

The effect of Ukraine war on global food security based on PEST's strategic analysis model

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Article Info	Abstract
<p>Original Article Main Object: International relations Scope: Russo-Ukraine War</p> <p>Received: 21 September 2023 Revised: 25 September 2023 Accepted: 29 September 2023 Published online: 04 October 2023</p> <p>Keywords: food security, food weaponization, grain crisis, supply chain, Ukraine war.</p>	<p>After the financial crisis of 2008, the issue of food security befitted one of the main security agendas of the world's countries. Three elements of climate change, the COVID-19 pandemic and armed conflicts are the fundamental reasons for fueling this crisis. Historically, armed conflicts have always been effective in food insecurity within countries; however, Russia's invasion of Ukraine in 2022 has caused food insecurity to spread globally. In fact, communicated the ominous legacy of the financial crisis caused by the pandemic and the worsening climate change situation, the timing of this war endured such that it has turned food security into a full-blown crisis. Given this explanation, the purpose of this research is to answer the question, how has the war in Ukraine fueled the food security crisis in the world? In response, the war in Ukraine has caused a global crisis in this area by creating insecurity in accessibility, availability, utilization of food, and stability of the supply chain. To consider this hypothesis, the PEST analysis method has been used. The key findings of the research show that the aggressive war in Ukraine directly (profound effect on food distribution, displacement of people, lack of agricultural labor, weaponization of food, and inflation) on the one hand and indirectly (progressively increasing the ultimate price of inputs including fertilizer and energy) food security crisis has intensified the world food insecurity.</p>
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Extended Abstract**Background**

After the financial crisis of 2008, the issue of food security befitted one of the main security agendas of the world's countries. Three elements of climate change, the COVID-19 pandemic, and armed conflicts are the fundamental reasons for fueling this crisis. Historically, armed conflicts have always been effective in food insecurity within countries; however, Russia's invasion of Ukraine in 2022 has caused food insecurity to spread globally. In fact, besides immediate human sufferings and loss of lives and livelihoods within Ukraine, the Russia-Ukraine crisis is ravaging global food markets and imperiling global food security. This is not surprising given the recently increasing role of the Black Sea region in global food markets. In fact, communicated the ominous legacy of the financial crisis caused by the pandemic and the worsening climate change situation, the timing of this war endured such that it has turned food security into a full-blown crisis. Russia and Ukraine are two of the largest exporters of grains, making them the world's breadbasket. The expected shortage of wheat supplies is threatening food security especially in vulnerable countries. So, it is well known that Russia and Ukraine play leading roles as global suppliers of food, fertilizer and energy. While disruptions in production and trade threaten the supply of grains to countries traditionally reliant on imports from Ukraine and Russia, the major risk to food security is coming from the immediate surge in global food and fertilizer prices.

Aim

The purpose of this research is to answer the question, how has the war in Ukraine fueled the food security crisis in the world?

Methods

The war in Ukraine has caused a global crisis in this area by creating insecurity in accessibility, availability, utilization of food, and stability of the supply chain. To consider this hypothesis, the PEST analysis method has been used. PEST analysis (political, economic, social, and technological) is a strategic management method whereby an organization or state can assess major external factors that influence its operation in order to become more competitive in the community. The core of PEST analysis is the belief that a comprehensive assessment of the major areas of influence that affect the sector in which an organization or state is positioned, as well as the organization itself, can facilitate more effective strategic planning.

Findings

The key findings of the research show that the aggressive war in Ukraine directly (profound effect on food distribution, displacement

of people, lack of agricultural labor, weaponization of food, and inflation) on the one hand and indirectly (progressively increasing the ultimate price of inputs including fertilizer and energy) food security crisis has intensified the world food insecurity.

Conclusions

On February 24, 2022, the Russian-Ukrainian conflict broke out. Subsequently, the global supply of agricultural commodities dropped precipitously, with the world's food security having become threatened in various ways, including creating challenges for production, costs and international trade. First, the Russian-Ukrainian conflict caused major damage to productive assets, agricultural land, labor availability, roads and other civilian infrastructure, with farmers being unable to attend to their fields or engage in harvesting. Hence, much uncertainty as to expected wheat, maize and rapeseed crop yields has arisen as the farming season takes hold in Ukraine. Second, grain exports from Russia, Ukraine and other neighboring countries are at risk of being canceled or delayed with the ongoing disruptions to Black Sea ports. Third, food export restrictions have further reduced the global food supply. Since the Russia-Ukraine conflict countries imposed export restrictions on food. Fourth, while the conflict has directly exacerbated international food prices, it has also led to rises in the prices of fertilizer and energy, which has indirectly increased the cost of growing food.

Conflict of interest

The authors declared no conflicts of interest.

Ethical considerations

The author has completely considered ethical issues, including informed consent, plagiarism, data fabrication, misconduct, and/or falsification, double publication and/or redundancy, submission, etc.

Data availability

The dataset generated and analyzed during the current study is available from the corresponding author on reasonable request.

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