

Review of: "The Disruption of the COVID-19 Pandemic on Farm Produce and its Implications for the Future of Food Security - A review"

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Potential competing interests: No potential competing interests to declare.

The paper addresses a timely issue for food systems transformation in the wake of the COVID 19 pandemic, which is considered one of the most significant pandemics affecting the global economy and all countries, poor and rich alike. Indeed, the impact of the pandemic on food systems and food security and nutrition has pushed the achievement of the Sustainable Development Goals (SDGs) beyond the reach of many countries and has highlighted the disparities in food systems. From these crises, however, several lessons have emerged. First and foremost, the transformation of food systems is an urgent priority. The pandemic clearly illustrates the interconnection of food systems with economic, environmental and health systems.

The authors have made a significant effort to review the literature in order to enrich the paper with data from studies and research dealing with the impact of the pandemic on agriculture in many countries. The presentation of the data and their analysis has helped to inform the reader of the severity of the pandemic on food system supply chains, the food security of countries, and the change in consumer food behaviour during and after COVID 19. Nevertheless, we consider that the study would gain in quality if the following elements were further detailed:

- The research methodology adopted by the authors by informing the reader about the relevance of the systematic review, especially with regard to the criteria for the selection of the articles studied as well as the case of the countries presented (Australia, West Asia, Italy, the EU, the United States, Malaysia...);
- The use of the Global Food Security Index (GFSI) as a basis for analysing the state of global food security should be justified, bearing in mind that there are other indicators for assessing food security, such as those of the FAO. Figure 1 on page 4 presents the dimensions of this index, which should include a resilience/natural resources dimension of the GFSI that shows the importance of the link between food security and the environmental dimension, notably climate change. In relation to this dimension, it is recommended to include the impact of climate change on food security for the countries studied and their possible aggravation as a result of the COVID pandemic¹⁹;
- The framework presented for the design of more resilient food systems that promote global food security requires further detail to the Policy Recommendations proposed by authors through concrete actions, particularly for developing countries that seem to be more affected by the effects of the pandemic than developed countries.

The paper has clearly shown the seriousness of the COVID 19 pandemic by comparing it with other pandemics and economic crises that the world has experienced. It is highly recommended to situate this research in relation to the current food crisis caused by the war between Russia and Ukraine. In fact, this war is having serious consequences on the volatility of food prices and is destabilising world markets, aggravating the food insecurity already heightened by the

COVID 19 pandemic.

To the authors' asset, they introduce the importance of changing consumer food behaviour during and after COVID 19. We consider it useful to introduce the effect that post-COVID 19 behaviour will have on the nutritional quality of today's food consumption, knowing that the nutritional dimension and its impact on consumer health is a key dimension of the concept of food security.

As regards the prospecting of the future of food security, it should be supplemented by studies that have used prospective methods to prospect the future of food security based on data illustrating future scenarios, particularly for developing countries.

In conclusion, the paper is well structured and rich in information related to the effect of the COVID 19 pandemic on agriculture. Our recommendations do not detract from the quality of the study, but we believe that their inclusion can only further improve the content of this paper.