

Forum: The Economic and Social Council

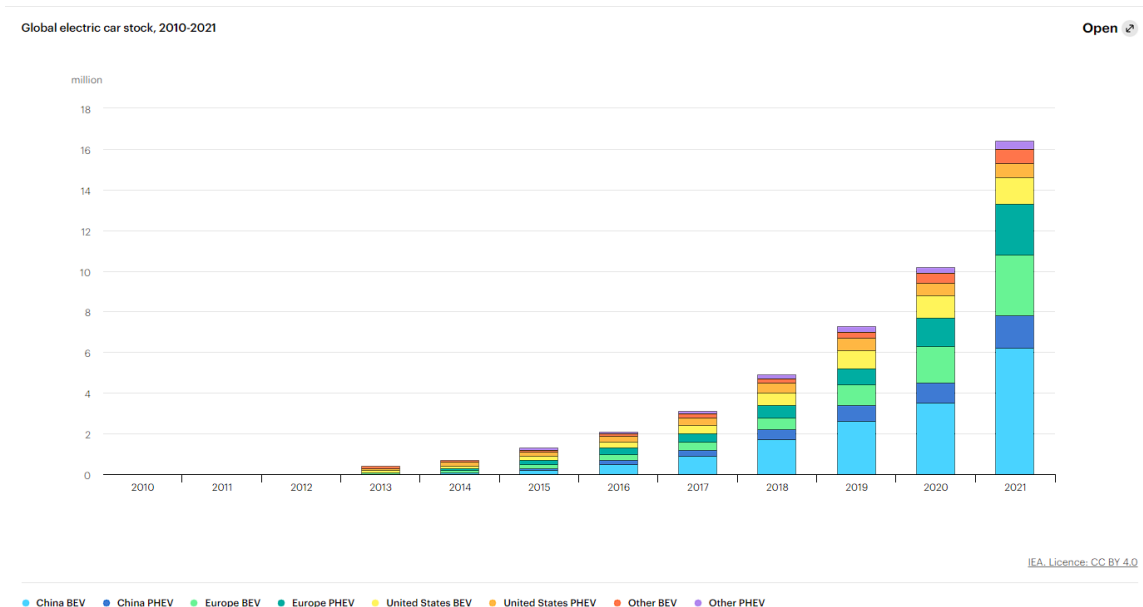
Issue: The Question of Protecting Food Production and Food Supply

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Introduction

The feeling of hunger touches up to 800 million people all over the world¹. With climate change, weather conditions ramp up each year bringing more and more catastrophes and extreme conditions, aggravating agriculture. With these conditions come many problems, including loss of biodiversity, loss of habitats and increase in socioeconomic problems. These are just some of the main points but climate change includes much much more, maybe even problems we have yet to come by. In 2016 193 states² agreed to limit the CO2 emissions to contain global warming to 2°C while pursuing to 1,5°C. The European Union has also taken extra steps to ban the sale of CO2 emitting cars by 2035, with huge steps being made in the development of electric cars, such as Tesla. The amount of electric vehicles on the roads has risen exponentially³ in the past few years, which can be seen from the first graph. The second graph shows potential outcomes of emissions and the rise of global temperature.



The amount of electric cars on stock, from the International Energy Agency, IEA

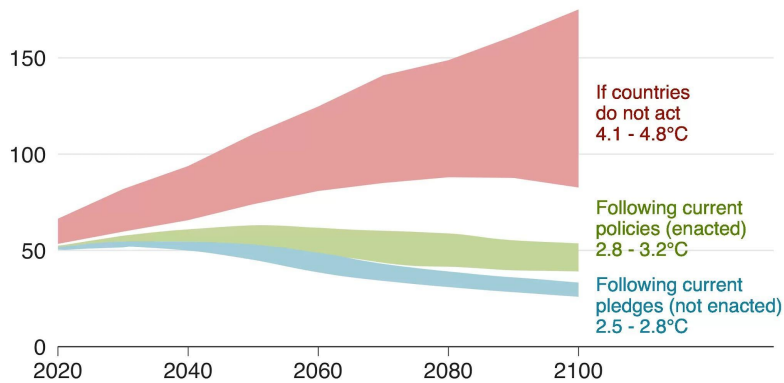
¹ <https://www.worldvision.org/hunger-news-stories/world-hunger-facts>

² <https://www.un.org/en/climatechange/paris-agreement>

³ <https://www.iea.org/reports/global-ev-outlook-2022/trends-in-electric-light-duty-vehicles>

How much worse will the problem get?

Emissions* and expected warming by 2100



*Emissions are in Gigatonnes of CO2 equivalent

Source: Climate Action Tracker

BBC

A graph showing different outcomes of climate changes in 80 years⁴.

The consequences of global warming are most severe in LEDCs, especially in countries located on the continent of Africa. The whole continent produces about 2%⁵ of the carbon dioxide emissions, and suffers the most in relation to its emissions. By this point, approximately 250 million people in the continent are affected and the number is expected to triple by 2050. However, even very developed countries, such as the Netherlands, are on the verge of catastrophes. With the ice caps melting, the sea levels have risen around 3 millimeters annually for the last two centuries.⁶ About a third of the Netherlands' urban area is prone to floods and sudden rising of sea levels could cause severe damage to the societal infrastructure, such as collapsing or destruction of households, social and welfare facilities, roads, bridges and sewers.

Definition of Key Terms

Agriculture

Practice of preparing and executing the growth, development and harvesting of crops and livestock. Additionally the distribution of crops and meat to markets can be included in the term.

Drought

⁴ <https://www.bbc.com/news/science-environment-46384067>

⁵ <https://news.un.org/en/story/2022/09/1126221>

⁶ <https://www.climatechangepost.com/netherlands/coastal-floods/>

An unusually long period of lower rainfall than expected, leading to shortage of water, loss of biodiversity and making agriculture practically impossible. Droughts can also be just draining of important masses of water, for example a lake or a well.

Biodiversity

The ensemble of species of plants, animals and bacteria that together form the living organisms of the world. In addition, biodiversity includes genital variation of organisms and the ecosystems and cycles of life.

Less Economically Developed Countries (LEDCs)

Countries, where the financial state is not as well developed as in other countries. Most LEDCs share points of high birth-, and death rates, low life expectancy and high infant mortality.⁷ Most African countries are LEDCs.

Famine

Large-scale shortage of food, due to sudden food loss, catastrophe, poverty or other accident. Not to be confused with a food crisis, a food crisis is considered a famine when all following three things are happening at the same time: 2 deaths per 10 000 people, a fifth of the areas households face a severe problem with malnutrition, a third of minors of the area suffer from malnutrition.⁸

Food Crisis

An acute problem with the lack of food, usually due to failure of agriculture, rise of population or sudden failure of storing food products. Around 350 million people are experiencing a food crisis at this moment⁹, the number of people has tripled compared to pre-covid 19 levels.

Non Governmental Organization (NGO)

An organization that is working outside of a government, usually without aiming for financial gain. NGOs usually aim to solve issues regarding for example humanitarian problems, human rights and other social problems or environmental causes, like helping provide food in famines, making sure everyone has a place to sleep after an earthquake and working to combat poaching of endangered species.

Explanation of the Question

⁷ <https://globalawareness1212.wordpress.com/what-is-ledc/>

⁸ <https://www.wvi.org/food-assistance/famines-and-hunger-crisis-what-you-need-know>

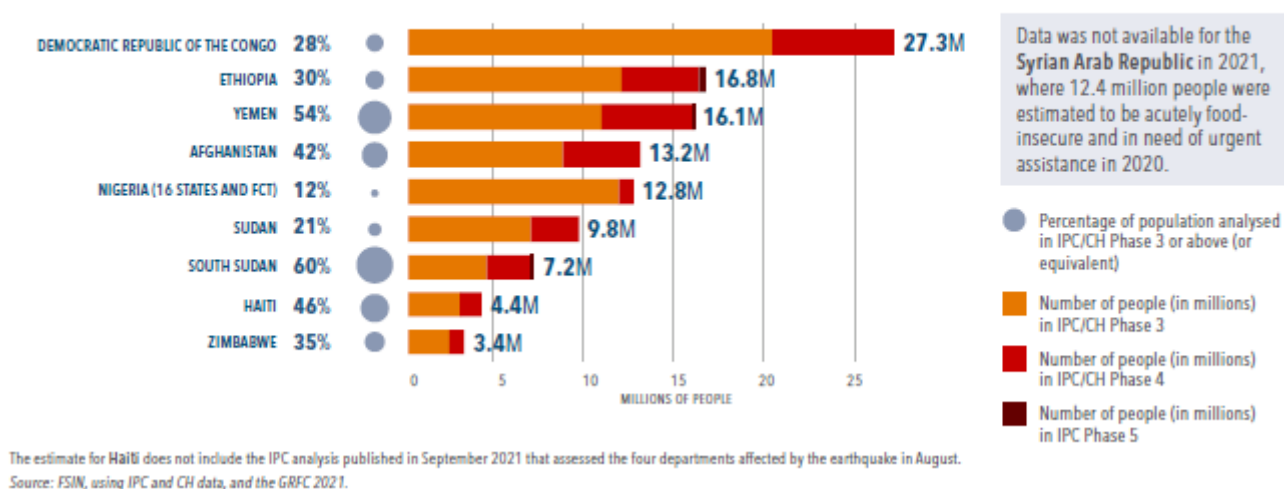
⁹ <https://www.wfp.org/emergencies/global-food-crisis>

Background

The world produces enough food for all of us, however unfortunately it is not distributed evenly. Especially in LEDCs problems like infant mortality occur frequently due to having inadequate nutrition. With climate change ramping up even more fierce each year, agriculture gets more difficult. Crucial bodies of water are draining, such as the Colorado river, which parts through 7 different states and is essential for over 40 million people, providing drinking water, electricity and a way to irrigate fields.¹⁰

Water shortage is just one of the problems with food production and agriculture. Extreme weather conditions, disasters and overall bad preservation can cause mass food losses, leading to a momentary food crisis even in the wealthier parts of the world. In LEDCs difficult conditions such as season droughts, wet seasons or cold winters cause mass food losses more drastically. These crises are dealt with by NGOs such as WFP (World Food Programme) or FAO (Food and Agriculture Organization of the United Nations) which provide assistance in emergency such as medicine and nutrition, transportation of agricultural products or protecting critical structures.¹¹

By September 2021, around 111 million people were in Crisis or worse (IPC/CH Phase 3 or above) in nine out of the 10 largest food crises of 2020



A graph showing that the 9 largest food crises combine together over 100 million people with around a third of the population of the country on average.¹²

Financial differences also play part in food crises around the world. For example in South Sudan, a plate of food costs 186% of average daily wages. In the state of New York, by that same percentage, a plate of food would cost 370 euros.¹³ Financial troubles have hit the economy in organizations such as WFP, and the need for resources is rising drastically. The amount of people experiencing a food crisis

¹⁰ <https://web.archive.org/web/20120429024450/http://wwa.colorado.edu/treeflow/lees/compact.html>

¹¹ <https://www.wfp.org/global-hunger-crisis>

¹² https://knowledge4policy.ec.europa.eu/publication/global-report-food-crisis-september-2021-update_en

¹³ https://docs.wfp.org/api/documents/WFP-0000119678/download/?_ga=2.81495575.1601345450.1609951074-1846744995.1609951074

has tripled in two years, rising up to about 350 million people. Problems with not enough funding to these organizations can be seen for example in the European Migration Crisis¹⁴ of 2015, when millions of Syrian refugees had to travel across many countries just to find a place to live where war is not imminent while many countries gave immigrants the cold shoulder.

Effects of food insecurity

Hunger crises are acute problems where a society as a whole is having trouble with getting enough nutrition. Causes for hunger crises are not clear to point out, but effects may be seen worldwide. For example the world food price crisis of 2007, when the global price of wheat, milk and rice doubled¹⁵ and food prices generally rose up by at least 25%.¹⁶ The rising of prices can lead to more severe socioeconomical problems, such as inflation, which is the fall of value of money.

A Conceptual Framework: Cycle of Food Insecurity & Chronic Disease



Adapted: Seligman HK, Schillinger D. N Engl J Med. 2010;363:6-9.

A graph picturing the downward spiral of food insecurity¹⁷

Basic nutrition is a necessity for a human being to survive. Without proper nutrition the physical growth can slow down and cause growth and developmental disorders as well as chronic diseases before and after birth. Growing up with minimal nutrition can also cause psychological problems later in life. According to this study¹⁸ made by the Texas Christian University, lack of food in the stages of

¹⁴ <https://www.youtube.com/watch?v=v13kTeAHY4c>

¹⁵ https://web.archive.org/web/20080625010620/http://www.navhindtimes.com/articles.php?Story_ID=04147

¹⁶ https://en.wikipedia.org/wiki/2007%E2%80%9308_world_food_price_crisis#Rising_prices

¹⁷ <https://hungerandhealth.feedingamerica.org/understand-food-insecurity/hunger-health-101/>

¹⁸ <https://www.psychologicalscience.org/news/releases/early-poverty-disrupts-link-between-hunger-and-eating.html>

growing up causes more eating disorders and raises the chance of obesity due to not forming a healthy relationship to food and may have problems controlling the amount of food intake in adulthood.

Key Member States and NGOs Involved and Their Views

World Food Programme (WFP)

The World Food Programme, abbreviated WFP, is founded by the United Nations and funded by voluntary donations of individuals, governments and corporations¹⁹. It is the largest humanitarian aid organization, founded in 1961. WFP works against hunger and is helping in over 120²⁰ countries with individuals that are experiencing a crisis relating to food and is producing ways to battle against famines and crises in the future.

WFP utilizes partnerships with NGOs, leading directions of counties and different UN organizations to make the biggest impact in the battle against hunger. Over 20 000 volunteers are working to help in acute situations everywhere around the world.

Food and Agriculture Organization of the United Nations (FAO)

The Food and Agriculture Organization of the United Nations, abbreviated as FAO, is a UN knowledge agency with 194 member states, which provides funding for the work of the organization. FAO works to eradicate hunger and eliminate poverty while maintaining sustainable management of natural resources and pollution.

The United States of America (US/USA)

The United States of America is one of the largest countries by population and landmass, and one of the largest producers and exporters of agricultural products²¹. Even though the US is a highly developed state, over 10% of households, or in other words around 30 million people, live in a food insecure status. Food insecurity means no constant access to food, or not being sure of when will be the next time that food is on a plate. With no traits of a welfare state, such as financial aid coming directly from the government, many charities, food banks and NGOs rise up to help the low-paid and the homeless. Organizations such as Feeding America have set up food banks to share and maybe even prepare food locally.²²

China

¹⁹ <https://www.wfp.org/funding-and-donors>

²⁰ <https://www.wfp.org/who-we-are>

²¹ <https://www.fao.org/faostat/en/#data/OCL>

²² <https://www.feedingamerica.org/hunger-in-america>

China is the largest importer, consumer and producer of food²³, and agriculture provides jobs for around 300 million people, which is roughly the same amount as the population of the United States of America. China produces a quarter of the world's grains, which annually adds up to around 650 million tons of grain.²⁴

While China seems to be self-sufficient with their food production, eventually problems will come up. High population growth requires more and more food, jobs and housing. Soon, China will run out of cultivable farmland, jobs and room for more cities and housing.

Ukraine

Ukraine has been one of the main importers of grain, wheat, corn and sunflower oil in Europe. Normally Ukraine works with the World Food Programme (WFP) to assist with food shortages in East Europe and Asia to provide food for over 100 million individuals.²⁵ Under the Russo-Ukrainian war the price of food and electricity has jumped up in Europe, as the export of agricultural products was blocked by the Russian army. On July 22th, 2022 an agreement was established between Turkey, Ukraine, and United Nations (UN) to create a path for products stored in Ukraine. In three and a half months, over 12 million tons of grain and other products were shipped through the black sea to European markets.²⁶

Madagascar

Madagascar is experiencing a famine at the time of writing. Between 1980 and 2013, Madagascar has suffered from 63 natural disasters²⁷. Natural disasters are estimated to be one of the causes, alongside climate change and the socioeconomical problems of the COVID-19 pandemic. In June 2021, a broken water pipe caused residents to walk 15 kilometers in order to get fresh water. WFP reported on the 23rd of June that 500 000 people were in a famine with 800 000 on the verge of a famine.

United nations works with WFP and many governments to provide aid to people in Madagascar with the government of the United States providing aid worth 40 million US dollars.²⁸

²³ <https://catking.in/top-agricultural-producing-countries-in-the-world/>

²⁴ <http://global.chinadaily.com.cn/a/202207/08/WS62c76f8aa310fd2b29e6b27a.html>

²⁵ <https://www.unwomen.org/en/news-stories/feature-story/2022/09/ukraine-and-the-food-and-fuel-crisis-4-things-to-know>

²⁶ <https://www.consilium.europa.eu/en/infographics/ukrainian-grain-exports-explained/>

²⁷ <https://africafeeds.com/2021/06/23/madagascar-families-eating-mud-due-to-worst-drought-in-40-years/>

²⁸

<https://mg.usembassy.gov/u-s-government-provides-nearly-40-million-in-additional-emergency-assistance-for-southern-madagascar/>

Timeline of Events^{29 30}

Date	Description of event
1943	The first conference dealing with food and agriculture is held in Virginia, USA
1945	FAO is established
	WFP is established
1961	The Millenium goals are published with the first one being to cut the amount
2000	of people suffering from hunger in half
September 25th -27th, 2015	The second SDG, along with the other 16 SDGs are created, aiming to end hunger and all forms of malnutrition by 2030
2016	71st UN General Assembly, with conversations of accomplishing SDGs by 2030 were discussed

UN Involvement, Relevant Resolutions, Treaties and Events

The United Nations has made a few resolutions regarding the problems with food production and protection. Most of the work has been done from WFP and FAO, with FAO focusing on defeating hunger as a whole³¹ and WFP working to give humanitarian aid to people in need.

- WFP is established: resolution / adopted by the General Assembly on 19th of December, 1961 **(A/RES/1714(XVI))**³²
- The World Food day is established: resolution / adopted by the General Assembly on 5th of December, 1980 **(A/RES/35/70)**
- The right to food: resolution / adopted by the General Assembly on the 18th of December, 2002 **(A/RES/57/226)**³³

Possible Solutions³⁴

Sharing expertise

²⁹ <https://research.un.org/en/foodsecurity/un-milestones>

³⁰ <https://documents-dds-ny.un.org/doc/RESOLUTION/GEN/NR0/167/67/PDF/NR016767.pdf?OpenElement>

³¹ <https://farm4fashion.wordpress.com/2019/04/09/what-is-the-difference-between-wfp-fao-and-ifad/>

³² <https://documents-dds-ny.un.org/doc/RESOLUTION/GEN/NR0/167/67/PDF/NR016767.pdf?OpenElement>

³³ <https://digitallibrary.un.org/record/482533>

³⁴ <https://sdgs.un.org/goals>

Not everyone has the knowledge or experience of farming and preserving food for a later date. LEDCs could benefit from providing good equipment and knowledge on how to farm to provide for entire communities. This could also help the economical situation and provide more jobs and work opportunities for everyone, even in highly developed countries such as the US. This would contribute to SDG 1 (no poverty), 2 (zero hunger) and 8 (decent work and economic growth)

Increasing aiding and funding

To prevent situations like the European refugee crisis of 2015 which was mentioned earlier, WFP could ask for funding more directly from governments. FAO gets their funding from the member states, and WFP could switch to a similar system of funding, where member states and enterprises provide WFP with a fixed budget annually. The donation system could be kept, but especially governments and enterprises would be encouraged to join the annual funding system.

Committing to nature agreements

Many food crises are caused fully or partially by effects of climate change. One way of slowing down climate change is to commit globally to the Paris agreement and pursue together to keep the global temperature under 1,5°C. While not everything can be reversed, many harvests and storages of food are destroyed due to the effects of climate change, such as droughts or tornados. Working should be done together, with highly developed countries aiding the LEDCs in their struggles to cut the CO2 emissions before 2030.

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