

Article

Food and nutrition security in the perspective of the common good

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The concept of food security has been used with different meanings over time. Since the Food Conference held in Rome and since the 1970s, various definitions have emerged, which, together with the multiple challenges that have been faced, reflect the nature of the food problem.

The definition adopted at the 1996 World Food Summit states that food security is a situation that occurs when all people have, at all times, physical and economic access to enough safe and nutritious food to satisfy their food needs and preferences in order to lead a healthy and active life.

This definition takes into account the availability of staple food based on agricultural, livestock and fisheries production, the access to food, the income of individuals, the development of urban and rural markets, and the size of the population. In addition, the definition includes the use of these foods — for which safety and access to water services are paramount —, food stability — which is mainly affected by the increase in food prices and by the negative effects of climate phenomena—, and finally, the institutional framework for food security. This last element is based on the policies and tools of each region, giving a more comprehensive character





Farmer from Cañete working on the field
Photography: JNF / Le Cordon Bleu University

“The tragedy of hunger in the midst of plenty remains as a harsh reality in today’s world”

to the matter in order to achieve an adequate state of health and optimal nutrition.

Despite the efforts that have been made, the task of ensuring food security for the poorest people in a sustainable way is still unfinished. Malnutrition and poor health and basic sanitation conditions, women’s lack of power, accelerated globalization, degradation of agricultural lands, and other factors are having influence on this. The tragedy of hunger in the midst of plenty remains as a harsh reality in today’s world.

The World Food Summit convened by FAO in June 2002 was intended to stimulate national leaders to urgently assess the pace of progress in reducing food insecurity.

Food insecurity is understood as the probability of a drastic decrease in access to food or consumption levels due to environmental or social risks, or to a reduced response capacity (Food and Nutrition Security, 2011).

Research on food security is essential to devise strategies and assess the compliance of the programs being executed. For further progress in this aspect, alliances between organizations and institutions (national institutes related to the subject, universities, non-governmental organizations) are required to benefit from their specialization. This demands a

change of researchers’ mindset and a certain degree of collective organization to adapt, with the minimal amount of resources as possible, to the current claims in this field.

Regarding food security programs, there is still much to learn, especially in relation to new management models, new forms of customer relations, more decentralization, greater public responsibility, greater organizational flexibility, and greater individual commitment.

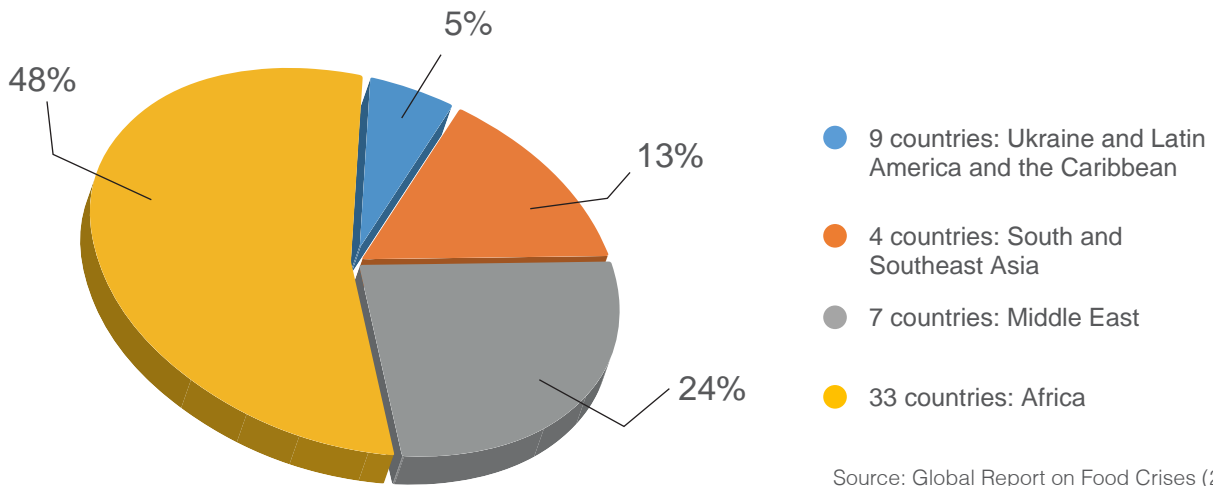
Situation in the world

According to the Global Report on Food Crises (GRFC 2019), in the world, over half of the global total of acutely food-insecure people is in Africa, where more than 65 million individuals are in need of urgent action and care. Eastern Africa has the highest number of acutely food-insecure people (28.6 million), followed by Southern Africa (23.3 million) and West Africa and the Sahel (11.2 million).

More than half of the 113 million acutely food-insecure people are in 33 African countries. With 27.4 million food-insecure people, seven Middle-East countries accounted for 24% of the global total estimated by the GRFC 2019. With 14.7 million food-insecure people, four countries in South and Southeast Asia (Myanmar, Afghanistan, Bangladesh, and Pakistan) accounted for 13% of the

GRFC total. The remaining 5% is in Ukraine (1.1 million) and Latin America and the Caribbean with 4.2 million food-insecure people in need of urgent action across eight countries (Haiti with 2.3 million; El Salvador, Guatemala, Honduras, and Nicaragua with 1.6 million; and Venezuelan migrants in Colombia, Ecuador, and Peru with 0.4 million)

Countries in the world with acute food insecurity



Source: Global Report on Food Crises (2019)

According to revised information from the UN, food insecurity in 2017 has grown in comparison to 2014, except in North America and Europe.

FAO uses the Food Insecurity Experience Scale (FIES) survey module consisting of eight carefully selected and tested questions to measure the severity of food insecurity. Analyzed data from more than 140 countries reveal that Africa, Latin America, and Asia suffer from greater food insecurity; and women represented the highest percentage.

The prevalence of severe food insecurity, based on the FIES in 2017, reveals that 10% of the world population was exposed to severe food insecurity (about 770 million people).

Moreover, the worst food crises in 2018 were represented by eight countries. According to the phases of food insecurity, 0.2 % of Yemen's population is in phase 5 (catastrophe) and 17 %, in phase 4 (emergency); while, Afghanistan, Syria, and Sudan have from 34 % to 42 % of their population in phase 4 (emergency).

Prevalence of food insecurity in the world

INDICATOR	STATE IN THE CONTINENTS								
	WORLD		AFRICA	ASIA	LATIN AMERICA AND THE CARIBBEAN	SOUTH AMERICA	OCEANIA	NORTH AMERICA	EUROPE
	2004-2006	2016-2018	2018	2018	2018	2018	2018	2018	2018
Underfeeding prevalence	14.4%	10.7%	19.9%	11.3%	6.5%	5.5% (Perú: 9.7%)	6.2%	<2.5%	<2.5%
Prevalence of severe food insecurity	N.D.	8.7%	21.5%	7.8%	N.D.	8.2%	N.D.	1.0%	1.0%

Source: Elaborated by the authors. Data from The State of Food and Nutrition Security in the World (2018).

In other words, Yemen presents an extreme food insecurity situation, according to the global report on food crisis 2019 (GRFC 2019). There, 2 million children under five years are acutely malnourished; only 15 % of children between 6-23 months are consuming a minimum acceptable diet for their growth and development; 41 % of households lack access to safe drinking water; 10 % of infants under six months are exclusively breastfed, 47 % of children suffer from stunting.

Approximately 85 000 children have died of malnutrition. In 2017, the cholera outbreak affected one million people, and 2000 of them died. It was the biggest and fastest epidemic on record, and its rapid spread was due to the destruction of the sewerage and sanitation system, as a consequence of war attacks (BBC News World, 2018).

Indicators of malnutrition in the world

Based on the Sustainable Development Goals (SDG) and aims of the World Health Assembly, this analysis has considered the following indicators of malnutrition: the state of stunting in children under five years, anemia in women of reproductive age, overweight in children younger than five years, exclusive breastfeeding in children younger than six months, emaciation in children younger than five years, and obesity in adults.

The state of stunting of children in 2018 is dramatically led by Africa and Asia. Unfortunately, one in three women of reproductive age suffers from anemia; the prevalence has increased from 2012 to 2016, from 30.3 % to 32.8 %. The emaciation

“Adult obesity continues to increase each year”

of children under five years is predominant in Asia, followed by Africa. Adult obesity continues to increase each year (from 9.2 % in 2012 to 13.2 % in 2016). Paradoxically, obesity in adults is high in Europe, North America, Oceania, South America, and Latin America and the Caribbean.

Indicators of food insecurity by continents

		STATE IN THE CONTINENTS							
N°	INDICATOR	WORLD	AFRICA	ASIA	LATIN AMERICA AND THE CARIBBEAN	SOUTH AMERICA	OCEANIA	NORTH AMERICA	EUROPE
		2012	2018	2018	2018	2018	2018	2018	2018
1	Stunting in children under 5 years	24.9%	21.9%	30.0%	22.7%	9.0%	7.1% (Perú: 12.9%)	N.D.	N.D.
2	Anemia in women of reproductive age	30.3%	32.8% (2016)	37.7% (2016)	36.6% (2016)	22.0% (2016)	23.9% (2016)	16.5% (2016)	17.8% (2016)
3	Overweight in children younger than 5 years	5.4%	5.6%	4.9%	5.2%	7.5%	7.8%	N.D.	N.D.
4	Breastfeeding in children younger than 6 months	36.9%	40.7%	43.7%	41.2%	N.D.	N.D.	N.D.	N.D.
5	Emaciation in children younger than 5 years	N.D.	7.5%	7.1%	9.4%	1.3%	1.3%	N.D.	N.D.
6	Obesity in adults	9.2%	13.2% (2016)	11.8% (2016)	7.3% (2016)	24.1% (2016)	23.0% (2016)	28.9% (2016)	29.0% (2016)

Source: Elaborated by the authors. Data from The State of Food and Nutrition Security in the World (2018).

There are three key factors or drivers of food insecurity in the world: the consequences of climate change, national or international conflicts, and disruptions in economic policies. It is known that between 2011 and 2016, the number of low- and middle-income countries exposed to extreme climate changes has increased to 96 %. Climate events have increased in frequency and intensity. This is reflected in an increase from 18 % to 36 % of countries exposed to three or four types of extreme climate events

in the last 20 years. Additionally, 74 million acutely food-insecure people in 21 countries have been affected by conflict. Furthermore, 29 million acutely food-insecure people were affected by climate change and 100 million acutely food-insecure people were affected by economic shocks.

What is being done today?

In the face of what has been found, and with the objective of “ending all forms of malnutrition” by 2030, since

2012, the World Health Assembly agreed on six global goals to improve the nutrition of the nursing mother and infants by 2025. In 2015, the

Sustainable Development Goals (SDGs) established a global agenda to achieve improved nutrition by 2030.

Global targets to improve nutrition by 2025 and 2030

	Target for 2025	Target for 2030
Stunting	40 % reduction of in the number of children under five years who are stunted.	50 % reduction in the number of children under five years who are stunted.
Anemia	50 % reduction of anemia in women of reproductive age	50 % reduction in the rate of anemia in women of reproductive age
Wasting	30 % reduction in wasting	30 % reduction in wasting
Childhood overweight	To have no increase of childhood overweight	Reduce and maintain childhood overweight less than 3 %
Breastfeeding	To increase the rate of exclusive breastfeeding during the first six months of life up to at least 50 %	To increase the rate of exclusive breastfeeding during the first six months of life up to at least 70 %
Emaciation	To reduce and maintain childhood emaciation less than 5 %	To reduce and maintain childhood emaciation less than 5 %

Source: WHO and UNICEF. 2018. *The extension of the 2025 Maternal, Infant and Young Child nutrition targets to 2030*. Discussion paper..

Currently, worldwide attention to address the problem of malnutrition is growing, and it involves several nations. At the 2nd International Conference on Nutrition, countries were included into an action agenda. The United Nations Decade of Action on Nutrition 2016-2025 is the defined, cohesive and time-bound general framework for better coordination, to share successful experiences and drive policies aiming to eliminate malnutrition.

There is also the Scaling Up Nutrition Movement for the Promotion of Nutrition, comprised of 60 countries which promote interventions on nutrition and join forces

to eliminate malnutrition. Based on the first Report of the Celebration of the Decade of Action on Nutrition, nowadays, 183 countries have national policies, i.e., they have objectives and measures on nutrition. 105 of them have health sector plans with nutrition components; 70 countries have incorporated food security and nutrition into their investment policies and programs; in 57 countries, measures have been implemented to prevent and mitigate food insecurity; and, in 28 countries, socioeconomic measures that reduce vulnerability to climate threats and crisis have been put into practice. However, there is still a lot to be done.

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Ethical approach

Food security involves access, availability, safe and quality use, stability, and institutional framework. Nutrition is a right contained in the Universal Declaration of Human Rights of 1948. It would be fallacious to explain hunger exclusively due to food shortages; hunger is a social and comprehensive issue. Let us put in a balance the influencing and determining factors, such as climate changes or decay of the agricultural production versus the economic models and policies and armed conflicts. What factor carries greater weight today? If we refer to climate change, we can notice that the governments of the different nations that suffer from it know about periods of heavy rainfall, periods of drought, and urbanization control. These are reasons to question why each year similar percentages of climate change victims, house destruction, human losses, and natural resources repeat themselves. Instead of taking preventive action through clear policies, in many cases, unfinished reparation actions with shady financing end up being carried out. Therefore, it is a priority for countries to have new approaches in their preventive policies and action plans to face climate changes in the short, medium, and long term.

For this purpose, it is important to consider cross-cutting factors influencing livelihoods and the food system, such as: constant assessment of climate risk; multidisciplinary work with knowledge and experience for technical issues and prepared governments; inclusive approaches, user-oriented and focused on vulnerable groups; and a large-scale reliable financing system encouraging investment. Having instruments for intervention in specific cases is equally necessary, such as measures for vulnerability reduction, social protection in response to shocks, forecast-based financing, risk monitoring and immediate alert systems, and the strengthening of governance (Lara Cortés, 2001).

Hunger is an aberrant problem that humanity has suffered since its origin (Keys A. 1950). It is known of around 400 famines throughout history, but the difference lies in the causes and the ways in which they manifested in the past and those in which they manifest

today. It is best explained if we analyze the degree of humankind participation in triggering famine. Hence, there is an urgent need to bring ethical problems to the fore in order to address the issue of hunger; even the FAO itself has considered “ethics for food and agriculture” as a priority area.

Economic, political, and religious conflicts translate into destruction of livelihoods, houses, and infrastructure; massive migration; currency devaluation, which in turn provokes the collapse of the health system; the lack of control and spread of preventable diseases; as well as a terrible nutritional situation. Conflicts can end up in armed wars as in many countries, where the first victim is the truth. History reveals that the background to many conflicts is based on economic interests under the guise of religious interests, pseudo-ethical slogans, or others pretexts. Economic and power interests hinder the clarity in the resolution of the conflict, and it is further aggravated when allied countries that add their own interests intervene, making the problem even worse. Throughout history, there have been serious attacks against humanity, famine, destruction of donated food, intentional contamination of food for war purposes, and indifference of institutions that claim to be protectors of human rights.

If we analyze the component of the safe and quality use of food worldwide, we can affirm that today we have a dangerous and not-so-pristine food production system that damages the health and threatens the security of the planet, breaking the principles of bioethics. Highly toxic foods are produced; there is no clarity or veracity of information about the food that people consume in terms of their composition (sugars, trans fats, saturated fats, prohibited dyes, carcinogenic preservatives, high concentrations of salt, allergenic ingredients, genetically modified ingredients), and regarding their process (sanitary quality; expiration date; conservation; transport; chemical, biological, or physical contamination). This is reinforced in the face of legal gaps in laws or regulations regarding healthy eating, which in many cases are “tailored” for some companies.

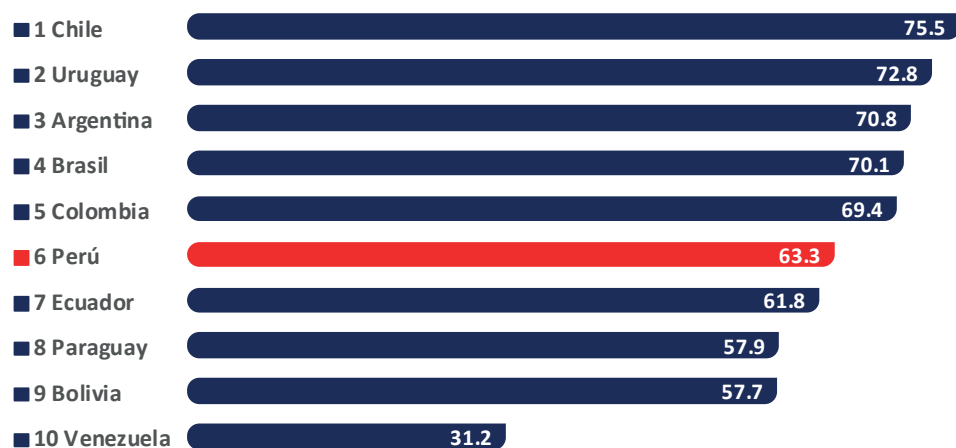
Situation in Peru

According to the 2019 Global Food Security Index (GFSI) analysis prepared by The Economist, Peru is ranked 58 out of 113 countries; and at the regional level, it is ranked 9 out of 18 countries in Central and South America.

The Global Food Security Index conducts evaluations of countries that are more and less vulnerable

to food insecurity with 28 indicators measured by three dimensions: affordability, availability, and quality and safety; with scores that fluctuate between 0 and 100. Within these three categories, Peru is ranked 61 in affordability, 58 in quality and safety of food, and its best location is in availability (57); however, a weakness in Peru is the minimal public spending on agricultural research and development.

Regional Ranking of Food Security 2019



Source: *The Global Food Security Index 2019. The Economist.*

It is important to recognize that poverty leads to consequences, such as diseases, malnutrition, and food insecurity. In Peru, between 2014 and 2016, on average, 2.5 million people suffer from hunger, with an increase of 100,000 people compared to the previous inquiry (2013/2015). If we focus on chronic malnutrition, there was a decrease between 2009 and 2017, according to the Nutrition Information System; however, a report of the World Health Organization (WHO) indicates

that 15 regional health departments register malnutrition in moderate proportion, being the Huancavelica region the only one that presents a serious level, exceeding 30% of malnourished children. In Arequipa, until 2016, 6.6% of children suffered from chronic anemia at the regional level. These figures show that there is a lot to do.

Reviewing the statistics of organizations such as the National Institute of Statistics and Informatics (INEI) and





Children benefiting from the Qali Warma Program of the Ministry of Development and Social Inclusion (MIDIS).

Photography: MIDIS.



Fruit sale at La Minka market in Callao.

Photography: JNF / Le Cordon Bleu University

the WHO, we find other indicators that reflect various factors affecting food security, and we really find a worrying scenario because, although malnutrition has decreased in some regions, in others, there is a shortage of food while, at the same time, obesity persists. Moreover, food is expensive, as a consequence of unfavorable climate factors or economic policies, which influence the population leading to a state of malnutrition or even chronic anemia and undernourishment.

The food availability at the national, regional, and local levels is related to a factor that affects many consumers: low productivity, which in turn is related to the little agricultural stimulation by the State. This causes the existence of abandoned land or poor peasants in marginal areas. For instance, in Huancavelica, 70% of the population is engaged in agriculture and livestock, but they lack technological instruments and training in sustainable agriculture with technology, which leads to low levels of production, productivity and profitability, and consequently, inaccessibility to credits and financing mechanisms.

Concerning access to food, one of the influencing factors is monetary and non-monetary income, as well as food prices. Many times, in the most vulnerable areas, people do not have access to basic products to survive. Per capita income in Peru is highly variable. In the regions of Moquegua and metropolitan Lima, there are

high per capita incomes, and the opposite occurs in Huancavelica, Apurímac, and Huánuco, which have very low per capita incomes.

Education and health are factors that determine the good use of food since we must take into account that educational performance is interrelated with nutrition and diet; thus, education and health become two relevant factors that contribute to avoid poor school performance, aggressiveness, and anxiety; and they even prevent the population from suffering from some diseases.

On the other hand, the variability of food prices is to a great extent caused by natural events, such as mud slides, earthquakes, heavy rains, overflows, or anthropic situations like water and land contamination and social conflicts. In Peru, there are six regions with high vulnerability to food insecurity because of natural phenomena; these are Amazon, Huanuco, Huancavelica, Ayacucho, Apurimac, and Puno, according to the WFP (World Food Program, 2018).

Likewise, an institutional framework is very important for the effective implementation of policies, strategies, and norms that

“A weakness in Peru is the minimal public spending on agricultural research and development”

help strengthen and improve food and nutritional security. The intervention of the prepared and reality-conscious government is essential for programs and projects. In Peru, the Ministry of Health has created the National Center for Food and Nutrition (CENAN), a technical regulatory body of the National Institute of Health (INS) that seeks to raise awareness about the nutritional situation and eating habits. The Ministry of Development and Social Inclusion (MIDIS) has created a national program of school feeding called Qali Warma to offer food services during the school period, and the Juntos (Together) program with the aim of delivering a periodic amount of money to parents in exchange for sending their children to school and health centers for monitoring. This helped many families find a way out of poverty with health, education, and nutrition.

If we take a panoramic view of food insecurity in Peru, we must recognize that many public and private companies as well as non-governmental organizations (NGOs) have joined in this great work of supporting low-income families, even focusing with special attention on the nutrition during infancy and early childhood. It is worth mentioning that with all these contributions, by 2018, child malnutrition decreased by 5.3% in five years; however, paradoxically, 8.6% of the population under five years is overweight and obese.

Food and nutrition security is not only a concept, but a reality foreign to many people in vulnerable sectors. For approximately 15 years, Peru has had outstanding achievements in the growth of the economy and the decrease in child malnutrition. The government has implemented important projects and public policies to combat these problems; however, as the phrase “everything looks nice on paper,” we ask ourselves, what is reality like? It is regrettable that in many regions we still find children with anemia; the same farmers who plant and harvest food, are the ones who suffer from hunger.

It is disquieting to know that, from the budget allocated to the agricultural sector, it is estimated that 85% stays in the city for wages and general service payments; thus, the part that reaches the agricultural communities is a small amount.

This is evidenced by the little investment in this sector despite the fact that 70% of the food consumed in Peru comes from small farmers. Therefore, the State must invest in production projects and facilitate the access to drinking water and irrigation, since accessibility to safe water is not enough in Peru.

“It is regrettable that in many regions we still find children with anemia; the same farmers who plant and harvest food, are the ones who suffer from hunger”

If having food and nutrition security is everyone's task at the national, regional, and local levels, then, why cannot hunger be reduced by 100%? It is unacceptable that in these times of unprecedented technological development, we have not yet been able to find the solution to the food problem on the planet.

Bibliographic references:

- FAO: Perú tiene 100 mil personas más que padecen hambre, ¿qué ocurrió? (10 de octubre del 2017). Gestión. Recuperado de: <https://gestion.pe/economia/fao-peru-100-mil-personas-padecen-hambre-ocurrio-2204288>
- Lecaros, Juan Alberto (2016): La bioética global y la ética de la responsabilidad: una mirada fenomenológica a los orígenes y a los desafíos para el futuro. Revista Iberoamericana de Bioética/ n°1/01-13[2016 ISSN 000-000 DOI:10.14422/rib.i01.y2016.007
- Red de información sobre Seguridad Alimentaria. (2019) Global Report on Food Crises. Recuperado de <http://www.fao.org/news/story/item/1188071/icode/>
- Organización de las Naciones Unidas para la Alimentación y la Agricultura. (2018) El estado de seguridad alimentaria y nutricional 2018. Roma. Recuperado de <http://www.fao.org/state-of-food-security-nutrition/es/>
- Centro Nacional de Alimentación y Nutrición, Instituto Nacional de Salud. Sistema de información del estado nutricional de niños menores de 5 años y gestantes que acceden a establecimientos de salud - SIEN. Bol Inst Nac Salud. 2018; 24(3-4):39-44.
- Perú mejora posición en seguridad alimentaria. (21 de Febrero del 2018). El Peruano, p.1. Recuperado de: <https://elperuano.pe/noticia-peru-mejora-posicion-seguridad-alimentaria-64087.aspx>
- Pacheco A. (2011). Situación Actual y Perspectivas de la Seguridad Alimentaria para el Mediano Plazo. CEPLAN Centro Nacional de Planeamiento Estratégico.