Food and Agriculture Organization of the United Nations

WFP World Food Programme

PAHO Pan American Health Organization

World Health Organization Americas

unicef

IFAD Investing in rural people

2020

REGIONAL OVERVIEW OF FOOD SECURITY AND NUTRITION IN LATIN AMERICA AND THE CARIBBEAN

FOOD SECURITY AND NUTRITION FOR LAGGING TERRITORIES

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2020 REGIONAL OVERVIEW OF FOOD SECURITY AND NUTRITION IN LATIN AMERICA AND THE CARIBBEAN

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Food and Agriculture Organization of the United Nations
Santiago, 2021

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FOREWORD

The year 2020 has brought one of the worst health crises in recent history. At the time of finalizing this document, over 60 million people in the world have been infected with the novel coronavirus, and 1.4 million have died. Projections point to the largest drop in gross domestic product since World War II, and an increase in poverty in Latin America and the Caribbean of approximately 45 million people. This situation is having dramatic repercussions on employment and incomes, and a disproportionate impact on food and nutrition, especially for the region's most vulnerable inhabitants.

The coronavirus (COVID-19) health crisis will affect progress associated with the Sustainable Development Goals (SGDs). While its effects have not yet been fully measured on targets related to ending hunger, achieving food security and improving nutrition, it is expected that there will be immediate and lasting consequences on the quality of life of the population. This may seriously jeopardize the achievement of the targets associated with SDG 2 "End hunger, achieve food security and improved nutrition and promote sustainable agriculture" and SDG 3 "Ensure healthy lives and promote well-being for all at all ages".

This is even more concerning since, even before the pandemic, much of the region's progress in terms of food and nutrition had reverted. In 2019, there were 47 million people living in hunger in Latin America and the Caribbean. This means that approximately 7.4 percent of the region's inhabitants were suffering from hunger; perhaps more importantly, it also means that the total number of undernourished people has increased by more than 13 million people in the last five years alone.

Likewise, over 190 million people suffered from moderate or severe food insecurity in 2019. In other words, one of every three inhabitants of Latin America and the Caribbean did not have access to nutritious and sufficient food due to lack of economic or other resources. This reality can affect food quality and eating habits, and have negative consequences on nutrition, health and well-being.

Food quality is also related to overweight, and this new edition of the Regional Overview of Food Security and Nutrition in Latin America and the Caribbean confirms that the rate of childhood overweight continues to grow; in 2019 it stood at 7.5 percent, which is above the global average of 5.6 percent. In fact, overweight and obesity have increased among all age groups. The rate of overweight in women exceeds that of men in all countries, and in 19 countries the difference is 10 percentage points or more. The economic and social cost of the double burden of malnutrition, and especially of overweight and obesity, is increasing in the region, with 75 percent of deaths caused by noncommunicable diseases being highly associated with unhealthy eating.

However, as is well known, national averages often hide even more serious situations within countries. Today, in Latin America and the Caribbean, one in every five territories is highly lagging in regard to malnutrition, either due to stunting or overweight. Childhood stunting rates are disproportionately high in rural territories with less access to services and labour markets, where labour markets are predominantly informal, and in which the population has high levels of poverty and low levels of schooling. Overweight in children under 5 is more pronounced in urban areas, and especially among the poorest groups, although it is also present in rural areas. In fact, 53 territories, or one out of every five, are lagging as a result of the double burden of malnutrition, and these territories tend to be rural, with high levels of poverty and high proportions of indigenous and Afro-descendant peoples.

The five United Nations agencies that developed the 2020 edition of the Regional Overview of Food Security and Nutrition in Latin America and the Caribbean would like to underscore the need for new policies and investments that target lagging territories where people suffer from the highest rates of malnutrition. The region will only have achieved Zero Hunger when all women

and all men, in all territories, have food security and are free from all forms of malnutrition.

The 2020 Regional Overview highlights some examples that are already occurring in the region that demonstrate that it is possible to carry out successful, multidimensional initiatives that can reduce the different forms of malnutrition in areas facing the greatest challenges. There are cross-cutting policies and programmes that combine interventions to guarantee physical and economic access to healthy food, while ensuring their proper use and quality. When these actions are designed and implemented in dialogue and coordination with relevant stakeholders and considering the territories' characteristics, their impacts on the well-being of the entire population can increase.

Therefore, it is urgent that political actors and society as a whole, with the support of the United Nations and the international community, respond with substantive measures so that the progress that was initially made towards the SDGs does not become merely a good story in the region's recent history. The full and sustainable development of the territories that are falling behind is not only an obligation in terms of the realization of the rights of their inhabitants; it would also allow these territories to activate their social, economic, environmental and cultural potential, to the benefit of all societies and the planet.

Everything seems to indicate that the coming years will be very complex and present enormous challenges for achieving the 2030 Agenda for Sustainable Development, but we hope that this edition of the Regional Overview will contribute with evidence and proposals to building a more inclusive and sustainable recovery that, this time, supports all people and their territories

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ABBREVIATIONS

ECLAC	Economic Commission for Latin America and the Caribbean
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross domestic product
IFAD	International Fund for Agricultural Development
LAC	Latin America and the Caribbean
NCD	Noncommunicable disease
PAHO	Pan American Health Organization
SDG	Sustainable Development Goal
SFP	School feeding programme
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
WB	World Bank
WFP	World Food Programme
WHO	World Health Organization

GEOGRAPHICAL SUBREGIONS OF LATIN AMERICA AND THE CARIBBEAN AND COUNTRY CODES[1]

LATIN AMERICA

Mesoamérica

BLZ	Belize
CRI	Costa Rica
SLV	El Salvador
GTM	Guatemala
HND	Honduras
MEX	Mexico
NIC	Nicaragua
PAN	Panama

South America

ARG	Argentina
BOL	Bolivia (Plurinational State of)
BRA	Brazil
CHL	Chile
COL	Colombia
ECU	Ecuador
GUY	Guyana
PRY	Paraguay
PER	Peru
SUR	Suriname
URY	Uruguay
VEN	Venezuela (Bolivarian Republic of)

CARIBBEAN

ATG	Antigua and Barbuda
BHS	Bahamas
BRB	Barbados
CUB	Cuba
DMA	Dominica
DOM	Dominican Republic
GRD	Granada
HTI	Haiti
JAM	Jamaica
KNA	Saint Kitts and Nevis
LCA	Saint Lucia
VCT	Saint Vincent and the Grenadines
TTO	Trinidad and Tobago

[1] The classification of countries in different geographical groups is purely for statistical purposes and does not imply any judgment on the part of the United Nations on the political or other type of situation of the countries or territories.

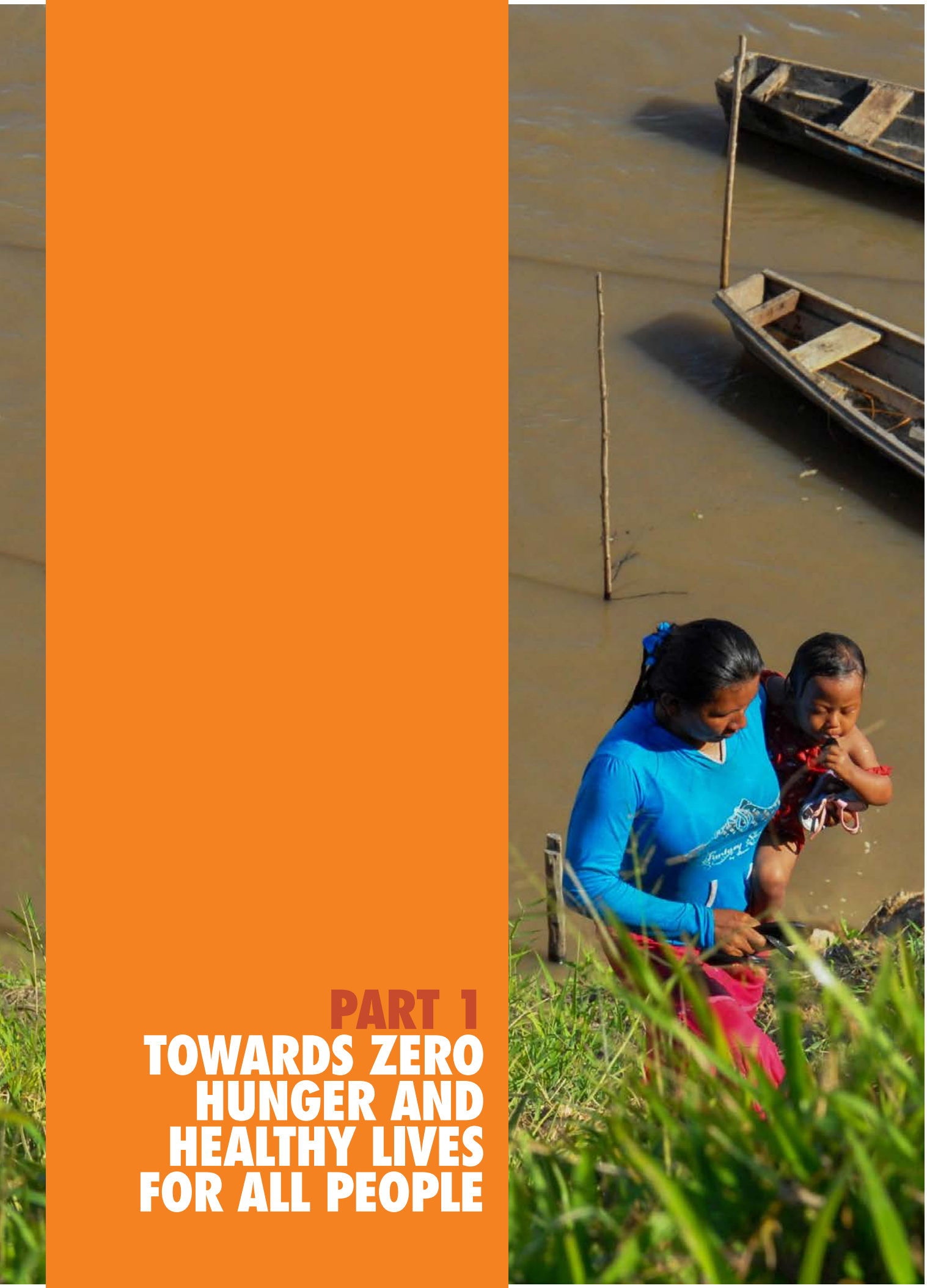
PRESENTATION

The goals of the 2030 Agenda for Sustainable Development that are related to food security and nutrition will not be achieved as long as, in some territories in Latin America and the Caribbean, populations continue to live with malnutrition rates that are at least double those of national averages. Economic opportunities in these areas are often limited, public services are scant, and exposure to severe climate events is high. The public policies promoted in the region have had less impact in these historically lagging territories, and there is a pressing need to produce a new agenda of public instruments that address the characteristics of the communities that inhabit them.

The full and sustainable development of the territories that are falling behind is not only an obligation in terms of the realization of the rights of their inhabitants; it would also allow these territories to activate their social, economic, environmental and cultural potential, to the benefit of all societies and the planet.

It is hoped that the 2020 Regional Overview will help to highlight the challenges experienced by the territories with the worst indicators in terms of food and nutrition, and that it will serve to mobilize political commitment and public attention towards those areas that are most highly lagging in comparison with national averages. As in previous editions, this Overview also outlines the policies and programmes that countries are developing to address all forms of malnutrition.

The year 2020 will be remembered for many decades as the year of the COVID-19 pandemic.
The indicators of the 2030 Agenda that are used in this publication do not yet show the different impacts of the novel coronavirus. However, in each of the chapters and sections that follow, there are references to the possible implications of the pandemic for the future.



PART 1
TOWARDS ZERO HUNGER AND HEALTHY LIVES FOR ALL PEOPLE

PART 1

TOWARDS ZERO HUNGER AND HEALTHY LIVES FOR ALL PEOPLE

KEY MESSAGES

➔ In 2019, 7.4 percent of the population of Latin America and Caribbean, or 47.7 million people, lived with hunger. This situation has deteriorated in the past five years as the number of undernourished people increased by 13.2 million.

➔ If this trend continues, the possibility of achieving Sustainable Development Goal 2, Zero Hunger, will become more remote. It is estimated that hunger will affect 67 million people in the region by 2030, and this figure does not account for the repercussions of the COVID-19 pandemic.

➔ The population affected by food insecurity in Latin America has continued to increase over the past five years. In 2019, almost one-third of the population, or 191 million people, suffered from moderate or severe food insecurity. Of these, 57.7 million people, or approximately 10 percent of the region's population, suffered from severe food insecurity; this means they either had no food, went hungry or went more than one day without eating.

➔ The rate of childhood stunting is decreasing in the region, and overweight in children under 5 is increasing. Stunting decreased from 22.7 percent in 1990 to 9 percent in 2019, falling below the global average of 21.3 percent. On the other hand, overweight in children increased from 6.2 percent to 7.5 percent in the same period, which exceeds the global rate of 5.6 percent.

➔ In 2016, approximately 75 percent of deaths in Latin America and the Caribbean were attributed to noncommunicable diseases (NCDs). Access to quality, nutritious and sufficient food helps to prevent these types of diseases and strengthen the immune system to better respond to problems related to respiratory failure, among others.

➔ The impacts of the COVID-19 pandemic are not yet reflected in the Sustainable Development Goal indicators related to food and nutrition. However, the available information on food consumption, nutrition surveys and forecasts of increased poverty in the region all point to a significant increase in hunger, food insecurity and malnutrition in the coming years.

Hunger, food insecurity and the different forms of malnutrition reflect the distance that separates us from the effective exercise of the human right to adequate food and health. The achievement of the targets stemming from Sustainable Development Goal 2 (SDG 2) — zero hunger — and SDG 3 — ensure healthy lives and promote wellbeing for all at all ages — constitutes a roadmap that facilitates the realization of these rights and the fulfillment of the rest of the 2030 Agenda objectives.

The indicators used to measure progress towards these targets complement one another and attempt to show, from different approaches, the advances made by countries in relation to their populations' access to healthy nutrition. One challenge that has been recognized, and that is particularly important for regions with high levels of inequality, is the disaggregation of these indicators' information so that populations with more severe lags can be identified. Chapter 2 of this document addresses this challenge by broadening the analysis of indicators and proposing policy actions to reduce inequality among territories.

The year 2020 will be remembered for many decades as the year of the COVID-19 pandemic. The 2030 Agenda indicators used in this publication to characterize the food and nutrition situation do not yet reflect the different impacts of the novel coronavirus. However, this chapter underscores some representative results that are available at the time of this publication's conclusion. ■

1.1 SDG 2. END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

SDG 2 proposes to end hunger and all forms of malnutrition by 2030. This section presents the situation in countries of Latin American and the Caribbean (LAC) in relation to this goal's first two targets. The first target has two indicators, and it tracks progress towards ending hunger and ensuring the access of all people to sufficient and nutritious food. The second target also has two indicators, and it provides information on the physical impacts of nutritional deficiencies related to food, whether these be stunting or low weight or overweight for height. Therefore, both targets identify different and yet complementary milestones that facilitate an understanding of countries' situations and challenges in terms of achieving SDG 2.

It is important to remember that the first target's indicators are measured every year, while the second target is measured through periodic surveys that vary in frequency from one country to another. Therefore, the fact that they measure different (although closely related) factors, and that measurement periods vary, must be considered when comparing advances towards the first two targets of SDG 2.

In the context of the current pandemic, which is unfolding within a social and economic crisis, it is to be expected that these indicators will regress significantly, at least in the short and medium term (Table 1). In fact, several countries in the region are already identifying increases in acute malnutrition in some territories and population groups.

1.1.1 Target 2.1. End hunger and ensure access for all people to safe, nutritious and sufficient food all year round.

Indicator 2.1.1. Prevalence of undernourishment

The prevalence of undernourishment estimates the proportion of the total population that does not have enough food to satisfy their energy needs to live a healthy and active life over a period of one year. This calculation requires the following parameters:

- the mean level of dietary energy consumption,
- coefficients of variation and symmetry that account for inequality in food consumption, and
- a cut-off point defined as the minimum dietary energy requirement for a healthy life.

It is the cumulative probability that the usual consumption of food energy is below the minimum consumption threshold for an average individual that is representative of the population.

SDG TARGET: ACHIEVE THE ERADICATION OF HUNGER BY 2030.

Undernourishment is the main international indicator used in recent decades to track progress in eradicating hunger. The prevalence of undernourishment in the world and in LAC has decreased considerably over the past two decades. Between 2000 and 2019, the global rate of undernourishment fell from 13.2 percent to 8.9 percent. However, this decrease has stagnated during the last five years.

The trend in LAC has been similar. The prevalence of undernourishment between 2000 and 2019 also decreased by more than three percentage points, from 11.1 percent to 7.4 percent. However, the lowest prevalence was recorded in 2014 when undernourishment affected 5.6 percent of the regional population. Between 2014 and 2019, hunger[2] increased by almost 2 percentage points to 7.4 percent. This upward trend occurred within a context of economic deceleration and decline, increased poverty,[3] extreme weather events and political conflict (FAO, IFAD, WHO, WFP & UNICEF, 2020). If this trend continues between now and 2030, the prevalence of undernourishment in the region could reach 9.5 percent. It must also be taken into account that this estimate does not factor in the repercussions of COVID-19, including the sharp decline in economic activity, the drastic decrease in employment and incomes, and the significant increase in poverty (see Box 1) (FAO, IFAD, WHO, WFP & UNICEF, 2020).

Figure 1 shows that the regional trends in the prevalence of hunger over the last two decades is primarily explained by South America, where it decreased significantly between 2000 and 2014, from 11.2 percent to 3.8 percent. From there, hunger levels increased considerably to 5.6 percent in 2019. In Mesoamerica the situation has deteriorated since the beginning of the century. The prevalence of hunger was contained between 2000 and 2014, but it began to increase again in 2014 and stood at 9.3 percent in 2019. In contrast, the trends have been somewhat different in the Caribbean. Between 2000 and 2010 the rate of undernourishment showed ups and downs; nevertheless, this subregion saw a significant decrease of 3.5 percentage points. Between 2010 and 2019, the prevalence of hunger decreased more slowly and stood at 16.6 percent in 2019, its lowest rate since 2000.

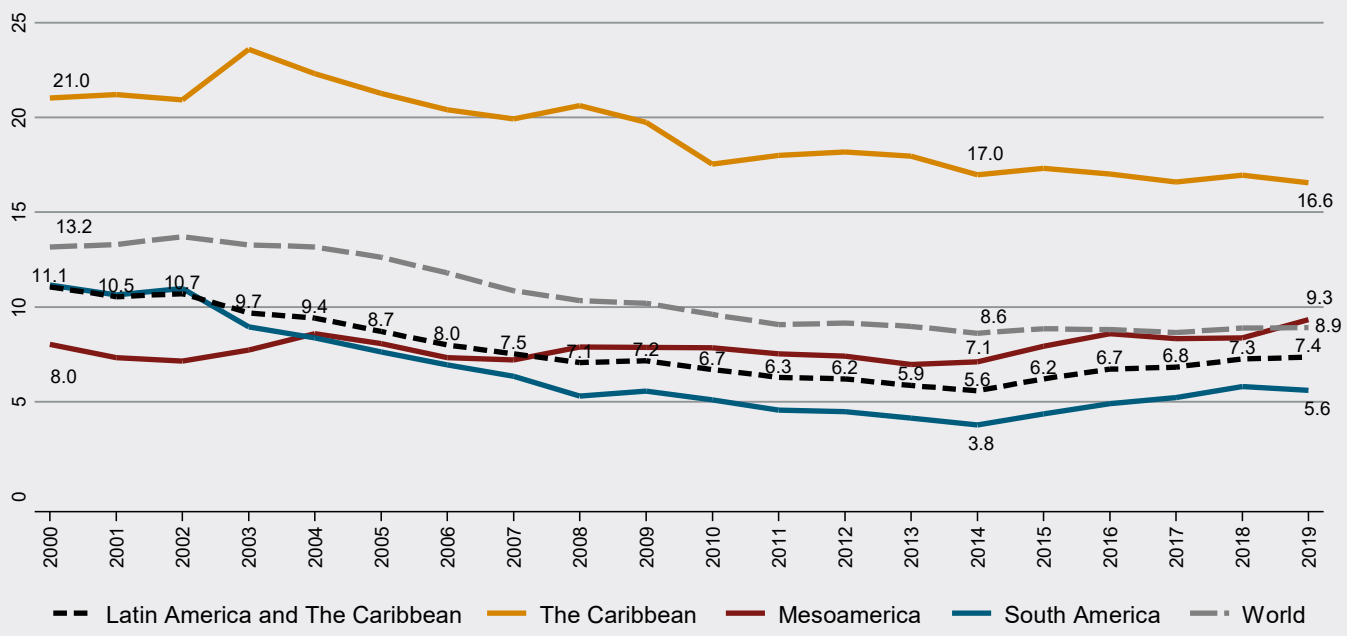
Without considering the effects of the COVID-19 pandemic, and based on recent trends, projections from now until 2030 (see Annex 2 for data by country) point to an increase of

[2] In this section, the concepts of hunger and undernourishment are used interchangeably.

[3] According to projections by the Economic Commission for Liatin America and the Caribbean, extreme poverty increased by 26 million people between 2014 and 2019 (ECLAC, 2019).

2.1 percent in the rate of undernourishment in South America, to 7.7 percent, and an increase of 3.1 percentage points in Mesoamerica, to 12.4 percent. In the Caribbean, the rate of undernourishment is expected to decrease by almost two percentage points, to 14.4 percent (FAO, IFAD, WHO, WFP & UNICEF, 2020).

FIGURE 1
EVOLUTION OF PREVALENCE OF UNDERNOURISHMENT, LATIN AMERICA AND THE CARIBBEAN, SUBREGIONS AND WORLDWIDE, 2000–2019. IN PERCENTAGES



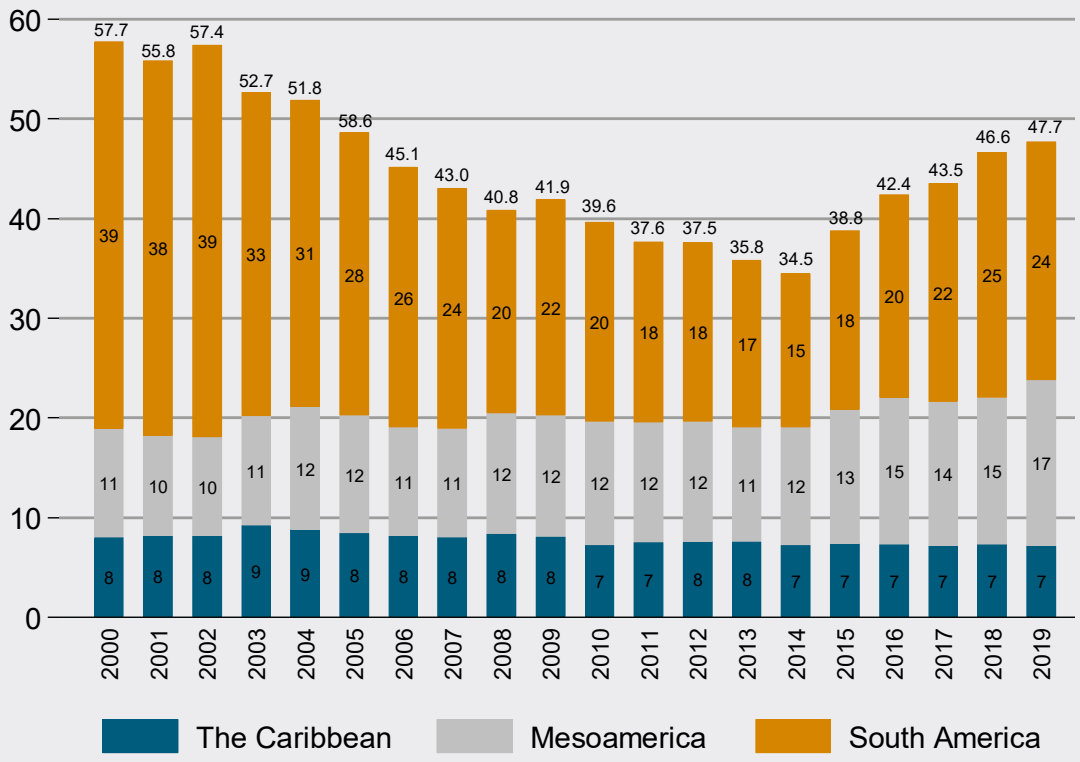
SOURCE: FAO, 2020a. Food Security Indicators.

In 2019, 687.7 million people suffered from hunger worldwide, or 120 million less than in 2000. However, this decrease was recorded primarily until 2011. In the past five years, the global undernourished population has increased by 58.9 million. The LAC region also saw a decrease in its undernourished population between 2000 and 2019, from 57.7 million people to 47.7 million people. However, this decrease only corresponds to the period between 2000 and 2014, when the lowest number of undernourished people, or 34.5 million, was recorded. Between 2014 and 2019 the number of people suffering from hunger in the region increased by 13.2 million and stood at 47.7 million in 2019. If this trend continues, according to projections, the number of undernourished people would reach 66.9 million by 2030; in other words,

almost 20 million more people would suffer from hunger in the region. It also must be considered that these projections do not contemplate the potential effects of the COVID-19 pandemic.

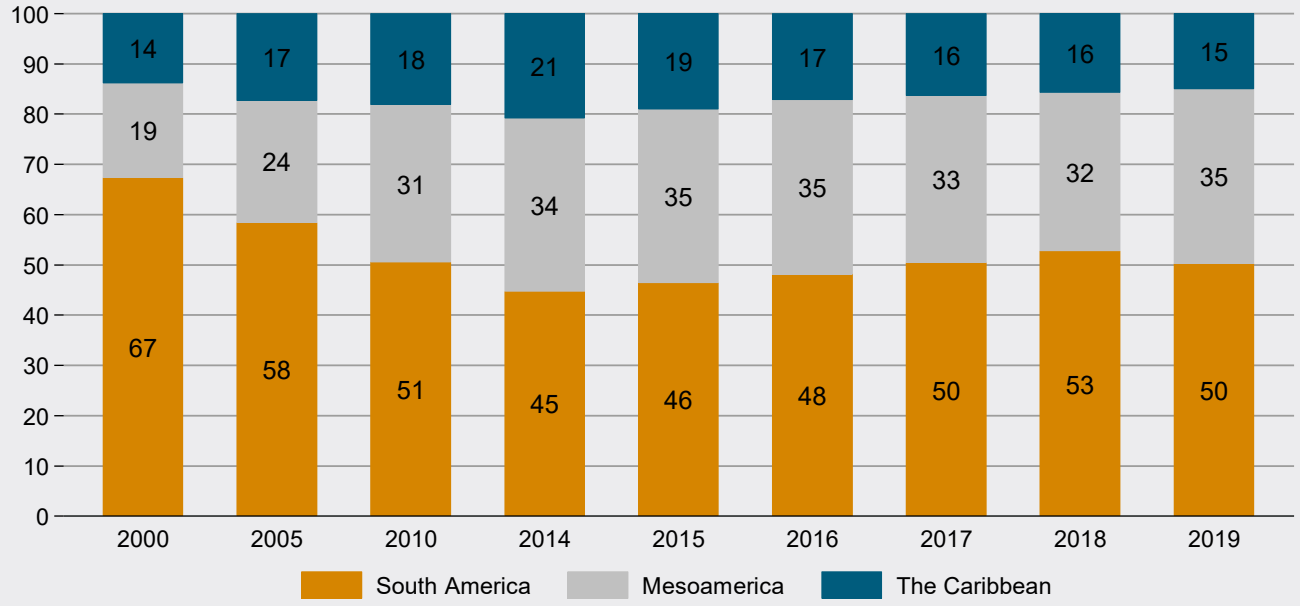
At the subregional level, most undernourished people live in South America, where 24 million people suffer from hunger, while in Mesoamerica and the Caribbean there are 16.6 million and 7.2 million undernourished people, respectively. In terms of the evolution within each subregion (Figure 2), the trend is mainly defined by South America. In this subregion, there was a significant reduction in the number of people living with hunger (23.5 million) between 2000 and 2014; this number then increased by 8.6 million between 2014 and 2019. The evolution has been different in Mesoamerica, especially between 2000 and 2014 when the number of people suffering from hunger increased by one million. Then, from 2014 to 2019, this increase was much more pronounced, culminating in 16.6 million people in 2019. In contrast, these variations have been limited in the Caribbean where hunger affected approximately 7.2 million people in 2019. If these trends continue, by 2030 hunger would affect 35.7 million people in South America and 24.5 million people in Mesoamerica, while in the Caribbean the number of people living with hunger would decrease to 6.6 million (FAO, IFAD, WHO, WFP & UNICEF, 2020).

FIGURA 2
NUMBER OF UNDERNOURISHED PEOPLE, LATIN AMERICA AND SUBREGIONS, 2000–2019. IN MILLIONS OF PEOPLE



FUENTE: FAO, 2020a. Food Security Indicators.

FIGURA 3
EVOLUTION OF DISTRIBUTION OF UNDERNOURISHED PEOPLE BY SUBREGION, LATIN AMERICA AND THE CARIBBEAN, 2000–2019. IN PERCENTAGES



FUENTE: FAO, 2020a. Food Security Indicators.

The above represents a significant change in the distribution of the undernourished population in the region. In 2000, 67 percent of undernourished people lived in South America, 19 percent in Mesoamerica and 14 percent in the Caribbean. However, South America's percentage was considerably lower in 2019; only half of those affected by undernourishment lived in this subregion, while the other half was distributed between Mesoamerica (35 percent) and the Caribbean (15 percent) (Figure 3). This shift can be explained, above all, by the economic and social progress achieved in South America,[4] as well as by the stagnation in the reduction in hunger rates in the other two subregions between 2000 and 2014. Nonetheless, the proportion of people living with hunger in South America has increased slightly in the last five years, from 45 percent to 50 percent (Figure 3).

In regard to the evolution of hunger in different countries, FAO publishes undernourishment data triennially to reduce the volatility of estimates

[4] As indicated in previous editions of this publication, during this period South America showed significant economic growth (average annual rate of 3.6 percent) and intense public policy actions targeting vulnerable and lower-income groups. As a result, poverty decreased by more than 15 percentage points in all countries. In some cases, such as Bolivia (Plurinational State of) and Ecuador, the decrease was greater than 30 percentage points (WB, 2020) (ECLAC, 2020c).

that certain transitory phenomena can cause.[5]

Between 2013–2015 and 2017–2019, 16 countries reduced their rates of undernourishment (Table 1) and advanced towards the achievement of this target. Honduras is a noteworthy example, where the prevalence of undernourishment decreased by 3.5 percentage points. The Dominican Republic succeeded in reducing its prevalence of undernourishment by 3.0 percentage points, and Ecuador by 2.9 percentage points. During the same period, Bolivia (Plurinational State of) Colombia and El Salvador, all saw undernourishment decrease by 1.8 percentage points.

In contrast, the greatest increases between the 2013–2015 and 2017–2019 trienniums are concentrated in eight countries in the region. In Venezuela (Bolivarian Republic of) the prevalence of undernourishment increased by 22.8 percentage points, or 6.5 million undernourished people; in other words, the undernourished population in this country tripled in 5 years. Mexico is also struggling to reach the first target of SDG 2, with an increase of 2.5 percentage points (3.5 million people) in the prevalence of hunger between 2013–2015 and 2017–2019. In turn, the prevalence of undernourishment has increased by more than 1 percentage point in Argentina and Paraguay.

vThe prevalence of undernourishment in the countries for the 2017–2019 triennium must also be examined, because this is an indication of the distance that separates each country from the Zero Hunger target. In this sense, Haiti stands out, with a prevalence of 48.2 percent; in other words, almost half of the population (5.4 million people) is undernourished. What is more, this percentage has stagnated in the last decade. Venezuela (Bolivarian Republic of), following significant increases in undernourishment in the last trienniums, had a prevalence of 31.4 percent in 2017–2019, or 9.1 million undernourished people. In contrast, Mesoamerican countries such as Nicaragua, Guatemala and Honduras have succeeded in reducing undernourishment since the 2013–2015 triennium, although their rates are still 17.2 percent, 16.1 percent and 13.8 percent, respectively; these rates have also stagnated over the last two trienniums. In South America, Bolivia (Plurinational State of) has made progress during the past two decades, but its prevalence still sits at 15.5 percent and it will need to accelerate its progress to meet the first target of SDG 2. In countries such as Belize, Ecuador, El Salvador, Jamaica, Paraguay and Suriname, the prevalence of undernourishment exceeds the regional average of 7.2 percent.

Over 50 percent of the region's undernourished population is concentrated in three countries: Venezuela (Bolivarian Republic of) (9.1 million), Mexico (9 million) and Haiti (5.4 million). Meanwhile, Guatemala (2.8 million), Colombia (2.7 million), Peru (2.2 million), Bolivia (1.8 million) and Argentina (1.7 million), together, account for almost one-quarter of people living with hunger in the region. In other words, approximately 75 percent of the total population suffering from hunger is concentrated in 8 out of 33 LAC countries.[6]

[5] In contrast with regional aggregates, annual monitoring of the evolution of undernourishment in the countries is difficult due to national phenomena such as specific shocks in the production and availability of foods, abrupt changes in income levels, deficiencies in national reporting in certain years or other contextual factors.

[6] It is important to note that, although the undernourished population in Brazil cannot be estimated because its prevalence is less than 2.5 percent, the number of undernourished people can be very significant due to the size of Brazil's total population.

TABLE 1

PREVALENCE OF UNDERNOURISHMENT AND MILLIONS OF PEOPLE AFFECTED IN LATIN AMERICA AND THE CARIBBEAN COUNTRIES, 2000-2019

	Prevalence (%)						Millions of people					
	2000-02	2010-12	2013-15	2016-18	2017-19	Change 2016-18 and 2017-2019	2000-02	2010-12	2013-15	2016-18	2017-19	Change 2016-18 and 2017-2019
Argentina	3.1	3.4	<2.5	3.4	3.8	▲	1.2	1.4	n.r.	1.5	1.7	▲
Barbados	6.5	4.8	4.4	4.5	4.3	▼	<0.1	<0.1	<0.1	<0.1	<0.1	=
Belize	5.9	6.9	7.8	7.5	7.6	▲	<0.1	<0.1	<0.1	<0.1	<0.1	=
Bolivia (Plurinational State of)	27.9	23.3	17.3	15.6	15.5	▼	2.4	2.3	1.9	1.7	1.8	▲
Brazil	10.1	<2.5	<2.5	<2.5	<2.5	=	17.9	n.r.	n.r.	n.r.	n.r.	=
Chile	3.5	3.7	3.1	3.3	3.5	▲	0.5	0.6	0.6	0.6	0.7	▲
Colombia	8.8	12.2	7.3	5.5	5.5	=	3.5	5.5	3.4	2.7	2.7	=
Costa Rica	4.8	3.9	4.2	3.2	3.2	=	0.2	0.2	0.2	0.2	0.2	=
Cuba	<2.5	<2.5	<2.5	<2.5	<2.5	=	n.r.	n.r.	n.r.	n.r.	n.r.	=
Dominica	3.8	4.7	5.3	5.7	5.8	▲	<0.1	<0.1	<0.1	<0.1	<0.1	=
Dominican Republic	20.6	12.4	8.5	6	5.5	▼	1.8	1.2	0.9	0.6	0.6	=
Ecuador	21.2	18.3	11.7	9.1	8.8	▼	2.7	2.7	1.9	1.5	1.5	=
El Salvador	7.3	11	10.7	9.5	8.9	▼	0.4	0.7	0.7	0.6	0.6	=
Guatemala	22.4	17.1	17.7	16.1	16.1	=	2.7	2.5	2.8	2.7	2.8	▲
Guyana	6.7	7.4	6.5	6	5.7	▼	<0.1	<0.1	<0.1	<0.1	<0.1	=
Haiti	53.2	48.2	48.3	48.3	48.2	▼	4.6	4.8	5.1	5.3	5.4	▲
Honduras	22	21.2	17.3	13.8	13.8	=	1.5	1.8	1.5	1.3	1.3	=
Jamaica	7.5	9.7	9.8	9.3	8.7	▼	0.2	0.3	0.3	0.3	0.3	=
Mexico	3.3	4.8	4.6	6.7	7.1	▲	3.3	5.4	5.5	8.4	9	▲
Nicaragua	27.6	20.2	18.8	17.1	17.2	▲	1.4	1.2	1.2	1.1	1.1	=
Panama	24.6	11.9	8.4	7.3	6.9	▼	0.8	0.4	0.3	0.3	0.3	=
Paraguay	10.6	8.5	7.7	8.7	8.8	▲	0.6	0.5	0.5	0.6	0.6	=
Peru	21.6	8.2	5.8	7	6.7	▼	5.8	2.4	1.8	2.2	2.2	=
Saint Vincent and the Grenadines	13.5	5.8	5.7	6	5.7	▼	<0.1	<0.1	<0.1	<0.1	<0.1	=
Suriname	12	7.4	7.7	8.4	8.1	▼	<0.1	<0.1	<0.1	<0.1	<0.1	=
Trinidad and Tobago	10.1	9.2	6	5.7	5.5	▼	0.1	0.1	<0.1	<0.1	<0.1	=
Uruguay	3.7	<2.5	<2.5	<2.5	<2.5	=	0.1	n.r.	n.r.	n.r.	n.r.	=
Venezuela (Bolivarian Republic of)	15.1	<2.5	8.6	27.3	31.4	▲	3.7	n.r.	2.6	8	9.1	▲
WORLD	**13.4**	**9.6**	**8.8**	**8.8**	**8.8**	=	**833.2**	**669.2**	**643.3**	**663**	**673**	▲
LATIN AMERICA AND THE CARIBBEAN	**10.8**	**6.7**	**5.9**	**6.9**	**7.2**	▲	**57.0**	**39.7**	**36.4**	**44.1**	**45.9**	▲
LATIN AMERICA	**10**	**5.8**	**5**	**6.2**	**6.5**	▲	**48.9**	**32.1**	**29**	**36.9**	**38.7**	▲
CARIBBEAN	**21.1**	**18.4**	**17.4**	**16.9**	**16.7**	▼	**8.1**	**7.6**	**7.4**	**7.2**	**7.2**	=
MESOAMERICA	**7.5**	**7.7**	**7.3**	**8.4**	**8.7**	▲	**10.3**	**12.2**	**12.2**	**14.6**	**15.2**	▲
SOUTH AMERICA	**10.9**	**5.1**	**4.1**	**5.3**	**5.5**	▲	**38.6**	**19.9**	**16.7**	**22.3**	**23.5**	▲

Notes ▲Increase ▼ Decrease = Unchanged.
< 2.5: prevalence less than 2.5%. < 0.1: population less than 100,000 people.
n.r .: data not reported because prevalence is less than 2.5%.
Source: FAO, 2020.

BOX 1

THE COVID-19 PANDEMIC AND ITS POSSIBLE EFFECTS ON UNDERNOURISHMENT AND FOOD INSECURITY

The confinement that has resulted from the COVID-19 pandemic has reduced economic activity. Demand and employment have decreased, and this has affected households' capacity to generate income. Considering the context of the pandemic, estimates for the rest of the year have forecasted a global economic contraction of approximately 5 percent. The projected decrease in the region exceeds 9 percent, which is four times greater than that of the 2008-09 crisis. According to ECLAC, the regional unemployment rate could surpass 13.5 percent; in other words, there could be 18 million additional unemployed people in the region (ECLAC, 2020a). It should be noted, in addition, that before the pandemic, one of every two jobs in the region was informal. Consequently, a large part of the population does not have access to social security but depends mainly on their savings to overcome a crisis of this magnitude. In turn, restrictions on mobility and the fall in consumption prevent many people from generating an income (ECLAC, 2020a).

In one way or another, households are experiencing decreased incomes. It is estimated that, as a result of the pandemic, poverty will affect 45.5 million more people in the region. Of this increase, more than half (28.5 million people) are expected to correspond to the level of extreme poverty. This implies that poverty could affect 37 percent of the population and, what is even more concerning, extreme poverty could affect 15.5 percent, the highest rate in the past 19 years (ECLAC, 2020a). It is evident that this situation, in addition to the disruption in supply chains and the increased prices of some foods (FAO & WFP, 2020a), jeopardizes food security and nutrition, especially for the poorest and most vulnerable households. First, the quality of their diet would be affected, as it would include lower-cost food items that are less healthy and nutritious. In the most extreme cases, the quantity of food that these households could access would also decrease.

Based on International Monetary Fund (IMF) projections in terms of reduced gross domestic product (GDP), the *State of Food Security and Nutrition in the World* reports that the global increase in hunger could affect an additional 83 million to 132 million people; in other words, the number of affected individuals could reach 828 million. Although it is anticipated that the undernourished population will decrease in 2021, it will still be greater than what was forecasted before the pandemic. However, this analysis is based on IMF projections that have already been updated and does not include the total impact that the recession could have. This is because it only considers the effects on the availability of food in net importing countries and not the possible consequences of unequal access to food within countries; therefore, it underestimates the potential impact of the pandemic (FAO, IFAD, WHO, WFP & UNICEF, 2020).

At any rate, there are still not enough representative estimates at the national level to specify the impact of COVID-19 on food security in LAC. Moreover, the pandemic has still not begun to decline, and it is expected that its effects on food security and nutrition will continue to grow.

It is evident that countries such as El Salvador, Guatemala, Haiti, Honduras, Nicaragua and Venezuela (Bolivarian Republic of), which presented high levels of food insecurity and poverty before the pandemic, are at greater risk of seeing their situation worsen in the coming months as a result of different factors that the pandemic has aggravated (FAO & WFP, 2020a). According to estimates by the World Food Programme (WFP), acute food insecurity in these zones could affect 16 million people (including Venezuelan migrants in Colombia, Ecuador and Peru), or three times the population that was affected before the pandemic (WFP, 2020).

Similarly, according to an analysis by FAO (FAO, 2020b) it is likely that net importing countries such as Colombia, Costa Rica, Cuba, Dominica, El Salvador, Granada, Honduras, Jamaica, Mexico, Peru, Saint Lucia, Saint Vincent and the Grenadines and Venezuela (Bolivarian Republic of), and especially low-income countries such as Haiti, will be the most affected by the devaluation of their currencies (ECLAC & FAO, 2020).

BOX 1 (CONTINUED)

Most of the countries in the region are not immune to the consequences of the pandemic; in fact, it is estimated that poverty will significantly increase in most of them. Specifically, it is expected that extreme poverty will increase by between 4 and 6 percentage points in Brazil, Colombia, Ecuador, El Salvador, Mexico and Nicaragua, while countries such as Bolivia, Chile, Guatemala, Honduras, Panama and Peru will see increases of between 2 and 3.9 percentage points (ECLAC, 2020a). Economic forecasts are very grim for Caribbean countries that depend to a great extent on tourism.[7] The impact of poverty on households' food security will depend on the measures that governments are able to continue to implement in response to the crisis. To monitor the impact of COVID-19 on households' food security, the WFP has created several platforms to share the results of the surveys that they have been conducting throughout the pandemic. One of these is *COVID-19 Impact on markets access, food security and livelihoods in Latin American Countries*[8] which includes a large portion of the countries in the region, and another is *How is COVID-19 impacting lives?*[9] which includes some Mesoamerican countries, Haiti and Colombia.

In addition, it is anticipated that the COVID-19 pandemic will have more significant effects on women, indigenous and Afro-descendant populations, children and migrants, among other priority groups. In general, women receive less remuneration, are more likely to be poor, and carry out most domestic tasks and care work. Confinement and school closures can make it more difficult for them to work or generate income. The socio-economic conditions of indigenous and Afro-descendant populations are also generally worse; they are subject to discrimination in the labour market; and they tend to live in isolated areas with less access to health and sanitation services. Children in this context are generally not in school, which can mean that they no longer receive the food that these institutions provide daily. Migrants are usually excluded from social protection and healthcare systems, and this makes them more vulnerable. Consequently, all these population groups find themselves at risk of greater food insecurity during the pandemic (UN SG & UNSDG, 2020).

[7] The estimated decrease in GDP in the Caribbean is 8 percentage points (ECLAC, 2020b).

[8] https://unwfp.maps.arcgis.com/apps/MapSeries/index.html?appid=9c7d5aff4fd941388d8ae3b43ff15d3f.

[9] https://analytics.wfp.org/t/Public/views/ResultsfromremotesurveysforLatinAmericatheCaribbean/CATI?:embed=y&:display_count=no&:showVizHome=no&:origin=viz_share_link#1.

Indicator 2.1.2: Prevalence of moderate or severe food insecurity

The prevalence of food insecurity estimates the number of people without access to nutritious and sufficient food due to lack of economic or other resources, based on the experience of people aged 15 and older. To this end, the instrument uses eight questions to identify the level of severity of food insecurity.
Severe food insecurity: Level of food insecurity in which people have probably run out of food, suffer from hunger and, in the most extreme cases, go for days without eating, which seriously jeopardizes their health and well-being.
Moderate food insecurity: Level of food insecurity in which people face uncertainty about their ability to obtain food and, at certain times of the year, are forced to reduce the quantity or quality of food that they consume due to lack of economic or other resources. This decreases the quality of their diet and interrupts eating habits, and it can have negative consequences on their nutrition, health and well-being.

SDG TARGET: ACHIEVE FOOD SECURITY BY 2030.

Food insecurity is another indicator used to measure progress towards the eradication of hunger. It is quantified through the Food Insecurity Experience Scale (FIES), which is included in household surveys. The FIES explores the degrees of severity of food insecurity through questions on food quality and quantity, and it considers factors related to the possibility of obtaining food. It also captures seasonal phenomena and, by relating these to other variables, obtains a characterization of people who are affected by food insecurity. Moderate or severe food insecurity considers the sum of the two lowest levels of food insecurity on the scale,[10] and is indicator 2.1.2 of SDG 2.

As indicated in previous versions of this publication, this is an especially significant indicator for LAC because it is better suited to identify changes in food security in middle-income and upper-middle-income countries. It is more sensitive to changes in the food security of vulnerable groups, which are often located at the limits of the poverty threshold, and it can anticipate potential changes in consumption patterns and dietary quality that can affect different forms of malnutrition. It also facilitates the disaggregation of information at the individual level, which enables the characterization of food security according to gender or ethnic group, for example.

This indicator also helps to identify food insecurity problems that are associated with seasonal phenomena. To this end, a specific module has been developed for use in the context of the COVID-19 pandemic.[11]

Moderate or severe food insecurity

In 2019, moderate or severe food insecurity affected 2 billion people in the world, or more than one-quarter of the global population; specifically, 746 million people, or 9.7 percent of the world's population, suffered from severe food insecurity.

In the same year, 191 million people in Latin America were affected by moderate or severe food insecurity. Of these, almost two-thirds (122 million) lived in South America and 69.7 million lived in Mesoamerica. These figures indicate that, in 2019, almost one-third (31.7 percent) of Latin Americans were forced to reduce the quality and quantity of food that they consumed and, therefore, were in a situation of moderate or severe food insecurity. The prevalence in South America was 28.5 percent, while in Mesoamerica it was 39.3 percent. Specifically, severe food insecurity affected 9.5 percent of the Latin American population: 7.6 percent in South America, and 14.1 percent in Mesoamerica (Figure 4).

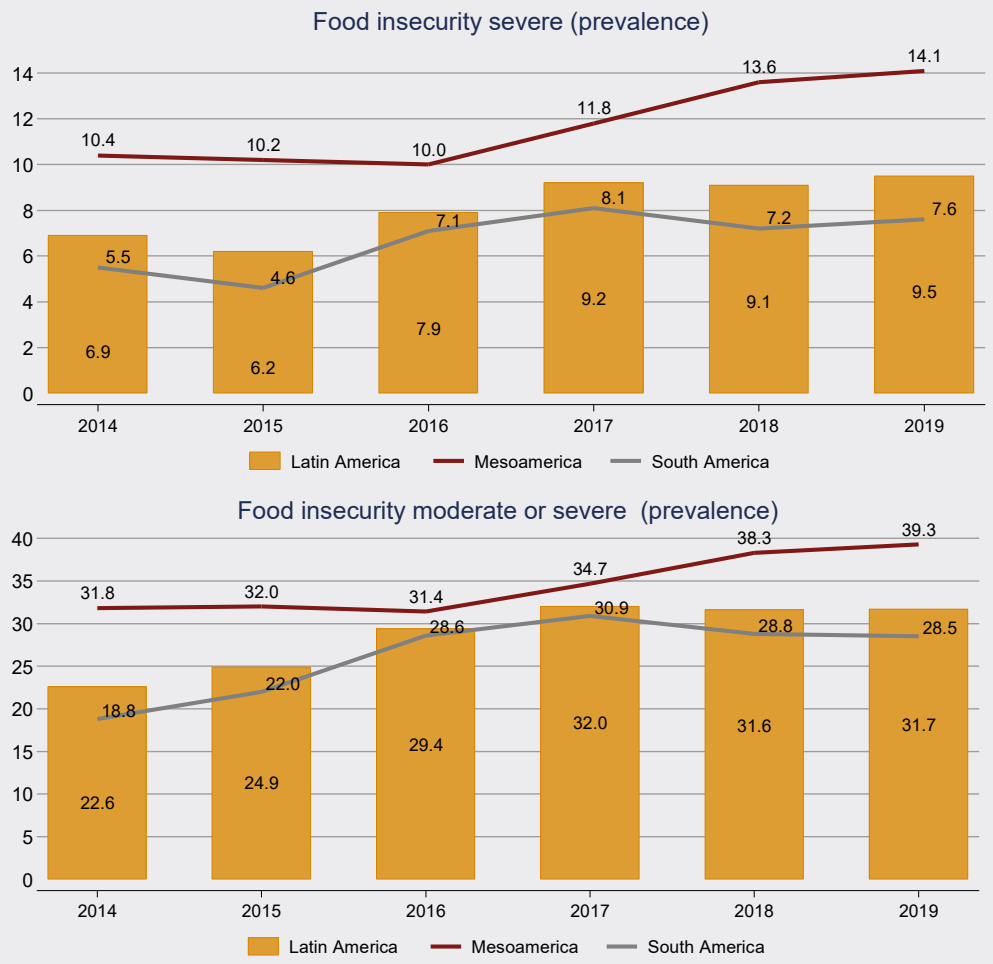
[10] This survey establishes individuals' probability of being classified in one of three categories: (1) people with mild food insecurity, (2) people with moderate food insecurity, and (3) people with severe food insecurity.

[11] For more information on using the FIES to monitor the impact of COVID-19 on food security, see FAO 2020. Using the Food Insecurity Experience Scale (FIES) to monitor the impact of COVID-19. Available at: http://www.fao.org/3/ca9205en/ca9205en.pdf.

Food insecurity showed an upward trend between 2014 and 2019 as the number of people affected by moderate or severe food insecurity in Latin America increased by 61.8 million. This is equivalent to an increase in prevalence from 22.6 percent to 31.7 percent in five years. The number of people living with severe food insecurity also increased significantly, by 17.9 million, or an increase in prevalence of 2.6 percentage points (Figure 5).

At the subregional level, although most people affected by food insecurity in the region live in South America, its prevalence is significantly higher in Mesoamerica, especially in the case of severe food insecurity. Both regions showed an upward trend between 2014 and 2019; however, the increase is more pronounced in South America and was registered mostly between 2014 and 2016, while in Mesoamerica it began in 2017 (Figure 5).

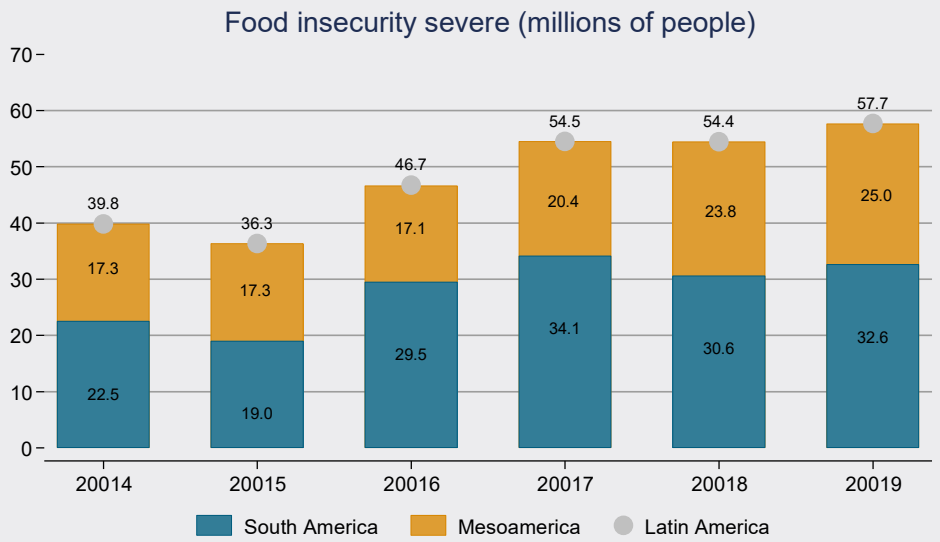
FIGURA 4
EVOLUTION OF PREVALENCE OF FOOD INSECURITY BY SUBREGION, LATIN AMERICA, 2014–2019. IN PERCENTAGES

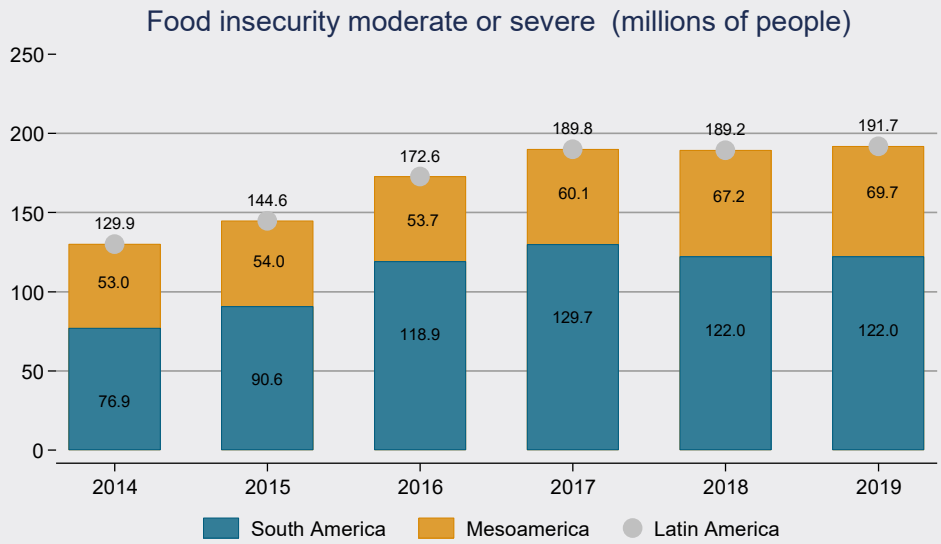


FUENTE: FAO, 2020a. Food Security Indicators.

FIGURA 5

EVOLUTION OF NUMBER OF PEOPLE WITH FOOD INSECURITY BY SUBREGION, LATIN AMERICA 2014–2019. IN MILLIONS OF PEOPLES





FUENTE: FAO, 2020a. Food Security Indicators.

Just as in the case of undernourishment, the information on food insecurity is presented in moving trienniums in order to reduce the volatility of estimates. The vast majority of countries with available information show an increase in this indicator during the 2014–16 and 2017–19 trienniums. In Argentina, the prevalence of moderate or severe food insecurity increased by 16.6 percentage points. The affected population has practically doubled in the country, with 3.2 million more people living with severe food insecurity. In Mexico, the prevalence of moderate or severe food insecurity rose from 27.4 percent to 34.9 percent. This represents an increase of more than 10 million affected people and almost 5 million people living with severe food insecurity. In El Salvador, Guatemala and Honduras, the increases were more contained. However, in Honduras over half of the population suffers from moderate or severe food insecurity, and 23.9 percent is affected by severe food insecurity. In Guatemala, these rates are 45.2 percent and 18.1 percent, and in El Salvador they are 42.2 percent and 14.6 percent, respectively.

TABLE 2

PREVALENCE OF FOOD INSECURITY IN SELECTED COUNTRIES IN LATIN AMERICA AND THE CARIBBEAN, 2014–2019. IN PERCENTAGES

	Severe Food Insecurity (%)				Moderate or Severe Food Insecurity (%)			
	2014-16	2015-17	2016-18	2017-19	2014-16	2015-17	2016-18	2017-19
Argentina	5.8	8.6	11.2	12.9	19.2	25.9	32.3	35.8
Brazil	1.9	1.8	1.7	1.6	18.3	21.5	21.8	20.6
Chile	2.7	3	3.4	3.8	10.2	11.9	13.7	15.6
Costa Rica	4.7	4.7	5.1	5.4	21.8	22.1	23.3	25.5
Ecuador	7.1	7.1	7.1	n.a.	23.3	23.3	23.3	n.a.
El Salvador	13.8	13.7	14	14.6	42.2	41.6	41.6	42.2
Guatemala	16.1	17	17.1	18.1	42.7	44.2	43.5	45.2
Honduras	23.2	21.8	21.9	23.9	56	54.4	52.2	55
Mexico	8	8.6	10	11.5	27.4	28.7	31.8	34.9
Peru	9	n.a.	n.a.	n.a.	29.9	n.a.	n.a.	n.a.
Saint Lucia	4.5	4.5	4.5	n.a.	22.2	22.2	22.2	n.a.
Uruguay	6.8	7.6	7.4	6.4	21.6	23.4	25.1	23.2
World	**8.1**	**8.2**	**8.7**	**9.2**	**22.7**	**23.5**	**24.6**	**25.5**
Latin America	**7**	**7.8**	**8.7**	**9.3**	**25.6**	**28.8**	**31**	**31.8**
Central America	**10.2**	**10.7**	**11.8**	**13.1**	**31.7**	**32.7**	**34.8**	**37.4**
South America	**5.7**	**6.6**	**7.5**	**7.7**	**23.2**	**27.2**	**29.4**	**29.4**

NOTE: n.a., not available.
SOURCE: FAO, 2020a. Food security indicators.

TABLE 3

POPULATION WITH FOOD INSECURITY IN SELECTED COUNTRIES OF LATIN AMERICA AND THE CARIBBEAN, 2014–2019. IN MILLIONS OF PEOPLE

	Severe Food Insecurity (Millions)				Moderate or Severe Food Insecurity (Millions)			
	2014-16	2015-17	2016-18	2017-19	2014-16	2015-17	2016-18	2017-19
Argentina	2.5	3.8	4.9	5.7	8.3	11.3	14.2	15.9
Brazil	3.9	3.6	3.6	3.4	37.5	44.4	45.4	43.1
Chile	0.5	0.5	0.6	0.7	1.8	2.2	2.5	2.9
Costa Rica	0.2	0.2	0.3	0.3	1.1	1.1	1.2	1.3
Ecuador	1.2	1.2	1.2	n.a.	3.8	3.8	3.8	n.a.
El Salvador	0.9	0.9	0.9	0.9	2.7	2.6	2.7	2.7
Guatemala	2.6	2.8	2.9	3.1	6.9	7.3	7.4	7.8
Honduras	2.1	2	2.1	2.3	5.1	5	4.9	5.3
Mexico	9.7	10.6	12.5	14.6	33.4	35.4	39.7	44
Peru	2.7	n.a.	n.a.	n.a.	9.1	n.a.	n.a.	n.a.
Saint Lucia	<0.1	<0.1	<0.1	n.a.	<0.1	<0.1	<0.1	n.a.
Uruguay	0.2	0.3	0.3	0.2	0.7	0.8	0.9	0.8
World	597.8	612.6	656.5	703.3	1672.8	1753.1	1859.8	1948.4
Latin America	40.9	45.8	51.9	55.5	149	169	183.8	190.2
Central America	17.2	18.3	20.4	23.1	53.5	55.9	60.3	65.7
South America	23.7	27.5	31.4	32.5	95.5	113.1	123.5	124.5

NOTE: n.a., not available.
SOURCE: FAO, 2020a. Food Security Indicators.

Food insecurity by gender

The advantage of the FIES is that it shows disaggregated information by individuals and population type. This facilitates a gender analysis, which reveals a significant gap between men and women.

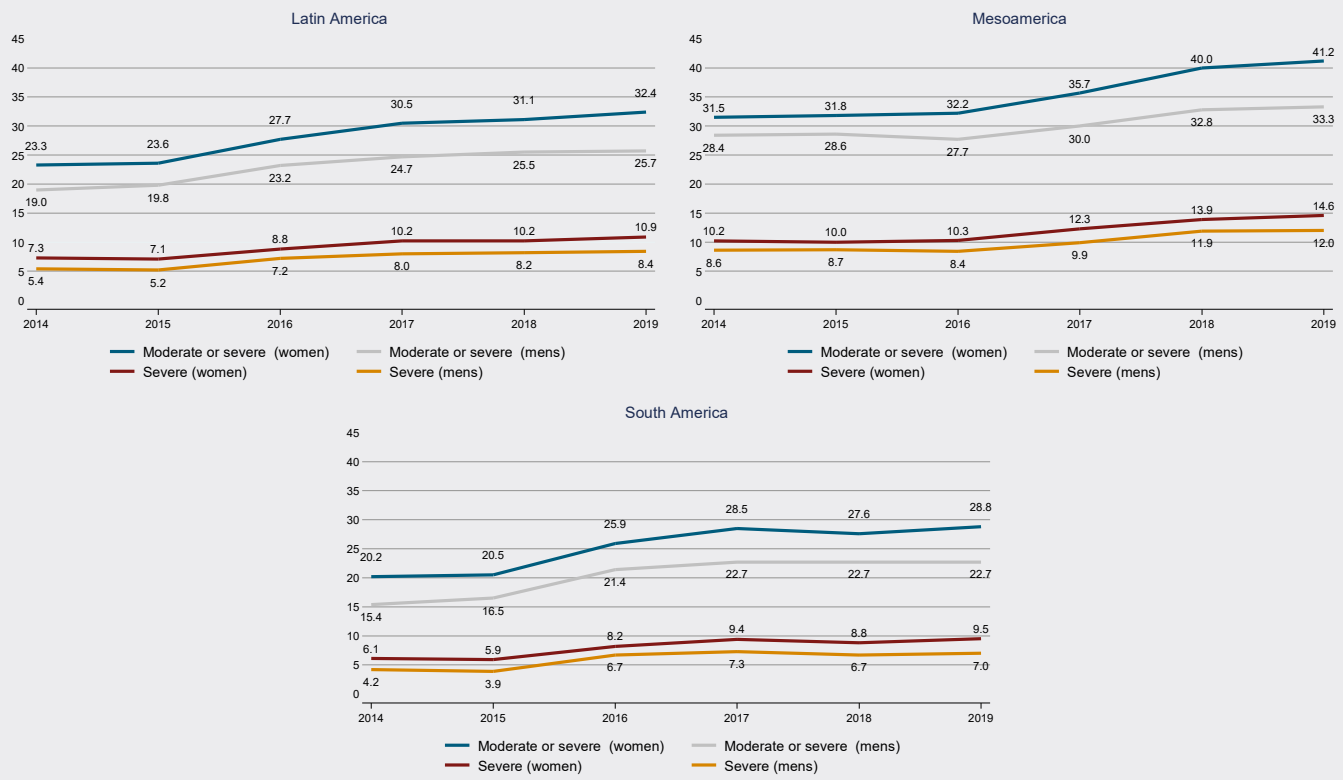
Just as with other indicators, such as those related to lack of income or employment,[12] food insecurity in the world affects women to a greater extent than men.[13] In 2019, the prevalence of moderate or severe food insecurity in Latin America was 32.4 percent among women and 25.7 percent among men; in other words, almost 20 million more women are affected (Figure 6).

Although food insecurity affects women more than men in all regions of the world, the

[12] The index of femininity of poverty in Latin America is 117; women's unemployment rate is 1.5 percentage points higher than that of men (ECLAC, 2020c).

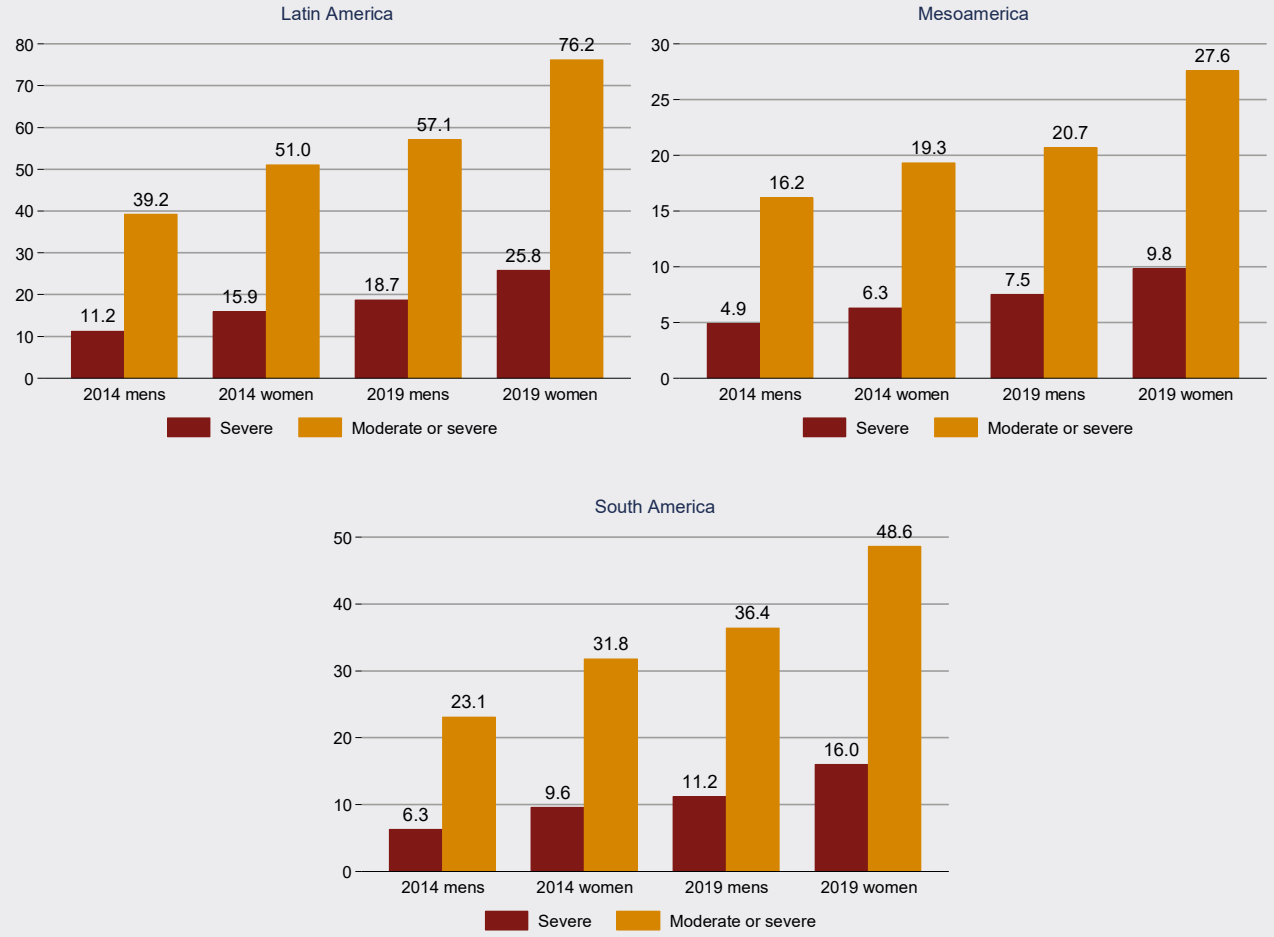
[13] This calculation includes women and men aged 15 and over.

FIGURE 6
EVOLUTION OF PREVALENCE OF FOOD INSECURITY BY GENDER IN PEOPLE AGED 15 AND OVER, LATIN AMERICA AND SUBREGIONS, 2014–2019. IN PERCENTAGES



SOURCE: Prepared by the authors based on FAO data.

FIGURE 7
EVOLUTION OF NUMBER OF PEOPLE WITH FOOD INSECURITY BY GENDER IN PEOPLE AGED 15 AND OLDER, LATIN AMERICA AND SUBREGIONS, 2014 AND 2019. IN MILLIONS OF PEOPLE



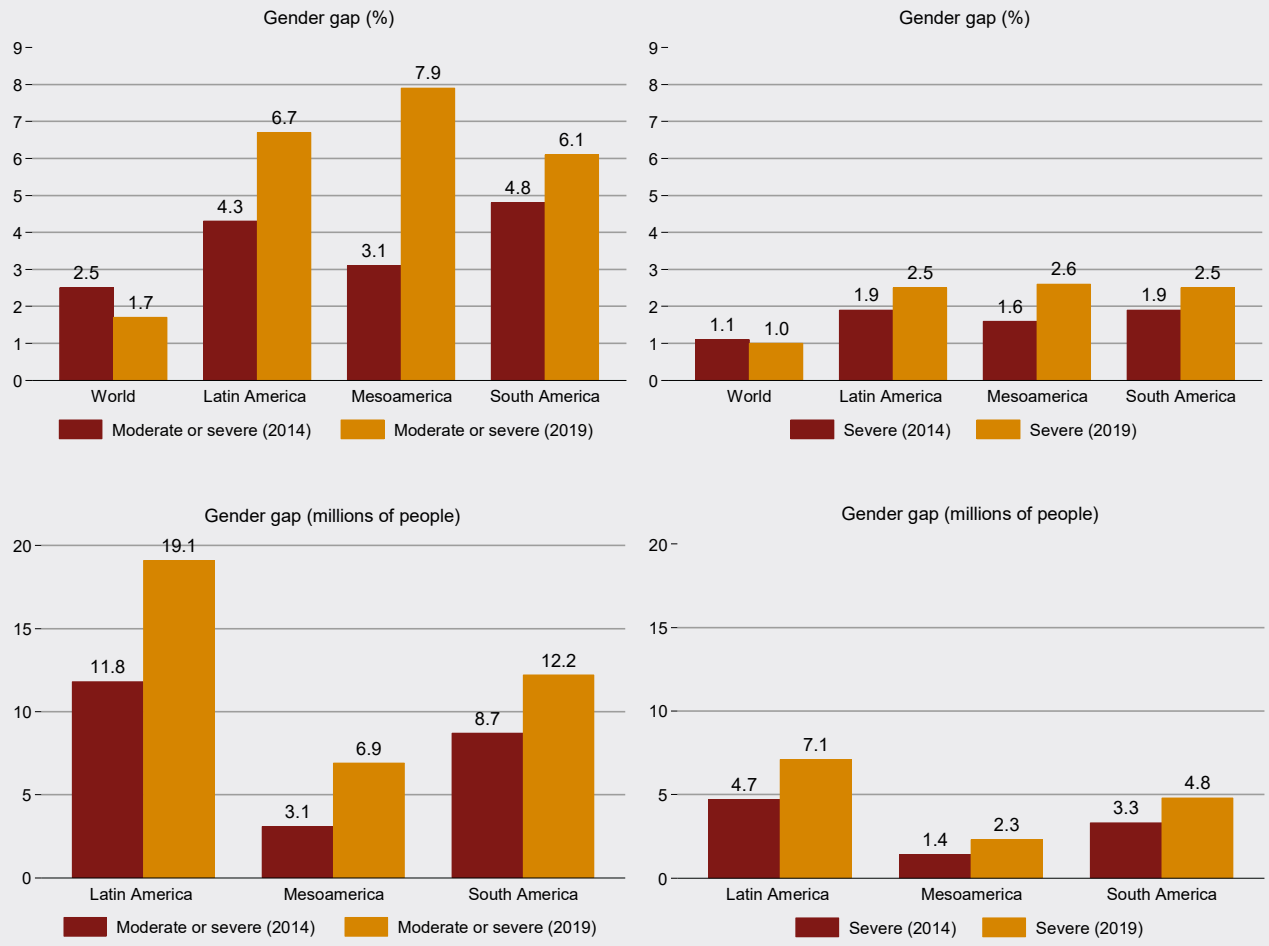
SOURCE: Prepared by the authors based on FAO data.

difference is even greater in Latin America[14] (FAO, IFAD, WHO, WFP & UNICEF, 2020). In the case of moderate or severe food insecurity in 2019, in other regions of the world the difference ranged between 1 and 4 percentage points, while in Latin America the gap was 6.7 percentage points (FIGURE 8). Furthermore, in contrast with what is happening in other regions of the world, since 2014 this gap has been growing as the prevalence of food insecurity has increased.

The same trend can be observed in both subregions, but it is more pronounced in Mesoamerica. While in 2014 the difference in the prevalence of moderate or severe food insecurity was 3.1 percentage points in Mesoamerica and 4.8 percentage points in South America, in 2019 these rates were 7.9 and 6.1 percentage points, respectively. In other words, 41.2 percent of women in Mesoamerica and 28.8 percent of women in South America were affected by moderate or severe food insecurity (Figure 6 and Figure 8). In terms of population, this means that the gap in Mesoamerica more than doubled in five years, increasing from 3.1 million to 6.9 million people, and affected 27.6 million women in 2019 (Figure 7 and Figure 8).

[14] This situation can be explained, in part, by the difficulties that women in the region have in accessing resources, inputs, markets, credit, and employment services and opportunities, which limits their incomes and livelihoods and translates into greater levels of poverty and food insecurity (FAO, PAHO, UNICEF & WFP, 2018).

FIGURA 8
GAP BETWEEN WOMEN AND MEN AFFECTED BY FOOD INSECURITY, 2014 AND 2019. IN PERCENTAGE POINTS AND MILLIONS OF PEOPLE



SOURCE: Prepared by the authors based on FAO data.

All countries in the region with available information show a greater prevalence of food insecurity in women than in men. The countries with the largest gaps between men and women are Argentina, El Salvador and Peru (Table 4).

TABLE 4

PREVALENCE (%) AND MILLIONS OF PEOPLE AFFECTED BY FOOD INSECURITY BY GENDER IN PEOPLE AGED 15 AND OVER IN SELECTED COUNTRIES IN LATIN AMERICA AND WORLDWIDE, 2017–2019

	Severe				Moderate or Severe			
	Prevalence		Millions		Prevalence		Millions	
	Men	Women	Men	Women	Men	Women	Men	Women
Argentina	8.9	13.4	1.4	2.3	28.2	36.4	4.5	6.3
Brazil	1.7	3.7	1.4	3.1	11.2	15.2	9	12.9
Chile	4.9	5.8	0.4	0.4	17.6	22.4	1.3	1.7
Costa Rica	4.2	5.6	0.1	0.1	20.1	26.8	0.4	0.5
Ecuador	17.5	18.1	1.1	1.1	42.7	48.1	2.6	3
El Salvador	12	15.7	0.3	0.4	35.6	45.7	0.8	1.2
Guatemala	16	18	0.9	1.1	39.6	46.2	2.2	2.7
Honduras	21.3	24.4	0.7	0.8	50.8	55.5	1.6	1.8
Mexico	9.9	12.3	4.4	5.9	29.7	37	13.2	17.8
Peru	6.3	10.3	0.7	1.2	21.4	34.8	2.5	4.2
Uruguay	5	6.4	0.1	0.1	18.5	23.5	0.2	0.3
World	**9.8**	**10.4**	**277.4**	**295.5**	**24.6**	**26.1**	**695.9**	**738.4**
Latin America	**8.2**	**10.5**	**18**	**24.3**	**25.3**	**31.3**	**55.6**	**72.8**
Mesoamerica	**11.3**	**13.6**	**6.9**	**8.9**	**32.1**	**39**	**19.6**	**25.7**
South America	**7**	**9.2**	**11.1**	**15.4**	**22.7**	**28.3**	**36**	**47.2**

SOURCE: Prepared by the authors based on FAO data.

The fact that women are more likely to suffer from food insecurity is concerning, not only because it is indicative of a structural problem that makes them more vulnerable to the lack of healthy food, malnutrition, disease and micronutrient deficiencies, but also because this vulnerability can have repercussions on health during pregnancy and breastfeeding, and it can affect the health of children (see Section 1.3.2).

Previous editions of this publication highlighted some of the causes of the gender gap in relation to food insecurity. It also underscored that the difference between women and men relative to this indicator is greater in Latin America than in the rest of the regions of the world for which information is available. Various studies at the global level indicate that place of residence, schooling levels, access to social services, poverty, and households' income levels significantly determine the difference in the levels of food insecurity between men and women.

1.1.2 Target 2.2. End all forms of malnutrition

The eradication of childhood malnutrition is part of the international commitments of the 2030 Agenda for Sustainable Development. The goal includes two indicators that monitor the different forms of malnutrition in children under 5. The first of these is the prevalence of stunting, which is associated with a chronic or prolonged insufficiency of necessary nutrients, recurring infections, and care practices that are counterproductive to adequate growth. The second indicator is malnutrition which, in turn, is broken down into two. The first of these is wasting, with more acute periods of lack of food intake that can cause sharp declines in weight; the second is overweight by height, caused by the consumption of high-calorie products and insufficient physical activity.

Indicator 2.2.1: Prevalence of stunting in children under 5

Stunting describes the situation in which a child's height is insufficient for his or her age. This has repercussions on physical and cognitive growth, and it is the result of a prolonged lack of nutrients that are necessary for development. The devastating effects of stunting can be lifelong. It is measured as the percentage of children between 0 and 59 months who are below -2 standard deviations from the median height-for-age of the WHO Child Growth Standards.

WORLD HEALTH ASSEMBLY TARGET: 40 PERCENT REDUCTION IN THE NUMBER OF CHILDREN UNDER 5 WHO ARE STUNTED.

SDG TARGET: 50 PERCENT REDUCTION IN THE NUMBER OF CHILDREN WHO ARE STUNTED BETWEEN 2012 AND 2030.

In LAC, the process of eradicating this form of malnutrition has advanced considerably during the last two decades. According to estimates by UNICEF, WHO & WB (2020), the prevalence of stunting in the region decreased from 22.7 percent in 1990 to 9 percent in 2019 and is now well below the global average of 21.3 percent. This means that the number of children in the region who are affected by stunting decreased by 8 million, down from 12.8 million to 4.7 million in the same period.

Each subregion has also made significant progress in the last three decades (Figure 9). The number of stunted children in the Caribbean dropped from 800,000 (20.8 percent) to 300,000 (8.1 percent); in Mesoamerica it was reduced from 5.1 million (31.9 percent) to 2 million (12.6 percent); and in South America, from 6.8 million (18.9 percent) to 2.4 million (7.3 percent).

According to the trends in recent years, the region would be very close to achieving both targets, although one year later than proposed. The Caribbean, on the other hand, would be the only subregion to reach the 2025 and 2030 targets within the prescribed timeframe (FAO, IFAD, WHO, WFP & UNICEF, 2020).

It is important to note that, despite the significant progress in the region and subregions in terms of stunting, these averages hide very different realities at the county level (FIGURE 10) and even at the subnational level. Chapter 2 will take a closer look at which territories are lagging; in other words, in which territories malnutrition rates exceed the national averages.

In terms of the progress achieved by countries in the region (Figure 11), Bolivia (Plurinational State of), El Salvador, Mexico, Paraguay and Peru show the most notable progress between 2000 and 2010, with reductions of over 40 percent. Similarly, Belize, Chile, Honduras, Nicaragua and Suriname also made significant progress with decreases of more than 30 percent. On the other hand, Guatemala is still the country with the highest prevalence of stunting in the region (46.7 percent), a prevalence that decreased by barely 8.5 percent between 2000 and 2015. Other countries with stunting rates that exceed 20 percent are Ecuador, Honduras and Haiti where rates are 23.9 percent, 22.6 percent and 21.9 percent, respectively (Figure 10).

Indicator 2.2.2: Prevalence of wasting and overweight in children under 5

Wasting

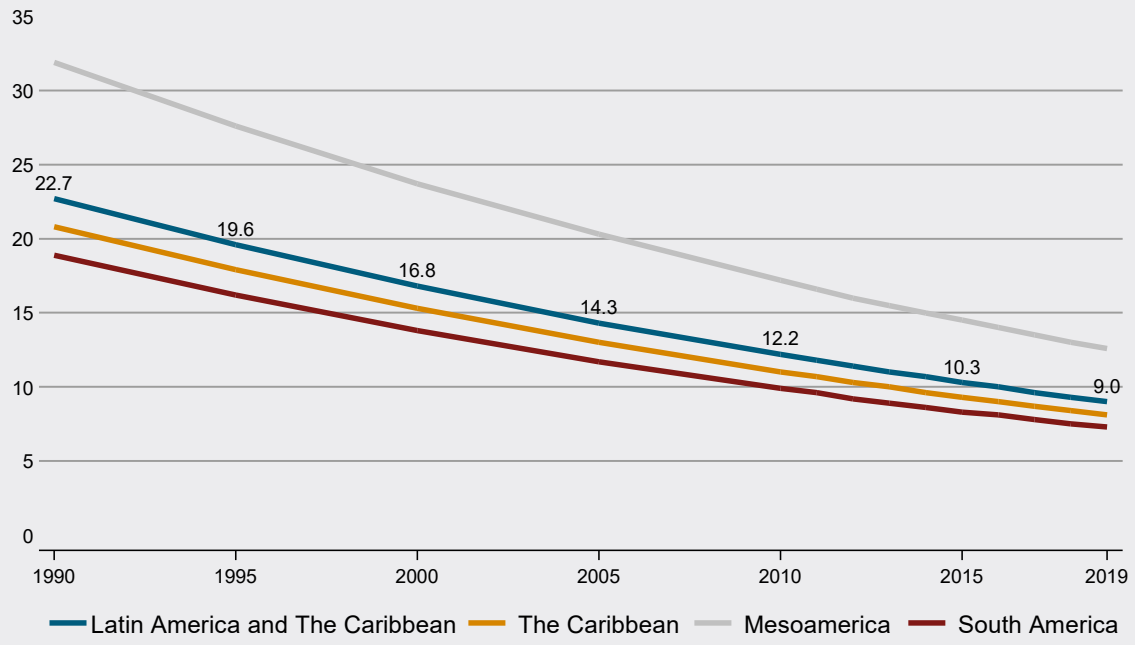
A child is considered to suffer from wasting or acute malnutrition when their weight is low in relation to their height. Wasting is the result of recent and severe weight loss or the inability to gain weight because the child has not eaten enough, or due to the presence of a communicable disease that causes them to lose weight (which is also related to lack of access to water and sanitation). It is measured as the percentage of children between 0 and 59 months who are below -2 standard deviations from the median weight-for-height of the WHO Child Growth Standards.

WORLD HEALTH ASSEMBLY TARGET: REDUCE AND MAINTAIN CHILDHOOD WASTING TO LESS THAN 5 PERCENT BY 2025.

SDG TARGET: REDUCE AND MAINTAIN CHILDHOOD WASTING TO LESS THAN 3 PERCENT BY 2030.

FIGURE 9

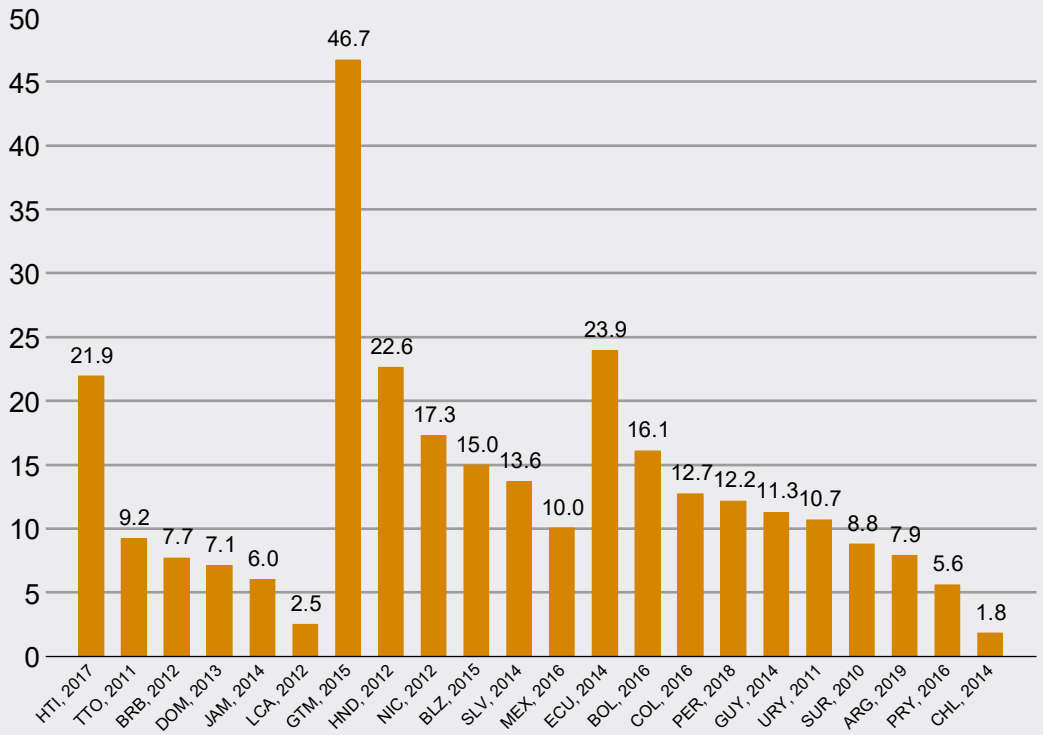
EVOLUTION OF PREVALANCE OF STUNTING, LATIN AMERICA AND THE CARIBBEAN AND SUBREGIONS, 1990 AND 2019. IN PERCENTAGES



SOURCE: UNICEF, WHO & WB, 2020.

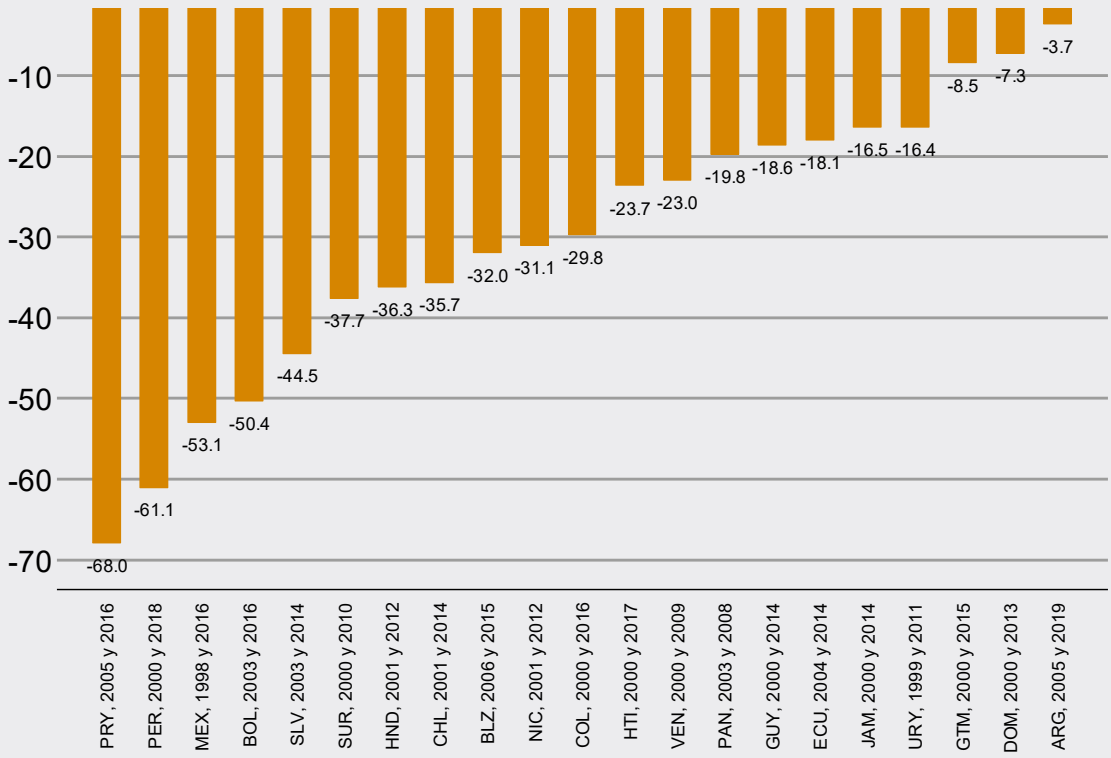
FIGURE 10

PREVALENCE OF STUNTING IN SELECTED COUNTRIES OF LATIN AMERICA AND THE CARIBBEAN, ORGANIZED BY SUBREGION, LATEST INFORMATION AVAILABLE FROM 2010 ONWARDS. IN PERCENTAGES.



SOURCE: UNICEF, WHO & WB, 2020.

FIGURE 11
DECREASES IN THE PREVALENCE OF STUNTING IN SELECTED COUNTRIES IN LATIN AMERICA AND THE CARIBBEAN, DECADES 2000 AND 2010. IN PERCENTAGES



SOURCE: Prepared by the authors based on data from UNICEF, WHO & WB, 2020.

The prevalence of this type of malnutrition in the region is 1.3 percent, which is significantly below the global average of 6.9 percent. In terms of population, it affects 700,000 children under 5, of which 400,000 live in South America, 100,000 in Mesoamerica and another 100,000 in the Caribbean, with rates equivalent to 1.3 percent, 0.9 percent and 2.9 percent, respectively (Figure 12).

In terms of the World Health Assembly targets,[15] the three subregions succeed in maintaining their prevalence below 5 percent. However, at the national level, there are some countries that are still not meeting this target. Moreover, this indicator is more sensitive to sudden or circumstantial changes in access to food. Therefore, it could show significant changes in some population groups in the coming months due to the economic crisis stemming from the COVID-19 pandemic.

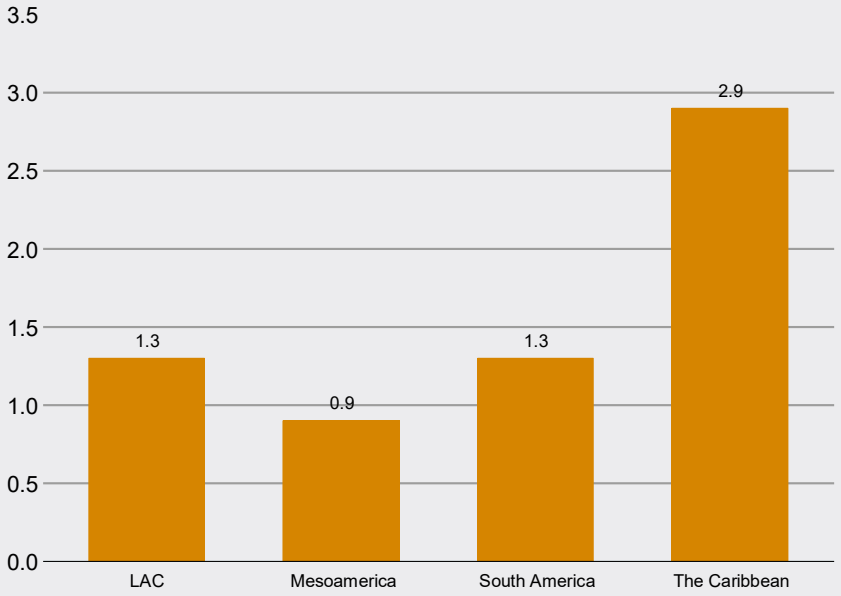
Among Caribbean countries, Barbados and Trinidad and Tobago present a prevalence that is greater than 5 percent, or higher than the established target for 2025. In Haiti, Jamaica and Saint Lucia, the prevalence exceeds 3 percent, and this is also above the established target for 2030. All countries in Mesoamerica are below 3 percent; in South America, Guyana and Suriname present the highest prevalence, with 6.4 percent and 5 percent, respectively. The rest of the countries are below 2 percent (Figure 13).

In contrast with the first target's indicators, the first two indicators of the second target of SDG 2 show a positive trend in most countries. However, it must be considered that these are usually obtained through health surveys[16] that are not normally carried out every year. In fact, in 18 countries in the region information relative to stunting is over five years old, and in another 5 countries the available information predates

[15] UNSCN. 2017. Debate document. By 2030, end all forms of malnutrition and leave no one behind. Available at: https://www.unscn.org/uploads/web/news/document/NutritionPaper-SP-WEB.pdf.

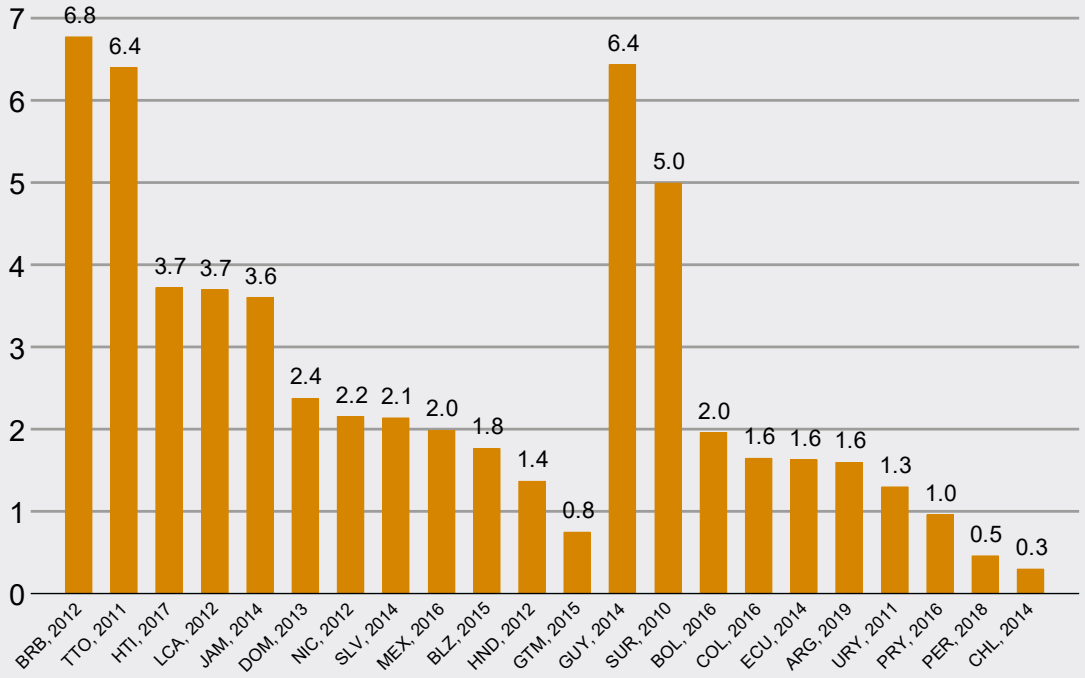
[16] Most countries use one of the following surveys: National Demographic and Reproductive Health Survey; Demographic and Health Survey; Multiple Indicator Cluster Survey.

FIGURE 12
PREVALENCE OF WASTING, LATIN AMERICA AND THE CARIBBEAN AND SUBREGIONS, 2019. IN PERCENTAGES



SOURCE: UNICEF, WHO & WB, 2020.

FIGURE 13
PREVALENCE OF WASTING IN SELECTED COUNTRIES OF LATIN AMERICA AND THE CARIBBEAN, BY SUBREGION. LAST INFORMATION AVAILABLE FROM 2010 ONWARDS. IN PERCENTAGES



SOURCE: UNICEF, WHO & WB, 2020.

2010. Therefore, the measurements of the targets' indicators have different temporalities (those of the first target are annual and those of the second target depend on the year that the respective national surveys are carried out).

Childhood overweight

Childhood overweight refers to a child whose weight is very high for his or her height. It is the percentage of children between 0 and 59 months who are above 2 standard deviations from the median weight-for-height of the WHO Child Growth Standards. This type of malnutrition is the result of burning very few calories relative to the quantity of food and drinks that are consumed, and it increases the risk of NCDs later in life (UNICEF, WHO & WB, 2020).

WORLD HEALTH ASSEMBLY TARGET: NO INCREASE IN OVERWEIGHT IN CHILDREN UNDER AGE 5 BY 2025.

SDG TARGET: REDUCE AND MAINTAIN OVERWEIGHT IN CHILDREN UNDER 5 AT 3 PERCENT BY 2030.

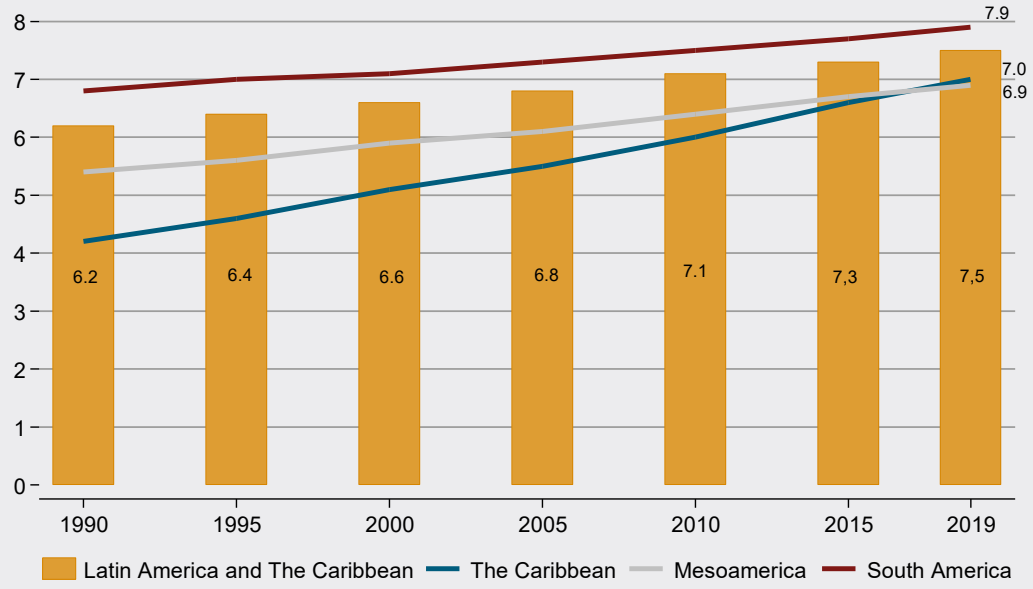
The rate of overweight in children under age 5 in the region exceeds the global average of 5.6 percent and has increased steadily since 1990, from 6.2 percent in 1990 to 7.5 percent in 2019. This represents an increase of 400,000 overweight children, giving a total of 3.9 million in 2019. If this trend continues, the region will not meet the World Health Assembly target, which is no increase in overweight in children under age 5 between 2012 and 2025.

In terms of the subregions, in the Caribbean there has been a marked increase in this indicator in recent years. Although this subregion had the lowest prevalence of overweight in the 1990s, its prevalence has now reached 7 percent, surpassing Mesoamerica and only 0.5 percentage points below the regional average. However, the number of affected children remains unchanged at 200,000, which means that the increase in percentage is due to the overall decrease in the number of children under age 5 in this subregion. In Mesoamerica the prevalence of childhood overweight is 6.9 percent, or 1.1 million children. South America has the greatest prevalence, with 7.9 percent in 2019; furthermore, 2.6 million of the 3.9 million overweight children in the region are concentrated in this subregion (Figure 14).

Although regional and subregional trends are increasing, the countries show mixed realities. In Belize, Chile, Guatemala, Mexico and Peru there were significant decreases in the prevalence of overweight in children under age 5 between 2000 and 2010. In contrast, this indicator has significantly increased in countries such as Ecuador, Honduras, Paraguay and Suriname (Figure 16).

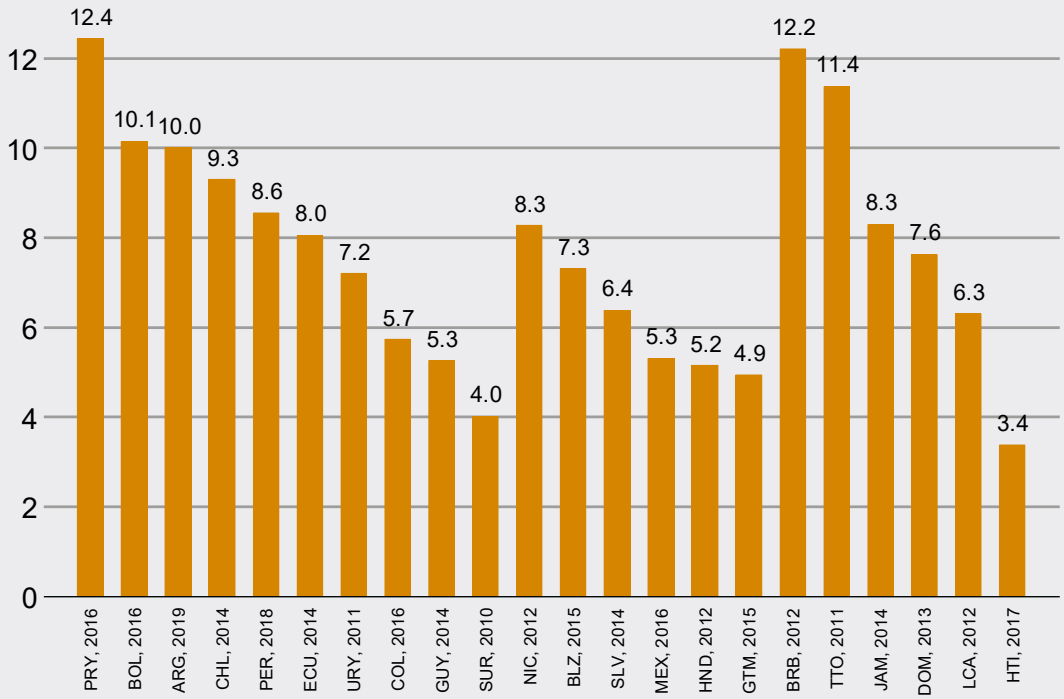
On the other hand, according to the most recent data that is available (Figure 15), the percentage of childhood overweight in Argentina, Barbados, Bolivia (Plurinational State of), Paraguay and Trinidad and Tobago exceeds 10 percent, while Nicaragua has the highest prevalence in Mesoamerica, at 8.3 percent.

FIGURE 14
EVOLUTION OF PREVALENCE OF OVERWEIGHT IN CHILDREN UNDER AGE 5, LATIN AMERICA AND THE CARIBBEAN AND SUBREGIONS, 1990–2019. IN PERCENTAGES



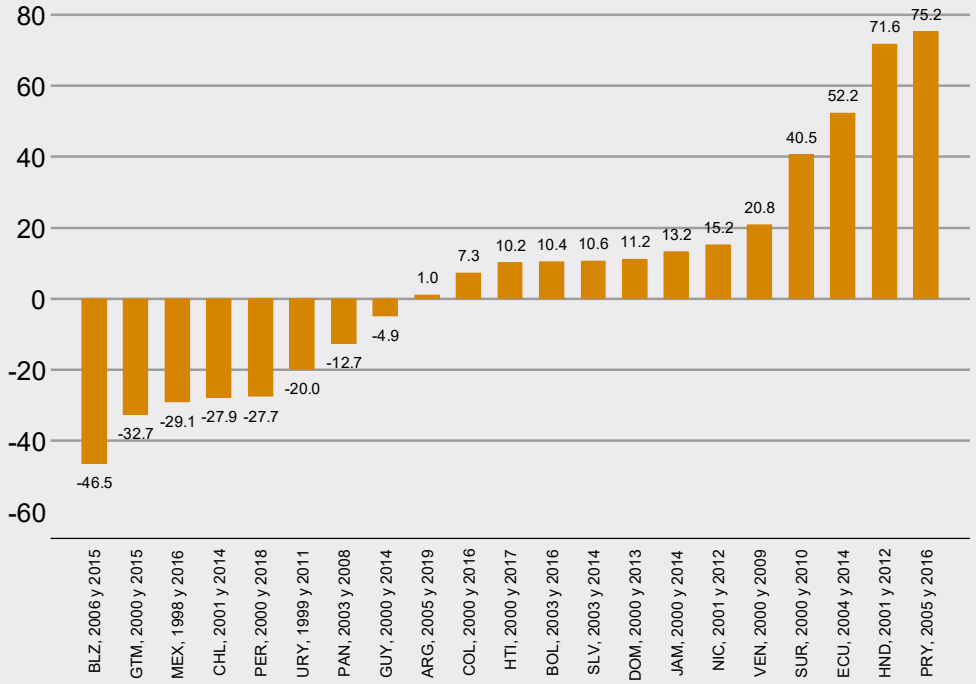
SOURCE: UNICEF, WHO & WB, 2020.

FIGURE 15
PREVALENCE OF OVERWEIGHT IN CHILDREN UNDER AGE 5 IN SELECTED COUNTRIES IN LATIN AMERICA AND THE CARIBBEAN AND BY SUBREGION, LATEST DATA AVAILABLE FOR EACH COUNTRY FROM 2010 ONWARDS. IN PERCENTAGES



SOURCE: UNICEF, WHO & WB, 2020.

FIGURE 16
VARIATIONS IN PREVALENCE OF CHILDHOOD OVERWEIGHT IN CHILDREN UNDER AGE 5 IN SELECTED COUNTRIES IN LATIN AMERICA AND THE CARIBBEAN, DECADES 2000–2010. IN PERCENTAGES



SOURCE: Prepared by the authors based on data from UNICEF, WHO & WB, 2020.

Previous editions of this publication included an in-depth analysis of the possible causes of the accelerated increase in overweight children. These causes were also analyzed in the framework of the changes in consumption patterns and the rapid transformation of food systems in recent decades. Moreover, different opportunities were highlighted for policies to facilitate the increased accessibility and production of nutritious and diverse foods, promote better food environments (including economic access, selective taxes, nutritional information, front-of-pack labelling and restrictions on advertising and sales of food and drinks that are high in fats, sugars and salt for children and adolescents) and promote healthier consumption habits (FAO, PAHO, UNICEF & WFP, 2018) (FAO, PAHO, UNICEF & WFP, 2019).

The double burden of childhood malnutrition

As has been noted, progress in reducing malnutrition in children under age 5 is considerable in comparison with the beginning of this century. However, childhood overweight is steadily increasing and exceeds 10 percent in some countries, a percentage that is higher than that of childhood stunting. In some countries – and in some territories, families and individuals – these two forms of malnutrition coexist to a significant extent; therefore, these countries face the double challenge of ending undernourishment and halting the problem

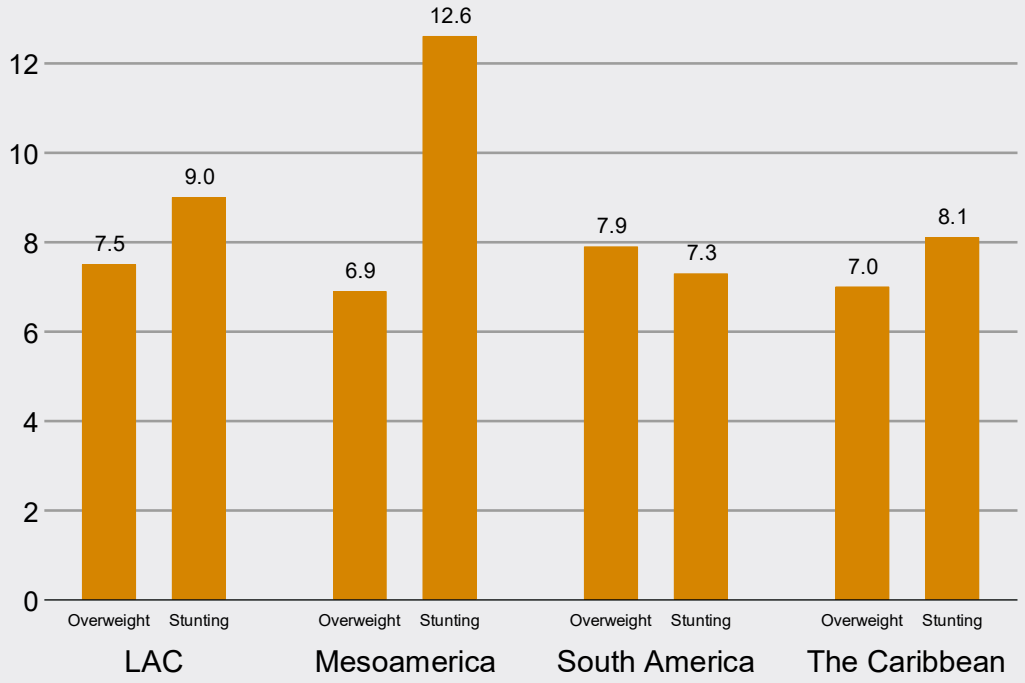
of overweight. Furthermore, it is important to consider the lack of certain micronutrients as one of the most significant challenges that some countries must overcome to ensure adequate nutrition.

For example, Mesoamerica has the highest rate of stunting (12.6 percent). This percentage is almost double that of childhood overweight; in other words, in this subregion there are 2 million stunted children and 1 million overweight children. Although South America is the subregion with the lowest prevalence of stunting, its rate is still 7.3 percent, and that of childhood overweight is 7.9 percent; these percentages are equivalent to 2.4 million stunted children and 2.6 million overweight children. In the Caribbean, the rate of stunting in children under age 5 is 8.1 percent and that of overweight is 7 percent; this means that in this subregion there are 300,000 stunted children and 200,000 overweight children.

By country, the rates in Bolivia, Ecuador, Nicaragua, Panama, Peru and Trinidad and Tobago exceed the regional average for both stunting and overweight in this population group.

Chapter 2 of this document analyzes in greater detail the realities of the different forms of malnutrition in the different countries' territories. It will show that sometimes the double burden of malnutrition is expressed more acutely in some territories than in others.

FIGURE 17
PREVALENCE OF THE DOUBLE BURDEN OF MALNUTRITION, LATIN AMERICA AND THE CARIBBEAN AND SUBREGIONS, 2019. IN PERCENTAGES



NOTES: S: stunting. O: overweight.
SOURCE: Prepared by the authors based on data from UNICEF, WHO & WB, 2020.

As noted in previous editions of this publication, in many cases these two realities are determined by unequal access to, for example, healthy foods, public health and education services, and basic water and sanitation services. It is not only important to ensure the quantity of food; its quality is equally important. In this sense, the role of the price of food is important, as well as its physical availability, promotion and advertising, education and access to basic services, among other factors (FAO, PAHO, UNICEF & WFP, 2018) (FAO, PAHO, UNICEF & WFP, 2019).

BOX 2

COST OF THE DOUBLE BURDEN OF MALNUTRITION: SOCIAL AND ECONOMIC IMPACT IN MESOAMERICA

The problem of overweight and obesity in Latin America and the Caribbean is increasing, while the rates of different types of undernourishment continue to be significant. This phenomenon, known as the double burden of malnutrition, affects low-income countries and middle-high-income countries.

The study *The cost of the double burden of malnutrition* (ECLAC & WFP, 2017), led by the World Food Programme and the Economic Commission for Latin America and the Caribbean, applies a model of analysis that measures the social and economic impact of the double burden of malnutrition. After the 2017 pilot study in Ecuador, Chile and Mexico was published, the study continued to analyze the double burden of malnutrition in several countries of Mesoamerica and the Caribbean: El Salvador, Guatemala, Honduras and the Dominican Republic.

The methodological model distinguishes two dimensions of analysis: the *retrospective incidental* and the *prospective*. The first dimension estimates the effects and costs generated by malnutrition for the year of analysis, while the prospective dimension projects, for a given time horizon, the future effects and costs resulting from malnutrition over the life cycle of the country's population in the year of analysis. In the case of the incidental dimension, the information was generated for 2017 for El Salvador, Honduras and the Dominican Republic; in the prospective dimension, the future effects and costs resulting from the malnutrition of this population in 2017 were projected for 2018-2081. For Guatemala, the year of analysis for the incidental dimension was 2018, and the prospective dimension was projected for 2019–2082.

The main economic and social costs identified for these countries are presented below.

El Salvador

The cost of the double burden of malnutrition for 2017 was 2,559.2 million dollars, which is equivalent to 10.3 percent of the country's GDP. Approximately two-thirds of this total, or 1,704.7 million dollars, can be attributed to undernourishment, and 854.5 million to overweight and obesity. Therefore, future costs are estimated to be more than 1 billion dollars per year for 2018-2081, which represents 4.2 percent of annual GDP.

In terms of the social cost, 41 percent of malnourished children do not complete primary education and only 9 percent complete secondary education. One million adults in the country suffer from diabetes and hypertension as a result of overweight or obesity, and these two conditions generate the highest health costs.

Honduras

In 2017, the double burden of malnutrition reached 2,341.4 million dollars, equivalent to 10.2 percent of the country´s GDP. Of this amount, 2,005.1 million dollars (approximately 85 percent) can be attributed to undernourishment and 336.4 million to overweight and obesity. The future costs of the double burden of malnutrition are estimated at 618 million dollars per year for 2018-2081, equivalent to 2.7 percent of annual GDP.

BOX 2
(CONTINUED)

In terms of the social cost, 40 percent of malnourished children do not complete primary education and only 4 percent complete secondary education. Approximately 816,000 adults suffer from diabetes and arterial hypertension.

Guatemala

In Guatemala, the cost of the double burden of malnutrition in 2018 reached 12,034 million dollars, equivalent to 16.3 percent of GDP. Of this amount, 8,220 million (slightly more than two-thirds) can be attributed to undernourishment and 3,813 million to overweight and obesity. The future costs of the double burden of malnutrition are equivalent to 6,700 million dollars per year for 2019–2082, which represents 9.1 percent of annual GDP.

In terms of social costs, 44 percent of malnourished children do not complete primary education and only 9 percent complete secondary education. Approximately 80,000 children suffered from diseases and almost 5,000 died as a result of malnutrition; and over 2.3 million adults suffer from diabetes and arterial hypertension.

Dominican Republic

The cost of the double burden of malnutrition in the Dominican Republic reached 1,961.1 million dollars, which is equivalent to 2.6 percent of the country's GDP. Of this amount, 499.7 million (approximately 25 percent) can be attributed to undernourishment, and 1,461.4 million to overweight and obesity. Future costs of the double burden of malnutrition are estimated at 1,915 million dollars annually for 2018-2081, equivalent to 2.5 percent of annual GDP.

In terms of the social cost, the study shows that 39 percent of malnourished children do not complete primary education and only 12 percent complete secondary education. Over 1.6 million adults suffer from diabetes and hypertension as a result of overweight and obesity, thus generating the greatest health-related costs.

It is important to highlight that, in recent decades, the rate of undernourishment has been declining steadily; therefore, the future costs of the double burden of malnutrition in all countries will be attributed mainly to overweight and obesity (representing between 87 percent and 98 percent of the total). This will lead to a clear change in the nutritional, epidemiological and demographic profiles of these countries.

Given these results, it is recommended to strengthen, build and implement multisectoral public policies against malnutrition, due to deficiencies or excess, in order to promote the sustained decrease of the prevalence of malnutrition by addressing the root causes of the problem. Simultaneously, the health and social protection systems should be adapted to respond to the increasing burden of NCDs, and to provide measuring and evaluation systems that facilitate the monitoring of malnutrition and its causes and effects.

1.2 SDG 3. ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

A healthy life greatly depends on the availability and appropriate use of sufficient, quality, diverse and nutritious food. The two goals in this section are related to reducing maternal mortality and mortality due to NCDs.

1.2.1. Target 3.1. Reduce the global maternal mortality ratio

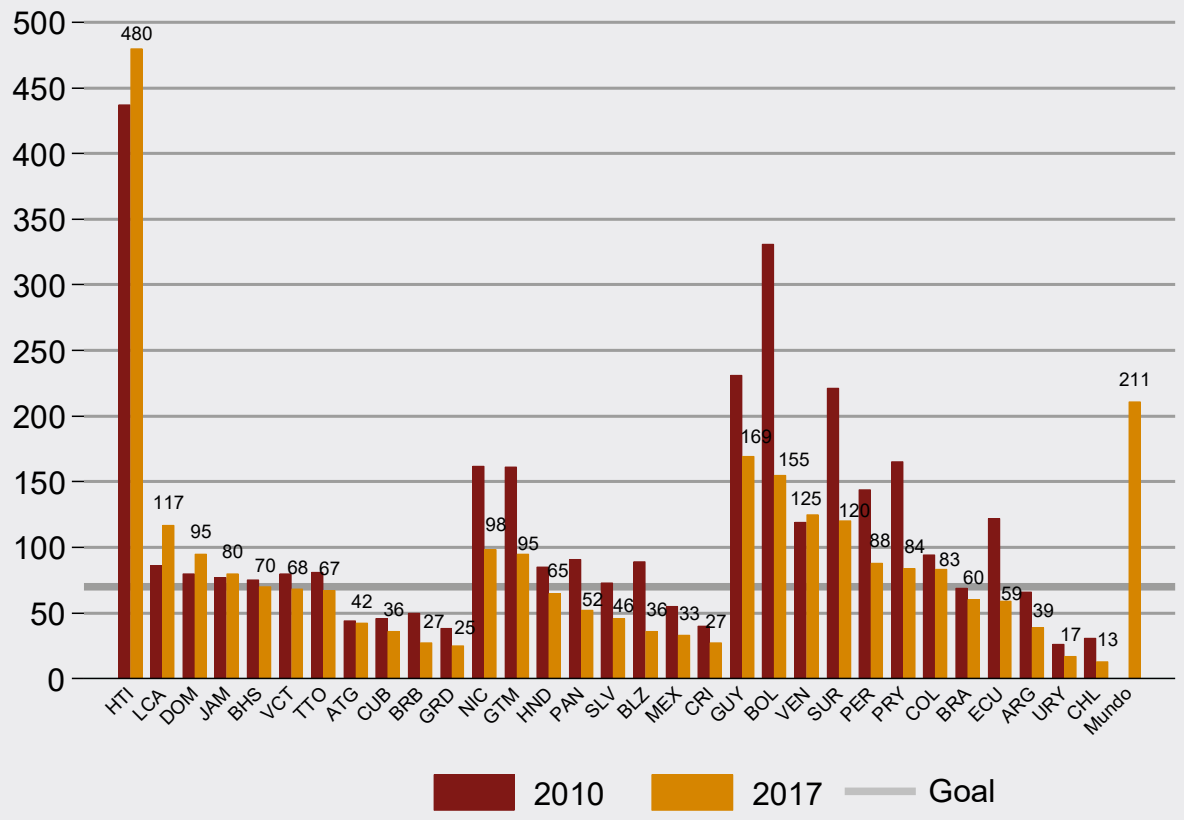
Maternal mortality is defined as the death of the mother during pregnancy, due to any cause related to or aggravated by pregnancy or its management (WHO, 2019).

Nutrition is fundamental for the development of a healthy pregnancy and avoiding complications during childbirth. During gestation, vitamin D and folic acid deficiencies can lead to various complications, while a lack of micronutrients such as vitamin A and iron increases the risk of complications during childbirth, increasing the risk of death (FAO, 2018a). Moreover, some of the causes of maternal mortality are diabetes, cardiovascular disease and obesity, which are associated with poor nutrition (FAO, PAHO, UNICEF & WFP, 2019).

SDG TARGET: REDUCE THE GLOBAL MATERNAL MORTALITY RATIO TO LESS THAN 70 PER 100,000 LIVE BIRTHS BY 2030.

Between 2010 and 2017 the maternal mortality rate decreased in most countries of the region; nonetheless, the ratio per 100,000 live births increased in four of them: Saint Lucia, Saint Vincent and the Grenadines, Venezuela (Bolivarian Republic of) and, to a lesser extent, Jamaica. According to WHO, there are countries in the region with a long way to go to reach target 3.1. One example is Haiti, where the current ratio of maternal mortality (480) is seven times higher than the established target and twice the global average (211). Although the maternal mortality rates of the rest of the countries are substantially below the global rate, some are also quite far from the established target. The 2017 rates in Guyana and Bolivia are more than double, and in Suriname and Saint Lucia they are still higher than 100 deaths per 100,000 live births. Nicaragua, Guatemala, the Dominican Republic, Peru, Paraguay, Colombia and Jamaica also have ratios exceeding 70 deaths per 100,000 live births (Figure 18).

FIGURE 18
MATERNAL MORTALITY PER 100,000 LIVE BIRTHS, LATIN AMERICA AND THE CARIBBEAN AND WORLDWIDE, 2018



SOURCE: WHO, 2016. Global Health Observatory data repository.

1.2.2 Target 3.4. Reduce by one-third premature mortality from noncommunicable diseases

Indicator 3.4.1. Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease

The mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease is measured as the probability of death from these diseases in people aged between 30 and 70.

NCDs or chronic illnesses tend to be long-lasting and are the main causes of death in the world, leading to more than 40 million deaths per year. Risk factors include unhealthy eating, physical inactivity, tobacco and alcohol, while metabolic factors that increase the risk of NCDs are increased arterial pressure, overweight and obesity, hyperglycemia and hyperlipidemia.

SDG TARGET: REDUCE PREMATURE DEATHS DUE TO NONCOMMUNICABLE DISEASES BY 33 PERCENT BETWEEN 2015 AND 2030.

In 2016, nearly 75 percent of deaths in the region (2.8 million), were caused by NCDs (FAO, PAHO, UNICEF & WFP, 2019). Among this group of illnesses, the most common are cardiovascular disease, cancer, diabetes and chronic respiratory disease. Previous editions of this publication outlined the relationship between the consumption of highly processed products that are high in sodium, sugar and saturated and trans fats and the development of obesity, which implies a greater risk of death due to cardiovascular disease, diabetes or cancer (Poti, Braga, & Quin, 2017) (Fiolet, et al., 2018) (Schnabel, et al., 2019). Conversely, a diet with a high content of fruit, vegetables and whole grains reduces the risk of these diseases (GBD 2017 Diet Collaborators, 2019). In other words, adequate nutrition is closely related to reaching this target.

Cardiovascular disease, cancer, diabetes and chronic respiratory disease caused 2.2 million deaths in the region in 2016. More than 1 million deaths can be attributed to cardiovascular disease; 640,000 to cancer; 250,000 to diabetes; and 230,000 to chronic respiratory disease (WHO, 2016).

There are significant differences at the subregional level. In the Caribbean, cardiovascular disease accounts for 45 percent of deaths from NCDs, a percentage that is well above the regional average of 36 percent. In Mesoamerica, diabetes led to 17 percent of deaths from NCDs, in contrast with the global and regional rates of 4 percent and 9 percent, respectively. In South America, deaths caused by cancer account for one-quarter of all deaths from NCDs, and chronic respiratory disease led to 9 percent deaths, almost double the Caribbean rate (Figure 19).

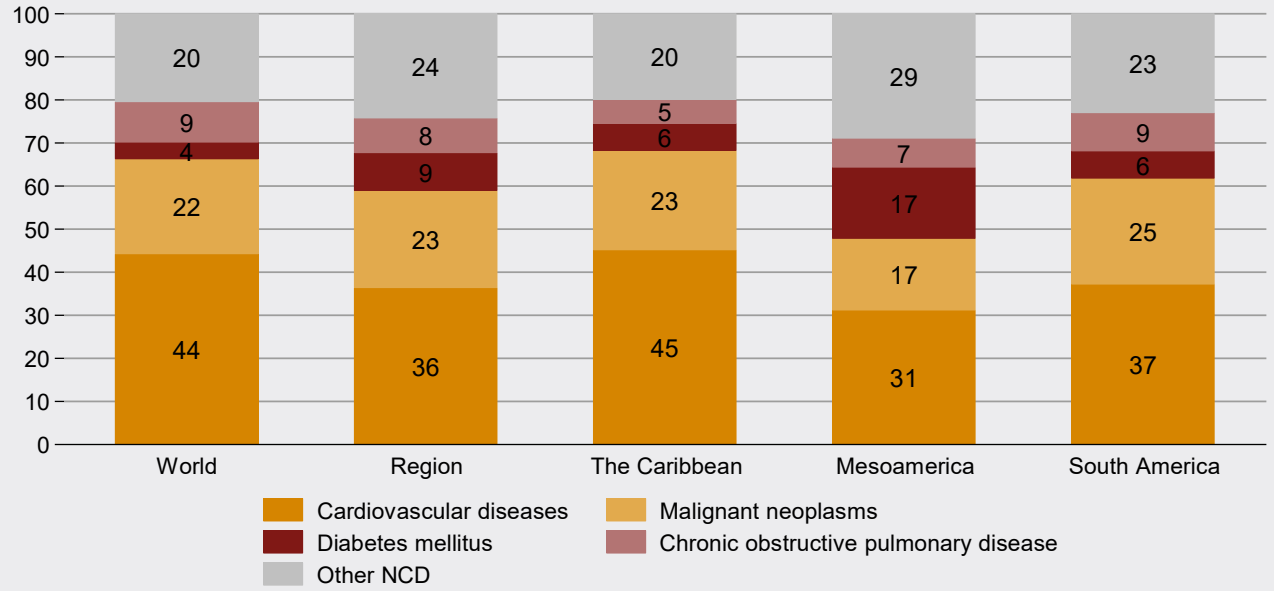
According to the latest information available, the likelihood of death due to NCDs of people aged between 30 and 70 in countries in the region ranges between 11 percent and 30 percent, and this likelihood is greatest in Guyana. Eleven countries in the region have higher rates than the global average (18.3 percent), and seven of these are in the Caribbean. Haiti has the highest incidence of all Caribbean countries and the second highest in the region at 26.5 percent. In Mesoamerica, all countries are below 16 percent except for Belize. In South America, Guyana has the highest probability in the region, or 30.5 percent, and both Guyana and Suriname exceed the global average.

In terms of the evolution of this indicator, there have been improvements in most countries between 2010 and 2016. Exceptions include Haiti, where the likelihood of death increased by more than four percentage points; Saint Vincent and the Grenadines, with an increase of two percentage points; and Antigua y Barbuda, with a rise of one percentage point (FIGURE 20).

In addition to the risk of premature death, obesity and NCDs have physical, psychological and economic complications that affect people's quality of life and overburden health systems. In economic terms, NCDs entail great healthcare costs for people and for governments. For example, patients in the region pay on average 40 percent of their healthcare

FIGURE 19

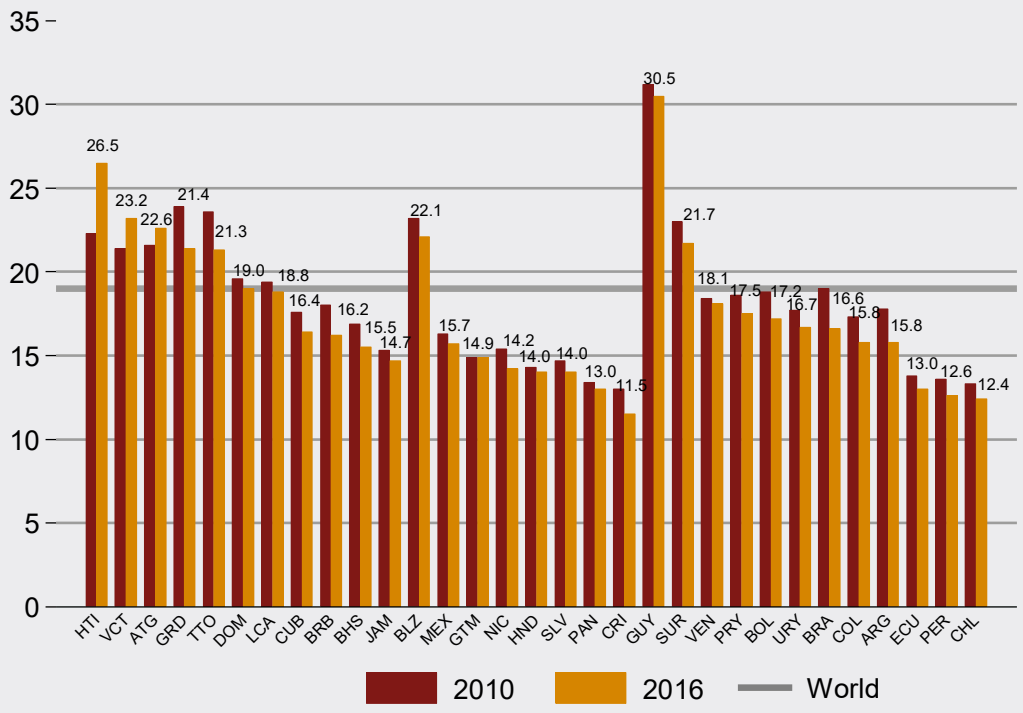
PERCENTAGE OF DEATHS DUE TO NCDS, ACCORDING TO DISEASE TYPE, IN LATIN AMERICA AND THE CARIBBEAN, SUBREGIONS, AND WORLDWIDE, 2016. IN PERCENTAGES



SOURCE: WHO, 2016. Global Health Observatory data repository.

FIGURE 20

PROBABILITY OF DEATH DUE TO NCDS IN PEOPLE AGED 30 TO 70, LATIN AMERICA AND THE CARIBBEAN AND WORLDWIDE, 2010 AND 2016. IN PERCENTAGES



SOURCE: WHO, 2016. Global Health Observatory data repository.

costs, which can represent a significant loss of household resources. For governments, the costs associated with obesity and NCDs are steadily increasing. It is estimated that in developed countries the medical costs associated with obesity represent between 2 percent and 7 percent of national expenditures. In addition, complications from these diseases can reduce workers' productivity due to physical and psychological problems and work absenteeism, which translates into economic losses for countries (Cuadrado & García, 2015) (Kang, Jeong, Cho, Song, & Kim, 2011) (Latzer & Stein, 2013). This is all evidence of the importance of ensuring the healthy nutrition of the entire population throughout all stages of the life cycle, for the development of a full life and to prevent obesity and premature deaths (PAHO, 2017) (Poti, Braga, & Quin, 2017) (GBD 2017 Diet Collaborators, 2019).

BOX 3
COVID-19, NCDS AND OBESITY

WHO has highlighted that people with NCDs, such as cardiovascular disease, diabetes and cancer, have a higher risk of becoming seriously ill from COVID-19, and they are more likely to die from the virus (PAHO, 2020). Various epidemiological studies have shown that diabetes increases the risk of hospitalization and of being admitted to intensive care, and that the mortality rate due to COVID-19 could be as much as 2 or 3 times higher in diabetic patients (Vas, Hopkins, Feher, Rubino, & Whyte, 2020).

Studies at the global level have found that the coronavirus illness is more serious in patients with obesity because their immune system functions less effectively and they present high levels of hypoxia (the lack of sufficient oxygen in tissues to maintain body functions) (Lim, Shin, Nam, Jung, & Koo, 2020).

In addition, as a result of the pandemic, there has been a displacement effect on the treatment of illnesses other than COVID-19, and the treatment of NCDs is being postponed. This has increased overall mortality due to deaths from diseases other than COVID-19 and deficiencies in treating them (ECLAC and PAHO, 2020).

All the above would indicate that, in the region, high rates of obesity and the increasing presence of NCDs are putting a significant part of the population at greater risk from the pandemic. Conversely, the pandemic can also lead to an increase in overweight, obesity and NCDs. As a result of the quarantine policies and limitations to the number of outings that people can make to acquire food, people have reduced their levels of physical activity and increased their consumption of unhealthy foods, as they purchase non-perishable foods instead of fresh ones (FAO & ECLAC, 2020a; FAO & ECLAC, 2020b).

Households' decreased purchasing power also impacts the quality of the diets of population groups with the lowest incomes, because it negatively affects demand for healthy and nutritious products, considered more expensive, in favor of cheaper products that are usually high in calories, sugars, fat and salt, which are harmful for health (FAO & ECLAC, 2020b). As a result, there would be a significant global decrease in demand for nutritious, but more expensive, products such as fruits, vegetables and dairy products, which directly impacts the poorest groups in society (Swinnen & McDermott, 2020).

Along these lines, the *Centro de Investigación en Nutrición y Salud del Instituto Nacional de Salud Pública* (National Public Health Institute's Nutrition and Health Research Centre) is collaborating with the World Food Programme (WFP) to carry out an online survey with

BOX 3
(CONTINUED)

the objective of identifying how contingency measures associated with COVID-19 affect food purchasing and the quality of the population's diet. It includes Bolivia, Colombia, Ecuador, Honduras and Mexico. According to preliminary results of the surveys carried out in Mexico, two of every three people perceived an increase in the price of animal products, as well as fruits and vegetables, which could result in the decreased consumption of healthy foods in population sectors with decreased incomes. In addition, while overall only 12 percent of people perceive that their nutrition worsened during the pandemic, this perception doubles among lower-income groups (24 percent). The results of the surveys carried out in Mexico highlight inequalities in access to healthy food among people of low socio-economic status, which may be accentuated by the loss of incomes due to the COVID-19 epidemic (INSP & WFP, 2020)

1.3 OTHER INDICATORS RELATED TO FOOD AND NUTRITION

1.3.1 Overweight and obesity throughout the life cycle

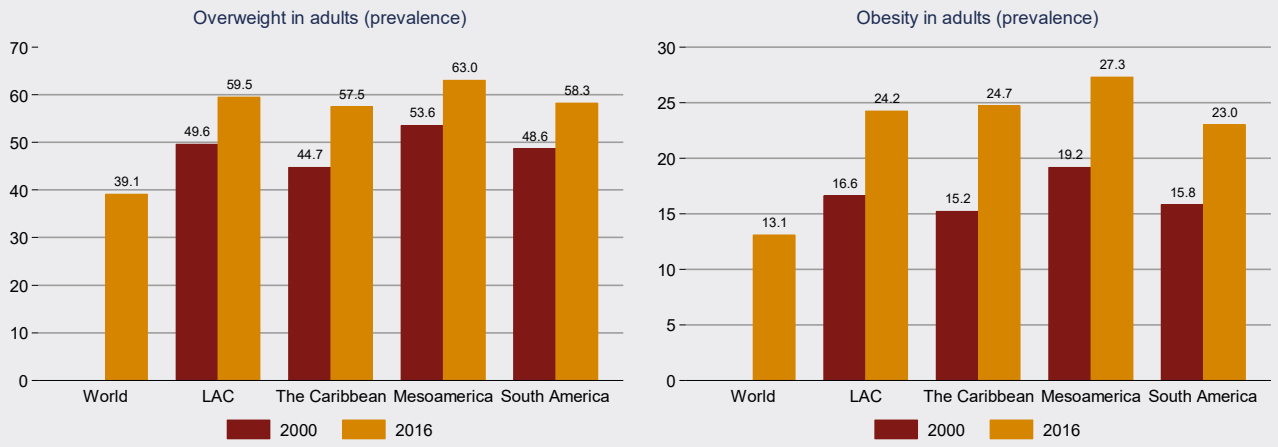
Overweight and obesity are affecting more and more people in the world. The region's average surpasses global averages. The prevalence of overweight in people over age 18 is 59.5 percent, more than 20 percentage points above the global average, while obesity in people over age 18 affects nearly one-quarter of adults, which also greatly surpasses the global rate of 13.1 percent. Among the subregions, Mesoamerica has the greatest prevalence of overweight and obesity, or 63 percent and 27.3 percent, respectively (Figure 21).

In terms of their evolution, adult overweight and obesity have been steadily increasing in the region since 1975, and between the beginning of the century and 2016 the rate of adult obesity doubled,[17] affecting 106 million people in 2016 (FAO, PAHO, UNICEF & WFP, 2019). Overweight has increased in the region by 10 percentage points in the same period and affected 262 million adults in 2016.

It is especially concerning that, between 2000 and 2016, the increases in overweight and obesity were considerable in all countries. Overweight increased by between 7 and 17 percentage points, and obesity by between 6 and 12 percentage points since the year 2000 (Figure 22). Haiti is an especially notable case, as in the year 2000 its rates of overweight were among the lowest in the region, but by 2016 these had increased by 17.3 percentage points. Haiti has seen the greatest increase in the region, reaching a rate of 54.9 percent in 2016, while the country also has a significant prevalence of undernutrition and stunting.

[17] Calculated with data from (WHO, 2016) and (DAES, 2020).

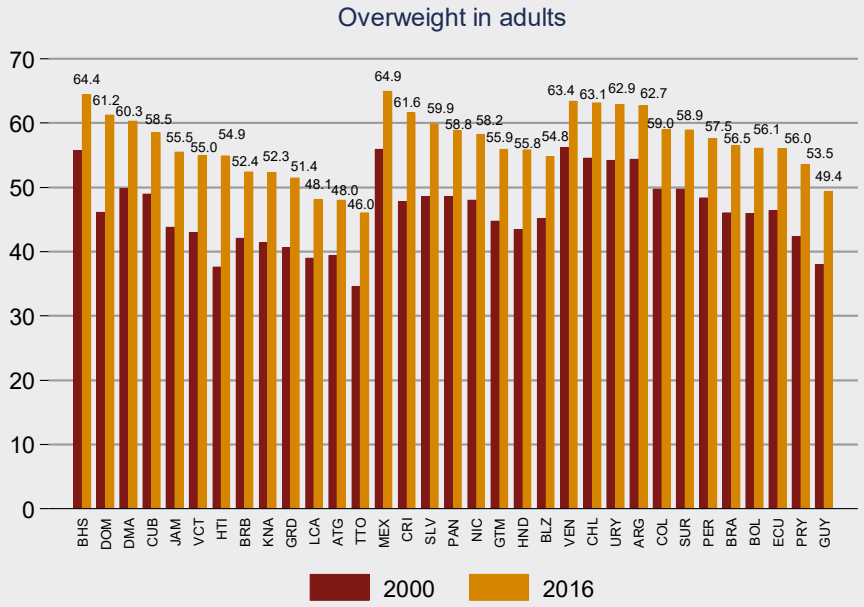
FIGURE 21
PREVALENCE OF OBESITY IN PEOPLE OVER AGE 18, LATIN AMERICA AND THE CARIBBEAN, SUBREGIONS AND WORLDWIDE, 2000 AND 2016. IN PERCENTAGES

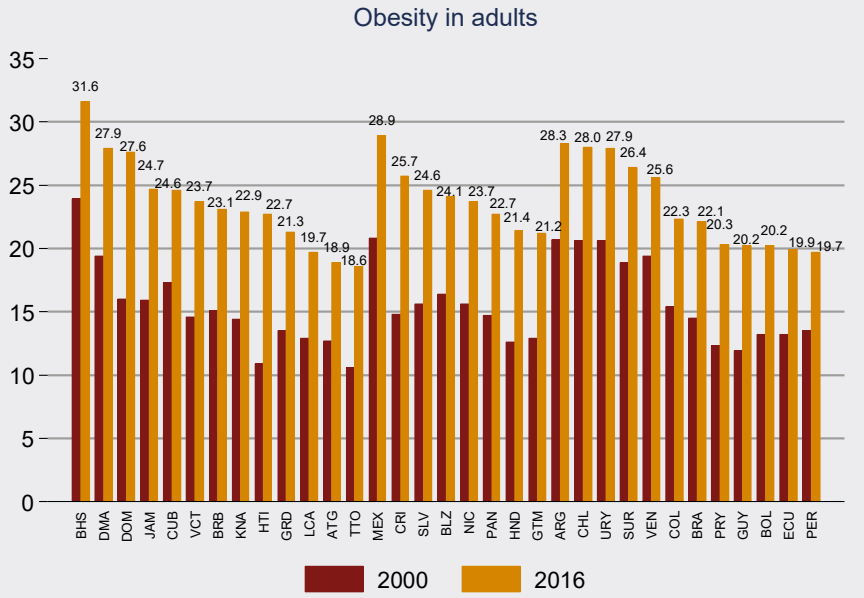


SOURCE: FAO, PAHO, UNICEF & WFP, 2019; WHO, 2016; DAES, 2020.

FIGURE 22

PREVALENCE OF OVERWEIGHT AND OBESITY IN PEOPLE OVER AGE 18, LATIN AMERICA AND THE CARIBBEAN, BY SUBREGION, 2000 AND 2016. IN PERCENTAGES





SOURCE: WHO, 2016.

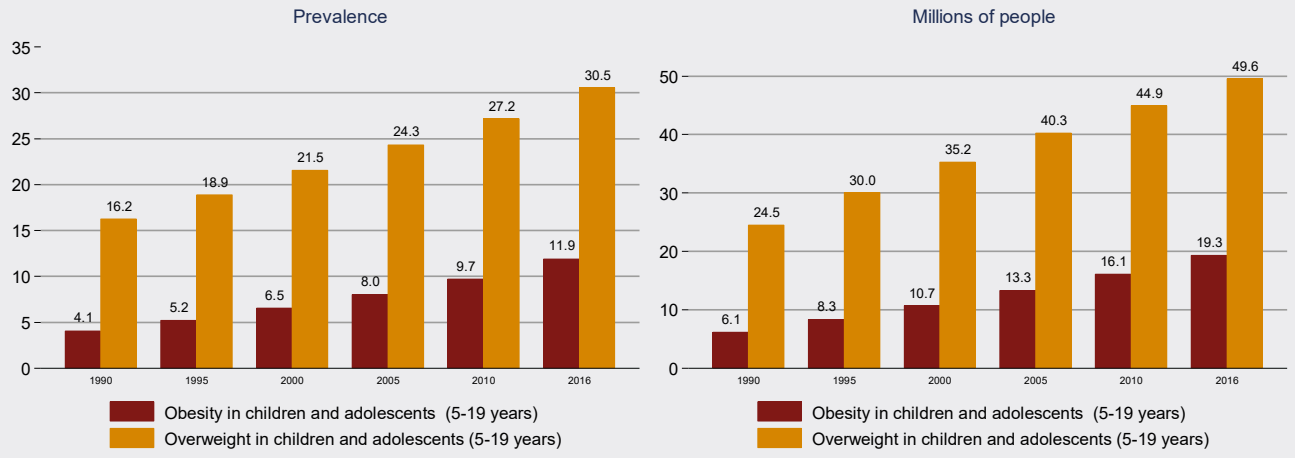
Adult obesity in the region affects more women than men. In all countries, its prevalence is greater in women than in men, and in 19 countries the difference is of at least 10 percentage points. The inferior quality of diets is related to excess weight and food insecurity. As highlighted in Section 1.1.1, moderate or severe levels of food insecurity in the region also affect women more than men. That women are more likely to suffer from food insecurity and obesity highlights the need to ensure that food not only meets minimum calorie requirements, but also quality and nutritional requirements, being low in sugar, fats and salt and avoiding over-processed food, so that they can lead a healthy and active life, free from all forms of malnutrition (WHO, 2016).

Overweight and obesity are also rapidly increasing among children aged 5 and above and adolescents in the region. More than 30 percent are affected by overweight, which means that 50 million children and adolescents live with this condition. Obesity affects 12 percent and, just as in adults, the population of children and adolescents with obesity also doubled between 2000 and 2016, surpassing 19 million people in 2016.

Obesity is a risk factor for developing NCDs. Children and adolescents with obesity are also vulnerable to developing these diseases at an early age and throughout their lives, and this could lead to an accelerated aging process (Barton, 2012), in addition to resulting in psychological and social problems among these age groups (Latzer & Stein, 2013).

Therefore, to guarantee a healthy and active life throughout the life cycle, as well as longevity and reduced morbidity and mortality rates due to NCDs, it is necessary to ensure food systems that promote and facilitate the entire population's access to foods that are not only sufficient, but also healthy. These systems must protect the health of children and adolescents, promote healthy nutrition and disincentivize the production and consumption of products that are high in sugar, fats and salt.

FIGURE 23
PREVALENCE AND MILLIONS OF CHILDREN (AGES 5 TO 9) AND ADOLESCENTS (AGES 10 TO 19) AFFECTED BY OVERWEIGHT AND OBESITY IN LATIN AMERICA AND THE CARIBBEAN, 1990–2016



SOURCE: WHO, 2016; DAES, 2020.

BOX 4
HEALTHY AND AFFORDABLE DIETS

According to WHO, a healthy diet is balanced, varied, contains an adequate range of foods and protects from malnutrition and NCDs. It must include vegetables, whole grains, nuts and a minimum of 400 grams of fruits and vegetables per day. Furthermore, the percentage of calories from fats must not exceed 30 percent, and saturated and trans fats must be limited. Calories from free sugars must not exceed 10 percent and the daily maximum salt intake is 5 grams. Based on these guidelines, countries develop food guides that also consider the characteristics of individuals, the cultural context, customs and local products. However, there is evidence of difficulties in accessing this type of diet. For example, several studies show the limited affordability of healthy diets in comparison with less healthy ones (Jones, Conklin, Suhrcke, & Monsivais, 2014) (Wiggins & Keats, The rising cost of a healthy diet: Changing relative prices of foods in high-income and emerging economies, 2015) (Drewnowski, 2010) (FAO & PAHO, 2016) (Hall, et al., 2019).

Specifically, according to the 2020 State of Food Security and Nutrition in the World (FAO, IFAD, WHO, WFP & UNICEF, 2020), the cost of a diet that is considered healthy in LAC is the highest of all regions in the world, or US$3.98 per day. This means that a healthy diet in terms of calories, necessary nutrients and greater diversity of foods is almost four times more expensive than a diet that only considers the minimum number of calories to be consumed daily (Table A).

A. COST (IN US$) OF A MINIMUM CALORIE DIET AND A HEALTHY DIET IN THE WORLD, REGIONS AND SUBREGIONS OF LATIN AMERICA AND THE CARIBBEAN

	Minimal calorie diet	Healthy diet	Healthy diet/ Minimal calorie diet
Latin America and The Caribbean	**1.06**	**3.98**	**3.8**
The Caribbean	1.12	4.21	3.8
Mesoamerica	1.13	3.81	3.4
South America	0.91	3.71	4.1
Africa	**0.73**	**3.87**	**5.3**
Asia	**0.88**	**3.97**	**4.5**
Oceania	**0.55**	**3.06**	**5.6**
North America and Europe	**0.54**	**3.21**	**5.9**
World	**0.79**	**3.75**	**4.7**

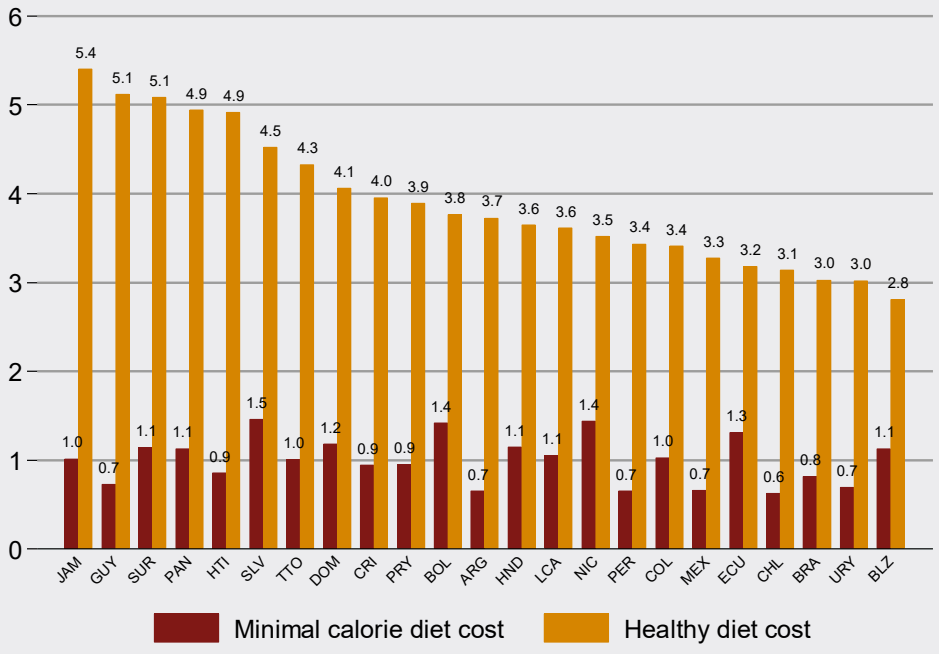
SOURCE: FAO, IFAD, WHO, WFP & UNICEF, 2020.

BOX 4
(CONTINUED)

In some countries in the region, the cost of a healthy diet is close to or greater than US$5.00 per day (Jamaica, Guyana, Suriname, Panama and Haiti).

Moreover, there are countries where the difference between a healthy diet and the minimum-calorie diet is quite high; for example, in Guyana, a healthy diet is more than seven times more expensive than a minimum-calorie diet, and in Haiti, Jamaica, Peru, Mexico, Argentina and Chile it is five times more expensive (Figure B).

B. COST (IN US$) OF A MINIMUM CALORIE DIET AND A HEALTHY DIET IN SELECTED COUNTRIES OF LATIN AMERICA AND THE CARIBBEAN

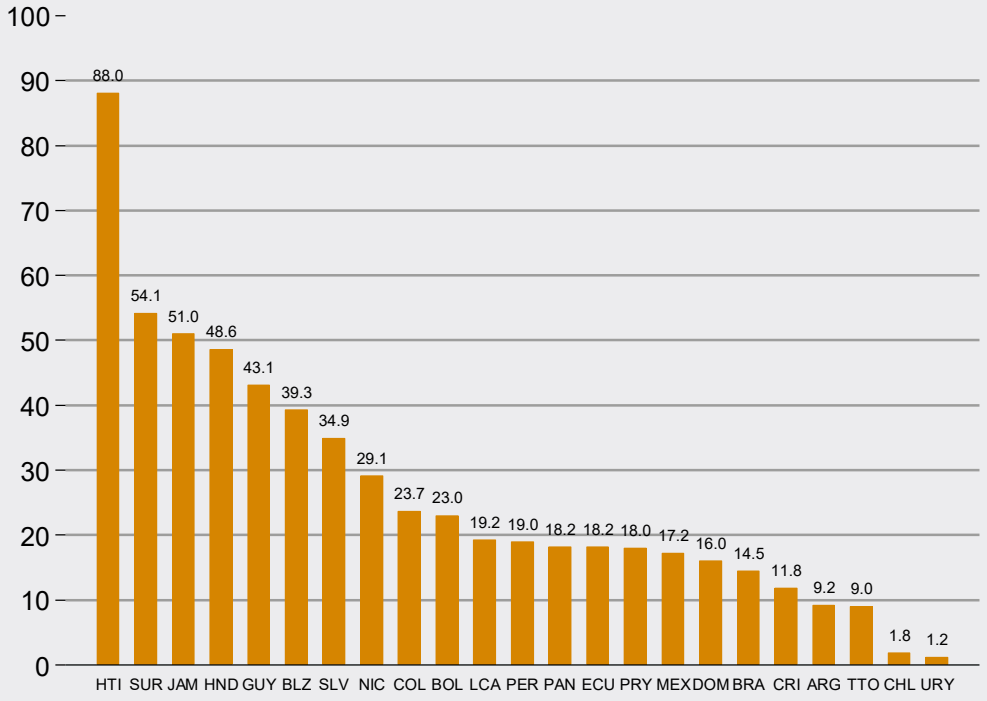


SOURCE: FAO, IFAD, WHO, WFP & UNICEF, 2020.

According to calculations, as a simple average, 26.5 percent of the population in LAC countries cannot access a healthy diet. However, there are countries in which this percentage is much higher; for example, in Haiti 88 percent of the population cannot access a healthy diet, and in countries such as Suriname, Jamaica and Honduras healthy nutrition is unaffordable for nearly half of the population (Figure C). Furthermore, in Saint Lucia, Haiti, Guyana, Belize, Honduras and Nicaragua, the cost of a healthy diet would exceed average daily spending on food; in Saint Lucia, for example, to access a healthy diet, a family, on average, would have to double its normal spending on food (FAO, IFAD, WHO, WFP & UNICEF, 2020).

BOX 4
(CONTINUED)

C. PERCENTAGE OF THE POPULATION WITHOUT ECONOMIC ACCESS TO A HEALTHY DIET IN SELECTED COUNTRIES IN THE REGION



SOURCE: FAO, IFAD, WHO, WFP & UNICEF, 2020.

Previous editions of this Overview have shown how calorie-dense, low-nutrient foods are less costly than fresh, nutrient-dense ones (FAO & PAHO, 2016) (FAO, PAHO, UNICEF & WFP, 2019). To the extent that healthy diets continue to be of limited economic affordability, people with lower incomes will tend to buy high-calorie foods to cover their minimum calorie requirements, without covering their nutritional needs, which can lead to several malnutrition problems. In LAC, sales of so-called ultra-processed products, which are high in calories, have increased considerably in the past decade (PAHO, 2019) and the availability of fruits and vegetables is lower than recommended (FAO, PAHO, UNICEF & WFP, 2018). This evidences the challenges related to physical and economic access to a healthy diet in the region, in contrast with the ease of access to diets with a high number of highly processed foods with excessive fat, sugar and salt, which are associated with overweight, obesity and NCDs.

1.3.2 Applying a comprehensive plan for maternal, infant and young child nutrition

As has already been noted, women are disproportionately affected by food insecurity and obesity. It is evident that they are in a disadvantaged position and that targeted efforts are required to ensure their right to a healthy diet. Addressing these needs will also help to ensure the food security and nutrition of newborns. The objective of the *Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition* is to alleviate the double burden of childhood malnutrition beginning in the first phases of development, from conception until age two (WHO, 2014a).

The progress achieved in the three indicators that are closely related to maternal and newborn nutrition is outlined below. Also shown are some of the consequences that nutritional deficiencies can have on women, and how this impacts the health of newborns.

Global target 2. Reduce by half the rates of anemia in women of reproductive age

Anemia is a condition defined by the blood's inability to transport enough oxygen to meet the organism's needs. The most common cause of anemia throughout the world is iron deficiency as a result of a long-term negative iron balance. This may be the result of an insufficient contribution or absorption of iron in the diet; increased iron requirements during pregnancy or growth periods; or increased iron loss during menstruation or intestinal worm infections (helminthiasis). It is estimated that 50 percent of cases of anemia in the world are due to iron deficiency. The significant causes of this condition worldwide include infections, other nutrition deficiencies (especially of folates and vitamins B12, A and C), genetic conditions such as sickle-cell anemia or thalassemia and chronic inflammation (WHO, 2017d) (WHO, 2011).

Women suffering from anemia are twice as likely to die during childbirth and in the days following childbirth. Furthermore, this condition increases the risk of premature birth and low birth weight that, in turn, increase the risk of mortality in newborns and childhood malnutrition (UNICEF, 2019).

WORLD HEALTH ASSEMBLY TARGET: 50 PERCENT REDUCTION OF ANEMIA IN WOMEN OF REPRODUCTIVE AGE BY 2025.

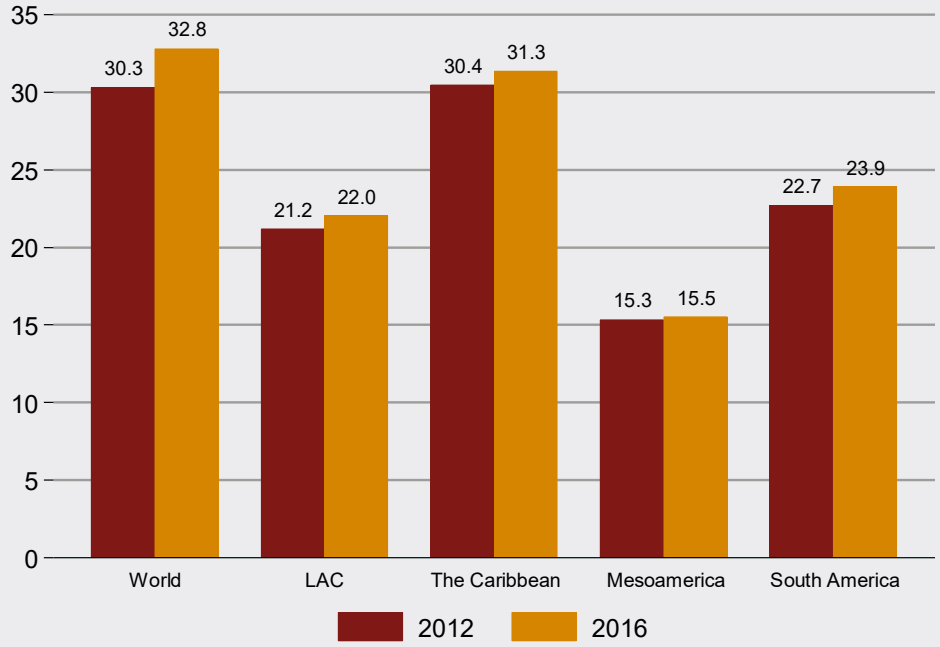
SDG TARGET: 50 PERCENT REDUCTION OF ANEMIA IN WOMEN OF REPRODUCTIVE AGE BY 2030.

Anemia is closely related to a lack of micronutrients; in other words, access to a healthy diet plays an important role in preventing anemia and its consequences on pregnancy, childbirth, and maternal and newborn health.

According to the latest information available, in 2016 the global rate of anemia in women of reproductive age was 32.8 percent, which means that it affected 613 million women worldwide. In the LAC region, the percentage was substantially lower than the global average: 22 percent of women of reproductive age, or 37.6 million women. However, the realities by subregion are heterogeneous. In the Caribbean, the rate of anemia exceeds 30 percent, a percentage that is very close to the global average and that is explained mainly by the high rate in Haiti. In South America its prevalence is 24 percent and in Mesoamerica it is 15.5 percent, much lower than the other two subregions. From 2012 until 2016, according to the latest information available, there has been no progress in any of the subregions (FIGURE 24).

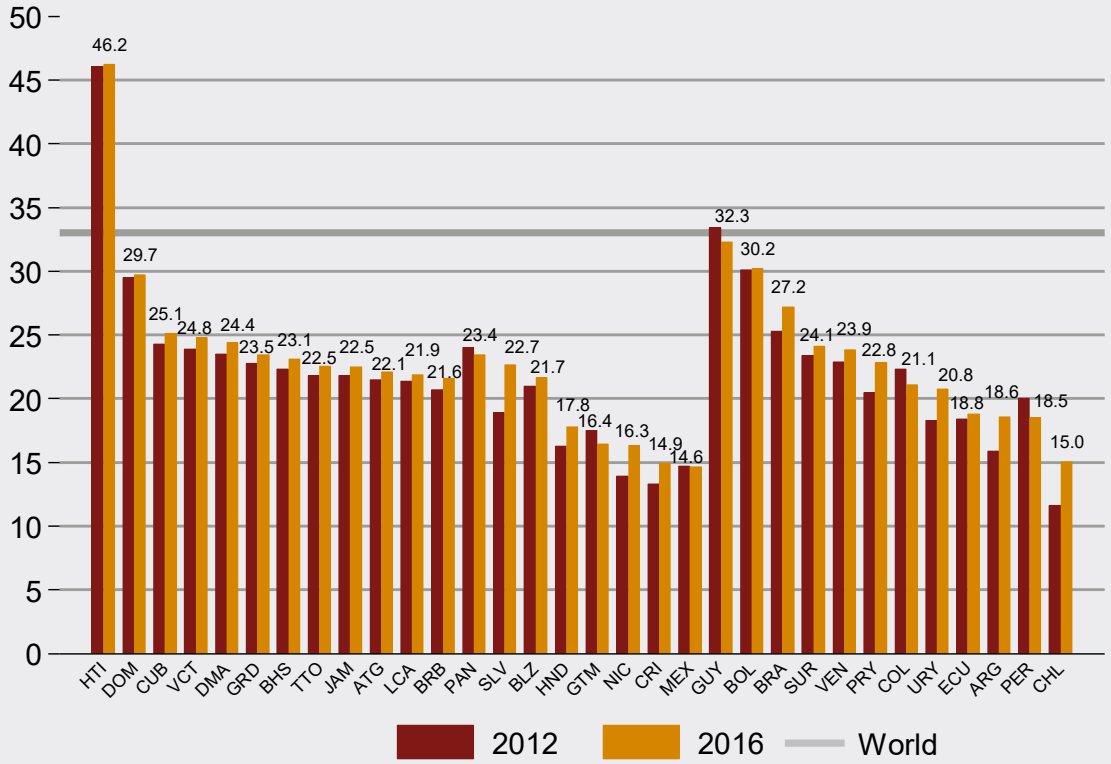
Haiti has a much higher rate of anemia than other countries, with a prevalence of 46.2 percent, and the rates in Bolivia (Plurinational State of) and Guyana are the only others that exceed 30 percent. In terms of progress, the countries are not reducing anemia in women of reproductive age. In Chile and El Salvador, there was an increase of more than three percentage points between 2012 and 2016. In Argentina, Nicaragua, Paraguay and Uruguay the increase exceeds two percentage points (Figure 25).

FIGURE 24
WOMEN OF REPRODUCTIVE AGE WITH ANEMIA, LATIN AMERICA AND THE CARIBBEAN, BY SUBREGION, 2012 AND 2016. IN PERCENTAGES



SOURCE: FAO, IFAD, WHO, WFP & UNICEF, 2020.

FIGURE 25
WOMEN OF REPRODUCTIVE AGE WITH ANEMIA, LATIN AMERICA AND THE CARIBBEAN, BY SUBREGION, 2012 AND 2016. IN PERCENTAGES



SOURCE: FAO, IFAD, WHO, WFP & UNICEF, 2020.

Global target 3. Prevalence of underweight

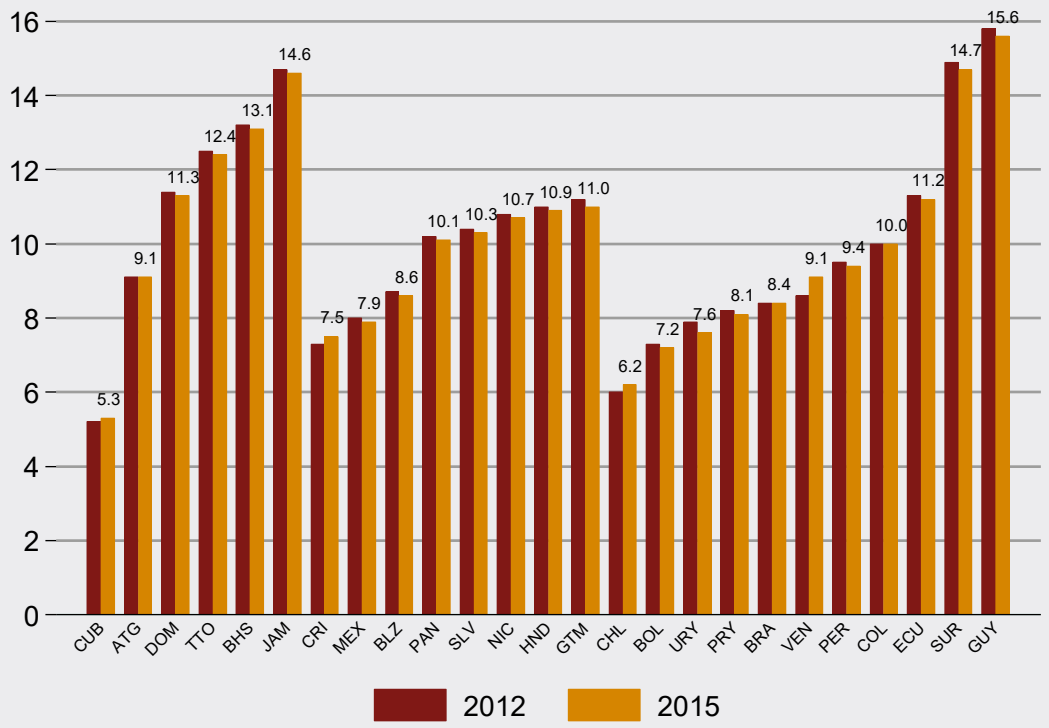
Underweight or low birth weight is defined as a weight of less than 2.5 kg at birth (WHO, 2014b). It is associated with prenatal mortality, and it increases the risk of suffering from diabetes, cardiovascular disease and deficiencies in future cognitive development (WHO/NMH/NHD/14.5, 2017).
The mother's nutritional status is essential to prevent low birth weight. Calcium supplements when calcium levels are low, for example, decrease the risk of preeclampsia and premature birth (WHO, 2014b).

WORLD HEALTH ASSEMBLY AND SDG TARGET: 30 PERCENT REDUCTION IN LOW BIRTH WEIGHT.

Low birth weight affects 14.6 percent of newborns worldwide. This percentage is significantly lower in the region, affecting 8.7 percent of newborns. The subregion with the greatest prevalence is the Caribbean, with a rate of 9.9 percent, while in Mesoamerica it is 8.7 percent and in South America, 8.6 percent. All regions have made progress, but it is still not enough to meet the target of reducing underweight by 30 percent.

Between 2012 and 2015 a decrease was observed in the rates of most countries with available information; however, Venezuela (Bolivarian Republic of) is a notable case, in which the rate increased by 0.5 percentage points.

FIGURE 26
PREVALENCE OF LOW BIRTH WEIGHT, LATIN AMERICA AND THE CARIBBEAN, BY SUBREGION, 2012 AND 2015. IN PERCENTAGES



SOURCE: UNICEF, 2020a.

Global target 5. Breastfeeding

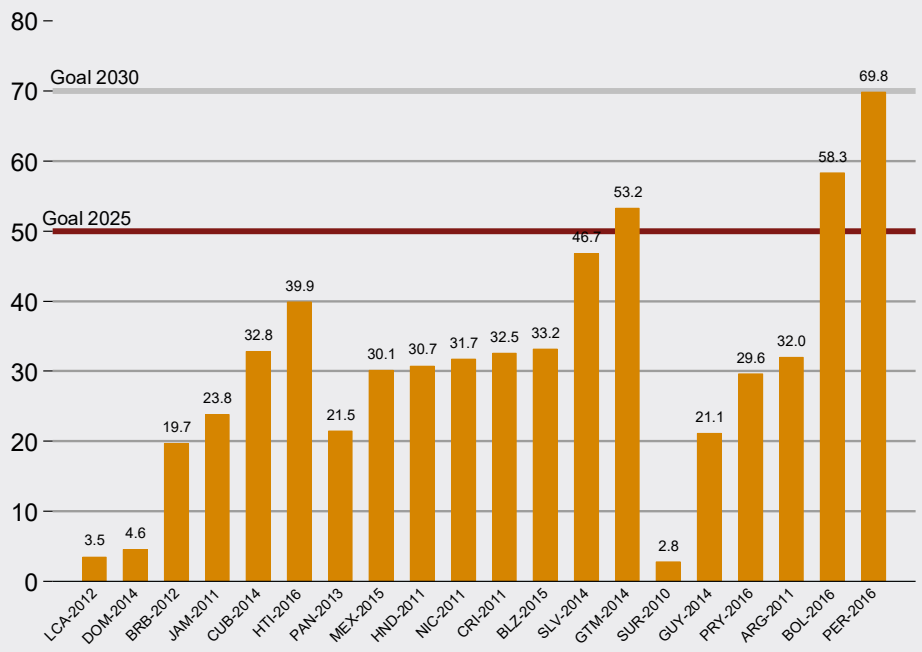
Breastfeeding is the best source of nutrition for children under 6 months, as it covers all their nutritional and immunological requirements. It is recommended that breastfeeding commence during the first hour of life, and exclusive breastfeeding continue during the first 6 months of life (FAO, PAHO, UNICEF & WFP, 2019) (UNICEF, 2019)

WORLD HEALTH ASSEMBLY TARGET: INCREASE THE RATE OF EXCLUSIVE BREASTFEEDING IN THE FIRST SIX MONTHS UP TO AT LEAST 50 PERCENT BY 2025.

SDG TARGET: INCREASE THE RATE OF EXCLUSIVE BREASTFEEDING IN THE FIRST SIX MONTHS UP TO AT LEAST 70 PERCENT BY 2030.

According to 2019 estimates, globally only 44 percent of children under 6 months were exclusively breastfed. Within the region, it is estimated that the rate in Mesoamerica is 33.2 percent which represents significant progress since 2012, when it was barely 21.6 percent. In the Caribbean, the 2019 estimate indicates that only 26 percent of children under 6 months were exclusively breastfed. This percentage represents a decrease of four percentage points in comparison with 2012 (FAO, IFAD, WHO, WFP & UNICEF, 2020). According to the latest information available for the countries, the rates in Bolivia (Plurinational State of), Guatemala and Peru are above 50 percent. If these rates are maintained, they would meet the goal of the Global Health Assembly for 2025. Only Peru has a rate of 70 percent, which is the goal for 2030. In contrast, in Dominica, Saint Lucia and Suriname, rates are very low and do not exceed 5 percent. In the rest of the countries with available information, the rates range between 20 percent and 40 percent.■

FIGURE 27
RATE OF EXCLUSIVE BREASTFEEDING DURING FIRST 6 MONTHS IN SELECTED COUNTRIES IN LATIN AMERICA AND THE CARIBBEAN, BY SUBREGION. LAST YEAR AVAILABLE FROM 2010 ONWARDS. IN PERCENTAGES



SOURCE: FAO, IFAD, WHO, WFP & UNICEF, 2020.

PART 2
FOOD SECURITY AND NUTRITION FOR LAGGING TERRITORIES

PART 2

FOOD SECURITY AND NUTRITION FOR LAGGING TERRITORIES

KEY MESSAGES

➔ Recent information on malnutrition in the region's countries shows that one of every 5 territories is highly lagging, either due to stunting or overweight in children under 5.

➔ The highest levels of lag in relation to stunting are in rural areas, where there are high poverty levels, low incomes and schooling levels, higher levels of labour informality, less access to services, and a greater proportion of indigenous and Afro-descendant population.

➔ Overweight appears to be geographically distributed in a more homogenous way. However, the most lagging territories in relation to this indicator tend to be concentrated in urban areas, where there are higher incomes, less poverty, greater access to services and more formal employment. Once again, those who are most affected are the poorest inhabitants of these urban areas.

➔ Although some determinants associated with each of the burdens of malnutrition are different, several territories are lagging simultaneously in relation to stunting and overweight. In general, these areas have similar indicators to those observed in the case of stunting; in other words, they tend to be more rural and present higher poverty levels.

➔ Beyond the socio-economic and contextual characteristics that are generally associated with undernutrition and overweight, this chapter shows that indigenous and Afro-descendant populations are especially affected, and that the double burden of malnutrition is disproportionately concentrated among them.

➔ Although the real extent of the impact of the coronavirus pandemic is still unknown, it threatens to increase these differences and the gaps between lagging and non-lagging territories. The pandemic hits vulnerable populations and territories particularly hard, where there are more informal jobs, incomes are lower and healthy food is scarce. The areas identified as lagging, especially due to stunting, would be the most impacted.

➔ Overcoming the serious situation that exists in lagging territories, especially those that are highly lagging, requires public policies that target these territories and especially the most vulnerable populations within them, particularly indigenous and Afro-descendant populations and women.

➔ Addressing the problem of food security and nutrition in lagging territories requires multidimensional interventions that address the various causes of malnutrition in an integrated manner, and that provide a coordinated response across different dimensions of development.

As long as there are territories in Latin America and the Caribbean (LAC) in which malnutrition levels are at least twice those of national averages, it will be impossible to meet the targets of the 2030 Agenda for Sustainable Development.

In all countries in the region there are places where the severity of indicators related to nutrition reflects significant shortcomings in infrastructure, public services and productive opportunities for their inhabitants. This reality also prevents the planned and sustainable development of these territories, and it deprives the rest of the country and the planet from benefiting and enjoying their social, economic, environmental and cultural potential.

The objective of this chapter is to mobilize political commitment and public attention towards people who live in places that suffer the greatest lags in relation to national food and nutrition indicators. To this end, the first section develops an analysis to determine how many territories there are and where they are located, especially those presenting the worst malnutrition indicators in each country. Subsequently, this section highlights some reasons that may explain this reality. The second part of the chapter provides information on the policies and programmes that countries are developing, or could be developing, to address these lags. It also includes an analysis of how the 2020 COVID-19 pandemic especially affects the populations inhabiting the most lagging territories, and what policy implications this may have in the near future.

It is hoped that the content of this second chapter will draw attention to each country's distinct realities and facilitate the design and implementation of policies, programmes, new forms of governance, and institutional and regulatory frameworks that are appropriate for the specificities of the populations and their territories.

2.1 LAGGING TERRITORIES[18] IN LATIN AMERICA AND THE CARIBBEAN IN RELATION TO MALNUTRITION

The objective of this section is to show the marked inequality in the geographical distribution of malnutrition in the region's countries, and to highlight the most lagging territories; in addition, it points out some possible causes that help to explain this reality.

As one might expect, there are abundant publications that aim to identify territorial disparities in the representation of different socio-economic and environmental indicators (Geppert & Stephan, 2008) (Ianos, et al., 2013) (Niebuhr & Stiller, 2003) (Rodríguez-Pose & Ezcurra, 2010) (Salvati, Venanzoni, & Carlucci, 2016), including at the regional level (Berdegué, J; Carriazo, F; Jara, B; Modrego, F; & Soloaga, I, 2015) (Cuadrado-Roura & Aroca, 2013) (Modrego & Berdegué, 2015). However, in contrast to

[18] In this analysis, the concept of territory is limited to an administrative unit that is smaller than the national one. The broader definition, which includes environmental characteristics and socio-economic or cultural belonging, has been discarded for practical reasons, and because of the limited information available. In any event, it is considered that the level of disaggregation of information used meets the document's main objective to visualize disparities within the countries, as well as the need to design differentiated policies to address the malnutrition of the population living in these territories.

these studies, the Regional Overview of Food Security and Nutrition in Latin America and the Caribbean focuses on identifying and explaining differences among territories in terms of malnutrition.

Although the analysis recognizes the limited information that is available at the subnational level, it does show that all countries included in this study are facing internal challenges in achieving more homogenous results in terms of their populations' food and nutrition. Similarly, the analysis provides an initial numerical dimension of the problem and facilitates the inference of different relationships between nutritional, socio-economic and territorial variables.

To maintain coherence with the information in Chapter 1, it would have been preferable, for example, to use indicators such as undernourishment or food insecurity from target 2.1 of SDG 2. However, only a few countries disaggregate this information at the subnational level, which does not allow the analysis to be sufficiently regional.

For these reasons, this analysis opted for the two malnutrition indicators included in the second target of SDG 2, for which there is official geographically disaggregated information in a considerable number of countries in the region: the prevalence of stunting and overweight in children under 5.[19] The advantage of using these indicators is that they are included in the objectives of a significant number of the region's policies and programmes and, consequently, different monitoring and evaluation instruments have been developed for them. Moreover, they facilitate the inclusion of the characterization of the double burden of malnutrition, and they usually represent the situations that are most related to the long-term effects of malnutrition.[20]

As has been noted in previous editions of this publication, these two indicators can also be related to the outcomes of the functioning of the food systems. It must also be clarified that the territories are identified according to the extent to which they are lagging in relation to the national average, not the regional average.[21]

2.1.1. How many territories are lagging?

The information obtained for child stunting allows these classifications to be made for 328 territories in 23 countries in the region. Using the most restrictive measure, that is, classifying as lagging territories those territorial units where stunting in children under 5 exceeds the country's average by one standard deviation, 17 percent of the territories are classified as lagging. If all the territories in which the indicator exceeds the average value are considered, more than 43 percent would be considered lagging.

Specifically, in terms of stunting, there are 55 highly lagging territories and 142 lagging territories in total. It is interesting to observe that in highly lagging territories, the average prevalence of stunting is 27.6 percent, while in non-lagging territories it is 11.9 percent (the average for all countries is 16.5 percent). In other words, there is a difference of almost 16 percentage points in the prevalence of stunting between highly lagging and non-lagging territories.

Beyond the averages of the countries that are considered, there are very pronounced differences in Belize, Colombia, Guatemala, Guyana,

[19] For more information on these indicators and their evolution, see Chapter 1 of this document.

[20] A more detailed description of the use of these indicators can be found at: https://www.who.int/nutrition/double-burden-malnutrition/en/. Reasons for using stunting as opposed to wasting indicators can be found at https://www.who.int/e s/news-room/fact-sheets/detail/malnutrition and https://www.unicef.es/sites/unicef.es/files/comunicacion/Informe_La_desnutricion_infantil.pdf. More information on this topic can also be found at https://iris.paho.org/bitstream/handle/10665.2/33680/9789253096084-spa.pdf and https://www.nature.com/articles/s41591-020-0807-6.

[21] As will be discussed later in this document, two levels of lag are defined: low and high. Low levels characterize territories where the rate of malnutrition is simply higher than the national average, regardless of the magnitude of the difference. Highly lagging territories are those in which the malnutrition rates are more than one standard deviation above the national average. For more details on the methodology, see Annex 4.

Honduras, Panama and Peru, where the gap in the rates of stunting between highly lagging and non-lagging territories surpasses the average and is almost 48 percentage points in Panama and 34 percentage points in Guatemala. To provide an example, while 61 percent of children living in the most highly lagging territories in Panama suffer from stunting, only 13 percent of children are affected in non-lagging territories, which shows acute differences between the country's different regions.

The situation is similar in the case of childhood overweight, with 311 territories identified in 22 countries.[22] When applying the strictest measurement for classifying a territory as lagging in relation to overweight, 17 percent of the territories are classified as lagging. On the other hand, if lagging is defined as simply an above-average prevalence of overweight, 45 percent of territories would be classified as such.

Of the 311 territories with information on childhood overweight, 53 are highly lagging, while 141 territories would be considered to have a low lag, at most. However, in the case of overweight, there appear to be fewer differences among territories, with a lower dispersion of values than that observed for stunting. For example, when aggregating all countries, in highly lagging territories the average prevalence of overweight in children under 5 is 13.1 percent, less than 7 percentage points above the prevalence in non-lagging territories (6.6 percent). In the case of countries with gaps that are greater than the average for countries in the region, these gaps do not exceed 18 percentage points. The countries with the greatest average differences between highly lagging and non-lagging territories are Jamaica (17.5), Guyana (14.7), Panama (14), Bolivia (12.7) and Peru (10).

[22] The only countries that are considered are those with information for more than two territories using the most recent information available between 2005 and 2019. In the case of Nicaragua, there is only information for stunting, but not for overweight in children under 5. This is the reason different countries and territories are considered for each measurement. Data in Chile is for kindergarten children, in Costa Rica for children between ages 6 and 12, and in Ecuador for children between ages 5 and 11.

2.1.2. Spatial distribution of lagging territories

The situation in the region's countries can be visualized in the maps that appear in figures 28 through 39. It must be noted that direct comparisons between countries are not viable, because although they all have lagging areas, the levels of stunting and overweight differ considerably from one country to another. Consequently, for example, in a country with low malnutrition rates a lagging territory may have an average stunting rate of 10 percent, while in another country with higher malnutrition rates, for a territory to be classified as lagging more than 30 percent of children must be stunted. In this sense, this document presents a perspective of territorial equality and justice within the countries through relative development indicators (in this case, malnutrition), and does not set acceptable or desirable malnutrition limits to classify territories.

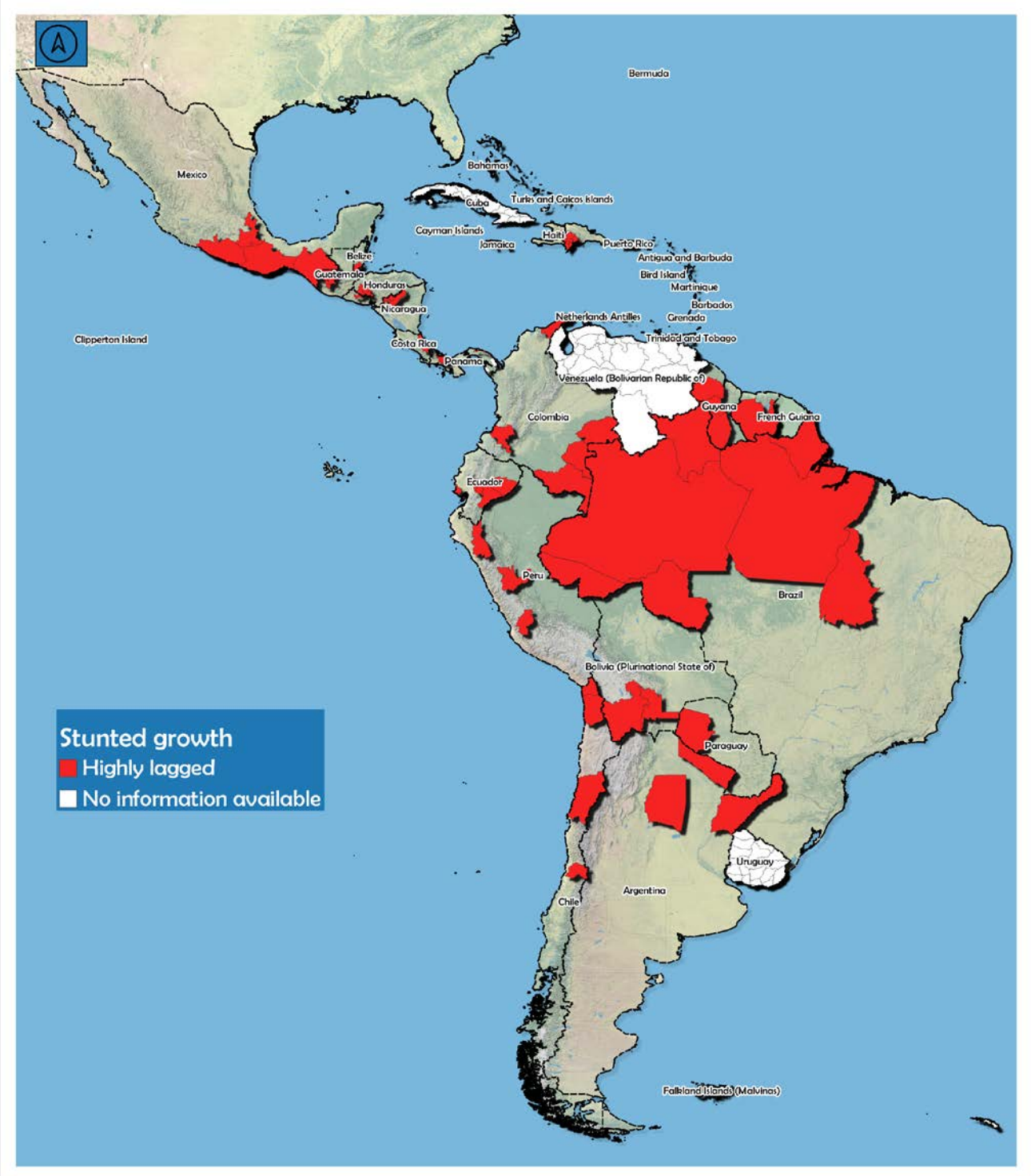
Therefore, the gap between a lagging territory and a non-lagging territory is specific to each country and trying to close this gap may imply different efforts in one country as opposed to another. This document presents a general overview of the lagging territories, and it is intended to be a starting point in meeting the challenge of adopting a territorially equitable view of development. However, the specific analysis for each country must be developed subsequently, ideally considering the results that are featured herein.

Childhood stunting

Before carrying out a more detailed analysis of each country and denoting the differences in the levels of lag due to stunting, it is important to provide an overall perspective of results at the regional level. Figure 28 shows the spatial distribution of highly lagging territories in relation to stunting in the entire region and demonstrates that, in almost all countries with available information, there are territories in which the prevalence of stunting in children under 5 greatly exceeds the national average (by more than one standard deviation).

FIGURE 28

HIGHLY LAGGING TERRITORIES IN RELATION TO STUNTING IN CHILDREN UNDER 5, LATIN AMERICA AND THE CARIBBEAN[23]



SOURCE: Prepared by the authors based on official information from the countries. ARG (ENNyS, 2005), BOL (EDSA, 2016), CHL (JUNAEB "Mapa Nutricional", 2019), COL (ENDS, 2010), ECU (ENSANUT, 2018), PER (ENDES, 2018), CRI (Censo Escolar de Peso-Talla, 2016), GTM (ENSMI, 2015), NIC (ENDESA, 2012), HND (ENDESA, 2012), MEX (ENSANUT, 2012), SLV (ENS, 2014), PAN (ENV, 2008), SUR (MICS, 2018), JAM (JSLC, 2014), HTI (EMMUS, 2017) and GUY (MICS, 2014).

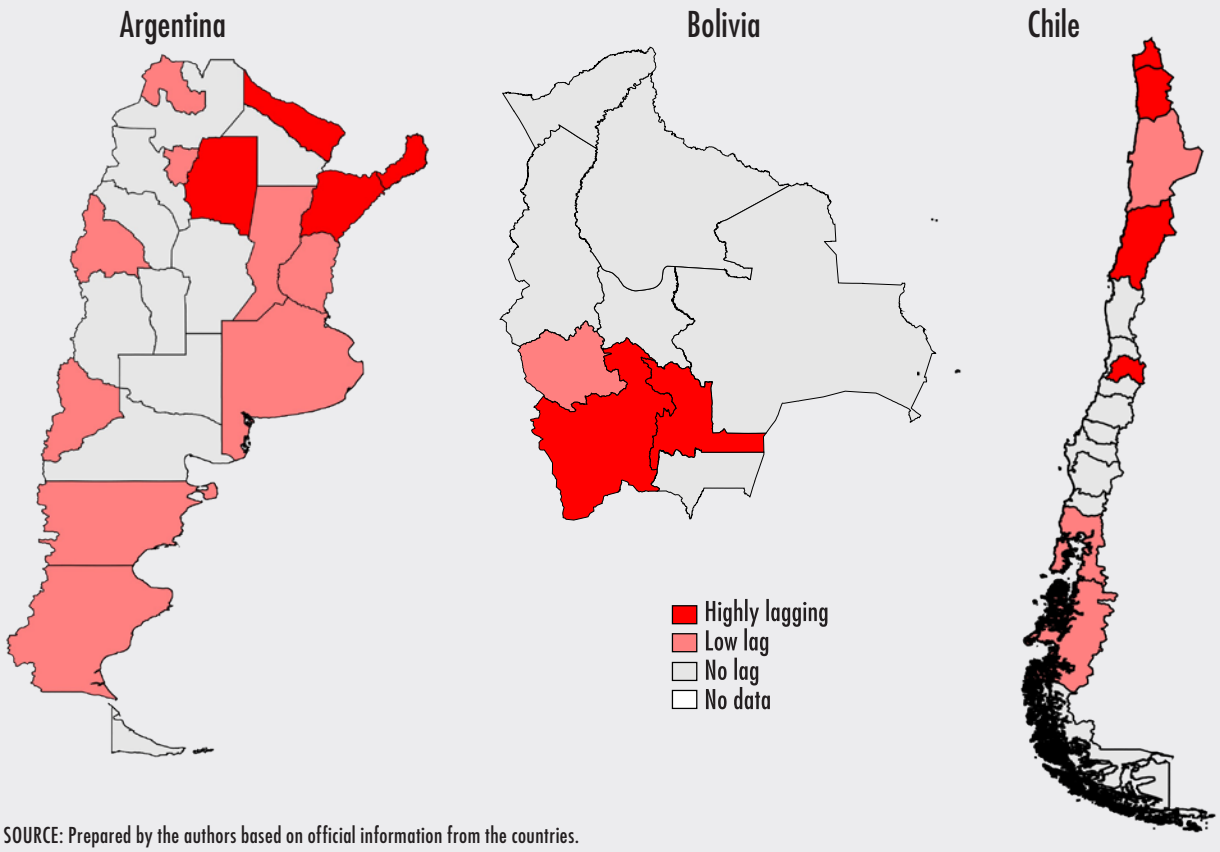
[23] The boundaries and names shown and the designations used in this publication's maps do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers and boundaries. Dashed lines on the maps represent approximate border lines for which there may not be full agreement.

However, despite the relative homogeneity of highly lagging territories among countries in the region, a concentration of highly lagging territories due to malnutrition can be seen in northern Argentina and Chile, southern Bolivia (Plurinational State of) and eastern Paraguay. Similarly, in the Amazon, there are clearly highly lagging zones in eastern Brazil, northern Bolivia (Plurinational State of), south-western Colombia and western Peru, an area populated by several indigenous peoples.

Figure 28 is useful for contextualizing the problem at the regional level. However, it does not show the different realities that exist within each country, and this is precisely the focus of this section.

Figure 29 presents the results for three countries in the Southern Cone: Argentina, Bolivia (Plurinational State of) and Chile. It is interesting to observe that highly lagging territories are concentrated in the northern region of Argentina and Chile and in southern Bolivia. In Argentina, the prevalence of stunting in Corrientes stands at 9.9 percent, in Formosa (10.3 percent), Misiones (9.8 percent) and Santiago del Estero (9.4 percent). The most affected territories in Chile are also in the northern region, specifically in Arica and Parinacota (5.6 percent), Atacama (6.1 percent), Tarapacá (6.4 percent), and in the metropolitan area (6.1 percent) where approximately 40 percent of this southern country's inhabitants live.

FIGURE 29
LAGGING TERRITORIES IN RELATION TO PREVALENCE OF STUNTING IN ARGENTINA, BOLIVIA (PLURINATIONAL STATE OF) AND CHILE



SOURCE: Prepared by the authors based on official information from the countries. ARG (ENNyS, 2005), BOL (EDSA, 2016) and CHL (JUNAEB "Mapa Nutricional", 2019).

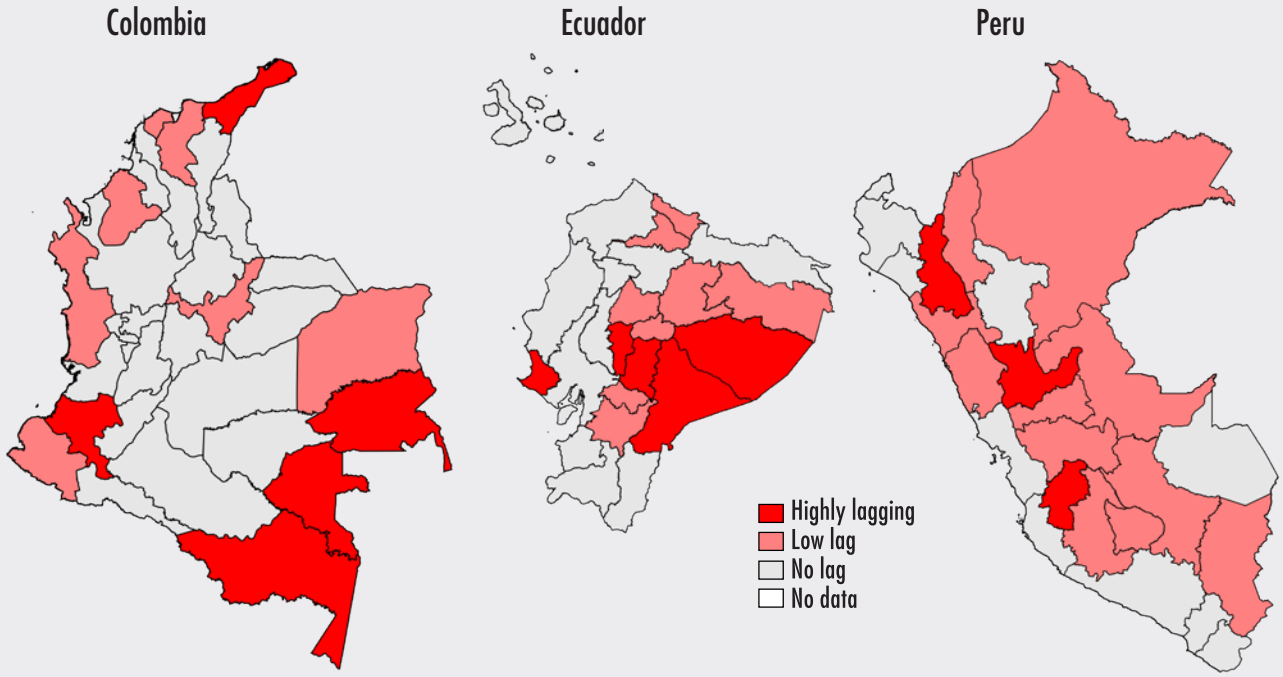
In Bolivia (Plurinational State of), the lagging territories are in the regions of Chuquisaca and Potosí, where stunting affects 26 percent and 30 percent of children.

In Peru (Figure 30), lagging territories are concentrated in Cajamarca (28 percent), Huancavelica (32 percent) and Huánuco (22 percent), with stunting rates that are much higher than the average for the country's territories, and especially than that of non-lagging territories (6.5 percent), that is, territories with stunting levels that are below the national average.

Ecuador also presents high levels of stunting in the most highly lagging areas. For example, stunting rates in Bolívar, Chimborazo, Morona Santiago, Pastaza and Santa Elena range between 34 percent and 36 percent. In Colombia they are somewhat lower, although still high, with at least one in five children affected by stunting in lagging areas. Territories such as Amazonas, Cauca, Guainía, La Guajira and Vaupés have stunting levels ranging between 23 percent and 35 percent.

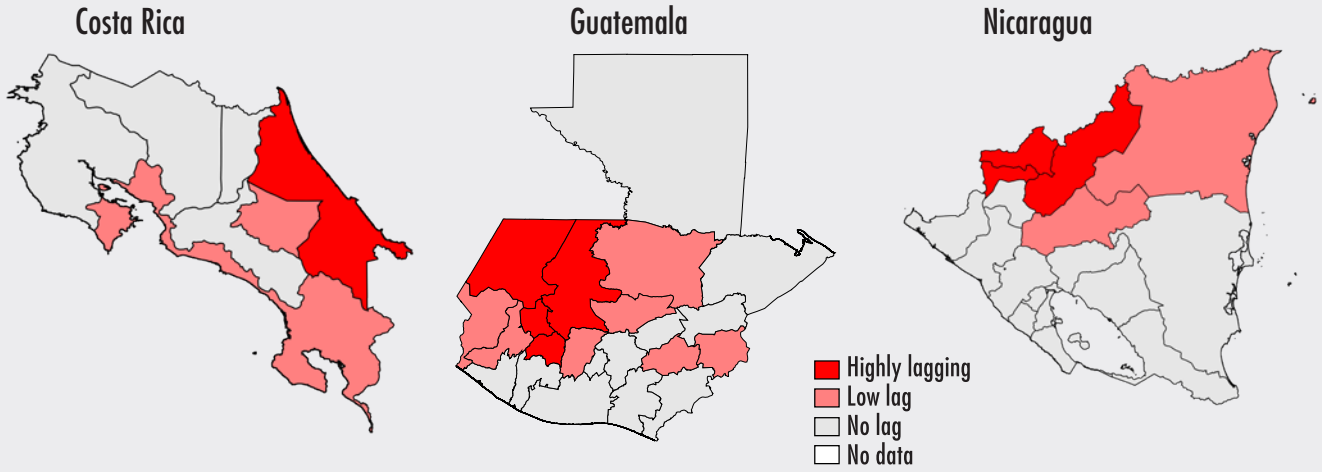
The situation in Costa Rica is completely different (Figure 31), where the most lagging territory in the country is Limón (4.5 percent). In Nicaragua stunting rates exceed 27 percent in Jinotega, Madriz and Nueva Segovia. In Guatemala, stunting affects 66 percent of children in Sololá, 68 percent in Huehuetenango, 69 percent in Quiché and 70 percent in Totonicapán.

FIGURE 30
LAGGING TERRITORIES IN RELATION TO PREVALENCE OF STUNTING IN COLOMBIA, ECUADOR AND PERU



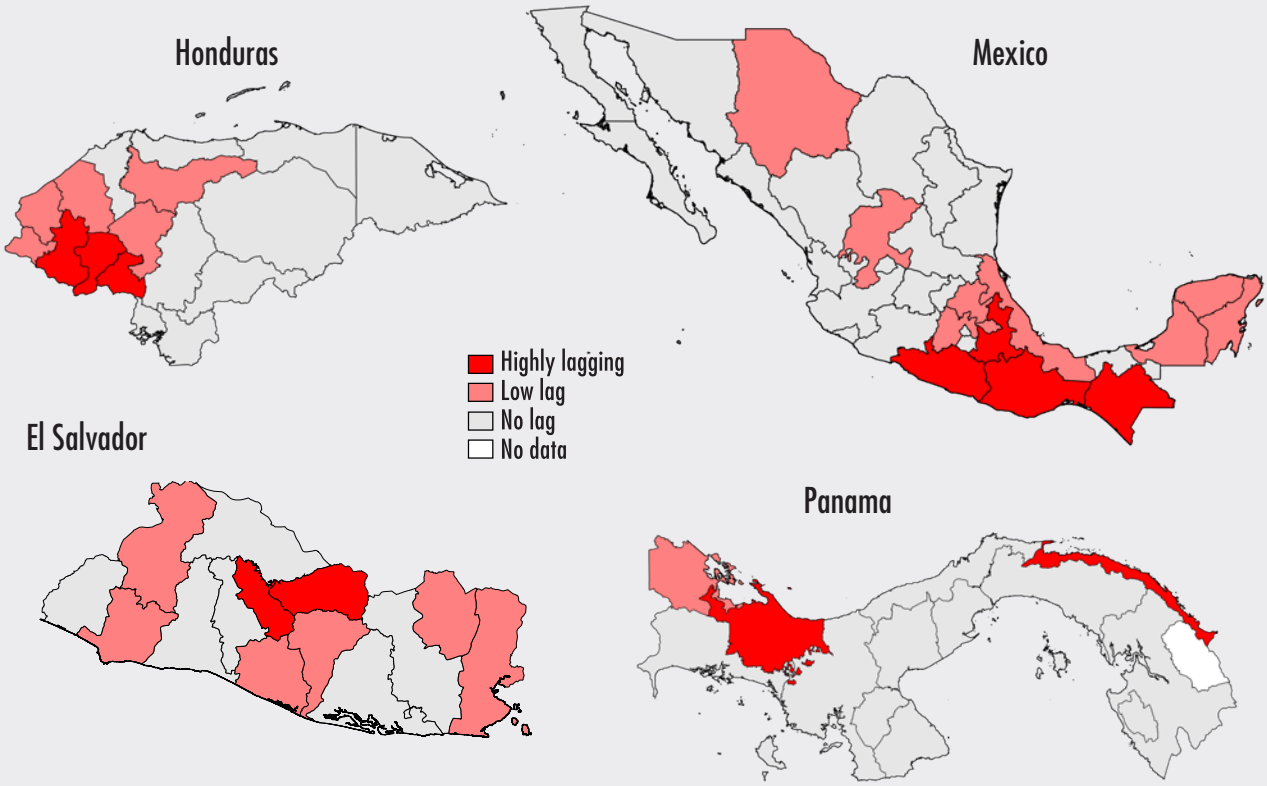
SOURCE: Prepared by the authors based on official information from the countries. COL (ENDS, 2010), ECU (ENSANUT, 2018) and PER (ENDES, 2018).

FIGURE 31
LAGGING TERRITORIES IN RELATION TO PREVALENCE OF STUNTING IN COSTA RICA, GUATEMALA AND NICARAGUA



SOURCE: Prepared by the authors based on official information from the countries. CRI (Censo Escolar de Peso-Talla, 2016), GTM (ENSMI, 2015) and NIC (ENDESA, 2012).

FIGURE 32
LAGGING TERRITORIES IN RELATION TO PREVALENCE OF STUNTING IN HONDURAS, MEXICO, EL SALVADOR AND PANAMA



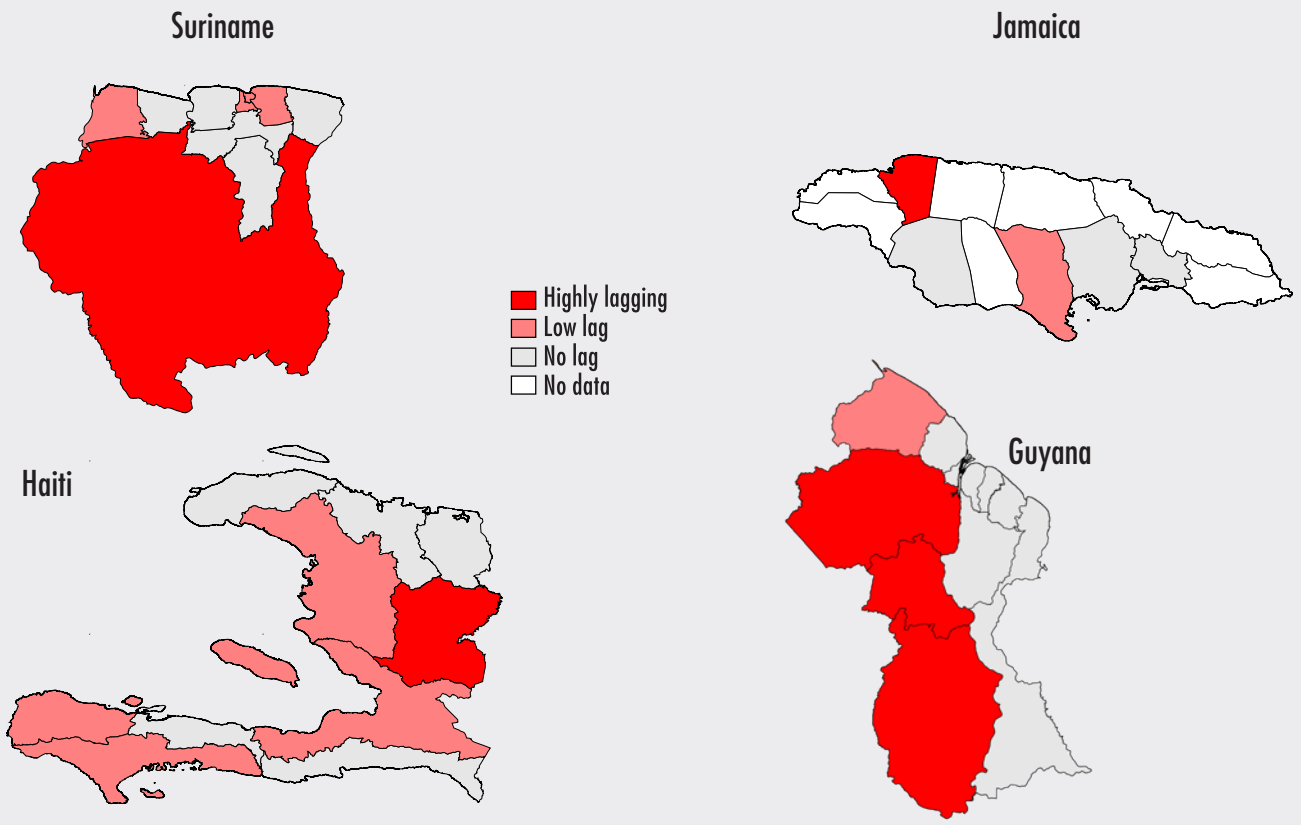
SOURCE: Prepared by the authors based on official information from the countries. HND (ENDESA, 2012), MEX (ENSANUT, 2012), SLV (ENS, 2014) and PAN (ENV, 2008).

The lagging territories in Honduras are concentrated along the western border, where Intibucá (48 percent), La Paz (38 percent) and Lempira (47 percent) are located. In Mexico, the highest figures are condensed in the south of the country in the states of Chiapas (31 percent), Guerrero (24 percent), Oaxaca (21 percent) and Puebla (20 percent). These percentages are well above those of non-lagging areas, in which stunting rates average 8.9 percent.

Figure 32 shows information for El Salvador and Panama. While the highly lagging territories in El Salvador have similar stunting rates to those of countries with better outcomes, 18 percent in Cabañas and Cuscatlá, those of Panama are among the highest in the region. The rates in some areas surpass those of non-lagging territories by more than 40 percentage points, such as Guna Yala (57 percent) and Ngäbe-Buglé (64 percent).

Lastly, the areas of St. James in Jamaica (15 percent), the central region of Haiti (30 percent), the south of Suriname (16 percent) and the regions in western Guyana, where Cuyuni-Mazaruni (27 percent), Potaro-Siparuni (31 percent) and Upper Takutu-Upper Essequibo (27 percent) are located, are the most highly lagging regions, although their percentages

FIGURE 33
LAGGING TERRITORIES IN RELATION TO PREVALENCE OF STUNTING IN SURINAME, JAMAICA, HAITI AND GUYANA



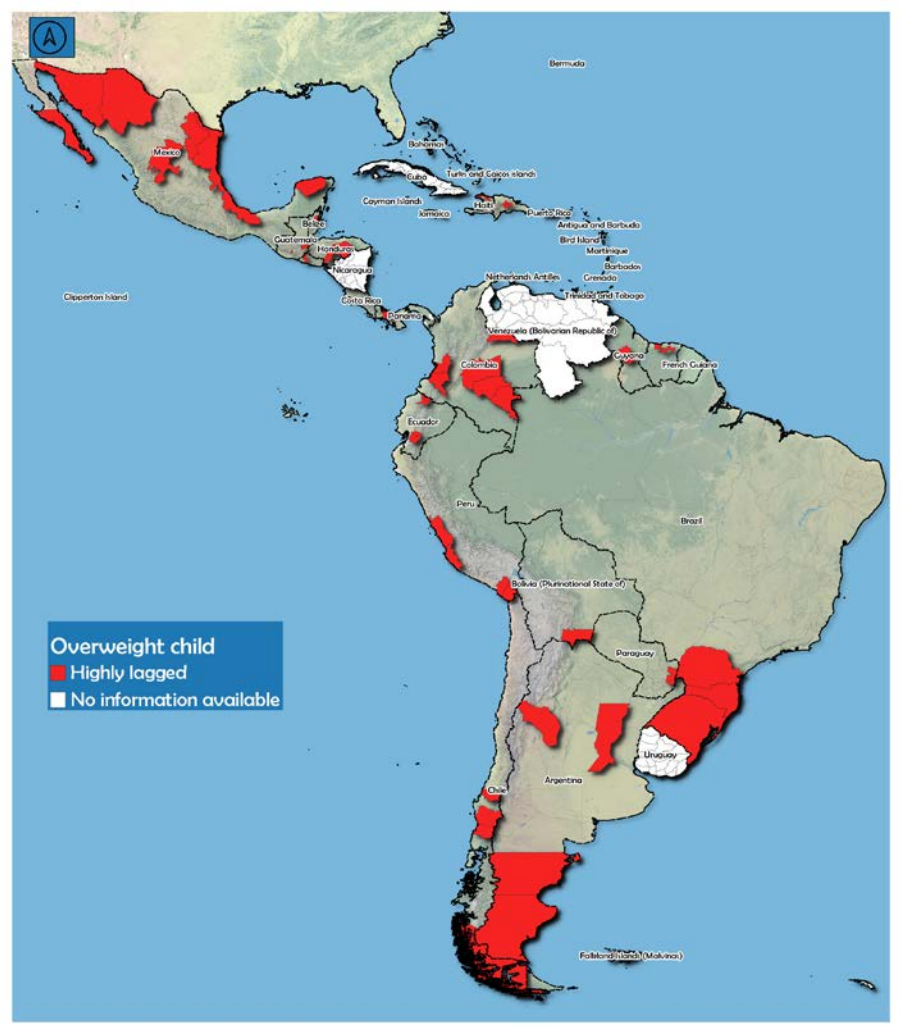
SOURCE: Prepared by the authors based on official information from the countries. SUR (MICS, 2018), JAM (JSLC, 2014), HTI (EMMUS, 2017) and GUY (MICS, 2014).

are not as high as those of some countries, specifically in Central America.

Childhood overweight

As in the case of stunting, it is important to first provide an overall perspective of where highly lagging territories in relation to overweight are located. It is interesting to observe that the geographical distribution of lagging territories changes when analyzing overweight in children under 5. For example, these territories tend to be concentrated more in southern Argentina and Chile, south-western Brazil and northern Mexico. Furthermore, it is evident that large cities and the capitals of each country tend to be the most affected, in contrast with what occurs with stunting. Figure 34 shows the geographic distribution of lagging territories in relation to overweight in children under 5.

FIGURE 34
HIGHLY LAGGING TERRITORES IN RELATION TO PREVALENCE OF OVERWEIGHT IN CHILDREN UNDER 5 IN LATIN AMERICA AND THE CARIBBEAN



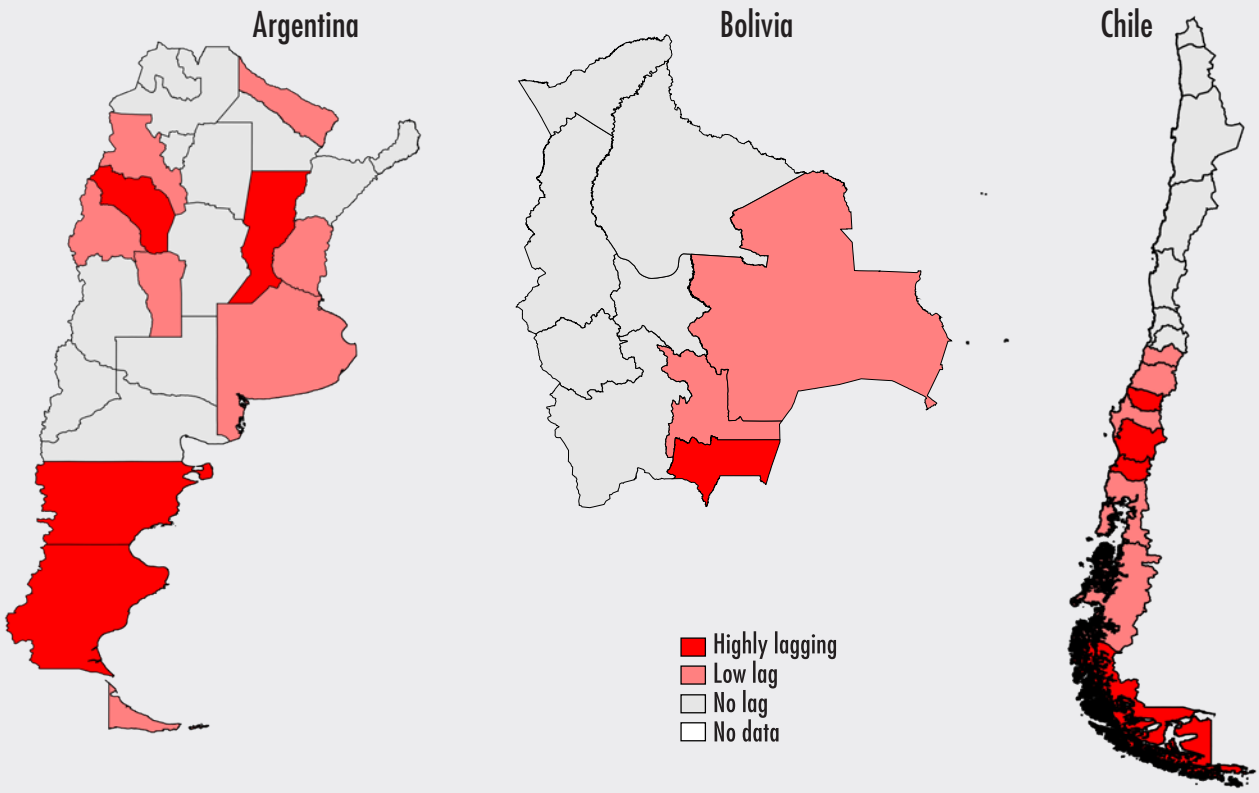
SOURCE: Prepared by the authors based on official information from the countries. ARG (ENNyS, 2005), BOL (EDSA, 2016), CHL (JUNAEB "Mapa Nutricional", 2019), COL (ENDS, 2010), ECU (ENSANUT, 2018), PER (ENDES, 2018), PRY (MICS, 2016), CRI (Censo Escolar de Peso-Talla, 2016), GTM (ENSMI, 2015), SLV (ENS, 2014), HND (ENDESA, 2012), MEX (ENSANUT, 2012), PAN (ENV, 2008), JAM (JSLC, 2014), GUY (MICS, 2014), SUR (MICS, 2018) and HTI (EMMUS, 2017).

A more detailed look shows that, as previously noted, lagging territories in Chile are concentrated south of the capital, specifically in the regions of La Araucanía, Los Ríos, Magallanes and Ñuble, where the prevalence of overweight is approximately 19 percent.

Just as in Chile, in Argentina the prevalence of overweight is higher in the southern states and in states located near the centre of the country, but not in the north. As such, the most highly lagging territories are Chubut (12.3 percent), La Rioja (13 percent), Santa Cruz (13 percent) and Santa Fe (13 percent). However, in Bolivia (Plurinational State of) lagging territories in terms of overweight coincide with those seen in the case of stunting; for example, in areas such as Tarija, which is the most affected, the prevalence of overweight is 20 percent (Figure 35).

In Peru, lagging territories in relation to overweight are concentrated along the country's coast, where areas such as Callao, Ica, Lima, Moquehua and Tacna are the most affected. In this area, the prevalence of overweight ranges between 12.5 percent and 16 percent, and Moquegua is the most affected.

FIGURE 35
LAGGING TERRITORIES IN RELATION TO PREVALENCE OF OVERWEIGHT IN CHILDREN UNDER 5 IN ARGENTINA, BOLIVIA (PLURINATIONAL STATE OF) AND CHILE

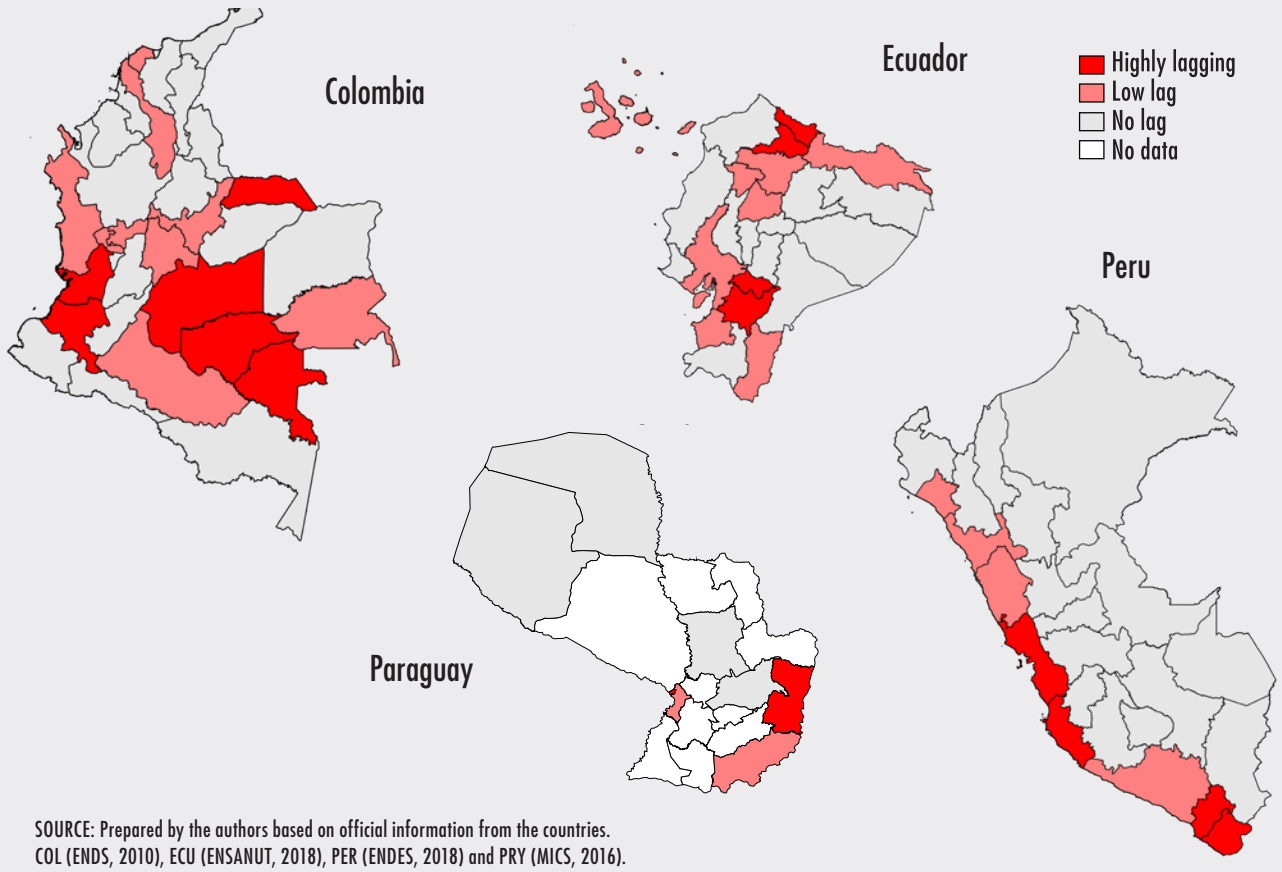


SOURCE: Prepared by the authors based on official information from the countries.
ARG (ENNyS, 2005), BOL (EDSA, 2016) and CHL (JUNAEB "Mapa Nutricional", 2019).

In Colombia, the territories with the highest prevalence of overweight in children under 5 are Arauca, Cauca, Guaviare, Meta, San Andrés and Providencia, Valle and Vaupés. However, this prevalence is lower than those of the abovementioned countries, and ranges from 6.3 percent to 8.1 percent. The locality of Vaupés stands out, as it lags in relation to both overweight and stunting and it is also the area with the highest prevalence of overweight.

In the case of Ecuador, the most highly lagging areas are Azuay, Carchi, Cañar and Imbabura, where the prevalence of overweight surpasses 23 percent in all cases. This means that at least one in every five children is overweight in these areas. In Paraguay, lagging territories have rates of overweight that surpass 15 percent in the Alto Paraná and Asunción regions.

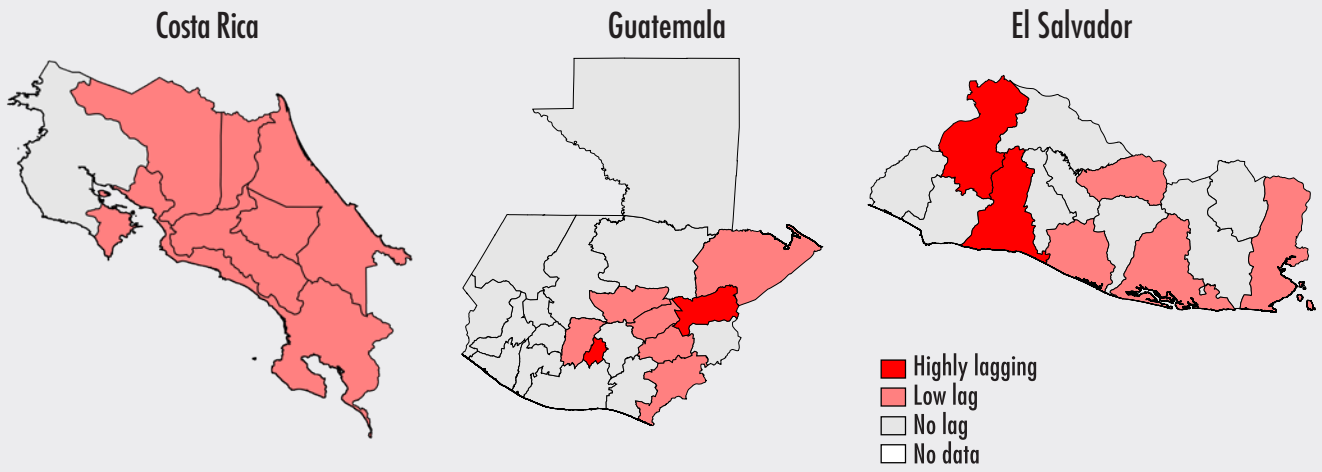
FIGURE 36
LAGGING TERRITORES IN RELATION TO PREVALENCE OF OVERWEIGHT IN CHILDREN UNDER 5 IN COLOMBIA, ECUADOR, PARAGUAY AND PERU



SOURCE: Prepared by the authors based on official information from the countries.
COL (ENDS, 2010), ECU (ENSANUT, 2018), PER (ENDES, 2018) and PRY (MICS, 2016).

Territories such as Sacatepéquez and Zacapa in Guatemala, and La Libertad and Santa Ana in El Salvador, are among the most lagging areas in their countries. In Guatemala, the prevalence of overweight in these territories exceeds 8 percent, a situation similar to La Libertad in El Salvador (8.7 percent), and somewhat lower than in Santa Ana (10.2 percent), in the same country. Costa Rica is a noteworthy case, as no territory in this country has a markedly higher rate of overweight in children under 5.

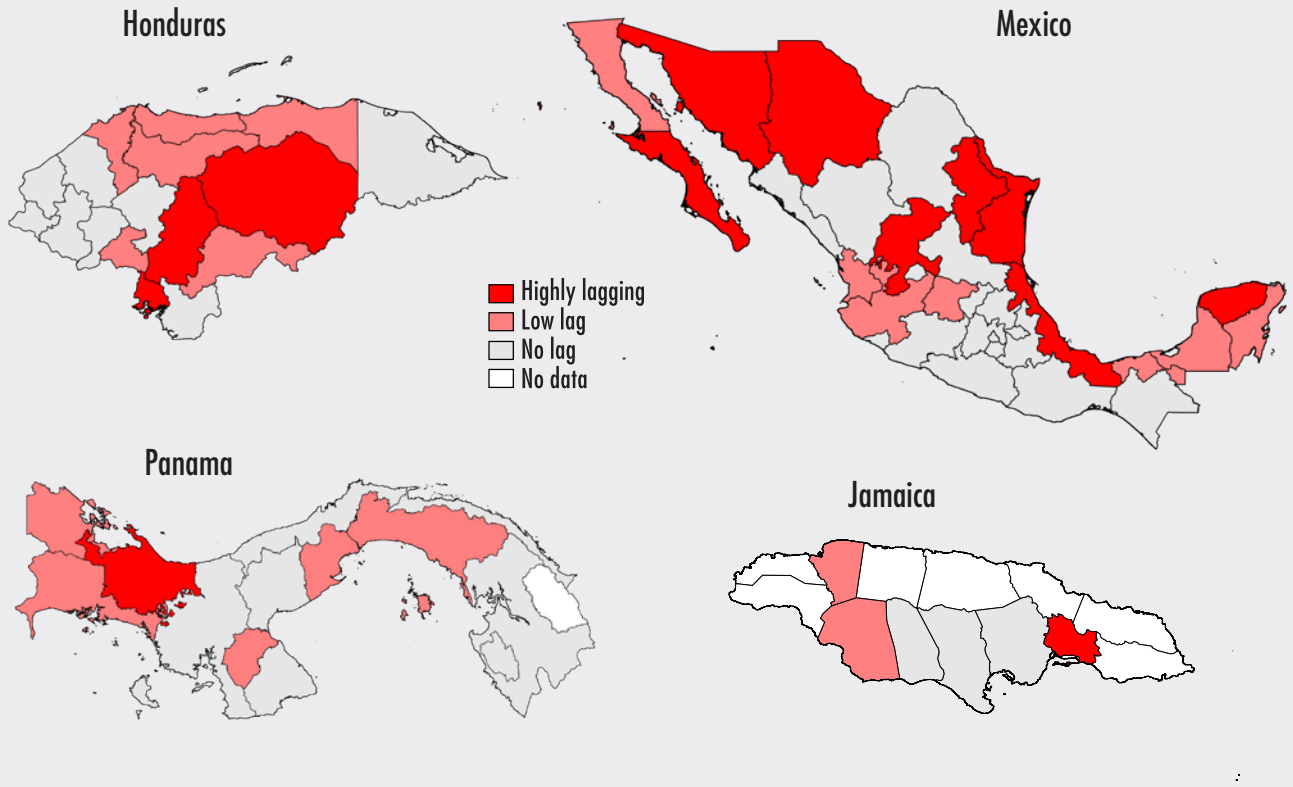
FIGURE 37
LAGGING TERRITORES IN RELATION TO PREVALENCE OF OVERWEIGHT IN CHILDREN UNDER 5 IN GUATEMALA, COSTA RICA AND EL SALVADOR



SOURCE: Prepared by the authors based on official information from the countries. CRI (Censo Escolar de Peso-Talla, 2016), GTM (ENSMI, 2015) and SLV (ENS, 2014).

Similar trends to those identified in Paraguay and some Central American countries can be seen in Honduras, Jamaica and Panama, where only a few territories can be considered lagging. In the case of Jamaica, only Saint Andrew is lagging with a rate of overweight of 23 percent. This rate is similar to that of Ngäbe-Buglé in Panama (another lagging territory in terms of both overweight and stunting), where this indicator is slightly below 19 percent. Finally, in Honduras overweight in children under 5 mostly affects the regions of Francisco Morazá, Olancho and Valle; however, their rates are low in comparison with the rest of the region (all below 7 percent). In Mexico, the most highly lagging territories are concentrated in the country's northernmost region, in the states of Sonora (13.5 percent), Chihuahua (13.1 percent) and Baja California (11.2 percent and 13.2 percent in the southern part), and along the Atlantic coast, especially in the region that extends between Nuevo León (15.5 percent) and Yucatán (13.5 percent).

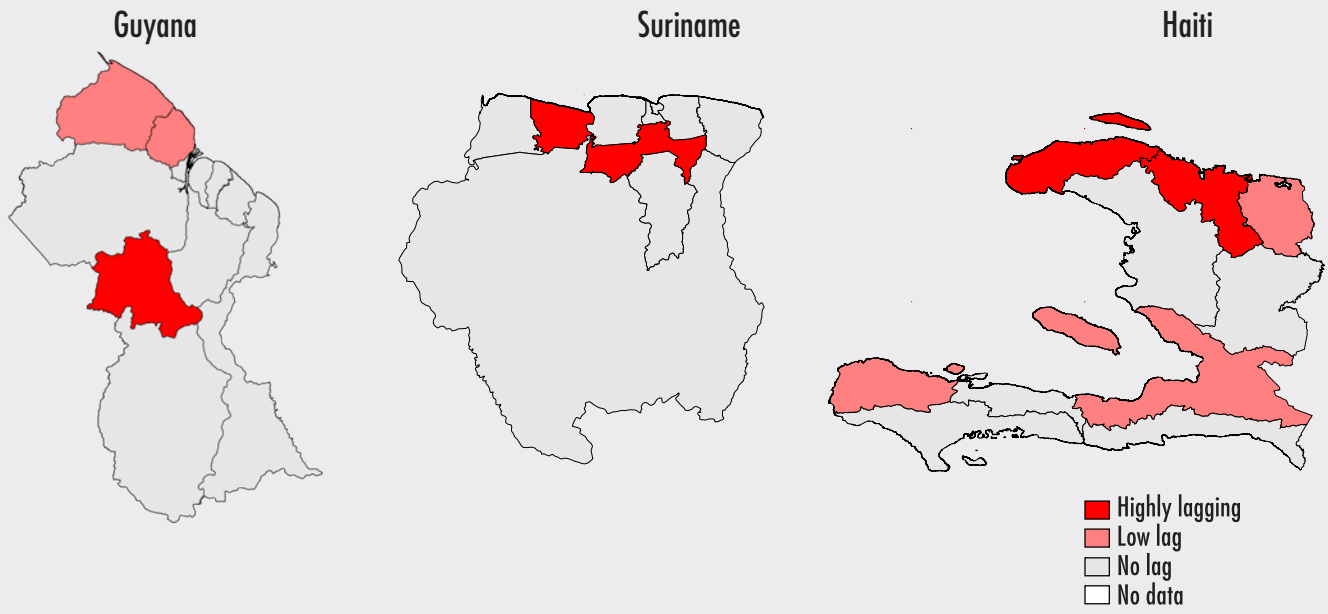
FIGURE 38
LAGGING TERRITORES IN RELATION TO PREVALENCE OF OVERWEIGHT IN CHILDREN UNDER 5 IN HONDURAS, MEXICO, PANAMA AND JAMAICA



SOURCE: Prepared by the authors based on official information from the countries. HND (ENDESA, 2012), MEX (ENSANUT, 2012), PAN (ENV, 2008) and JAM (JSLC, 2014).

Lastly, Figure 39 depicts the results in Guyana, Haiti and Suriname. In these countries, the highest rates, and therefore the most highly lagging territories, tend to be concentrated in northern areas. Lagging areas in Haiti are the North (Nord) and North West (Nord-Ouest) areas, both with rates of only 4.5 percent.

FIGURE 39
LAGGING TERRITORES IN RELATION TO PREVALENCE OF OVERWEIGHT IN CHILDREN UNDER 5 IN GUYANA, SURINAME AND HAITI



SOURCE: Prepared by the authors based on official information from the countries. GUY (MICS, 2014), SUR (MICS, 2018) and HTI (EMMUS, 2017).

In Suriname, the average rate of overweight in lagging areas exceeds 11 percent, and Coronie (12.9 percent) and Para (10 percent) are the most highly lagging areas. In Guyana there is only one lagging area, but its rate of overweight in children under the age of 5 is approximately 19 percent; this is the Potaro-Siparuni region, which also has a high rate of stunting.

It is important to note that the areas with the highest levels of overweight and stunting tend to differ within each country, but this is not always the case. This section has shown several examples of regions within countries where both problems coexist and greatly affect their inhabitants. Such are the cases of Potaro-Siparuni in Guyana, Ngäbe-Buglé in Panama and Vaupés in Colombia, in addition to several other examples throughout the region that currently show slight lags in both indicators.

2.1.3 What explains the existence of lagging territories in relation to malnutrition?

Territories' differences are their unique and, in most cases, valuable characteristics. However, access to opportunities and public goods that States should be guaranteeing for their citizens should be independent from the territory in which one is born, has chosen to live, or to which one has been forced to migrate due to one's circumstances.

There is ample evidence of the main causes associated with malnutrition. In general, the most lagging territories have not had access to the necessary policies or investments to address these causes. Challenges related to income levels, access to education and health services, the availability and quality of employment, or the rate of teenage pregnancy, among other circumstances, are strongly associated with high levels of malnutrition (Aheto, Keegan, Taylor, & Diggle, 2015) (Masibo, 2013) (Pravana , et al., 2017) (Tette, et al., 2016).

Likewise, limited access to drinking water and other hygiene factors such as sanitation services are also usually associated with higher malnutrition rates, especially in rural and isolated areas of developing countries (Aheto, Keegan, Taylor, & Diggle, 2015) (Tasnim, 2018). Moreover, poor nutrition education and deficient child feeding practices, especially during the first years of life, must also be considered factors associated with diets that are limited in diversity and quality (Ijarotimi, 2013).

Governments, scientific and academic agencies and the international community in general have developed many policies, strategies, programmes and methodological proposals to address malnutrition. Even so, it must be recognized that the area that has shown the most evidence and positive outcomes until now is the fight against undernutrition and the lack of micronutrients.

For example, (UNICEF, 2015) recognizes that the determinants of malnutrition in children are multidimensional and connected to a series of immediate, basic and underlying factors. As an example, the recommendations of the Final Report of the WHO Commission on the Social Determinants of Health (WHO, 2008) (WHO, 2008), and several other recent publications by FAO (De La O Campos, Villani, Davis, & Takagi, 2018) (FAO, 2017) (FAO, IFAD, WHO, WFP & UNICEF, 2020), underscore the improvement of daily living conditions, which includes equality for mothers, equality for children during their first years of life, healthy environments, fair labour practices and decent work, social protection throughout the life cycle, and universal access to healthcare. The report also includes recommendations to address the unequal distribution of power, money and resources.

In recent years there has been a significant interest in linking nutrition to the functioning of food systems. Many studies and policy proposals find the causes of nutrition outcomes in the characteristics and dynamics that define the transformation of current food systems (FAO, PAHO, UNICEF & WFP, 2019); (HLPE, 2017); (HLPE, 2020).

These and other conceptual models, recommendations and international commitments explain the causes of different forms of malnutrition. However, their use at the territorial level presents a number of significant challenges.

Although the social determinants of health must be common to all forms of malnutrition, the weight of some in comparison to others in terms of explaining stunting or childhood overweight can vary depending on the territory and the extent to which it is lagging. In other words, each territory's specific characteristics can condition which determinants are most relevant in explaining one form of malnutrition or another.

For example, in the case of a low-income family living in an urban area, physical access to nutritious food can be a determinant that explains potential cases of undernutrition, or even overweight. On the other hand, access to nutritious and diverse foods will not be as determining for a low-income family living in a rural environment, because they can more easily access fruit trees, vegetables and legumes from home gardens, or fish from a nearby river or the ocean.

Another challenge that is closely related to the above is that both childhood stunting and overweight are, in part, the result of how food systems function. In this sense, the way in which the parts of the food system are developed and interrelated can vary according to the specificities of territories and the relationship that they have with national and global actors and dynamics. As such, stunting at an early age can become a significant risk factor for developing overweight later in life.

Furthermore, and although this chapter does not delve into this particular theme, it is important to note that the intensity and geographic location of these problems can be affected and change as a result of environmental factors and the specific effects of climate change, which have more acute impacts in those areas of the globe that are most affected by malnutrition (Dietz , 2020); (FAO, IFAD, WHO, WFP & UNICEF, 2019).

Finally, there are at least two practical elements that must be taken into account when considering the determinants of malnutrition within territories.

The first is fundamentally technical and analytical. The information related to the causes and determinants of malnutrition is not usually available at an adequate territorial scale. Hence, there is generally no other option but to use the information that is available for territories that may be too "large". This level of aggregation inevitably hides other lags, which precludes showing the reality of the sectors that are the most impoverished and affected by undernutrition or overweight within each of these units of measurement. This means that some associations between variables remain hidden and, in some cases, it can prevent the identification of connections that exist in the territories. This level of aggregation also prevents the correct identification of the most affected areas; thus, it becomes difficult to inform policies, so they act in a more targeted, relevant and perhaps more rapid and efficient manner, especially in cities and in higher- or lower-income areas within them.

In political terms, it is also necessary to recognize the challenges, inherent to the functioning of many states in the region, to efficiently organizing the civil service in a way that responds to the territories' different characteristics. Reaching populations that live in especially remote and difficult to access territories is complex, and what is also critical is the role played by the challenges and the will to coordinate among the different levels of administrations, as well as with local formal, informal and traditional authorities. Another hurdle is coordinating with sectoral and central administrative mechanisms themselves, as they do not have the necessary flexibility to implement policies in accordance with territorial realities (see Section 2.2 of this chapter for more details).

2.1.3. Principal determinants of malnutrition in lagging territories

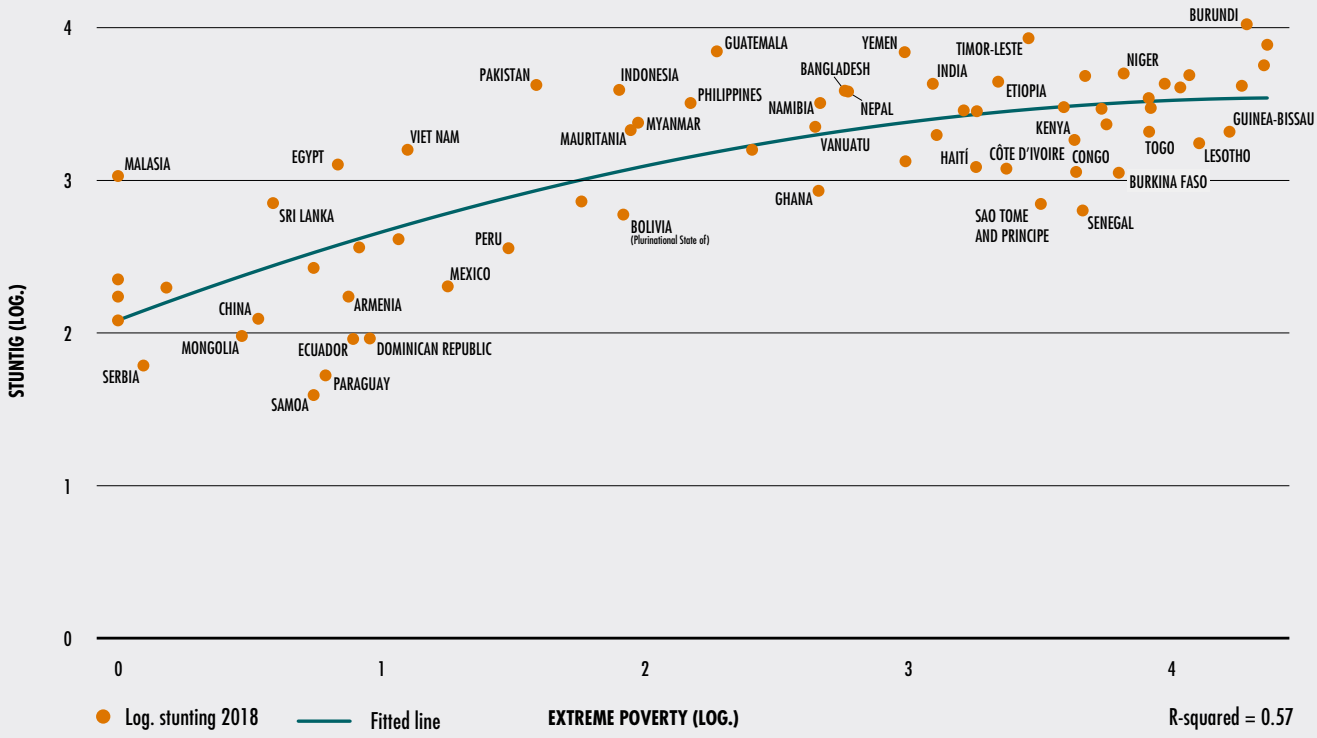
The lack of income (poverty) to enable access to healthy food is repeatedly cited as one of the most important determinants of lagging territories in relation to malnutrition.

As such, although stunting and extreme poverty are not exactly the same, they end up being two sides of the same coin (FAO, IFAD, WHO, WFP & UNICEF, 2019). For example, Figure 40 shows the relationship between stunting and extreme poverty indicators and denotes a high correlation between them. In fact, as the figures show, the levels of extreme poverty explain more than half of the variation in stunting levels at the global level.

If the analysis focuses on the causes of these outcomes, it is possible to show that, from an economic standpoint, low incomes, lack of employment and precarious employment, as well as vulnerability to transitory shocks, are among the principal triggers of the existence of high levels of malnutrition in general, and stunting in particular.

FIGURE 40
CORRELATION BETWEEN STUNTING AND EXTREME POVERTY WORLDWIDE

B) RATIO BETWEEN EXTREME POVERTY AND STUNTING PREVALENCE

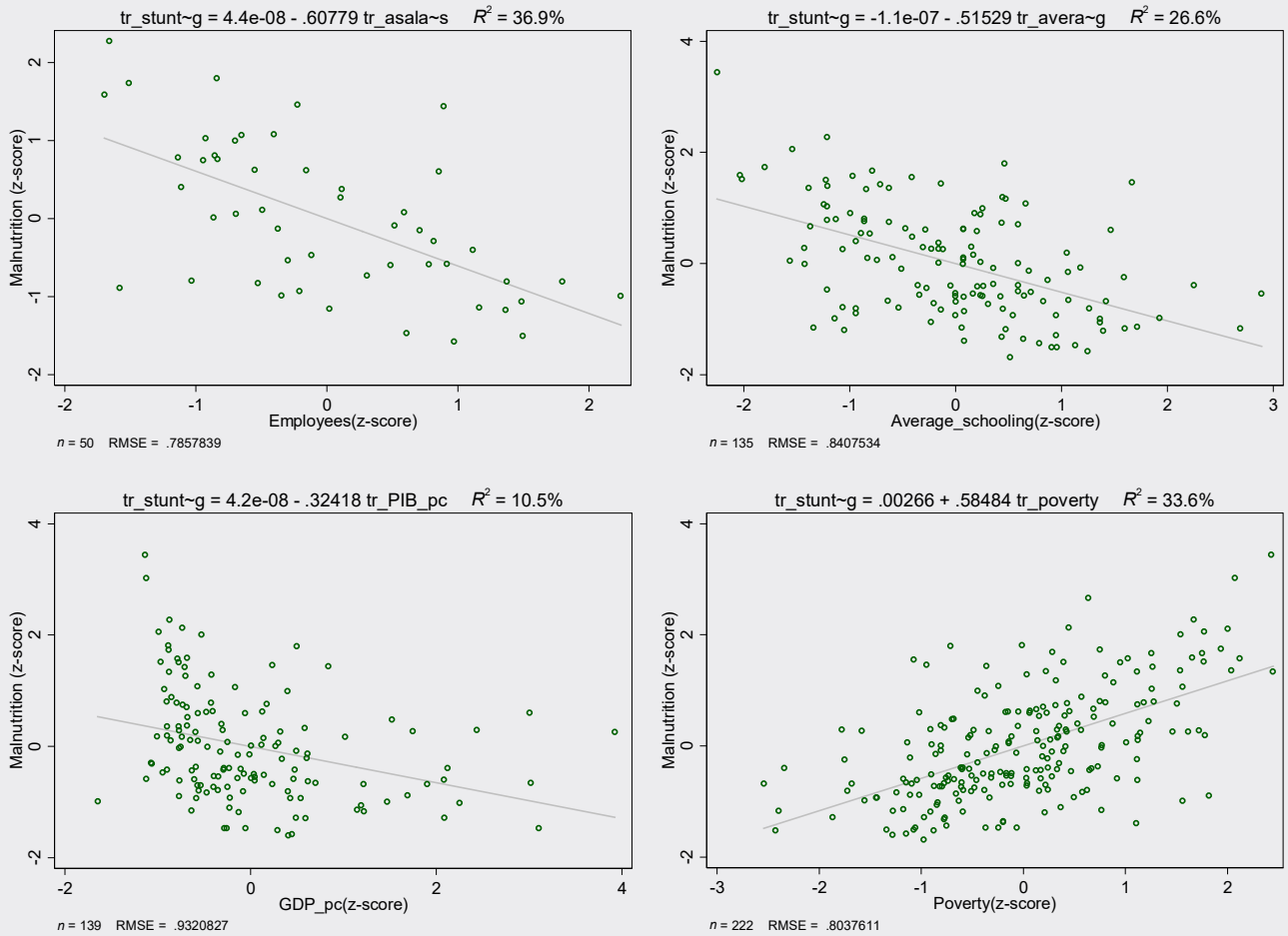


SOURCE: FAO, IFAD, WHO, WFP & UNICEF, 2019.

In terms of the variables that indicate economic development levels and explain lags in relation to malnutrition in LAC, Figure 41 shows the correlation between the level of stunting and the percentage of paid workers in the economy (as a variable that is closely related to employment formality), average schooling, per capita income and poverty.

As expected, the prevalence of stunting is greater in territories where poverty is higher and income levels are lower. As such, the first variable (poverty), on its own, explains more than 33 percent of the variations in stunting levels, while an increase in per capita income levels (measured through per capita gross domestic product [PCGDP]) is negatively correlated with stunting and explains 10.5 percent of this variable's total variation.

FIGURE 41
ECONOMIC AND LABOUR MARKET FACTORS ASSOCIATED WITH STUNTING (CORRELATIONS)



SOURCE: Prepared by the authors based on official information from the countries (See Annex 3).

Schooling also has a negative relationship with stunting, from which it can be deduced that increased schooling is associated with decreased stunting. This makes sense, since higher schooling levels generally lead to an increase in the population's income levels and their improved food consumption.

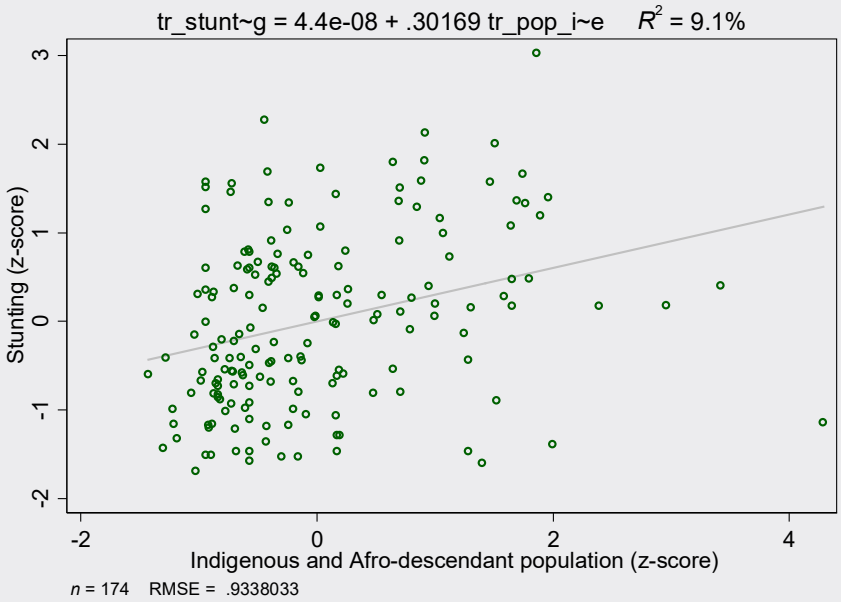
Similarly, Figure 41 shows that the percentage of paid workers in the local economy can have a positive effect on reducing stunting levels. This association can be explained by the levels of formality and social security that generally stem from paid employment, in contrast with economies with high levels of informality. In fact, the correlation between stunting and the percentage of paid workers is –60 percent, while the correlation between this indicator and the percentage of self-employed workers is 59 percent; the values are almost identical, but one value is positive while the other is negative.

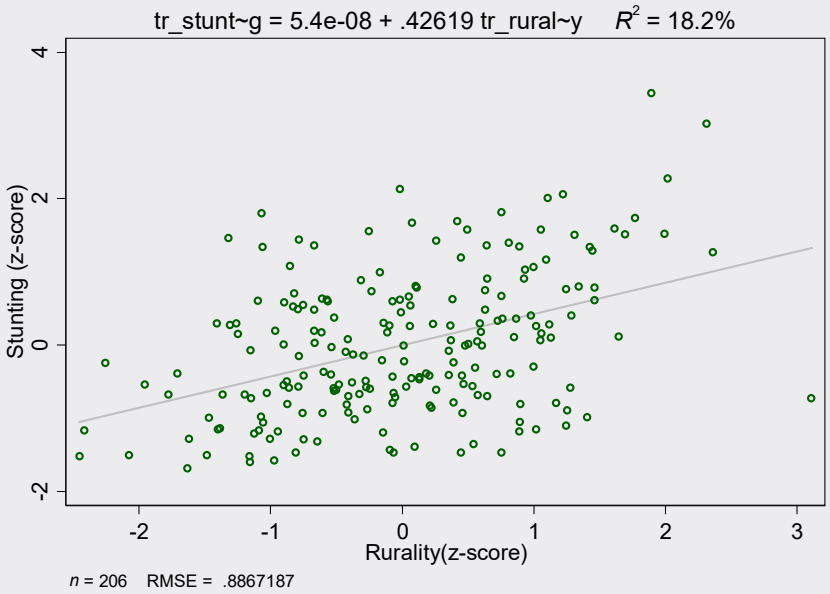
However, the presence of lagging territories is not only explained by factors associated with economic development. Variables such as access to water, rurality and the proportion of indigenous population can be significantly associated with the territories' levels of undernutrition. Figure 42 shows the association between lagging territories and the proportion of indigenous and Afro-descendant population and levels of rurality.

Overall, both variables behave similarly; they are both positively associated with stunting and they have similar levels of association. The percentage of indigenous and Afro-descendant population would explain almost 9 percent of the total

FIGURE 42

ARE THERE HIGHER LAGS IN RURAL AREAS AND THOSE INHABITED BY INDIGENOUS AND AFRO-DESCENDANT PEOPLES?





SOURCE: Prepared by the authors based on official information from the countries (See Annex 3).

variation in stunting in the first subnational territorial units, while levels of rurality explain almost 20 percent of the total variation.

A more aggregated analysis of the territories in terms of the extent to which they lag shows that highly lagging regions in regard to stunting tend to present lower population densities, lower average schooling levels, and a lower percentage of the population with higher education (see TABLE 5). In particular, the population density of highly lagging territories is almost 80 percent lower than that of non-lagging territories. In addition, average schooling is less than eight years in lagging areas, which is more than one year less than those of non-lagging territories. Along the same lines, only 11 percent of the

population of lagging territories has a university education, while in non-lagging areas the average percentage is 16 percent.

Similarly, the participation of self-employed workers in the labour market is higher in lagging territories, reaching 43 percent (probably related to employment informality), and the prevalence of paid employment is lower (47 percent compared to 55 percent).

In terms of the relationship of lagging territories with contextual variables, only 66 percent of their population has access to drinking water (almost 15 percentage points less than in non-lagging areas) and more than half lives with unsatisfied basic needs, while this percentage is less than 30 percent in non-lagging territories. These regions also have fewer doctors per inhabitant and fewer health centres. Inequality, measured by the Gini coefficient, is slightly higher in these territories and stands at 0.5 compared with 0.4 in non-lagging areas.

Lastly, the results indicate that, on average, lagging territories have twice the indigenous

TABLE 5
INDICATORS ASSOCIATED WITH LAGS IN RELATION TO PREVALENCE OF STUNTING IN LATIN AMERICA AND THE CARIBBEAN

Indicador	No lag	Lagging	Highly lagging
Population density (inhabitants per km2)	427.4	85.6	97.0
Rurality (%)	25.5	34.5	43.3
Average age (years)	30.4	29.4	28.3
GDP per capita (US$ 2019)	8,174	8,124	5,982
Poverty (%)	29.2	42	52.2
Extreme poverty (%)	9.3	14.4	21.2
Average schooling (years)	9	8.4	7.8
Population with higher education (%)	16	13.5	11.1
Labor participation (%)	58.5	60.2	58.9
Unemployment (%)	5.4	4.7	3.8
Female participation in the labor market (%)	39.3	38.7	37.1
Paid workers (%)	55.5	42.6	46.9
Self-employed workers (%)	31.3	37.8	42.9
Agricultural workers (%)	11.6	10.9	20.3
Indigenous and Afro-descendant population (%)	12.5	19.6	33.9
Population with access to drinking water (%)	79.3	75.6	65.5
Available health centres (number)	232.6	243.5	226.4
Population with unsatisfied basic needs (%)	29.7	34.7	47.5
Doctors per 1,000 inhabitants (number)	1.4	1.2	1.1
Household income inequality (Gini index)	0.4	0.4	0.5
Adolescent pregnancy (%)	14.1	17.4	15.7
Number of territories	185	87	55

NOTE: This data reflects the average of countries with available information for each indicator. Not all countries and territories have information for each indicator. For example, the average per capita GDP has been calculated with data from the territories in Argentina, Bolivia (Plurinational State of), Colombia, Chile, Mexico and Peru, while unsatisfied basic needs have been calculated with data from Argentina, Bolivia (Plurinational State of), Colombia, Guatemala, Honduras, Panama and Peru.
SOURCE: Prepared by the authors based on official information from the countries (See Annex 3).

or Afro-descendant population of non-lagging territories, representing almost 34 percent of the population. Details regarding these results and some additional indicators can be found in TABLE 5.

In terms of childhood overweight, the tendencies are not as clear. In contrast with what is occurring with stunting, childhood overweight can be interpreted as a more generalized problem. In other words, although there may be determinants that affect the prevalence of overweight to a greater extent in specific areas, its manifestation is more cross-cutting and depends less on income levels, poverty, levels of rurality and other indicators that are characteristic of the different territories. For example, Figure 43 presents the relationships between overweight in children under age 5 and poverty levels on one hand, and the percentage of paid workers on the other. Although a negative trend can be observed in the first case (in general, poorer areas have lower levels of overweight), poverty levels would explain less than 10 percent of the variation in data related to overweight in a given area.

FIGURE 43
POVERTY, EMPLOYMENT FORMALITY AND OVERWEIGHT IN LATIN AMERICA AND THE CARIBBEAN

SOURCE: Prepared by the authors based on official information from the countries (See Annex 3).

As noted above, the percentage of paid workers in a given area is an indicator of the level of employment formality and, in this sense, a desirable characteristic for labour markets. Despite this, the available information shows a somewhat positive correlation between this indicator and levels of overweight. Again, the relationship is relatively weak, with an R2 of 15.4 percent between these two variables and a high dispersion of observations.

Overweight does appear to be positively correlated with the population's average income levels, schooling and access to water, and negatively associated with levels of rurality. This suggests that childhood overweight is more present in the areas usually considered urban and more developed, in contrast with what is occurring with stunting. However, it is useful to note that these relationships are not as clear as in the case of the variables associated with stunting. Again, this suggests that, although it is possible to find determining factors for overweight in children under the age of 5, this problem is more widespread and generalized and, therefore, cuts across different socio-economic groups, areas and contexts.

It is important to note that because the analysis has been carried out at highly aggregated levels, the relationships between variables are only at the level of averages. Thus, for example, the fact that overweight is more prominent in urban, higher-income areas does not mean that higher-income people are the most affected. Rather, it reflects the fact that these areas are also inhabited by poor and vulnerable populations that are the most affected by high levels of overweight and obesity. Among other reasons, this is explained by the high cost of safe and healthy food that, consequently, is less accessible to the poor. In addition, information and education on safe and healthy eating may be inaccessible or unavailable, which may lead to the decreased consumption of fruits, vegetables and other lower-calorie foods (FAO, IFAD, WHO, WFP & UNICEF, 2020).

TABLE 6 presents a summary of the indicators associated with childhood overweight. In this case, lagging territories tend to be more urban (the percentage of rural population is 24 percent compared with 35 percent in non-lagging territories), have a higher average of years of schooling, less poverty and higher incomes. For example, the average number of years of schooling in lagging areas is 9.2, while in areas where overweight is below average it is 8.4 years. Also, poverty and extreme poverty are less prevalent in these territories, with rates of 32 percent and 7 percent in lagging territories, respectively. In contrast, poverty affects 40 percent of the population in non-lagging territories, while extreme poverty affects almost 15 percent.

The indicators related to overweight suggest that this problem is mostly associated with urban lifestyles, in complete contrast with stunting. For example, in addition to the abovementioned factors, labour market participation (61 percent), women's participation in the labour market (43 percent) and the percentage of paid workers (59 percent) are higher in areas that are most affected by overweight, and these are all indicators that are normally associated with development. Likewise, the proportion of agricultural workers is lower: less than 10 percent in highly lagging areas and over 14 percent in non-lagging areas relative to overweight.

Regarding contextual indicators, over 80 percent of the population in lagging areas has access to drinking water (72 percent in non-lagging areas) and less than 30 percent have unmet basic needs (almost 40 percent in non-lagging areas). Again, this coincides with higher incomes and development in areas that are lagging due to overweight. In terms of the number of available health centres, significant differences were not observed; however, a difference was observed in the number of doctors per 1,000 inhabitants, which are more concentrated in territories that are lagging in relation to childhood overweight.

Finally, and in contrast with what is occurring in the case of stunting, there are no great disparities associated with the percentages of indigenous and Afro-descendant peoples. The average percentage in highly lagging territories is 18.1 percent, while it is 20.5 percent in territories where childhood overweight is less prevalent than the national average.

TABLE 6

INDICATORS ASSOCIATED WITH LAGS IN RELATION TO PREVALENCE OF OVERWEIGHT IN CHILDREN UNDER 5 IN LATIN AMERICA AND THE CARIBBEAN

Indicator	No lag	Lagging	Highly lagging
Population density (inhabitants per km2)	178.8	390.7	313.5
Rurality (%)	35.3	28.2	24.0
Average age (years)	29.1	30.3	30.5
Per capital gross domestic product (US$ 2019)	6,926	8,640	9,048
Poverty (%)	39.9	34.2	31.6
Extreme poverty (%)	14.8	12.9	7.3
Average schooling (years)	8.4	8.7	9.2
Population with higher education (%)	13.6	15.2	16.0
Labour market participation (%)	59.7	57.4	60.6
Unemployment (%)	4.8	5.2	4.9
Women's participation in the labour market (%)	38.0	38.6	42.5
Paid workers (%)	44.3	57.6	58.6
Self-employed workers (%)	38.7	31.3	30.9
Agricultural workers (%)	14.2	12.7	9.9
Indigenous and Afro-descendent population (%)	20.5	15.1	18.1
Population with access to drinking water (%)	72.7	78.5	80.9
Available health centres (number)	244.6	208.6	243.1
Population with unsatisfied basic needs (%)	38.6	29.5	28.6
Doctors per 1,000 inhabitants (number)	1.3	1.1	1.7
Household income inequality (Gini index)	0.4	0.4	0.4
Adolescent pregnancy (%)	16.8	14.7	12.4
Number of territories	170	88	53

NOTE: This data reflects the average of countries with available information for each indicator. Not all countries and territories have information for each indicator. For example, the average per capita GDP has been calculated with data from the territories in Argentina, Bolivia (Plurinational State of), Colombia, Chile, Mexico and Peru, while unsatisfied basic needs have been calculated with data from Argentina, Bolivia (Plurinational State of), Colombia, Guatemala, Honduras, Panama and Peru.

SOURCE: Prepared by the authors based on official information from the countries (See Annex 3).

Generally speaking, the above-mentioned outcomes allow us to sustain that stunting is associated to a greater extent with territories where there are low incomes, higher poverty levels, a greater presence of indigenous and Afro-descendant peoples, fewer years of schooling, less access to services and more precarious employment; in other words, it is more prevalent in these territories. In contrast, the analysis of the causes of lag in relation to overweight reveals that this type of lag is more prevalent in urban areas with higher average incomes, less poverty, higher education levels, greater employment formality and greater coverage of basic services.

Principal determinants of the double burden of malnutrition in lagging territories

Despite the general conclusions in terms of the causes of stunting and overweight, there are territories in LAC that are lagging in relation to both problems simultaneously. Of the sample of territories considered, five are highly lagging in both stunting and overweight in children under 5. These territories are in Colombia (Cauca and Vaupés), Guyana (Potaro-Siparuni), Panama (Comarca Ngäbe-Buglé) and Trinidad and Tobago (South West), all of which have a high proportion of indigenous and Afro-descendant peoples, high levels of rurality and poverty, lower schooling levels, higher unemployment levels, and a larger population with unmet basic needs. Hence, these territories have characteristics that are mainly associated with highly lagging areas in relation to stunting; however, they face the double burden of malnutrition because they also have high rates of overweight in comparison with the average for each of their countries.

If all territories are considered that present some level of lag in regard to stunting or childhood overweight, the number of territories with a double burden would increase to 53. In other words, almost one in every five territories in LAC suffers from the double burden of malnutrition to some extent, which means it is lagging to some extent in terms of both stunting and overweight, while one in every two territories is lagging either in relation to stunting or overweight.

TABLE 7 presents the classification of territories according to the extent to which they are lagging. The second column contains the data from territories with no lag in relation to either stunting or overweight. The third column presents the indicators of territories that are lagging in relation to at least one category, stunting or overweight, whether it be a high lag or low lag. The last column presents the indicators associated with the double burden of malnutrition, or territories lagging simultaneously due to stunting and overweight in children under 5.

As indicated previously, these territories' most notable characteristics are related to low population density (although rurality is not a predominant characteristic among them), greater levels of poverty and extreme poverty, and a slightly lower rate of labour participation. In addition to these factors, it is notable that there are fewer health centres and doctors in areas affected by the double burden of malnutrition. Despite this, the element that is perhaps the most pronounced in these territories is the greater proportion of indigenous and Afro-descendant population. In this sense, more than one in every five inhabitants of territories affected by the double burden of malnutrition is indigenous or Afro-descendant (22 percent), almost 9 percentage points above the rate in non-lagging territories and two percentage points above the indicator observed in territories that are lagging in relation to only one malnutrition indicator.

The high levels of prevalence and of lag (mainly due to stunting, but also due to overweight) in territories with higher proportions of indigenous and Afro-descendant population is concerning; unfortunately, however, this information is not new. For example, a recent study carried out in 13 countries in the region, including Belize, Bolivia (Plurinational State of), Brazil, Colombia, Ecuador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Paraguay, Peru and Suriname, reached a similar conclusion. Indigenous populations in LAC have significantly higher levels of stunting than non-indigenous populations, even though indigenous children are generally breastfed (Gatica-Domínguez, Mesenburg, Barros, & Victora , 2020). This reveals that other characteristics, possibly associated with a lack of nutrition policies and less access to healthy foods after the breastfeeding period, are very detrimental to this population and their territories. According to the abovementioned study, this fact is more related to physical access to food than to a lack of income that determines economic access.[24]

[24] The results that are presented are highly correlated in the literature, in which similar variables have generally been considered as determinants of stunting and overweight in children under 5. In addition to the study summarized above, which establishes a relationship of greater prevalence of stunting among indigenous children for the region, the situation has been confirmed at least in the specific cases of Guatemala (Gatica-Domínguez, Victora, & Barros, 2019) and Costa Rica (Vargas, 2012), among other countries in the

TABLE 7

INDICATORS ASSOCIATED WITH THE DOUBLE BURDEN OF NUTRITION IN LATIN AMERICA AND THE CARIBBEAN, ACCORDING TO THE CLASSIFICATION OF TERRITORIES

Indicator	No lag	One lag	Double burden
Population density (inhabitants per km2)	271.0	324.7	59.6
Rurality (%)	29.0	31.6	32.8
Average age (years)	29.7	29.8	29.6
Per capita gross domestic product (US$ 2019)	7,197	7,892	8,450
Poverty (%)	31.6	37.6	42.1
Extreme poverty (%)	9.6	14.1	13.2
Average schooling (years)	8.6	8.7	8.2
Population with higher education (%)	15.6	14.0	14.3
Labour market participation (%)	57.2	60.9	56.8
Unemployment (%)	5.5	4.8	4.7
Women's participation in the labour market (%)	38.0	39.2	38.7
Paid workers (%)	48.0	50.5	51.2
Self-employed workers (%)	33.6	36.1	34.2
Agricultural workers (%)	13.6	12.1	14.0
Indigenous and Afro-descendant population (%)	12.9	19.6	21.7
Population with access to drinking water (%)	77.1	75.0	76.7
Available health centres (number)	229.5	245.2	193.9
Population with unsatisfied basic needs (%)	33.2	35.0	33.4
Doctors per 1,000 inhabitants	1.3	1.3	1.1
Household income inequality (Gini index)	0.4	0.4	0.5
Adolescent pregnancy (%)	16.5	14.7	16.4
Number of territories	85	172	53

NOTE: This data reflects the average of countries with available information for each indicator. Not all countries and territories have information for each indicator. For example, the average per capita GDP has been calculated with data from the territories in Argentina, Bolivia (Plurinational State of), Colombia, Chile, Mexico and Peru, while unsatisfied basic needs have been calculated with data from Argentina, Bolivia (Plurinational State of), Colombia, Guatemala, Honduras, Panama and Peru.

SOURCE: Prepared by the authors based on official information from the countries (See Annex 3).

region. Likewise, the relationship between the socio-economic indicators that have been presented, such as poverty, education, levels of rurality and access to drinking water, among others, have been extensively studied and are consistent with the results presented here (Longhi, Gómez , Zapata , & Paolasso, 2018) in Peru (Sobrino, Gutiérrez , Cunha, Dávila, & Alarcón, 2014), Bolivia (Mamani Ortiz, Luizaga Lopez, & Illanes Valverde, 2019), Colombia (Osorio, Romero, Bonilla, & Aguado,, 2018), Ecuador (Hinrichsen, 2017) (Ortiz, Van Camp, Wijaya, Donoso, & Huybregts, 2014) and Paraguay (Ervin & Bubak, 2019). Lastly, it is important to highlight that these results are closely related to those presented by the Centro Latinoamericano para el Desarrollo Rural (Rimisp) (2020) in its Informe Latinoamericano sobre Pobreza y Desigualdad 2019, available here: https://rimisp.org/informelatinoamericano/index.php/2020/04/15/informe-2019/.

2.1.4. Anticipated effects of COVID-19 on hunger and its territorial representation

At the time of writing, the region and the rest of world are facing the consequences of the COVID-19 pandemic, not only in terms of health, which is logically the first cause for concern, but also in terms of its devastating effects on economic growth, employment and the population's incomes. According to the most recent forecasts, the region's economy will contract by 9 percent in 2020 and poverty and extreme poverty levels will increase by 7.1 and 4.5 percentage points, respectively (ECLAC & FAO, 2020). To provide an idea of the magnitude of this problem, this impact is equivalent to regressing 16 years in the fight against extreme poverty in the region's rural areas, where it is anticipated that levels will increase by 4.9 points, although, logically, this forecast may vary among countries and territories.

As demonstrated throughout this chapter, the determinants and manifestations of malnutrition vary among countries and territories, and they have a more pronounced impact on different population groups. Likewise, despite the scarcity of information that is currently available on the consequences of the COVID-19 pandemic on malnutrition, it is anticipated that these will also manifest differently within territories across the region, depending on inhabitants' levels of vulnerability and exposure to contagion, the ways in which labour markets are able to adapt to these new conditions, and the effectiveness and timeliness of the policies designed by the region's governments. Although the pandemic's specific effects on many territories in remote areas of the country are unknown, it is not unrealistic to expect that the greatest impacts will be observed in areas with the most determinants of malnutrition, such as the presence of greater levels of poverty and vulnerability, low schooling, higher proportions of indigenous peoples and greater susceptibility to climate change.

Although the results and indicators presented in this document do not reflect these effects on malnutrition, overweight or food insecurity in the region, the presence of lagging territories in relation to other indicators, such as poverty, unemployment, labour informality and the percentage of the population with unsatisfied basic needs, for example, does provide a basis for predicting that some regions will be more strongly impacted by COVID-19, and possibly for a longer period.

This section not only attempts to describe and discuss territorial disparities in terms of stunting and childhood overweight, it also aims to identify what common factors explain these differences. All of this should result in the construction of policies that effectively and efficiently address the different forms of malnutrition, to reduce and eliminate these gaps.

BOX 5
TARGET 2.3 OF THE SUSTAINABLE DEVELOPMENT GOALS

SDG target 2.3 is subdivided into target 2.3.1, Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size, and target 2.3.2, Average income of small-scale food producers, by sex and indigenous status.

Target 2.3 contemplates duplicating the agricultural productivity and incomes of small-scale food producers by 2030, especially those of women, indigenous peoples, family farmers, pastoralists and fishers, through secure and equitable access to different production resources. Given its characteristics, the achievement of this target is especially relevant for those populations that usually live in territories that are lagging in relation to stunting, because a large

BOX 5 (CONTINUED)

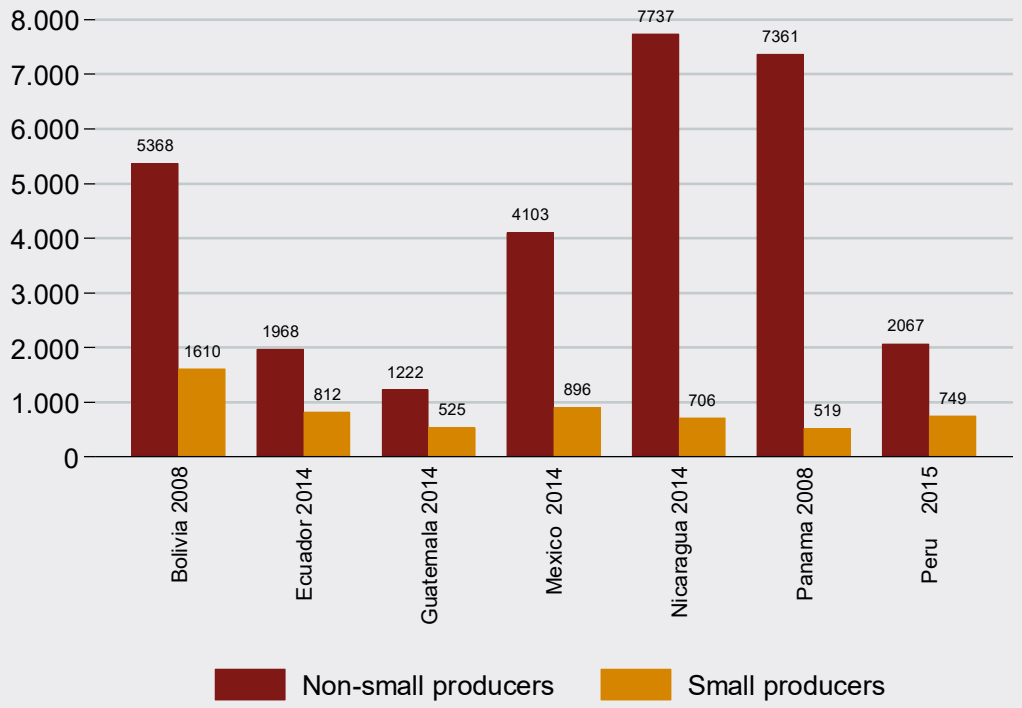
part of their income and food security depends on agricultural activities.

This target is also important because it is estimated that there are approximately 570 million farms throughout the world, the majority of which are small (farms of 2 hectares or less). In some countries, small-scale food producers represent up to 85 percent of all food producers; however, they exploit only 7 percent of land (CSA, 2015).

Despite this, the productivity of smallholders is systematically lower than that of large food producers. In Latin America and the Caribbean specifically, yields are between 30 percent and 50 percent lower than those of agribusiness.

Furthermore, there is a significant income gap between small- and large-scale producers. While the income gap, on average, for countries with available information in Latin America is 73 percent, in countries such as Nicaragua and Panama the difference in incomes between small- and large-scale producers exceeds 90 percent, as shown in the figure below.

A. AVERAGE ANNUAL INCOME FROM AGRIGULTURE FOR SELECTED COUNTRIES, BY SIZE OF FOOD PRODUCERS, PPA (2011 CONSTANT INTERNATIONAL DOLLARS)



SOURCE: FAO, 2020d.

BOX 5
(CONTINUED)

In addition to the contributions that they make in terms of agricultural production itself and the recovery of sustainable and environmentally friendly agricultural practices, smallholders make a significant contribution to job creation in rural areas, poverty reduction and strengthening the sustainable management of natural resources. Despite this, they often suffer from food insecurity and malnutrition, as approximately 80 percent of poor people and those who suffer from food insecurity live in rural areas, and most rural poor are small-scale family farmers (CSA, 2015). This is true even though, if the total number of family farmers is considered, they are responsible for approximately 80 percent of global food production, and in Latin America and the Caribbean they supply between 27 percent and 67 percent of food production, depending on the country (FAO, 2014). Furthermore, small-scale family farmers (who produce on less than 2 hectares) generate 36 percent of food worldwide (Lowder, Sánchez, & Bertini, 2019).

Achieving the established target for SDG 2.3, by increasing yields, productivity and producers' incomes, implies improving the living conditions of small-scale agricultural producers, and providing stability to a population group that is key to the creation of sustainable food systems, progress towards food security, and the eradication of hunger in Latin America and the Caribbean.

The above not only benefits smallholders themselves; it also has benefits that are shared by the inhabitants of the areas where small-scale agricultural activities take place. Therefore, improving the living conditions of smallholders, especially women, indigenous and Afro-descendant producers, is key to reducing disparities and territorial inequalities that are associated with malnutrition, and to decreasing the number of lagging territories and the population affected by undernutrition, overweight and obesity.

2.2 POLICIES TO ADDRESS MALNUTRITION IN LAGGING TERRITORIES OF LATIN AMERICA AND THE CARIBBEAN

As in previous editions of this publication, this last section focuses on highlighting some of the main policies that LAC countries are developing to address hunger, food insecurity and malnutrition in all its forms, specifically policies with a territorial approach aimed at addressing the specific needs of the most lagging areas. This section also includes some of the policies that target the most vulnerable groups, as well as other general policies for the entire population that are considered essential because of their scope and results.

It must be noted that, until a few years ago, these policies and programmes mainly targeted food insecurity and the reduction of stunting or deficiencies in certain micronutrients; they have only recently begun to incorporate the reduction of overweight and obesity among their main objectives.

Moreover, in the context of the 2020 COVID-19 pandemic, this document also briefly highlights some of the noteworthy efforts that countries are making to secure the population's right to food.

As previously explained, this edition of the Regional Overview of Food Security and Nutrition in Latin America and the Caribbean has the added challenge of identifying a territorial perspective in some of the policies that are required to reduce the malnutrition levels of the inhabitants of lagging territories. As described below, while there are some relevant examples that have had significant impacts, only a few experiences have been identified. Nevertheless, it is hoped that these cases may help to advance the design and implementation of new public policy initiatives that address this food and nutrition reality.

The following proposes a policy analysis based on the different observations relative to the causes and determinants of food insecurity and malnutrition (WHO, 2008) (UNICEF, 2013) that are outlined in Section 2.1. This analysis is organized into three measurement groups that focus on: (1) improving and promoting economic access to adequate nutrition; (2) improving the production of, and physical access to foods that support adequate nutrition; and (3) improving the use and quality of food (see TABLE 8). The rationale and content of each group will be developed in the corresponding section.

It should be noted that the objective of some policies is to strengthen public capacities and promote a favorable environment for improving the countries' food and nutrition status (including appropriate legal and institutional frameworks). Some of the instruments that have been developed address the different forms of malnutrition simultaneously (Box 17), whereas other policies seek outcomes that are primarily linked to one specific type of malnutrition.

Sectoral actions are also needed to address the specific dimensions of the problem through a territorial approach (BOX 6). In this sense, it is important that the use of the different instruments be part of broad, coherent and coordinated food and nutrition strategies. To this end, it is essential to promote intersectoral and intergovernmental coordination. At the same time, an approach is required that addresses the specificities of more vulnerable groups, such as women and indigenous peoples (BOX 7 and BOX 8).

TABLE 8
POLICIES TO ADDRESS MALNUTRITION IN LAGGING TERRITORIES IN LATIN AMERICA AND THE CARIBBEAN

Measures to improve and promote economic access to adequate nutrition in lagging territories	Measures to improve the production of, and physical access to foods that promote adequate nutrition in lagging territories	Measures to improve the use and quality of foods in lagging territories
▶ Social protection systems ▶ Support for farmers' livelihoods ▶ Decent employment	▶ Sustainable nutrition-sensitive agriculture and value chains ▶ School feeding programmes ▶ Short marketing circuits	▶ Policies that promote maternal-infant nutrition ▶ Complementary feeding ▶ Water, sanitation and hygiene ▶ Communication for social and behavioral change to reduce barriers to adequate nutrition ▶ Quality of foods consumed outside the home

BOX 6
INSTITUTIONALITY AND POLICIES WITH A TERRITORIAL APPROACH TO REDUCING ALL FORMS OF MALNUTRITION

A territorial approach to policies may provide an appropriate framework to address the causes of the higher levels of malnutrition in the region's countries. This approach places particular emphasis on "how" policies are implemented. To this end, they are based on the territories' specificities and consider their social, economic, environmental, cultural and institutional characteristics in order to formulate strategies that respond to their specific needs. This approach emphasizes a view of the whole territory in order to anchor development strategies in territorial assets such as social capital and natural, economic, productive and ethnocultural resources.

A territorial approach to ensuring food security and nutrition must promote the active participation of local governments and recognize the importance of other territorial stakeholders, such as producer associations, cooperatives, women's organizations, indigenous communities, neighbourhood organizations, members of the local private sector, churches, food banks, consumers and other civil society stakeholders that may play an important role in the design, implementation and monitoring of policies and programmes.

The territorial analysis of food and nutrition policies is closely related to the more sustainable transformation of food systems, linking rural producers and environmental resource management with urban consumers in specific spatial circuits. This, in turn, strengthens local economic dynamics based on the sustainable management of territorial assets.

SOURCE: OECD, FAO & UNCDF, 2016.

BOX 7
HAND-IN-HAND INITIATIVE

The objective of the United Nations' Hand-in-Hand initiative is to accelerate agricultural transformation and sustainable rural development in order to eradicate poverty and end hunger and all forms of malnutrition, thus contributing to the achievement of the Sustainable Development Goals. It prioritizes countries, and territories within countries, where poverty and hunger are the most widespread or where national capacities are more limited.

The list of countries prioritized by the initiative is constantly evolving. Countries are prioritized in which there are circumstances that threaten to marginalize a significant number of people. For example, Haiti is one of the countries prioritized by the initiative.

Hand-in-Hand adopts a market-oriented, food system approach that aims to increase the quantity, quality, diversity and accessibility of nutritious foods in local, regional and national food markets. It aims to improve the capacity of food systems to promote nutrition, offer healthy foods to all, and improve households' livelihoods, thus reducing extreme poverty.

The initiative has a territorial approach. It targets geographical areas where there is significant agricultural potential and high poverty levels, and it works within them to obtain the maximum potential agricultural benefit. It focuses on increasing the producers' productivity and improving short-term incomes and long-term sustainability.

One of the initiative's main pillars is creating partnerships between the public sector, private sector, civil society, academia and between the countries themselves (South-South and Triangular Cooperation).

Hand-in-Hand is led by the Food and Agriculture Organization in close collaboration with the International Fund for Agricultural Development and the World Food Programme.

SOURCE: FAO, 2020e.

BOX 8
PUBLIC POLICIES AND CULTURAL BELONGING IN LATIN AMERICA AND THE CARIBBEAN

One in every four inhabitants of LAC is indigenous or Afro-descendant. Of the region's total rural population, 13 percent is recognized as indigenous and 33 percent as Afro descendant. In other words, almost half of the region's rural inhabitants (46 percent) belong to one of these two groups (Angulo, Solano and Tamayo, 2018), and they are overrepresented among the region's poorest and most excluded populations.

Addressing ethnicity in strategies to overcome poverty, and in food security and nutrition strategies, creates tensions with the predominant technical rationale of public policy. First, it involves a trade-off between scaling up standard policies and developing specific solutions for indigenous and Afro-descendant contexts. Secondly, ethnic groups continue to be perceived as passive actors in decision-making processes; therefore, policies and interventions that aim to improve their quality of life tend to ignore their traditional knowledge systems

BOX 8
(CONTINUED)

and preferences. Thirdly, although these policies provide new opportunities to advance the rights and historical demands of ethnic groups, they can also lead to trade-offs in terms of their autonomy and self-determination.

This situation can be explained by the lack of technical instruments to incorporate culture within policy planning processes, as well as the challenges faced by public systems in the implementation of effective intersectoral and intergovernmental coordination mechanisms.

Cultural diversity is a strength of Latin American and Caribbean societies. Leveraging this potential requires improving how ethnicity and cultural diversity are addressed in public policy planning processes. This is important for building societies that are free from discrimination and exclusion, to enhance the effectiveness and sustainability of the interventions that aim to improve the wellbeing of indigenous and Afro-descendant peoples.

SOURCE: Correa, 2019.

2.2.1. Measures to improve and promote economic access to adequate food in lagging territories

Within this first group of policies addressing all forms of malnutrition in the most lagging territories, policies are highlighted that aim to ensure that people have economic access to the foods that are necessary for adequate nutrition. In other words, they aim to ensure that people have enough income for stable, diversified, nutritious and quality food consumption.

As explained in the previous section, household incomes are an important determinant for accessing adequate foods, and this factor partly explains the existence of lagging territories in relation to malnutrition. Low incomes, lack of employment and precariousness influence the malnutrition rates that are observed in the region's lagging territories. Stunting rates are higher in territories in which poverty is greater and household incomes are lower. This section outlines social protection policies, support for family farming, and decent employment measures in cities and in non-agricultural rural employment, all centered on improving economic access to food.

Social protection systems

Social protection is a key strategy to accelerate the achievement of most SDGs. It is one of the main instruments used by countries in the region to address the lack of employment and income that, as seen in the previous section, are two of the determinants of malnutrition in the most lagging territories. Therefore, social protection plays a fundamental role in the promotion and acceleration of progress towards food security and nutrition, the development of different types of territories (including urban and rural), and the enhancement of the most vulnerable population's resilience. Although social protection programmes have expanded considerably in the region in the last decades, their design and implementation must be adjusted to improve their coverage in lagging territories, their adaptation, and their ability to sustainably contribute to the social and economic inclusion of urban and rural populations.

Firstly, the coverage and access to social protection systems must be expanded to address the specific gaps of the most lagging territories. This is critical, since social protection policies and programmes can address the immediate and underlying causes of malnutrition (FAO, 2017). If designed appropriately, they have the potential to increase the consumption and diversity of foods in households, for example through cash transfers. The evidence shows that the immediate use of cash leads to the consumption of an increased number of meals and more diverse diets. In addition, these instruments can contribute to reducing the need to resort to survival mechanisms that are harmful to nutrition and health, such as reducing the food intake of children in a crisis situation (FAO, 2017).

Secondly, the design and implementation of social protection systems must be adapted to address the specific livelihood needs of the populations in the most lagging territories. To this end, the design of social assistance programmes must be revised (amount, regularity, conditionalities, etc.), as well as the introduction of possible complementary measures.

To address all forms of malnutrition, it is essential to design social protection programmes that are nutrition-sensitive (BOX 9), that boost low-income consumers' access to nutritious foods, and that increase the affordability of a healthy diet for this population group (FAO, IFAD, WHO, WFP & UNICEF, 2020). Although it is true that healthy eating is included among the general objectives of conditional cash transfer programmes, it is rare that they incorporate concrete guidelines to avoid increased overweight and obesity (Biermayr-Jenzano, 2020).

BOX 9
NUTRITION-SENSITIVE SOCIAL PROTECTION

The nutrition outcomes of social protection programmes can be boosted through different strategies that include:

- Design of interventions that encompass food security and nutrition needs, including amounts that cover the cost of a nutritious and diverse diet.
- Include explicit nutrition objectives and indicators to measure progress, including indicators for malnutrition due to deficits and excess.
- Effectively reach nutritionally vulnerable sectors.
- Promote varied diets and access to micronutrients.
- Link social protection programmes with communication and awareness-raising actions that focus on the importance of a healthy diet.

These nutrition-sensitive social protection strategies can be linked to long-term strategies that promote the production, processing and distribution of varied, nutrient-rich foods.

SOURCE: FAO, 2016a.

Thirdly, it is necessary to coordinate social protection with productive inclusion and employability strategies, which will allow families to protect their incomes and food security in rural and urban areas. In this regard, it is key to support the beneficiaries of social assistance programmes through strategies that aim to strengthen family farming, non-agricultural rural employment and urban employment. These measures are analyzed in greater detail in the next two sections.

On the other hand, it is important to underscore that many lagging territories are located in ecologically fragile areas, which exposes households to various threats and crises that can jeopardize their food security. The different climate change scenarios foreseen for this century predict more extreme and frequent environmental events. These will have a negative impact on the four dimensions of food security, as well as on assets and livelihood opportunities in rural and urban areas. Regular social protection programmes provide a good entry point from which to support adaptation and resilience to climate change (Cárdenes & Solórzano, 2019) (Box 10).

BOX 10
SOCIAL PROTECTION AND ADAPTATION TO CLIMATE CHANGE

Social protection has the potential to improve or support households' adaptation to climate change if the planning, design and implementation of programmes follow these principles:

- Recognize the uncertainty of climate change.
- Prioritize food security and nutrition considerations.
- Support households' long-term adaptation strategies.
- Avoid the risk of maladaptation.
- Understand that different social protection options have trade-offs.
- Establish resilience objectives in the programmes' theories of change.
- Consider the undesired indirect effects on the environment.
- Adapt the programmes to the context.
- Recognize even the small contributions of individual interventions.
- Work across all disciplines, especially those that are linked to climate change activities.

SOURCE: Cárdenes & Solórzano, 2019.

Finally, the region's countries are exposed to the impacts of different natural or anthropogenic phenomena that can result in crises or disasters such as earthquakes, pandemics, climate phenomena such as droughts and hurricanes, the exacerbation of preexisting conflicts, macroeconomic crises, etc. In this sense, social protection that is reactive to emergencies aims to invest in the preparation of social protection systems that can provide a more effective and timely response to the most vulnerable households (Beazley, Solórzano, & Barca, 2019).

Various countries in the region have used social protection systems to respond to different types of emergencies, and the impact of social protection that is reactive to emergencies is therefore well documented.[25] Social protection has been a particularly important measure to respond to the socio-economic impacts of the COVID 19 pandemic (Box 11).

[25] See Beazley, Solórzano, & Barca, 2019.

Haku Wiñay/Noa Jayatai is a rural productive development programme implemented by the Ministry of Development and Social Inclusion (MIDIS) of Peru, the objective of which is to develop the productive and economic capacities of households living in poverty and extreme poverty, to improve their food security and increase their incomes. It was explicitly designed to complement the conditional cash transfer programme *Juntos*, and its priority is therefore to benefit the participants of this programme. The *Haku Wiñay/Noa Jayatai* activities are grounded in four components: (1) strengthen and consolidate the family production system, (2) improve household living conditions, (3) promote inclusive rural businesses, and (4) develop financial capacities.

Local governments have a key role in this programme, and they participate in the formulation of the diagnostic assessment and the technical file upon which the programme's interventions and resource allocation mechanisms are based. Furthermore, local governments are responsible for ensuring the sustainability of these initiatives once the programme ends. The programme also includes the creation of implementation nuclei, which are groups of rural households from a given settlement that become MIDIS counterparts and receive resources directly for local implementation. This model has contributed to aligning the supply of extension services with the demands of the rural population (Wiggins & Espinoza, 2016).

Haku Wiñay/Noa Jayatai has positively impacted the incomes and food security of participating households. According to the assessment carried out by the Group for the Analysis of Development and the Ford Foundation, 63 percent of participants increased their incomes by almost US$300 as a result of the programme. Their diets also improved notably, specifically in terms of an increased consumption of grains, orange tubers and vegetables, green leafy vegetables, beans, legumes, meat and eggs (Escobal & Carmen, 2016).

BOX 11
SOCIAL PROTECTION MEASURES TO MITIGATE THE IMPACTS OF COVID-19

Social protection is a key measure for the immediate mitigation of the socio-economic impacts of COVID19 and, at the same time, for helping affected households to progressively rebuild their livelihoods and strengthen their economic and social inclusion capacities.

This has been one of the principal measures adopted by LAC governments. As of November 2020, countries in the region had implemented 291 social protection measures, of which 42.3 percent were based on cash transfers, 18.9 percent on food or in-kind transfers, 15.8 percent on guaranteeing access to basic services, and 23 percent on other social protection measures.

Some of the social protection measures that have been implemented until now are outlined below. Although this is not an exhaustive list, it does provide an overview of some of the measures that are being applied in the region:

- **Argentina**: vertical expansion of the *Pensión Universal para el Adulto Mayor* [Universal Pension for the Elderly] and the *Asignación Universal por Hijo* [Universal Child Allowance] social assistance programmes, as well as the Universal Pregnancy Allowance, through which beneficiaries have received US$47. The *Ingreso Familiar de Emergencia* [Emergency Family Income] was also created, which is a one-time

BOX 11
(CONTINUED)

payment to families in informal employment.

- **Jamaica**: cash transfers to people from any sector who have lost their jobs since March 2020. Through the Supporting Employees with Transfer of Cash (SET Cash) programme, beneficiaries will receive a monthly amount of approximately US$65 during a period of three months.
- **Panama**: creation of the *Panamá Solidario* programme, which distributes E-vouchers, social assistance transfers and food parcels to vulnerable families without incomes during the quarantine.

SOURCES: FAO & ECLAC, 2020c. FAO & ECLAC, 2020. ECLAC, 2020d.

Support for farmers' livelihoods

Family farming is one of the main sources of income and food for people who live in the most lagging rural territories. This type of agriculture represents more than 80 percent of agricultural production units in the region, and it is the main source of work in the agricultural and rural sector (FAO, 2018b). Although family farming is important for rural economies, it usually has lower levels of productivity and employment incomes than other economic activities. It is estimated that two-thirds of family farmers in the region face significant limitations that prevent them from increasing their profitability (FAO, 2018b). These include the lack of coordination with markets, infrastructure deficits, and limited access to financial and non-financial assets and rural services. As a result, family farmers suffer from high levels of hunger, food insecurity and malnutrition. To support famers and public purchasing from family farming, Colombia has enacted Law 2046 (Box 12).

For all these reasons, it is essential to support those who depend on family farming and who participate in social assistance programmes through strategies that improve access to productive assets (land, water, energy, services), rural financial services (credit, savings, insurance) and rural non-financial services (technical assistance and rural extension services). Thus, family farmers will have strengthened capacities to improve risk management, invest in family production and, at the same time, ensure that their families' basic needs are met (FAO, 2019).

A key public programme for family farming in Brazil is the *Programa Fomento às Atividades Produtivas Rurais* [Promotion of Rural Productive Activities Programme],[26] which is a cash transfer programme that targets productive activities in rural areas. Its objective is to promote social and productive inclusion and boost the development of the productive capacity and food security and nutrition of poor rural families. The Ministry of Citizenship directly transfers non-reimbursable financial resources to beneficiary families through the *Bolsa Familia* programme's payment structure. The amounts that are transferred, from 2,400.00 to 3,000.00 Brazilian *reais*, must be invested in a productive project formulated by the family in collaboration with a Technical Assistance and Rural Extension (ATER, for its Portuguese acronym) agent. The beneficiaries are the most vulnerable families registered in the *CadÚnico*, Brazil's Single Registry for Social Programmes, with income profiles of extreme poverty or poverty.

[26] Rural Promotion Programme (Programa Fomento Rural) https://www.gov.br/cidadania/pt-br/acoes-e-programas/inclusao-produtiva-rural/programa-fomento-rural-1.

BOX 12

COLOMBIA AND LAW 2046 PROMOTING PUBLIC PROCUREMENT FROM FAMILY AND COMMUNITY FARMING

Law 2046, endorsed on 6 August 2020, establishes mechanisms to promote the participation of local small-scale agricultural producers and family and community farmers in public food procurement markets.

The Law establishes conditions and instruments for food procurement so that all public food procurement and distribution programmes promote the participation of local small-scale producers and local producers whose production systems are part of family or community farming, or its organizations.

This Law also specifies that the mechanisms, conditions and instruments that promote or establish the participation of small-scale producers belonging to ethnic communities, or agricultural producers belonging to ethnic communities whose production system is part of family or community farming, in the local public food procurement market will have specific regulations that respect their uses, customs and collective rights.

Public entities at the national, departmental or district level, mixed commercial enterprises, and private entities that manage public resources and operate within the country that demand food supplies or agricultural goods, either directly or through a third party, must comply with the provisions that promote public procurement from family and community farming.

SOURCE: Colombian Congress, 2020.

The diversification of production is a key element to ensure food security and nutrition, and to conserve, protect and improve natural resources (FAO, 2018c). Productivity and the efficiency of resource use can be increased through diversification. For example, agroecological diversification strengthens ecological and socio-economic resilience through the creation of new market opportunities (Box 13). Furthermore, the varied consumption of diverse types of foods, such as grains, legumes, fruits, vegetables and animal products, helps to improve the population's nutrition outcomes. The genetic diversity of different varieties, breeds and species is key because they contribute different micronutrients and other bioactive compounds to the population's diet (FAO, 2018c).

BOX 13

NICARAGUAN DRY CORRIDOR RURAL FAMILY SUSTAINABLE DEVELOPMENT PROJECT (NICAVIDA)

The Nicaraguan Dry Corridor Rural Family Sustainable Development Project (NICAVIDA) focuses on increasing incomes, improving the nutritional quality of diets and strengthening the climate change adaptation capacities of 30,000 rural families (approximately 152,000 people, equivalent to 17 percent of the Dry Corridor's population). Of this target group, 52 percent are women, 20 percent are youth and 12 percent are indigenous.

The project has combined urban and rural labour integration strategies with agricultural production for the producers' own consumption and for the market. It has promoted diversified production systems to improve access to diverse and nutritious foods, balance women's workload, promote and boost women's incorporation and participation in rural productive organizations, and stimulate women's economic empowerment through the development of small businesses.

The project's main outcomes include the formulation of 1,224 family plans, incorporating 20,470 people (68 percent of the target population). Along with technical assistance and the provision of productive inputs, the project provides nutrition education with a special emphasis on breastfeeding mothers and the families linked to the family plans.

The project has aimed to integrate food security in its gender and social inclusion strategy by seeking synergies between women's economic empowerment, participation in community organization mechanisms, and empowerment in food security.

The project, supported by IFAD, is managed by the Ministry of Family, Community, Cooperative and Associative Economy (MEFCCA) in 37 municipalities in 8 departments, with the participative collaboration of the Ministry of Health (MINSA) among others.

SOURCE: IFAD, 2016.

Likewise, simple digital innovations can generate new opportunities to improve production processes and promote more diversified, sustainable, nutritious and profitable production (Box 14). Digital agriculture can facilitate the reduced use of inputs, contribute to optimizing productivity and competitiveness, foster cooperation between farmers, and enable direct connections between producers and consumers (ECLAC, FAO & IICA, 2019). The implementation and use of information and communication technologies in agriculture and the food value chain must consider measures to reduce the digital gap in the most lagging territories. They must also factor in the costs of the technology, and the population's degree of digital literacy and skills (Trendov, Varas, & Zeng, 2019).

BOX 14

SEMI-ARID SUSTAINABLE DEVELOPMENT PROJECT IN THE STATE OF PIAUÍ IN BRAZIL

The objective of the Semi-arid Sustainable Development Project in the State of Piauí, implemented by the Secretariat of Family Farming (SAF) with support from the International Fund for Agricultural Development, is to reduce rural poverty and extreme poverty levels by improving the agricultural and non-agricultural incomes and employment opportunities of poor rural households, thus optimizing the economic potential that exists in the project area.

It targets the promotion of training and technical assistance in the use of sustainable technologies, improved access to financial services and short-term credit, strengthened social and productive organizations to increase their bargaining power and ability to access goods and services, and the provision of small grants for agricultural investments. The project promotes an integral approach that aims to respond to the specific circumstances of the participants and their territories.

SOURCE: IFAD, 2009 and Secretariat of Rural Development, 2018.

In Central America and Mexico, a strategy is being applied that combines subsistence production with production oriented towards generating monetary income, for example in pairing maize and beans, which are the foundations of the production and foods systems of small farmers and rural indigenous populations (ECLAC, FAO & IICA, 2019). In Mexico, beans are an important product cultivated by more than 570,000 producers for their own consumption, with native varieties in the country's south-central region and commercial production in the north-central region. The interinstitutional project *Riqueza mexicana: para la defensa del consumo del frijol* [Mexican Wealth: Protecting Bean Consumption] promotes joint actions to strengthen the link between science and technology, the milpa[27] intercropping system, the Milpa Route, and promotion and dissemination campaigns that aim to influence the production and consumption of beans. The Mexican food security entity Segalmex has paid support prices to small-scale producers of beans and other grains such as white maize, rice and breadmaking wheat since 2019. Its goal is to boost the incomes of small-scale producers, to help improve their living standards and increase agricultural production and food self-sufficiency, reducing imports by guaranteeing support prices for basic grains and milk. The *Frijol para México* [Beans for Mexico] initiative focuses on adopting new agricultural practices to contribute to boosting the productivity of bean crops, as well as resilience to climate change, thus promoting the country's food self-sufficiency and reducing imports. The *Proyecto Nacional de Plantas Nativas para la Alimentación y la Agricultura* [National Native Plants for Food and Agriculture Project] aims to promote the development of rural communities through the recovery and sustainable use of native crops, to improve their economies and achieve restructuring, productive diversification and food self-sufficiency.

Improved access to financing is a key factor for rural and urban development; however, in LAC, a significant part of the rural population, composed primarily of poor rural households and the small and medium-sized agribusinesses in which they participate, has restricted access to financial services. The result is that this segment

[27] Land for cultivating maize and, sometimes, other crops.

of the population is unable to maximize viable agribusiness opportunities (FAO & Academia de Centroamérica, 2016).

In regard to this issue, the situation is quite heterogeneous among and within LAC countries. Villarreal (2017) highlights that, for example, in Costa Rica the State Bank has 531 branches and over 1,400 automatic teller machines in all regions of the country, which provides a broad platform for the financial inclusion of rural producers. This country has a broad supply of formal financial services, with ready access to credit for end users, but the processes are quite bureaucratic. Meanwhile, in Honduras there have been efforts to broaden supply through *cajas rurales* [rural credit and savings banks] as contingency and economic support mechanisms that aim to benefit family farming in the Dry Corridor. *Cajas rurales* promote the diversification of family farmers' incomes and a culture of savings, and help households to diversify their diet through access to products other than those that they produce. In addition to providing financial resources, rural credit and savings banks support the provision of productive inputs, such as fertilizers (FAO, 2012a).

Decent employment

As indicated in the previous section, lack of employment and precarious work are two important factors that negatively impact malnutrition levels. The creation of decent employment[28] is a key strategy to promote economic access to foods and contribute to food security in the most lagging territories. In general, women and men who live in poverty only receive income through their work. Therefore, quality employment allows families to maintain a more stable food consumption and a better quality of life (FAO, 2012b).

Moreover, policies geared towards promoting employment and income-generating activities are essential to increase people's incomes and, as a result, the affordability of healthy diets (FAO, IFAD, WHO, WFP & UNICEF, 2020).

The generation of decent employment should not be limited to promoting employability but must also improve markets and employment opportunities for poor inhabitants of rural and urban areas. To achieve this, it is important to define which actions and services are most appropriate for each area, such as, for example, those that facilitate the expansion of territorial and extraterritorial options (FAO, 2018b).

At the same time, job market institutions must be strengthened with the goal of adapting social security systems and labour market policies and interventions (employment capacities and skills, inclusive paths to access formal employment, and unemployment benefits) that are relevant to working conditions in lagging rural and urban territories. Workers who live in poverty in these territories are almost exclusively employed in the informal sector, and their incomes are low and irregular. This is a barrier to accessing contributory programmes. In this context, several options may be considered, including subsidized pillars for low-income workers or more flexible frameworks that respond, in rural areas for example, to contributory patterns that follow the income-generation cycle in the agricultural sector (Winder-Rossi & Faret, 2019).

It is necessary to highlight that in the region, rural agricultural employment has decreased while employment in the service sector has increased (Ramírez, 2019). In this sense, employment and non-agricultural rural income may be part of the solution to decrease poverty,[29] address the modernization of the agricultural

[28] Decent work is a concept developed by the International Labour Organization (ILO) to establish the characteristics that an employment relationship must have, in accordance with international standards, such that the work is carried out in conditions of freedom, equality, security and human dignity. This concept is supported by four pillars: (1) employment regulations and rights, (2) job creation and business development, (3) social protection and (4) governance and social dialogue.

[29] A study (RIMISP, online) carried out in Chile, Colombia and Mexico found that, in the three countries, non-agricultural rural employment is very important in rural areas, representing 60 percent, 67 percent and 68 percent of employment, respectively. Furthermore, it concluded that non-agricultural rural employment, when increasing in proportion to the employment in rural areas of Latin America and the Caribbean, contributes to the fulfillment of SDGs through households' increased incomes.

sector and improve the quality of life of the rural population (Berdegué, Reardon, Escobar, & Echeverría, 2001).

The diversification of incomes with non-agricultural sources is one option for the development of rural areas, and it can reduce hunger and poverty. Hence, an important component of rural economic policies should be a focus on capacity building and continuing education after secondary school. Also, the development of physical infrastructure is fundamental to develop urban-rural links to enhance product, input and labour markets.

It is also important to improve the employment opportunities and conditions in peripheral urban zones in which there are high poverty rates. To this end, human capital must be strengthened to improve employment opportunities through remedial education programmes and training. This should include mechanisms that promote the labour insertion of youth, strengthening links between the education system and the labour market. Another important aspect is the creation of employment programmes. The most important instrument for generating employment for vulnerable groups is public employment programmes, which could be coordinated with broader development strategies to generate long-term impacts. It is also essential to support small businesses, so they improve their capacities and increase their productive resources and opportunities to access markets (Millenium Project, n.d.).

The National Employment Programme (PRONAE), implemented by Costa Rica's Ministry of Labour and Social Security, offers economic subsidies and supplementary benefits to people belonging to legally recognized organizations within their communities, to promote entrepreneurship in rural tourism, agro-industry and craftmanship; employment in communal works, such as the construction of classrooms in schools, maintenance of rural roads, multi-purpose rooms and health centres; and training in strategic areas such as languages, computer science and tourism management (Ministry of Labour and Social Security of Costa Rica, cited in FAO, 2018). Since 2009, PRONAE has incorporated the Indigenous Works modality to support communal construction projects in the country's indigenous territories (FONDESAF, 2017).

2.2.2. Measures to improve the production of, and physical access to foods that promote adequate nutrition in lagging territories

The region has enough food to feed its entire population. The productive capacity and commercialization mechanisms that have been developed in recent decades could be sufficient to provide nutritious food for all (FAO, 2019). However, this does not mean that everyone has the quantity and diversity of foods that are necessary to ensure the population's adequate nutrition (Intini, Jacq, & Torres, 2019). This is especially relevant in certain territories (rural and urban), that present high levels of stunting and childhood overweight, and in which it is difficult to access nutritious, diversified and quality foods. In this context, it is important to develop policies that aim to improve the availability of and physical access to sufficient and healthy food.

As previously stated, the territories' specific characteristics determine which factors may be more relevant than others in explaining the different forms of malnutrition. As such, for a low-income urban household, physical access to adequate foods may be a determinant of potential cases of undernutrition (or even overweight). However, for a low-income rural

household, physical access to food would not be a determining factor, since it would be easier, for example, to access farm products or fruits and vegetables from gardens.

Therefore, the following measures are presented below: sustainable nutrition-sensitive agriculture and value chains, school feeding programmes, and short marketing circuits.

Sustainable nutrition-sensitive agriculture and value chains

Improving physical access to foods that promote adequate nutrition requires the implementation of policy options and incentives that foster nutrition-sensitive agricultural production. In other words, investments must be made in options that support the production of varied products such as fruits, vegetables, dairy products and meat that permit a varied and adequate diet. Investments that support the production of varied and nutritious foods are essential to provide greater access to adequate food in poor rural environments (FAO, IFAD, WHO, WFP & UNICEF, 2020).

The promotion of nutrition-sensitive agriculture is one of the main productive approaches to address the different forms of malnutrition. In Latin America and the Caribbean, promoting productive initiatives that support healthy and sustainable foods helps to address the different forms of malnutrition, while integrating a clear sustainability approach (IFAD, 2019).

The objective of nutrition-sensitive agriculture is "to maximize the positive impact of the food system on nutrition outcomes while minimizing any unintended, negative consequences of agricultural policies and interventions for the consumer" (UNSCN, n.d., p. 1). The agriculture sector is essential for the achievement of nutrition objectives.

This type of agriculture focuses on the benefits generated from a varied diet and recognizes the nutritional value of foods for adequate nutrition, health and productivity. It also recognizes the social importance of the food and agriculture sector for sustaining rural livelihoods. Nutrition-sensitive agriculture focuses on poor households, promotes gender equality and provides nutrition education to improve households' nutrition, with an emphasis on women and children. It also links agriculture to other sectors such as education, health and social protection to address the different causes of malnutrition (FAO, 2020f).

This approach begins with an analysis of the food security and nutrition context, identifying the main nutrition problems that the target population is facing (especially those related to excessive or insufficient consumption of certain foods or food groups) and the main causes of these problems. From there, an integral analysis of the local food systems is carried out, considering their contribution to food security and nutrition, as well as their sustainability from an economic (income generation and poverty reduction), social (inclusion of vulnerable groups and gender equity) and environmental (sustainable management of natural resources and resilience to climate change) perspective.

This analysis facilitates the identification of products and specific value chains that are not only economically viable, but that can also respond to the population's nutritional needs and strengthen the capacity of the food system to ensure access to adequate food in a way that is sustainable and inclusive. Once the value chains with this potential have been selected, they are analyzed to identify nutrition-sensitive investments in each link of the chain (de la Peña & Garrett, 2019).

- At the production level: promotion of good agricultural practices, reduction of pesticide use, promotion of varieties and species with high nutritional value, scaling up production to increase availability all year long, etc.
- At the level of storage, processing and transportation: promotion of inputs, equipment and infrastructure that preserve the nutritional quality of the product, ensure food safety and reduce post-harvest loss.
- At the commercialization level: improvement of hygiene conditions in local markets, family farmers' improved access to institutional markets (public purchasing) that serve vulnerable populations, etc.
- At the consumption level: nutrition awareness-raising campaigns for consumers,

promotion of the consumption of nutritious foods that comprise a healthy diet, preparation of nutritious recipes adapted to local tastes, emphasis on local products and traditional diets with high nutritional value, etc. Measures that seek to regulate advertising, front-of-pack labelling, and fiscal policies are the most cost-effective policies at the consumption level to promote healthy eating. In contrast, there is little evidence of the effectiveness of nutrition awareness-raising campaigns, and these are also very costly.

In this way, it is possible to identify investments in specific value chains that contribute to promoting nutrition-sensitive, sustainable and inclusive food systems (Box 15).

Likewise, the production of diverse foods must be promoted in peri-urban and urban environments. The growth of the urban population, due to migration from rural zones to urban areas and population growth, has led to increased poverty, food insecurity and malnutrition. Rapid urbanization and urban poverty require strategies that ensure adequate food supply and distribution systems to address urban food insecurity rates and their adverse effects on the population's food and nutrition (FAO, 2011).

In general, urban consumers depend on purchased foods that come from rural areas or are imported. However, in response to a lack of economic resources, the urban poor must turn to urban and peri-urban agricultural activities for their sustenance and survival (FAO, 2011), investing in the production of horticultural crops to provide better access to fresh products such as fruits and vegetables. Moreover, as these are shorter chains, there is a decreased risk of food loss along the supply chains (FAO, IFAD, WHO, WFP & UNICEF, 2020).

A study of eight countries by the United Nations System Standing Committee on Nutrition (n.d.), concluded that Brazil's food and agricultural policies and plans are the most nutrition-sensitive. These policies take a sustainable approach to improved foods and nutrition, the increased production of foods, targeting groups that have higher levels of vulnerability, improving access to markets and food processing and storage. However, the report indicates that there is not enough emphasis on increasing the production of nutrient-rich foods, promoting transformation processes that preserve nutritional value, decreasing post-harvest loss, and incorporating nutrition education.

BOX 15

PROJECT FOR THE ECONOMIC AND SOCIAL INCLUSION OF SMALL RURAL PRODUCERS IN NORTHEAST HONDURAS (PROINORTE)

The objective of the Project for the Economic and Social Inclusion of Small Rural Producers in Northeast Honduras (PROINORTE), with an investment of US$46.9 million, implemented by the Ministry of Agriculture and Livestock and financed by IFAD, is to improve nutrition and increase the incomes of rural smallholders, thus strengthening their resilience.

To this end, it has adopted a sustainable food system approach to selecting and promoting value chains. This approach entails analyzing food systems through a participative process of regional consultation in which the local population and authorities select the value chains. This multi-stakeholder consultation methodology raises the awareness of local stakeholders about the need to consider food security and nutrition in the selection of value chains, identify the challenges and benefits of each chain, and to ensure strong ownership by local stakeholders. The selected value chains are analyzed through a multidimensional lens to identify investments that can improve the demand and supply of nutritious foods or add nutritional value.

On the demand side, the project will develop awareness-raising campaigns on healthy and balanced diets for at least 15,000 beneficiaries, as well as promotional campaigns that show the nutrition benefits of specific products.

On the supply side, it will promote safe and environmentally sustainable practices to ensure the production of diverse and safe foods.

At the commercialization stage, the project develops sustainable commercial partnerships between producers and buyers, with a special focus on short value chains. Furthermore, the school feeding programme, supported by the World Food Programme, will be one of the key markets for small-scale producers' nutritious products.

SOURCE: IFAD, 2018.

School feeding programmes

School feeding programmes (SFPs) provide food to students, generally those with higher levels of vulnerability who suffer from food insecurity. On average, this type of programme benefits 37 percent of households globally (WB, 2018). According to the World Bank (2018), the SFPs that reach the greatest number of poor people are in Bolivia (Plurinational State of) (73 percent coverage), El Salvador (69 percent), Nicaragua (67 percent), and Honduras and Panama (66 percent in both cases).

SFPs are multisectoral policies that can contribute to different strategic areas including, but not limited to, education, health, agriculture and territorial development. They are cross-cutting policies that seek to address poverty, and can also promote the development of children and adolescents, improve eating habits and ensure access to a healthy diet. In addition, they can promote the more inclusive development of the local economy when they are linked to food procurement from family farming (FAO, 2019).

Currently, almost all LAC countries have SFPs and approximately 85 million children receive some type of school feeding (breakfast, snack, lunch or a combination of these), with an annual investment of approximately US$4.3 billion that generally comes from national budgets (WFP, 2017a).

SFPs can promote the adequate consumption of macronutrients and micronutrients in children's diets, which improves nutrition and health, decreases morbidity and increases learning abilities. Furthermore, they can help to prevent overweight and NCDs if standards are adopted to limit free sugars, saturated fats, trans fats and sodium. Foods that are provided through these programmes are often fortified to provide additional micronutrients to students, thus contributing to reducing the prevalence of anemia and improving their nutritional status. Moreover, these programmes can help children to adopt healthier diets, because eating habits that are developed during childhood are likely to be maintained during adulthood. This may be part of the solution for addressing the double burden of malnutrition (WFP, 2019).

A study by Bundy et al. (2009) shows that SFPs explicitly or implicitly transfer the value of the foods that are provided at school to households. They are also relatively easy to expand during a crisis and their benefit per household can surpass 10 percent of household expenditures (Box 16). This type of transfer increases school attendance, cognition and educational performance, especially if they are complemented by measures such as de-worming and micronutrient enrichment or supplements that improve students' nutrition.

Even more importantly, Bundy's study notes that SFPs have the potential to impact lagging territories, serving also as a strategy through which to fight poverty and food insecurity. Furthermore, during the past decade, they have evolved from targeted welfare programmes into more institutionalized programmes with universal coverage at the first level of schooling (FAO, 2013a).

However, infrastructure conditions can be insufficient and inadequate, especially in rural sectors, and this affects the quality of SFPs. This is partly due to the lack of resources to improve infrastructure. Furthermore, in rural areas equipment is either lacking or in poor condition, and there is an insufficient supply of water, electricity and sanitary services (FAO, 2013b).

Bolivia (Plurinational State of) has a highly decentralized approach to school feeding. Autonomous municipal governments are the entities responsible for providing school feeding services from the planning phase to their implementation and monitoring. To this end, they establish their own implementation and administration systems. Communities participate through Social Community Education Councils]() that manage and operate the programmes in schools and are an essential control mechanism. These councils organize the preparation and distribution of school meals in the territories (WFP, 2014). The cost-benefit analysis carried out by the World Food Programme (2017) in 15 municipalities of Bolivia (Plurinational State of)[30] concluded that the National Complementary School Feeding Programme (PNACE) is an important investment for students, their families and the entire community, in rural and urban areas. Every dollar invested in the programme has an economic return of 4.71 dollars in urban areas and 5.20 dollars in rural areas, and for each additional year in school, children's future incomes increase by 7 percent. Furthermore, by receiving nutritious food at school, students improve their nutrition levels and health status in general. School attendance is also increased in urban and rural areas (7.90 percent and 9.95 percent, respectively) and the school drop-out rate decreases by 3.03 percent in urban areas and 2.37 percent in rural areas. School feeding programmes also provide a market for local agricultural production, which boosts local economies.

[30] Department of Chuquisaca (Alcalá, Culpina, Icla, Incahuasi, Las Carreras, Mojocoya, Poroma, Sopachuy, Sucre, Tarabuco, Tarvita and Zudañez) and department of Tarija (Padcaya, Tarija and Yunchará).

Brazil is a benchmark for public procurement from family farming with its Food Procurement Programme (PAA) in the framework of the *Fome Zero* programme. One of its modalities, Direct Purchasing with Simultaneous Donation, in addition to purchasing from family farming, foresees donations to entities from the social protection network (in other words, it contributes to food security at both ends, the small-scale producers and the families receiving the donation). Brazils´s National School Feeding Programme (PNAE) also stipulates that 30 percent of food procurement must come from family farming. The PAA and PNAE are considered to be the most significant public procurement programmes from family farming in the world.

In Chile, the companies supplying school feeding programmes must buy part of their inputs from family farming, local small-scale producers and producers from lagging areas. Specifically, the companies must acquire 15 percent of their inputs from producers in the regions in which they are providing services, or acquire 10 percent of these inputs in territories designated as "lagging areas" that are part of the Lagging Areas Programme.[31] Meanwhile, private entities that offer the service in the Santiago Metropolitan Area must acquire 50 percent of their inputs from lagging areas.

With the aim of supporting the Government of Guatemala in the implementation of the School Feeding Law, which stipulates that 50 percent of food for school feeding programmes must be acquired from local farmers, IFAD, FAO and the WFP decided to join forces and work alongside key actors, such as the Ministry of Education (MINEDUC) and the Ministry of Agriculture and Livestock (MAGA). IFAD, FAO and the WFP are developing a project that aims to strengthen the capacities of the school feeding programme value chains, with a sustainable link to family farming, to provide students with healthy, nutritious, diverse and locally-sourced foods. The project is being developed in 20 municipalities in the departments of Alta Verapaz, Chiquimula and San Marcos, and this experience will serve as the foundation to institutionalize the approach of linking family farming to school feeding programmes, to systematize the practices and lessons learned and to help the Government to sustainably expand the proposed model at the national level. Each incremental dollar invested has a return of 3.1 dollars in terms of improved education and productivity, longer and healthier lives, and local economic development, among other factors. This translates into an incremental benefit of 2,184 dollars during the life of a student, in comparison with an incremental cost of 712 dollars per student during the school feeding programme period.

[31] The objective of the Lagging Areas Programme is to reduce inequalities through the implementation of public policies geared towards reducing development and well-being gaps that affect these territories in comparison with the rest of the country. This is achieved through an intersectoral and participative intervention policy, with a focus on productive development, the transfer of skills and the generation of social and human capital.

BOX 16

SCHOOL FEEDING POLICIES AND PROGRAMMES TO ENSURE THE HEALTHY NUTRITION OF CHILDREN AND ADOLESCENTS DURING THE COVID-19 PANDEMIC

School closures and the suspension of school feeding programmes as a consequence of the measures implemented to avoid the spread of the novel coronavirus have meant that at least 10 million children in the most vulnerable conditions ceased to access food distributed in schools.

In the framework of the United Nations Decade of Action on Nutrition (2016-2025), the *Red de Alimentación Escolar Sostenible* [Sustainable School Feeding Network], which includes 23 countries from the region, has so far identified 14 countries that have continued to support 55 million school children of the 65 million who are affected. This SFP intervention in the context of COVID-19 has prioritized those territories that are the most vulnerable to food insecurity.

The modalities for reaching students are diverse and include delivery to each family in their home, cash transfers, food vouchers and food parcels containing perishable and non-perishable products that a guardian can pick up at the school centres. Some examples of countries that have implemented SFPs during the pandemic are the Dominican Republic, through the National Institute for Student Well-being (INABIE) and Brazil, led by the National Fund for Educational Development (FNDE) and at the municipal and state level. In Costa Rica and Honduras modalities are also being implemented to provide food kits as a supplement to the food that school children receive in their homes.

The exchange of experiences, lessons learned and mechanisms to implement school feeding programmes during the COVID-19 pandemic has been key so that other countries can continue to offer the service even when schools are closed. In several countries it was necessary to modify the regulatory framework that was in place, make purchasing mechanisms more flexible, and implement biosecurity protocols in accordance with the instructions given by the ministries of health and the World Health Organization. Moreover, this SFP modality has allowed the continuation of nutrition education actions, included in the food parcels or provided virtually, that emphasize hygiene and safe food preparation.

There will be short-, medium- and long-term challenges after the pandemic. Initially, it will be necessary to strengthen technical assistance networks to reopen schools and create methodologies that contribute to healthy and safe school feeding. Later on, school feeding policies will need to be strengthened as a strategy to ensure the improved quality of education, food security, nutrition and social protection.

SOURCE: FAO & ECLAC, 2020.

Short marketing circuits

Developing different short marketing circuits – bringing producers and consumers closer together, reducing intermediation or promoting agreements between producers and sales chains – is an important measure to improve access to healthy foods and habits (Intini & Torres, 2019). Moreover, these types of policies contribute to improving the incomes of producers and the food security and nutrition of the population in the territories in which the circuits are implemented, while also reducing the environmental impact of agrifood chains. Short circuits have become more widespread in the region and they have been established mainly through ecological and organic markets, as well as through the promotion of local markets.

The surge in short marketing circuits as a type of commerce is due in part to consumers' increased demand for local, healthy and seasonal products (ECLAC, 2014). Thanks to this type of commerce, people can access products that promote adequate nutrition, such as fruits and vegetables.

It must be noted that, although short marketing circuits have expanded, they are not new; rather, short circuits decreased as a result of the concentration of the population in urban centers and the intensification and scaling up of production. This led to the appearance of intermediaries, distributors and retailers, and the development of long and complex marketing chains (Köbrich Grüebler, Bravo Peña, & Cano Silva, 2015). Consequently, food supply became concentrated in supermarket chains and large areas.

In local communities, short marketing circuits are an important vector for the territories' revitalization and appeal. They are considered a way to relocate value chains to keep value within territories,[32] as they generate employment, capture value based on intangible assets (brand, territorial rootedness), improve the resilience of territories and value heritage (ECLAC, FAO and IICA, 2014).

Short marketing circuits are especially relevant in the framework of promoting sustainable nutrition-sensitive food systems and value chains. Low-income consumers (who live in lagging territories) generally acquire food in local and informal markets. Therefore, the development of short marketing circuits that provide diverse, safe and healthy foods improve the most vulnerable populations' access to a healthy diet (de la Peña & Garrett, 2019).

One of the main challenges is carrying out research on the potential of the different types of short marketing circuits for the agrifood chain stakeholders and territories, in order to influence better public policies from an integrated territorial perspective (FAO, 2016b).

In Chile there has been a growing trend towards the proliferation of short marketing circuits that promote commercial channels for the products of family farming. For example, the Agricultural Development Institute (INDAP) has developed a series of initiatives and programmes related to marketing and added value that supply produce from family farmers to the inhabitants of towns and cities, in such a way that producers sell directly to consumers. Moreover, open-air markets located mostly along public roads are one of the principal means by which small holders sell their produce and they supply fruits and vegetables to the population. According to the National Registry of Open-air Markets (SERCOTEC, 2016) there are more than 1,100 open-air markets throughout the country and 340,000 vendors.

[32] However, this requires the mobilization of greater public and private investment in these territories.

2.2.3. Measures to improve the use and quality of foods in lagging territories

Within the range of policies that address all forms of malnutrition in the most lagging territories, this section highlights those that aim to ensure adequate support and nutrition practices, healthy eating habits and a healthy home environment and appropriate health services.

This section describes the policy measures that address the food and nutrition needs of children, youth and women of reproductive age, as these are the groups receiving special support to prevent the intergenerational cycle of malnutrition. Subsequently, interventions will be analyzed that are equally essential to ensure the biological utilization of food, such as the provision of safe drinking water, interventions related to communication for social and behavioural changes, and policies to ensure the quality of foods consumed outside the home.

Policies promoting maternal-infant nutrition

Maternal-infant nutrition interventions have focused on the first 1,000 days of a child's life, from pregnancy until age 2, since this is the period identified as an opportunity to prevent infant morbidity and mortality and ensure adequate growth. During this period, children have greater nutritional needs for their growth and development; if these are not met, stunting may be irreversible. Adequate nutrition during the first 1,000 days is also important to prevent overweight and NCDs. Therefore, interventions to improve infant and child feeding are a cornerstone of maternal and child nutrition policies (IFPRI, 2016).

Income inequalities in the region limit access to quality health services of population groups with greater levels of vulnerability or social exclusion, such as women, indigenous and Afro-descendant populations, people with lower schooling levels, those in the lowest income quintiles and people who live in rural areas or in the periphery of large cities (GTR, 2017). These inequalities threaten the progress that has been achieved in terms of health, growth and development (Etienne, 2013).

Governments must address inequalities in access to healthcare in the different territories, considering that marginalized groups are those that face greater barriers to accessing health services (GTR, 2017). Economic and social factors and geographical borders are associated with observable differences in rates of maternal-infant mortality and morbidity, and these differences also exist within LAC countries (Etienne, 2013).

Countries such as Chile, Costa Rica, Cuba and Uruguay have succeeded in reducing their maternal and infant mortality rates through social protection policies that provide universal healthcare. However, there have been several obstacles to the effective application of these policies in other countries in the region with more heterogeneous and unequal populations (GTR, 2017) .

More than 90 percent of the population of Brazil, Chile, Colombia, Jamaica, Mexico y Peru are recipients of some type of healthcare policy. Brazil and Peru have opted for decentralized health services to broaden their coverage, while Bolivia, Mexico and Peru have implemented free health insurance for people in the lowest quintiles. On the other hand, Colombia has opted for private sector participation (Etienne, 2013; GTR, 2017).

The best practices for infants and children are focused on exclusive breastfeeding for the first six months and continued breastfeeding until at least age 2, and on complementary feeding; in other words, the introduction of safe, soft, age-appropriate solid foods beginning at 6 months. The promotion of breastfeeding has proven to be a promising intervention to improve nutrition (IFPRI, 2016). However, to achieve breastfeeding until at least 6 months, promoting it is not enough. Social protection measures are also necessary to protect working women.

Colostrum and breast milk provide essential nutrients for the growth and development of infants, and benefit their nutrition habits, which decreases the risk of suffering from overweight and obesity in adulthood; they also protect against infant stunting and wasting. Moreover, exclusive breastfeeding helps to regulate maternal post-partum weight gain;

this, in turn, provides additional health benefits related to nutrition for mothers, protecting them from obesity and some NCDs later in life (WHO, 2014b).

Combining breastfeeding with adequate complementary feeding also protects against stunting. Moreover, the type of complementary feeding, and when it is introduced, can influence future risks of overweight and obesity (Pearce & Langley-Evans, 2013; Bhutta et al., 2013).

As noted in the previous section, in Caribbean countries such as Haiti and Jamaica there are lagging areas in relation to stunting. The Baby-friendly Hospital Initiative seeks to ensure that all mothers and babies who are born in maternity facilities are fully supported in breastfeeding. The initiative may significantly improve the health of mothers and babies by protecting, promoting and supporting breastfeeding (WHO, 2017).

Similarly, Brazil has made significant progress in improving breastfeeding practices. The average duration of breastfeeding increased from approximately 2.5 months in 1974–1975 to 14 months in 2006–2007. An increase in exclusive breastfeeding rates has also been observed, from 4 percent in 1986 to 48 percent in 2006–2007. This is all due to a series of actions implemented by the central Government. In 1981, they launched the National Programme to Promote Breastfeeding through a media campaign to raise the awareness of decision-makers and the public relative to the need to improve breastfeeding rates. Targeted communication strategies were developed through multiple channels and with messages that were adapted to the local context and the specific barriers to breastfeeding. However, this success could not have been achieved on its own. A broader expansion was required of access to health services, maternal-infant nutrition, and policies in support of the most vulnerable groups. Furthermore, Brazil has also supported the development of human milk banks in neonatal intensive care units in almost all countries of the LAC region, which not only provide human milk to newborns in critical situations, but also promote a breastfeeding culture in hospitals (IFPRI, 2016).

Complementary feeding

WHO and UNICEF recommend introducing safe and nutritionally adequate complementary foods beginning at 6 months, and continuing breastfeeding until at least age 2 (WHO, 2020).

Complementary feeding contributes to progress towards three global nutrition goals for 2025:[33]

- 40 percent reduction in stunting (low height for age) in children under 5 (WHO, 2017a).
- no increase in childhood overweight (WHO, 2017b).
- reduce and maintain infant wasting below 5 percent (WHO, 2017c).

At around 6 months, breastfeeding is no longer enough to cover infants' energy and nutrient needs (WHO, 2020). It is specifically recommended to continue breastfeeding on demand, with frequent feedings, until age 2 or more, and to offer varied, nutrient-rich foods,[34] beginning with small quantities and gradually increasing the quantity and frequency with which they are offered. Animal products such as meat, chicken, fish, eggs and dairy products are particularly important because they provide essential nutrients, especially iron and zinc, and they promote adequate physical growth and optimal cognitive performance (UNICEF, 2019a). Introducing fruits, vegetables, legumes, nuts and seeds before age 2 is beneficial because they are a source of vitamins, minerals and fibre, and children become accustomed to eating them through to adulthood. Furthermore, it is recommended that children be fed lovingly and patiently, maintaining eye contact and responding to their cues of hunger and satiety, encouraging them to eat but not forcing them.

If children's nutrition is not diverse enough beginning at 6 months, it is possible that they will not obtain sufficient nutrients for adequate

[33] SGD target 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants under 1 year of age, to safe, nutritious and sufficient food all year round.

[34] UNICEF and WHO recommend that children of this age consume a minimum of five of the eight food groups.

growth, which may have a negative effect on their physical and mental development (UNICEF, 2019a). The nutrition that they receive between 6 months and 23 months may also be one of the main risk factors for overweight, especially if: (1) children at that age consume foods with high sugar, salt or fat content, which predispose them to prefer less healthy foods later on, and (2) their caregivers' feeding practices do not respond to hunger and satiety cues, which may contribute to the overconsumption of foods (UNICEF, 2019b).

Only slightly more than two-thirds of children between ages 6 months and 8 months worldwide consume complementary foods. However, too many begin receiving them before 6 months. In LAC, almost half of babies between 4 months and 5 months, and approximately 15 percent of babies between 2 months and 3 months already receive solid food (UNICEF, 2019a). In terms of dietary diversity in the region, the data are more encouraging. At the global level, 29 percent of children between 6 months and 23 months consume foods from at least five of eight food groups, in comparison with 60 percent in LAC (UNICEF, 2019c). Peru, El Salvador and Cuba are at the top of the list of countries with the highest percentages of children between 6 months and 23 months who consume a minimum of five out of eight food groups (83 percent, 73 percent and 70 percent, respectively), while the Dominican Republic, Guyana and Haiti are at the bottom of the list (51 percent, 40 percent and 19 percent, respectively). Despite this data, in the region, 30 percent of children in this age groups do not receive animal products and 20 percent do not eat any type of fruit or vegetable. Children between 6 and 11 months of age have a less diversified diet than children between 12 and 23 months of age.

In terms of commercial foods for babies and infants, their sales at the global level have increased in recent years and there is great concern about the damage that they may cause during the first years of life: the high levels of saturated and trans fats, free sugars and salt in some of these products may predispose children to suffer from NCDs and shape their preferences and eating habits throughout their lives (UNICEF, 2020b). Packaging may also be problematic when foods come ready to eat, because the ease and speed of consumption can lead to high-calorie intake in a short period of time, in addition to creating families' dependence on these products to the detriment of homemade foods. Lastly, the promotion and advertising of these products contribute to this problem; a case in point is the inappropriate promotion and advertising of breastmilk substitutes. In some countries in the region, such as Chile, Mexico, Peru and Uruguay, the governments are taking increasing measures to reduce the consumption of unhealthy foods, for example requiring front-of-pack labels to alert consumers about the nutrient content of foods, including those targeting children.

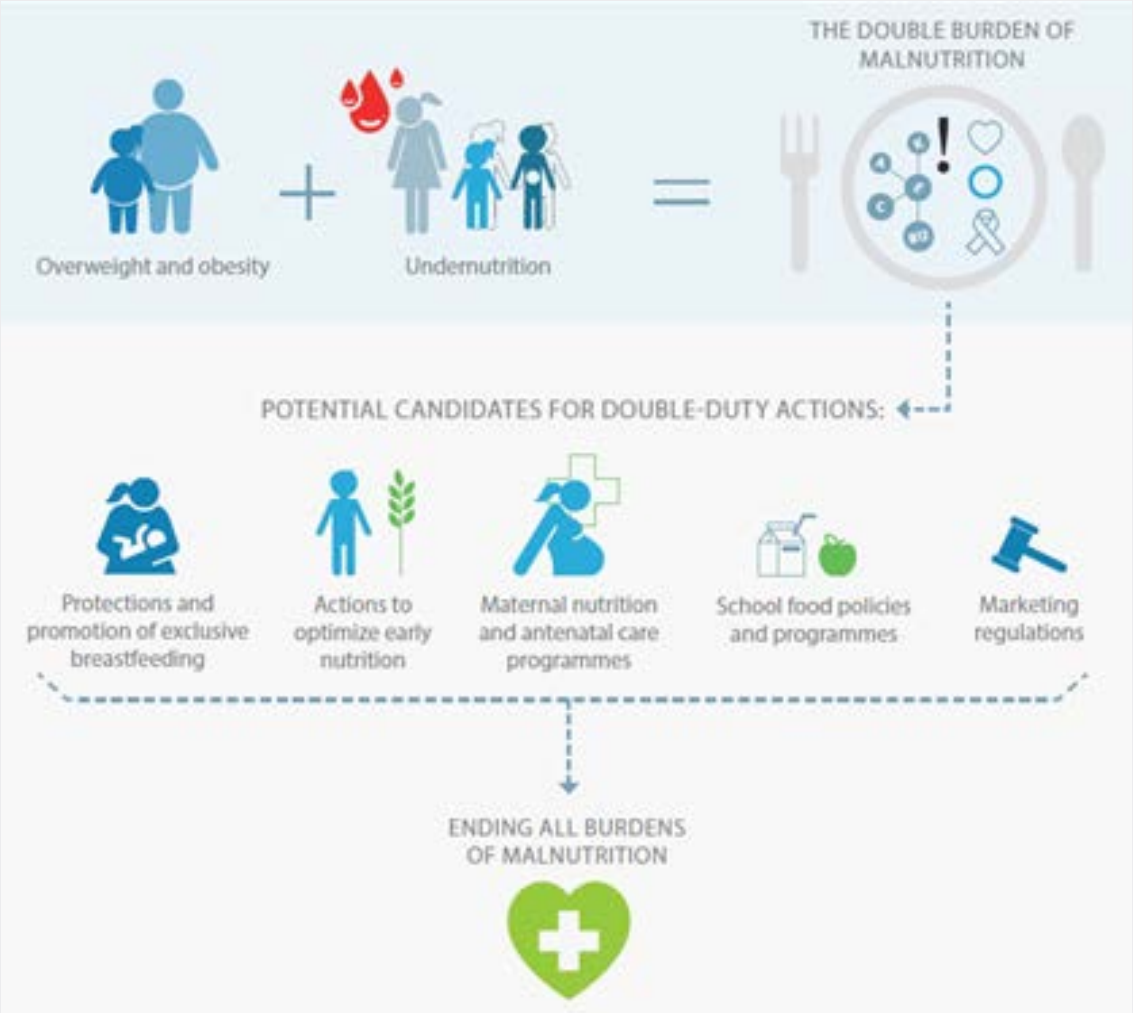
Since undernutrition, overweight and obesity often coexist, it is important to offer integrated solutions (Box 17).

BOX 17
DOUBLE-DUTY ACTIONS

Double-duty actions include interventions, programmes and policies that have the potential to simultaneously reduce the risk of the burden of undernourishment (including wasting, stunting and micronutrient deficiency or insufficiency) and overweight, obesity or diet-related NCDs (including type 2 diabetes, cardiovascular disease and some types of cancer). Double-duty actions leverage the coexistence of multiple forms of malnutrition and their shared drivers to offer integrated solutions.

Double-duty actions are not necessarily new actions. Often, they are actions that are already used to address single forms of malnutrition, but they have the potential to address multiple forms simultaneously.

SOURCE: WHO, 2017a



Water, sanitation and hygiene

Despite the progress that has been recorded in the region since 1990 in the coverage of improved sources of drinking water, thanks to the expansion of running water, inequalities continue to exist in sanitation coverage and access to clean drinking water. Part of the population still lacks water and sanitation services. In 2015, 18 million inhabitants of Latin America and the Caribbean practiced open defecation and 34 million were still using unimproved sources of water for human consumption (JMP, WHO and UNICEF, 2016). Furthermore, there are wide disparities, linked to levels of wealth, in accessing improved sanitation and drinking water. In LAC, the coverage of sanitation and drinking water is considerably lower in the poorest households. Furthermore, the coverage of sanitation and improved sources of drinking water is lower among indigenous groups. Due to the lack of infrastructure and inadequate public services, the living conditions of the population living in peripheral zones, such as in poor neighborhoods of central areas, are inadequate. In central urban regions, people in the poorest quintiles cannot access safe housing with adequate water, sanitation and hygiene. In the periphery, people do not have access to water or sanitation, and they do not have waste collection services. Furthermore, people who live in self-built houses in illegal and informal subdivisions generally have to pay higher prices for water (IADB, 2009).

The report of the Joint Monitoring Programme for Water Supply and Sanitation (JMP), implemented by WHO and UNICEF (2016), indicates that there are significant differences relative to water, sanitation and hygiene between subregions, countries and regions within countries.
For example, in Brazil the coverage of running water in households or dwellings varies by region. Although at the national level running water reaches over 80 percent of households or dwellings, the lowest percentages were recorded in Rondônia (37 percent), Acre (45 percent), Pará (46 percent) and Amapá (56 percent).
The coverage of improved sanitation also varies considerably between regions with the greatest and the least coverage. In Honduras, the coverage of improved sanitation reaches 88 percent of households in the departments of Atlántida and Choluteca, while in the department of Gracias a Dios it only reaches 30 percent.

Interventions in the nutrition, water, sanitation and hygiene sectors are closely linked.
People's nutrition is affected by a series of relationships between poor quality or insufficient water, poor sanitation facilities (or lack thereof) and poor hygiene practices. Inadequate food intake and diseases and infections related to different factors cause malnutrition. In addition, insufficient access to water, sanitation and hygiene can cause serious nutrition problems, either due to diarrhea, infections or environmental enteropathy. All of these affect the absorption of nutrients and put the population's health at risk, especially the health of the most vulnerable groups, in this case children (IFPRI, 2016; UNICEF & Humanitas, 2018).

In Brazil, *Programa Cisternas* [the Cistern Programme]) aims to increase access to water for human consumption and water for production for families living in extreme poverty in the rural semiarid region. The family targeting strategy is based on Brazil's *Cadástro Único* [Single Registry] and the targeting of municipalities is based on food insecurity data from the Ministry of Citizenship. Between 2003 and 2016, 1.2 million water cisterns were built, and the goal of 1 million was reached in 2014. This has benefitted 4.5 million people in the semiarid region. The population is learning to sustainably cultivate their small plots through the resurgence of traditional methods and native species. Saving and storing water means that there is less or no need to use fertilizers. They are also learning to conserve the *caatinga* (surrounding forests and shrublands) and to plant trees, cassava, cactus and other resilient native vegetation. The policy is transformative for women. The cisterns are registered in the name of female heads of households, which gives them ownership, status and responsibility. Collecting water in households means they no longer have to walk kilometers to collect water. Children can go to school and women have free time for other activities: community participation, learning new skills and growing food, such as vegetables, native and medicinal plants, and raising chickens and goats. This gives women greater independence and incomes and increases their families' food security (World Future Council, 2020).

Communication for social and behavioural change to reduce barriers to adequate nutrition

Over 40 million people suffer from hunger in LAC, and almost one of every three children under 5 is anemic. Simultaneously, overweight and obesity are an increasing problem in the region: 60 percent of the adult population is overweight and 24 percent are obese. However, these numbers lead to more complex questions: What do people eat? What choices do they make when purchasing? How do they use cash? Why? How can positive change be generated? Each meal implies a decision, and one that reflects the environment in which the decisions are made. However, what is eaten is not only an individual responsibility; to a great extent, the decision is a result of what food systems, industries and supermarkets produce and advertise, as well as prices and subsidies.

In the last 20 years, the region has achieved significant progress in reducing malnutrition. However, the poorest families still spend most of their income on food, and overweight and obesity are increasing in most countries. Nevertheless, the barriers to accessing foods that promote adequate nutrition are rooted in structures and social norms, and in power relationships and practices.

Communication strategies (social marketing, engagement, communication for social and behavioural change) can contribute to creating new norms and activating positive changes in food environments and food-related decisions.

In this sense, the different components of social protection programmes or community services reduce physical, structural or economic access barriers to healthy nutrition. Communication also contributes to reducing possible psychosocial barriers (stereotypes, myths, self-confidence, gender norms) and making healthy diets an aspiration.

Experiences and interest in this type of combined designs that transcend the more unidirectional approach of nutrition education have been growing in international organizations, civil society and national and local governments in the region. Their fundamental approach, in addition to integrating these initiatives with other programmes and social services, is that they place the populations at the centre of the initiatives' management as active subjects in their own transformation.

In Argentina the programme *Promoción de estilos de vida saludable en la escuela* [Promoting healthy lifestyles at school] targeted students aged 6 to 12 in a public primary school in a peripheral neighborhood of Córdoba. This interdisciplinary educational intervention was carried out with intersectoral participation and its objective was to promote healthy lifestyles among school-age children through nutrition education workshops and a kiosk offering healthy food. A total of 127 children aged 5 to 14 participated in the project. In terms of food consumption, it was found that only 24.4 percent consumed dairy products for breakfast and 89 percent consumed at least one fruit per day. On the other hand, 56.7 percent of children preferred to eat sweets at least three times or more per week. The post-intervention evaluation of supply and demand showed the persistence of the preference for sweets, snacks, and sugary drinks, but the demand for grains, in the form of baked goods, and fruit increased (Scruzzi, Cebreiro, Pou, & Rodríguez Junyent, 2014). It also concluded that the families and the educational community both play an important role in shaping eating habits, and it was recognized that schools provide a valuable opportunity for food and nutrition education.

As noted in the previous section, the double burden of malnutrition is one of the main challenges for Bolivia (Plurinational state of), a country that is seeing an increase in rates of overweight and obesity among adolescents. In a joint effort, the Ministry of Health's Food and Nutrition Unit, a digital television programme targeting adolescents (PICA) and the World Food Programme developed a strategy based on the participative production of audiovisual content that connects nutrition issues with the motivations, concerns and aspirations of adolescents. The strategy, implemented in two departments in the country, El Alto and La Paz, showed the gap that existed between adolescents' knowledge in terms of food and nutrition, and their attitudes and behaviours towards processed foods that are high in sugars and fat. Therefore, the process focused on understanding the root causes of this gap and potential motivations for a positive transformation of these practices, understanding adolescents as the drivers and protagonists of this change. The pilot programme was financed by the City Council of Vigo, in Spain.

Although Peru has been recognized for reducing chronic childhood malnutrition in the last 10 years, there are still challenges that must be addressed. As explained in the previous section, anemia is a persistent challenge for the physical, cognitive and social development of children, especially those under age 3. On the other hand, obesity and overweight continue to increase. The problems caused by poor nutrition are magnified in the poorest zones in the highland and rainforest, and they have repercussions on children's future. To address them, the Peruvian Government has implemented several initiatives, including the *Plan Nacional para la Reducción y el Control de la Anemia Materno Infantil y la Desnutrición Crónica Infantil en el Perú 2017–2022* [National Plan to Reduce and Control Maternal-Infant Anemia and Chronic Childhood Malnutrition in Peru 2017–2022] and the *Plan Multisectorial de Lucha contra la Anemia* [Multisectoral Plan to Fight Anemia]. In this context, in 2017 the Ministry of Health and the Ministry of Development and Social Inclusion, in collaboration with the World Food Programme, jointly launched the television programme called *Cocina con Causa* [Cooking with a Cause], in partnership with the Institute of Radio and Television of Peru. The programme has been recorded in different geographic locations to represent the country's diversity. Youth, families and nutrition specialists present creative solutions to daily nutrition challenges. Its first season had over 3 million viewers, with positive results in terms of recall and intentions to improve. As part of the same strategy, and to complement it at the local level, young artists and staff from nutrition monitoring community services wrote, produced and transmitted a soap opera to promote healthy eating, connecting it with myths, traditions, gender social norms and other dynamics that are part of the communities' social and cultural life.

BOX 18

GASTRONOMY AS A MEANS TO PROMOTE TRADITIONAL, HEALTHY AND SUSTAINABLE FOODS AND AS A DRIVER OF RURAL DEVELOPMENT

The sudden surge in the popularity of gastronomy has evidenced its power to improve food security and nutrition and rural development.

On one hand, it promotes the revival and revaluing of traditional foods and diets, promoting healthy consumption habits and the use of quality local and ecological products. On the other hand, it can be a productive and social inclusion instrument that connects small-scale farmers with gastronomy, hospitality and tourism markets and value chains, and that offers labour integration options to youth.

This social gastronomy approach that is accessible to the middle and working classes can offer a healthy alternative to consumers, promoting traditional foods and a balanced and sustainable diet as an alternative to the alarming increase in the consumption of fast and ultra-processed food in the region.

For example, the IFAD-financed Rural 4 Young People programme aims to improve eating habits and promote the consumption of healthy foods, improving nutrition knowledge and positively highlighting the value of healthy and nutritious foods with cultural identity. Moreover, decent jobs are created for youth through professional training and the establishment of sustainable enterprises in the gastronomy and hospitality sectors. The target group includes 4,800 young indigenous or Afro-descendent people aged between 16 and 35, living in poverty in rural and semi-urban areas of Bolivia (Plurinational State of), Colombia and Honduras, prioritizing the participation of women at a rate of 70 percent.

SOURCE: IFAD, 2020.

Quality of foods[35] consumed outside the home

An excessive intake of sugars, fats and salt, and an inadequate intake of proteins and high-value micronutrients is associated with stunting, increased mortality and infections in infants and children. This leads to a reduction in the capacity of children to learn as well as having negative impacts on their productivity as adults. In environments with limited resources, diets are generally based on a limited variety of plant-based food products that may lack essential nutrients. By improving economic conditions, diets are modified, and more animal products are consumed, as well as fats and oils, sugars and highly processed foods. This transition can have impacts on long-term health, such as the increased risk of overweight or obesity and the development of NCDs in later phases of the life cycle (IAEA, 2020).

Foods consumed outside the home represent an increasing proportion of worldwide food consumption, due to factors such as increasing urbanization, women's participation in the labour market and innovations in the commercialization, distribution, processing and conservation of foods. There are various options available: street vendors, restaurants, food stores, among others (Vakis, Genoni, & Farfan, 2015). Those who live in the most lagging territories in terms of childhood overweight are in the medium and low quintiles according to income, and they live in cities or urban environments. Often, the time and distance required to travel from their homes to their workplaces leads to the increased consumption of food outside the home, in accessible places and food stands, that is usually low in nutritional quality and which can foster overweight and obesity.

In the region, food purchased from street vendors represents between 20 percent and 30 percent of urban families' expenditures and it is a significant source of employment. Furthermore, street vending is a significant source of income for women, who represent between 70 percent and 90 percent of vendors (FAO, 1995). In LAC, the *Codex Alimentarius* Commission has adopted a regional document that is a guide to the street vending of food and represents the basis for a code of applicable practices in the different countries, under the responsibility of local authorities (FAO, 1995).■

In El Salvador, a study by the Consumer Ombudsman (2019) found that people who eat food prepared outside the home do so frequently. Over 30 percent of those surveyed indicated that they eat breakfast and lunch outside the home during the week, and they eat an evening meal outside the home between two and three times a week. In terms of the preferred foods for consumption outside the home, pupusas (thick maize- or rice-based tortillas) are the most consumed for breakfast and dinner, while chicken is the food that is most consumed for lunch. The most consumed drinks are coffee for breakfast, fruit juices for lunch, and carbonated soft drinks for dinner. Water consumption with food consumed outside the home is relatively low. Only 14 percent of those surveyed indicated that they prefer to drink water with breakfast. This figure increases to 20 percent for lunch and 19 percent for dinner. In monetary terms, people who eat food prepared outside the home spend an amount that ranges between 5.05 and 7.50 dollars for breakfast; 10.05 and 12.50 dollars for lunch; and over 6 dollars for dinner.

[35] Quality foods are defined as those that promote diversified, balanced and adequate nutrition, and that provide energy and nutrients that are essential for development and for leading a healthy and active life (IAEA, 2020).

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ANNEX 1

SDG 2 INDICATORS. ANNUAL DATA FOR THE WORLD, LATIN AMERICA AND THE CARIBBEAN AND SUBREGIONS

Undernourishment

	Prevalence				Millions			
	2000	**2014**	**2019**	**2030**	**2000**	**2014**	**2019**	**2030**
World	13.2	8.6	8.9	**9.8**	808.6	628.9	687.8	**841.4**
Latin America and the Caribbean	11.1	5.6	7.4	**9.5**	57.7	34.5	47.7	**66.9**
Caribbean	21.0	17.0	16.6	**14.4**	8.0	7.2	7.2	**6.6**
Latin America	10.3	4.7	6.7	**9.1**	49.8	27.3	40.5	**60.3**
Mesoamerica	8.0	7.1	9.3	**12.4**	10.9	11.9	16.6	**24.5**
South America	11.2	3.8	5.6	**7.7**	38.9	15.4	24.0	**35.7**

Food insecurity, in percentages and millions of people.

	Severe food insecurity (%)		Severe food insecurity (Millions)		Moderate or severe food insecurity (%)		Moderate or severe food insecurity (Millions)	
	2014	**2019**	**2014**	**2019**	**2014**	**2019**	**2014**	**2019**
World	8.3	9.7	602	746	22.4	25.9	1633.5	2001.1
Latin America	6.9	9.5	39.8	57.7	22.6	31.7	129.9	191.7
Mesoamerica	10.4	14.1	17.3	25	31.8	39.3	53	69.7
South America	5.5	7.6	22.5	32.6	18.8	28.5	76.9	122

Childhood malnutrition

	Prevalence						Millions					
	Stunting		Wasting	Overweight in children under 5			Stunting		Wasting	Overweight in children under 5		
	2000	**2019**	**2019**	**1990**	**2000**	**2019**	**2000**	**2019**	**2019**	**1990**	**2000**	**2019**
World	32.4	21.3	6.9	4.9	4.9	5.6	199.5	144	47	31.4	30.3	38.3
Latin America and the Caribbean	16.8	9	1.3	6.2	6.6	7.5	9.5	4.7	0.7	3.5	3.8	3.9
Caribbean	15.3	8.1	2.9	4.2	5.1	7	0.6	0.3	0.1	0.2	0.2	0.2
Mesoamerica	23.7	12.6	0.9	5.4	5.9	6.9	3.9	2	0.1	0.9	1	1.1
South America	13.8	7.3	1.3	6.8	7.1	7.9	5	2.4	0.4	2.5	2.6	2.6

ANNEX 2

PREVALENCE OF UNDERNOURISHMENT AND MILLIONS OF PEOPLE AFFECTED IN LATIN AMERICA AND THE CARIBBEAN, PROJECTIONS FOR 2030

	Prevalence of undernutrition (%)	Number of undernourished people (millions)
Belice	7.7	-
Bolivia (plurinational state of)	9.2	1.2
Dominica	6.2	-
Ecuador	3.7	0.7
El Salvador	3.9	0.3
Guatemala	14.4	3
Guayana	4.7	-
Haiti	44.1	5.6
Honduras	9.7	1.1
Jamaica	5.1	0.2
Mexico	12.3	17.2
Nicaragua	14.2	1
Panama	3.1	0.2
Paraguay	6.4	0.5
Peru	3.8	1.3
Saint Vincent and the Granadines	4.6	-
Suriname	5.8	-
Venezuela (Bolivarian Republic of)	61.7	20.5

SOURCE: Prevalence of Undernourishment (PoU) projection tool http://www.fao.org/publications/sofi/2020/en/

ANNEX 3

SOURCES OF INFORMATION, SECTION 2.1.

Indicators of stunting and overweight in Latin America and the Caribbean

Country	Year of information	Source
Argentina	2005	**Encuesta Nacional de Nutrición y Salud (ENNyS)-WHO
Barbados	2012	*Barbados Multiple Indicator Cluster Survey (MICS) - UNICEF
Belize	2015	*Belize Multiple Indicator Cluster Survey (MICS) - UNICEF
Bolivia	2016	Encuesta de Demografía y Salud (EDSA) - Instituto Nacional de Estadística (INE)
Brazil	2007	*Pesquisa nacional de demografia e saúde da criança e da mulher (PNDS) - UNICEF
Chile	2019	Mapa Nutricional de la Junta de Auxilio Escolar y Becas JUNAEB - Ministerio de Educación
Colombia	2010	Encuesta Nacional de Demografía y Salud (ENDS) - Departamento Administrativo Nacional de Estadísticas (DANE)
Costa Rica	2016	Informe de resultados "Censo Escolar de Peso-Talla"- Ministerio de Salud y Ministerio de Educación Pública.
Dominican Republic	2013	*Encuesta Demográfica y de Salud (ENDESA) - UNICEF
Ecuador	2018	Encuesta Nacional de Salud y Nutrición (ENSANUT) - Instituto Nacional de Estadística y Censo (INEC)
El Salvador	2014	Encuesta Nacional De Salud De Indicadores Múltiples Por Conglomerados (MICS) - Dirección General de Estadísticas y Censos (DIGESTYC)
Guatemala	2015	VI Encuesta Nacional de Salud Materno Infantil - Instituto Nacional de Estadística (INE)
Guyana	2014	*Multiple Indicator Cluster Survey (MICS)-UNICEF
Haiti	2017	*Enquête Mortalité, Morbidité et Utilisation des Services (EMMUS-VI) - UNICEF
Honduras	2012	*Encuesta Nacional de Salud y Demografía - UNICEF
Jamaica	2014	*Survey of Living Conditions - UNICEF
Mexico	2012	**Encuesta Nacional de Salud y Nutrición "ENSANUT"- Instituto Nacional de Salud Pública
Nicaragua	2012	Encuesta Nicaragüense de Demografía y Salud - Instituto Nacional de Información de Desarrollo (INIDE) y Ministerio de Salud (MINSA)
Panama	2008	*Encuesta de Niveles de Vida - UNICEF
Paraguay	2016	* Encuesta de Indicadores Múltiples por Conglomerados (MICS) - UNICEF
Peru	2018	* Encuesta Demográfica y de Salud Familiar (ENDES) - UNICEF
Suriname	2018	Multiple Indicator Cluster Survey (MICS) - Ministry of Social Affairs and Public Housing
Trinidad and Tobago	2011	* Multiple Indicator Cluster Survey - UNICEF

Note: The data corresponds to data recalculations by international agencies (*UNICEF-**WHO) using information from the countries.

Argentina: Socio-economic, demographic and other indicators

Indicator	Year of information	Source
Population size	2010	Ceso Nacional - Instituto Nacional de Estadística y Censos (INDEC)
Population density (inhab/km2)	2010	Ceso Nacional - Instituto Nacional de Estadística y Censos (INDEC)
Rate of rurality	2010	Ceso Nacional - Instituto Nacional de Estadística y Censos (INDEC)
Average age (years)	2010	Ceso Nacional - Instituto Nacional de Estadística y Censos (INDEC)
*GDP	2014	Cuentas Nacionales - Instituto Nacional de Estadística y Censos (INDEC)
Poverty rate	2018	Incidencia de la pobreza y la indigencia - Instituto Nacional de Estadística y Censos (INDEC)
Percentage of people with higher education	2010	Ceso Nacional - Instituto Nacional de Estadística y Censos (INDEC)
Rate of labour participation	2014	Mercado de Trabajo- Ministerio de Trabajo, Empleo y Seguridad Social
Unemployment rate	2014	Mercado de Trabajo- Ministerio de Trabajo, Empleo y Seguridad Social
Prevalence of agricultural workers	2010	Ceso Nacional - Instituto Nacional de Estadística y Censos (INDEC)
Prevalence of indigenous or Afro-descendant population	2010	Ceso Nacional - Instituto Nacional de Estadística y Censos (INDEC)
Percentage of population with access to drinking water	2010	Ceso Nacional - Instituto Nacional de Estadística y Censos (INDEC)
Unsatisfied Basic Needs (UBNs)	2010	Ceso Nacional - Instituto Nacional de Estadística y Censos (INDEC)

*Expressed in 2019 US$

Bolivia: Socio-economic, demographic and other indicators

Indicator	Year of information	Source
Population size	2016	Población Estimada y Proyectada por Departamento - Instituto Nacional de Estadística (INE)
Population density (inhab/km2)	2012	Censo de Población y Vivienda - Instituto Nacional de Estadística (INE)
Rate of rurality	2012	Censo de Población y Vivienda - Instituto Nacional de Estadística (IN
*GDP	2016	Instituto Nacional de Estadística (INE)
Poverty rate	2017	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Extreme poverty rate	2016	Encuesta de Hogares - Instituto Nacional de Estadística (INE)
Average years of schooling	2016	Encuesta de Hogares - Instituto Nacional de Estadística (INE)
Percentage of people with higher education	2012	Censo de Población y Vivienda - Instituto Nacional de Estadística (INE)
Rate of labour participation	2012	Censo de Población y Vivienda - Instituto Nacional de Estadística (INE)
Unemployment rate	2012	Censo de Población y Vivienda - Instituto Nacional de Estadística (INE)
Rate of women's participation in labour market	2012	Censo de Población y Vivienda - Instituto Nacional de Estadística (INE)
Percentage of self-employed workers	2012	Censo de Población y Vivienda - Instituto Nacional de Estadística (INE)
Percentage of paid workers	2012	Censo de Población y Vivienda - Instituto Nacional de Estadística (INE)
Percentage of indigenous or Afro-descendant population	2017	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Percentage of population with access to drinking water	2012	Censo de Población y Vivienda - Instituto Nacional de Estadística (INE)
Number of available health centres	2020	Ministerio de Salud
Doctors per 1,000 inhabitants	2017	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Gini index for household income	2017	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Prevalence of teenage pregnancy	2017	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Unsatisfied Basic Needs (UBNs)	2012	Necesidades Básicas Insatisfechas (NBI) - Instituto Nacional de Estadística (INE), Unidad de Análisis de Políticas Sociales y Económicas (UDAPE)

*Expressed in 2019 US$

Chile: Socio-economic, demographic and other indicators.

Indicator	Year of information	Source
Population size	2017	Censo de Población y Vivienda- Instituto Nacional de Estadísticas (INE)
Population density (inhab/km2)	2015	Instituto Nacional de Estadísticas (INE)
Rate of rurality	2017	Censo de Población y Vivienda- Instituto Nacional de Estadísticas (INE)
Average age (years)	2017	Censo de Población y Vivienda- Instituto Nacional de Estadísticas (INE)
*GDP	2017	Banco Central de Chile
Poverty rate	2017	Encuesta Nacional de Empleo (CASEN)- Ministerio de Desarrollo Social
Extreme poverty rate	2017	Encuesta Nacional de Empleo (CASEN)- Ministerio de Desarrollo Social
Average years of schooling	2017	Censo de Población y Vivienda- Instituto Nacional de Estadísticas (INE)
Percentage of people with higher education	2017	Censo de Población y Vivienda- Instituto Nacional de Estadísticas (INE)
Rate of labour participation	2017	Instituto Nacional de Estadísticas (INE)
Unemployment rate	2017	Instituto Nacional de Estadísticas (INE)
Percentage of self-employed workers	2017	Instituto Nacional de Estadísticas (INE)
Percentage of agricultural workers	2017	Censo de Población y Vivienda- Instituto Nacional de Estadísticas (INE)
Prevalence of indigenous or Afro-descendant population	2017	Encuesta Nacional de Empleo (CASEN)- Ministerio de Desarrollo Social
Percentage of population with access to drinking water	2017	Censo de Población y Vivienda- Instituto Nacional de Estadísticas (INE)
Number of available health centres	2020	Ministerio de Salud
Farmers' incomes	2017	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Doctors per 1,000 inhabitants	2017	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Gini index for household income	2017	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Prevalence of teenage pregnancy	2017	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Unsatisfied Basic Needs (UBNs)	2017	Centro Latinoamericano para el Desarrollo Rural (RIMISP)

*Expressed in 2019 US$

Colombia: Socio-economic, demographic and other indicators.

Indicator	Year of information	Source
Population size	2018	Censo Nacional de Población y Vivienda (CNPV) - Departamento Administrativo Nacional de Estadística (DANE)
Rate of rurality	2018	Censo Nacional de Población y Vivienda (CNPV) - Departamento Administrativo Nacional de Estadística (DANE)
Average age (years)	2018	Censo Nacional de Población y Vivienda (CNPV) - Departamento Administrativo Nacional de Estadística (DANE)
*GDP	2018	Departamento Administrativo Nacional de Estadística (DANE)
*per capita GDP	2018	Departamento Administrativo Nacional de Estadística (DANE)
Poverty rate	2018	Departamento Administrativo Nacional de Estadística (DANE)
Percentage of people with higher education	2018	Censo Nacional de Población y Vivienda (CNPV) - Departamento Administrativo Nacional de Estadística (DANE)
Unemployment rate	2018	Departamento Administrativo Nacional de Estadística (DANE)
Rate of women's participation in labour market	2018	Departamento Administrativo Nacional de Estadística (DANE)
Percentage of indigenous or Afro-descendant population	2005	Censo Nacional de Población y Vivienda (CNPV) - Departamento Administrativo Nacional de Estadística (DANE)
Percentage of population with access to drinking water	2018	Censo Nacional de Población y Vivienda (CNPV) - Departamento Administrativo Nacional de Estadística (DANE)
Farmers' incomes	2018	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Doctors per 1000 inhabitants	2018	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Gini index for household income	2018	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Prevalence of teenage pregnancy	2017	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Unsatisfied Basic Needs (UBNs)	2018	Departamento Administrativo Nacional de Estadística (DANE)

*Expressed in 2019 US$

Costa Rica: Socio-economic, demographic and other indicators.

Indicator	Year of information	Source
Population size	2011	Censos Nacional de Población y de Vivienda- Instituto Nacional de Estadísticas y Censos (INEC)
Population density (inhab/km2)	2011	Censos Nacional de Población y de Vivienda- Instituto Nacional de Estadísticas y Censos (INEC)
Rate of rurality	2011	Censos Nacional de Población y de Vivienda- Instituto Nacional de Estadísticas y Censos (INEC)
Average age (years)	2011	Censos Nacional de Población y de Vivienda- Instituto Nacional de Estadísticas y Censos (INEC)
Average years of schooling	2011	Censos Nacional de Población y de Vivienda- Instituto Nacional de Estadísticas y Censos (INEC)
Rate of labour participation	2011	Censos Nacional de Población y de Vivienda- Instituto Nacional de Estadísticas y Censos (INEC)
Unemployment rate	2011	Censos Nacional de Población y de Vivienda- Instituto Nacional de Estadísticas y Censos (INEC)
Rate of women's participation in labour market	2011	Censos Nacional de Población y de Vivienda- Instituto Nacional de Estadísticas y Censos (INEC)
Percentage of agricultural workers	2011	Censos Nacional de Población y de Vivienda- Instituto Nacional de Estadísticas y Censos (INEC)
Percentage of indigenous or Afro-descendant population	2011	Censos Nacional de Población y de Vivienda- Instituto Nacional de Estadísticas y Censos (INEC)
Percentage of population with access to drinking water	2011	Censos Nacional de Población y de Vivienda- Instituto Nacional de Estadísticas y Censos (INEC)

Ecuador: Socio-economic, demographic and other indicators.

Indicator	Year of information	Source
Population size	2010	Censo de Población y Vivienda (CPV) - Instituto Nacional de Estadísticas y Censos (INEC)
Population density (inhab/km2)	2010	Censo de Población y Vivienda (CPV) - Instituto Nacional de Estadísticas y Censos (INEC)
Rate of rurality	2010	Censo de Población y Vivienda (CPV) - Instituto Nacional de Estadísticas y Censos (INEC)
Average age (years)	2010	Censo de Población y Vivienda (CPV) - Instituto Nacional de Estadísticas y Censos (INEC)
Poverty rate	2014	Encuesta Condiciones de Vida (ECV) - Instituto Nacional de Estadísticas y Censos (INEC)
Extreme poverty rate	2015	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Rate of labour participation	2018	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Unemployment rate	2018	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Percentage of self-employed workers	2010	Censo de Población y Vivienda (CPV) - Instituto Nacional de Estadísticas y Censos (INEC)
Percentage of indigenous or Afro-descendant population	2010	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Percentage of population with access to drinking water	2010	Censo de Población y Vivienda (CPV) - Instituto Nacional de Estadísticas y Censos (INEC)
Number of available health centres	2020	Ministerio de Salud Pública
Farmers incomes	2018	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Doctors per 1000 inhabitants	2018	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Prevalence of teenage pregnancy	2018	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Unsatisfied Basic Needs (UBNs)	2018	Centro Latinoamericano para el Desarrollo Rural (RIMISP)

El Salvador: Socio-economic, demographic and other indicators.

Indicator	Year of information	Source
Population size	2007	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Rate of rurality	2007	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Average age (age)	2007	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Poverty rate	2014	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Extreme poverty rate	2006	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Rate of labour participation	2016	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Employment rate	2016	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Percentage of indigenous or Afro-descendant population	2007	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Percentage of population with access to drinking water	2016	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Farmers' incomes	2016	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Doctors per 1000 inhabitants	2016	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Prevalence of teenage pregnancy	2015	Centro Latinoamericano para el Desarrollo Rural (RIMISP)

Guatemala: Socio-economic, demographic and other indicators.

Indicator	Year of information	Source
Population size	2018	Censo Nacional de Población y de Vivienda - Instituto Nacional de Estadística (INE)
Population density (inhab/km2)	2018	Banco de Guatemala
Rate of rurality	2018	Censo Nacional de Población y de Vivienda - Instituto Nacional de Estadística (INE)
Poverty rate	2014	Instituto Alianza Nacional Contra la Pobreza (ICOP)
Extreme poverty rate	2014	Instituto Alianza Nacional Contra la Pobreza (ICOP)
Average years of schooling	2014	Informe Nacional de Desarrollo Humano
Percentage of people with higher education	2018	Censo Nacional de Población y de Vivienda - Instituto Nacional de Estadística (INE)
Rate of labour participation	2018	Censo Nacional de Población y de Vivienda - Instituto Nacional de Estadística (INE)
Unemployment rate	2018	Censo Nacional de Población y de Vivienda - Instituto Nacional de Estadística (INE)
Rate of women's participation in labour market	2018	Censo Nacional de Población y de Vivienda - Instituto Nacional de Estadística (INE)
Percentage of indigenous or Afro-descendant population	2018	Censo Nacional de Población y de Vivienda - Instituto Nacional de Estadística (INE)
Percentage of population with access to drinking water	2018	Censo Nacional de Población y de Vivienda - Instituto Nacional de Estadística (INE)
Number of available health centres	2020	Ministerio de Salud
Unsatisfied Basic Needs (UBNs)	2002	Instituto Nacional de Estadística (INE)

Guyana: Socio-economic, demographic and other indicators.

Indicator	Year of information	Source
Poverty rate	2015	Sekhani R.(2017). Fellow Poverty Facts. Guyana Budget & Policy Institute and Center for New Economic Studies. Georgetown-Guyana

Haiti: Socio-economic, demographic and other indicators.

Indicator	Year of information	Source
Poverty rate	2014	Fondo Monetario Internacional (FMI)
Extreme poverty rate	2014	Fondo Monetario Internacional (FMI)

Honduras: Socio-economic, demographic and other indicators.

Indicator	Year of information	Source
Unsatisfied Basic Needs (UBNs)	2013	Flores M. (2017). Las Necesidades Básicas Insatisfechas en Honduras 2001-213. Boletín N° 3 de Estructura y Dinámica de la Población Las Necesidades Básicas Insatisfechas en Honduras. Universidad Nacional Autónoma de Honduras (UNAH)

Mexico: Socio-economic, demographic and other indicators.

Indicator	Year of information	Source
Population size	2010	Censo de Población y Vivienda- Instituto Nacional de Estadística y Geografía (INEGI)
Population density (inhab/km2)	2010	Censo de Población y Vivienda- Instituto Nacional de Estadística y Geografía (INEGI)
Rate of rurality	2010	Censo de Población y Vivienda- Instituto Nacional de Estadística y Geografía (INEGI)
Average age (years)	2010	Censo de Población y Vivienda- Instituto Nacional de Estadística y Geografía (INEGI)
*GDP	2015	Garcia R. (2018). La medición de la actividad económica y el desempeño a nivel estatal en México. Foco Económico.
Poverty rate	2018	Encuesta Nacional de Ingreso y Gasto de Hogares- Instituto Nacional de Estadística y Geografía (INEGI)
Extreme poverty rate	2018	Encuesta Nacional de Ingreso y Gasto de Hogares- Instituto Nacional de Estadística y Geografía (INEGI)
Average years of schooling	2010	Censo de Población y Vivienda- Instituto Nacional de Estadística y Geografía (INEGI)
Percentage of people with higher education	2010	Censo de Población y Vivienda- Instituto Nacional de Estadística y Geografía (INEGI)
Unemployment rate	2017	Encuesta Nacional de Ocupación y Empleo- Instituto Nacional de Estadística y Geografía (INEGI)
Rate of women's participation in labour market	2017	Encuesta Nacional de Ocupación y Empleo- Instituto Nacional de Estadística y Geografía (INEGI)
Percentage of self-employed workers	2017	Encuesta Nacional de Ocupación y Empleo- Instituto Nacional de Estadística y Geografía (INEGI)
Percentage of agricultural workers	2017	Encuesta Nacional de Ocupación y Empleo- Instituto Nacional de Estadística y Geografía (INEGI)
Percentage of population with access to drinking water	2010	Censo de Población y Vivienda- Instituto Nacional de Estadística y Geografía (INEGI)

*Expressed in 2019 USS

Panama: Indicadores socioeconómicos, demográficos y otros.

Indicator	Year of information	Source
Poverty rate	2017	Ministerio de Desarrollo Social
Unsatisfied Basic Needs (UBNs)	2010	Ministerio de Economía y Finanzas

Peru: Socio-economic, demographic and other indicators.

Indicator	Year of information	Source
Population size	2017	Censo Nacional de Población y Vivienda - Instituto Nacional de Estadística e Informática (INEI)
Population density (inhab/km2)	2017	Censo Nacional de Población y Vivienda - Instituto Nacional de Estadística e Informática (INEI)
Rate of rurality	2017	Censo Nacional de Población y Vivienda - Instituto Nacional de Estadística e Informática (INEI)
Average age (years)	2017	Censo Nacional de Población y Vivienda - Instituto Nacional de Estadística e Informática (INEI)
*GDP	2018	Instituto Nacional de Estadística e Informática (INEI)
Poverty rate	2010	Instituto Nacional de Estadística e Informática (INEI)
Extreme poverty rate	2018	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Average years of schooling	2018	Encuesta Nacional de Hogares - Instituto Nacional de Estadística e Informática (INEI)
Percentage of people with higher education	2018	Encuesta Nacional de Hogares - Instituto Nacional de Estadística e Informática (INEI)
Rate of labour participation	2017	Encuesta Nacional de Hogares - Instituto Nacional de Estadística e Informática (INEI)
Rate of women's participation in labour market	2017	Encuesta Nacional de Hogares - Instituto Nacional de Estadística e Informática (INEI)
Percentage of self-employed workers	2017	Encuesta Nacional de Hogares - Instituto Nacional de Estadística e Informática (INEI)
Percentage of paid workers	2017	Encuesta Nacional de Hogares - Instituto Nacional de Estadística e Informática (INEI)
Percentage of indigenous or Afro-descendant population	2017	Censo Nacional de Población y Vivienda - Instituto Nacional de Estadística e Informática (INEI)
Percentage of population with access to drinking water	2017	Censo Nacional de Población y Vivienda - Instituto Nacional de Estadística e Informática (INEI)
Number of available health centres	2018	Instituto Nacional de Estadística e Informática (INEI)
Farmers' incomes	2016	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Doctors per 1,000 inhabitants	2018	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Gini index for household income	2018	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Prevalence of teenage pregnancy	2017	Centro Latinoamericano para el Desarrollo Rural (RIMISP)
Unsatisfied Basic Needs (UBNs)	2014	Instituto Nacional de Estadística e Informática (INEI)

*Expressed in 2019 US$

ANNEX 4

HOW DO WE IDENTIFY LAGGING TERRITORIES? BRIEF METHODOLOGICAL DESCRIPTION

For all indicators considered, a territory is considered to be lagging when the indicator in question is above the national average. Therefore, Y_{ij} is a given indicator (e.g., stunting) for territory i in country j, Y_j is the average for the given indicator and $\bar{y}\ \sigma Yj$ is the standard deviation of the same indicator in country j.

First, the territory (TRY_{ij}) will be considered lagging in terms of the given indicator if the difference between the indicator at the territorial level and the national average, divided by the standard deviation of the same indicator, is greater than one. Therefore:

$$TRY_{ij} = \frac{(Y_{ij} - \bar{Y}_j)}{\sigma Y_j} > 1$$

This implies that, to be considered a lagging territory, not only must this territory have an indicator that is above average, (TRY_{ij}>0), but this indicator must also be more than one standard deviation above the average. It is important to note that, when the data is converted, an average equal to zero and a standard deviation equal to one are obtained. Hence, comparisons can be made between territories in different countries, according to their deviation relative to the average of their own country.

By way of comparison, the number of lagging territories can be shown if the classification rule used is TRY_{ij}>0, which, although it follows the same classification logic, is less demanding.

The above measure is appropriate in that it allows comparisons between territories in countries with unequal levels of malnutrition, poverty and other development indicators. As an example, in the exercise developed by FAO and ECLAC (2018) countries such as Chile are excluded because they are considered high-income countries, and the same is true of territories that, although they may have malnutrition levels that exceed the average of their own country, do not pass the first filter associated with unsatisfied basic needs in rural areas.

2020 REGIONAL OVERVIEW OF FOOD SECURITY AND NUTRITION IN LATIN AMERICA AND THE CARIBBEAN

FOOD SECURITY AND NUTRITION FOR LAGGING TERRITORIES

In 2019, 7.4% of the population of Latin America and the Caribbean lived with hunger, which is equivalent to 47.7 million people. The situation has been deteriorating during the last five years as the number of undernourished people increased by 13.2 million. If this trend continues, the possibility of meeting the Zero Hunger target of the Sustainable Development Goals will become more remote. It is estimated that, by 2030, hunger will affect 67 million people in the region, a figure that does not factor in the repercussions of the COVID-19 pandemic.

The population affected by food insecurity has continued to increase in Latin America in the past five years. In 2019, almost one-third of the population, or 191 million people, were affected by moderate or severe food insecurity.

Stunting is decreasing in the region while overweight in children under 5 is on the rise. Stunting decreased from 22.7% in 1990 to 9% in 2019, a percentage that is lower than the global average of 21.3%. However, childhood overweight increased from 6.2% to 7.5% in the same period, surpassing the global average of 5.6%.

Recent information on malnutrition in countries in the region shows that almost one of every five territories is highly lagging, either in terms of the prevalence of stunting or the prevalence of overweight in children under 5.

The most highly lagging territories in regard to stunting are in rural areas. These territories have high levels of poverty, low income and schooling levels, higher levels of employment informality, and a greater proportion of indigenous and Afro-descendent population.

Overweight in children under 5 appears to be more homogeneously distributed from a geographic standpoint. Nonetheless, the most lagging territories tend to be concentrated in urban areas with higher incomes, less poverty, more access to services, and more labour formality.

Although some determinants associated with each type of malnutrition are different, several territories are lagging simultaneously in terms of stunting and overweight. In general, these areas tend to be more rural and present high poverty levels.

Although the true magnitude of the impact of COVID-19 is still unknown, it threatens to accentuate these differences and increase the gaps between lagging and non-lagging territories. The pandemic has hit the most vulnerable populations and territories especially hard, in which there are more informal jobs, incomes are lower and there is a lack of healthy foods. The areas that are identified as lagging, especially in terms of malnutrition, would be the most affected.

Addressing the problem of food insecurity and nutrition in lagging territories requires multidimensional interventions that address the different causes of malnutrition in an integrated manner, and that provide a coordinated response across different dimensions of development. This Regional Overview describes some of the main policy interventions that are being developed in the region, organized around three groups of measures that aim to: (1) improve and promote economic access to adequate nutrition, (2) improve the production of, and physical access to foods that promote adequate nutrition, and (3) improve the use and quality of foods.

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