

REGIONAL REPORT: CENTRAL AND SOUTH AMERICA

GLOBAL FOOD SECURITY INDEX 2019

Supported by



Central and South America

Global Food Security Index 2019

Food security in Central and South America

Central and South America is a significantly different region today than it was twenty years ago. Over recent decades many countries in the region have made tremendous strides in slashing poverty, hunger and child mortality, improving key factors contributing to overall food security. However, new challenges to food security have arisen, from natural disasters and climate change to economic stagnation, inequality and social unrest. Political turmoil has already led to backsliding on food security in a number of countries, most notably in Venezuela. These political and economic stresses are eroding key aspects of food security, particularly affordability and availability.

Measuring food security: The Global Food Security Index

How food secure are the countries of Central and South America? To answer this question, The Economist Intelligence Unit, supported by Corteva Agriscience, conducts an annual benchmarking assessment called the Global Food Security Index (GFSI). The 2019 GFSI marks the eighth edition of this study and considers three core issues of food security: affordability, availability, and quality and safety. The index also explores the risk to food security from exposure to climate change and other natural resources challenges. This report presents the key findings for the 18 countries in Central and South America included in the GFSI.

Regional performance

| Average regional scores | Score/100 |
|------------------------------------|-------------|
| 1 North America | 78.5 |
| 2 Europe | 75.8 |
| 3 Middle East and North Africa | 64.8 |
| 4 Asia Pacific | 64.2 |
| 5 Central and South America | 61.7 |
| 6 Sub-Saharan Africa | 47.9 |

Top 5 ranked countries in region

| Rank/113 | Country | Score |
|----------|------------|-------|
| 1 | Chile | =25 |
| 2 | Uruguay | 33 |
| 3 | Argentina | 37 |
| =4 | Brazil | =39 |
| =4 | Costa Rica | =39 |

Lowest 5 ranked countries in region

| Rank/113 | Country | Score |
|----------|-----------|-------|
| 18 | Venezuela | 113 |
| 17 | Haiti | 103 |
| 16 | Nicaragua | 82 |
| 15 | Bolivia | 75 |
| 14 | Paraguay | 74 |

Regional statistics

| GDP per capita (PPP) | | | Prevalence of undernourishment | | |
|---------------------------|---------|------------|--------------------------------|---------|-------|
| Highest | Panama | US\$25,590 | Highest | Haiti | 49.3% |
| Lowest | Haiti | US\$1,870 | Lowest | Brazil | <2.5% |
| Total regional population | | | Prevalence of obesity | | |
| Highest | Brazil | 210.7m | Highest | Uruguay | 28.9% |
| Lowest | Uruguay | 3.5m | Lowest | Bolivia | 18.7% |



Overview of findings

While there are some bright spots, the 2019 GFSI highlights critical gaps in building food security across Central and South America. Of the five countries worldwide with the biggest declines in the past year, three of them – Nicaragua, Argentina and Ecuador – are located in this region. The region is also home to the most food insecure country in the index, Venezuela, and the country with the highest levels of undernourishment, Haiti. Venezuela is a striking example of how quickly a once-prosperous country can become subject to extreme hunger and malnutrition as a result of economic mismanagement and large-scale corruption.

Economic stagnation, income inequality, backsliding democratic institutions and declining confidence in government in a number of countries in the region pose a threat to food security, both now and in the future through increased potential for political unrest. High-income countries are not immune to these trends, as protests in Chile and exorbitant food prices in Argentina demonstrate.

Future food security is also threatened by exposure to the risks of climate change, in particular rising temperatures and increasing severity of storms. Few governments in the region are taking steps to mitigate the impacts of these changes on food security – this, combined with the economic and political factors outlined above, poses a major threat to the future of food security in the region.

Central and South America: Overall rankings

| Rank | | Score / 100 |
|------|--------------------|-------------|
| 1 | Chile | 75.5 |
| 2 | Uruguay | 72.8 |
| 3 | Argentina | 70.8 |
| =4 | Brazil | 70.1 |
| =4 | Costa Rica | 70.1 |
| 6 | Colombia | 69.4 |
| 7 | Panama | 68.8 |
| 8 | Dominican Republic | 64.2 |
| 9 | Peru | 63.3 |
| 10 | Ecuador | 61.8 |
| 11 | El Salvador | 60.7 |
| 12 | Guatemala | 60.6 |
| 13 | Honduras | 58.0 |
| 14 | Paraguay | 57.9 |
| 15 | Bolivia | 57.7 |
| 16 | Nicaragua | 54.2 |
| 17 | Haiti | 43.3 |
| 18 | Venezuela | 31.2 |

Key regional findings:

Key strengths

- Food safety nets are present across the region and most have national coverage with consistent funding.
- With the exception of Venezuela, all countries have made investments in recent years to improve and maintain crop storage infrastructure.
- Central and South American governments demonstrate a strong commitment to nutrition, and almost all countries have recently updated nutrition guidelines and strategies.

Key gaps

- Rising food prices are jeopardising food affordability, particularly for lower-income families in countries such as Argentina, Haiti, Uruguay, Guatemala and Brazil.
- Agricultural finance systems are present, but lack depth and may not be sufficient to meet the needs of farmers.
- Poor road quality in many countries across the region hinders the efficient transportation of food, particularly in rural areas.
- Corruption is a challenge across the region, threatening the ability of supply chains and social safety nets to ensure food is consistently available.
- Most governments have not made political commitments on the international stage to address natural resource and climate threats to food security.
- As a result of political and economic crises, Venezuela is the lowest-ranking country in the GFSI.

Affordability

The first category of the GFSI measures food affordability by assessing factors including the ability of consumers to purchase food, their vulnerability to price shocks, and the presence of programmes and policies to support consumers when shocks occur. Food affordability has been a challenge for many countries in Central and South America in the past year, even for high- and upper-middle-income countries. Food prices are on the rise in many of the wealthier countries in the region, while poverty remains a barrier to food security in countries such as Haiti, Honduras and Guatemala. While food safety nets and agricultural finance systems are present, there is room for most countries to strengthen both.

Central and South America: Affordability rankings

These are the rankings for all countries in the region for the Affordability category.

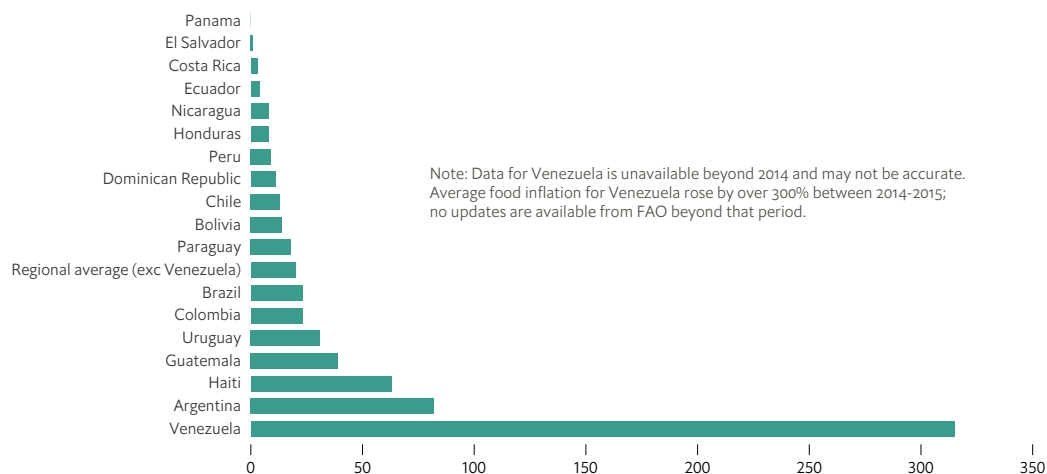
| Rank | | Score / 100 |
|------|--------------------|-------------|
| 1 | Chile | 80.5 |
| 2 | Uruguay | 79.3 |
| 3 | Argentina | 78.9 |
| 4 | Brazil | 77.0 |
| 5 | Costa Rica | 75.6 |
| 6 | Panama | 73.8 |
| 7 | Colombia | 73.7 |
| 8 | Paraguay | 72.0 |
| 9 | Ecuador | 69.4 |
| 10 | Peru | 69.1 |
| 11 | Dominican Republic | 68.4 |
| 12 | Bolivia | 65.8 |
| 13 | Guatemala | 65.3 |
| 14 | El Salvador | 63.8 |
| 15 | Nicaragua | 63.5 |
| 16 | Honduras | 57.2 |
| 17 | Haiti | 50.3 |
| 18 | Venezuela | 15.8 |

Key regional findings:

- **Food prices in several countries are rising sharply, straining the ability of families to put food on the table.** While food prices have remained relatively stable across most of the region, some countries are struggling with sudden increases in average costs, including Argentina, Haiti, Uruguay, Guatemala and Brazil. In the past year alone, food prices in Argentina have increased by 50% owing to a monetary crisis.¹ The political and economic crisis in Venezuela has also made basic items unaffordable to many of its citizens – the most recent data shows that food prices tripled between 2015 and 2016 (and unofficial data suggests that prices have only risen further since then).
- **On average, agricultural import tariffs are lower in Central and South America than any other region.** Lower import tariffs reduce the costs of imported food, and therefore overall food costs. There is significant variation in tariff rates across countries. The average agricultural import tariff for most favoured nations in Peru is 2.9%, while neighbouring Ecuador imposes a tariff of 18.1%, the 25th highest rate amongst all countries.
- **Food safety net programmes are present across the region, although may require additional funding.** Only El Salvador, Haiti, Honduras and Venezuela lack food safety net programmes with consistent funding and national coverage. However, more than half of countries are dependent on external organisations for support in running their food safety net programmes. Furthermore, rising food prices in many countries may strain current systems past anticipated usage.
- **About two-thirds of countries lack broad access to financing for farmers.** Although agricultural financial systems are present in the region, only Argentina, Brazil, Chile and Uruguay score top marks for this metric, indicating the availability of deep agricultural finance systems. Nicaragua is the only country globally where access has deteriorated measurably over the past year, with news reports indicating that private banks have stopped lending to the agricultural sector as a result of falling bank deposits.²

Price of average basket of food goods

% price rise of the average basket of food goods by country (2015-2018)



Note: Data for Venezuela is unavailable beyond 2014 and may not be accurate. Average food inflation for Venezuela rose by over 300% between 2014-2015; no updates are available from FAO beyond that period.

Source: Food and Agriculture Organisation (FAO)

Availability

A second dimension of the GFSI measures food availability through assessing factors such as the sufficiency of the national food supply, risk of supply disruption, capacity to disseminate food, and research efforts to expand agricultural output. While most countries in the region indicate that there is a sufficient domestic food supply to meet the needs of their citizens, Central and South American countries face a number of complicating factors that jeopardise food availability to the wider population. Poor transport infrastructure quality and corruption risks can result in inequitable food availability within countries, particularly for rural and vulnerable populations. Through investing in the quality of infrastructure, countries can improve food supply chains and ensure consistent availability.

Central and South America: Availability rankings

These are the rankings for all countries in the region for the Availability category.

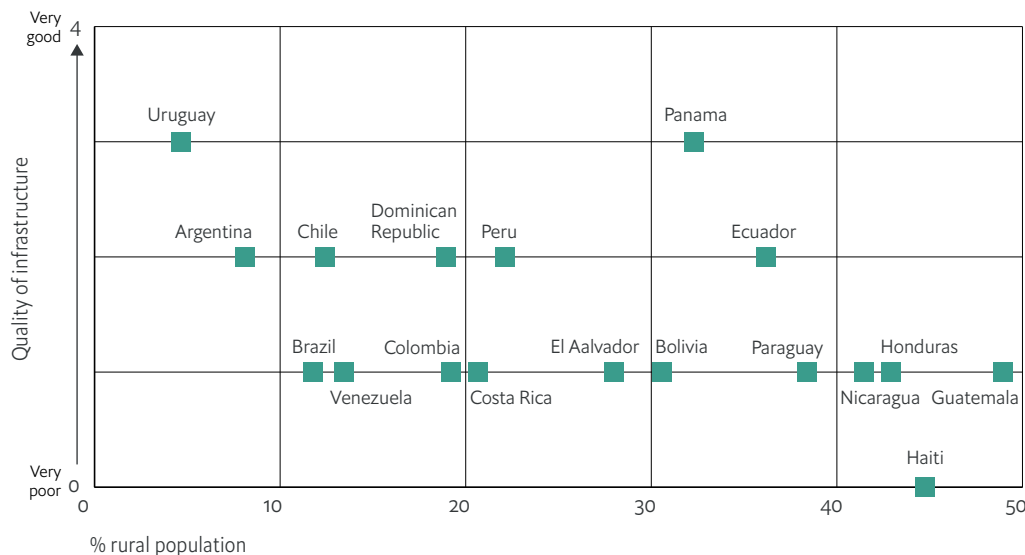
| Rank | | Score / 100 |
|------|--------------------|-------------|
| 1 | Chile | 71.3 |
| 2 | Uruguay | 66.7 |
| 3 | Colombia | 65.6 |
| =4 | Costa Rica | 63.1 |
| =4 | Panama | 63.1 |
| 6 | Dominican Republic | 61.0 |
| 7 | Argentina | 60.2 |
| 8 | Peru | 59.0 |
| 9 | Brazil | 58.8 |
| 10 | El Salvador | 58.6 |
| 11 | Honduras | 57.8 |
| 12 | Guatemala | 57.6 |
| 13 | Ecuador | 56.1 |
| 14 | Bolivia | 50.0 |
| 15 | Nicaragua | 47.9 |
| 16 | Paraguay | 42.4 |
| 17 | Haiti | 39.6 |
| 18 | Venezuela | 32.2 |

Key regional findings:

- **Political stability risks are on the rise in a few countries, and increasing social unrest poses a potential future risk in others.** Venezuela and Nicaragua are in the top five countries with the highest political stability risk in the study. EIU analysis finds that the risk for social unrest across the region is exacerbated by factors including income inequality, deficiencies in social safety nets, corruption, youth unemployment and dissatisfaction with government effectiveness.³
- **Road infrastructure quality is a major barrier to ensuring consistent availability of food across the region, particularly for rural areas.** Road quality is rated as poor in over half of the countries in the region included in the index. Average scores are the lowest of any region in the index. Poor transport infrastructure affects food availability for countries with high rural populations in particular, especially during times of bad weather. For example, more than 40% of people in Haiti, Nicaragua, Honduras and Guatemala live in rural communities, and yet road quality is rated as poor or very poor. The region also lacks strong port and airport infrastructure to compensate for this deficiency, and rail transport is not prevalent.
- **Corruption remains a complicating factor for food availability.** Of the 18 countries in the region, 13 are found to have high risk of corruption. Three countries – Haiti, Nicaragua and Venezuela – are in the highest corruption risk tier. These are also the three lowest-scoring countries in the region, underscoring the relationship between corruption and overall levels of food security.

Road infrastructure and rural population in Central and South America

Food availability is particularly at risk in countries with large rural populations and poor road quality.



Source: The Economist Intelligence Unit

Quality and safety

This final category of the GFSI measures the variety and nutritional quality of the average diet, as well as food safety. There is wide disparity in scores in this category across the region, corresponding with income variations. Low- and lower-middle-income countries, including Haiti, Bolivia and a few Central American countries, have lower levels of dietary diversity, micronutrient availability and access to infrastructure required for safely storing and handling perishable food. However, most countries in the region, regardless of income level, demonstrate strong political commitment to improving nutritional standards through the establishment of dietary guidelines and nutrition plans and strategies. In order to achieve these nutrition goals, countries can focus on plans and investments to improve dietary diversity, thereby expanding the availability and consumption of critical micronutrients including iron.

Central and South America: Quality and safety rankings

These are the rankings for all countries in the region for the Quality and safety category.

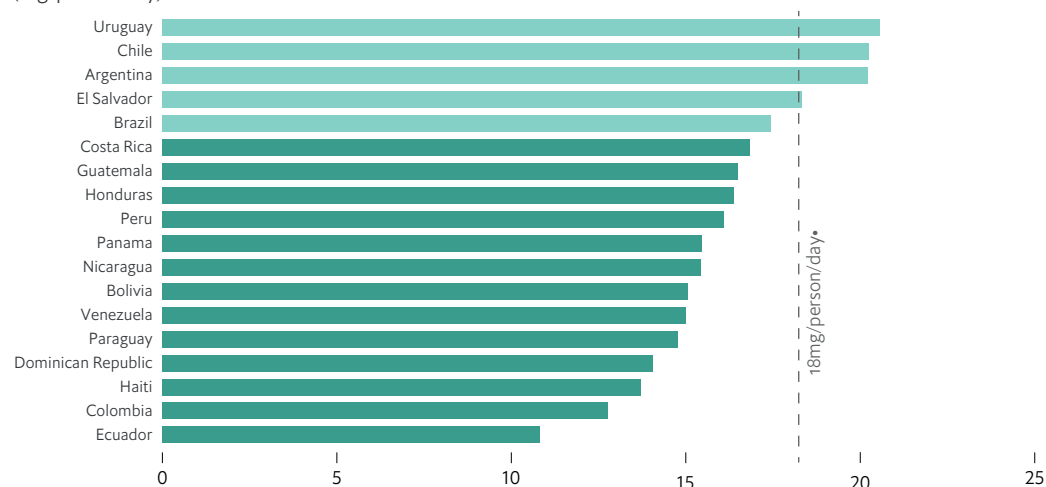
| Rank | | Score / 100 |
|------|--------------------|-------------|
| 1 | Brazil | 84.0 |
| 2 | Argentina | 79.5 |
| 3 | Costa Rica | 75.6 |
| 4 | Chile | 74.7 |
| 5 | Uruguay | 73.3 |
| 6 | Panama | 71.8 |
| 7 | Colombia | 69.3 |
| 8 | Venezuela | 66.9 |
| 9 | Paraguay | 65.4 |
| 10 | Dominican Republic | 62.3 |
| 11 | Honduras | 60.6 |
| 12 | Peru | 60.4 |
| 13 | El Salvador | 58.9 |
| 14 | Ecuador | 58.4 |
| 15 | Bolivia | 58.3 |
| 16 | Guatemala | 57.5 |
| 17 | Nicaragua | 48.2 |
| 18 | Haiti | 35.9 |

Key regional findings:

- Government commitment to nutrition is strong, particularly compared with other regions.** Central and South America has a high ranking for nutritional standards owing to the fact that most countries have national nutrition guidelines and strategies in place. However, a third of countries do not appear to have conducted a nutrition monitoring survey within the past five years, limiting governments' ability to monitor for nutritional deficiencies within the population.
- Low levels of available dietary iron increase the risk of anaemia.** The region has the lowest scores in the index for iron availability. Indeed, data shows that 14 of the 18 countries have less than 18mg/day/person of iron available in the diet (recommended intake is 18mg for adult women; 8mg for adult men).⁴ Anaemia disproportionately affects women, and can have severe impacts including increased maternal mortality risks.
- While on average, dietary diversity is stronger in Central and South America than in other regions, there is a clear gap between richer and poorer countries.** Dietary diversity, as well as micronutrient availability in diets, falls along country income group lines. Both are stronger in high- and upper-middle-income countries than in low- and lower-middle-income countries.
- Although the culture of ensuring food safety is strong in most countries, significant risks exist in Nicaragua and Haiti.** All countries in the region have food safety agencies, but access to electricity and potable water lags behind in Nicaragua and Haiti, making the safe handling and storage of food more challenging in these countries. In Haiti, 35% of the population lack access to basic drinking water, and approximately 20% lack access in Nicaragua. Fewer than half of Haiti's citizens have access to electricity, while 13-14% of the population of Nicaragua and Honduras have no electricity.

Average availability of dietary iron

(mg/person/day)



*recommended intake: 18 mg/day for women per the National Institutes of Health (NIH)
Source: Global Nutrient Database

Natural resources and resilience

In addition to the three core factors outlined above, the GFSI assesses how exposure to climate risks and the three natural assets crucial to food security (water, land and oceans) can affect a country's overall food security picture. This is used as an adjustment factor that serves as a lens through which food security can be viewed to demonstrate changes to the overall score when climate-related and natural resource risks are taken into account, but not as a mainstream criterion to determine index rankings. Climate change is a risk factor for the region's food security. A variety of exposure factors, such as temperature rise and increased severity of storms, could destroy crops and reduce food supply. Compared with other regions, Central and South America has low levels of political commitment to addressing these challenges. In order to shield themselves from future impacts on food security, countries should assess their exposure risks and develop systems and policies to improve mitigation efforts.

Key regional findings:

- **The most significant exposure risks to the region are temperature rise and increased severity of storms.** Hurricanes and other storms pose a major annual threat to countries, particularly to Central American and Caribbean island nations. The 2019 hurricane season caused billions of dollars of damage in the Caribbean alone.⁵
- **Ecuador and Peru are among the countries most exposed globally to the impacts of climate change.** Both countries face exposure risks to temperature rise, drought, flooding and storm severity. Ecuador is the GFSI's most vulnerable country in terms of increases in temperature. A major risk factor for climate variability in Ecuador and Peru is the El Niño weather phenomenon and its intensification as a result of climate change.^{6,7}
- **Few countries in the region have made commitments on the international stage to protect food security from these risks.** Of the 18 countries, 12 have not made a commitment to develop early warning measures or invest in climate-smart agricultural practices. Uruguay, which is the least vulnerable to climate and natural resource resilience risks, is the only country with commitments to developing both.
- **Ocean health is at risk in many countries across the region.** Most of the 18 countries have coastal economies which rely on marine sources for their diets and livelihoods. However, in ten of the countries, coastal areas have high levels of eutrophication potential, threatening the ability of marine life to thrive. Furthermore, in over half of countries with coastal economies, fewer than 10% of key marine biodiversity areas are protected. These protections would help to prevent overfishing and enhance sustainable management of ocean ecosystems.

Top 5 countries in Central and South America most vulnerable to severe storms

- 1  El Salvador
- 2  Guatemala
- 3  Peru
- 4  Venezuela
- 5  Dominican Republic

Central and South America: Adjusted overall rankings

These are the overall index rankings taking into account the score adjustment for Natural Resources and Resilience risks.

| Rank | | Score / 100 |
|------|--------------------|-------------|
| 1 | Chile | 68.0 |
| 2 | Uruguay | 67.6 |
| 3 | Argentina | 62.9 |
| 4 | Costa Rica | 62.8 |
| 5 | Brazil | 62.3 |
| 6 | Colombia | 61.8 |
| 7 | Panama | 60.0 |
| 8 | Dominican Republic | 55.2 |
| 9 | Peru | 54.5 |
| 10 | El Salvador | 54.2 |
| 11 | Ecuador | 53.8 |
| 12 | Guatemala | 53.0 |
| 13 | Honduras | 52.4 |
| 14 | Paraguay | 51.9 |
| 15 | Bolivia | 51.3 |
| 16 | Nicaragua | 48.4 |
| 17 | Haiti | 38.2 |
| 18 | Venezuela | 28.2 |

Improving food security in Central and South America

Key takeaways

- 1 Improved availability of agricultural finance would greatly enhance food security, both by enabling farmers to become more productive and strengthening the financial stability of rural households. Across the region, there is significant opportunity for improvement. Seven countries in the region only offer some multilateral or government financing, while in Honduras, Nicaragua, Venezuela and Haiti, access to finance for farmers is more limited.
- 2 Countries should take steps where possible to ensure that food remains affordable and that rising food prices do not exacerbate food insecurity for lower-income and vulnerable households. When food prices are on the rise, food safety nets become all the more important. In countries such as Argentina, where food prices have skyrocketed by over 50% in the past year, existing funding for food safety nets may not be sufficient to meet the needs of households who are no longer able to purchase enough food to feed their families.
- 3 Food transportation infrastructure is a major challenge for countries across the region. Road infrastructure in Bolivia, Brazil, Colombia, Paraguay, Venezuela, Haiti and across Central America (with the exception of Panama) is rating as poor or very poor. While roads might be well maintained in urban centres, the road networks outside of cities could be insufficient to reach all parts of the country, and may be made inaccessible during times of poor weather. Investments in critical infrastructure can improve food accessibility for rural populations.
- 4 Additional investment and support are needed to improve dietary diversity and micronutrient availability in low- and lower-middle-income countries, such as Haiti, Bolivia and Nicaragua. These investments, which could take the form of subsidised fruit and vegetables or micronutrient supplements, can help to mitigate the threat of malnutrition and anaemia, which is a particular risk for the region.
- 5 Central and South American countries face challenges not only to present food security, but also to future food security through risks from climate change. As an example, Haiti, the Dominican Republic and Ecuador are three of the ten countries most vulnerable to temperature rise in the world. Greater political commitment to addressing the impacts of natural resource and climate risks on agriculture is needed, particularly given high levels of exposure to temperature rise and severe storms.

References

1. ReliefWeb. "GIEWS Update: Argentina - Food emergency declared by the Government amidst worsening access to food". 2019. Available at: <https://reliefweb.int/report/argentina/giews-update-argentina-food-emergency-declared-government-amidst-worsening-access>.
2. Confidencial. "Ciclo agrícola en peligro: no hay crédito". 2019. Available at: <https://confidencial.com.ni/ciclo-agricola-en-peligro-no-hay-credito>.
3. The Economist Intelligence Unit. "Where next and what next for Latin America?" 2019. Available at: http://www.eiu.com/public/thankyou_download.aspx?activity=download&campaignid=latinamerica2019.
4. National Institutes of Health. "Iron: Fact Sheet for Consumers". Available at: <https://ods.od.nih.gov/factsheets/Iron-Consumer>.
5. Insurance Information Institute. "2019 Hurricane Season: 'Slightly Above Average'". 2019. Available at: <https://www.iii.org/insuranceindustryblog/2019-hurricane-season-slightly-above-average>.
6. International Research Institute for Climate and Society. "Why do we care about El Niño and La Niña?" Available at: <https://iri.columbia.edu/our-expertise/climate/enso/why-do-we-care-about-el-nino-and-la-nina>.
7. UNDP. "Climate Change Adaptation: Ecuador". Available at: <https://www.adaptation-undp.org/explore/south-america/ecuador>.

Whilst every effort has been taken to verify the accuracy of this information, neither The Economist Intelligence Unit Ltd. nor the sponsor of this report can accept any responsibility or liability for reliance by any person on this report or any of the information, opinions or conclusions set out in the report.

LONDON

20 Cabot Square
London, E14 4QW
United Kingdom
Tel: (44.20) 7576 8000
Fax: (44.20) 7576 8500
Email: london@eiu.com

GENEVA

Rue de l'Athénée 32
1206 Geneva
Switzerland
Tel: (41) 22 566 2470
Fax: (41) 22 346 93 47
Email: geneva@eiu.com

NEW YORK

750 Third Avenue
5th Floor
New York, NY 10017
United States
Tel: (1.212) 554 0600
Fax: (1.212) 586 1181/2
Email: americas@eiu.com

DUBAI

Office 1301a
Aurora Tower
Dubai Media City
Dubai
Tel: (971) 4 433 4202
Fax: (971) 4 438 0224
Email: dubai@eiu.com

HONG KONG

1301 Cityplaza Four
12 Taikoo Wan Road
Taikoo Shing
Hong Kong
Tel: (852) 2585 3888
Fax: (852) 2802 7638
Email: asia@eiu.com

SINGAPORE

8 Cross Street
#23-01 Manulife Tower
Singapore
048424
Tel: (65) 6534 5177
Fax: (65) 6534 5077
Email: asia@eiu.com