The world has been changing at an unprecedented speed in the last five years, with unforeseen consequences globally. First it was the COVID-19 pandemic, which changed the social and economic conditions, and now are the regional disputes that are affecting the global economy, generating crises worldwide [1]. In this uncertain environment, as mentioned by the Lancet Commission in 2019, “Food is the single strongest lever to optimize human health and environmental sustainability on the planet” [2]. Food is currently threatening both people and the planet [3]. Food production in a sustainable manner is becoming an urgent issue today for the sustainability of human life and the planet. In 2000, at the Millennium Summit, the Millennium Development Goals (MDGs) were set. At the World Summit on Sustainable Development in 2002, in Johannesburg, terms such as “sustainable diet” [4], “sustainable food consumption” [5], “sustainable nutrition” [6], and “nutritional sustainability” [7] were considered as efforts to produce and consume food in a more sustainable manner. In 2006, the connection between biodiversity, food, and nutrition was established at the Convention of Biological Diversity [8], followed by the World Food Summit on Food Security, where the declaration of the World Summit on Food Security was adopted in 2009 with the commitment for the end of hunger by all the participating countries. In 2012, in Rio de Janeiro, Brazil, at the conference on Sustainable Development with the outcome document, “The Future we Want”, the open working group for the Sustainable Development Goals (SDGs) was established. This led to the 2030 Agenda for Sustainable Development, adopted by the United Nations in 2015, and the 17 Sustainable Development Goals (SDGs) [9]. These goals are as follows [10]:

1. **No Poverty**: end poverty in all its forms everywhere.
2. **Zero Hunger**: End hunger, achieve food security, improve nutrition, and promote sustainable agriculture.
3. **Good Health and Well-Being**: Ensure healthy lives and promote well-being for all at all ages.
4. **Quality Education**: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
5. **Gender Equality**: Achieve gender equality and empower all women and girls.
6. **Cleaning and Sanitation**: Ensure availability and sustainable management of water and sanitation for all.
7. **Affordable and Clean Energy**: Ensure access to affordable, reliable, sustainable, and modern energy for all.
8. **Decent Work and Economic Growth**: Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.
9. **Industry, Innovation, and Infrastructure**: Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.
10. **Reduce inequalities**: Reduce inequality within and among countries.
11. **Sustainable Cities and Communities**: Make cities and human settlements inclusive, safe, resilient, and sustainable.
12. **Responsible Production and Consumption**: Ensure sustainable consumption and production patterns.

13. **Climate Actions**: Take urgent action to combat climate change and its impacts.

14. **Life below Water**: Conserve and sustainably use the oceans, seas, and marine resources for sustainable development.

15. **Life on Land**: Protect, restore, and promote sustainable use of terrestrial ecosystems; sustainably manage forests; combat desertification; and halt and reverse land degradation and biodiversity loss.

16. **Peace, Justice, and Strong Institutions**: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels.

17. **Partnership for the Goals**: Strengthen the means of implementation and revitalize the global partnership for sustainable development.

The SDGs have been designed to create a vision for achieving a sustainable future. More specifically, they were designed to, among other things, provide a basis to end poverty, eradicate hunger, protect the planet, and improve the quality of life in the world, ensuring a balance between social, economic, and environmental sustainability [11]. Out of the 17 goals of SDG presented above, two of them aim to “end hunger, achieve food security, improve nutrition, and promote sustainable agriculture”. This goal is characterized by multiple dimensions (social, economic, and environmental) that go much further than food security [12]. All SDGs were meant to ensure homogeneity between different policy sectors, especially those related to Agri-Food Supply Chain (AFSC), which is at the core of the SDGs’ objectives [13]. The following are a few examples of these interrelation links:

1. The promotion of nutrition as poverty makes it difficult to meet nutritional recommendations and restricts access to proper food production included in SDG1.

2. The promotion of sustainable food production to cope with the undernourishment included in SDG2.

3. The promotion of healthy and sustainable nutrition supporting good health is included in SDG3.

4. The promotion of food systems within the sustainable consumption and production part.

The global food system plays a central role in the achievement of the SDGs [14]. The world’s major staple crops, i.e., maize, wheat, and rice, must be sustainably produced and contribute to human health and wellbeing to achieve these goals. The intense involvement of the private sector in developing the SDGs is ubiquitous [15]. Almost each of the 169 targets listed under the SDGs is, to a greater or lesser extent, related to food and farming. Indeed, there is overwhelming historical evidence from the developed and the newly emerging economies of the developing world that indicates that agricultural growth has been the primary engine of overall economic growth [16].

From a realistic point of view, it should be mentioned that the implementation of the SDGs has deep economic implications and difficulties, especially for the least developed countries [11]. The urge for achieving the SDGs by 2030 implies that more attention should be placed on the analysis and assessment of the costs of implementing the SDGs and the (intemporal) costs of not pursuing them [17]. The implementation of the SDGs is a global priority, and the role of economic instruments and sustainable financing options has become essential in overcoming the costs associated with implementing the 2030 agenda through bridging the funding gaps for socioeconomic and environmental challenges [18].

In this third special edition, selected subjects of the Agri-Food Supply Chain (AFSC) towards the 2030 sustainable development are presented in 14 published papers. These include modern, state-of-the-art research topics from the subjects of primary sector (five papers), innovative foods (one paper), food waste management (three papers), consumers’ and stakeholders’ perceptions of foods (four papers), and food diet (one paper).

The five papers that are covering topics of the primary sector are as follows:

**POPULATION DYNAMICS OF THE OLIVE FLY BACTROCERA OLEAE:**
Katsikogiannis et al. investigated the population dynamics of the olive fly, *Bactrocera oleae*, one of the most studied pests of its kind, due to its economic impact on the olive trees’ production worldwide. Their findings indicate that fly populations are influenced mostly by climate and attitude over longer periods in the season and from bait sprays for shorter periods of time, which appear to be less effective in autumn.

**A NATURE-BASED SOLUTION DRIVEN BY MEDITERRANEAN LEAVING LABS:**
Yahya et al. investigated insights on an open innovation ecosystem of Mediterranean Living Labs for the synergetic development and participatory assessment of decentralized wetland-aquaponics in disadvantaged rural areas. This study addressed the knowledge gap and the limited research on the subject while revealing the role of public participation in ascertaining the solution and evaluating its feasibility.

**INNOVATIVE IV AND CSD CONDITIONS FOR IMPROVED GRAPE PRODUCTION:**
Alba et al. investigated optimizing combined effects of irrigation volumes (IV) and effective cold storage duration (CSD) practices on the quality of grapes produced. Their findings indicate that the proposed IV and CSD conditions gave superior organoleptic and dietary characteristics to the grapes produced, meeting consumers’ demands year-round in a better way.

**RESEARCH ON WINERY VINEYARD AGRICULTURAL PRODUCTION:**
Merkouropoulos et al. investigated an innovative holistic approach in viticulture towards wine production, applying a multidisciplinary methodology for the wine “Asproudi” of the Monemvasia vineyard of Greece. Their findings revealed the genetic relationship of the winery genotypes to the varieties maintained in the reference collection, whereas some other genotypes remained unknown.

**EFFECTIVE STRATEGIES FOR RURAL POVERTY REDUCTION:**
Ruben investigated the analytical linkages between key problems that cause smallholder poverty, the constraints that limit the effectiveness of ongoing rural development initiatives, and the prospects for alternative strategies to support behavioral change. He concludes that coordinated structural reforms in farms and community organizations, value chain integration, and more effective public–private cooperation are needed to improve poverty conditions.

The paper, which is covering the topic of new foods, specifically new packaging, is as follows:

**AN INNOVATIVE INTELLIGENT CHEESE PACKAGING WITH SPIRULINA:**
Kontogianni et al. proposed the use of whey protein-based edible films containing spirulina as an innovative cheese packaging alternative, and they found that the proposed intelligent packaging was appropriate for “kefolotyri” yellow Greek cheese.

The three papers covering topics of food waste management are as follows:

**INNOVATIVE FEED ADDITIVE FOR IMPROVED NUTRITIONAL PRODUCT:**
Kotsou et al. investigated the use of spent coffee grounds (SCG), a by-product, as a feed additive of alternative protein sources with a reduced environmental impact for insect species *Tendbrio molitor* larvae, commonly used for fish, poultry, and pig feeding. They found increased protein composition in the final product.

**POTENTIAL SUSTAINABLE USES OF BREWERY BY-PRODUCTS:**
Soceanu et al. investigated sustainable strategies for the recovery and valorization of brewery by-products, determining the chemical characteristics of different types of brewery waste, such as moisture content, ash, pH, total content of phenolic compounds, and total protein content. The experimental values obtained have shown that brewery waste is a valuable by-product indeed.

**REDUCTION OF FOOD WASTE THROUGH ORGANIZATIONAL THEORIES:**
Ramanathan et al. investigated food waste from an operational and supply chains of view, especially from the lens of existing theories in the operations management literature and newer sustainability theories. They proved that existing theories could help explain the motivations of firms engaging in food waste reduction but also call for more research that could help explain interesting observations, not apparent at first glance.
The four papers covering topics of the consumers’ and stakeholders’ perceptions on foods are as follows:

THE USE OF EDIBLE INSECTS AS A VALUE ANIMAL FEED SOURCE:
Gomes et al. investigated the value chain of the use of edible insects in animal feed in Brazil through the framework of SWOT, the business model, and the multiple case study of two companies, highlighting the sustainability characteristics, identifying the actors in the chain, and how value is generated. They found that the value chain can become a more significant aspect of sustainable agriculture by closing nutrient and energy loops, promoting food security, and minimizing climate change and biodiversity losses.

THE REVALORIZATION OF SURPLUS MATERIAL FROM FRUIT AND VEGETABLE SECTOR:
Fox et al. investigated how industry stakeholders in Ireland manage surplus fruit and vegetable material remaining as a way to reduce food waste through valorization after their main processing. They found that joined-up thinking is required among all stakeholders, including consumers and policymakers, to create positive sustainable changes in view of achieving food waste reduction targets and encourage revalorization.

WINE TOURISM OPPORTUNITIES FOR GROWTH IN THE POST-COVID-19 ERA:
Santorinaios et al. investigated consumers’ perceptions and attitudes for wine tourism opportunities in Greece using a formatted questionnaire promoted through the Google platform. Based on the participants’ answers, they found three distinctive types of support for the successful development of wine tourism in wine-producing countries such as Greece.

REDUCED-SALT GREEN TABLE OLIVES OPPORTUNITIES FOR DEVELOPMENT:
Paltaki et al. investigated consumers’ behavior, attitude, and expectation for the development of a new reduced-salt table olive product from Chalkidiki, an area of Greece. They found that such an innovative food is promising as the interests of consumers and industry have turned to foods that add nutritional value and meet updated food expectations.

Finally, the paper covering a topic of food diet is as follows:

THE GLOBAL GROWTH OF SUSTAINABLE DIET:
Gialeli et al. investigated trends and turning points over time, based on literature evaluation, covering the research on sustainable diets (SD), though a comprehensive bibliometric analysis of publications during the period 1986–2022. Among several dietary patterns, Mediterranean diet (MD) was identified as the most popular among the local SDs, with synergies among scientists in the Mediterranean region.

Acknowledgments: As the Guest Editor of the Special issue titled “Scientific advancements and pathways for an innovative Agri-Food Supply Chain towards the 2030 Sustainable Development Goals III”, I express my deep appreciation to all authors whose valuable work was published under this issue and thus contributed to the success of this edition.

Conflicts of Interest: The author declares no conflicts of interest.

List of Contributions:
Sustainability 2024, 16, 5693

References


**Disclaimer/Publisher’s Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.