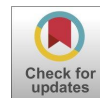




Paradigms of the agricultural system in times of COVID-19
Paradigmas del sistema agropecuario en tiempos del COVID-19

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Mr. Editor.

Until the end of the 20th century, world agriculture underwent a transition towards a new technological paradigm, very different from that of the green revolution, based on the current "bio" revolutions, in which human beings have transformed biodiversity by placing it at their service¹. In this context, the agriculture of the XXI century begins to live a new revolution, broader, deeper than the previous ones: an organizational revolution, of knowledge management and convergences between the different technologies. We live in a world with increasingly scarce resources, not only due to extraction, use but also due to the contamination and destruction of different ecosystems in the environment¹. Thus, the food industry, in general, seeks to adapt its reality, aspects such as the supply chain, the value chain, and consumer preferences, with possible entrepreneurial opportunities².

As of 2020, the COVID-19 pandemic has definitely taken the world by surprise, be it due to the speed of expansion, the high rate of morbidity and mortality, or other health factors³. Determining that all countries are vulnerable, mainly to suffer food insecurity⁴, particularly those in development¹. On the other hand, the rural productive projects try to maintain themselves, but without economic development⁵. This complicated health period brings with it not only a health crisis but also a social one, which requires a change in the economic model¹. Causing a decrease in economic activity, a fall in prices of primary products, the interruption of global value chains⁶, which represent potentially catastrophic financial, ecological, and social impacts⁷. Being somewhat clear, that all analysts agree "the world will not be the same as before the pandemic"³, that is, we live and will live in a world full of uncertainties.

The agricultural sector in Bolivia, as in many countries, is a strategic sector for its economy, it provides basic products for food, raw materials, and inputs for the transformation of food products, likewise, some products through exports generate foreign exchange⁸. However, it faces various environmental threats and in recent years, biological threats, which have caused economic damage to agricultural production, specifically during the 2019-2020 agricultural cycle, agro-productive systems were indirectly affected by conflicts post-election social (November - December 2019) and the Covid-19⁸ health crisis,

which increased poverty and aggravated inequalities¹, since it affected the provision of agricultural inputs, the collection, marketing, distribution, and consumption, due to the fact that the main crops such as potatoes, corn, barley, quinoa, corn among others were in the middle of the harvest process, the commercialization of fruits such as prickly pear, peach, grape, avocado, among others, were in full commercialization⁸. As a result of the delicate situation, the food industry will have to adjust to the new reality². Consequently, there is an urgent need to guide policies, programs, and projects to strengthen the country's agro-productive systems, improve the food transport system, support technical assistance, incorporate alliances with international cooperation⁸, seek strategies of an online model to engage the consumer⁹.

Finally, this new paradigm also develops at a time when science and technology are beginning to seek new convergences with systemic approaches. It is time to reflect, change the model and paradigm¹, planning structural policies in the food industry that allow the implementation of digital solutions, with the aim of promoting productive development¹⁰. Therefore, in the context of the pandemic, it should be taken as an unprecedented opportunity to rethink the way our food systems work⁷. Therefore, more resilient systems must be generated and risk management improved^{7,10}, providing support to producers, so that they continue with the supply, considering biosecurity measures throughout the production chain⁴, from the generation of material premium to the consumer in fresh or processed products, in short, seek economic reactivation.

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Conflicts of interest

Declaro no tener ningún conflicto de intereses, ni haber recibido ningún tipo de financiación pública y/o privada para la realización del presente manuscrito.

Ethical considerations

Declaro no mantener ningún conflicto ético con el contenido del presente documento.

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