

EDITORIAL

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# Research in agriculture and food security: retrospects and prospects

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Research in agricultural science has deeply evolved during the past decades, shifting attention from local to global issues, from production functions to market dynamics and equilibrium models, from orthodox economic theories to multidisciplinary frameworks. While evolving, agricultural science has constantly targeted solutions to feed the world [1]. These tendencies have been parallel to the development of new paradigms for agriculture, moving toward complex agri-food systems inspired to principles of security, resilience, sustainability and inclusiveness [2], that require technological innovations, financial support, policy interventions, regional and international cooperation and a long run vision [3].

The complex, multifaceted and multidisciplinary nature of the agri-food systems is also reflected in the dynamic conceptualization of food security. In the late nineties, it has been recognized that thinking about food security has shifted from global and national to household and individual, from a food first perspective to a livelihood perspective, and from objective indicators to subjective perception [4]. Far from being defined as the condition of a country to have “access to enough food to meet dietary energy requirements” [5, p. 5], food security evokes a multidimensional, multilevel, multiactor framework, conceptualized as resting on three [6], four [7] or even six pillars [8].

The “challenge of feeding 9 billion people” [9] is further complicated by novel threats and contests, spanning from

climate changes [10], pandemics [11], and geopolitical tensions [12], as well as by the need to face food insecurity in developed economies [13], where income inequality [14], food waste [15], poor nutrient intakes [16, 17], and complex value chains [18, 19] drive food insecurity in apparently wealthy conditions [20].

These issues call for a tremendous effort in research to produce evidence-based recommendations and orient entrepreneurs, consumers, and policymakers’ decisions. As one of the leading journals in food security, the pioneering advances in research reported in *Agriculture & Food Security* have far reaching implications both for the developing world and for developed economies. The Journal has a solid tradition in promoting high-level research within the field of food security research, to foster actions, projects, and interventions for more sustainable, resilient and inclusive agri-food systems. Its mission is to welcome research spanning a large range of relevant academic disciplines, including agricultural, ecological, environmental, nutritional, public health and policy. In its large scope, the Journal welcomes diverse topics, including agricultural and environmental sciences, agricultural and food economics and policy, food technology and innovation, information sciences and decision theory, health economics and policy for food and nutritional security. A renowned and widely representative Editorial Board ensures excellence and guarantees unbiased gender, geographic and topic representation of scholars based in least developing countries, emerging economies and developed countries.

*Agriculture & Food Security* currently has two ongoing collections pointing at timely research that should be promoted in agricultural science. The *Climate and Food Security* collection will shape the debate on the

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climate–agriculture–food security nexus. The rationale behind the collection is straightforward. Being responsible for greenhouse gas emissions, food systems need to be reformed to be inclusive, sustainable and resilient. This transition can be achieved through policy reforms, social innovations, new business models and technological advancements [21–23]. The collection *Building Resilience through Sustainable Food Environments and Diets* promotes discussion on sustainable food environments and diets that are healthy, nutritious and secure. It addresses the complex interplay between agricultural practices, environmental sustainability, and food security. The challenge will involve changes in consumers preferences, marketing strategies, and policy legacies, reflected in food claims, sustainability labels, voluntary standards, and so on [24–26]. With such a terrific agenda, *Agriculture & Food Security* is committed to continue serving as a platform to host excellent and impactful research that will feed debates and inform decisions: we are committed to serve academics, policymakers and the whole society.

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