

## THE IMPACTS OF ECONOMIC POLICY AND ADVERSE CLIMATE EVENTS ON WORLD HUNGER

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### ARTICLE INFO.

**Keywords:** food, poor, sustainable, crop, hunger, world hunger, available, lack of food.

### Abstract

Nowaday thousands of people are facing hunger due to various factors. Although governments try to address the problem in different ways, it seems to be useless. In the forthcoming paragraphs world hunger's reasons and its devastating consequences are tried to be explained. This article tries to shed some light on why world hunger is so significant issue, how to sufficiently cover the results and avoid its affects.

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### 1. Introduction

In today's fast-paced world, hunger is one of the biggest problems claimed, but there is no absolute solution to this problem as it is a multifaceted topic. The main goal of creating a stable basis for economics and preparing for climatic changes in advance is aimed at keeping the sustainability of nations' food consumption and preventing them from unexpected lack of food. What are the most effective ways of solving hunger around the world, and, when and under what conditions countries will produce the desired amount of food for the population? To find an answer to these questions, first and foremost, it is necessary to determine the reasons for the need for food, to create a unique and suitable environment for optimal distribution of edibles, to ascertain the component of basic inquires and relinquish the secondary sustenance products.

Creating a practical remedy for hunger resulted from unstable economy is a very complex and painstaking work process. The difficulty of this work is closely related to the fact that almost no adequate work has been done in this regard in Uzbekistan. Facing the problem thoroughly will, of course, be challenging. Therefore, at the initial stage of our research – analyzing food prices in different regions of the country, we tried to determine the price differences and their grounds.

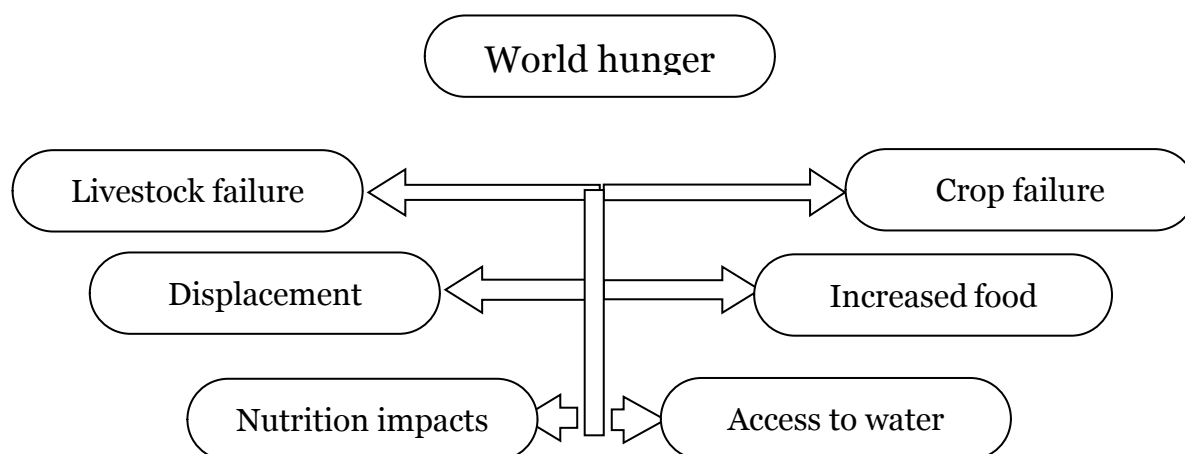
Observational studies play an important role in all fields of science. Mathematical statistics are used in the analysis of many theoretically obtained results based on available empirical materials. Economic research uses certain hypotheses and the results of theoretical research. Because the absence of generally accepted axiomatic does not allow correct reasoning.

Statistical tests are important in analyzing the results of scientific and economic research and evaluating their effectiveness. It should not be forgotten that the tests used in the study are affected by the comments related to the results of the study. The main problem is not economic theory, but the variability of research results. The data selection and decision-making process do not affect the analysis performed. In addition to statistical tests and hypotheses, data analysis is also important in evaluating

the effectiveness of the economic process, and in some cases, statistical methods are not required in the process of data analysis and processing. The article describes definitions in this field and their use in the climate forecasting.

## 2. The main part

Adverse climate events, such as droughts, floods, extreme temperatures, and storms, have significant impacts on world hunger and food security. These events can disrupt agricultural production, damage infrastructure, and lead to loss of livelihoods, all of which can exacerbate food insecurity and malnutrition. Here are some of the key impacts of adverse climate events on world hunger:



**Figure 1. Possible reasons for World Hunger.**

Droughts, floods, and extreme weather events can lead to crop failures, reducing the availability of food. This can result in decreased food production, leading to shortages and higher prices for staple crops. Crop failure leads to a decrease in the availability of staple crops, such as rice, wheat, maize, and other essential food items. This can result in food shortages and reduced access to diverse and nutritious foods. When crops fail, the scarcity of food can lead to higher prices for available produce. This makes it more difficult for vulnerable populations to afford an adequate diet, leading to increased food insecurity. Crop failure can lead to a lack of diverse foods, reducing access to essential nutrients. This can result in malnutrition and deficiencies in key vitamins and minerals, particularly affecting vulnerable groups such as children and pregnant women. Crop failure in one region can strain global food aid supplies, making it challenging to provide assistance to populations in need, both locally and internationally. In accordance to the information provided by [www.food-aid.org](http://www.food-aid.org) in every 6 seconds a child dies due to starvation which means over 16000 children passed away merely a day adding up to 5.8 billion in a year.<sup>1</sup>

Crop failure can lead to displacement and migration as people seek alternative sources of income and food. Displaced populations often face increased food insecurity due to the loss of their agricultural resources and livelihoods. The effects of environmental change are being felt from one side of the planet to the other, and consequently environment related relocation happens all around the world. However, the effects are uneven, and the most severe migration and displacement frequently takes place in low- and middle-income nations that have not significantly contributed to global warming in the past. To this end uprooting is frequently depicted as the "human face" of the misfortunes and harms brought about by environmental change.

Yet even in rich countries, adverse climate change is already intervening migration. According to U.S. Census Bureau data, 3.2 million U.S. adults were moved or evacuated due to natural disorders in 2022,

<sup>1</sup> <https://food-aid.org/>

of whom more than 500,000 had not returned by the beginning of 2023. The U.S. government has additionally started to help migration of whole networks, including Local American towns and neighborhoods profoundly powerless against ocean level ascent. Public worries over future relocation are huge in major league salary nations. In a 2019-2010 European Investment Bank survey, 24 percent of Europeans (and 41 percent of young Europeans) thought they would have to move because of climate change. In the United States, 30 percent of respondents in a 2022 Forbes Home survey cited climate change as one reason why they might move.<sup>2</sup>

Non-governmental organizations that work in the humanitarian sector include Concern and similar groups. That does not, however, imply that the topics we are addressing are apolitical. This also applies to hunger.

Similar to displacement, political factors are typically the cause of hunger. Droughts, floods, and other extreme weather occurrences are examples of natural calamities that only create famine and displacement when governments are ill-equipped or choose to ignore the situation rather than taking appropriate action.

Helping policies for IDP(internally displaced person)s and refugees frequently backfire. They weaken their resilience instead of enhancing their agency in host communities. The most prevalent limitations placed on refugees include the inability to lawfully travel within the nation, own property, or work in a formal capacity. All these restrictions apply to refugees from Somalia who are living in Kenya. In the first five months of 2023, a toxic combination of conflict, extreme drought, and deadly floods pushed over a million people to leave Somalia, setting a record for the nation's rate of displacement. The policies being implied in their favour are working against them and restrict the amount of adequate food that displaced persons can obtain, both in terms of quantity and quality.

This is not a problem that people with families to support and feed back home will just put up with. In many situations, they have families to support. Despite the fact that it may require them to be resourceful, refugees and internally displaced people will find a way to provide for their most basic requirements, namely food. The news frequently misrepresents this as a misuse of the procedures for providing humanitarian relief. However, it's not malicious even if the coping strategies are unpleasant, such attempting to obtain an additional ration card to deal with the sporadic and insufficient food deliveries. We all have this inclination; it's a survival instinct.

For instance, drought is a disaster with a delayed beginning that takes years to manifest. There is no reason why a drought should result in starvation and famine if there are sufficient early warning and response systems in place, together with a strong dose of political will. However, hunger is still permitted to exist. This is due to the fact that individuals are unable to obtain the resources they require due to policies, corruption, carelessness, or a lack of leadership.

Facing the facts about displaced people around the world would also be good way to show how corresponding world hunger and displacement are. 110 million effectively uprooted individuals around the world:

- 36.4 million exiles
- 62.5 million inside uprooted
- 6.1 million shelter searchers

Around 2/3 of exiles live in destitution. 75% of displaced people are facilitated in low-and center pay nations and 20% in least evolved nations.

Top 3 exile facilitating nations:

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<sup>2</sup> <https://www.migrationpolicy.org/article/climate-migration-101-explainer>

- Iran (3.4 million)
- Turkey (3.4 million)
- Germany (2.5 million)

3.1 million dislodged individuals got back to their areas or nations of beginning among January and June 2023, including:

- 2.7 million inside dislodged individuals
- 404,000 displaced people.

European Commission helpful financing:

The vast majority of the philanthropic spending plan of €1.7 billion spent to help effectively dislodged populaces and their host networks in 2023.<sup>3</sup>

Food shortages caused by failed crops may result in increased costs for available commodities. This increases food insecurity by making it harder for poor groups to purchase a healthy diet.<sup>4</sup> Food costs have been rising gradually since 2020 due to a mix of inflation, interruptions in the supply chain caused by pandemics, and taxes on specific foreign imports. However, throughout the past year, inflation has decreased, and the most recent statistics indicates that the price of goods isn't increasing as quickly as it used to. According to the Bureau of Labor Statistics' most current consumer price index (CPI) report, food costs increased by 2.7% between December 2022 and December 2023. In contrast, prices increased 10.4% in 2022 over the preceding year.

Indexes are used by the CPI to track variations in the average cost of goods over a certain time period. For various things, including the price of food, there are particular indices. According to the Bureau of Labor Statistics' most current consumer price index (CPI) report, food costs increased by 2.7% between December 2022 and December 2023. In contrast, prices increased 10.4% in 2022 over the preceding year. Indexes are used by the CPI to track variations in the average cost of goods over a certain time period. These things have particular indices, such as food prices.

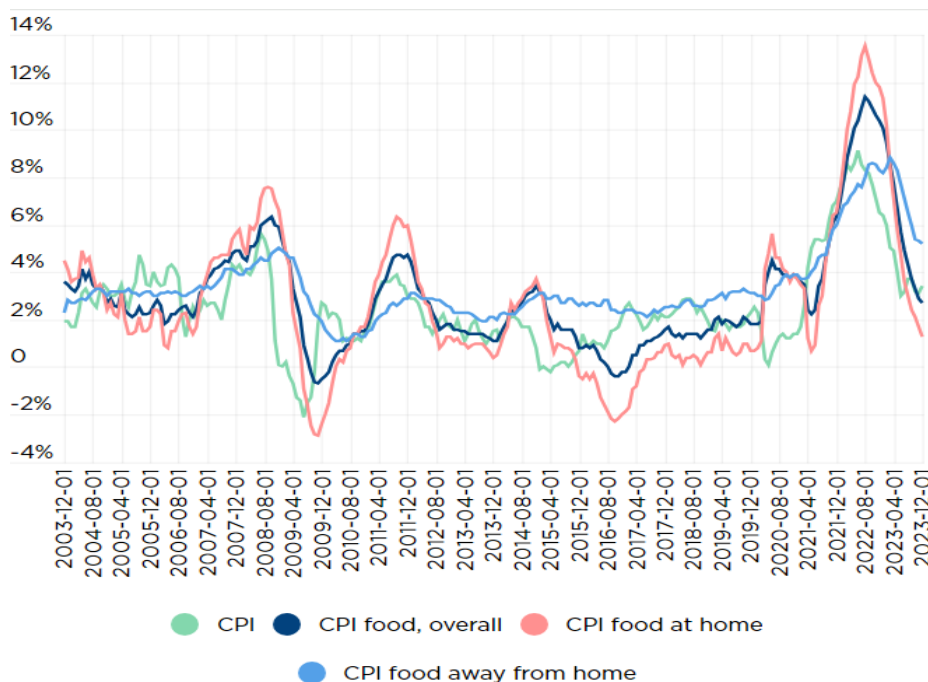
A number of variables, including as supply chain issues, labor costs, inflation, and the conflict in Ukraine, are contributing to the rise in food prices.

- According to the U.S. Bureau of Labor Statistics, labor expenses remain high.
- U.S. Department of Agriculture estimates that in 2023, the cost of producing food will rise by 4.1%.
- Food prices are rising due to several factors, such as supply chain problems, labor expenses, inflation, and the situation in Ukraine.
- The U.S. Bureau of Labor Statistics reports that labor costs are still quite high.

<sup>3</sup> <https://civil-protection-humanitarian-aid.ec.europa.eu>

<sup>4</sup> [www.fao.org](http://www.fao.org)

- According to U.S. Department of Agriculture forecasts, food production costs would increase by 4.1% in 2023.



**Figure 2. Food prices' changing rate in the last 12-months: 2003 – 2023.**

*Source: Consumer price index averages, Bureau of Labor Statistics*

In recent years, owing to a string of crop failures in several important producer countries (Australia, India, China, Russia) supply was unable to keep pace with a demand that continued to rise sharply. The difference was initially made up for by reducing stockpiles, which subsequently declined to record levels. At first prices rose only moderately (2006 to 2007: 9 %). But then, starting in mid-2007 and accelerating in early 2008, the dramatic price rises described above began to make themselves felt.<sup>5</sup>

The USDA projects that food prices will increase in 2024, albeit at a slower rate than they did in 2023.<sup>6</sup>

For many communities, agriculture is their primary source of income and sustenance. Crop failure can lead to loss of livelihoods and income, further exacerbating poverty and food insecurity. Many people in developing countries rely on livestock for their livelihoods and income. When livestock are lost due to events such as disease outbreaks or natural disasters, it can lead to economic hardship for these communities, making it more difficult for them to access food and other necessities.

Animals, particularly cattle are an imperative source of nourishment, wage, capital, draft control and security net for people and family units. The impacts of climate alter are anticipated to increase the helplessness of animals frameworks and strengthen existing components that influence animals generation. In provincial ranges, possession of animals, particularly that of cattle, may be a key resource that quantifiably decreases family helplessness to stuns and stresses related with normal and human initiated dangers. Amid a dry spell period when family units lose animals or the crowd sizes ended up littler they are dove into temporal and/or constant destitution.

Temperature increases and drought have a variety of direct and indirect effects on cattle output. As a result of veldt fires and moisture shortages that lead to inadequate feed, they lessen the amount of pasture that is available due to the interaction between ecosystem degradation and climate change.

<sup>5</sup> [www.fao.org](http://www.fao.org)

<sup>6</sup> [www.nerdwallet.com](http://www.nerdwallet.com)

Cattle and small ruminants are often fed at high stocking rates on community grounds; as a result, their numbers and productivity vary greatly during periods of low rainfall and reduced feed. Increased temperatures will change the primary productivity of forages and rangelands, affecting the quality of plant material and reducing the amount of nutrients available to animals.

It is probable that heat stress, water stress, and hunger (due to reduced feed) may result in cattle losses (conversion percentages). According to research, the number of cattle in Zimbabwe rises in years with rainfall that is above average while it falls sharply in years when there is a drought. Experience has shown that the El Niño phenomenon, coupled with drought and exceptionally high temperatures, may have catastrophic effects on rural households, particularly those in Regions IV and V who depend on pastoralism for a living.

In addition, drought and rising temperatures have the impact of reducing cattle reproductive and calving rates as well as the size of the herd in hotter regions. Research indicates a general trend toward decreasing herd numbers, especially for cattle in Zimbabwe, as a result of drought-related mortality and loaning out of livestock. Research indicates that during the 1982–1984 drought, the number of households without stocks increased, and animal birth rates were severely impacted, eventually dropping to zero at its worst. Increased heatwaves linked to climate change have been linked to a 10–14% decrease in dairy cow milk yield. Even when things get back to normal, dairy cattle seldom recover.

Temperature increases influence the spatial distribution and severity of already-existing pests and illnesses, which in turn have an impact on livestock productivity and, in very severe cases, may even result in cattle death. Animals raised by smallholder farmers are typically not given protein supplements, dosed, or disease-prevention vaccinations.

The nation's livestock output is both directly and indirectly threatened by floods and storms. They cause infrastructure like dip tanks and paddocks to be destroyed, which indirectly affects cattle and causes a direct loss of animals. Consequently, this increases the vulnerability of animals to illnesses, pests, and malnourishment. Unexpectedly large-scale and too frequent flooding destroys lives, livelihoods, and the environment.

Furthermore, households are under pressure to get rid of their productive assets due to cyclones and floods. The money made by selling such cattle could not be sufficient to cover a household's food and home expenses, particularly if grain is purchased at excessive costs from the open market.

The majority of stakeholders mentioned asset stripping as a crucial tactic used by people and households in rural regions when drought and other climate-related problems occur. Selling things including homes, farms, cattle, kitchenware, and farming equipment, or bartering for food, is known as asset stripping. Households who are in extreme situations frequently turn to selling cattle, but the prices they receive from the sale typically depend on how desperate they are. This indicates that people frequently receive less money for their cattle than what the market would bear. For instance, during the El Niño-induced droughts of 2015–2016, cattle prices fell sharply from USD 400 to as low as USD 50 in Masvingo Province and USD 30 in the districts of Chiredzi, Mwenzezi, Chivi, and Bikita.<sup>7</sup>

## Conclusion

Worldwide, we produce enough food to feed 7 billion people. We can feed everyone. However, approximately \$1 trillion worth of food is wasted every year. Because of the lack of resources, lack of infrastructure, social norms and political policies, people that are still hungry and in poverty are unable to solve their own hunger. They lack the land to grow their own food or do not have enough money to purchase it.

<sup>7</sup> “Climate change and livelihoods” - Zimbabwe Human Development Report 2017

Providing education and resources to develop sustainable practices will be key to helping in the fight against worldwide hunger. Many organizations like UNICEF and the World Health Organization are looking at how to help end the global hunger crisis and achieve food security worldwide. The United Nations has a goal to end hunger by 2030.

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