



**THE BUCHAREST UNIVERSITY OF ECONOMIC STUDIES**  
FACULTY OF AGRI-FOOD AND ENVIRONMENTAL ECONOMICS  
**RESEARCH CENTER FOR REGIONAL ANALYZES AND POLICIES**  
in collaboration with

**MOLDAVIAN ACADEMY OF  
ECONOMIC STUDIES**  
R. Moldova

**CATANIA UNIVERSITY**  
Italy

**ROMANIAN ACADEMY  
INSTITUTE OF NATIONAL ECONOMY  
INSTITUTE OF GEOGRAPHY**

**„SIMONE CESARETTI”  
FOUNDATION**  
Italy

**“PARTHENOPE” UNIVERSITY  
NAPOLI**  
Italy

**GENERAL ASSOCIATION OF  
ECONOMISTS FROM ROMANIA**

**MEDIA PARTNER**  
*“Quality – Access to Success”* Journal

**SOCAR**  
Romania

**PROGRAM**  
**10<sup>th</sup>**  
**INTERNATIONAL CONFERENCE**  
**ECOLOGICAL PERFORMANCE**  
**IN A COMPETITIVE ECONOMY**



**Bucharest**  
**8<sup>th</sup> March 2018**

---

---

---

## CONFERENCE AGENDA

---

---

The conference will be held at University of Economic Studies in Bucharest, the building Moxa, Moxa Mihail nr.5-7 Street

### ***08 March 2018***

8:00-9:00 st floor, hall)	Registration of participants (Moxa building, I
9:00-11:00 (Moxa building,	Opening of the conference, plenary session  I st floor, room 3M III)
11:00-11:30	Coffee break
11:30-13:00 (sections)	Communication presentations and debates
13:00-14:30	Lunch
14:30-16:30 (sections)	Communication presentations and debates
16:45-19:00 (sections)	Communication presentations and debates

### **09 March 2018**

8.00-10.00	Closing Conference Session (Moxa building, 2 <sup>nd</sup> floor, 3205 room)
------------	---

08 March 2018

## **PLENARY SESSION ACTIVITIES**

---

### **3 M III Conference Hall**

**9:00-9:20 Opening of the conference**

Welcome presentation

**PhD. Professor Istudor NICOLAE**, Rector of The Bucharest University of Economic Studies

**Academician PhD. Professor Dan BĂLTEANU**, Director of the Institute of Geography, Romanian Academy

**Academician PhD. Professor hab. Grigore BELOSTECINIC**, Rector of the Moldavian Academy of Economic Studies

**PhD. Professor Mihai Daniel ROMAN**, Director of Doctoral Studies Board, of the Bucharest University of Economic Studies

**PhD. Hamza KARIMOV**, CEO SOCAR Romania

**PhD. Professor Dan BOBOC**, Dean of the Faculty of Agri-Food and Environmental Economics

**PhD. Professor Gabriel POPESCU**, Director of the Research Centre for Regional Analysis and Policies, Department of the Agro-Food and Environment Economics, Bucharest University of Economic Studies

**9:20-11:00 Presentation of scientific communications**

1. *Green coverings for improving energy efficiency of buildings*, PhD. Carlo Alberto CAMPIOTTI, Italian National Agency for New Technology and Sustainable Economic Development (Italy), researcher Germina GIAGNACOVO, Italian National Agency for New Technology and Sustainable Economic Development (Italy), researcher Luca NENCINI, Italian National Agency for New Technology and Sustainable Economic Development (Italy), student Alessandro CAMPIOTTI, Italian National Agency for New Technology and Sustainable Economic Development (Italy)
2. *Economic evaluation of innovative investments in agri-food chain*, research fellow Alessandro SCUDERI “University of Catania (Italy), Professor Luisa STURIALE, University of Catania (Italy), Professor Giuseppe TIMPANARO, University of Catania (Italy)
3. *The advantages of economic growth policy in Romania*, Dumitru-Alexandru BODISLAV, associate professor PhD., The Bucharest University of Economic Studies, Florina BRAN, professor PhD., The Bucharest University of Economic Studies, Irina Elena PETRESCU, associate professor PhD., The Bucharest University of Economic Studies
4. *Romanian agriculture under the pressure of climate change and other risk factors*, Radu VOICU, professor PhD., The Bucharest University of Economic Studies, Carmen Valentina RADULESCU, associate professor PhD., The Bucharest University of Economic Studies
5. *Globalization and regional development from a durable perspective*, Carmen Valentina RADULESCU, associate professor PhD., The Bucharest University of Economic Studies, Irina Elena PETRESCU, associate professor PhD, The Bucharest University of Economic Studies, Ion PARGARU, professor PhD., University Politehnica Bucharest

## Section I

### 11:30-13:00

---

### 3M III Conference Hall

#### Moderators

PhD. Carlo Alberto CAMPIOTTI	Italian National Agency for New Sustainable Economic Development (Italy)
PhD. Professor Mariana IOVITU	The Bucharest University of Economic Studies
PhD. Associate professor Alexandru BODISLAV	The Bucharest University of Economic Studies

1. *Economic and environmental sustainability in agriculture: the results generated by biodegradable productive means*, PhD. Valeria ALLEGRA, University of Catania (Italy), professor Alfonso Silvio ZARBÀ, University of Catania (Italy)
2. *Evolutionary trends of the agro-food enterprises and related atmospheric emission: the case of Italy*, PhD. Valeria ALLEGRA, University of Catania (Italy), associate professor Salvatore BRACCO, University of Catania (Italy), professor Alfonso Silvio ZARBÀ, University of Catania (Italy)
3. *A comparison of consumers' willingness to pay and inferred valuation in the case of wine*, Post. Doc. Mario AMATO, University of Naples Federico II (Italy), associate professor Adele COPPOLA, University of Naples Federico II (Italy), associate professor Maria Teresa GORGITANO University of Naples Federico II (Italy)
4. *Revisiting the palm oil boom in Europe as a source of renewable energy: evidence from time series analysis*, Ph.D Deborah BENTIVOGLIO, Università Politecnica delle Marche (Italy), PhD student Giorgia BUCCI, Università Politecnica delle Marche (Italy), full professor Adele FINCO Università Politecnica delle Marche (Italy)
5. *Life cycle impact of industrial aquaculture systems: a review*, assistant professor Carlo BIBBIANI, University of Pisa (Italy), assistant professor Baldassare FRONTE, University of Pisa (Italy), professor Luca INCROCCI, University of Pisa (Italy), PhD. Carlo Alberto CAMPIOTTI, Italian National Agency for New Technology and Sustainable Economic Development (Italy)
6. *Traditional beekeeping in rural areas: profitability analysis and feasibility of pollination service*, Ph.D. student Simone BLANC,

University of Torino (Italy), full professor Filippo BRUN, University of Torino (Italy), research assistant Giuseppe DI VITA, University of Catania (Italy), associate professor Angela MOSSO, University of Torino, (Italy)

7. *Precision agriculture as a driver for sustainable farming systems: state of art in literature and research*, Ph.D. student Giorgia BUCCI, Università Politecnica delle Marche (Italy), Ph.D. Deborah BENTIVOGLIO, Università Politecnica delle Marche (Italy), full professor Adele FINCO, Università Politecnica delle Marche (Italy)
8. *Which winery visit do wine tourists prefer? An explorative analysis in Italy*, research fellow Elisa GIAMPIETRI, University of Padova (Italy), research fellow Petra DONÀ DALLE ROSE, University of Padova (Italy), research fellow Elettra MORLIN, University of Padova (Italy)
9. *An overview of food waste phenomenon: by problem to resource*, assistant professor and researcher Vera Teresa FOTI, University of Catania (Italy), full professor Luisa STURIALE, University of Catania (Italy), associate professor Giuseppe TIMPANARO, University of Catania, (Italy)
10. *Valorization of carob biomass for bioethanol production*, full professor Maurizio LANFRANCHI, University of Messina, (Italy), assistant professor Carlo GIANNETTO, University of Messina (Italy), student Francesco Spiridione SARDINA, University of Messina (Italy), student Salvatore ALFANO, University of Messina (Italy)
11. *Marketing strategies for animal welfare meat identification: comparison of preferences between millennial and conventional consumers*, assistant professor Stefano MASSAGLIA, University of Turin (Italy), research fellow Valentina Maria MERLINO, University of Turin, (Italy), assistant professor Danielle BORRA, University of Turin, (Italy)
12. *Consumer perception of organic blueberry labelling in Italy*, assistant professor, Stefano MASSAGLIA, University of Turin (Italy), research fellow Valentina Maria MERLINO, University of Turin (Italy), assistant professor Danielle BORRA, University of Turin (Italy), associate professor, Cristiana PEANO, University of Turin (Italy)

## Section I

### 14:30-18:00

### 3M III Conference Hall

#### Moderators

PhD.Professor Cristina ALPOPI	The Bucharest University of Economic Studies
PhD. Associate professor Irina Elena PETRESCU	The Bucharest University of Economic Studies
PhD. Lecturer Loredana Maria POPESCU	The Bucharest University of Economic Studies

1. *Determinants of environmentally-friendly farming*, assistant professor Silvia NOVELLI, University of Torino, (Italy)
2. *Assessing waste and by-products from wine-growing sector in MT ETNA*, assistant professor Gioacchino PAPPALARDO, University of Catania (Italy), PhD. Mariagrazia SIGNORELLLO, University of Catania (Italy), professor Biagio PECORINO, University of Catania (Italy)
3. *Price transmission of us soybean futures into Italian spot market*, research fellow Carlotta PENONE, University of Padua (Italy), associate professor Samuele TRESTINI, University of Padua (Italy)
4. *The textile hemp chain: value analysis, economic and environmental benefits*, researcher Raffaella PERGAMO, Council for Agricultural Research and Economics - Research Centre for Olive, Citrus and Tree Fruit (Italy), researcher Lucia BRIAMONTE, Council for Agricultural Research and Economics - Research Centre for Agricultural Policies and Bioeconomy (Italy), senior researcher Domenico CERRATO, Council for Agricultural Research and Economics - Research Centre for Cereal and industrial crops (Italy)
5. *Agriculture and circular paradigm: a case study*, research fellow Irene Paola BORRELLI, Simone Cesaretti Foundation (Italy)
6. *Resident attitude toward: the mediation effect of quality of life in the hyblaean district*, research fellow PhD. Silvia PLATANIA, University of Catania (Italy), teaching assistant Cinzia VULLO, University of Catania (Italy), junior teaching assistant Martina MORANDO, University of Catania (Italy)
7. *Urban gardens in the city of Naples: an empirical analysis*, PhD. Vincenzo RUSCIANO, “Parthenope” University, (Italy), PhD. Gennaro

- CIVERO, “Parthenope” University, Naples (Italy), associate professor  
Debora SCARPATO, “Parthenope” University (Italy)
8. *Regionalization processes in agricultural and environmental policies. A regional typologies comparative analysis to identifying fragile areas*, PhD. Fabiola SAFONTE, Institute of Research and Promotion of Inner Area of (Italy), PhD. Ferdinando TRAPANI, University of Palermo (Italy), assistant professor Claudio BELLIA, University of Catania (Italy)
  9. *Craft beer and intensity of purchase: a psychological analysis of consumer intentions*, associate professor Giuseppe SANTISI, University of Catania (Italy), junior teaching assistant Martina MORANDO, University of Catania (Italy), psychologist in training Anna SCIACCA, University of Catania (Italy)
  10. *A psychological analysis of wine and food consumption in Sicily: the marketing experience implication*, associate professor Giuseppe SANTISI, University of Catania (Italy), research fellow Silvia PLATANIA, University of Catania (Italy), teaching assistant Cinzia VULLO, University of Catania (Italy)
  11. *What drives recycling behavior? The role of social trust, perceived risk, and self-efficacy*, Ph.D. Francesca SCAFUTO, University of Naples Federico II (Italy), associate professor Valeria SODANO, University of Naples Federico II (Italy), assistant professor Francesco LA BARBERA, University of Naples Federico II (Italy)
  12. *The life quality in terms of the coordinate system: environmental factors - health saving - property value*, Dr. Sc., leading researcher Anna SCHMELEVA, V. A. Trapeznikov Institute of Control Sciences, Russian Academy of Sciences (Russia), Dr. Sc., Laboratory Chief Robert NIZHEGORODTSEV, V. A. Trapeznikov Institute of Control Sciences, Russian Academy of Sciences (Russia)
  13. *Social farm action value: the case study of “Case Di Maria”*, research fellow Alessandro SCUDERI, University of Catania (Italy), researcher Vera FOTI, University of Catania (Italy), research fellow Giuseppe STELLA, University of Catania (Italy)
  14. *Wine, sustainability and the territorial genetic identity*, associate professor, Rosa MISSO, University of Naples “Parthenope (Italy), professor and president Gian Paolo CESARETTI, Simone Cesaretti Foundation (Italy)
  15. *Estimating willingness to pay for digestate: evidence from an economic experiment from Sicilian farmers*, Ph.D. student Roberta SELVAGGI, University of Catania (Italy), Ph.D. Gaetano CHINNICI, University of Catania (Italy), assistant professor Gioacchino PAPPALARDO, University of Catania (Italy),



16. *Estimate of willingness to pay for Etna red wines: evaluation of the existence of an experiential component in purchase phase*, Ph.D. student Roberta SELVAGGI, University of Catania (Italy), student Marialuisa VERDUCCI, University of Catania (Italy), Professor Biagio PECORINO, University of Catania (Italy)
  17. *Investigating the intention to reduce palm oil consumption*, associate professor Valeria SODANO, University of Naples Federico II (Italy), Ph. D. Roberta RIVERSO, University of Naples Federico II (Italy), Ph. D. Francesca SCAFUTO, University of Naples Federico II (Italy)
  18. *The process of succeeding a family based small medium enterprise in the family- a report based on personal done interviews*, Marc SOMMER, Ph.D. student, The Bucharest University of Economic Studies, Oana Alexandra VOCHIN, Ph.D. student, The Bucharest University of Economic Studies, Ramezani Ahmadabadi (Dadfar) ELHAM, Ph.D. student, The Bucharest University of Economic Studies
  19. *Cluster policy - a development model*, Axel Ulrich WIESENER Ph.D. student, The Bucharest University of Economic Studies, Marc SOMMER, Ph.D. student, The Bucharest University of Economic Studies, Elena-Alice CÎRSTEA, Ph.D. student, The Bucharest University of Economic Studies
  20. *Agri-food, plastic and sustainability*, Rosa MISSO, University of Naples "Parthenope" (Italy), Monica VARLESE, Simone Cesaretti Foundation, Naples (Italy)
  21. *Agriculture, rural tourism and circular paradigm*, research fellow Immacolata VIOLA, Simone Cesaretti Foundation (Italy)
-

## Section II

### 11:30-13:00

---

### Room 3205

#### Moderators

PhD. Professor Florina BRAN	The Bucharest University of Economic Studies
PhD. Associate professor Gabriel NASTASE	“Dimitrie Cantemir” Christian University Bucharest
PhD. Lecturer Ovidiu Horia MAICAN	The Bucharest University of Economic Studies
PhD. Lecturer Sorin BURLACU	The Bucharest University of Economic Studies

1. *The current state of waste management in Romania*, Cristina ALPOPI, professor PhD., The Bucharest University of Economic Studies, Oleg MARGINA, PhD., Cristina Maria PARTAL, PhD.
2. *The effects of globalization on Manufacture of other food products in Romania*, Ion ANGHEL, professor PhD., The Bucharest University of Economic Studies, Ștefania-Cristina CUREA, associate professor PhD., The Bucharest University of Economic Studies, Ana-Maria POPESCU, associate professor PhD., The Bucharest University of Economic Studies
3. *Analysis of energy trends at EU level*, Evelina Petronela BALU, PhD.student, The Bucharest University of Economic Studies, Ovidiu BUZOIANU, PhD., The Bucharest University of Economic Studies, Iulia LUCHIAN, PhD., The Bucharest University of Economic Studies
4. *The business-automated data economy model, 2018 early update*, Dumitru-Alexandru BODISLAV, associate professor PhD., The Bucharest University of Economic Studies, Florina BRAN, professor PhD., The Bucharest University of Economic Studies, Loredana POPESCU, lecturer PhD., The Bucharest University of Economic Studies
5. *The museum tourism in Bucharest, Romania*, Elena BOGAN, lecturer PhD., University of Bucharest, Dana Maria (OPREA) CONSTANTIN, lecturer PhD., University of Bucharest, Elena GRIGORE, assistant PhD., University of Bucharest
6. *Intensive farming versus-agriculture environmentally sustainable*, Artur-Lucian BRĂILEANU, PhD. Ds., The Bucharest University of Economic Studies
7. *The perspectives of sports tourism development in Bucharest, Romania*, Elena BOGAN, lecturer PhD., University of Bucharest, Erika Alexandra MOLDOVEANU, MA student, University of Bucharest, Mihaela Ioana IAMANDEI, Ph.D. student, University of Bucharest

8. *Globalization - pros and cons* , Sorin BURLACU, assistant professor, PhD., The Bucharest University of Economic Studies, Corneliu GUTU, associate professor, PhD., ASEM Chisinau, (Republica Moldova), Florin Octavian MATEI, Ph.D. student, The Bucharest University of Economic Studies
9. *Analyse of forestry in Europe Union*, Ovidiu BUZOIANU, PhD., The Bucharest University of Economic Studies, Evelina Petronela BALU, PhD.student, The Bucharest University of Economic Studies, Iulia LUCHIAN, PhD., The Bucharest University of Economic Studies
10. *European Union strategy on combating climate change and promoting energy from renewable sources*, Paul CALANTER, senior researcher III, PhD., Romanian Academy - Institute for World Economy, Bucharest
11. *Aspects of university education in Romania and new opportunities for development*, Ghenadie CIOBANU, PhD., National Institute of Scientific Research in the field of Labor and Social Protection, Angela ANDREICA assistant professor, PhD., Satu Mare Commercial Academy, Florin Octavian MATEI, Ph.D. student, The Bucharest University of Economic Studies
12. *Eco-innovation and the development of new new opportunities on smes*, Ghenadie CIOBANU, PhD., National Institute of Scientific Research in the field of Labor and Social Protection, Cătălin GHINĂRARU, PhD., National Institute of Scientific Research in the field of Labor and Social Protection, Cristian TEODOR, teaching assistant, PhD., The Bucharest University of Economic Studies
13. *Analysis of the Bucharest residential market through the lens of retrofitted apartments*, Costin CIORA, assistant professor, PhD., The Bucharest University of Economic Studies, Ion ANGHEL, professor, PhD., The Bucharest University of Economic Studies, Ștefania - Cristina CUREA, associate professor, PhD., The Bucharest University of Economic Studies
14. *The analysis of Romania's potential for joining eco-innovation and increasing competitiveness*, Irina Daniela CIȘMAȘU, associate professor, The Bucharest University of Economic Studies, Alma Maria PETCU, student, The Bucharest University of Economic Studies
15. *The impact of intellectual capital on the responsibility and sustainability of the company. Example of an assessment of the socially responsible investment*, Sorin Adrian CIUPITU, teaching assistant, University Politehnica of Bucharest, Monica NIȚĂ, lecturer, University Politehnica of Bucharest
16. *Determination and analysis of the reputation capital index. Best logistic experts case study*, Sorin Adrian CIUPITU, teaching assistant, University Politehnica of Bucharest, Monica NIȚĂ, lecturer, University Politehnica of Bucharest
17. *Evaluation of energy efficiency of buildings*, Raluca Florentina CREȚU,

associate professor PhD., The Bucharest University of Economic Studies, Romeo Cătălin CREȚU, professor PhD., University of Agronomic Sciences and Veterinary Medicine

18. *Sustainable methods to assess a tax building*, Raluca Florentina CREȚU, associate professor PhD., The Bucharest University of Economic Studies

## Section II

**14:30-18:30**

### Room 3205

#### Moderators

PhD. Professor Victoria STANCIU	The Bucharest University of Economic Studies
PhD. Associate professor Raluca Georgiana LADARU	The Bucharest University of Economic Studies
PhD. Associate professor Crina Dacinia PETRESCU	The University "Babes Bolyai", Cluj
PhD. Student Evelina Petronela BALU	The Bucharest University of Economic Studies

1. *The role of innovation in increasing the sustainability of service organizations*, Razvan Catalin DOBREA, professor PhD., The Bucharest University of Economic Studies, Cristina DIMA, PhD. student, The Bucharest University of Economic Studies, Eugen ALBU, PhD. student, The Bucharest University of Economic Studies
2. *Income influence on diet and health*, Raluca Andreea ION, associate professor PhD., The Bucharest University of Economic Studies, Cristian George POPESCU, associate professor PhD., University of Bucharest
3. *Industrial production in Europe Union*, Mariana IOVITU, professor PhD., The Bucharest University of Economic Studies, Olivia Florentina BALU, assistant professor PhD., Geneva University, Amelia DIACONU, assistant professor PhD., Artifex University, Bucharest
4. *Performance in dismantling regional markets: transnational markets*, Luoana PASCU, PhD., Researcher 1 ECOIND, Bucharest, Bogdan PASCU, Ph.D. student, The Bucharest University of Economic Studies, Gabriel NASTASE, associate professor, PhD., Dimitrie Cantemir University, Bucharest
5. *Developing the concept of interstate space*, Bogdan PASCU, Ph.D. student, The Bucharest University of Economic Studies, Luoana PASCU, PhD., Researcher 1, ECOIND, Gabriel NASTASE, associate professor, PhD., "Dimitrie Cantemir" University

6. *Cancellation of the arbitration decision*, Ovidiu Horia MAICAN, assistant professor PhD., The Bucharest University of Economic Studies
7. *Recognition and enforcement of arbitration decisions*, Ovidiu Horia MAICAN, assistant professor PhD., The Bucharest University of Economic Studies
8. *The importance of Romanian tourism as an element for increasing the competitiveness of the national economy*, Cristina Maria PARTAL, PhD., Oleg MARGINA, PhD., Roxana Maria COSMA, Ph.D. student, The Bucharest University of Economic Studies
9. *A national ecological performance analyse - case study: Romania*, Monica Aureliana PETCU, professor PhD., The Bucharest University of Economic Studies, Iulia Maria DAVID-SOBOLEVSKI, professor PhD., The Bucharest University of Economic Studies, Irina Daniela CIȘMAȘU, associate professor PhD., The Bucharest University of Economic Studies
10. *Valuing land as a finite and precious resource: citizen perceptions on foreign land property safety limits in Romania*, Dacina Crina PETRESCU, associate professor, PhD., Babeș-Bolyai University, Cluj-Napoca, Ruxandra Mălina PETRESCU-MAG, associate professor, PhD., Babeș-Bolyai University, Cluj-Napoca
11. *Waste: judicial proceedings, practical solutions for the implementation of waste management infrastructure, and disposal consumer habits*, Ruxandra Mălina PETRESCU-MAG, associate professor PhD., Babeș-Bolyai University, Cluj-Napoca, Dacina Crina PETRESCU, associate professor, PhD., Babeș-Bolyai University, Cluj-Napoca, Romania, Nicoleta BICAN-BRIȘAN, associate professor, PhD., Babeș-Bolyai University, Cluj-Napoca, Nicoleta POP, Ph.D. student, Babeș-Bolyai University, Cluj-Napoca, Elena ROȘCULETE, assistant professor, PhD., University of Craiova
12. *Public institutions' management and green marketing strategies*, Maria Loredana POPESCU, assistant professors PhD., The Bucharest University of Economic Studies, Aurelia-Gabriela ANTONESCU, PhD., Alexandru NEGREA, professor PhD., University Ovidius Constanta
13. *Study on the perception of young Romanians on the eco-marketing and promotion efficiency in increasing the environmental NGOs competitiveness*, Ruxandra-Irina POPESCU, professor PhD., The Bucharest University of Economic Studies, Răzvan-Andrei CORBOȘ, associate professor PhD., The Bucharest University of Economic Studies, Ovidiu-Iulian BUNEA, Ph.D. student, The Bucharest University of Economic Studies
14. *A Romanian insight on corporate governance awareness*, Victoria STANCIU, professor PhD., The Bucharest University of Economic Studies, Florin Paul BRAN, Economist, PhD., BCR Erste, Bucharest

15. *Land degradation neutrality - a new pathway towards sustainable development in Romania*, Mihaela ȘTEFĂNESCU PhD., Liviu Alexandru CIUVĂȚ, PhD. scientific researcher, National Institute for Research and Development in Forestry Marin Drăcea (INCDS)
16. *The sustainability of Paulownia (Thunb.) Siebold & Zucc. Steud. Seeds development in the germination process as a result of cobalt irradiation*, Ancuta TENTER, Babes-Bolyai University, Cluj-Napoca, Liviu DĂRĂBAN, Babes-Bolyai University, Cluj-Napoca, Laura DĂRĂBAN, Babes-Bolyai University, Cluj-Napoca, Mihai VOEVOD, University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca
17. *Overview on the financing of the EU agriculture*, Alina ZAHARIA, PhD., The Bucharest University of Economic Studies, Daniela MIHAI, Ph.D. student, The Bucharest University of Economic Studies

## Section III

**11:30-13:00**

**Room 3304**

**Moderators**

PhD. Associate professor Carmen Valentina RĂDULESCU	The Bucharest University of Economic Studies
PhD. Assistant professor Elena BOGAN	The University of Bucharest
PhD. Assistant professor Stefania Cristina CUREA	The Bucharest University of Economic Studies
PhD. Student Marcela MITRITA	The Bucharest University of Economic Studies

1. *Media influence on popularizing the agricultural cooperative concept*, Maria Claudia DIACONEASA, PhD., The Bucharest University of Economic Studies
2. *Environment and energy resources*, Petrică Sorin ANGHELUȚĂ, PhD., National Qualifications Authority, Carmen Georgiana BADEA, Ph.D. student, The Bucharest University of Economic Studies, Iulian GOLE, Ph.D. student, University of Geneva
3. *Aspects of regional development and biodiversity*, Carmen Georgiana BADEA, Ph.D. student, The Bucharest University of Economic Studies, Petrică Sorin ANGHELUȚĂ, PhD., National Qualifications Authority, Iulian GOLE, Ph.D. student, University of Geneva
4. *Modern approaches for maintenance forecasting management*, Catalin Alexandru BARBU, Ph.D. student, The Bucharest University of Economic Studies, Romania, Marin ANDREICA professor PhD., The Bucharest

- University of Economic Studies, Ion-Petru POPESCU, Ph.D. student, The Bucharest University of Economic Studies
5. *From vegetal waste to bioethanol in agriculture*, Ștefania Daniela BRAN, Ph.D. student, The Bucharest University of Economic Studies, Iuliana DOBRE, associate professor PhD., The Bucharest University of Economic Studies
  6. *Public-private partnership and its influence on agricultural insurances*, Henriette-Cristiana CĂLIN, Ph.D. student, The Bucharest University of Economic Studies, Anca-Marina IZVORANU, Ph.D. student, The Bucharest University of Economic Studies
  7. *Globalization impact on foods sector: interaction between local and global*, Bogdan CHIRIPUCI, Ph.D. student, The Bucharest University of Economic Studies, Ioana TODIRICA, Ph.D. student, The Bucharest University of Economic Studies
  8. *Globalization as one way developmental process*, Constantin CONSTANTINESCU, Ph.D. student, The Bucharest University of Economic Studies, Raluca GEORGESCU, Ph.D. student, The Bucharest University of Economic Studies, Marcela MITRITA, Ph.D. student, The Bucharest University of Economic Studies
  9. *Analysis of the methodological framework for developing public investment projects*, Cristina DIMA, PhD. student, The Bucharest University of Economic Studies, Mihai CONSTANTINESCU, PhD. student, The Bucharest University of Economic Studies, Marius Nicolae PACURARI, PhD. student, The Bucharest University of Economic Studies
  10. *Study regarding the opinions of the managers of SMES from the Mures county concerning the importance of the implications in the social responsibility activities of the enterprises*, Alina Maria FARCAS (MOGA), Ph.D. student, The Bucharest University of Economy Studies
  11. *Introduction to the study livestock - interactions on agricultural environment*, Nicu Alin FARCUȚ, Ph.D. student, West University of Timisoara, Bogdan BAZGĂ, PhD., National expert on food security, Aurelian Vasile CHIRA, Ph.D. student, Alexandru Ioan Cuza Police Academy
  12. *Operational risk mapping and controlling - from theory to practice*, Violeta Mihaela GRECU (married SIMEDRE), Ph.D. student, The Bucharest University of Economic Studies, Ioana Maria POPESCU, Ph.D. student, The Bucharest University of Economic Studies
  13. *Taxation system in Romania and in the European Union*, Anca-Marina IZVORANU, Ph.D. student, The Bucharest University of Economic Studies, Henriette-Cristiana CALIN, Ph.D. student, The Bucharest University of Economic Studies

14. *Market share modelling and forecasting using markov chains in the case of romanian banking institutions*, Marta KOVACS (KISS), Ph.D. student, The Bucharest University of Economic Studies
15. *Environmental taxes in Europe Union*, Amelia DIACONU, assistant professor PhD., Artifex University, Bucharest, Olivia Florentina BALU, assistant professor PhD., Geneva University, Felicia STANCIOIU, professor PhD., The Bucharest University of Economic Studies
16. *Climate change and energy- Europe 2020 strategy*, Karimov TURAL, PhD.student, The Bucharest University of Economic Studies, Umid ABUZARLI, PhD.student, The Bucharest University of Economic Studies, Mammadzada LAMAN, PhD.student, The Bucharest University of Economic Studies

### **Section III**

**14:30-16:30**

**Room 3304**

**Moderators**

PhD.Professor Ion DOBRE

PhD.Professor Razvan Catalin DOBREA

PhD. Sorin Petrica ANGHELUTA

PhD. Ghenade CIOBANU

The Bucharest University of Economic Studies

The Bucharest University of Economic Studies

National Qualifications Authority, Romania

INCSMPS, Bucharest, Romania

1. *Measuring innovation for sustainable business development*, Camelia MAEREAN, Ph.D. student, The Bucharest University of Economic Studies, Eugen ALBU, Ph.D. student, The Bucharest University of Economic Studies
2. *Dimensions of sustainable management in the corporate hotel industry in Romania and Estonia*, Pavel STANCIU, assistant professor PhD., "Stefan cel Mare" University, Suceava, Gabriela CÎȘLARU, researcher, "Stefan cel Mare" University, Suceava, Raluca Georgiana LĂDARU, associate professor PhD., The Bucharest University of Economic studies
3. *Empowering natural capital by using human resources*, Marcela MITRITA, Ph.D. student, The Bucharest University of Economic Studies, Raluca GEORGESCU, Ph.D. student, The Bucharest University of Economic Studies, Constantin CONSTANTINESCU, Ph.D. student, The Bucharest University of Economic Studies
4. *Consumer perception of organic products*, Maria NICA, Ph.D. student, The Bucharest University of Economic Studies, Ionut Laurentiu PETRE, Ph.D. student, The Bucharest University of Economic Studies



5. *Ontology support for management of public authorities*, Gheorghe PĂCURAR, Ph.D. student, The Bucharest University of Economic Studies, Ionica Loredana STAN, Ph.D. student, The Bucharest University of Economic Studies
6. *Positive effects of the competitive cities in the socio-economic development process at the territorial level*, Andra- Madalina PANTILIE, Ph.D. student, The Bucharest University of Economic Studies, Ion DOBRE, professor PhD., The Bucharest University of Economic Studies
7. *An it solution to support the managerial decisions in preventing financial failure*, Ion-Petru POPESCU, Ph.D. student, The Bucharest University of Economic Studies, Marin ANDREICA, professor PhD., The Bucharest University of Economic Studies, Madalina Ecaterina POPESCU, associate professor PhD., The Bucharest University of Economic Studies, senior researcher, The National Scientific Research Institute for Labor and Social Protection Bucharest
8. *Green economy*, Alexandru Gabriel POSTOLACHE, Ph.D. student, The Bucharest University of Economic Studies, Victor-Adrian TROACA, Ph.D. student, The Bucharest University of Economic Studies
9. *Enjoy! It's from Europe 2017": the simple programmer preliminary results and the funds accessed by Romania*, Laurentiu RADU, Ph.D. student, The Bucharest University of Economic Studies
10. *Allocation of budget resources - main instrument for intervention of public authorities in the economic and social life*, Ionica - Loredana STAN, Ph.D. student, The Bucharest University of Economic Studies, Gheorghe PĂCURAR, Ph.D. student, The Bucharest University of Economic Studies
11. *Overview on traditional foods market in Europe*, Ioana TODIRICA Ph.D. student, The Bucharest University of Economic Studies
12. *Globalization - the effects of the real estate market on the environment*, Victor-Adrian TROACĂ, Ph.D. student, The Bucharest University of Economic Studies, Alexandru POSTOLACHE, Ph.D. student, The Bucharest University of Economic Studies
13. *New performance drives in automotive industry*, Larisa STOEAN, Ph.D. student, The Bucharest University of Economic Studies
14. *Analyze of waste management at the European Union level*, Mammadzada LAMAN, PhD.student, The Bucharest University of Economic Studies, Karimov TURAL, PhD.student, The Bucharest University of Economic Studies, Umid ABUZARLI, PhD.student The Bucharest University of Economic Studies

## Contents

<i>ECONOMIC AND ENVIRONMENTAL SUSTAINABILITY IN AGRICULTURE: THE RESULTS GENERATED BY BIODEGRADABLE PRODUCTIVE MEANS</i> , Valeria ALLEGRA, Alfonso Silvio ZARBÀ.....	7
<i>EVOLUTIONARY TRENDS OF THE AGRO-FOOD ENTERPRISES AND RELATED ATMOSPHERIC EMISSION: THE CASE OF ITALY</i> , Valeria ALLEGRA, Salvatore BRACCO, Alfonso Silvio ZARBÀ.....	13
<i>THE CURRENT STATE OF WASTE MANGEMENT IN ROMANIA</i> , Cristina ALPOPI, Oleg MARGINA, Cristina Maria PARTAL.....	19
<i>A COMPARISON OF CONSUMERS' WILLINGNESS TO PAY AND INFERRED VALUATION IN THE CASE OF WINE</i> , Mario AMATO, Adele COPPOLA, Maria Teresa GORGITANO.....	23
<i>THE EFFECTS OF GLOBALIZATION ON MANUFACTURE OF OTHER FOOD PRODUCTS IN ROMANIA</i> , Ion ANGHEL, Ștefania-Cristina CUREA, Ana-Maria POPESCU .....	31
<i>ENVIRONMENT AND ENERGY RESOURCES</i> , Petrică Sorin ANGHELUȚĂ, Carmen Georgiana BADEA, Iulian GOLE.....	36
<i>ASPECTS OF REGIONAL DEVELOPMENT AND BIODIVERSITY</i> , Carmen Georgiana BADEA, Petrică Sorin ANGHELUȚĂ, Iulian GOLE.....	42
<i>ANALYSIS OF ENERGY TRENDS AT EU LEVEL</i> , Evelina Petronela BALU, Ovidiu BUZOIANU, Iulia LUCHIAN.....	49
<i>MODERN APPROACHES FOR MAINTENANCE FORECASTING MANAGEMENT</i> , Catalin Alexandru BARBU, Marin ANDREICA, Ion-Petru POPESCU.....	53
<i>REVISITING THE PALM OIL BOOM IN EUROPE AS A SOURCE OF RENEWABLE ENERGY: EVIDENCE FROM TIME SERIES ANALYSIS</i> , Deborah BENTIVOGLIO, Giorgia BUCCI, Adele FINCO.....	59
<i>LIFE CYCLE IMPACT OF INDUSTRIAL AQUACULTURE SYSTEMS: A REVIEW</i> , Carlo BIBBIANI, Baldassare FRONTE, Luca INCROCCI, Carlo Alberto CAMPIOTTI.....	67
<i>TRADITIONAL BEEKEEPING IN RURAL AREAS: PROFITABILITY ANALYSIS AND FEASIBILITY OF POLLINATION SERVICE</i> , Simone BLANC, Filippo BRUN, Giuseppe DI VITA, Angela MOSSO .....	72
<i>THE BUSINESS-AUTOMATED DATA ECONOMY MODEL, 2018 EARLY UPDATE</i> , Dumitru-Alexandru BODISLAV, Florina BRAN, Loredana POPESCU.....	80
<i>THE MUSEUM TOURISM IN BUCHAREST, ROMANIA</i> , Elena BOGAN, Dana Maria (OPREA) CONSTANTIN, Elena GRIGORE.....	85
<i>THE PERSPECTIVES OF SPORTS TOURISM DEVELOPMENT IN BUCHAREST, ROMANIA</i> , Elena BOGAN, Erika Alexandra MOLDOVEANU, Mihaela Ioana IAMANDEI.....	92
<i>AGRICULTURE AND CIRCULAR PARADIGM: A CASE STUDY</i> , Irene Paola BORRELLI.....	101
<i>INTENSIVE FARMING VERSUS-AGRICULTURE ENVIRONMENTALLY SUSTAINABLE</i> , Artur- Lucian BRĂILEANU.....	105
<i>FROM VEGETAL WASTE TO BIOETHANOL IN AGRICULTURE</i> , Ștefania Daniela BRAN, Iuliana DOBRE.....	108

<i>PRECISION AGRICULTURE AS A DRIVER FOR SUSTAINABLE FARMING SYSTEMS: STATE OF ART IN LITTERATURE AND RESEARCH</i> , Giorgia BUCCI, Deborah BENTIVOGLIO, Adele FINCO.....	114
<i>GLOBALIZATION - PROS AND CONS</i> , Sorin BURLACU, Corneliu GUTU, Florin Octavian MATEI.....	122
<i>ANALYSE OF FORESTRY IN EUROPE UNION</i> , Ovidiu BUZOIANU, Evelina Petronela BALU, Iulia LUCHIAN.....	126
<i>EUROPEAN UNION STRATEGY ON COMBATING CLIMATE CHANGE AND PROMOTING ENERGY FROM RENEWABLE SOURCES</i> , Paul CALANTER.....	130
<i>PUBLIC-PRIVATE PARTNERSHIP AND ITS INFLUENCE ON AGRICULTURAL INSURANCES</i> , Henriette-Cristiana CĂLIN, Anca-Marina IZVORANU .....	135
<i>GREEN COVERINGS FOR IMPROVING ENERGY EFFICIENCY OF BUILDINGS</i> , Carlo Alberto CAMPIOTTI, Germina GIAGNACOVO, Luca NENCINI, Alessandro CAMPIOTTI .....	139
<i>GLOBALIZATION IMPACT ON FOODS SECTOR: INTERACTION BETWEEN LOCAL AND GLOBAL</i> , Bogdan CHIRIPUCI, Ioana TODIRICA.....	144
<i>ASPECTS OF UNIVERSITY EDUCATION IN ROMANIA AND NEW OPPORTUNITIES FOR DEVELOPMENT</i> , Ghenadie CIOBANU, Angela ANDREICA, Florin Octavian MATEI.....	148
<i>ECO-INNOVATION AND THE DEVELOPMENT OF NEW NEW OPPORTUNITIES ON SMES</i> , Ghenadie CIOBANU, Cătălin GHINĂRARU, Cristian TEODOR.....	154
<i>ANALYSIS OF THE BUCHAREST RESIDENTIAL MARKET THROUGH THE LENS OF RETROFITTED APARTMENTS</i> , Costin CIORA, Ion ANGHEL, Ștefania - Cristina CUREA.....	160
<i>THE ANALYSIS OF ROMANIA'S POTENTIAL FOT JOINING ECO-INNOVSTION AND INCREASING COMPETITIVENESS</i> , Irina Daniela CIȘMAȘU, Alma Maria PETCU.....	165
<i>THE IMPACT OF INTELLECTUAL CAPITAL ON THE RESPONSIBILITY AND SUSTAINABILITY OF THE COMPANY. EXAMPLE OF AN ASSESSMENT OF THE SOCIALLY RESPONSIBLE INVESTMENT</i> , Sorin Adrian CIUPITU, Monica NIȚĂ.....	173
<i>DETERMINATION AND ANALYSIS OF THE REPUTATION CAPITAL INDEX. BEST LOGISTIC EXPERTS CASE STUDY</i> , Sorin Adrian CIUPITU, Monica NIȚĂ.....	179
<i>GLOBALIZATION AS ONE WAY DEVELOPMENTAL PROCESS</i> , Constantin CONSTANTINESCU, Raluca GEORGESCU, Marcela MITRITA .....	185
<i>EVALUATION OF ENERGY EFFICIENCY OF BUILDINGS</i> , Raluca Florentina CREȚU, Romeo Cătălin CREȚU.....	188
<i>SUSTAINABLE METHODS TO ASSESS A TAX BUILDING</i> , Raluca Florentina CREȚU.....	195
<i>MEDIA INFLUENCE ON POPULARIZING THE AGRICULTURAL COOPERATIVE CONCEPT</i> , Maria Claudia DIACONEASA.....	202
<i>ENVIRONMENTAL TAXES IN EUROPE UNION</i> , Amelia DIACONU, Olivia Florentina BALU, Felicia STANCIOIU .....	208
<i>ANALYSIS OF THE METHODOLOGICAL FRAMEWORK FOR DEVELOPING PUBLIC INVESTMENT PROJECTS</i> , Cristina DIMA, Mihai CONSTANTINESCU, Marius Nicolae PACURARI.....	212

<i>THE ROLE OF INNOVATION IN INCREASING THE SUSTAINABILITY OF SERVICE ORGANIZATIONS,</i> Razvan Catalin DOBREA, Cristina DIMA, Eugen ALBU.....	217
<i>STUDY REGARDING THE OPINIONS OF THE MANAGERS OF SMEs FROM THE MURES COUNTY CONCERNING THE IMPORTANCE OF THE IMPLICATIONS IN THE SOCIAL RESPONSIBILITY ACTIVITIES OF THE ENTERPRISES,</i> Alina Maria FARCAS (MOGA).....	223
<i>INTRODUCTION TO THE STUDY LIVESTOCK - INTERACTIONS ON AGRICULTURAL ENVIRONMENT,</i> Nicu Alin FARCUT, Bogdan BAZGĂ, Aurelian Vasile CHIRA.....	227
<i>AN OVERVIEW OF FOOD WASTE PHENOMENON: BY PROBLEM TO RESOURCE,</i> Vera Teresa FOTI, Luisa STURIALE, Giuseppe TIMPANARO.....	232
<i>WHICH WINERY VISIT DO WINE TOURISTS PREFER? AN EXPLORATIVE ANALYSIS IN ITALY,</i> Elisa GIAMPIETRI, Petra DONÀ DALLE ROSE, Elettra MORLIN .....	241
<i>OPERATIONAL RISK MAPPING AND CONTROLLING - FROM THEORY TO PRACTICE,</i> Violeta Mihaela GRECU (SIMEDRE), Ioana Maria POPESCU .....	250
<i>INCOME INFLUENCE ON DIET AND HEALTH,</i> Raluca Andreea ION, Cristian George POPESCU.....	254
<i>INDUSTRIAL PRODUCTION IN EUROPE UNION,</i> Mariana IOVITU, Olivia Florentina BALU, Amelia DIACONU.....	260
<i>GLOBALIZATION AND REGIONAL DEVELOPMENT FROM A DURABLE PERSPECTIVE,</i> Carmen Valentina RADULESCU, Irina Elena PETRESCU, Ion PARGARU.....	264
<i>TAXATION SYSTEM IN ROMANIA AND IN THE EUROPEAN UNION,</i> Anca-Marina IZVORANU, Henriette-Cristiana CALIN .....	268
<i>MARKET SHARE MODELLING AND FORECASTING USING MARKOV CHAINS IN THE CASE OF ROMANIAN BANKING INSTITUTIONS,</i> Marta KOVACS (KISS).....	274
<i>PERFORMANCE IN DISMANTLING REGIONAL MARKETS: TRANSNATIONAL MARKETS,</i> Luoana PASCU, Bogdan PASCU, Gabriel NASTASE.....	279
<i>ANALYZE OF WASTE MANAGEMENT AT THE EUROPEAN UNION LEVEL,</i> Mammadzada LAMAN, Karimov TURAL, Umid ABUZARLI.....	282
<i>VALORIZATION OF CAROB BIOMASS FOR BIOETHANOL PRODUCTION,</i> Maurizio LANFRANCHI, Carlo GIANNETTO, Francesco Spiridione SARDINA, Salvatore ALFANO.....	286
<i>MEASURING INNOVATION FOR SUSTAINABLE BUSINESS DEVELOPMENT,</i> Camelia MAERAN, Eugen ALBU.....	292
<i>CANCELLATION OF THE ARBITRATION DECISION,</i> Ovidiu Horia MAICAN. ....	298
<i>RECOGNITION AND ENFORCEMENT OF ARBITRATION DECISIONS,</i> Ovidiu Horia MAICAN .....	302
<i>MARKETING STRATEGIES FOR ANIMAL WELFARE MEAT IDENTIFICATION: COMPARISON OF PREFERENCES BETWEEN MILLENNIAL AND CONVENTIONAL CONSUMERS,</i> Stefano MASSAGLIA, Valentina Maria MERLINO, Danielle BORRA .....	305
<i>CONSUMER PERCEPTION OF ORGANIC BLUEBERRY LABELING IN ITALY,</i> Stefano MASSAGLIA, Valentina Maria MERLINO, Danielle BORRA, Cristiana PEANO .....	312

<i>WINE, SUSTAINABILITY AND THE TERRITORIAL GENETIC IDENTITY</i> , Rosa MISSO, Gian Paolo CESARETTI.....	319
<i>AGRI-FOOD, PLASTIC AND SUSTAINABILITY</i> , Rosa MISSO, Monica VARLESE.....	324
<i>EMPOWERING NATURAL CAPITAL BY USING HUMAN RESOURCES</i> , Marcela MITRITA , Raluca GEORGESCU, Constantin CONSTANTINESCU .....	331
<i>CONSUMER PERCEPTION OF ORGANIC PRODUCTS</i> , Maria NICA, Ionut Laurentiu PETRE.....	335
<i>DETERMINANTS OF ENVIRONMENTALLY-FRIENDLY FARMING</i> , Silvia NOVELLI.....	340
<i>ONTOLOGY SUPPORT FOR MANAGEMENT OF PUBLIC AUTHORITIES</i> , Gheorghe PĂCURAR, Ionica Loredana STAN.....	347
<i>POSITIVE EFFECTS OF THE COMPETITIVE CITIES IN THE SOCIO-ECONOMIC DEVELOPMENT PROCESS AT THE TERRITORIAL LEVEL</i> , Andra- Madalina PANTILIE, Ion DOBRE.....	352
<i>ASSESSING WASTE AND BY-PRODUCTS FROM WINE-GROWING SECTOR IN MT ETNA</i> , Gioacchino PAPPALARDO, Mariagrazia SIGNORELLO, Biagio PECORINO.....	356
<i>THE IMPORTANCE OF ROMANIAN TOURISM AS AN ELEMENT FOR INCREASING THE COMPETITIVENESS OF THE NATIONAL ECONOMY</i> , Cristina Maria PARTAL, Oleg MARGINA, Roxana Maria COSMA.....	363
<i>DEVELOPING THE CONCEPT OF INTERSTATE SPACE</i> , Bogdan PASCU, Luoana PASCU, Gabriel NASTASE.....	367
<i>PRICE TRANSMISSION OF US SOYBEAN FUTURES INTO ITALIAN SPOT MARKET</i> , Carlotta PENONE, Samuele TRESTINI.....	370
<i>THE TEXTILE HEMP CHAIN: VALUE ANALYSIS, ECONOMIC AND ENVIRONMENTAL BENEFITS</i> , Raffaella PERGAMO, Lucia BRIAMONTE, Domenico CERRATO.....	375
<i>A NATIONAL ECOLOGICAL PERFORMANCE ANALYSE – CASE STUDY: ROMANIA</i> , Monica Aureliana PETCU, Iulia Maria DAVID-SOBOLEVSCHI, Irina Daniela CIȘMAȘU.....	379
<i>VALUING LAND AS A FINITE AND PRECIOUS RESOURCE: CITIZEN PERCEPTIONS ON FOREIGN LAND PROPERTY SAFETY LIMITS IN ROMANIA</i> , Dacina Crina Petrescu, Ruxandra Mălina Petrescu-Mag...386	
<i>WASTE: JUDICIAL PROCEEDINGS, PRACTICAL SOLUTIONS FOR THE IMPLEMENTATION OF WASTE MANAGEMENT INFRASTRUCTURE, AND DISPOSAL CONSUMER HABITS</i> , Ruxandra Mălina PETRESCU-MAG, Dacina Crina PETRESCU, Nicoleta BICAN-BRIȘAN, Nicoleta POP, Elena ROȘCULETE.....	392
<i>RESIDENT ATTITUDE TOWARD: THE MEDIATION EFFECT OF QUALITY OF LIFE IN THE HYBLAEAN DISTRICT</i> , Silvia PLATANIA, Cinzia VULLO, Martina MORANDO.....	400
<i>AN IT SOLUTION TO SUPPORT THE MANAGERIAL DECISIONS IN PREVENTING FINANCIAL FAILURE</i> , Ion-Petru POPESCU, Marin ANDREICA , Madalina Ecaterina POPESCU.....	406
<i>PUBLIC INSTITUTIONS’ MANAGEMENT AND GREEN MARKETING STRATEGIES</i> , Maria Loredana POPESCU, Aurelia-Gabriela ANTONESCU, Alexandru NEGREA .....	412
<i>STUDY ON THE PERCEPTION OF YOUNG ROMANIANS ON THE ECO-MARKETING AND PROMOTION EFFICIENCY IN INCREASING THE ENVIRONMENTAL NGOs COMPETITIVENESS</i> , Ruxandra-Irina POPESCU, Răzvan-Andrei CORBOȘ, Ovidiu-Iulian BUNEA.....	417

<i>GREEN ECONOMY</i> , Alexandru Gabriel POSTOLACHE, Victor-Adrian TROACA .....	423
<i>ENJOY! IT'S FROM EUROPE 2017: THE SIMPLE PROGRAMME PRELIMINARY RESULTS AND THE FUNDS ACCESSED BY ROMANIA</i> , Laurentiu RADU.....	428
<i>THE ADVANTAGES OF ECONOMIC GROWTH POLICY IN ROMANIA</i> , Dumitru-Alexandru BODISLAV, Florina BRAN, Irina Elena PETRESCU.....	433
<i>URBAN GARDENS IN THE CITY OF NAPLES: AN EMPIRICAL ANALYSIS</i> , Vincenzo RUSCIANO, Gennaro CIVERO, Debora SCARPATO.....	436
<i>REGIONALIZATION PROCESSES IN AGRICULTURAL AND ENVIRONMENTAL POLICIES. A REGIONAL TYPOLOGIES COMPARATIVE ANALYSIS TO IDENTIFYING FRAGILE AREAS</i> , G. Fabiola SAFONTE, Ferdinando TRAPANI, Claudio BELLIA .....	443
<i>CRAFT BEER AND INTENSITY OF PURCHASE: A PSYCHOLOGICAL ANALYSIS OF CONSUMER INTENTIONS</i> , Giuseppe SANTISI, Martina MORANDO, Anna SCIACCA .....	451
<i>A PSYCHOLOGICAL ANALYSIS OF WINE AND FOOD CONSUMPTION IN SICILY: THE MARKETING EXPERIENCE IMPLICATION</i> , Giuseppe SANTISI, Silvia PLATANIA, Cinzia VULLO.....	458
<i>WHAT DRIVES RECYCLING BEHAVIOR? THE ROLE OF SOCIAL TRUST, PERCEIVED RISK, AND SELF-EFFICACY</i> , Francesca SCAFUTO, Valeria SODANO, Francesco LA BARBERA.....	463
<i>THE LIFE QUALITY IN TERMS OF THE COORDINATE SYSTEM: ENVIRONMENTAL FACTORS – HEALTH SAVING – PROPERTY VALUE</i> , Anna SCHMELEVA, Robert NIZHEGORODTSEV .....	470
<i>SOCIAL FARM ACTION VALUE: THE CASE STUDY OF “CASE DI MARIA”</i> , Alessandro SCUDERI, Vera FOTI, Giuseppe STELLA.....	475
<i>ECONOMIC EVALUATION OF INNOVATIVE INVESTMENTS IN AGRI-FOOD CHAIN</i> , Alessandro SCUDERI, Luisa STURIALE, Giuseppe TIMPANARO.....	482
<i>ESTIMATING WILLINGNESS TO PAY FOR DIGESTATE: EVIDENCE FROM AN ECONOMIC EXPERIMENT FROM SICILIAN FARMERS</i> , Roberta SELVAGGI, Gaetano CHINNICI, Gioacchino PAPPALARDO .....	489
<i>ESTIMATE OF WILLINGNESS TO PAY FOR ETNA RED WINES: EVALUATION OF THE EXISTENCE OF AN EXPERIENTIAL COMPONENT IN PURCHASE PHASE</i> , Roberta SELVAGGI, Marialuisa VERDUCI, Biagio PECORINO.....	494
<i>INVESTIGATING THE INTENTION TO REDUCE PALM OIL CONSUMPTION</i> , Valeria SODANO, Roberta RIVERSO, Francesca SCAFUTO.....	500
<i>THE PROCESS OF SUCCEEDING A FAMILY BASED SMALL MEDIUM ENTERPRISE IN THE FAMILY - A REPORT BASED ON PERSONAL DONE INTERVIEWS</i> , Marc SOMMER, Oana Alexandra VOCHIN, Ramezani Ahmadabadi (Dadfar) ELHAM.....	506
<i>ALLOCATION OF BUDGET RESOURCES - MAIN INSTRUMENT FOR INTERVENTION OF PUBLIC AUTHORITIES IN THE ECONOMIC AND SOCIAL LIFE</i> , Ionica -Loredana STAN, Gheorghe PĂCURAR.....	510
<i>A ROMANIAN INSIGHT ON CORPORATE GOVERNANCE AWARENESS</i> , Victoria STANCIU, Florin Paul BRAN.....	514

<i>DIMENSIONS OF SUSTAINABLE MANAGEMENT IN THE CORPORATE HOTEL INDUSTRY IN ROMANIA AND ESTONIA</i> , Pavel STANCIU, Gabriela CÎȘLARU, Raluca Georgiana LĂDARU.....	518
<i>LAND DEGRADATION NEUTRALITY - A NEW PATHWAY TOWARDS SUSTAINABLE DEVELOPMENT IN ROMANIA</i> , Mihaela ȘTEFĂNESCU, Liviu Alexandru CIUVĂȚ.....	526
<i>NEW PERFORMANCE DRIVES IN AUTOMOTIVE INDUSTRY</i> , Larisa STOEAN.....	530
<i>THE SUSTAINABILITY OF PAULOWNIA (THUNB.) SIEBOLD &amp; ZUCC. STEUD. SEEDS DEVELOPMENT IN THE GERMINATION PROCESS AS A RESULT OF COBALT IRRADIATION</i> , Ancuta TENTER, Liviu DĂRĂBAN, Laura DĂRĂBAN , Mihai VOEVOD.....	537
<i>OVERVIEW ON TRADITIONAL FOODS MARKET IN EUROPE</i> , Ioana TODIRICA.....	543
<i>GLOBALIZATION – THE EFFECTS OF THE REAL ESTATE MARKET ON THE ENVIRONMENT</i> , Victor-Adrian TROACĂ, Alexandru POSTOLACHE.....	547
<i>CLIMATE CHANGE AND ENERGY- EUROPE 2020 STRATEGY</i> , Karimov TURAL, Umid ABUZARLI, Mammadzada LAMAN.....	552
<i>AGRICULTURE, RURAL TOURISM AND CIRCULAR PARADIGM</i> , Viola IMMACOLATA.....	556
<i>ROMANIAN AGRICULTURE UNDER THE PRESSURE OF CLIMATE CHANGE AND OTHER RISK FACTORS</i> , Radu VOICU, Carmen Valentina RADULESCU.....	563
<i>CLUSTER POLICY - A DEVELOPMENT MODEL</i> , Axel Ulrich WIESENER, Marc SOMMER, Elena-Alice CÎRSTEA.....	570
<i>OVERVIEW ON THE FINANCING OF THE EU AGRICULTURE</i> , Alina ZAHARIA, Daniela MIHAI.....	575

## REGIONALIZATION PROCESSES IN AGRICULTURAL AND ENVIRONMENTAL POLICIES. A REGIONAL TYPOLOGIES COMPARATIVE ANALYSIS TO IDENTIFYING FRAGILE AREAS

G. Fabiola SAFONTE

PhD. Agribusiness Economics, "Institute of Research and Promotion of Inner Area of Sicily", Italy, [irpais.institute@gmail.com](mailto:irpais.institute@gmail.com)

Ferdinando TRAPANI

PhD. Urban Planning, "University of Palermo", Italy, [ferdinando.trapani@unipa.it](mailto:ferdinando.trapani@unipa.it)

Claudio BELLIA

assistant professor, "University of Catania", Italy, [c.bellia@unict.it](mailto:c.bellia@unict.it)

### ABSTRACT

*This paper, effecting an analysis comparative of the different regional typologies, it analyzes the concept of weakness, with reference to the phenomena of degrade and disarrangement of the grounds, inside the processes of identification of functional territorial articulations to the statistical analysis and the decisions of policy, showing as despite the existence of a fed together of interpretations none of the examined typologies both indeed able to furnish a representation suitable of the phenomenon, since the different procedures of regionalization introduce not suitable discriminatory methodologies.*

### KEYWORDS

*Regional typologies, fragile areas, agricultural and environmental policies, abandonment of agriculture, depopulation, hydrogeological instability, vulnerability, regional planning.*

### INTRODUCTION

The paper intends to analyze how the concept of territorial fragility is declined within the various policy actions that, indirectly, intervene in relation to the phenomena of hydrogeological instability generated by the process of radical territorial transformation determined by the progressive abandonment of agriculture and the consequent phenomena of depopulation. These phenomena have invested a large part of the Italian territory and can be read, in numerical terms, with the reduction of the agricultural population from 8.2 million units active in the primary sector of 1951 to the 851 thousand employed workers detected by of the Istat Labor Force Survey of 2011. This decline in employment was accompanied by the mechanization and intensification of land use, but also by a significant restriction of cultivated areas: from 20.6 million hectares of UAA in 1961 to the current 12.7 million, taken over by the Census of Agriculture 2010. This led not only to the abandonment of crops, in marginal land, but also to the widespread disappearance of a maintenance facility that traditional agricultural companies and their economies exercised on the territory.

Since 1961, the year of the first agricultural census, when farms managed a total area of the farm (SAT) of 26.5 million hectares, to 2010, year of the last census, in which the same area has been reduced to 17 million hectares, there has been a variation that touches the one hundred thousand square kilometers, or almost a third of the total territorial extension of the country, modifying the balance between environmental dynamics, widespread attention and security of settlements with conspicuous results in terms of fragility of the soil-surface system and environmental hazard, generating negative environmental impacts and territorial deconstruction (Vindigni & La Terra 2016).

This is expressed numerically in about 530,000 landslides involving 7.3% of the national territory, with 19.3% of the national territory of areas at potential risk equal to 19.3%, of which 7.9% is more dangerous, 47,747 square kilometers subject to landslides and flood risks. Both the landslide and the hydraulic risks, taken as a whole, as noted in the Ispra 2015 Report affect over 7,145 municipalities, equal to 88.3% of the municipalities, and 15.8% of the Italian territory.

From what has been outlined it is clear that if land maintenance is a necessary condition of safety and environmental quality, the same is at the same time the main ecological factor capable of determining the living conditions of ecosystems and human communities and one of the main elements of danger for settlements and activities, target of possible flood and landslide events. In this regard, the knowledge of the regulatory components of all the processes and phenomena that insist on the territory plays a strategic role in the development of policy actions implemented with a view to sustainability and, therefore, aimed at combining socio-economic with environmental factors (Safonte and Brunori 2013, 2013b). However, if the available information regarding the uses and the territorial knowledge, even if perfectible, allow to outline a uniform picture of the situation of an area, the same can not be said about the knowledge and understanding of local dynamics, in terms of risk, degradation, fragility or hydro-geological vulnerability with reference to territories defined as fragile.

### 1. CONCEPTUAL FRAMEWORK

#### 1.1. Territorial fragility and its determinants

The negative impacts on the environment, on biodiversity and the landscape that have accompanied the changes in agriculture – well documented in literature (Baldock 1996, MacDonald, Crabtree et al. 2000, Buckwell and ARMSTRONG-BROWN 2004, Strijker 2005, Mottet, Ladet et al. 2006, Benayas, Martins et al. 2007, Verburg and Overmars 2009, Renwick, Jansson et al. 2013, Vindigni et al. 2013) – are to be charged with the process of polarization which sees the continuous intensification of the use of agricultural land to which it is opposed the phenomenon of abandonment and depopulation (Baldock 1996, Platania et al. 2016) that has altered the balance between adequate conditions of safety and exposure to environmental risk, in the relationship between the dynamics of natural agents and the ways of anthropogenic use of the territory, thus determining whatever in many environmental reports, studies and various documents is defined as territorial fragility.

In an attempt to provide a first conceptual definition of the term "territorial fragility", to understand what should be understood by *fragile area* we carried out an initial research, not exhaustive, through the search platform offered by Google (research carried out on



January 20, 2018) by entering the Italian keyword “fragilità territoriale”. 506,000 results were returned, whose areas of reference are mainly related, on the one hand (most of the items), to a social dimension, ranging from the concept of individual fragility, mostly linked to psychological dimensions, to the identification of subgroups of the population (elderly, young people) in conditions of hardship, deprivation and exclusion and, on the other (but only in a residual way) refer to the fragility of the territory in its geological and environmental elements.

Transposing in English language, the keyword “territorial fragility” returns 349,000 results, whose reference areas refer to a conceptualization that mostly refers to the States and to a supra-national dimension, being mainly linked to the themes of food sovereignty, safety, conflicts, disparities in wealth and human rights. Further refining the search, in Italian, through the keyword “fragility of land”, Google returns instead 854,000 items, most of which, although with different meanings, are linked to geological and environmental issues.

Deepening the level of analysis, from the study of the results returned, it seems that the difficulty in formulating a definition of territorial fragility, referring to strictly environmental issues, derives from the fact that the territorial structure of an area varies according to the type of use of the soil, of its biophysical characteristics, but also depends on the socio-economic parameters of a given territory.

The range is so wide and the socio-economic conditions are so different that no definition covers all the relevant factors. The semantic area of the concept of territorial fragility, in fact, borders on the concept of weakness and marginality that completes the thematic horizons: marginal, fragile, vulnerable, degraded, internal, lagging behind, rural, peripheral, forgotten, with structural problems, and so on. These are the locutions traced in literature that are alternatively used for its conceptual description.

On the other hand, even the different types of degradation and instability (Benedini and Gisotti 1985) present in themselves such a variety that for simplicity can be traced back to hydrogeological instability in the strict sense – that is the set of those processes that go from the contained and slow erosions to the more consistent forms of the superficial and subsurface degradation of the slopes up to the massive and severe forms of landslides – mainly located in areas defined as fragile, despite each of these categorizations has significant diversifications that are also internally relevant, in relation to the geological and geomorphological factors that characterize the different territorial areas. However, in most of the studies and documents examined, the concept of fragility is similar, being used as an alternative or synonymous, with that of *biophysical vulnerability*, understood as risk or exposure to dangers, represented by the possibility of losses due to the interaction between the company and the biophysical environment. These studies (DHA 1992, Cannon 1994, Luger et al. 2000, Hollenstein et al. 2002, Glade 2003, Glade and Crozier 2005, Adger 2006, Barredo 2007, Birkmann 2007, Nixon 2015) examine the source of risk biophysical and focus on the distribution of certain dangerous conditions, the settlement of the population in risky areas and the degree of loss associated with the occurrence of a particular event. Proximity to the source, intensity, duration, frequency or probability of the event and spatial impact are the main features of these analyzes. The main factors that characterize the “geo-environmental risk” can be categorized into: geological, hydraulic, seismic, volcanic, climatic, anthropic factors.

## 1.2. The policies intervention

In Italy, the specific tools for hydrogeological risks are the *Hydrogeological Asset Plan* (PSAI or PAI) – which has the value of the Sector Territorial Plan, and is the tool (cognitive, regulatory and technical-operational) through which are planned and planned actions, interventions and rules of use regarding the defense against hydrogeological risk – and the *Flood Risk Management Plan* (PGRA), an instrument for achieving the objectives of Directive 2000/60/EC (Floods Directive) implemented in Italy with Legislative Decree 49/2010, which initiated a new phase in the national flood risk management policy. The PGRA directs the action on the most significant risk areas for each river basin district, organized and hierarchized with respect to all the areas at risk and defines the safety objectives and the priorities of intervention on the district scale, in a concerted manner between all administrations and public entities, with the participation of stakeholders and local actors (Carrà et al. 2016).

In the direction of consolidation of environmental and climate performance, the Common Agricultural Policy intervenes for the current planning phase (2014-2020) through a strengthening of the synergies between agricultural policies, sustainability and valorization of public goods produced in agriculture (Bellia and Safonte 2015). Among the proposed tools to achieve these objectives, there is the introduction of a “green” obligatory payment (*greening*) for agricultural practices that are beneficial for the climate and the environment, which is equal to 30% of the total financial endowment of the Fund European Agricultural for Rural Development (EAFRD) for Rural Development Programs (RDP) earmarked for operations aimed at environment and the protection of natural resources supporting policies and for mitigation and adaptation to climate change. Therefore, Rural Development Policy is one of the policy instruments of reference because it offers a diversified set of targeted and effective incentives to encourage the dissemination of cultivation systems implemented in respect of the environment and of management practices and investments in rural areas that can promote the provision of public goods and ecosystem services (Bellia and Safonte 2012, Bellia et al. 2016).

As stated in the Partnership Agreement, the National Strategy of Internal Areas declares that he wants to intervene in a direct and effective way on the problems related to hydrogeological instability. This strategy is an Italian policy action specifically dedicated to those areas of the country that are characterized by a higher differentiated degree of marginality and disadvantage; its primary objective is the inversion of demographic trends, with the reduction of emigration flows, the attraction of new residents, the change of age composition in favor of the younger classes and the recovery of birth. The incisive nature of this policy action is to ensure the integration and the thematization of natural and anthropic risk as a priority criterion for the choice of places on which to apply public action, through a strategy based on maintenance, prevention, resilience, adaptation and (ecosystem) services.

## 1.3 The measurement of the territorial fragility

With regard to the hydro-geological risk, several studies carried out both at european level (Nixon 2015) and at national level show how currently available information on natural risks is rather fragmented, and how the relative quality is not homogeneous with

respect to the different dimensions of risk, also stressing, on the one hand, the lack of methodological uniformity in the perimetrations of dangerous areas that determines substantial regional disparities in the application of constraints and, on the other hand, delays in implementation, transposition and cartographic updating. In fact, depending on the type of risk considered, there are significant differences in the completeness, quality and granularity of the existing databases, even among the different EU Member States.

In Italy, the variables used to represent and characterize hydrogeological instability are annually elaborated and provided by ISPRA, on a national scale, through a report (Trigila, Iadanza et al. 2015) which provides an updated picture on hydrogeological instability, through hazard maps and risk indicators for landslides and floods related to population, firms, cultural heritage and artificial surfaces. The database, aimed at mapping the landslide hazard areas of the Hydrogeological Plans (PAI), processes, at the NUTSIII level, the surface values exposed to the five classes of landslide hazard: *very high risk* (P4), *high risk* (P3), *average* (P2), *moderate* (P1) and *attention areas* (AA). In the PAIs, landslide risk is assessed through the following indicators, for each level of danger: *resident population at risk*; *units of firms at risk*; *cultural heritage at risk*.

Alternatively, with reference to the data base aimed at mapping the areas with hydraulic danger, always at NUTSIII level, the values of the surface exposed to each of the three classes of hydraulic hazard are given: *high* (P3), *medium* (P2), *low* (P1). The flood risk is therefore quantified relatively to: *resident population at risk*; *units of firms at risk*; *cultural heritage at risk*; *schools at risk*. Further variables useful for the geographical and social characterization of the territory are related to the “coasts” of the Municipality, and to the classification of Italian Municipalities according to the methodology for the definition of the Internal Areas.

## 2. RESEARCH METHODOLOGY

In the following pages, in order to analyze how the fragility or territorial vulnerability is declined within the various policy actions that intervene at the local level also regarding the phenomena of hydrogeological instability, especially for the purposes of the subsequent understanding of the relative territorial dynamics that insist on the territories identified by the actions these same policies, we present a comparative analysis of the different regional typologies identified by the Rural Development Policy, the Territorial Cohesion Policy, the National Internal Areas Strategy (SNAI), reconstructing, where necessary, the evolutionary path that led to the conceptualization. Objectives and applications, dimensions, methods and techniques of elaboration, spatial extension, themes and domains will be focused in order to reach the identification of the demographic, economic, social and environmental components relevant for the identification of the territorial divisions relative to the environmental and territorial fragility, functional to the processes of statistical analysis first and then to decision makers for policy makers.

In fact, the criteria of regionalization have always been a topic of considerable geographical interest, since the search for territorial homogeneity – desired from time to time with the adoption of economic, environmental, functional or cultural parameters – underlies a need that goes far beyond the division of unitary areas, in terms of policy, into partitions with an intrinsic coherence (Vallega 1995), since how much more the territorial division is detached from the environmental-demographic-settlement dynamics, even more the factors of deterioration and marginality increase (Ferlandino and Molinari 2009).

In the context outlined, the cognitive dimension becomes essential for policy actions that must be efficient, effective and incisive, since the needs of the analysis are oriented to extract the maximum of significant information. For this purpose, the literature distinguishes the concepts of *program areas*, depending on certain policy objectives and *homogeneous areas*, or rather areas that are similar for a particular profile, such as to require the same type of intervention, since the territory has, in fact, its own peculiar geography, a delineation in geographic regions that can be identified according to geo-physical, socio-economic criteria, or with reference to historical boundaries. For these purposes, different methodologies may be used, such as the indicators and the territorial articulations (*typologies*) derived from primary data or indicators derived from quantitative modeling processes. Indicators – which summarize the relevant data and indicate the change or define the status of something (Galopin 1997, Niemeijer 2002) – and typologies are tools through which it is possible to elaborate data sets to provide new summary information on complex problems (Andersen et al. 2007). In particular, a typology is a stratification of data that is homogeneous according to specific criteria relevant to the policy (AbouZahr et al. 2007), as in the case of environmental and economic performance (Andersen et al. 2007).

## 3. RESULTS – REGIONAL TYPOLOGIES COMPARATIVE ANALYSIS

### 3.1. Rural areas

The problem of identifying functional areas for the planning of spatially differentiated policy interventions has given rise to a heated debate in the attempt to analyze the evolution processes of rural areas with the aid of tools able to grasp the relationships between economic development and territorial specificity, gaining strength the concept of the presence of a plurality of local development models, whose peculiarity derives from the intrinsic characteristics of the territory, understood as a space for interaction between economic, social, environmental and cultural elements (Selvaggi et al. 2016).

During the evolution of this debate, the OECD and Eurostat undertook to define a harmonized conceptual framework of rurality using different parameters of discrimination, while at national level the Italian Agricultural, Food and Forestry Policies Ministry (MIPAAF) intervened within the National Strategic Plan (NSP) of the Rural Development Policy.

#### 3.1.1. Rural areas typology by OECD

One of the essential aims of the OECD work program (OECD 1994, 2006, 2011) is to make an international comparison, both qualitative and quantitative, of the information on the actual condition of rural areas and their possible evolution, through the use of common indicators and common database used in the analysis of the various government actions.

For each indicator the *relevance*, in terms of well-defined purpose, and *reliability*, or rather the administrative context at which it can be applied, as well as its validity on scientific and empirical bases were assured. The OECD classifies the regions within each member country according to two territorial levels.

The highest level (Territorial level 2) consists of about 300 macro-regions while the lower level (Territorial level 3) is composed of over 2300 micro-regions which, to take into account the different regional geographies and establish significant comparisons

between regions belonging to the same type and level, are classified as *predominantly urban*, *predominantly rural* and *intermediate* using three indicators:

1. *Demographic density*. An area is defined as *rural* if its density is less than 150 inhabitants per km<sup>2</sup>.
2. *Resident population incidence*. An area is classified *predominantly rural* if over 50% of its population live in rural communities, *predominantly urban* if less than 15% live there and *intermediate* if the percentage of the population living in rural communities is between 15% and 50%.
3. *Urban centers*. A region classified as rural on the basis of the previous rule is classified as *intermediate* if it includes an urban center of more than 200,000 inhabitants; alternatively, a region classified as intermediate on the basis of the general rule is classified as *predominantly urban* if it contains an urban center of over 500,000 inhabitants.

### 3.1.2. Rural areas typology by Eurostat

In order to provide a coherent basis and overcome some of the limitations inherent both in the OECD methodology and in the same algorithms of Eurostat, the European Statistical Institute presents a zoning of rural areas classified in *predominantly rural*, *intermediate* and *predominantly urban* based on a variation of the OECD methodology according to an approach that follows three phases:

1. The identification of groups of cells of the urban grid with a minimum population density of 300 inhabitants per km<sup>2</sup> and a minimum population of 5000 inhabitants. All cells outside these urban clusters are considered *rural*;
2. Groups of regions classified at NUTS 3 level with less than 500 km<sup>2</sup> follow the classification of neighboring regions.
3. The regions are classified at NUTS 3 level based on the *share of the rural population* present in the grid cells. If more than 50% of the total population is in rural grid cells, the region will be classified as *predominantly rural*; if this threshold is between 20% and 50% in the rural grid cells, the region will be classified as *intermediate*; if instead the percentage is less than 20%, the region is defined *predominantly urban*.

To determine the size of the population, the grid cells are grouped on the basis of territorial contiguity. According to Eurostat, this method has the advantage of creating a more balanced distribution of the population.

### 3.1.3. Italian rural areas typology by MIPAAF - PSN 2014-2020

In order to allow a territorialization of the rural development interventions more in line with the needs highlighted by the different types of rural areas present in Italy, with regard to the 2007-2013 and 2014-2020 planning phases of the Rural Development Policy (RDP), the Ministry of Agriculture and Forestry Policies, in agreement with the Regions, has identified a zoning of the municipalities in three types of rural areas and urban centers in order to adequately capture the generally relevant intra-provincial differences within the Italian territory.

The OECD methodology has been revised, in the context of the NSP, by making some adaptations and using as indicators *population density*, *altimetric location* of the municipality and *weight of the agricultural area over the territorial one* (MIPAAF – Ministero delle Politiche Agricole 2010). The final classification of the Italian rural areas, which is developed in four phases, provides four homogeneous areas: *urban poles*, which include the provincial capitals with over 150 inhabitants per square kilometer and all strongly urbanized areas; *rural areas with specialized intensive farming*, which include urbanized rural lowlands, urbanized rural hill areas, predominantly rural low-lying areas and predominantly rural low-lying areas; *intermediate rural areas*, which mainly comprise rural hill areas, rural hill areas and significantly rural mountainous areas; *rural areas with significant development problems*, which mainly include rural mountainous areas, mainly hilly rural areas and significantly rural mountainous areas.

### 3.1.4. Less favoured areas and areas subject to European natural constraints

The regime of disadvantaged agricultural areas, currently a significant component of European policies for agriculture and rural development, is initially identified by Directive 75/268/EEC, implemented immediately after the start of the Common Agricultural Policy (CAP), with the objective to mitigate the natural disparities between the various agricultural areas of the Union, through the establishment of a special aid scheme (*compensatory allowances*), designed to encourage agricultural activities and improve farmers' income. Its aim is preserving the activities to protect the territory and to fight depopulation, where a minimum population level and the conservation of the natural environment would not have been otherwise insured.

In the current planning phase 2014-2020 the art. 31 of Reg. 1303/2013 expands the concept of disadvantaged area by identifying two types (Figure 1): *areas affected by specific constraints* and *areas subject to natural restrictions (ANC)*, whose designation is carried out in two phases.

The *first phase* forecasts that the areas to be demarcated according to the application of biophysical criteria (if at least 60% of the agricultural area meets the thresholds defined for the following criteria: low temperature, dryness, excess soil moisture, limited soil drainage, low soil consistency, shallow rooting depth, poor chemical properties, steep slopes).

The *second phase of fine-tuning* (Commission 2012) is instead partly delegated to the Member States that are called to "refine" their zoning, excluding those sub-areas in which the natural constraints have in fact been overcome thanks to the human intervention. The identification of the areas is done on the basis of local administrative units (LAU2), which represent larger entities than individual parcels of land.

The designation is ready only once the selection process is completed on the basis of biophysical criteria and the so-called fine-tuning. With regard to the areas affected by specific constraints, it is left up to the Member States to identify them (up to 10% of their territory) in order to capture further needs, such as specific requirements for preserving or improving the environment, maintaining the countryside, preserving the tourist potential of the area or to protect the coasts.

Areas may also be eligible for payments under this category if they are faced with certain criteria, established by individual Member States, which reflect specific constraints or on the basis of a combination of the biophysical criteria mentioned above. Although in principle the areas just outlined should have been associated with the rural development programs presented for the period 2014-2020, the European legislator has recognized the need for more time available for the Member States to undertake the analysis and the resulting identification of the territorial areas in question and an exemption was allowed until 2018. And indeed, the great majority of member states are still working on designation and on tuning.

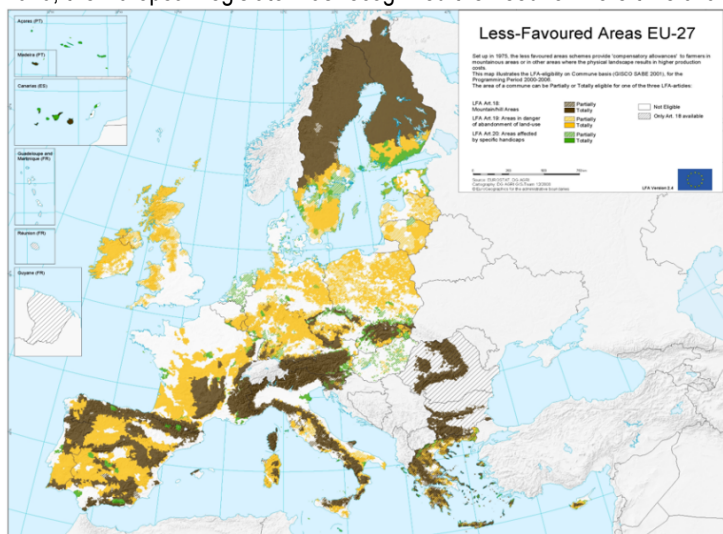


Figure 1. Less-Favoured Areas EU27

### 3.1.5. The Italian less favoured areas

In Italy, the issue of disadvantaged and marginal areas has always been the subject of not only extensive scientific and academic literature of interdisciplinary matrix, but also of numerous legislative and regulatory provisions. The relationship between these measures and the studies carried out in the various disciplinary fields has not always proved to be effective, both due to the partiality of the points of view adopted by the national and European legislators, and due to the lack of information and the consequent insufficient operability of the information system to support decisional interventions.

To overcome these problems, the National Atlas of the

Rural Territory, promoted by the Ministry of Agriculture, Food and Forestry Policies (RRN -MAPAF 2010) reconstructs an image of the rural, at the level national, in its socio-economic, environmental and settlement dimensions, through the preparation of a system of broad spectrum indicators addressing the issue of disadvantaged areas within an integrated territorial reading able to investigate the multiple links between agricultural production, rural world and territory, focusing on the issues of svant territorial affairs and relative compensation, on socio-spatial inequalities to be identified and characterized in their different components, of a physical-environmental nature, socio-economic or more exquisitely settlement.

In order to construct a geography of the territorial disparities present within agricultural economies, to be faced with effective policies aimed at the rural context, the methodology used to identification of such a conditions of disadvantage provides that disadvantaged rural areas are identified on the basis of three groups of indicators representing disadvantage factors in relation to environmental conditions (*average production altitude*), settlement (*population density, accessibility*) and economic (*intensity of agricultural production, profitability of agricultural work*), compared with performance indicators (*disposable income, demographic evolution*) and “normative” indicators (*disadvantaged areas ex EEC Directive 268/75*).

These dimensions are dealt with differentiated and heterogeneous analytical and communicative tools, ranging from cartographic representation to physical environmental variables, to statistical indicators for socio-economic variables, to modeling for the treatment of positional and relational variables that describe the functioning of the urban and regional systems.

## 3.2. Mountain areas

### 3.2.1. Mountain areas by Eurostat

Although at European level there is no comprehensive and integrated policy for mountain territories, as is the case for rural areas, nor is there a service specifically dedicated to these issues, the EU is still active in areas that, directly or indirectly, are able to affect the interests of these areas. The rationale behind this approach lies in the fact that, from the perspective of subsidiarity, a territorial policy that can also affect sub-regional differences is left to the autonomous decisions of the Member States.

According to Eurostat definition, mountain areas (at NUTS-3 level) are defined as regions in which more than 50% of the surface is covered by topographic mountain areas, or more than 50% of the regional population lives in these topographic mountain areas. The Council Regulation (EC) 1257/1999 in the delimitation of these areas includes mountain areas (Article 18) characterized by high costs in agriculture caused by difficult climatic conditions, due to the altitude that determine an abbreviated vegetative period and/or due to existence, in most of the territory, of strong slopes that make mechanization impossible or burdensome. Alternatively, according to the definition adopted in Art. 50 of EC Regulation 1698 of 2005 on the support for rural development by the European Agricultural Fund for Rural Development (EAFRD), mountain areas are those areas marked by considerable limitations in land use possibilities and a significant increase in the cost of work, due: 1) to very difficult climatic conditions due to the altitude, which result in a clearly shortened vegetative period; 2) to the existence, in areas of lower altitude, of strong slopes in most of the territory that make mechanization impossible or require the use of expensive equipment, or a combination of such factors, when the disadvantage resulting from each of these factors considered separately is less pronounced, but their combination leads to an equivalent disadvantage.

### 3.2.2. Italian mountain areas typology

The Italian classification by degree of mountaineering provides for a classification of municipalities in totally mountainous, partly mountainous and non-mountain, as a result of the application of a law dating back to 1952 (Article 1 of Law 991/1952). The legislative framework establishes the *criteria of classification geomorphological* (the law considers mountain territories the Municipalities located for at least 80% of their surface above the 600 meters of altitude above sea level and those in which the difference in altitude between the lower altimetric altitude and the surface of the municipal territory is not less than 600 meters) and

income type of land (average taxable income per hectare) Following the enactment of the subsequent law 142/90, which repeals this rule, the mountain territory is frozen to what at the time identified. The same law establishes the power of the Regions to include municipalities classified as mountain or partially mountainous in the Mountain Communities, but precludes them from changing the classification of a municipality

### 3.3. Remote areas

The need to proceed with the identification of remote areas arises from the need to take into account the different territorial geographies for policy purposes, since the remote areas face a series of different problems compared to rural areas close to a city, where it is possible find a wider range of services and opportunities. As already seen in the case of mountain areas, even remote areas are not subject to specific policy actions dedicated to them since the level of european intervention is provided indirectly within more general policies.

#### 3.3.1. Remote rural areas by OECD

The OECD (Dijkstra and Ruiz 2010), adopting the analysis used for the construction of the urban-rural typology implemented by Dijkstra and Poelman (2008), also followed by the Directorate General for the Regional Policy of the European Commission, identifies a classification of rural territories at NUTS level 3 establishing the remote rural areas.

The adopted methodology for the identification of remote areas foresees, after a first phase, in which, according to the incidence of the population residing in the local rural areas within each region, the regions have been classified as predominantly urban (PU), intermediate (IN) or predominantly rural (according to the OECD 2005 methodology), discriminating on the basis of the size of the urban centers contained in the TL3 regions. An area previously classified as PR (IN), becomes IN (PU) if it contains an urban center with at least 200,000 inhabitants representing 25% of the regional population. In the second phase, the regional typology of the OECD is extended considering the travel time of at least 50% of the regional population to the nearest inhabited center with over 50,000 inhabitants (Figure 2). This methodology applies only to intermediate areas (IN) and mainly rural areas (PR), since PU urban areas include the most populated areas, characterized by the presence of more services and therefore greater opportunities. The result is a typology containing five categories: *urban areas* (PU), *intermediate areas close to a city* (INC), *remote intermediate areas* (INR), *rural areas close to a city* (PRC) and *remote rural areas* (PRR). To identify an area as remote it is therefore necessary to carry out an accessibility analysis able to quantify the distance in terms of driving time necessary for a certain part of the population to reach a populated center. The area is therefore considered remote if at least 50% of its population needs to drive 60 minutes or more to reach a town with more than 50,000 inhabitants.

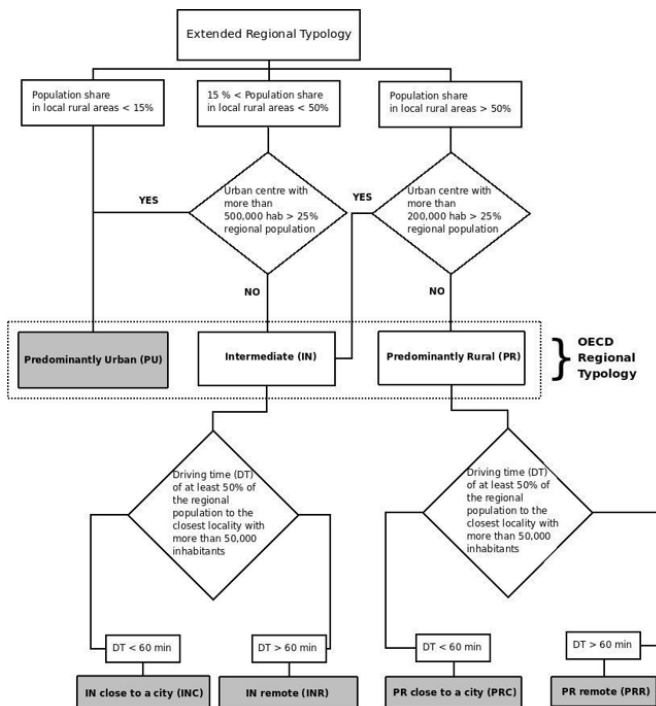


Figure 2. Methodology for extended regional typology (Dijkstra and Poelman (2008).

peripheral and outermost regions, represent more than half of the Italian municipalities, with almost 1/4 of the national population, equal to about 13.5 million inhabitants and over 60% of the total area.

## DISCUSSION AND CONCLUSION

The results show that some of the identified territorial typologies are not alternatives, if anything, they are complementary to the reading of the phenomena relevant for the purpose of the setting up of public action. This is true if we refer to the objectives of the Internal Areas Strategy linked to the reversal of the demographic trends in progress but not with regard to the desire to ensure the integration and the thematization of natural and anthropic risk as a priority criterion for choosing places on to which public action is to be applied, since the absence of a typology, at a regional level, homogeneous to a comparable one, does not allow the precise identification of the priorities for action in this sense.

Moreover, from the presented results, it is evident that in no-one of the examined regional typologies, among the discriminatory parameters, the indicators related to the vulnerability or territorial fragility are used in terms of risk of landslide, seismic risk,

desertification and land consumption despite the existence of a vast statistical literature able to identify, circumscribe and highlight these phenomena.

In this hypothesis, it becomes interesting to underline an aspect of not minor importance already highlighted by the OECD (2015) in the recent report “*Developing an inventory and typology of land use planning systems and policy instruments in OECD countries*”, from which it emerges clearly how the governance processes used in Italy are distinguished from those of other countries, and we know with what level of incisiveness, for a series of variables: the articulation in regions with a high degree of constitutionally guaranteed autonomy that involves the sharing of skills on the field of land use between the State and Regions, the non-use of integrated planning models used in conjunction with integrated economic planning, as is the case in most OECD countries, since in Italy’s territorial planning, the strong tradition prevails on urban planning which emphasizes the urban planning and the buildings control. In this context, one of the research questions that arise from this brief review is: how can these issues affect the lack of a unified framework of reading the phenomenon that only a territorial typology can provide? How the lack of a general policy approach – deriving from the absence of a homogeneous information framework that takes into consideration the environmental aspects, giving the right importance, to economic and social aspects – can be translated in the arbitrariness left at the regional level to the individual schedules territorial landscape?

We have already highlighted that if the indicators and types, based directly on available data (Safonte 2014, Safonte and Trapani 2017), can be used at the same time to identify the needs of policy intervention and for the ex-post impact assessment (Selvaggi et al. 2017), this assessment must be spatially explicit as it is not enough for decision makers to know what the impact of a policy action will be, but it is also important to know where impacts are expected and how and why they vary in different regions in the EU.

In this sense, a territorial typology, with reference to territorial fragility, should provide the sampling basis for assessing the impacts of the policy action as a whole of variation of the combinations of agricultural activities and environmental allocations, allowing to measure in agriculture the effects variation of response to policy in widely varying environmental conditions, as the classification factors of the typology must be based on environmental factors that are relatively stable over time and do not change under the influence of anthropogenic factors, at least not in the short term.

## REFERENCES

1. AbouZahr, C., Adjei S. & Kanchanachitra C. (2007). From data to policy: good practices and cautionary tales. *The Lancet* 369(9566): 1039-1046.
2. Adger, W. N. (2006). Vulnerability. *Global environmental change* 16(3): 268-281.
3. Andersen, E., Elbersen B., Godeschalk F. & Verhoog D. (2007). Farm management indicators and farm typologies as a basis for assessments in a changing policy environment. *Journal of environmental management* 82(3): 353-362.
4. Andersen, E., Elbersen B., Godeschalk F. & Verhoog D. (2007). New policy objectives-new farm typologies? *Pacioli 14, Agricultural Economics Research Institute (LEI)*: 111-121.
5. Baldock, D. (1996). Farming at the Margins, IEEP and LEI-DLO.
6. Barredo, J. I. (2007). Major flood disasters in Europe: 1950–2005. *Natural Hazards* 42(1): 125-148.
7. Bellia, C. & Safonte G. F. (2012). Problematiche concettuali ed aspetti economico-normativi della qualità nel settore agroalimentare, *Economia agro-alimentare/Food Economy*, Franco Angeli, 14(2), pp. 107-137, ISSN 1126-1668, DOI:10.3280/ECAG2012-002006.
8. Bellia, C. & Safonte G. F. (2015). Agri-food products and quality distinctive marks. Economic dimension of marked products such as PDO/PGI under Community legislation and valorisation strategies. *Economia agro-alimentare/Food Economy* Franco Angeli, 17(1), pp. 81–105 ISSN 1126-1668, DOI:10.3280/ECAG2015-001005.
9. Bellia, C., Latino S., & Bracco S. (2016). Agriculture, territory and multifunctionality: the case of South-East of Sicily, *Quality - Access to Success*, Volume 17, S1, pp. 92-98.
10. Benayas, J. R., Martins A., Nicolau J. M. & Schulz J. J. (2007). Abandonment of agricultural land: an overview of drivers and consequences. *CAB reviews: Perspectives in agriculture, veterinary science, nutrition and natural resources* 2(57): 1-14.
11. Benedini, M. & Gisotti G. (1985). Il dissesto idrogeologico: cause, effetti e interventi a difesa del suolo, *La Nuova Italia scientifica*.
12. Birkmann, J. (2007). Risk and vulnerability indicators at different scales: Applicability, usefulness and policy implications. *Environmental hazards* 7(1): 20-31.
13. Buckwell, A. & Armstrong-Brown S. (2004). Changes in farming and future prospects—technology and policy. *Ibis* 146(s2): 14-21.
14. Cannon, T. (1994). Vulnerability analysis and the explanation of ‘natural’ disasters. *Disasters, development and environment*, 13-30.
15. Carrà, G., Mariani, M., Radic, I. & Peri, I. (2016). Integrating stakeholders’ perspectives to develop tourism business strategies: The case study of a wine route, *Rivista di Studi sulla Sostenibilità* Issue 2, pp. 173-186.
16. European Commission (2012), Fine Tuning in areas with significant natural constraints, Discussion paper, Expert group meeting 4/9/2012
17. DHA, U. (1992). Internationally agreed glossary of basic terms related to disaster management. UN DHA (United Nations Department of Humanitarian Affairs), Geneva.
18. Dijkstra, L. & Poelman H. (2008). Remote rural regions: How proximity to a city influences the performance of rural regions, EU.
19. Dijkstra, L. & Ruiz V. (2010). Refinement of the OECD regional typology: Economic Performance of Remote Rural Regions. DG Regio, European Commission.

20. Ferlaino, F. & Molinari P. (2009). Neofederalismo, neoregionalismo e intercomunalità. *Geografia amministrativa dell'Italia e dell'Europa*, Il Mulino.
21. Gallopin, G. C. (1997). "Indicators and their use: information for decision-making." *Scope-Scientific Committee on Problems of the Environment International Council of Scientific Unions* 58: 13-27.
22. Glade, T. (2003). Vulnerability assessment in landslide risk analysis. *Erde* 134(2): 123-146.
23. Glade, T. & Crozier M.J. (2005). Landslide hazard and risk—Concluding comment and perspectives. *Landslide hazard and risk*: 765-774.
24. Hollenstein, K. H. R., Bieri O. & Stükelberger J. (2002). Modellierung der Vulnerability von Schadenobjekten gegenüber Naturgefahrenprozessen, ETH Zurich.
25. Luger, N., Amadei M., Bagnaia R., Dragan M., Ferneti M., Laureti L., Lavieri D., Luger F., Nisio S. & Oriolo G. (2000). Environmental quality and territorial vulnerability assessment through the GIS of Landscape Units of Italy: the experience of the Map of Nature project, Atti Conv. ESRI S. Diego, California.
26. MacDonald, D., Crabtree J., Wiesinger G., Dax T., Stamou N., Fleury P., Lazpita J. G. & Gibon A. (2000). Agricultural abandonment in mountain areas of Europe: environmental consequences and policy response. *Journal of environmental management* 59(1): 47-69.
27. MIPAAF – Ministero delle Politiche Agricole, Alimentari e Forestali (2008), Aree rurali italiane. Metodologia Ocse e Psn a confronto, consultabile online.
28. MIPAAF – Ministero delle Politiche Agricole, A. e. F. (2010). Piano Strategico Nazionale per lo sviluppo rurale 2007–2013.
29. Mottet, A., Ladet S., Coqué N. & Gibon A. (2006). Agricultural land-use change and its drivers in mountain landscapes: a case study in the Pyrenees. *Agriculture, Ecosystems & Environment* 114(2-4): 296-310.
30. Niemeijer, D. (2002). Developing indicators for environmental policy: data-driven and theory-driven approaches examined by example. *Environmental Science & Policy* 5(2): 91-103.
31. Nixon, S. (2015). "EU overview of methodologies used in preparation of Flood Hazard and Flood Risk Maps-Final Report." European Commission, Brussels <http://bookshop.europa.eu/en/eu-overview-of-methodologies-used-in-preparation-of-flood-hazard-and-flood-risk-maps-pbKH0216039>.
32. OECD (1994). Creating rural indicators for shaping territorial policy. Paris, OECD.
33. OECD (2006). OECD Rural Policy Reviews: The New Rural Paradigm: Policies and Governance. Paris, OECD.
34. OECD (2011). OECD regional typology, Directorate for Public Governance and Territorial Development, Paris.
35. Platania M., Platania S., & Santisi, G. (2016). Entertainment marketing, experiential consumption and consumer behavior: the determinant of choice of wine in the store. *Wine Economics and Policy*, n. 5 (Issue 2), pp. 87-95. Doi:10.1016/j.wep.2016.10.001.
36. Platania, S., Morando, M., & Santisi, G. (2017). The phenomenon of brand hate: Analysis of predictors and outcomes. *Quality - Access to Success*, Vol. 18(S2), pp. 342-347.
37. Renwick, A., Jansson T., Verburg P. H., Revoredo-Giha C., Britz W., Gocht A. & McCracken D. (2013). Policy reform and agricultural land abandonment in the EU. *Land Use Policy* 30(1): 446-457.
38. RRN - MIPAAf (2010), Atlante del territorio rurale nazionale. Nuove geografie per lo sviluppo rurale, consultabile on line <http://www.reterurale.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/3569>
39. Safonte, G. F. & Brunori G. (2013). Rural capital and rural well-being. A theoretical and methodological framework for the measurement of rural quality life at local level. *Measuring progress at local level*, Edizioni Plus-Pisa University Press.
40. Safonte, G. F. & Brunori G. (2013b). *Rural Multiple Identities*. Rural resilience and vulnerability: The rural as locus of solidarity and conflict in times of crisis. Laboratorio di studi rurali SISMONTI, Pisa (Italy).
41. Safonte, G. F. (2014). Earth and environment. The territorialist approach and the quality of life in rural areas. *Scienze del Territorio* 2: 339-366.
42. Safonte, G. F. & Trapani F. (2017). A theoretical and methodological framework for the analysis and measurement of environmental heritage at local level. *Energy Procedia* 115: 487-501.
43. Selvaggi R., Parisi M., Pecorino B. (2017). Economic assessment of cereal straw management in Sicily. *Quality – Access to Success*, 18(S2): 409-415.
44. Selvaggi, R., Valenti, F., Pappalardo, G., Rossi, L., Bozzetto, S., Pecorino, B., Dale, B.E., (2018). Sequential crops for food, energy, and economic development in rural areas: The case of Sicily. *Biofuels, Bioproducts and Biorefining*, 12: 22-28
45. Strijker, D. (2005). Marginal lands in Europe—causes of decline. *Basic and Applied Ecology* 6(2): 99-106.
46. Trigila, A., Iadanza C., Bussetini M., Lastoria B., Barbano A. & Munafò M. (2015). Dissesto idrogeologico in Italia: pericolosità e indicatori di rischio. Rapporto 233: 2015.
47. Vallega, A. (1995). La regione, sistema territoriale sostenibile: compendio di geografia regionale sistematica, Mursia.
48. Verburg, P. H. & K. P. Overmars (2009). Combining top-down and bottom-up dynamics in land use modeling: exploring the future of abandoned farmlands in Europe with the Dyna-CLUE model. *Landscape ecology* 24(9): 1167.
49. Vindigni, G., Peri, I. & Urso, A. (2013). Biodiversity and ecosystem approach as political discourse, *Quality - Access to Success* (14), S1, pp 11-17.
50. Vindigni, G. & La Terra, G. (2016). Rethinking IPRs on agro-biotechnological innovations in the context of food security. *Rivista di Studi sulla Sostenibilità* Issue 2, pp. 69-77.