

UNDERWEIGHT

Nigeria, a World Food Program operator measures the arm of a child of 8 months: is moderately malnourished.

uth lives in a shack in Monrovia, Liberia. She is 25 years old and does not know if today she will be able to give any food to Sekou, her severely undernourished 5-year-old son. Mogubai, 16, wanders the streets of Kolkata, India, begging for a few rupees to buy at least a bowl of rice. In La Paz, Bolivia, the 45-year-old José also today is eating a plate of pork rinds and potatoes yet again—he has reached 110 kg in weight. Meanwhile in Dire Dawa, Ethiopia, 33-year-old Hermela is in despair as her crop has been destroyed by the worst locust invasion in the last 20 years.

DIE OF STARVATION. OR UNHEALTHY FOOD

These are four faces of malnutrition: a global tragedy that reflects the contradictions of our age—today we are able to produce more than twice as many calories per day than is needed by any of Earth's citizens. Yet, nearly 690 million people suffer from hunger: one and a half times the population of Europe. More than half of those live in Asia, but the problem is more widespread in Africa, where it affects one person in every five. Furthermore, if we take into account those who do not have regular access to food, that figure rises to a staggering more than 2 billion people. That's one in three people.

But that's not all. On the other end of the scale, there is the opposite problem: 2.33 billion overweight people, more than a billion of whom are obese. This does not only happen in rich countries, where there is an overabundance of food (and waste), but also in poor countries, where the only affordable food, as in the case of José, is junk food, high in calories (fats or sugars) and costing less than healthy foods such as pulses, fruit and vege-

tables. More than 3 billion people in the world cannot afford a healthy diet. As a result, more than half of the world's population die of either starvation or diseases caused by overeating (cancers, diabetes, strokes and heart attacks).

The situation is serious. And Covid is making it worse. So much so that the dream of ending hunger by 2030, signed in 2015 by governments representatives of 193 UN countries, is now officially over. «The world is not on track to achieve this goal», wrote the Directors of the five international agencies dealing with agriculture, childhood, food and health (FAO, UNICEF, IFAD, WFP and WHO) in their latest report The State of Food Security and Nutrition in the World 2020. To be more precise: «Africa and West Asia are completely off track. Latin America and the Caribbean are not on track, and their situation is deteriorating. Only East and Central Asia are doing well».

At this rate, the number of people suffering from hunger will exceed 840 million by 2030. Not to mention the detrimental effects caused by Covid, conflicts and climate change: «three vortexes», Maurizio Martina, FAO Deputy Director-General, told Focus, «which risk becoming a single, overwhelming cyclone».

AGGRAVATING FACTORS: COVID. WARS AND CLIMATE

Indeed, throughout the last year the pandemic has added 130 million people to the ranks of the malnourished. «Travel restrictions are preventing millions of seasonal workers from arriving from foreign countries. And unharvested food is left to rot in the fields», warns a report by Ipef Food. «Farmers and livestock breeders all over the world have kept working throughout the pandemic: they are defined as essential, but no one provides them with equipment to protect themselves from Covid or subsidies that take into account the risks they are running». The pandemic, adds IOM (the International Organization for Migration), has mainly hit undeclared work, the most widespread among migrants, with effects both on expatriates and on their families at home: in fact, three quarters of international money

G8 governments in 2008 pledged \$ 23.13 billion in aid. They gave 13.4 billion

orders are sent to poor countries. «This scenario risks adding 33 million people to the ranks of the hungry», warns the latest report.

On top of this, there are conflicts in some countries (Syria, Afghanistan, Nigeria, and Sudan). And extreme weather events such as hurricanes and droughts, affecting South Asia and the Horn of Africa. And the invasion of desert locusts, which threatens crops in East and Southern Africa. So much so that FAO and WFP (the World Food Programme) have just launched an emergency appeal in support of the 34 million people who are at risk of dying of starvation, especially in Yemen, South Sudan and Northern Nigeria. «5.5 billion dollars are needed immediately to deal with these emergencies», says Mr Martina.

But southern Europe is not free from risks. On the contrary: «The Mediterranean will be one of the most critical areas of the world over the next 30 years», warns Marta Antonelli, researcher at CMCC (the Euro-Mediterranean Centre on Climate Change). «If greenhouse gas emissions continue at the current rate, climate change is expected to reduce freshwater resources in our area by 30-50%. This will have severe consequences for irrigation».

COMMITMENTS (AND MONEY) REMAINED ON PAPER

How did we get to this point? Does the food crisis depend on the economy? «Partly yes», replies Giacomo Branca, Professor of Environmental Economics at the University of Tuscia. «The primary cause of malnutrition is poverty. In 2008, G8 governments promised \$23.13 billion in aid to the least developed countries: they delivered \$13.44 billion». Just over half. «It is a pity that the human body cannot digest cellulose», Indian agronomist Mankombu Sambasivan Swaminathan commented bitterly. «Fine words on paper do not fill the belly».

«Global economic disparities have worsened over the last decade», adds Paolo Sckokai, Director of the Department of Agri-Food Economics at the Catholic University of Piacenza. «Today, agriculture provides food for all, but many people do not have sufficient income to buy it».



EXTREMES

Madagascar:

distribute food

populations

affected by drought, which has endangered 1.3 million people. Below, overweight Californians: in the US, 16% of under-19s are overweight.

World Food

Program

aid to

operators

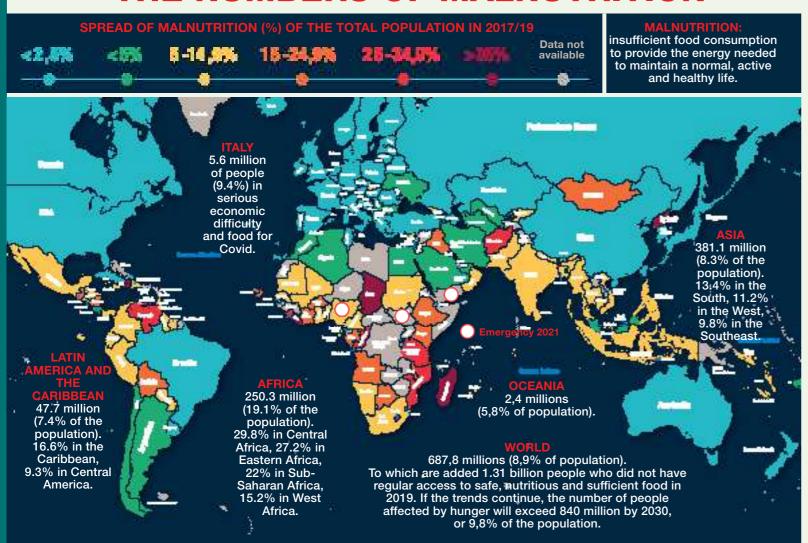
The minimum threshold to avoid starving to death is \$1.25 per person per day, while the safety threshold is \$1.75. FAO estimates that \$145 billion will be needed over 15 years to bring the entire population up to this threshold. This is 0.17% of world GDP. An achievable target. And yet, it is becoming more and more distant: in the 1980s global aid for agriculture was 20% of the total; by 2014 it had fallen to 5%.

But the problem of hunger is not just a matter of scarce funds, warns Marc J. Cohen of Oxfam in a study published in Food Ethics. It very much depends on how these funds are used. «After the 2010 earthquake in Haiti», Cohen says, «the US gave large subsidies to its rice farmers, while Haiti reduced its duties on rice imports almost to zero. Eventually, US rice was cheaper than Haitian rice, and now it accounts for more than 80% of consumption. This way Haiti lost its food autonomy».

Follows on pag. 76

72 | Focus | 73

THE NUMBERS OF MALNUTRITION



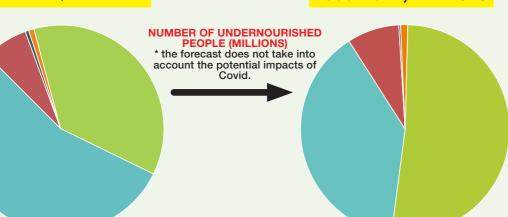
381,1 (55,4%)250,3 (36,4%)

LATIN AMERICA CARIBBEAN 47,7 (6,9%)

OCEANIA 2,4 (0,4%)

NORTH AMERICA 5,4 (0,9%)

2019: 687,8 millions



2030*: 841,4 millions

392,2 (39,1%) **AFRICA** 433,2 (51,5%)

LATIN **AMERICA CARIBBEAN** 66,9 (7,9%)

> **OCEANIA** 3,4 (0,4%)

ASIA

NORTH AMERICA EUROPE 8,5 (1%)

FOOD AVAILABILITY

2.353 kcal

The daily calorie requirement / person for a healthy diet.

5,935 kcal

The calories / person of food produced every day in the world (plus 3,812 kcal in animal feed; tota

Only upper-middle-income countries and Asia have enough fruit and getables to meet the minimum consumption of 400 g per day / persor

TFOOD WASTE

The percentage of food wasted on the entire production food. It is equivalent to the load of 23.3 million Tir (931 t).

kg/year

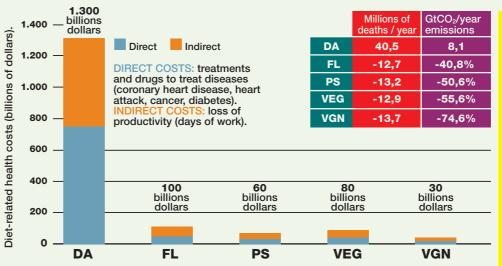
The average amount of food that each inhabitant of the Earth wastes.

<mark>67 kg/year</mark>

The average amount of food that every Italian wastes (a Greek 142, a Norwegian 5, European average 80 kg)

DIETS, EMISSIONS AND DISEASES

DIET-RELATED HEALTH COSTS, DEATHS AND EMISSIONS IN 2030,



DA: current diet: FL: flexible diet (moderate amounts of animal foods): PS: with moderate amounts of fish; VEG: vegetarian (also with dairy products and eggs); VGN: vegan

The current dietary model involves high health costs to treat cardiovascular and metabolic diseases: by 2030 it could reach 1.3 trillion dollars (more than Canada's GDP), Adopting one of the 4 diets would cut spending below 100 billion (-92.3%), especially in high-income countries

The current diet leads to 40.5 million annual deaths worldwide each year, 71% of deaths. Alternative diets would reduce mortality from 31.3% to 33.8% especially in upper-middleincome countries. In low-income countries, people die more from infectious diseases and malnutrition.

The current dietary model is also the cause of 21-37% of total greenhouse gas emissions, responsible for climate change. By adopting one of the 4 alternative healthy diet models, emissions can be reduced by 41 to 74%. In fact, most of the emissions depend on the consumption of meat (especially beef and lamb: 41%) and milk and dairy products (25%).

THE 2 FACES OF MALNUTRITION

2,001 BILLIONS of people did not have regular access to food: 34.9% of the population.

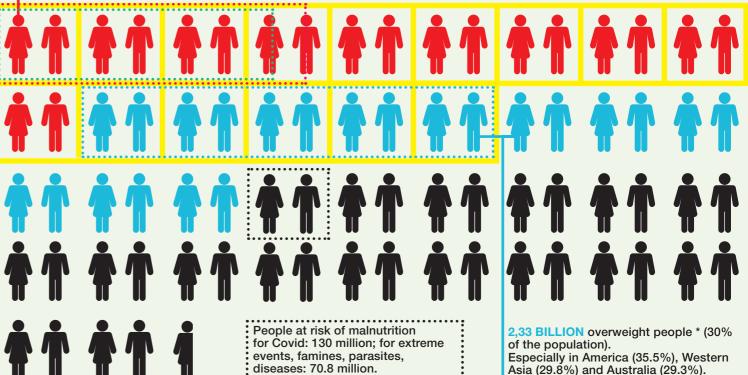
IDENTIKIT: mostly women, low income, poor education, with health problems, people living in the countryside, age 25-49, separated / divorced.

People in constant food shortage: 687.8 million (8.9% of the population).

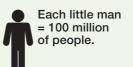
746 million people in severe food insecurity.

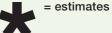
People who can't pay for a healthy diet: 3 billion.

Obese *: 1.04 billion people (13% of the population).



LEGEND





WORLD POPULATION (IN 2019) 7.7 BILLION PEOPLE

Fonti: Fao, "The state of food and nutrition in the world 2020", Oms, University of California. Food waste index report 202:

THE EFFECTS OF DROUGHT

Right: Madagascar, people waiting for a food ration. On the ground, the signs of distancing from Covid. The drought is causing serious problems food in Africa (below, South Sudan) and also in Asia.



continued from pag. 73

The same scenario occurred with European exports of milk powder to West Africa, which tripled between 2011 and 2016: today small dairy farmers in Burkina Faso, Senegal and Nigeria are struggling to survive in their domestic markets.

Hunger, in turn, leads to conflict: «The children of herders become jihadists not out of conviction, but because there is a lack of jobs», says Adama Ibrahim Diallo, leader of the association of dairy farmers in Burkina Faso. Indeed, wars are often one of the side effects of hunger. Along with migration: according to a report by IOM, in the past 20 years the number of international migrants has increased by 56%, going from 174 to 272 million. In Sub-Saharan African countries (the area that suffers most from hunger), military spending accounts for 8% of the budget, compared with 3% for agriculture. «And four of the top five aid donors, the US, France, Germany and the UK, were among the top six arms exporters», Cohen points out.

SHORT-SIGHTED CHOICES

Then there are the short-sighted choices of governments: «Ghana has invested 58% of its budget in supporting cocoa for export, to the detriment of food crops, livestock and fisheries», Cohen says. Speaking of international relations, we cannot forget land grabbing, i.e. the leasing of large agricultural areas to foreign countries: a phenomenon that began in 2008 due to the crisis in agricultural prices. According to Land Matrix, an NGO that monitors land use, agreements have been concluded on 66.431 million hectares of land worldwide, almost as much as the entire area of France. Most of the fields are rented for wood, followed by maize, flour, palm oil (for biofuels), soya, barley and fodder. As a result, many countries are losing arable land to support their livelihoods: most of them are in Africa (39%, mainly Mozambique and the Democratic Republic of Congo), Eastern Europe (29.3%, Ukraine and Romania) and Latin America (14.6%, Brazil and Argentina). The world's largest investors are the US, China and the UK.

What should we do? In order to avoid global fallout, «the priority», says Ipef Food, «is to protect the most vulnerable: the poor, the children, the elderly, and the disabled. In order to do this, we



Many poor countries use aid for **arms** or for the export of **land** or products. And agriculture lags behind

need to promote land reform to reduce inequalities in access to land. Billions of dollars are to be allocated to save the economy during this period: we must seize the opportunity to transform it, not just to keep it afloat». Moreover, this would have beneficial effects on many fronts: wars, migration and human lives.

Another important step is to focus on biodiversity, says the WWF. «Throughout history we have used over 6,000 crops for food, while today we only use 200 of them. And nine of these account for almost 70% of the food produced. This lack of diversity makes us more vulnerable to pests, weather events and diseases».

DIVERSIFIED SOLUTIONS

Another area for urgent action is change in diet. Current eating habits, based on livestock and dairy products, produce up to 37% of greenhouse gases. And they lead to 40.5 million deaths a year, as animal fats cause cancer and cardiovascular disease. All of this also results in huge health care costs.

Switching to a flexible diet, with moderate amounts of fish, or to a vegetarian diet would reduce deaths by one third and health care costs by more than 90%, at least in upper-middle-income countries.

Finally, there is a technological aspect: «To develop agriculture, we need to introduce higher-yielding varieties such as wheat and rice. This approach has worked in Asia, so much so that countries like the Philippines and Vietnam have become exporters», Branca says. «But in Africa, this method did not take root: local producers were not ready to accept these innovations».

«The solutions cannot be the same for everyone», adds Sckokai. «They have to adapt to different realities, often consisting of remote villages with no roads to get there, no water, no electricity. We have to take one step at a time. But it is urgent to start».

Italy can play a major role in this regard, points out the FAO Deputy Director: «Our country chairs the G20 and in July is going to host the UN Food Systems Pre-Summit. We are facing three major emergencies, related to health (Covid), environment (climate change) and food (hunger). We must not neglect any of these, because each is tied to the other».