

*Convergence to sustainability of well-being – The European Governance for the future*

by Rosa Misso, Gian Paolo Cesaretti, Safwat Shakir Hanna, Zacharoula Andreopoulou, Monica Varles

## Abstract

Facing the challenges to the sustainability of well-being, the main commitment to EU member countries will be to give themselves a sustainable structure for the people and for all its territories, where, through an appropriate governance you must ensure exclusive benefits able to win ideas, behaviors and activities “homologated” which essentially crush the value systems pertinent to the identity of people and territories. On the basis of these considerations, the present paper aim to underline the important role that the economist has to play, reinterpreting the limits of the theory in light of a new and practical idea of economy, able to build well-being and to guarantee its sustainability in all its dimensions. Starting from the role of European integration, the paper aim to underline the importance to reinstate the “food issue” in a new idea of European integration more sustainable for all.

## *Poverty, balanced well-being and knowledge: challenges to sustainability*

by Maria Carmen De Angelis

## Abstract

Today Global Society is gradually moving towards a structural “approach to Well-Being. This virtuous way, capable to lead Global Society on its own sustainability path, passes through the resolution of numerous challenges. Among these, it is necessary to overcome poverty, rebalancing the relationship between Material Living Conditions and Quality of life, to increase knowledge. Overcoming these challenges to Well- Being Sustainability constitutes a necessary condition also to fight the various forms of food poverty, emphasize the centrality of food, compared to quality of life’s issues; promote a culture of food sustainability. In this paper, there will be presented and discussed some of the reasons of this statement.

## *The Environmental Human Development Index*

by Francesco Busato and Norma Maccar

## Abstract

Human Development Index is one of the (if not the) most widely used measure of well-being, still missing, however, an “environmental dimension” (as suggested during the Rio+20-United Nation Conference on Sustainable Development, as part of Millennium Development Goals post-2015). This paper tackles this issue and introduces an original quantitative measure, named Environmental Human Development Index. The proposed index augments the Human Development Index with the Environmental Performance Index (a complete indicator of environmental quality of countries and a benchmark of policy goals achievement). The paper eventually simulates a country ranking using the new index.

## *Well-being funding: essence and estimation method*

by Olha Hlushchenko

## Abstract

The article focuses on developing new tools to measure sustainable well-being. The main objective is to offer a method for estimating and measuring well-being sustainability and test its results on the actual data from Ukraine. The indicator wellbeing funding includes the amount of assets funded by public finances for environment protection, health care, spiritual and physical development, education, social protection and financial assets of households. There is a correlation between the amount of financial assets of well-being fund and average life expectancy at birth. There have been defined principles of achieving food security in terms of well-being sustainability.

### *HTA in the nutritional care: investments' efficiency and effectiveness*

by Alberto Manelli, Oscar Domenichelli, Roberta Pace and Martina Vallesi

#### Abstract

Health Technology Assessment (HTA) in spite of being a relatively recent methodological phenomenon has become increasingly important tool for the policy makers to bridge the gap between research and policy making. This work starts with an evaluation of the logic behind the adoption of HTA process for policy making, including features and advantages of the process. Subsequently, this study presents the risk related to the investments in health sector, from the different perspectives such as: balance among effectiveness, efficiency and economy; and role of the scarcity of available resources. Finally, the explanation about the necessity to evaluate the ability of investments in the health technology in nutritional care making a synthesis between the different variables to support the operations of the policy makers in a view to create added value and to contain costs.

### *Rethinking IPRs on agro-biotechnological innovations in the context of food security*

by Gabriella Vindigni and Giuseppe La Terra

#### Abstract

This paper engages in the debate on how agro-biotechnological innovations can influence food security. IPRs are considered an important incentive for research initiatives based on genetic resources and they encourage investments in agricultural innovations. However, concerns have risen about the current system of IPR in plant improvement over its impact on food security. IPRs may affect the accessibility and availability of a large number of agricultural products, undermining food security.

### *Innovative sustainable strategies in agro-food systems and in buildings for energy efficiency*

by Carlo Alberto Campiotti, Carlo Bibbiani, Alberto Campiotti, Evelia Schettini, Corinna Viola and Giuliano Vox

#### Abstract

EU identified the energy efficiency policy as the major strategy for ensuring both the sustainability of the use of energy resources and to develop the transition towards a low-carbon and decentralized energy system in Europe. This paper presents a brief analysis on available innovative technologies to reduce the dependency of agriculture and agro-food sector from fossil energy, and comply with the international commitment to reduce greenhouse emissions and to combat climate change. A general overview is provided on the energy consumption in agriculture and agro-food sector, with particular focus on the Italian sector is taken into consideration. It is discussed the role of solid biomass in place of fossil resources and the application of solar cooling technology as new technologies for acclimatization in greenhouse agriculture. Moreover, the application of living vegetated horizontal and vertical layers on buildings is evaluated as innovative and natural technology for improving the sustainability of towns and reducing the energy consumption for air conditioning in summer and CO<sub>2</sub> emissions in towns.

### *Potentialities of new agri-biotechnology for sustainable nutrition*

by Daniela Covino and Flavio Boccia

## Abstract

Transgenic foods could be considered as daily conventional foods, that carry various kinds of well-known genetic modifications, and sometimes they are also able to perform a particular function. They are products which outwardly are the same as conventional ones, but they have features that can also be quite different. These foods could help improve the well-being of our society, especially for the fringe of the population with chronic diseases related to allergy phenomena or food intolerance, or a deficiency/excess of certain nutritional factors. The presence of novel foods on the market could improve their diet and, consequently, their well-being. The aim of the present work is to focus on the potential role of second generation genetically modified foods of enhancing more sustainable dietary regimes in terms of welfare. Functional transgenic food may be defined as daily conventional ones, carrying modifications in nutrients content, capable of performing as dietary supplement. Nutritional characteristics may strongly differ from usual foods in our dietary regimen in terms of vitamins, fat, gluten and so on. It is well accepted that such a kind of food might contribute to improve societies' welfare, especially for people affected by chronic disease depending on allergies or intolerance, deficiency or surplus of specific nutritional factors. Still, several issues are to debate in terms of their acceptability and equivalence.

## *The role of nutritional labeling in promoting healthier food choices: a review of the major issues in the EU*

by Azzurra Annunziata and Angela Mariani

## Abstract

As the widespread rapid growth of diet-related diseases becomes a major public concern, nutritional labeling is increasingly considered a potential tool to support the goal of changing unhealthy eating habits while retaining consumer freedom of choice. This paper aims to contribute to the institutional debate on the effectiveness of nutritional labeling on the back or front of packaging in promoting healthier food choices, focusing on the EU. The major issues detected and discussed are based on a literature review of recent studies that have examined the limits and potentials of such tools. Finally, we discuss other promising application fields of nutritional labeling, such as on alcoholic beverages and restaurant menus, and present some directions for further research.

## *A sustainable competitive model: the biodynamic farming in Italy*

by Raffaella Pergamo , Lelio Morra and Carlo Triarico

## Abstract

The bases of biodynamic method are consistent to the principles of modern agroecology. From vision that binds the legal, economic and spiritual spheres, was established a network among the commercial organization Demeter and her production standards, the national associations of biodynamic producers and specialist large retailer (Calabrese e Bosco, 2015). This paper describes a slice of Italian biodynamic reality through an analysis of business cases that are in their individuality, however, be considered as common parts of a model of sustainable and competitive agriculture.

## *Lessons learned from a process of farm sustainability assessment: literature review, methodology and governance opportunities*

by Anna Gaviglio, Mattia Bertocchi and Eugenio Demartini

## Abstract

The present paper aims at being a contribute for those need to assess the sustainability of farms, exposing the procedure followed for the construction of 4Agro, an application for the evaluation of farms of the South Milan Agricultural Park, Italy. The survey started from the review of 5 methodologies (IDEA, RISE, SAFE, SOSTARE and MOTIFS) and highlights the possible solutions to some typical issues of this type of analysis: (i) data availability; (ii) selection of indicators; (iii) involvement of all stakeholders. The analysis also highlights the possibility to integrate, even in agriculture, the three typical scales of sustainability (environment, society, economy) with the one of the governance, as suggested by the SAFA guidelines.

### *The determinants of ranking in sustainable efficiency of Italian farms*

by Paolo Cupo and Rinalda Alberta Di Cerbo

#### Abstract

This study individuates the determinates of the farms' sustainability following the approach based on the concept of sustainable value formulated by Figge and Hann (2004), which integrates the environmental, economic and social components into a single monetary indicator that takes into account the opportunity cost of the resources used defined by a benchmark. The results of the GLM regression show that almost all the structural characteristics have a significant impact on the sustainable efficiency of the farms, while the specialized farms perform better than mixed farms like the young and male farmers. Moreover, the highly significant and positive coefficients of correlation between the three components of sustainability, demonstrate that no trade-off exists between them.

### *Promoting sustainable agriculture in 2030 Agenda*

by Irene Paola Borrelli

#### Abstract

With the 2030 Agenda, sustainable agriculture has gained the necessary recognition to be used as a tool to achieve a greater level of individual and collective wellbeing. In addition to the explicit reference in the Goal 2 on this point, the analysis that was conducted on the SDGs showed multiple interrelationships with all other SDGs and the guiding principles of the 2030 Agenda. In this respect, after a conceptual overview on sustainable agriculture, this undertaking verifies how the latter fits into 2030 Agenda, and offers some thoughts for its application, with regard to the situation in Italy.

### *Integrating stakeholders' perspectives to develop tourism business strategies: the case study of a wine route*

by Giuseppina Carrà, Mariagiulia Mariani , Ivana Radić and Iuri Peri

#### Abstract

The authors analyze stakeholders' perspective in tourism development of the Etna Wine Route, considering a wider set of organisations having an interest in the destination management and development and enhancement of the local tourism. The effective management for wine tourism development is the stakeholder involvement in generating ideas for products and services. A broader assessment of the EWR as a tourist destination helped an effective interaction of various stakeholders through co-ordination and consultation mechanisms, leading to a tourism development plan. The case study provides important insights for destination management integrating stakeholders' perspective. For this purpose, the Strategic Orientation Round (SOR), integrated in the SWOT analysis, was implemented, a qualitative approach, aiming to create awareness and promote action as prioritized by stakeholders', through interviews and working groups.

*Agenda 2030 and sustainable agriculture: the case of Chile*

by Juvenal Urizar Alfaro and Wildo EVega Araya

Abstract

The Agenda 2030 of the Organization of United Nations, it has in sight 17 lenses to expire, close to 169 goals, which must be realized in gun-sights to a sustainable development, in where the problems of food emission, the access to these on the part of the persons, together close to the nutrition that must have so much children, young women and elders, the efforts that every State realizes, and the first approach of this problem by means of the Agenda 2020 of the European Union.

*Local food production for local consumption: why is it so hard to achieve? A case study from a small UK Transition Initiative*

by Jane Catherine Brandt , Rosanna Salvia and Giovanni Quaranta

Abstract

The Transition Mayfield (UK) group ran a Local Food project to raise awareness in the local community about the importance of developing local food production and consumption networks; strengthening the local economy and fostering collaboration and skill sharing. The discussion reveals number of factors that were not addressed: growers can lack the additional energy and skills needed to market their produce locally; the community already has very active social networks and the Transition group could not add anything to it; there is a complex relationship between shopkeepers that determines which shop sells what produce. The paper shows that, when trying to promote local food production for local consumption, attention has to be paid and an understanding gained of the motivation and constraints that operate in every part of the network.

*Entreprendre en milieu rural au Maroc. Les voies de l'avenir de la PME rurale*

by Driss Guerraou

Abstract

L'objet de cette contribution est d'examiner, à partir du cas du Maroc les potentialités qu'offre aujourd'hui à aux économies émergentes la promotion des activités non agricoles en milieu rural en matière de création de richesses nouvelles, de promotion de nouvelles opportunités d'emploi en faveur des jeunes et des femme et de lutte durable contre la pauvreté rurale.

*Association of nutritional disease with food security and sustainability: Latin America and Chile situation*

by Macarena Valladares

Abstract

Introduction: In America Latina and Caribbean exist high levels of so called nutritional diseases such as hunger and obesity. The objective is to review the antecedents between nutritional diseases with elements outside the scope of health associated with crop production. Methods: The search focused in nutrition, crop production, food security and sustainability, in Latin America and Chile. Results: A pathway for the management of nutritional diseases it is to consider aspects that influence food all as a whole. Particularly Chile present high obesity levels and are some initiatives for management from the perspective of agriculture and food security. Must be considered economic, social, political, health and sustainability aspects on crops, hunger and obesity should consider the same determinants. Conclusions: Latin America and Chile should develop crops that allow the management of nutritional diseases, generating enough food and care for the environment.

### *The Local Food Processing House: a social innovation for rural development in Campania*

by Giovanni Quaranta, Jane Brandt and Rosanna Salvia

#### Abstract

Social innovation assigns importance to the social and relational aspect of the community development linking it to social interactions and cooperation. Collective actions are crucial not only to promote new solutions to the problems generated by the globalization and the financial crisis in rural areas, but also in supporting community resilience. This study focuses on an experience of social innovation in a southern Italian community, Caggiano, who has built around food a new path of development. The work analyses the mechanisms displayed and employed by the community to achieve cohesiveness and trust among different local actors and highlight how the social innovation implemented played a crucial role in promoting the development and the sustainability of the community.

### *The redefinition of the role of agricultural areas in the city of Catania*

by Alessandro Scuderi, Luisa Sturiale, Claudio Bellia, Vera Teresa Foti and Giuseppe Timpanaro

#### Abstract

In the last few years there seems to have been a growth of interest in green spaces with agricultural activities in the urban environment that have become expressions of a urban agriculture that represent a mode of agricultural exploitation of these green spaces by citizens, able to offer a response to renewed social, alimentary, environmental, and cultural demands. It is in this context that the Municipality of Catania has proposed the creation of one of the largest urban gardens in Europe, in a marginal area of a neighbourhood with a high level of socio-economic degradation of the city. This paper, starting from analysis of urban agriculture at European level, aims, through a SWOT analysis, involving the social and economic partnership in the identification of the highlight the strengths and weaknesses, the opportunities and the threats, of this “new form of urban green”, as a valid tool for the integrated development of the territory that encompasses the socio-economic and environmental spheres.

### *Aquaponic as sustainable innovation for food production*

by Carlo Bibbiani, Alessandro Campiotti, Luca Incrocci, Alberto Pardossi, Baldassarre Fronte and Corinna Viola

#### Abstract

To better understand aquaponic, it is important to describe the socio-demographic context and the role of agriculture in a future perspective. Due to the increasing world population, by 2050 food production should be increased of not less than 70%. Nowadays the agriculture sector is playing a key role in ensuring food security and in the upcoming context it should also face one of the greatest dilemmas of the modern age, which consist in producing more food using less resources and minimizing the environmental impacts. To cope with this challenge, the aquaculture technology seems to be one of the most suitable production systems able to face this dilemma. In this paper, the technical and technological aspects of the Integrated Aquaponic System (IAS) are described. The integration of an aquaponic system with algae, worms and insects production it is also suggested for improving sustainability.