication	17	
Water use (irrigation water)[a]	8	4-17
Water scarcity	164	
Soil		
Erosion (water)	35	7-70
Erosion (wind, very uncertain)	35	7-70
Land occupation (deforestation)	3	
Biodiversity		
Biodiversity impacts of pesticide use	1	
Biodiversity impacts of nitrate eutrophication	3	
Biodiversity impacts of phosphorus eutrophication	3	
Pollinator losses	15	1-25
Fisheries overexploitation	10	
Social[b]		
Livelihood loss	333	
Health damages (well-being loss)	145	
Acute health effects of pesticides	8	
Risk of conflict	396	
Economic		
Value of products lost and wasted	936	
Subsidies (OECD only)	119	
Sub-total environmental costs	696	
Sub-total social costs	882	
Sub-total economic costs	1055	
Total costs (all categories)	**2625**	

[a] The cost of irrigation water is included in the sub-total environmental costs as a proxy for water use; it is excluded from the total costs to prevent double counting as irrigation costs are already covered in the product value.
[b] When excluding children in the population numbers (as the well-being estimates are based on a sample of adults only), the total social costs sum to USD 579 billion (USD 229 billion livelihoods, 101 billion health, 249 billion conflicts). Those numbers more clearly underestimate these costs (as they neglect well-being losses from children) but are more accurate for the sample covered (i.e. for adults).
[c] Where no range is indicated, the numbers are point estimates indicating mid-values.

Ultimately, taking into account all the externalities, for every euro spent in food, 1.5 € of public money (or taxpayer contribution) is spent on mitigating the environmental impact of the food sector (e.g. clean-up of polluted drinking water), and another 1.5 € is spent on lost social well-being. In the end, food ends up costing three times its market value!

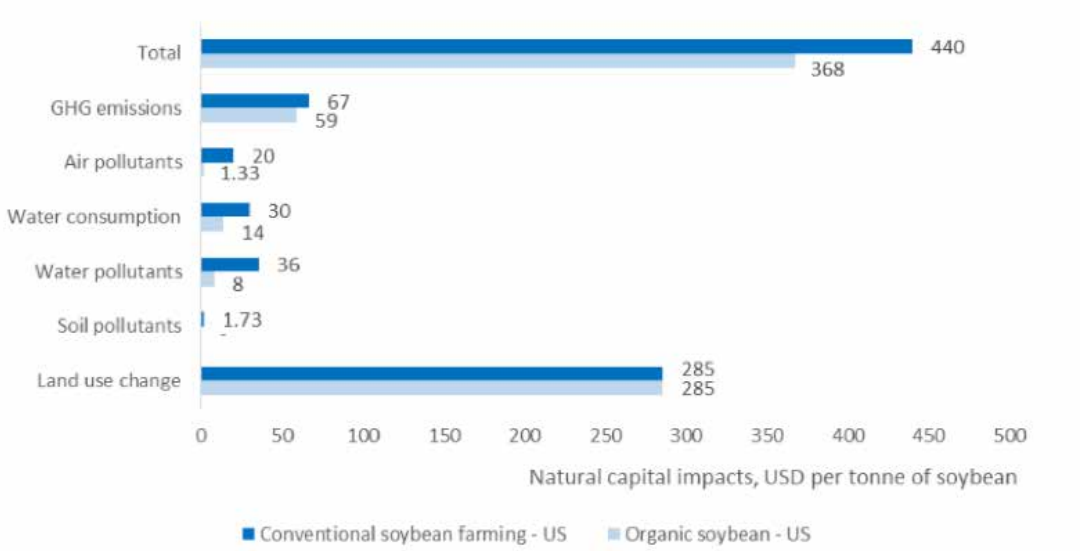
This analysis of the current situation of the food sector undeniably shows how necessary a change of direction is. We need to develop a more sustainable agriculture, which, contrary to what is widely believed, might be already present in virtuous realties. The following chart (taken from FAO,

2015. Natural Capital Impacts in Agriculture. Supporting Better Decision-Making) shows a perfect example of sustainable agriculture, displaying the difference, in terms of operational impact on the natural capital, between conventional and organic farming systems.

Farmers that adopt organic farming practices, which utilize crop rotations and cover crops, can achieve significant reductions in water pollution, air pollution and water consumption. The natural capital cost, saving associated with these impacts can be, respectively, as great as USD 27, USD 19 and USD 16 per tonne of soybeans produced.

Decreasing natural capital impact is achieved through the elimination of pesticides and the application of organic manure such as slurry. Studies show that gross margins and operating costs for farms employing these practices increase up to 219 percent and 12 percent per hectare, respectively.

Along with the price premium paid for organic produce, this assumes yields of 2.9 tonnes per hectare for organic farms and 3.2 tonnes for conventional farms.



To ensure that these realities do not remain isolated cases of good practices in agriculture, we should all become agents of change, through sustainable food choice, such as the purchase of organic and fair trade food.

AGROECOLOGY, A NECESSARY BASIS FOR SUSTAINABLE FOOD

Contribution by Karen Hoberg

The XII Congress of the Spanish Society of Organic Farming (SEAE) that took place in September in Lugo with the topic "The legumes: key for agrosystem management and organic food" concluded that it is needed to modify ways of producing and distributing our food to avoid a further decrease of the fertile lands of our planet and to mitigate climate change.

Agroecology passed from being an emerging science that provides a framework for designing sustainable models of food production, to become a way of understanding food production without damaging agroecosystems. We are no longer talking about an activity of savage researchers in the classrooms analyzing agrosystems, but a set of agroecological practices that contemplate the preservation of soil, biodiversity and climate with proper management of crops, which is being promoted by social movements, by the people, that tries to change the ways of life, the production of foods and the present form of exchange and regulation of the market.

In addition, to produce healthy food, currently it is needed to maintain and establish fair and innovative food production models for the people and all the actors in the food chain in order to face the big challenges of this century for humanity such as climate change and water scarcity. It is not about producing quality food for small elite, but about preserving the health of the planet, the soil and people.

These are the main conclusions of the biannual congress held in Lugo for three days, with the support of the Lugo Deputation, the Xunta de Galicia, the Ministry of Agriculture, Food and Environment (MAGRAMA) and other entities.

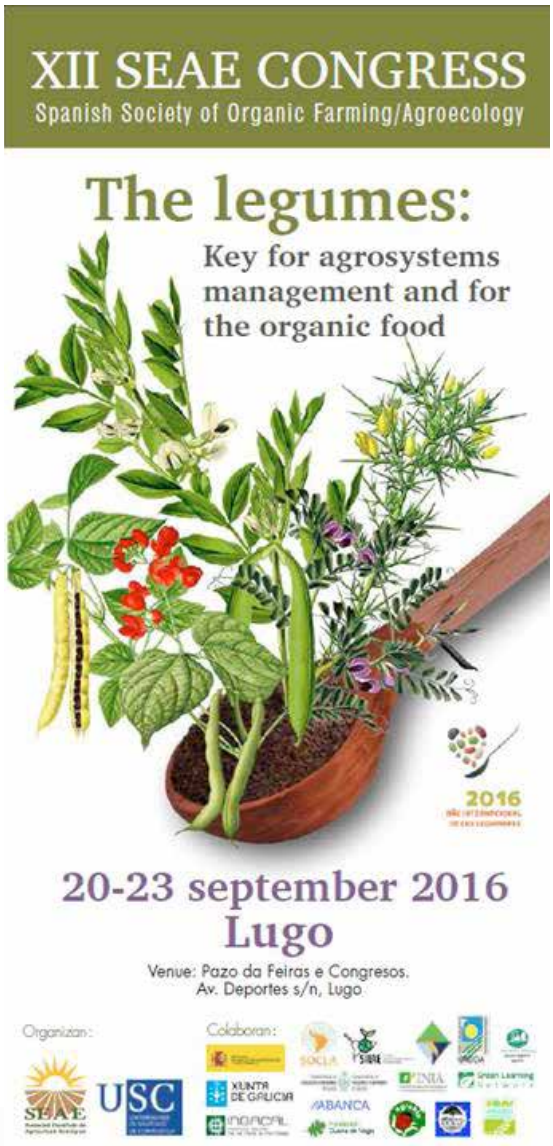
In the sessions of the Congress intervened 30 experts and researchers of 16 Spanish autonomous regions as well as from outside Spain as there are Brazil, France, Colombia and the United Kingdom. The main lines and action plans in organic farming of Andalusia, Balearic Islands and Galicia were presented. Also the need for the new European regulation for organic farming was discussed in order to include environmental and even social aspects to strengthen the integration of small farmers with group certification and, in the medium term, participatory guarantee schemes (GSP).

A seminar on agroecology took place with the participation of Eva Torrremocha –IFOAM World Board member- and Karen Hoberg, board member of IFOAM AgriBioMediterraneo.

Regarding climate change, innovation and research were represented by participants of the autonomous research institutes and universities of Asturias, the Bask country, Castile-La Mancha, Navarre, Catalonia and Community of Valencia. More support was requested for this sector.

The Congress had other previous and parallel activities, such as various workshops and, for the first time, a fair of ecological small operators (Feria NaturaLugo) with about 50 producers from several autonomous communities. During the gala dinner, the EcoElabora Prizes were awarded to the generation, innovation and diffusion of agro-ecological knowledge in Spain.

For further information: www.agroecologia.net



”GO ORGANIC” - NEW FRONTIERS IN MARKETING ORGANIC PRODUCE

Contribution by Shirley Gazit, Ph.D. The Israel Bio-Organic Agriculture Association (IBOAA).

As society becomes more concerned with natural environment, businesses are modifying their behavior to address these concerns. In marketing, terms like “Green Marketing” and “Environmental Marketing” have been popping up since the 80’s.

Green or Environmental Marketing consists of all activities designed to generate a product intended to meet human needs and desires, with minimal impact on the natural environment. The worldwide emphasis on environmental concerns include climate change, water management issues, deforestation, environmental toxicology, etc. Consumers see environmental consciousness as an important corporate priority along with good value, trustworthy, fairness and care. Many consumers prefer to spend more on green products, because of the benefits they provide.

Organic Agriculture started, as a concept, in the early 19th century. The pioneers of the early organic movement searched for alternative practices, that would help them avoid some common problems of agriculture – erosion, soil depletion, decline of crop varieties, low quality food and livestock feed, and rural poverty. By definition they became the first conscious environmentalists, they embraced a holistic notion that the health of a nation built on agriculture is dependent on long-term vitality of its environment, especially its soil.

This is today’s definition of Organic Agriculture:

“Organic Agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects “.

In addition, the Organic Agriculture philosophy is based on four principles, Ecology, Health, Fairness and Care. Organic Agriculture in my mind is taking the lead in creating additional standards- The next frontier in setting a new set of values making us better human beings and this world a better world.

During a presentation at the Natural Products Expo West, held on March 10-13 in Anaheim, California. Angela Jagiello, associate director of the conference and product development for the Organic Trade Association, Washington, said:

“Going organic is not exactly cheap or easy for food and beverage manufacturers, but the size of the prize may be worth it. Growth of organic products is expected to continue to outpace total food sales in the year ahead and beyond, driven by four key factors”.

“The first trend driving dynamic growth in organic is the expansion of organic products beyond the natural channel”. “Food service is another area of growth for organic”, Ms. Jagiello said.

A second factor behind growth in the organic marketplace is what Ms. Jagiello called ‘vegetable magnetism’.

The increasingly connected shopper is another force behind the burgeoning organic market. “Innovative startups and top technology companies now offer same-day grocery delivery in select markets, removing the barriers of inconvenience and time for many consumers”, she added.

“The fourth trend driving growth in organic is consumer desire for convenience”. (“Four trends driving growth in organic”, March 14, 2016 - by Monica Watrous http://www.foodbusinessnews.net/)

Israel burgeoning organic market is manifested in a crammed results page for any search in google for “Yerakot Organim”- Organic Vegetables. Farmers Markets and Community Supported Agriculture (CSA) Farms are springing up like mushrooms after the rain.

Meshek Shvarzman- Netaim, Sade Yarok- Beit Yehoshoa and Teva Habsor- Ein Habsor, are a few examples of Organic Farms offering same-day fresh quality produce delivery in Israel market, without the barriers of inconvenience and time for consumers.

Costumers in Israel are now tapping e-commerce opportunities. This retail category is developing rapidly, in the Start-up nation and among the ‘tech-ing’ Israelis. (Meshek Shvarzman- Netaim, http://www.shvarzman.co.il/; Sade Yarok- Beit Yehoshoa, http://www.sadeyarok.co.il/; Teva Habsor- Ein Habsor, http://www.teva-habsor.co.il/).

Israel Bio- Organic Agriculture Association (I.B.O.A.A) 2nd Annual conference on organic fresh produce is a part of a series advancing Organic Agriculture Principles and produce.

The conference will educate consumers and farmers about organic agriculture and fresh produce. The aim of the conference is to deliver consumers and conventional growers a thought provoking program with relative information on the top reasons to “Go Organic”

In this conference, speakers will address a range of topics from personal to planetary health consciousness. Sessions will provide the latest data and insights about food safety also comparison of the nutritional value and sensory qualities between organically and conventionally fresh produce.

The conference will be held at The Agricultural Research Organization (ARO) - Volcani Center, Beit Dagan on Mars 2016.

SUSTAIN(ABILITY) IN THE MEDITERRANEAN

Contribution by Dr. Charikleia Minotou

According to international policies the future will be characterised by more environmental friendly priorities. The planet is going through a crisis because of the rising and growing phenomenon of degradation of ecosystems, natural resources and biodiversity.

At a global level we have the Sustainable development goals of the United Nations Development Programme, focusing on different parameters and providing a new updated approach to development, as well as indicating significant human, ethical and environmental prospects as priorities.

The Mediterranean area is re-updating its strategy to adapt to the new situation and to adopt more environmental friendly policies. All Mediterranean countries follow national, regional or global priorities. Farmers, societies, consumers, entrepreneurs, organizations, NGOs, industries are developing synergies and are working on new model prototypes.

In this contribution, two significant and sustainable examples of projects in Greece will be presented. The first one is from an initiative by Bioma Farm and the agronomist Dimitris Machairidis, while the second one from the Life- Stymfalia program.

A) Bioma Farm (http://www.bioma.gr/) is creating organic plants for professional and non-professional producers. The procedure from the seed, the graft and up till the transplantation on the farm is controlled and certified by the DIO organization according the EU legislation.

Bioma farm has private greenhouses in Aridaia of South Pella, in northern Greece, offering a powerful potential to produce organic certified seedlings and plants.

Under its operation sustainability collaborations include:

Their working criterias being the goals and aspirations of the clients, they create professional grade plantations, gardening and aromatic based plants. From its creation in 2005 until today, they have sent informative material all over Greece.

Residential Vegetable Gardens: Through its E-Shop, a great amount of plants and supplies is being sent within Greece, quickly, safely and reliably. Bioma's goal is to organize educational meetings for amateur gardeners, as well as to make more advanced options available.

Research - Information: Bioma is involved in research programs as well as in university student projects with seedlings or plants, aiming at participating in the creation of new data and practical information that will be used to further develop production.

Tradional Greek Varieties: The conservation and diffusion of traditional Varieties, selected and shaped by nature in Greece, is the primary target of the Nursery. Their classification and cultivation, since the early days of 2000 until today, have provided enough information and are being promoted and sent to germplasm banks or private initiatives specialized for this purpose.

Experiential visits: The greenhouse space is open to public. Schools and other organizations can get in touch with Bioma, organize a visit to the facilities of the Nursery and come into contact with the techniques of ecological farming, seedling, etc. They can also learn about the plants in a small educational garden that was created expressly for this purpose.

Social services: Since its creation, Bioma farm has always been involved in the diffusion of informative material and has provided its expertise to:

- Ecological/environmental meetings
- Workshops/seminars
- Diffusion of informative material and seed exchange meetings
- The creation of educational vegetable gardens in schools and other facilities.

Bioma farm is member of IFOAM – Organics International and strongly supports IFOAM AgriBioMediterraneo at different activities, contributing to creating synergies and sharing efforts.

B) LIFE-Stymfalia (http://www.lifestymfalia.gr/)

The EU co-funded project LIFE-Stymfalia is an innovative project which aims at the restoration, long-term protection and management of Lake Stymphalia, a mountainous lake located in Northern Peloponnesus, where Hercules performed one of his 12 labours.

In recent years Lake Stymphalia has been covered by dense reeds, causing the degradation of the wetland. Through LIFE-Stymfalia, Piraeus Bank in collaboration with the Piraeus Bank Group Cultural Foundation, the Municipality of Sikyonion, OIKOM Environmental Studies Ltd., the Society for the Protection of Prespa and the Centre for Renewable Energy Sources and Saving, aspires to develop an innovative business model for the sustainable financing of the Lake's management after the end of the project.

This pioneering business scheme will involve the utilization of the area's biomass and other renewable natural resources, combined with low-impact commercial activities.

Farmers' Network of Stymphalia

The interest of the local community in the restoration of the Lake was demonstrated through the signing of the "Agreement for the Protection of Lake Stymphalia" by 320 residents of the wider area. Out of the 320 signatories, approximately 120 were local farmers.

The Farmers' Network consists of these farmers and aims at fostering farming practices based on responsible, integrated and organic agriculture. The objectives are to promote best practices in agriculture and water management, to raise environmental awareness, to enhance local synergies and to engage the local community in the sustainable management of the Lake.

To this end, experiential educational seminars have been designed in order to link agricultural production with notions such as biodiversity, climate change, natural resources, food systems, rural landscape and ecosystem services. So far, five seminars have been held, attended on average by 25 farmers.

The topics focus on the sustainability of the agricultural sector and how organic and integrated systems could strengthen the quality and the environmental profile of products and services provided locally. The identity of the Farmers' Network has been reinforced through a logo "Stymphalia my home", that will be used by farmers and other local businesses that agree with and commit to the purposes of the Farmers' Network.

IFOAM AgriBioMediterraneo strongly supports the establishment of the network and the program LIFE-Stymfalia.

A **SUSTAINABLE ORGANIC PRODUCTION MODEL FOR 'FOOD SECURITY'** IN THE UNITED ARAB EMIRATES AND SICILY

This paper is the result of the collaboration between IFOAM AgriBioMediterraneo, Catania University and the Abu Dhabi development fund and was written by by Khalid Butti Al Shamsi, Antonio Compagnoni, Giuseppe Timpanaro, Paolo Guarnaccia, Paolo Caruso, Simone Rocchi

Key words: Food security, Food Sovereignty, Organic agriculture, Local Market, SAFA (Sustainable Assessment of Food and Agriculture Systems), Alternative Food Networks.

Abstract

In fall 2015 a 3 years PhD research project started at Catania university (Sicily, Italy) in Agriculture, Food and Environmental Science: "A sustainable organic production model for 'Food Security' in United Arab Emirates and Sicily". The research has been designed and carried out in collaboration with IFOAM ABM and FAO. The aim of this research is to contribute to food security by developing integrated organic production models, related to biodiversity of food sources, soil fertility and water availability, both in the UAE and Sicily. Through the FAO SAFA tool multi-faced sustainability approach, interviews and visits in two organic farmer communities in UAE and Sicily, first results are obtained: SAFA reporting for each farmer and each community and identification of some additional SAFA tool indicators for local market and migrant workers. Some best practices in organic production, direct marketing and migrant worker integration heave been identified and are shared with the farmers.

Introduction

Food sovereignty, the right of peoples to healthy, culturally appropriate and affordable food, produced in a sustainable way, and a related territorial farming and a food policy, today represent a challenge that involves both developing and developed areas. Indeed, climate changes, economic crisis, migration flows toward developed areas, quality of life and impacts on human health in urban and rural contexts, the crisis of hexogen pathways of use and consumption of local resources for the competition on global market push, from one side, to the statement of pathways based on sustainability, and from the other toward pathways linked to local peculiarities. This kind of production models activate "Alternative Food Networks" that privilege organic production and other productions with low environmental impact. Strictly related to this process there are UAE and Sicily, linked by similar climate, demographic and migratory issues.

Material and methods

The main methodology applied by the research has been the study of the sustainability through the use of a holistic approach, on a set of selected farms in the UAE and in Sicily, and the SAFA system and Tool, implemented by FAO. The goal is to validate the functionality of SAFA in the two territories and to propose additional indicators for the improvement of the system. SAFA protocol for selected companies or sectors is designed as a process based on guidelines, codes of sustainability, self-assessment forms, operational plans, calculation methodology and system of indicators for the assessment and the continuous monitoring of the business management situation. This is very important in order to define the areas in which it's necessary to intervene to improve the impact of actions on the two territorial contexts analysed in the studio (Sicily and the United Arab Emirates). Data and parameters collection has been carried out with the SAFA TOOL through direct farmer and workers' interviews and visits to the farms by researchers and collaborators in support of the research work. The SAFA TOOL is integrated with specific questions for the collection of data and information necessary to comprehensively define the three pillars of sustainability (environmental, social and economic), in order to adopt, as much as possible, a holistic approach to prepare additional proposals and / or to improve the SAFA TOOL designed by FAO, to allow a wider application.

Besides applying the multi-faced sustainability approach of environmental, economic and social health, a specific emphasis has been given to:

- understanding how sustainable is the production of food for the local market, what is needed and how to promote it, assessing its contribution to stable food supply;

• understanding how the migrant workers are integrating in the context of the two Regions (UAE and Sicily) organic farming sectors, contributing to local economy, social integration and cultural cross-fertilization.

Two groups of farmers have been selected in the two territories, 8 farmers per region, 7 organic certified on EU regulation for plant production (open field and greenhouse vegetables (Sicily and UAE) and fruits, dates (UAE) citrus, fruits and ancient cereals (Sicily), livestock (mainly goats, sheep, chicken and honey) in both regions. All but 1 Farm (in Sicily, integrated pest management and no herbicide or synthetic fertilizers, producing summer fruit and grapes for wine) have in common (in varying degrees) marketing directly their products in the local market. All farms have migrant workers.

Results

During the first year of activities some first interesting results were achieved:

1. Direct interviews and SAFA tool assessments were carried out in all the farms collecting many information and data with a first SAFA reporting result (see polygons). Some of the data collected are confirmed by organic and ethical certification, some are verified by the researchers, other are (for the time being) relying on the farmer declaration.

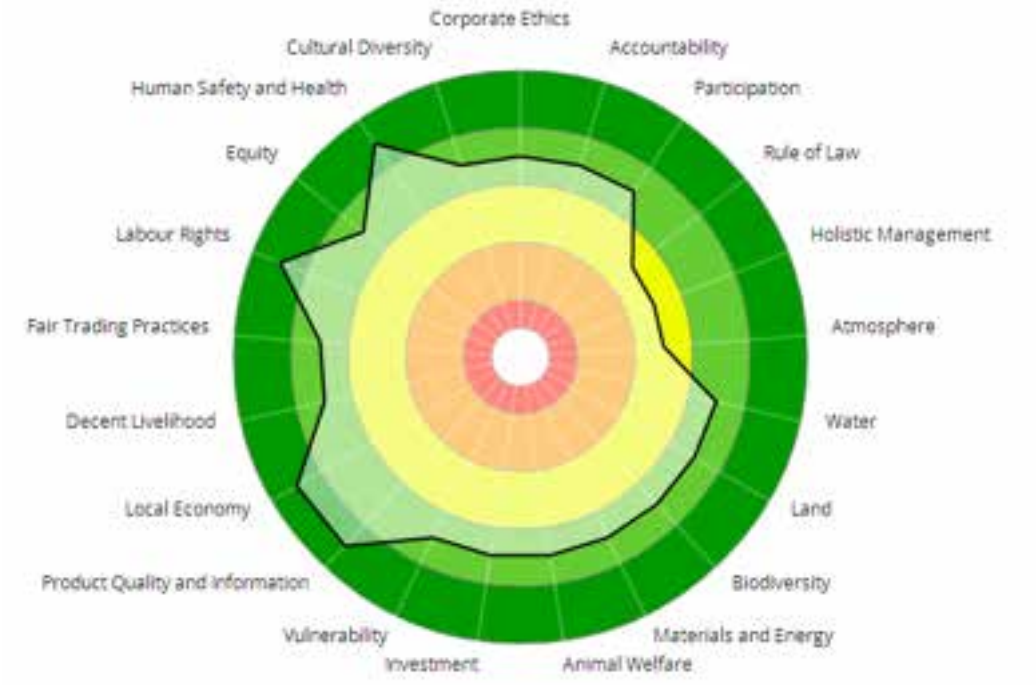
2. Interviews with migrant workers were carried out together with an analysis of the legal and practical situation about migrant workers in the two regions.

3. Additional indicators for the SAFA tool have been identified for local market, based on volumes, turnover and number of different products marketed directly by the farms.

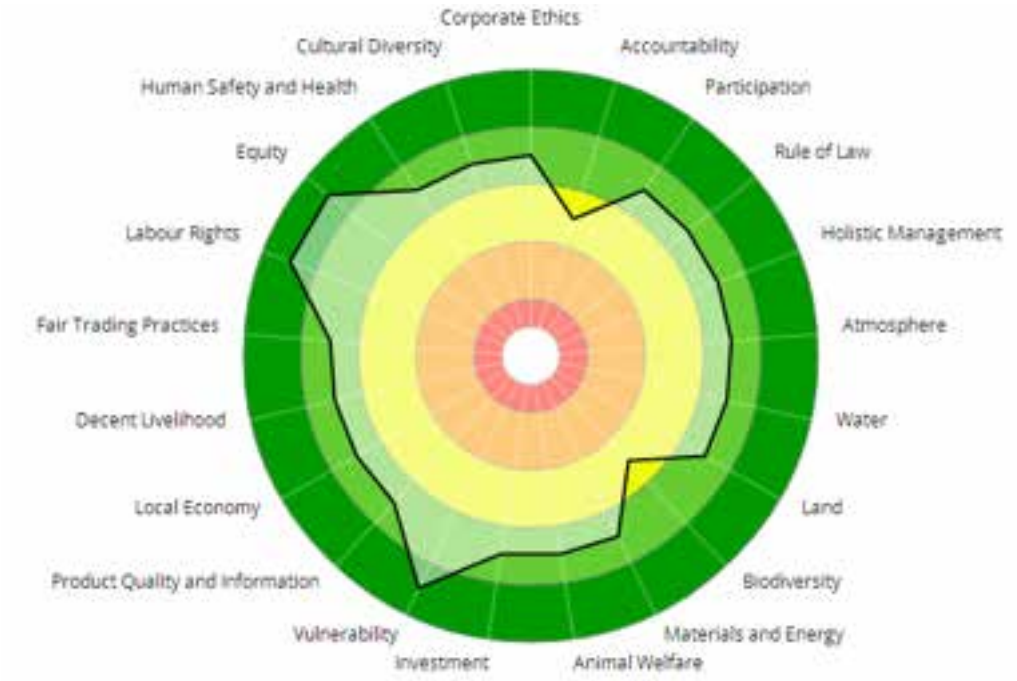
4. Some organic fruit and vegetable growing, livestock breeding, marketing and migrant workers' integration best practices have been identified by the research activities and are shared between the farmers involved.

Organic 3.0 research approach relevance can be seen in the 360° sustainability approach and the special focus on Food Security/Food Sovereignty, local market and migrant workers' integration. Last but not least in the fact that the research itself is facilitating organic farmers' community development and best practices sharing.

SAFA polygons that identifies the two farmer communities with their average scores



Farms in Sicily



Farms in UAE

Discussion

A focal point of this work is the importance of the nexus between organic agriculture and sustainability. In fact, in order to have a real sustainable system, it's mandatory to have a low impact on the environment and organic agriculture is one of the best ways to achieve this goal. Another relevant theme in our work is the importance of the ethical and economic sectors in order to have a complete sustainable agriculture. In fact in the farms we have assessed that there is a close link between the preference for local market, the legality and fairness of worker conditions and high sustainability performances.

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MULTI-STAKEHOLDERS KNOWLEDGE, EXPERIENCE AND PERCEPTION ON KEY ISSUES FOR THE **ECONOMIC DEVELOPMENT OF ORGANIC AQUACULTURE**

Contribution by Pino Lembo and Antonio Compagnoni

The overall vision of the EU research project "OrAqua" is to facilitate economic growth of the organic aquaculture sector in Europe, supported by science-based regulations and in line with organic principles and consumer confidence.

Among the project activities, a stakeholder meeting was held in Rotterdam on October 2015, back to back to the European Aquaculture Conference, in order to assess multi-stakeholders knowledge, experience and perception on key issues for the economic development of organic aquaculture. To this purpose, a survey on the current EU regulatory framework for the organic aquaculture was carried out.

Conflicting approaches to the wide range of multidisciplinary and complex organic farming issues may challenge stakeholders having different backgrounds and knowledge and maybe conflicting objectives and preferences of specific farming issues (feed, welfare, environment, economic, etc.), related to the EU regulation. These challenging issues were addressed using the Multi Criteria Decision Analysis (MCDA) as a tool to facilitate informed decisions of choices among alternatives and hence to balance conflicting approaches to the specific organic farming issues. MCDA technique facilitates the in depth analysis of important issues/goals (e.g. feed, environment etc.), breaking these into smaller components for evaluating interests/alternatives (e.g. protein source, fat source, amino acid profile, fatty acid profile, feed utilization, growth rate, discharge of nitrogen and phosphorus, etc.) and finally integrating each component according to a process of ranking, weighting and calculating a score.

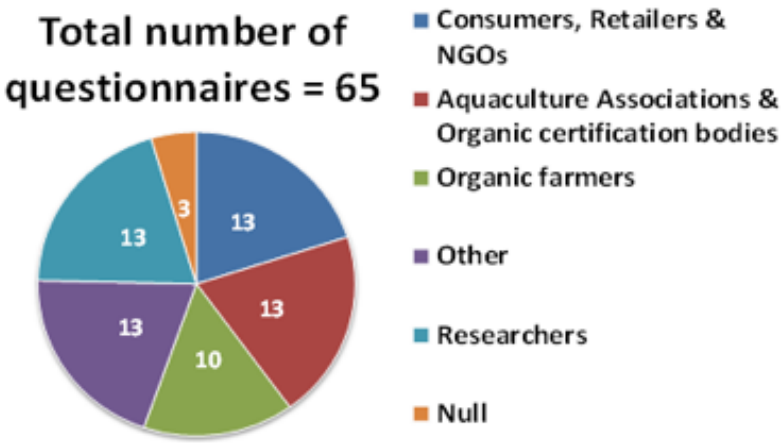
As in the "real world" situations, solutions to alternatives are reached as compromise solutions, resulting from trade-offs between various (sometime) conflicting objectives of the stakeholders and decision makers, through negotiations to reach a consensus. This involves seeking "optimal solutions" to multiple alternatives such as prioritising between fish health/welfare and farm economics/competitiveness, etc. All the above should balance within the framework of the organic principles.

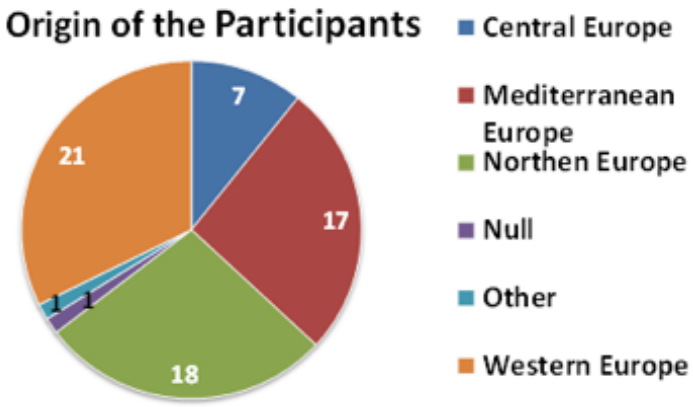
Among the several techniques belonging to the MCDA, we used the Analytical Hierarchy Process (AHP). AHP converts the human expert judgment into numerical values that can be processed allowing diverse and often incommensurable elements to be compared to one another in a rational and consistent way. At the beginning of the procedure, the AHP provides that a complex decision problem is decomposed into simpler decision problems to form a decision hierarchy. The advantage to decompose the decision problem into a hierarchy consists in getting more easily comprehended sub-problems, so that each of them can be analysed independently.

In our survey, a sensitivity analysis has been carried out to evaluate the robustness of the results, with respect to the uncertainty associated to the answers provided by the participants to the survey.

Participants to the survey were requested to answer anonymously to a questionnaire with a number of closed questions concerning the following eighteen subject areas: 1) Institutional framework; 2) Consumer perception; 3) Environmental interactions; 4) Fish health and welfare; 5) Control provision; 6) Production rules; 7) Legislative framework; 8) Production systems; 9) Product quality; 10) Product ecological quality; 11) Energy use; 12) Recycling; 13) Environmental impact; 14) Quality of water; 15) Quality of feed; 16) Quality of the rearing environment; 17) Physiological condition; 18) Husbandry practices. In addition, interested parties had the possibility to submit free contributions.

The number of participants to the survey, for each category of stakeholders, was the same (13), except for organic farmers who were 10. The most represented geographical region was the Western Europe (21), followed by the Northern Europe (18) and the Mediterranean Europe (17). The less represented was the Central Europe (7). The gender of the large majority of participants was male (49), only 15 were female. The average age of participants was quite high; almost all were over thirty-five years.


Total number of questionnaires = 65
13
13
10
13
13
3
Consumers, Retailers & NGOs
Aquaculture Associations & Organic certification bodies
Organic farmers
Other
Researchers
Null


Origin of the Participants
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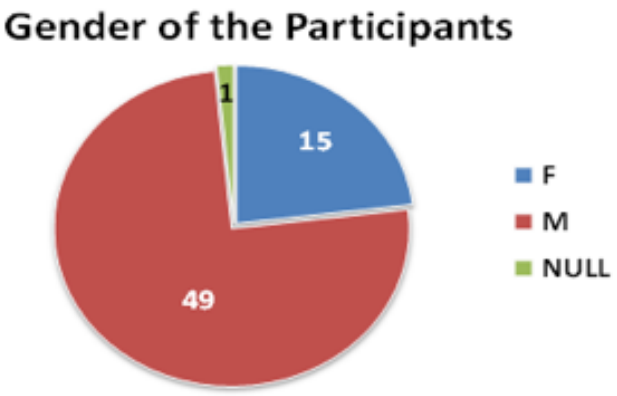
17
18
1
1
21
Central Europe
Mediterranean Europe
Northen Europe
Null
Other
Western Europe


Gender of the Participants
15
49
1
F
M
NULL


Age of the Participants
1
1
5
27
31
18-25
26-35
36-50
50+
NULL

Some of the most relevant conclusion of the survey are hereinafter reported.

According to the majority of the stakeholders, who participated to the survey, the most important issue to be taken into consideration in order to promote the development of the Organic Aquaculture is the "Consumer perception".

The "Product ecological qualities" (e.g. environmental friendly; animal friendly; sustainable; local/domestic production) are the more appropriate to characterise the Consumer perception.

The more relevant action in order to establish a more appropriate Legislative framework for the organic aquaculture was to "Reinforce European/national support to programs for developing organic aquaculture".

The more relevant action to make more effective the Control provisions, meant as the qualitative/quantitative checks/controls carried out on organic farms, raw materials and organic products, is by far "Enforce the homogeneity of the control system among countries and Certification bodies".

The more desirable Product qualities (not exhaustive examples are: no chemicals, additives, hormones used; good appearance; good smell; good taste; good texture) for the organic products were: "No hormone used" and "No chemicals used", while the less important quality was considered the "Good appearance".

The more desirable Product ecological quality (not exhaustive examples are: environmental friendly; animal friendly; sustainable; local/domestic production) in the organic products was: "Sustainability", followed by the "Animal friendly quality".

The "Environmental impact" is the more appropriate element to describe the Environmental interaction, meant as the relationships between organic farms and the environment, as well as the attitude to environmentally friendly behaviour.

"Look for products that use less packaging" was considered the Recycling activity more effective to reduce waste.

The more appropriate practice to limit the Environmental impact in the organic aquaculture was considered to "Prevent dispersion of chemicals and antibiotics". While the less appropriate were considered "Improve systems to prevent escapes" and/or "Allow Recirculation Aquaculture Systems (RAS) for on-growing phase".

The Production system more in line with the organic principles was considered firstly the "Integrated multi-trophic aquaculture (IMTA)", which is an intensive and synergistic cultivation that uses water-born nutrients and energy transfer. Multi-trophic means here that the various species occupy different trophic levels. It was followed by Cage at sea and Medium-low density systems. While, the lower preference was assigned to the "Recirculation Aquaculture Systems RAS" and the "Medium-high density system".

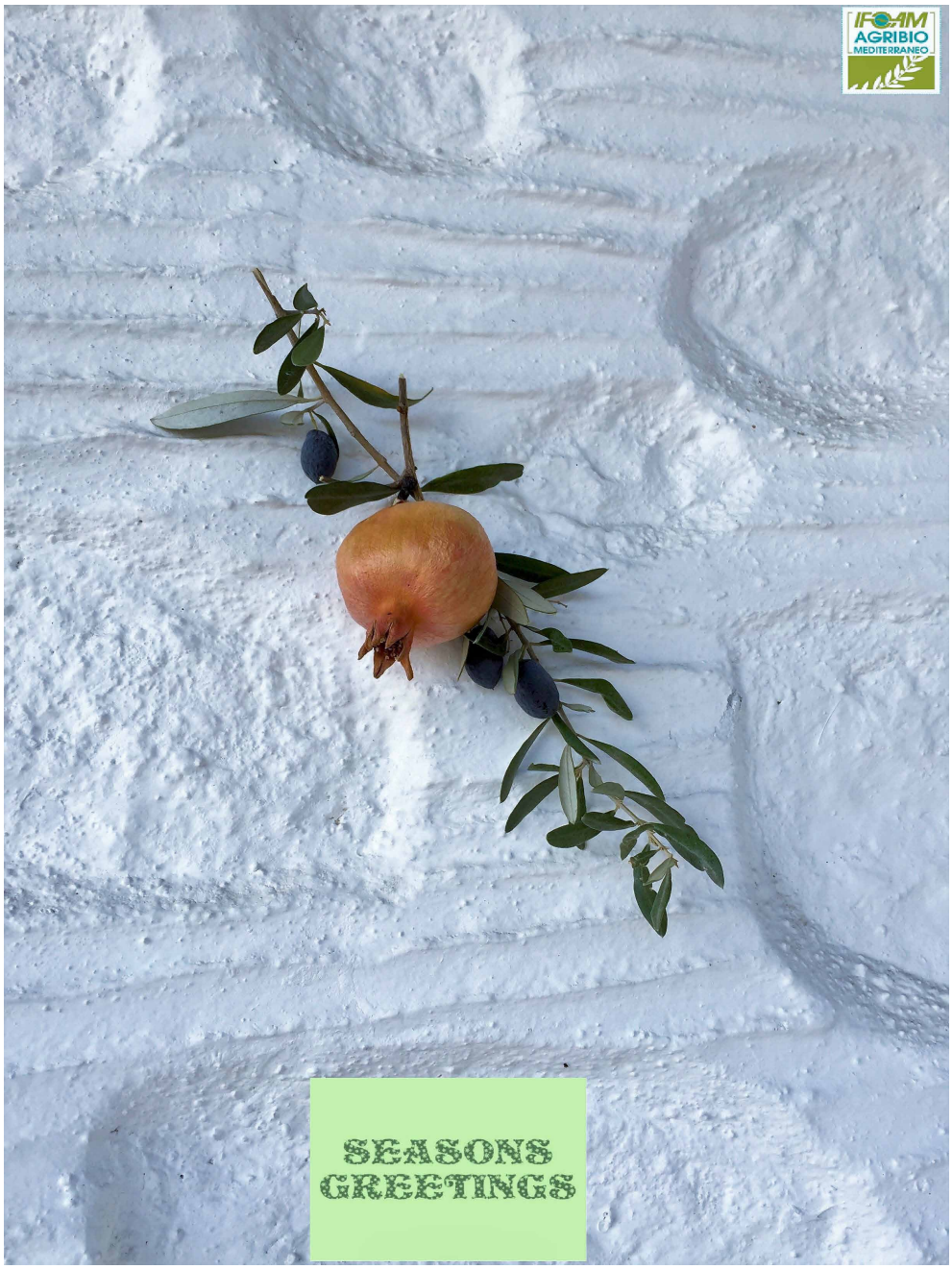
The measures considered more appropriate in order to keep the Quality of water under control in the organic aquaculture farms were "Set threshold limits for stocking density". However, such preference was only slightly higher than that for "Set threshold limit for oxygen" and "Set threshold limit for nutrient".

The more appropriate measures to ensure good Physiological condition (the physiological health conditions of the farmed animals) to the fish in the organic aquaculture farms were represented by "Keep stocking density at a safer level" and "Monitor fish behaviour and fin damages or other injuries".

The more appropriate measures in order to ensure the Quality of feed were firstly "Use trimmings from sustainable fishery" (trimmings are the waste product of fish processing, which are used for the production of fishmeal and oil). And secondly "Allow fishmeal/oil from whole fish".

The very proactive participation to the survey of consumers, retailers, researchers, organic farmers together with experts from the organic certification bodies, the aquaculture associations, the environmental NGOs, the feed industry and the Public Institutions provided a useful feedback on how to improve the European regulation of organic aquaculture.

IFOAM AGRIBIOMEDITERRANEO WISHES YOU ALL A **WONDERFUL HOLIDAY SEASON AND A GREAT NEW YEAR!!**



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