

Strengthening Local Food Systems in Times of Concomitant Global Crises: Reflections From Chile



See also Morabia, p. 923, Tarantola et al., p. 925, and the *AJPH* COVID-19 section, pp. 939–977.

The COVID-19 pandemic is superimposed on the existing challenges of obesity, undernutrition, and climate change. Currently, Chile is still facing the worst drought on record, which will continue to negatively affect agriculture. In Chile, COVID-19 also comes on top of a social crisis that began on October 18, 2019, and was driven by the cumulative effects of an economic system established by former dictator Augusto Pinochet that deregulated markets and privatized social security.¹ As of March 26, 2020, Chile, already in a state of catastrophe, had reached 1300 confirmed cases of COVID-19, which catalyzed a total lockdown for the counties with the greatest concentration of cases. As in the rest of the world, in Chile COVID-19 has affected the national food system—which has been observed but mostly not yet documented.

Commercial, large-scale agriculture drives global trade, and Chile is a main global exporter of fruits and salmon. Yet, with the COVID-19 pandemic, the normally lucrative agroexport business in Chile is facing an ever-decreasing demand for imports by its main markets (China, the United States, and the European Union). Domestic markets for fresh goods are being

supplied by small-scale agriculture. Before the social crisis and COVID-19, small-scale agriculture was already vulnerable to food system changes and market shocks because of limited access to technologies, markets, and an aging workforce. The national state of emergency and curfews enacted during the Chilean social crisis forced many Chileans to navigate their food system differently. For example, more Chileans shopped at farmers markets (*ferias libres*)—the main commercial outlets for family farmers—and neighborhood corner stores.

However, the COVID-19 pandemic is a direct threat to both the health and livelihoods of family farmers in Chile—who are on average 55 years old—and, consequently, the local food system. Although the National Association of *Ferias Libres* obtained governmental permission to continue in areas on total lockdown, including specific hours for the elderly, more than 20% of *ferias libres* are suspended. Therefore, family farmers increasingly depend on home delivery programs, mainly promoted through digital means, to sell their products. The support to vendors of *ferias libres* comes primarily from the local governments that are committed to

facilitating local food access. Some municipalities are offering a program called *Tu Feria a La Casa*. This program provides exclusively the elderly with affordable fresh product boxes, at no extra delivery charge, which they can receive by calling a landline telephone number. Other municipalities provide free boxes of food to their most vulnerable families.

During the Chilean social crisis of 2019, many supermarkets were burned or pillaged, and not all have reopened, particularly in the poorest areas. Yet, as the COVID-19 outbreak continues, consumers are becoming more dependent on supermarkets, where affordable ultraprocessed foods are highly accessible, especially to low-income consumers, but where fruit and vegetable prices are higher than in *ferias libres*.² In Chile, the 3.6 million self-employed workers are particularly vulnerable to the myriad negative socioeconomic

ramifications related to the COVID-19 pandemic, including the inevitable massive rates of unemployment. High supermarket prices are therefore a challenge, given the substantial consumer uncertainty.

Chile's Law of Food Labeling and Advertising is a global example of a multipronged regulatory effort to make food systems more conducive to healthier eating through initiatives such as front-of-package warning labels. Yet Chile ranks first among Organisation for Economic Co-operation and Development nations in overweight and obesity prevalence, which reflects a food environment saturated with products with warning labels and, thus, an even greater need for healthy food.³

In late 2019, town hall-style meetings called *cabildos* were held throughout Chile to address the causes and possible solutions to the social crisis, including food access. Building on the *cabildo* model, with today's global technology, face-to-face spaces for citizens to meet can be virtual forums where initiatives related to surviving during COVID-19 can be discussed, including strategies to make food accessible to everyone, while understanding digital inclusion. Both public and private institutions and

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organizations can serve as virtual hosts, and leaders of agricultural groups, for example, can disseminate information to members, who often have low digital inclusion but access to social media and messaging. Greater preparation can help mitigate emotional stresses and improve resilience for the next crisis.⁴

In Chile, it is once again necessary for everyone to navigate the food system in a time of crisis—this time infectious rather than social in origin. David Nabarro, one of six special envoys on COVID-19 to the World Health Organization, emphasizes that COVID-19 is not just a health crisis but also an unprecedented economic and social interruption.⁵ This type of socioeconomic interruption to local economies adds to the preexisting environmental

challenges that have been affecting food production in Chile and other countries. Nabarro asserts that it is necessary to

... steer the new system towards a new and improved paradigm, such as that provided by the 2030 Agenda and the Paris Agreement. In order to do that, it will be important to define a clear narrative to underline the interlinkages between the spread of the virus, its causes and consequences, to the larger picture of sustainability and climate.^{5(p4)}

Therefore, it is critical to understand how the myriad negative impacts of COVID-19 on the food system are inextricably linked to global climate change.

To do so, we have designed a table (Table 1) that can be used to visualize the interlinkages between climate change, crises of

any cause, and the subsequent human resilience gained. Although Chile's experiences are used as an example in Table 1, many other Latin American and Caribbean countries have also undertaken local initiatives to protect food supply chains as COVID-19 emerged in March. In fact, recognizing the need for greater intersectoral collaboration, on April 3, 2020, the ministers and secretaries of agriculture, food, livestock, fisheries, and rural development of 25 Latin American and Caribbean countries addressed their collaborative support of maintaining the regional food system, specifically by adapting the appropriate measures to the local realities of each country.⁶ Taken together, if Chile and other countries worldwide

begin to standardize their food systems data collection, for example by applying Table 1, swifter and stronger collective action to strengthen global food systems can occur.

How, then, do we reconcile a sick planet with people sick from (or in conjunction with) an unanticipated crisis of any origin (e.g., social, infectious, or natural disaster)? Although economies continue to struggle and companies continue to close because of COVID-19, nations and civil society alike continue to look for alternatives to both maintaining and navigating local food systems. White et al. recently analyzed the role commercial food systems should play in positively affecting health through diet.⁷ The authors concluded that to make food systems more sustainable for both human and planetary health, a

TABLE 1—Interlinkages Between Crises, Causes, and Consequences, With the Larger Picture of Climate and Resilience Strategies to Improve Approaches to Safe and Sustainable Diets

Food System Actors in Chile	Climate Change	Crisis 1: Social Cause	Resilience Strategies	Crisis 2: Infectious Cause	Resilience Strategies
Family farmers	Decreased yields Crop change Abandonment	Difficulties transporting products Increased demand	Traditional channels (<i>ferias libres</i>) increase market rate	Health concerns Work force limitations Difficult access to markets	Home and municipal delivery Private–public working groups Visible campaigns for farmers markets
Supermarkets	Higher prices for fresh products	Fires, looting, and destruction	Increased surveillance Insurance Definite closure of stores	Long lines Sanitary risks inside stores Sourcing products	Reinforced home delivery Limited store opening hours Separate protected hours for elderly people and health care workers
Individual consumers	Less access to and availability of fresh products	Decreased income Disrupted public transport Unsafety	<i>Cabildos</i> Shopping at traditional markets	Job loss Uncertainty More time at home Unavailable school feeding	Online shopping Access to public aid Food preservation Homemade recipes School meal boxes Food basket boxes from local municipality (paid and free)
Agribusiness (exports)	Technological adaptation	Uncertainty regarding product transport Favorable exchange rate Stable foreign markets	Logistic adaptation	Workforce limitation Uncertainty regarding transport and entry Favorable exchange rate Economic crisis in foreign markets	Private–public working groups Efforts to keep intersupply chains open Online marketing

change to the entire global food system is required, and that governments have the ability to speed up this change. Collective action must be taken so that the differences between what large and small-scale producers face with their respective abilities to adapt to climate change, in addition to social or health shocks, do not inadvertently create greater socioeconomic inequality and vulnerability. We believe that the COVID-19 pandemic and any future crises are critical global moments in which to rethink food systems for sustained planetary and human health. **AJPH**

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CONFLICTS OF INTEREST

R. Kanter and S. Boza have no potential or actual conflicts of interest to report.

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