

The Problem of World Hunger

Both a quantitative and qualitative problem

Introduction

With the movement of capital and the globalization of international commerce, the new world economic order has created and continues to create a significantly emarginated Third World. Despite privatisation and globalization, a considerable number of countries are emarginated from the mainstream global economy and are left at the sidelines of most negotiations and accords. Due to their limited geographic size, smaller countries are paid less attention in the world news (80% of the news comes from the U.S., Britain and France) and receive less aid grants from international bodies, compared to other countries.

Finally, the quality of the food supplied to countries in the developing world is an issue that continues to assume greater importance. In fact, medical data suggests that a diet rich in fibre and low in refined carbohydrates and fats is especially beneficial to populations that have survived famine, and more attention should be given in order to carefully assess the kind of foods that is made available to these populations in need.

The problem of World Hunger

Every day we hear stories of human sufferance, murders and hunger-related deaths. The tragic data and images surrounding such stories pervade our every day lives and are a depressing reflection of the world of consumerism, food surplus and, at times, indifference.

The statistics are alarming. About 24,000 people die every day from hunger or hunger-related causes (2). The data have improved compared to the 35,000 people who died of hunger a decade ago. Also, three-quarters of these deaths are related to children less than five years of age. Today, 10% of children living in developing countries die before their fifth birthday. Famine and wars cause only 10% of deaths due to hunger, though these are the most commonly discussed causes. The Food and Agriculture Organization (FAO) estimates that more than 30 million people a year die of hunger (5). Those who suffer from severe or permanent malnutrition are about 900 million. These include men, women

and children who have suffered irreversible damage due to food scarcity and face death in the short- or long-term or risk a state of severe disability (blindness, rickets, poor brain development).

Despite this, the right to food is one of the principles set down in the 1948 “Universal Declaration of Human Rights” (10). The right to food is clearly enshrined in Article 11 of the International Covenant on Economic, Social and Cultural Rights, in which governments “recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions.” A considerable number of countries have remained marginalized from the mainstream world economy and left on the sidelines of political negotiations. Due to their limited geographic size, smaller countries are paid less attention paid in the world news (80% of the news comes from the U.S., Britain and France) and receive less aid grants from international bodies, compared to other countries (14).

The increased mobility and freedom of capital—both legal and illegal—does not promote investments in Third World countries but tends to be concentrated in industrialized countries. International trade, research and finance are concentrated in the United States, Japan and Western Europe. These three geographic areas exert strong control, exerting their influence across most of the world. Such political and economic imbalances become discernible when the contradiction that binds them spirals: the increase in the number of malnourished people is a problem that affects the entire planet. All geographic areas in the world have suffered food insecurity (23).

The Asian continent has the highest number of malnourished people (642 million). The Sub-Saharan region in Africa has the highest proportion of malnourished people in relation to population. Even in developed countries, malnutrition is becoming a growing problem.

World Hunger, seen by diverse intellectuals

Siddharta, the main protagonist of the novel by Herman Hesse (25), explains his philosophy of life: Fasting for him was not a form of punishment but rather "the most beautiful thing" because if he learned to resist hunger, he would not need to find a job in

order to satisfy his hunger. As a result, he would have more time to meditate in absolute serenity. This fictional character has greatly influenced Western culture, prompting many to learn more about the "real" Siddhartha, who was the founder of Buddhism in the sixth century B.C.

For Marcelo Sánchez Sorondo, Chancellor of the Pontifical Academy of Sciences, as well as bishop and philosopher, there are no other solutions to world hunger, which has dramatically exploded again in the Horn of Africa: “We must act now and help free these populations from a state of emergency, but we also need a long-term plan” (26). Continuing, Sánchez Sorondo goes to the heart of the problem, remembering that already in his day Paul VI had a clear vision of the relationship between faith and science when he encouraged scientists to “respect and build natural laws, have the confidence to find the hidden opportunities that providence has put in Nature for the good of Men.”

Without restrictions because “the grain of wheat is a product created by God, according to the workings of Nature, which Man today is able to mimic, in part,” stresses Sánchez Sorondo, adding “We must, therefore, respect both the laws of Nature and develop it taking into account its positive aspects, otherwise Nature will reject human intervention.” An example? Consider how “global warming is threatening the water cycle, which is the basis of life on our planet.”

Hunger, mortality and the role of modern medicine

Between the late 1930s and the 1960s there was a common theory on the causes related to the decline in the mortality rate. It was believed that this trend was, in fact, due to four factors: public healthcare reforms, advances in medicine, improvements in hygiene, and a rise in income.

Among the most evident trends of the last century, which were brought to light in epidemiological studies, is the significant fall in the mortality rate due to infectious diseases. Also worth mention are the rise—and subsequent recent decline—in the mortality rate due to stroke and cardiovascular disease; the increase in the mortality rate due to lung cancer; and the fall in mortality due to stomach cancer and cancer of the uterus. Finally, on a social level, it is important to remember the sharp rise in diabetes

and metabolic diseases, which are accompanied by an increase in weight, also in countries in the developing world.

Changes in diet have today given rise to new forms of pathologies (particularly intestinal cancer) (31), due to a decrease in the use of simple and natural foods. The relationship between the consumption of raw fibres and colon cancer is an example of this. In recent years, a large prospective “cohort” study was carried out in Europe in which 500,000 people were recruited as volunteers: the study allowed researchers to collect detailed information on their dietary habits and to take blood samples. Subsequently, those who took part in the study have been followed-up to determine the possible occurrence of malignant tumours, thus placing them in relation to their dietary habits, lifestyles and the laboratory analysis of their blood samples.

Among the first results of the study, entitled EPIC (European prospective investigation into cancer and nutrition), is a clear effect from the consumption of raw fibres (32). Compared to those belonging to the lowest quintile, the volunteers who displayed a high consumption of raw fibres had a 60% risk of colon cancer, which decreased by 40% (33). The survival instinct is the basis of life for all humans and animals that inhabit the planet. The availability of food is the first resource. Once available, this leads to an increase in average life expectancy, which in turn generates a new set of suppositions, especially regarding the quality of life. In fact, the impact of globalization through TV and today the Internet has meant that all civilizations have the opportunity to witness the glaring differences in the quality of life across the world, such as areas where poverty and food insecurity are still a real human drama, while other parts of the world enjoy wealth and food surplus.

If on the one hand developed countries offer to help poorer countries through important economic initiatives, wealthy countries also continue to enjoy the economic benefits of exploiting their poorer counterparts. This is now the subject of heated debate, with sectors of the population in rich countries who avoid purchasing products from poorer countries where local populations are continually exploited, particularly the young. An example of this is in Bolivia, where 39% of the population is under 15 years and the majority of the population starts working at a young age. There, the majority of children work to pay for electricity or water for their families and/or to pay for books and pens

needed at school (37). Although it seems illogical, the reality is that if these children stopped working, they could no longer attend school.

A qualitative approach to the problem of world hunger

“Feeding the Planet” is the slogan of the upcoming EXPO, which will take place in Milan in 2015. The theme encompasses all food-related issues, from the problem of the lack of food in some areas of the world to nutrition education and the debate surrounding GMOs. In fact, if the lack of food and how to solve the problem of its availability is the central theme of the upcoming edition of EXPO, it is worth stressing the importance of the quality of the food supply. Thus, the new slogan could be “Feeding the planet well.” If this were the case, the adjective “well” would have double meaning: on the one hand, it would put forth the concept of quality compared to quantity; and on the other hand, it would introduce the theme of sustainability in food production, which inevitably leads to cost savings.

In the Horn of Africa, there is a new food emergency and images of emaciated children have reappeared in daily news reports. Millions of people in East Africa are facing a food crisis caused by severe drought and a combination of negative factors, among them food price hikes, the ongoing conflict in Somalia, and the general vulnerability of people and communities throughout the region. Even this humanitarian tragedy needs to be better represented across world in order to encourage action.

To address the problem of world hunger, we must know where and why people are suffering from it. This information cannot fill the stomachs of the hungry, but it is crucial to determine which measures are needed to ensure access to adequate amounts of food.

In conjunction with Washington, Berlin, Paris, London and Brussels, CESVI, the Italian edition of the Global Hunger Index (38), presented its latest report in Milan, with the patronage of EXPO and in cooperation with local authorities and other non-governmental organizations. The report is the fifth in the Italian series and the seventh in Europe: The theme of food security is one of the necessary indicators in measuring reductions in world hunger.

Nutrition and sustainability are two important topics that are taking a leading role in the political agenda of major global institutions. The FAO recently declared an urgent need

to use alternative protein sources and it is promoting the return to entomophagy in countries where the consumption of insects was traditionally practiced (41) (FAO, 2010). The main challenge that affects food systems is that of meeting a growing demand for nutrient foodstuffs (especially given that the world population will reach 9.2 billion people by 2050), compared to a decline in available natural resources, an increase in environmental degradation and greater competition for resources due to the demand for energy from renewable sources (42).

One of the most pressing issues affecting global food systems is the increasing global demographic and the resulting increase in food demand. It is estimated that the world population will reach 9.2 billion by 2050.

Economic development processes, urbanization and globalization will also lead to a change in eating habits in developing countries, where there will be a greater variety of foods and an increase in the consumption of animal proteins. Higher incomes will lead to a rise in the consumption of fruits, vegetables, milk, dairy products, meat and related meat products.

The demand for meat is on the rise and this will require a rise in the cultivation of cereals and fodder needed to feed animals (42).

Among other social factors contributing to changes in eating habits in developing countries are the emancipation of women; the growth of international trade; the influence of the food industry and marketing; and the growing preference for western food models. The changes in food demand will have a major impact on health. Although the diversification of diet among the poor will improve their health, this diversification is also expected to cause an increase in diet-related diseases, such as obesity and diabetes, due to the greater availability of low cost—and low quality—foods.

Over the past ten years, the prevalence of obesity—both in adults and in children—has skyrocketed, not only in developed countries but also in developing countries. In describing this alarming phenomenon, in 1998 the World Health Organization coined the term “global epidemic of obesity” (45). In Italy, data taken from the ISTAT multipurpose surveys has shown an increase in the prevalence of obesity, from 7.3% in 1994 to 9.8% in 2005 (46). It has been calculated that there are 4 million and 700 thousand obese adults in Italy. The data released by ISTAT in 2002 indicates that Italy, compared to other

countries in Europe, has a high prevalence of overweight among children and adolescents, reaching 26.9% among males and 21.2% among females.

One of the most reputable theories posits that a genetic predisposition to diabetes and obesity is linked to evolutionary processes. Neel was likely the first researcher to tackle this hypothesis, suggesting that obesity and diabetes originated from a process of natural selection, in which the development of a “thrifty” genotype was needed for survival during periods of famine (48).

The theory of the “thrifty” genotype is, therefore, based on three main findings: (1) famines were a common occurrence in human history; (2) food shortages have led to food deprivation and a significant increase in mortality in the general population, mainly caused by infection; (3) the obese are more likely to survive during periods of prolonged food deprivation.

In the light of this theory, which has been accredited today by experts in the field, efficacious interventions tackling the problem of world hunger will have to consider not only food procurement but also food quality, with a preference for foods such as lettuce, cabbage, celery, potatoes, carrots, turnips, sweet potatoes, nuts, peas, beans, lentils, wheat, rice, corn, barley, millet and cereals.

Conclusion

“Feeding the planet” is the slogan of the upcoming EXPO, which will be held in Milan in 2015 (54). The objective is to solve food scarcity by fighting the problem of hunger. Personally, I think it is necessary to give greater importance to the quality rather than quantity of available food. It is also important to address the issue of sustainability in food production, which can also be economical. According to the theory of the “thrifty” genotype in developing countries, those who have survived famine over the centuries did so thanks to certain genetic characteristics. A surprising finding reveals that when migrant populations in developing countries are exposed to the typical diet of industrialized countries, these populations rapidly increase in weight and rapid weight gain is associated with the “thrifty” genotype when it is activated by excessive food intake (51). Thus, when supplying food to people in developing countries, the “thrifty” genotype should be taken into account, especially in the choice of foods supplied. Foods

high in saturated fats and fast absorption carbohydrates should be avoided so these populations do not, over time, suffer from the same diseases that are common in industrialized countries.

In conclusion, in order to solve the problem of world hunger we must act not only on the amount of food supplied but also on its quality, giving preference to foods such as lettuce, cabbage, celery, potatoes, carrots, turnips, potatoes, dried fruit, peas, beans, lentils, wheat, rice, corn, barley, millet and cereals.