Editorial

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Special issue on the International Conference on Multidisciplinary Research – Agrarian Sciences: Message from the editor

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The journal *Open Agriculture* has established a cooperation with the Organization Committee of International Conference on Multidisciplinary Research – Agrarian Sciences, which took place on July 1–2 2021 in hybrid format (online and in person – Viseu, Portugal). The organization of this scientific event was shared by the Polytechnic Institute of Viseu and the local Management Unit of the CERNAS Research Centre.

The **Special Issue on the International Conference on Multidisciplinary Research – Agrarian Sciences** was launched to allow the participants of the conference to publish their complete and original works, which covered the following areas: Sustainable Agriculture, Animal Science, Environment & Society, Food Science & Technology, and Nutrition & Eating Behaviours.

Under the present urgency to fight climate change and preserve the natural resources and the environment, the scientific developments in the field of sustainable agriculture can be a great contribution to help farmers implement the best agricultural practices aimed at preserving the natural ecosystems and the environment in general. The Sustainable Development Agenda of the United Nations focuses much on the aspects related to green food production and transformation techniques, as a way to efficiently provide food to feed the growing world population, while reducing the stress over the environment. The meat production, and beef in particular, can be seen as problematic, on one side because of the requirements in terms of land, feed, and water, and on the other side, because in some cases it has been associated with deforestation and destruction of rain forests in some parts of the globe. All these aspects need to be analysed from the practical point of view, and scientific knowledge is certainly necessary to help getting answers to some of the problems that urge to be solved.

The pressure over the environment is another aspect highly critical, and the depletion of natural resources needs to be counterbalanced with a rational usage, which implies the recovery of waste materials in a logic of circular economy. Tools such as life cycle assessment are valuable to objectively evaluate possible solutions and help in decision making. The utilization of agri-food residues or by-products, while bringing economic advantages by making it possible to obtain added value products, on the other hand reduces the pollution and helps preserving the environment.

The whole food supply chain, from primary production to the final consumer and discard of the food packages, needs to be on the objective of researchers all over the world, as a way to produce the foods more efficiently, with higher conversion ratios and cleaner transformation technologies, allowing us to obtain better quality foods, both in terms of nutritive value and organoleptic characteristics to please the consumer. Consumers nowadays are becoming more and more alert to the problems that challenge society and attribute more value to sustainable products, like those originating from organic farming, or those packed using biodegradable materials, instead of synthetic plastics which have been identified as highly pollutants, not only on land but most especially on rivers and oceans.

The response of the scientific community to all these challenges, with applied and fundamental research, is pivotal for the global wellbeing and coexistence of man with all other forms of life on planet Earth.

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