



RESEARCH PAPER

Russia-Ukraine War: Impacts on World Food Security

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ABSTRACT

This study focuses on Russia-Ukraine war, and its potential effects at global food supply. The exports from Russia-Ukraine region account for major food imports by poor nations of the world in the regions like Africa and Middle East. Climate change and Covid-19 effects already made these regions food deficient which triggered food inflation. This war has further eroded their ability to afford food because of erosion of global supply due to this conflict and increase in demand by the developed world. This is a qualitative study which relies on reports and articles in the researched area. This study concludes that conflict environment have the potential of luring people to unlawful activities and civil wars. A stable global order requires rule-based uninterrupted supply of food to the food deficient regions.

KEYWORDS Conflict, Food Security, Global Trade, Instability, Russia-Ukraine War, Third World

Introduction

Food security is the main domain of public policy of any national government. Every living soul needs an optimum energy intake for physical survival. Elements like population growth, food prices, rising food demand, international market mechanisms are intrinsically linked with each other. The change in any of these values affects the other elements of the equation. Food security predicament is influenced by many factors which are interconnected. Firstly, rising food prices are the result of increased demand of crops. Secondly, globalization has contributed to food inflation as national governments respond to international markets instead of focusing on cushioning their domestic population from food volatility. Thirdly, the integration of agriculture in global markets influence their price fluctuations according to conditions of global market like wars, pandemic etc., Conflict instability as a result of Russia-Ukraine war is hampering the achievement of Sustainable Development Goals like SDG 1 (No poverty), SDG 2 (Zero hunger), and SDG 12 (Responsible consumption and production). There is a serious policy debate to tackle these challenges. The domestic boosting of food production might create shock absorbers against volatility in global food supply chain. Wheat is the main staple diet of around 35 per cent population of the world.(Grote et al., 2021) Russia and Ukraine accounted for almost 14 per cent global wheat production during the period from 2016-17 to 2020-21.(Mustafa, n.d.) For food, several countries rely on Russia and Ukraine. Between 2016 and 2021, the two nations contributed more than half of the world's sunflower seed products, 14% of the world's wheat, and 19% of the world's barley.(*War in Ukraine Could Plunge World into Food Shortages*, n.d.) Russia and Ukraine are considered lynchpin in the global food supply chain. In addition to wheat, both are major producers and exporters of barley and oil seeds like sun flower. Russia is the biggest exporter of fertilizers in the world. Russia-Ukraine war has obstructed the normal agricultural trade activities at global level, and that too when world was still reeling from the shocks of Covid-19 pandemic. Covid-19 pandemic disrupted global trade which resulted in increasing inflation at global level and the resultant rise of poverty and malnutrition in the developing world. According to IMF, global economy shrunk by 4.4 per cent in 2020.('Coronavirus', 2020) It was worst depression since the Great Depression of the 1930s. It had obvious impacts on the average household incomes of the world, which reduced the buying power of the already economically marginalized communities. World

economy was still recovering from these depressing shocks when Russia attacked Ukraine. This war again put brakes on the wheels of trade in different commodities. Food is the most important component of global trade in which Russia and Ukraine had surplus produce, resultantly both being net exporters of food stuff. Countries mostly dependent on their grains were Low Income Countries(LIC). Eritrea imported almost all of its food stuff from both these states. Many other countries with big populations depend on their grains like Egypt, Bangladesh, Turkey, Middle East and African nations. Egypt imports almost 80 per cent of its wheat from Ukraine. Almost 50 per cent of Tunisia's wheat is imported from Ukraine.(nordiceditor, 2022) Some Low Income Countries have limited strategic stock of wheat. This war created the potential of catastrophic food scarcity in these states due to the blockade of exports from Black Sea ports. Ukraine has world's richest soil to produce food. Blockage of export from this abundant food resource land directly influences the food scarce areas already mentioned. Many industrialised states like England and Japan are also dependant on imports for meeting their food needs, but these states have economic muscle to absorb the shocks of rising food bill. The rise in food costs is directly related to the demand and supply gap in the world market. The stoppage of supply of grains and edible oil from Russia and Ukraine created scarcity of supply in the world market which has hitherto pushed their purchase cost substantially. This increased cost is burdening the already teeming millions of the developing world. To illustrate this, one can see the example of Egypt whose per capita income in 2022 was 4504 US Dollars which is expected to reduce to 4437 US Dollars in 2023.(*Egypt - Gross Domestic Product (GDP) per Capita 2027*, n.d.) This decreased income at national level has further eroded the ability of its people to bear the rising cost of food products. The inflationary pressures of food basket start a chain reaction of inflation affecting almost every other domain of the economy which further strains the economically depressed people of the developing world.

Literature Review

Global food inflation showed the weaknesses of global trade dynamics in the event of major conflicts. Russia-Ukraine conflict involved major global powers like NATO, for strategic gains at the expense of others. This war of Titans has the potential of squeezing weak economies to their limits. Rising population with scarcity of food is a perfect combination for a big humanitarian crisis with no specified borders. According to research by Ronald Berger, between 2013 and 2030, 97 per cent of the population growth would occur in the developing world.(*97% of Population Growth to Be in Developing World*, 2015) Meeting the needs of 1.2 billion more individuals in the developing world is a problem in its own merit. But global volatile strategic environment and conflicts are further exacerbating the already volatile human development scenario. These negative trends need to be rectified at a faster pace. Otherwise, developed world would also feel the heat in the form of influx of refugees, terrorism and disruption of trade.

Countries, families, and individuals find it more difficult to meet their food needs during armed conflicts. These conflicts hinder efforts to grow and harvest food. The processing, transport, supply and marketing of food becomes very difficult. More particular, conflicts can make it more difficult for supply networks and food systems to function as intended. For instance, producers face problems in producing because of a war and some may leave the nation. Foreign markets for agricultural supplies may be disrupted, and military operations can damage water infrastructure and agricultural output. Due to declining purchasing power or a lack of supplies, military conflicts may also make it harder for individuals to meet their immediate food demands. Such wars have a negative impact on food-importing, low-income countries by raising food costs both locally and internationally; Disruption of energy markets can have a detrimental impact on importing nations' ability to buy food and energy, as well as on the ability of international food aid to fulfil expanding food needs during times of emergency. World Food Programme caters to the needs of people in emergency situations. Its procurement cost for food stuff has increased which has limited its ability to buy more food for such people and the number of people in need of help has

also increased due to this war. An almost 6 million people has been internally displaced and almost same number has left Ukraine. (*'This War Must End'*, 2022) In light of this, food-related concerns are now a key component of warfare and should be considered in all conflict management strategies.

The current Russia-Ukraine conflict and all the potential human security repercussions have worsened the already fragile situation due to the factors like COVID-19 pandemic, a crisis in energy supplies, maritime limitations, and current catastrophic weather conditions brought on by climate change.(Nicas, 2022) The last ten years gains in reducing global hunger have been reversed. It is estimated that 7.6 to 13.1 million people might face severe hunger.(*Ukraine War Exacerbates Famine in the Global South*, n.d.) The progress gained in the domain of food security during the last ten years, including through the Sustainable Development Goals, will unquestionably be jeopardised as a result of this war.

Russia and Ukraine produce about 30% of the wheat marketed worldwide and provide 12% of its calories.(Harvey & correspondent, 2022). The conflict has made it difficult for these countries to export wheat, maize, and barley. Additionally, Belarus and Russian Federation are presently controlling a substantial amount of the global inventory of fertilisers. Hence the price of food and fertilizer has risen as a result of this war.(Nicas, 2022) These spiralling prices may hurt farmers during this harvesting season and the subsequent ones.(*War in Ukraine Could Plunge World into Food Shortages*, n.d.) The erratic nature of key agricultural commodities and fertilisers provides a particular risk. Such a situation creates uncertainty in the markets which directly affects choices of products and increases speculative tendencies.(Nicas, 2022) The situation of global food markets has worsened due to the additional factor of the fierce competition between China and India for meeting their own demands which is rising due to their huge populations (Muzaffar, & Khan, 2016; Nicas, 2022).

More specifically in the Middle East, North Africa, and the Sahel, food scarcity has a significant negative impact on the ability of several weak food-importing countries to meet the needs of their population. The only sources of wheat imported into African countries are Russia and Ukraine.(nordiceditor, 2022). Egypt imports 85 per cent of its wheat from Ukraine while this percentage for Lebanon and Tunisia are 81 per cent and 50 per cent, respectively (nordiceditor, 2022). It is a fact of history that socio-political turbulences promote food hunger.(Yom, 2021), The resourceful states try to avert such situations through aid programmes.(Harvey & correspondent, 2022). This battle is also making it more difficult for international organizations to provide food aid to countries that are experiencing hunger or other violent conflicts. The Global Food Program, for example, must reduce the number of rations distributed as a result of rising prices because it purchases 50 per cent of its grains from the Ukrainian market. The resultant situation may cause millions of people to lose access to the current food aid program.(Boyd, 2022)

Results and Discussion

The concept of food security has recently received a lot of interest after Russia-Ukraine war. The majority of analyses have concentrated on a fundamental understanding of food insecurity in the event of conflict, including how to address issues like vitamin inadequacies and a lack of dietary energy availability in food deficient states dependent on grain imports. Researches and practitioners have only recently begun to compare and rigorously study the social and political effects of food insecurity(Koren & Bagozzi, 2016). Many studies has investigated the role of generalized financial differences and cultural variances, such as those relating to economic development or religion, in igniting conflicts.(Ray & Esteban, 2016).

It's clear that there are two key points. There are many distinct dimensions of food security that are pertinent for combat zones and communities. These aspects can also range greatly depending on the nature and severity of the armed conflict as well as the degree of income as can be seen in eroding of financial strength of farmers in Ukraine after the war. These effects have quite varied levels of genesis and operation. There are two factors that may directly affect participation in practically any sort of antisocial behaviour. These are nutrition and economic opportunity. Numerous other mechanisms, including global prices of food, regional and local institutions created during wartimes, commodities, governance, and environmental factors, may have their origins at higher aggregate levels.

Individual food insufficiency, or the threat of it, may give both tangible and intangible incentives for people to do certain types of behaviour. At the individual level, opportunity-cost theories akin to early crime models dominate economic explanations for food insecurity (Ehrlich, 1973). Similar reasoning has also been used to explain other behaviours, such as collective acts of uprising and violence (Collier et al., 2004). Hence, food insecurity might contribute to a decline in opportunity cost of people supporting or joining armed groups, raising the potential for violent confrontation. Such a situation might inflame vast regions of the world which are food dependent coupled with endemic poverty. Food inflation aids people joining terrorist groups. The recent increase in crime rate in major urban centres of Pakistan is a case in point. (Mati, 2023) Each individual weighs the relative costs and advantages of participating in a conflict. When the predicted benefits outweigh the drawbacks, illegal activity occurs (Draca & Machin, 2015). Food insecurity can spiral to erosion of authority of the state to enforce order in society. Prevailing alternative ideas stress this point that political judgements and individual-level explanations for food insecurity are dominated by the opportunity-cost theory, which many people attempt to communicate in order to express their unhappiness and complaints (Gurr, 1970). Most people find poverty and food insecurity upsetting, which might trigger resentments, disappointments, and anger, resulting in people acting in an anti-social manner. This specifically involves dissatisfaction with and mistrust in the government, which may result from perceptions of a lack of assistance from the government when there is a lack of food (Wischnath & Buhaug, 2014). Russia and Ukraine are major exporters of grain and fertilizers to these volatile regions like Yemen, Syria, many African States and Pakistan. These areas are witnessing increase in crime rates due to the factors described above (Yaseen, Muzaffar, & Naeem, 2019).

According to World Food Programme report, the agency is facing the additional cost of 71 million Dollars per month to continue its programme of providing food to the conflict affected regions like Yemen and Ukraine. It is obvious that a looming humanitarian crisis is looming over the poverty stricken regions of the world which further strengthen the case for a rule based uninterrupted global food trade regime. In the absence food security teeming millions of the poor regions of the world might be further engulfed in civil wars and instability. The above discussed results in these regions can pull the carpet from the feet of global order.

Conclusion

The focused attention of the international community on the current conflict in Ukraine, may lead to the ignorance of the issues facing the food-scarce states of the Global South now a days. In addition to poverty, scarcity of natural resources and climatic stress, the current situation might ignite human emigration leading to geo-political tensions and intra-state conflicts. The end of the current conflict may lead to the avoidance of such likely scenarios. In order to ensure food security during armed conflict, experts and practitioners have highlighted a number of crucial steps. In order to ensure efficient execution of food support due to its role in reducing the impacts of conflict and developing peace, it is necessary to ensure adherence to the principle that basic human rights to food and water must be protected throughout armed conflicts. (Kemmerling et al., 2022) Food insecure and

conflict-ridden environments should be provided with food support to reduce the impacts of food scarcity which further inflames the conflict. (Tranchant et al., 2019) Also, intentional food insecurity brought on by conflict may serve as a foundation for the imposition of targeted penalties in respect to upcoming conflicts. This could stop parties to a conflict from intentionally or unintentionally causing dietary deficiencies as a technique of war. This could also result from the war itself. Food security is so important that actions which prevent targeted populations from receiving food assistance during the conflict may be subject to sanctions. In the interim, the world community may establish a strategic food buffer to handle food crises caused by armed wars or natural disasters brought on by changes in the climate. This system may enable reactive actions that aid in containing the effects of food crises on human security, hence promoting peace. Also, new guidelines for international humanitarian law should be added that expressly offer adequate protection to facilities associated to food systems and operations (farms, crops, animals, fisheries, etc.) as non-military targets, with corresponding consequences in the event of infractions.

Russia's attack on Ukraine is sapping their ability to cultivate crops and harvest them. In addition to eroding the ability of farmers for financing growth of next season crops, this season's crops would also not find their way to their export destinations like African and Arab states. These states have already depleting reserves to nourish their burgeoning population. Egypt has put in place a mechanism of subsidised bread for its 70 million vulnerable people of the 103 million populations. Wheat imports of Egypt in 2021-22 were estimated to be 12 million tonnes. World food inflation has pushed the cost of wheat imports for Egypt by 3 billion dollars. (Mostafa, 2022) This illustrates the gravity of situation in developing world and poor countries where state subsidies are needed to shield the people from famine and malnutrition.

Recommendations

The management of the effects of the combination of armed conflict and food insecurity needs further research in cross-disciplinary domains for making suitable policies. Taking into account local atmosphere, these policies should inform programmes both at national and international levels which may reduce the effects of conflict on food security. An example of such programme is opening of Black Sea ports for grain exports through a "mirror" deal. This deal allowed Ukraine to sell its stock of 10 billion dollars' worth wheat to export. Resultantly Russia's export of fertilizers would also be facilitated. Turkey would check Ukrainian vessels to allay fears of Russia regarding movement of military equipment through these cargo ships. ('Ukraine War', 2022)

The most important mode for protecting populations from food shocks is the strategic food stocks by the national governments. National governments should try to protect domestic food market from global shocks through financing to the farmers. This policy might prevent local farmers from gaining financial benefits according to the international market, but the strategic reserves might protect urban slums from food shocks and prevent crime rates, resultantly ensuring social stability. Government should subsidize agricultural inputs for reducing the cost of food production at national level. The increasing fertiliser cost due to Russia-Ukraine war is already hurting farmers worldwide because Russia is the main player in fertiliser industry. Hence farming subsidies coupled with strategic reserves of food can protect local populations from food shocks. The states with better reserves should contribute to the global strategic food reserves under the auspices of international organizations like World Food Programme. It is obvious that a global response can ameliorate a global problem which further strengthens the need for a better global rules-based order.

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