

2021

Regional Growth Conference Summer Workshop











Thursday



3 June 2021

Abstract

Providing citizens with affordable and safe food is a complex problem. Moreover, the health and wellbeing of citizens and consumers are directly affected by the way cities and regions are managing a sustainable food environment. The management of food systems and quality has therefore far-reaching impact for areas as varied as health, climate, jobs and innovation. Given the expected changes associated with climate change and the continuous population growth, much more effort and innovation will be needed in the food sector. Several regions have identified food innovation, energy and sustainability as strategic areas for their development strategy. What all those regions have in common is to sustainably work on increasing agricultural production, improving safety, quality and the supply chain of food products and decreasing food losses and waste.

10:00 - 10:45 Lecture: Food export marketing at regional level

Theodoridis Prokopis, Assoc. Prof., Department of Business Administration of Food and Agricultural Enterprises

Food and farming contribute to the regional economies annually and supports jobs across them. Which are the success stories in the food export sector? How the COVID-19 pandemic has impacted food sectors' growth last year?

11:00 - 11:45 Lecture: Sustainable food supply chains

Zacharatos Theofanis, Researcher, PhD Candidate, Department of Business Administration of Food and Agricultural Enterprises

Sustainable food systems start with the development of sustainable agricultural practices, development of more sustainable food distribution systems, creation of sustainable diets and reduction of food waste throughout the system. Sustainable food systems have been argued to be central to many or all 17 Sustainable Development Goals.

12:00 - 12: 45 **Team projects**

13:00 - 13:45 **Presentations – Discussion**





Abstract

According to data released annually by the Association of Greek Tourism Enterprises (SETE) and the Bank of Greece, tourism is a major contributor to Greek economy and a sector of rising competitiveness at global level. At the same time, the issue of sustainability is inherent in the policy of Greek tour is more velopment. In this context, the concept of sustainable development through the economic, environmental, social and cultural dimension of the impact of tourism should be analyzed; the principles of sustainable tourism development, the main trends and key issues affecting the modern tourism market should be properly evaluated; the sustainable development with the management of destinations and the operation of tourism businesses should be linked; a comparative analysis between the positive and negative effects of different forms of tourism should be conducted; international practices related to the adoption and implementation of sustainable development in tourism should be examined. Further to the above, sustainable tourism development policy "takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities"

10: 00 - 10: 45 Lecture: Sustainability and Tourism Destinations

Argyropolou Maria, Assist. Prof., Department of Tourism Management

Opportunities for the development of sustainable tourism forms are required that oppose mass tourism in terms of its impact to the destinations, ensure tourism seasonality mitigation and promote responsible tourist activity. Eco-tourism, agritourism, heritage tourism, nature tourism, wine tourism, food tourism, literary tourism and other special and alternative forms, focusing on the local communities and the environment of the destinations may be used as exceptional tools to contribute in a sustainable tourism future.

11: 00 - 11: 45 Lecture: Tourism and Regional Growth

Poulaki Ioulia, Assist. Prof., Department of Tourism Management

Tourism development is often suggested as a potential solution to the regional growth problem. It is usually suggested as a complementary and not the main activity in the development strategy of a region, connected with primary and secondary production sectors. Tourism as a socio-economic activity may significantly contribute to regional economic growth, especially in developing regions, in the context of an integrated tourism development and policy and, under certain conditions, which the regions





should meet. These conditions are related with geographic, accessibility, economic, living and cultural issues.

12: 00 - 12: 45 **Team projects**

13: 00 - 13: 45 **Presentations – Discussion**





Abstract

The EU Biodiversity Strategy to 2020 aimed to halt the loss of biodiversity and ecosystem services in the EU by 2020, and to restore them as far as possible, while also helping to curb global biodiversity loss. This strategy puts Europe's biodiversity on the path to recovery by 2030 for the benefit of people, climate and the planet. Environmental issues such as environmental pollution caused by anthropogenic activities is one of the most critical factors that determine the destiny of life on Earth. Therefore, it is necessary to seriously elaborate the strategy of environmental protection through state-of-the-art approaches in energy production, in the management of waste biomass, in the control of genotoxic agents and in understanding the role of microbial 'unseen majority' in anthropogenic climate change. These will enable us to protect ecosystem stability, human health and achieve an environmentally sustainable future.

10: 00 - 10: 20 Lecture: Greece as a hotspot for plants diversity – Red Data Book and conservation

Dimopoulos Panayotis, Prof., Vice Rector for Research and Development

Greece is one of the most species-rich European countries, since more than 7000 native plant tax a occur there, with ca. 20% being endemic. Identifying Biodiversity Hotspots and endemism centers is a valuable tool in conservation prioritization and planning. Biodiversity conservation assessment is linked to the efficiency of the protected areas network in Greece. The necessity for a timely, systematic, and effective aversion of plant extinctions in Greece has ignited the drafting of a new, comprehensive Red Data Book for the Greek flora.

10:20 - 10:35 Lecture: The Red Book of the Threatened Animals of Greece: a valuable tool for conserving Greek Biodiversity

Gkiokas Sinos, Prof., Department of Biology

The Red Data Book of the Threatened Animals of Greece was first published by the Hellenic Zoological Society in 1992, it was updated in 2009, and, with its strong scientific base, is recognized as the most authoritative guide to the status of animal biodiversity in Greece. Of 1014 animal species surveyed (a fraction of the actual number of species), 468 (46%) were considered at some risk of extinction mainly because of destructive human activities. It's time for the new updated RDB that would include many more animal species for evaluation.

10:35-10:50Lecture: Greek Islands: plant species, ecosystems and biogeography

Panitsa Maria, Assist. Prof., Department of Biology

Day 3





Greece is one of the most important island countries in the Mediterranean concerning itsrich plant species diversity, the high rates of endemism and rarity and the huge number of islands. Island biodiversity is affected mainly by the climate, area, elevation, isolation, palaeogeography, geology, and humans. Since human influence is extremely intense on island ecosystems, priority in conservation strategies should be given in education and sensitization of local population to environmental issues and to the special value of islands as places that house unique components of global biodiversity and, as crucial parts of our natural and cultural heritage.

10:50 - 11:05 Lecture: Environmental Mutagenesis: Genotoxicological studies on selected environmental pollutants

Vlastos Dimitris, Assoc. Prof., Department of Environmental Engineering

Environmental pollution is a complex issue because of the diversity of anthropogenic agents, both chemical and physical, which have been detected and classified. All organisms are continuously exposed to chemical and physical pollutants, many of which are toxic and their effect is rapidly seen at the physiological level. Environmental pollutants have potentially genotoxic effects i.e. they cause mutations and other genetic changes in the cells. The control of genotoxic agents, which can affect the ecosystem stability and human health, is of utmost importance. Therefore, it is necessary to seriously elaborate the strategy of genotoxic monitoring through genotoxicological studies and relevant legislation.

11:05 - 11:20 Lecture: Hydrogen Energy Autarky: From Materials to Energy through research and technology

Makridis Sofoklis, Assoc. Prof., Department of Environmental Engineering

As fossil fuel reserves are steadily declining while the energy demand continues to rise, Hydrogen is the alternative energy carrier that would serve as the base of a new, Circular Energy Economy on a global scale. Climate Change effects have swelled to such a degree where Hydrocarbon technology is considered harmful while Hydrogen technology implementation is essential to the effects (glacier melting, sea-level rising, global Temperature rising) debilitation. Advanced materials are closely associated with Hydrogen storage technology in the form of Metal-Hydride tanks. Hydrogen is the only fuel that can be produced, stored and electrochemically exploited without producing gaseous pollutants.

11:20 - 11:35Lecture: Integrated management and exploitation of multi-dispersed agricultural residues –
application to energy production

Papadakis G. Vaggelis, Prof., Department of Environmental Engineering





Agricultural waste biomass is the largest and most sustainable energy source, but its exploitation has not been realized until now. Our research group coordinates the Greek-Chinese cooperation project SYNAGRON which aims to pave the way for the environmentally friendly useful exploitation of the residues of the agricultural sector for the generation of high value bio-products and/or energy. This is to be accomplished by designing and developing an innovative pyrolysis (Py) - anaerobic digestion (AD) processing plant for the conversion of agricultural wastes initially into useful bio-products, such as biochar, biooil, syngas and biogas, and then into hydrogen and/or electrical energy.

11:35 - 11:50 Lecture: Deciphering the unique microbial communities of Etoliko Lagoon

Tsiamis George, Assoc. Prof., Department of Environmental Engineering

In the recent years, cultivation independent approaches such as amplicon sequencing, single cell genomics, metagenomics and metatranscriptomics are becoming an important tool for the scientific community. An extensive screen of numerous environments using SSU rRNA community profiling to identify habitats enriched in unexplored microbial diversity identified Etoliko Lagoon as one of eight unique environments exhibiting an unexplored prokaryotic diversity. The rich microbial diversity was discovered by a single cell genomic approach revealed the presence of more than 20 highly divergent representatives from bacterial and archaeal candidate phyla, with many of those being sequenced using a Single Cell Genomics approach.

- 12: 00 13: 15 Team project -Presentations
- 13: 15 13: 45 **Discussion**

14: 00 - 14: 45 Final Discussion - End of the program

ⁱⁱDepartment of Tourism Management, University of Patras

iiiDepartment of Environmental Engineering, University of Patras

ⁱDepartment of Business Administration of Food and Agricultural Enterprises, University of Patras

^{iv}Department of Biology, University of Patras