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A fairer spread

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The global food crisis has gained pace due to war, the pandemic, and climate change. The vulnerability of the global food systems puts global health progress at risk.

Photo: Einar Nilsen

The massive increase in food production that we have witnessed over the last decade is one of humanity's greatest technological and scientific achievements. Thanks to the development of higher-yield crops, effective pesticides, artificial fertilisers and advanced agricultural engineering, we produce more than enough calories to cover the needs of humanity – despite the fact that there have never been as many people on Earth as right now (1).

The problem is that we distribute calories so incredibly unevenly that the result is a massive health loss at both ends of the scale. At the beginning of 2022, there were 276 million people at risk of starvation (2) and close to 150 million children under five suffered from stunted growth due to undernutrition (3). At the same time, 2.2 billion people across the world are overweight (3). Globally, malnutrition, both in the form of too little and too much food, causes more than 25 % of all deaths caused by non-communicable diseases – a share that has increased by 15 % since 2010 (3).

The planet also has to pay a high price for our eating. As much as 40 % of the Earth's ice-free surface and 66 % of all the world's water supply is used for food production (1). And food production causes more than one-third of the planet's total greenhouse gas emissions, an increase of 14 % since 2010 (3).

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While food production contributes to climate change, it is also very vulnerable to these changes. Climate change has already had an adverse effect on the world's food production (4). And in the years ahead, food safety will increasingly be challenged by global temperature increases (5). We recently saw an example when an extreme heatwave in India gave rise to fears that crops might fail (6). As a result, the world's wheat prices rose yet again to record heights. This happened immediately after the ravages of the COVID-19 pandemic, that caused a rise in food prices on a scale that pushed at least 155 million people into extreme poverty, with the accompanying risk of undernutrition (3).

The war in Ukraine has further accentuated the vulnerability of the world's food supply. Globally, as much as 15 % of corn exports come from Ukraine, 12 % of wheat exports and up to 50 % of sunflower oil exports (7). Millions of tonnes of grain are currently stuck in Ukrainian grain stores and aboard ships that are stuck in closed ports (2). And unless the war comes to an end, Ukrainian farmers will have nowhere to store this summer's crops, that will be left to rot in the field. This situation may cause a risk of acute starvation for a further 47 million people, most of them in sub-Saharan Africa (2). And the consequences of war go considerably further than next year's harvest. In turn, a shortage of artificial fertilisers may well give rise to a global food crisis that will last for years (7).

The poorest will always be the worst affected by any crisis. In Norway, people spend approximately 11 % of their household income on food, but in some countries this percentage is as high as 50 % (8). A rise in grain prices that will

be expensive to us, will spell disaster for others. Besides, rich countries have access to a variety of sources of calories, while singular dependency on grain leaves the populations of many poorer regions even more vulnerable.

The combined effects of war, the pandemic and a climate-related food crisis demonstrate how the vulnerabilities of the global food systems jeopardise the global health progress that has been made over recent decades. To prevent the growing hunger crisis from spiralling completely out of control, we urgently need to re-establish stable production and transport of food. We also need to provide humanitarian assistance to the worst affected countries, as urged by the World Food Programme (2). But in the longer term, our food systems need radical change. This is the only way to put an end to the systematic health disparities caused by regional undernutrition, and those caused by overnutrition. We need to secure a more stable and fairer distribution of the world's production of calories and micronutrients. To secure more effective utilisation of the enormous areas of land used for food production, the world's meat production will also need to be drastically reduced (3). This type of action will require greater international collaboration, major financial investment and increased focus on correct nutrition as a basic health right. But this will pay off. According to the calculations published in the Global Nutrition Report 2021, increased investment in nutrition will produce global economic growth in the region of USD 10 billion by 2050 (3). But the most important gain will be a healthier planet and a healthier population.

REFERENCES

1. Myers SS, Smith MR, Guth S et al. Climate Change and Global Food Systems: Potential Impacts on Food Security and Undernutrition. Annu Rev Public Health 2017; 38: 259–77. [PubMed][CrossRef]

2. World Food Programme. WFP calls for urgent opening of Ukrainian ports to help rein in global hunger crisis. 6.5.2022. https://www.wfp.org/news/wfp-calls-urgent-opening-ukrainian-ports-help-rein-global-hunger-crisis Accessed 31.5.2022.

3. 2021 Global Nutrition Report: The state of global nutrition. Bristol: Development Initiatives. https://globalnutritionreport.org/documents/753/2021_Global_Nutrition_Report.pdf Accessed 31.5.2022.

4. Ray DK, West PC, Clark M et al. Climate change has likely already affected global food production. PLoS One 2019; 14: e0217148. [PubMed][CrossRef]

5. Dasgupta S, Robinson EJZ. Attributing changes in food insecurity to a changing climate. Sci Rep 2022; 12: 4709. [PubMed][CrossRef]

6. Kagge G. Verden har nok mat. Men de som sulter, får den ikke. Aftenposten 29.5.2022. https://www.aftenposten.no/verden/i/pWRmL6/verden-har-nok-mat-men-de-som-sulter-faar-den-ikke Accessed 31.5.2022.

7. Farrer M. Ukraine war has stoked global food crisis that could last years, says UN. The Guardian 19.5.2022. https://www.theguardian.com/world/2022/may/19/ukraine-war-has-stoked-global-food-crisis-that-could-last-years-says-un Accessed 19.5.2022.

8. Bjørnestad S. Dyrere mat skaper mer sult. FNs matvaresjef frykter opprør og folkevandringer. E24 23.5.2022. https://e24.no/internasjonal-oekonomi/i/0G6WL6/dyrere-mat-skaper-mer-sult-fns-matvaresjef-frykter-opproer-og-folkevandringer?referer=https%3A%2F%2Fwww.aftenposten.no Accessed 31.5.2022.

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