Food security and COVID-19 in Latin America: A challenge to overcome

Dra. Marianella Herrera Cuenca MSc, DSc^{1,2,3}

SUMMARY

Latin America is a region full of challenges due to its characteristics. The COVID-19 pandemic arrived in an unprepared region that must take action for controlling an emergency of a large magnitude, which is not surprising because of the economic decline, the increase in hunger, and informal employment experienced in recent decades. Previous efforts to eradicate hunger and move closer to meeting the number two goal of sustainable development are facing now a setback given the slowdown in activities because of the pandemic. The projection of the increase in intraregional poverty reported by CEPAL is a call for attention to the reformulation of policies associated with the dimensions of poverty and in particular the food and nutritional security of the population. Policies should focus on two levels: an immediate level of attention to the vulnerable population and another dedicated to planning structural actions with a view to the middle and long term.

Key words: *Food security, Latin America, COVID-19, pandemic*

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ORCID: 0000-0003-0162-3480

- ¹Centro de Estudios del Desarrollo (CENDES), Universidad Central de Venezuela.
- ²Fundación Para la Alimentación y Nutrición José María Bengoa, Venezuela.

³Observatorio Venezolano de la Salud (OVS), Venezuela. E-mail:manyma@gmail.com

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RESUMEN

La región de Latinoamérica por sus características, es una región llena de retos y desafíos. La pandemia de COVID-19 toma a la región sin prepararse para una emergencia de tal magnitud, lo cual se puede constatar por el decrecimiento económico, el aumento del hambre y del empleo informal experimentado en las últimas décadas. Los esfuerzos realizados con anterioridad para erradicar el hambre y acercarse al cumplimiento del objetivo número dos de desarrollo sostenible se han encontrado con un franco retroceso dada la ralentización de las actividades por causa de la pandemia. La proyección del aumento de la pobreza intrarregional reportado por CEPAL, es un llamado de atención a la reformulación de las políticas asociadas con las dimensiones de la pobreza y en particular a la seguridad alimentaria y nutricional de la población. Las políticas deben enfocarse en dos niveles: uno inmediato de atención a la población vulnerable y otro dedicado a la planificación de las acciones estructurales con mirada al mediano y largo plazo.

Palabras clave: Seguridad alimentaria, América Latina, COVID-19, pandemia.

INTRODUCTION

The global pandemic of COVID-19 disease (produced by the SARS-COV-2 virus) has generated a space for discussion about key points for humanity, as never seen before in recent history. On one hand, the severe criticisms of the management of the pandemic by the World Health Organization (WHO) at the beginning of the epidemic and the breaks and fractures in the different approaches on the other, show the complexity of this issue. The world after this pandemic will be changed. The way of work, bring education, and investing time will be transformed and the planet will have to rethink in global terms how to face this transition of society (1). It is very important to be aware of the situation in Latin America since it is the region with the highest inequalities in the world (2).

One of the most important points for low- and middle-income countries, and particularly for the Latin American region (LA), is the awareness of pre-existing problems which include: high poverty, food insecurity, poor sanitation, hunger, and malnutrition, and which become in this situation the center of proper decision making to overcome the milestones that contribute to achieving the living conditions of the majority of the population.

Given the high contagiousness of SARS-CoV-2, the risks to the general population are high. If symptoms are not addressed, health complications may occur. These symptoms have been categorized from what may appear to be a simple cold to severe pneumonia and truly life-threatening oxygenation disorders (3). In an ideal world, staying at home would be logical thinking, but is it feasible?

Over the past three years, international multilateral organizations have begun to transform reports to include relative measurements of the achievement of sustainable development goals. An example of this is the global and regional food security reports produced by the Food and Agriculture Organization (FAO), United Nations Children's Fund (UNICEF), The World Food Programme (WFP), International Fund for Agricultural Development (IFAD), and WHO in 2019 (4). In particular, in the State of Food Security, the measurement and categorization of food security (FS) in marginal and moderate and severe food insecurity (FI) have made the difference by highlighting the significant vulnerability of the population that must face a life without the possibility of adequately feeding themselves (4).

It was not enough to indicate the level of undernourishment, based on the apparent consumption of calories. The food panorama remained narrow, given the impact that not only Therefore, during the global and regional food security scenario that existed before the pandemic, and according to reports such as the FAO and the Global Nutrition Report (2,5) that expressed that Latin America is the most unequal region in the world in terms of food security at the time, this article proposes to review some of the effects that the COVID-19 pandemic has had on food security within the region.

Poverty and its impact on Latin American food security

From the multidimensional concept of food security, its close association with poverty can be understood; both, poverty and FS are multidimensional notions. Food security exists "when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their daily energy needs and food preferences for an active and healthy life" (6,7). This concept comprises four dimensions: Physical availability, economic and physical access, utilization, and stability over time of the three previous dimensions (6). From these scopes, which are interrelated, we can conclude that they have some relationship with well-being, living conditions, and family or individual income without necessarily being a perfectly defined causal association. The impact of food security on the development model has been proposed for several decades since nourishment is part of the biological wellbeing of the population, that allows being healthy, productive and express the maximum potential in the best conditions possible, thus, food insecurity interferes with the holistic development of individuals, therefore is an obstacle to achieve societal development (8).

Multidimensional poverty includes three aspects: health, through the measurement of nutrition and infant mortality indicators; education, through the years of schooling and years within the educational system; and quality of life, through the evaluation of access to energy for cooking, sanitation, drinking water, electricity, housing, and household goods. The measurement of poverty and its dimensions can determine the existence of simultaneous deprivations and allows both to identify people in poverty and to disaggregate them by dimension and indicator (9), in such a way that it can give a more precise idea of the situation of people and the area in which they are most vulnerable. It also gives an idea of the human rights situation and the potential and windows of development opportunities.

During the COVID-19 pandemic, Latin America has faced enormous challenges in addition to those already faced in pre-pandemic times. Scenarios of poverty and continuing social challenges such as economic decline and the presence of a high proportion of informal employment have increased during the pandemic (10), given the quarantine and physical distancing measures required to stop the spread of the SARS-CoV-2 virus that has proven to be highly contagious to people (11). These measures, which have prevented regular performance in jobs, have resulted in the loss of jobs and of course, have meant a decrease in income for large sectors of the population (10).

In this context, where life continues and families must follow the course of their activities, couples join or divorce, women may be pregnant, children born pre-pandemic must face their first two years of life - which is a critical period of growth and development - older adults continue to age and chronic diseases follow their evolution and worsening, if these are not taken into account because of social isolation and distant measures, existing problems will increase and new ones will appear. It can be seen that health, in general, has suffered an alteration, and prevention programs have also been altered.

Living in poverty implies facing challenges daily, which impact the health and well-being of the population. Lack of services, fewer years of schooling, access to health, all of which continue and are worsening in the current conditions within the COVID-19 pandemic. A logical reflection is about the future in people's quality of life, and the consequences of having lived, for example, the first thousand days, or at least a portion of them, in conditions of deprivation that already exist and that have been worsening during the pandemic. Studies refer to understanding the environmental influence in the first thousand days of life, for example, and the dramatic consequences on future health if negative disturbances and temporary exposures are not corrected (12). A child who does not receive the nutrients needed for brain development and psychomotor skills is at increased risk of developing cognitive and psychomotor disabilities (13).

Poverty, then, is a multidimensional determinant that will influence development, but it will also increase the gaps between populations groups, augmenting the backwardness already accumulated in previous decades.

The following Table is a projection of the population in a situation of poverty and extreme poverty made by the Economic Commission for Latin America and the Caribbean (ECLAC-CEPAL in Spanish) without considering the effect of the COVID-19 measures.

In the same Table, even though Venezuela is not disaggregated, it is included in the total. In the particular case of Venezuela, the figures provided by the ENCOVI 2019-20 surveys reflect a dramatic increase in deprivation with 96 % income poverty and a marked increase in multidimensional poverty indicators (14).

With the increase in the expected regional poverty reflected in the table, the predictable behavior of family food security is undoubtedly to be toward worsening. With the loss of formal jobs, during the already high informal sector in the region, households would resort to survival strategies that would help them overcome this situation, and face the probable deterioration in the nutritional status as a result of the inadequate feeding of their members (15).

From Northern Mexico to Patagonia, Argentina

Latin-American countries, before the pandemic, were registering signs of alarm that should have been taken into account to implement the necessary corrective measures for their improvement and reorientation regarding FS (5). People with undernourishment in LAC showed an increase in the last four years of 4.5 million people for a figure of 42.5 million people compared to the numbers reported in 2014. Also, a significant inequality was identified in terms of food and nutritional security by gender. Of the 187 million people affected by the total or partial

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Table 1

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	Extreme				Total			
Country	2019 ^a	2020 ^b			2019 ^a	2020 ^b		
		Context	Context	Context	Level	Context	Context	Context
	Level	Low	Middle	High		Low	Middle	High
Argentina ^c	3.8	5.1	5.5	6.3	26.7	32.5	33.6	35.3
Bolivia	14.3	15.4	16.0	16.7	32.3	33.6	24.4	35.5
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Brazil	5.4	6.9	7.4	7.9	19.4	23.0	24.3	25.4
Chile	1.4	2.1	2.3	2.6	9.8	11.9	12.7	13.7
Colombia	10.3	11.3	12.0	12.7	29.0	30.4	31.5	32.5
Costa Rica	4.0	4.7	4.9	5.3	16.0	17.7	18.4	19.1
Ecuador	7.6	9.9	10.7	11.6	25.7	30.0	30.8	31.9
El Salvador	7.4	8.5	9.0	9.6	33.7	35.4	36.4	37.3
Guatemala	19.8	21.2	21.4	21.8	48.6	50.3	50.5	50.9
Honduras	18.7	19.5	19.8	20.5	54.8	56.3	57.1	57.8
Mexico	11.1	14.9	15.9	17.1	41.9	46.7	47.8	48.9
Nicaragua	18.0	20.7	21.3	22.2	47.1	50.6	51.6	52.7
Panama	6.2	6.4	6.6	6.8	14.2	14.5	14.9	15.6
Paraguay	6.2	6.3	6.5	6.9	19.4	19.8	20.3	21.1
Peru	3.7	4.6	4.8	5.1	16.5	18.5	19.1	20.1
Dominican Repúblic	4.5	4.6	4.9	5.3	20.3	20.7	21.1	21.7
Uruguay	0.1	0.2	0.3	0.4	2.9	4.2	4.8	5.7
Latin America ^d	11.0	13.0	13.5	14.2	30.3	33.7	34.7	35.8

Latin America (17 countries): projection of population living in poverty (extreme and total) in 2020, without including the effect of the measures for mitigation of the impact of COVID-19 (in percentages)

Source: Comisión Económica para América Latina y el Caribe (CEPAL), based on Banco de Datos de Encuestas de Hogares (BADEHOG).

a Projections.

b Preliminary projections based on assumptions of impacts on employment and wages for different productive sectors. The three contexts vary according to if the average wage's variability of households is less than the GDP (low context), same (middle context), or higher (high context).

c Urban areas settings.

d Includes the 17 countries on the table plus the Bolivarian Republic of Venezuela.

interruption in their access to food, 69 million were women compared to 55 million men (5).

Since food environments are the interaction between people and the physical, economic, political, and socio-cultural conditions that determine how food is acquired, stored, and prepared, understanding these surroundings becomes critical to addressing what happens there (5).

In Latin America, the last few years were marked by economic decline, which together with the inequities in the region contributed to the taking over the continent by the Sars-CoV-2 virus without being prepared for an emergency of such magnitude (1). In fact, so far it is reported that at the regional level there is a drop in GDP of 6.4 % due basically to the restrictions applied to the tourism and service sectors, and the decrease in exports from the manufacturing, mining, and fuel industries (16).

We will now evaluate the following aspects that contribute to improving or worsening food security: food production, trade restrictions, the vulnerability in food prices, difficulties in transportation, and the increase in informal employment.

Food production

Latin America (LA) has traditionally been a food exporting continent, with some exceptions, including Venezuela. The region is responsible for 14 % of the world's production of agricultural and fishery products, and before the pandemic was projected to double its production, thus becoming the continent with the largest food exports in the world (17). In Brazil and Argentina, the continued practice of double cropping of corn and soybeans was expected to increase, and poultry production in Latin America and China was expected to account for nearly 40 % of the increase in global poultry production (17).

Food production in the region was then, and still is, an important source of income and employment in the area. In fact, despite the pandemic, there has been a 6 % growth in agricultural production and the fishing sector in the region, a figure that is very important when one considers that the rest of the goods exported by the region have reported a 21 % drop, due to the loss of productive capacity for different reasons (15). The contraction in income from food production, and consequently the decrease in it, is considered an alteration in availability. The reduction in the production of perishable foods and those with greater artisan labor have been the most vulnerable during this crisis, to the detriment of healthy eating (15,16).

Trade restrictions

Even though some countries promoted trade restrictions for food, in Latin America trade liberalization measures surpassed restrictions, except in a few cases. Particularly noteworthy is the case of the Bolivarian Republic of Venezuela, where food imports have continued to include luxury foods that are completely inaccessible to the majority of the population (18). However, trade flexibility measures in no way guarantee access by the most vulnerable population to basic foods that should constitute a varied, balanced, and sufficient diet. It is important to highlight that food exports outside the region have remained practically unchanged, while intraregional food marketing has experienced a decline (15,16).

The vulnerability of food prices

Traditionally, food prices have behaved in a volatile manner. Depending on crops, and supply and demand, food is a commodity that has taken on particular relevance over the decades in world markets. Thus, in the mid-2000s it was possible to observe how quickly the world food market changed according to circumstances. In the early 2000s, the positive consequences of previous decades of growth in the food market were evident: good harvests increased purchasing power and diversification of diets. However, from 2004 onwards, the increase in production failed to keep pace with demand, and prices began to rise. With the successive global economic crises, particularly in 2008 and 2009, the impact on food security in many countries was felt (19).

In this context, which was unexpected and abnormal for the entire world —including Latin America— some foods had already been experiencing a drop in prices before the pandemic and with some variations, this same trend continued during the first months of the crisis. However, since April, prices have risen in many countries of the region, which is an obstacle to economic access to food, thus altering one of the dimensions of food security (20).

In fact, unlike the other indicators, the consumer price index (CPI) has had a greater impact on food than on the rest of the products in the basic goods basket. Feeding during the pandemic has had a higher cost than in the same period with respect to the previous year and thus, at the regional level, the food CPI has registered a variation of 5.6 % compared to the total CPI which has only varied by 3.8 % (16).

This relative increase in food prices, marked by an alteration in the supply and demand for food, is to be expected given the circumstances and is a factor influencing price variability. At the beginning of the pandemic, as we have mentioned, there was stability and even a small decrease in the price index. However, as the pandemic has progressed and supply has decreased, prices have increased (16,20).

Difficulties for transport

Transportation difficulties, in general, have

been an obstacle to living a normal life during the pandemic, from initial prohibitions on walking the streets in some countries, to preventing travel by air, boat, or motor vehicles. Similarly, early trade restrictions affected transportation and fuel production failures influenced regional food transportation (15). It is worth noting the case of Venezuela, which during the pandemic has experienced a crisis in the availability of fuel, being a net exporter of oil in the past, but with the deterioration in the facilities of the refineries and the inadequate public policies with respect to the economy, oil production has deteriorated, and consequently, access to gasoline and even diesel has decreased for the transportation of food and the general population (15, 16, 20, 21).

Implications for the nutrition, health, and wellbeing of the population

As a result of undernourishment, food insecurity, and hunger in the region, which have not been eradicated despite having experienced a decline at the beginning of the past decade, millions of people must face the impossibility of eating adequately. According to FAO, by 2018 the countries with the highest prevalence of people suffering from hunger were Haiti (49.3 %),Guatemala(15.2 %),Nicaragua(17 %), Bolivia (17.1 %), and the Bolivarian Republic of Venezuela (21.2 %) (5).

On the other hand, chronic growth retardation in children under 5 years of age, which responds to the impossibility of maintaining a constant balanced, varied, and sufficient diet in the most vulnerable populations over long periods, is an indicator that reflects the cumulative effects of prolonged environmental deprivation among which are: poor nutrition, recurrent infections, and poor hygiene (22). However, equally important has been the increase in obesity in the region, associated with hidden hunger, particularly among more disadvantaged women, having a higher prevalence of food insecurity than men in the region, and being more obese than them (5,23).

Main risks and challenges

The food systems and food security of Latin

American countries are undoubtedly at risk. Recovering access to and distribution of food and ensuring its adequate use must be a regional priority to guarantee the right to food. The biggest challenge is to ensure multi and intersectoral work given the complex situation in Latin America that, since the pre-pandemic period, stood out as a scenario where social inequalities were immersed in social components such as health, food, and education. Thus, a comprehensive view of the multiple and complex problems that afflict the region must prevail even more at this time.

To think that the solution to food insecurity could be food distribution only is to take assistance policies and programs to a paternalistic extreme since this crisis represents a window of opportunity to start working together and by levels, within the severe problem of food insecurity and its negative consequences for the population.

The region requires a holistic development plan assuming the human rights framework as the guiding axis of the proposals to generate a decrease in the social inequality gaps. An important point is that the social determinants of health ultimately have a permanent interrelationship among them so, a deviation in the path of the wellbeing of some of these determinants has direct consequences on the other. This is the case with food and nutritional deficiencies, which have a direct impact on health and education.

People cannot be healthy with nutritional deficiencies or excesses, nor can they be prepared for education when they do not eat an adequate breakfast. In the case of Latin America, the pandemic has represented a step away from the achievement of sustainable development goal 2 (SDG2): zero hunger. The already slowed down Latin American economy is facing this new challenge where generating formal employment, access to food, health and education is difficult due to the deteriorated conditions in the various countries. The growing poverty with all its dimensions and its implicit deprivation shows that it is impossible to move forward without taking into account the integrality of human beings. Beyond the figures, the qualitative aspects studied in the region express the coexistence of countless restrictions on the daily life of millions of people. Thus, the deterioration of food access and availability expressed by visible deficiencies in nutritional status or excesses with hidden hunger, build a scenario that does not favor the development of individuals, the achievement of hunger eradication, and ultimately constitutes an obstacle to regional development.

Public policies should focus on two aspects: food and nutritional attention in the short term to those who require it, and programs aimed at structural strengthening, developing formal jobs and aligning them with prevention programs in health, education, environment, and comprehensive well-being. This window of opportunity for rethinking regional development should not be wasted; on the contrary, it should take into account the intra-regional support of capacities, trade, and economic structures of the region. In this way, Latin America could emerge strengthened with great learning, and be able to overcome the vulnerability of its population for the best.

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