
THE IMPACT OF THE RUSSIA-UKRAINE CONFLICT ON INDONESIA'S FOOD SECURITY

¹Fitri Al Istiqomah

¹Department of International Relations, Faculty of Social and Political Science, Universitas Indonesia

*Corresponding Email: fitrialistiqomah@gmail.com/fitri.al@ui.ac.id

Submission: September 7, 2025 | Accepted: November 8, 2025

ABSTRAK

Konflik Rusia-Ukraina memperburuk krisis pangan global yang sebelumnya terdampak pandemi Covid-19. Indonesia mengalami kenaikan harga dan kelangkaan pangan, terutama gandum yang impor dari Rusia dan Ukraina. Selain itu, ketergantungan terhadap impor pupuk dari Rusia, membebani sektor pertanian nasional. Meskipun Indonesia secara geografis jauh dari pusat konflik, Indonesia merasakan dampak pada ketahanan pangannya. Penelitian ini bertujuan menjawab pertanyaan: bagaimana konflik Rusia-Ukraina mempengaruhi ketahanan pangan Indonesia? Dengan menggunakan Teori Interdependensi, studi ini mengadopsi pendekatan kualitatif berbasis data sekunder dari arsip, dokumen, dan internet. Temuan menunjukkan bahwa ketahanan pangan Indonesia mengalami gangguan karena gangguan ekonomi berupa impor gandum dan pupuk, akses pasokan murah terganggu, inflasi makanan volatil, dan keseimbangan asimetris, dengan Indonesia lebih bergantung. Studi ini berkontribusi memperkaya pemahaman tentang ketahanan pangan dalam konteks interdependensi asimetris, serta merekomendasikan langkah kebijakan seperti diversifikasi sumber impor dan penguatan produksi pangan domestik.

Katakunci: Ketahanan Pangan Indonesia, Konflik Rusia-Ukraina, Saling Ketergantungan

ABSTRACT

Russia-Ukraine conflict has worsened the global food crisis, which had already been impacted by the Covid-19 pandemic. Indonesia has experienced significant increases in food prices and shortages, particularly for wheat imported from Russia and Ukraine. In addition, Indonesia's reliance on fertilizer imports from Russia has further strained the agricultural sector. Although geographically distant from the conflict, Indonesia has felt considerable effects on its food security. This study aims to answer the research question: how does the Russia-Ukraine conflict affect Indonesia's food security? Utilizing interdependence theory, this study employs a qualitative approach based on secondary data from archives, documents, and online sources. The findings reveal that Indonesia's food security has been disrupted through economic which is wheats and fertilizer imports, disturbed access to affordable supplies, volatile food inflations, and asymmetrical balance, with Indonesia being the more dependent party. This study contributes to the theoretical understanding of food security under asymmetric interdependence and recommends policy measures such as diversifying import sources and strengthening domestic food production.

Keywords: Food Security in Indonesia, Russia-Ukraine Conflict, Interdependence

BACKGROUND

Food security is a critical issue for countries worldwide, including Indonesia, where it remains a top priority. Food security exists when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food for an active and healthy life (FAO 1996). Maintaining food security, especially in fulfilling its four dimensions such as availability, access, utilization, and stability (Ashley 2016) presents a particular challenge for Indonesia as a highly populated country with a significant dependence on food imports. In such situations, external factors such as geopolitical turmoil and armed conflicts in other countries can pose serious threats to national food security.

Conflicts in certain regions can hinder communities or individuals from accessing food, engaging in production activities, and may lead to food insecurity due to the destruction of agricultural land caused by war and forces people to abandon their farmland or flee, resulting in a lack of productivity (Ashley 2016). A key example is the Russia-Ukraine conflict, which began on February 24, 2022. This conflict has disrupted production in both countries, causing global food supply chain disruptions. Although Indonesia is geographically distant, it has felt the impact through food price volatility and shortages. The Russia-Ukraine war has disrupted not only production and distribution in the conflict zones but also global food availability.

According to a United Nations (UN) report, Russia and Ukraine collectively account for nearly one-third of global wheat exports, 80% of global sunflower oil exports, and 20% of global barley and corn exports (FAO 2022). Furthermore, Russia is a major global exporter of fertilizers, contributing 23% of ammonia exports, 14% of urea exports, 10% of processed phosphate exports, and 21% of potash exports, as reported by The Fertilizer Institute (Collusi, Schnitkey, and Zulauf 2022).

The war has disrupted the supply chains of these critical exports. Fighting, port blockades, and economic sanctions against Russia have hindered the flow of food and fertilizer exports, which are essential for many countries, including Indonesia. The suspension of wheat and fertilizer exports has led to global supply shortages and sharp price increases in various commodities, impacting many nations, including Indonesia.

As a populous country relies on imports of key food staples such as wheat and soybeans, Indonesia has been affected by the Russia-Ukraine conflict. Indonesia imports wheat primarily from Ukraine, Australia, and Canada, with Ukraine supplying for nearly 11 million tons, or 30%, of Indonesia's total wheat imports (Gading 2023). Meanwhile, Russia contributes 12% of Indonesia's total fertilizer imports, making it the country's fourth-largest supplier, with 743,000 tons imported in 2020 (Komalasari 2022). Disruptions in supply from Russia and Ukraine have forced

Indonesia to seek alternative import sources at higher prices amid soaring global food costs.

The consequences of the conflict have driven up domestic food inflation and reduced the affordability for many Indonesians. The Indonesian Badan Pusat Statistik (BPS) reported that volatile food inflation reached 10.33% year-on-year (YoY) in March 2024, the highest rate since the 8.93% YoY recorded in March 2022 (Masitoh, 2024). This represents the most significant food inflation Indonesia has experienced over the past five years. Finance Minister Sri Mulyani has warned that the Russia-Ukraine war poses a severe threat to Indonesia's food security by escalating the costs of food and fertilizer imports. Rising global energy prices further exacerbate this challenge, compounding pressures on the global economy (Damara 2022). Conflicts in a region can make it difficult for local populations to access food. These conflicts hinder people socially and politically, limiting their access to employment and education, both of which are necessary for generating income (Ashley 2016). Thus, even when the conflict occurs in a distant region, the impact of armed conflict on food security can spread beyond the immediate conflict zone.

Wars not only affect the food security of the nations directly involved but also have far-reaching consequences for neighbouring countries, regions, and even the global community. This phenomenon highlights the growing reality of global interdependence, which has become increasingly evident in the era of globalization. The interconnectedness of nations and issues today has grown highly complex. Therefore, this topic is crucial for further research, especially given the cross-border impact of such issues. This article seeks to address the research question "how does the Russia-Ukraine conflict affect Indonesia's food security?"

This article aims to explain the impact and relationship that influence Indonesia's food security, which has been affected by the Russia-Ukraine conflict. This article argues that Indonesia's food security has been affected by the Russia-Ukraine conflict due to its interdependent relationship with these two countries. However, it also acknowledges the presence of other contributing factors, given that interdependence among nations is rarely balanced. Accordingly, this article is divided into several sections. The first section introduces the background and problem statement. The second section is literature review, provides an explanation of the theoretical framework used for the analysis. The third section outlines the research methodology employed. Finally, the last section presents the findings, analysis, and conclusions.

LITERATURE REVIEW

Research has shown a strong link between conflict and its effects on global economic conditions and food security. (Hussein dan Knol 2023) note that despite the limited impact on the agricultural sector in the countries involved, the war has triggered various crises in the supply chain. This reduction in supply has caused panic in the markets, inflation surges, and food insecurity in regions dependent on imports (Hussein and Knol 2023). Food security in developing countries, such as those in North Africa, has been affected by the Russia-Ukraine war due to the interconnectivity of the global food system, with high fertilizer prices influencing local food production, harvests, and food prices (Ben Hassen and El Bilali 2024). In contrast, developed countries like those in the European Union, as (Rabbi et al. 2023) explain, although most European nations are self-sufficient in many products, still experience the effects of the conflict, particularly in terms of food access and industrial costs.

The effect of conflict on the world's food commerce especially Indonesia, was studied by Ardan et al. (2023), Findings indicate that increased competition in the vegetable oil market due to the diversion of grain and oil exports from Russia and Ukraine has temporarily increased Indonesian palm oil exports while interfering with domestic supplies. Due to the disruption of cheap basics, this has led to a 3-5% spike in food price inflation and an increase in malnutrition indicators in susceptible areas like Eastern Indonesia. Harvests are further threatened by sanctions that restrict access to fertilizers, which might lower annual production of rice and palm oil by 2-4 percent. This underscores the long-term threats to Indonesia's food sovereignty in the face of geopolitical shocks (Ardan, Marzaman, and Deni 2023).

Utami and Maliki's (2024) study looked at how violence might exacerbate food insecurity in Indonesia and throughout the world by making supply chains more vulnerable. They focused on Indonesia's reliance on Black Sea wheat imports, which accounted for over 20% of pre-war requirements, and they recorded disturbances that led to import limitations and a 10-15% increase in the price of native wheat flour. Food insecurity among the urban poor is predicted to rise by 5% in 2023 as a result of this and the lack of Russian fertilizer, underscoring the necessity of diverse trade policies to guard against far-off military conflicts (Utami and Maliki 2024).

Study on the impact of the Russia-Ukraine conflict on Indonesia's food security was conducted by Suryana et al. (2024), who argue that the conflict has had economic repercussions for Indonesia, particularly in the food and agricultural sectors. Although Indonesia has managed to maintain sufficient rice supplies at reasonable prices, the national rice reserves have dwindled to their lowest level in the past decade in 2022. When compounded by the Russia-Ukraine conflict, rice prices have risen significantly

(Suryana et al. 2024).

Recent research by Nugrahapsari et al. (2024) shows that the shortage of Ukrainian sunflower oil has two consequences. Due to substitution demand, the price of vegetable oil has risen globally, increasing producers' profits by 15-20%. However, this volatility has fuelled domestic food inflation (5-7% in 2022-2023), increasing inequalities in the food system, and creating insecurity for low-income households that rely on inexpensive cooking oil (Nugrahapsari et al. 2024).

Previous studies discussing the impact of the Russia-Ukraine war on Indonesia have primarily focused on its effects on the Indonesian economy, such as rising commodity and fuel prices, or Indonesia's role in peace efforts between Russia and Ukraine. However, studies exploring how armed conflict in a specific region can have a profound impact on the food security of countries geographically distant, such as Indonesia, remain underexplored.

In order to answer the research question and fill this gap, this study using four (4) dimensions of interdependence theory from Joseph Nye (Nye 2007) used to clarify the degree of choice in situations of interdependence: sources of interdependence, benefits of interdependence, costs of interdependence, and the level of balance; to understand how the mutual dependencies and actions of other states, particularly Russia and Ukraine, influence Indonesia's food security.

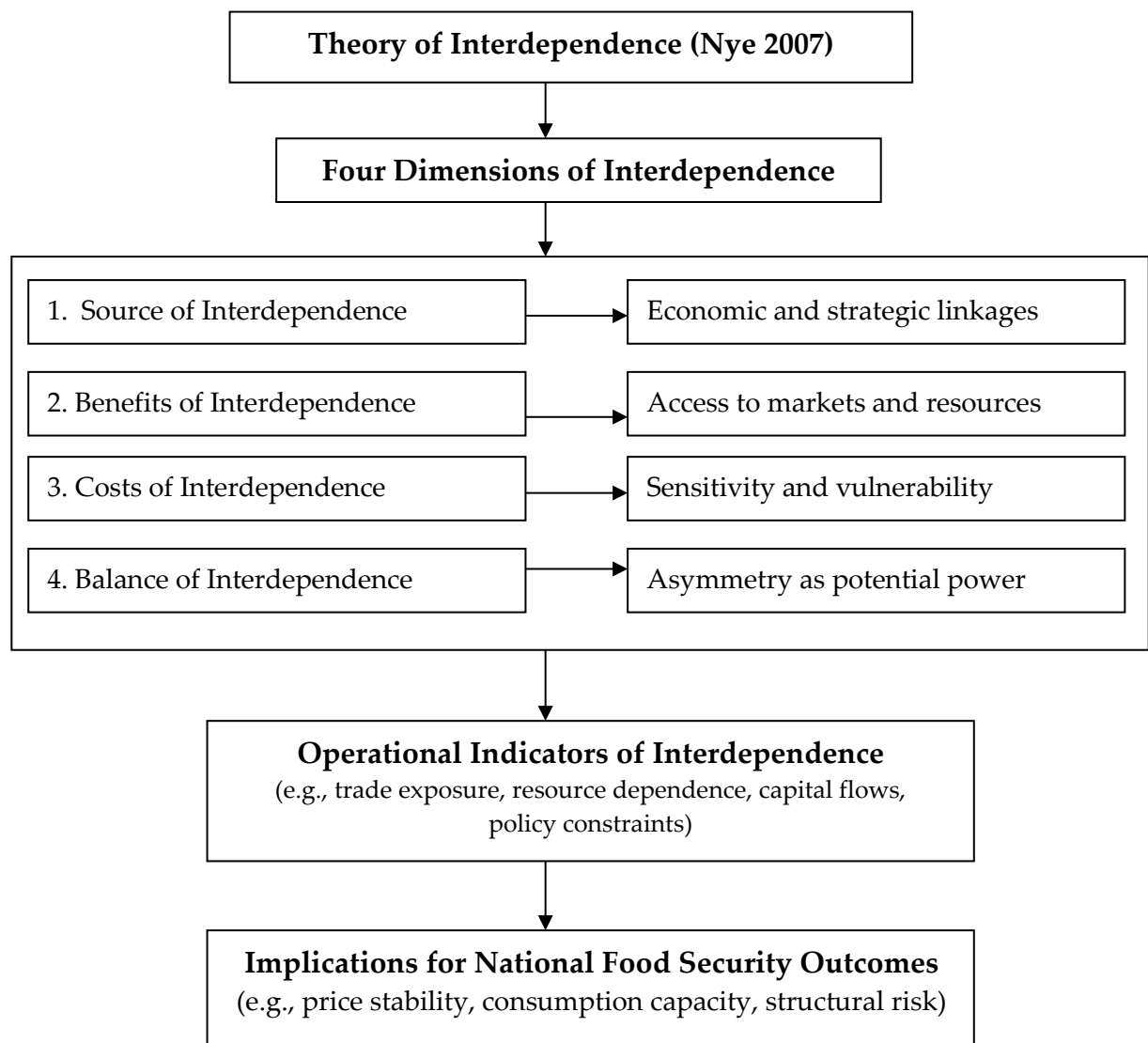
According to Nye (2007), there are two sources of interdependence: military interdependence and economic interdependence. Military interdependence refers to mutual dependence in military competition, such as arms assistance. While economic interdependence is understood as the use of the economy as a tool in traditional international politics and involves social dimensions that influence policy choices, values, and costs. The benefits of interdependence refer to reciprocal relationships. In interdependence, zero-sum and non-zero-sum are aspects of the benefits discussed, but there is no situation characterized as negative-sum. The costs of interdependence involve short-term sensitivity and long-term vulnerability. Sensitivity refers to the amount and speed of dependence, such as how quickly changes in one part of the system affect others, while vulnerability refers to the relative costs of changes in the structure of an interdependent system (Nye, 2007).

Balance in interdependence refers to the relative equilibrium or imbalance of interdependence. A situation with less dependency is a source of power. If two parties are interdependent but one is not as dependent on the other, the less dependent party will have a source of power, as long as both parties perceive the interdependent relationship (Nye, 2007). Nye (2007) further adds that manipulating the imbalance in interdependence can also become a source of power, overall balance is rare, as is

complete imbalance, where one party is entirely dependent while the other is not dependent at all.

Based on the conceptual explanation above, the following figure 1 illustrates the operationalisation of Joseph Nye's interdependence dimensions and their relevance to analysing Indonesia's food security within the context of the Russia-Ukraine conflict.

Figure 1. Operationalisation of Joseph Nye's Interdependence Theory Dimension (2007) in the context of Indonesia's food security (adapted and visualised by the author)



RESEARCH METHOD

This article employs a qualitative approach, refers to techniques used to collect, process, analyze, and interpret non-numeric textual data (Bryman 2012). According to Lamont (Lamont 2015), a deductive approach in qualitative research allows the researcher to categorize data based on previously acquired or narrated knowledge.

The data collection technique used in this study includes archival-document-based and internet-based research. The collected data is consisting of texts such as statements, speeches, official documents from government agencies and relevant organizations, including reports from the Badan Pusat Statistik (BPS), as well as literature such as books, journal academic articles, organizational reports, media content, and news media articles. The secondary data collected includes reports, organizational publications, and surveys that address related issues.

Data analysis in this article employs an interpretive approach. The collected data will be subjected to processes of reduction, presentation, and interpretation, using the four dimensions of interdependence: sources, benefits, costs, and the level of balance, as the analytical framework. The interpretation of the processed data will lead to conclusions and provide answers to the research question (Flick 2009). The timeframe for this analysis, focusing on the impact of the Russia-Ukraine conflict on Indonesia's food security, covers the years 2022 to 2024.

DISCUSSION

Sources of Indonesia's Interdependence with Russia-Ukraine

The economy (exports and imports) is the source of interdependence Indonesia, Russia, and Ukraine. Therefore, this subsection of the discussion will be divided into two focal points. First, in the context of food security, the sources of interdependence can be classified as fertilizer and wheat imports in the relationship between Indonesia, Russia, and Ukraine. Second, interdependence also arises from global-level interconnectedness, which affects the rise in global food prices.

Indonesia relies on trade relations with Russia and Ukraine to meet its national food supply needs. To ensure adequate food and energy supplies, Indonesia engages in export-import activities with Russia. In 2021, Indonesia's exports to Russia amounted to USD 1.49 billion and imports from Russia to Indonesia were recorded at USD 1.25 billion, resulting in a trade surplus of USD 239.8 million (Sembiring 2022). By 2022, Indonesia's exports to Russia declined to USD 332.1 million, while imports from Russia rose to USD 347.1 million, leading to a trade deficit of USD 15 million (Sembiring 2022).

Indonesia's exports to Russia include commodities such as vegetable fats and oils, rubber and rubber products, and machinery or electrical equipment, valued at USD 883.6 million, USD 99.4 million, and USD 89.4 million, respectively, in 2021. On the other hand, Russia's exports to Indonesia primarily consist of iron and steel, valued at USD 447 million in 2021 and USD 135 million in 2022 (Sembiring 2022). Additionally, in the agricultural and food sectors, Russia supplies fertilizers to Indonesia. Russia is the third-largest supplier of fertilizers to Indonesia, following China and Canada. Below is a table illustrating the countries from which Indonesia imports fertilizers.

Table 1.
List of Fertilizer Import Source Countries to Indonesia 2017-2023

Country Origin	2017	2018	2019	2020	2021	2022	2023
Net Weight: 000 tons							
Canada	1.266,1	1.269,4	963,3	1.203,8	1.804,2	1.766,5	625,2
China*	2.408,3	2.339,2	1.914,5	1.654,1	1.784,3	1.066,2	1.147,0
Russia	962,3	1.044,1	818,7	743,3	974,6	1.030,0	1.078,7
Belarus	660,9	738,8	640,2	568,9	905,5	133,4	144,8
Vietnam	75,7	112,3	66,5	116,9	182,4	126,8	146,8
Egypt	729,1	794,9	681,3	753,7	1.141,2	801,4	486,6
Jordan	257,9	281,3	181,9	155,9	243,7	562,7	360,6
Germany	249,3	156,0	111,8	162,7	151,5	53,8	50,5

Source: Badan Pusat Statistik Statistik (BPS 2024)

Ukraine was seen as a potential trade partner for Indonesia in Central and Eastern Europe, alongside Russia. At that time, the trade value between Indonesia and Ukraine experienced a growth trend of 3.7% from 2008 to 2012, with total trade reaching USD 1.32 billion in 2012 (BKSAP, 2013). By 2019, Ukraine was Indonesia's second-largest wheat importer, with a value of USD 58 million (Yani 2023), despite wheat not being a staple food in Indonesia. Indonesia itself has increasingly imported food supplies, particularly wheat, from Ukraine.

From Ukraine's side, Indonesia's exports in 2021 reached USD 417 million, while imports amounted to USD 1.05 billion, resulting in a trade deficit of USD 623.9 million (Sembiring 2022). This deficit persisted in the first two months of 2022, during which Indonesia's exports totaled USD 28.7 million and imports USD 35.6 million, leaving a trade deficit of USD 6.9 million (Sembiring 2022). The commodities exported by Indonesia to Ukraine included animal fats and oils, paper and paper products, footwear, rubber and rubber products, as well as tobacco and tobacco substitutes. Conversely, Indonesia imported cereals, iron and steel, sugar and confectionery

products, milling industry products, and optical instruments from Ukraine (Pristiandaru 2022).

Although overall trade between Indonesia and Ukraine has not yet reached a large scale, the structure of imports indicates a growing concentration in food-related commodities. Wheat and meslin became the largest imports from Ukraine in 2021, accounted for approximately 3.18 million tons, or 94.37% of total import volume, with a value of USD 897.7 million, representing 88.61% of Indonesia's total import value for the year (Kusnandar 2022). Table 2 shows Indonesia's wheat imports from Russia and Ukraine in 2018-2022, as 2023 data shows recovery but still disrupted.

Based on the data, Indonesia's trade balance shows a deficit with both Russia and Ukraine, which are among Indonesia's key trading partners. This highlights that Russia holds greater interdependence with Indonesia, whereas Ukraine, while less dominant, still significantly influences Indonesia's interdependence structure. Notably, although Australia currently serves as Indonesia's main wheat supplier, Ukraine was the leading supplier from 2018 to 2020 and became the second-largest supplier in 2021.

Global interdependence plays a significant role in amplifying the effects of the Russia-Ukraine conflict, including rising food prices that impact not only the two nations directly involved but also the global economy. In addition to geopolitical ramifications, the conflict has created widespread economic challenges and social instability extending far beyond the battlefield. The war, which began on February 24, 2022, also triggered a refugee crisis, affecting various countries' policies on immigration and asylum.

Although the war is limited to Russia and Ukraine, economic sanctions against Russia have further weakened the already fragile global economy, still recovering from the COVID-19 pandemic. These sanctions have negatively impacted numerous countries, leading to significant disruptions in the supply and pricing of energy, raw materials, commodities, oil, food, and particularly wheat. The war has the potential to trigger a global hunger crisis, as one-third of global exports of wheat and barley and more than 70% of sunflower oil come from Russia and Ukraine (The Lancet Regional Health - Europe 2022). The sanctions and blockades have disrupted these essential supply chains, illustrating the far-reaching consequences of the conflict for global food security and economic stability.

Given that Russia is the world's largest exporter of wheat, pig iron, natural gas, and nickel, as well as a critical supplier of fertilizers, the sanctions imposed on Russia have only exacerbated the fragile recovery of economies emerging from instability caused by the pandemic. Meanwhile, Ukraine plays a vital role in supplying the global

demand for wheat and sunflower oil. Many developing and even developed countries rely heavily on wheat and oil imports from Russia and Ukraine. Additionally, countries embroiled in their own conflicts, such as Lebanon, Yemen, Syria, Iraq, Afghanistan, North Africa, and West Africa, also depend on food supply imports from these two nations.

This underscores that interdependence or even dependency on Ukraine and Russia is not exclusive to Indonesia but is a global phenomenon. The effects ripple across all nations engaged in trade relations with Ukraine and Russia. According to the International Monetary Fund (IMF), the ongoing conflict could severely disrupt global supply chains due to rising prices and Ukraine's inability to manage its agricultural lands, of which 70% are used for wheat farming (The Lancet Regional Health - Europe 2022). In the absence of production, there are no harvests, no goods for export, and ultimately, wheat prices surge due to limited supply. Simultaneously, demand for wheat imports continues to come from countries worldwide.

The World Bank has reported that both developing and developed nations, including the European Union (EU), have been significantly impacted by this conflict. For instance, the EU imports a substantial portion of its energy from Russia, including 35% of its natural gas, 20% of its crude oil, and 40% of its coal (Baffes and Nagle 2022). Conversely, Russia also relies on the EU as a major export market. Many developing nations depend on Russia and Ukraine for commodities and food supplies, and both countries have been key contributors to global wheat exports in recent years. Due to the closure of all Ukrainian ports in the Black Sea, 90% of Ukraine's wheat exports have been halted (Baffes and Nagle 2022).

The volume of imports from Russia and Ukraine significantly affects the fluctuations in commodity prices within the global economic system. The higher the price of a commodity, the less importing nations can afford to procure, which directly impacts their access to critical resources. Price hikes, driven by supply shortages and logistical disruptions in import-export processes, make it increasingly challenging for nations to secure adequate supplies, particularly food. High wheat and fertilizer prices affect numerous countries and serve as tools for interdependence, enabling nations to meet their needs, particularly in maintaining food security. The Russia-Ukraine conflict has demonstrated that sources of interdependence, understood as tools of economic and political leverage, can reveal how political-economic instability and food scarcity in one region can have far-reaching global consequences.

Production Losses from Interdependence for Indonesia's Food Security

In theory, interdependence should generate mutual benefits through stable access to essential commodities at affordable prices. In the context of food trade, this

means that importing countries such as Indonesia expect smooth and cost-efficient access to food supplies. However, contrary to the expected benefits, the unbalanced nature of Indonesia's interdependence with Ukraine caused disruption in wheat supply. As much as 24% of Indonesia's wheat supply comes from Ukraine (Dihni 2022b). The anticipated benefits of affordable food prices from this interdependent relationship were instead negated by rising costs. For example, the price of instant noodles, which rely on wheat as a raw material, tripled.

The conflict forced Indonesia to seek alternative ways to fulfill its food needs. This turned the benefits of interdependence into drawbacks, as Indonesia became increasingly dependent on Ukraine. To ensure food supply stability, the Indonesian government recommended mitigation efforts such as substituting wheat-based instant noodles with cassava-based alternatives. Additionally, the government emphasized improving agricultural infrastructure and soil fertility. These mitigation measures were intended to prevent food shortages from both the demand and supply (provision) sides (Maulana 2022). It's evident what caused this is a heavy reliance on foreign wheat imports means that domestic agricultural output needs to be higher to make the country less vulnerable. To do so, more fertilizer imports or subsidies are needed to promote local production of staples like rice.

As of 2023, the ongoing Russia-Ukraine conflict continues to threaten Indonesia's food security. While the trade relationship between the two nations brought benefits in terms of energy and raw material (food) imports, the geopolitical tensions resulting from the conflict have negatively impacted Indonesia's expected benefits. The conflict has disrupted the supply of fertilizers and natural gas, which are closely tied to food production in Indonesia's agricultural sector. Fertilizer and seed costs account for 6% and 3.4%, respectively, of the total production costs for rice paddies (Yani 2023). The global surge in fertilizer prices and the disruption of fertilizer imports from Russia have significantly affected rice production in Indonesia.

By 2020, Indonesia's state-owned fertilizer producers managed to produce only 7 million tons of fertilizer, and the government has struggled to maintain relatively low fertilizer prices to safeguard domestic production, which has already been declining. The conflict has further complicated Indonesia's issues with fertilizer production and food security. One of Indonesia's national fertilizer producers, Pupuk Iskandar Muda, had to cease operations due to a shortage of natural gas, ammonia being a critical input for fertilizer production.

The government has implemented several interventions to support food production in the agricultural sector, including a fertilizer subsidy program in 2022. This program provided IDR 25 trillion in subsidies to 16 million farmers registered in the Definitive Group Needs Plan Electronic System (e-RDKK). Additionally, the

government implemented policies to ensure natural gas prices remained at USD 6 per million British thermal units (MMBTU) (Yani 2023). These efforts were aimed at reducing Indonesia's unbalanced dependency created by its interdependent trade and cooperation relationships with Russia and Ukraine.

The Costs of Interdependence for Indonesia in Food Security

According to Bank Indonesia, there are three primary impacts of the conflict on Indonesia's national economy. First, there has been an increase in the prices of various commodities, such as oil, wheat, soybeans, and beef. As of March 21, 2022, the price of Brent crude oil had reached \$110.8 per barrel, representing a 29% increase (Dihni 2022a). This surge in global oil prices has also influenced the costs of other essential commodities. Wheat prices, for example, rose by 43.5% in March 2022, increasing from \$780 per bushel in January 2022 to \$1,119.3 per bushel (Dihni 2022a). Similarly, soybean prices climbed from IDR 12,500/kg to IDR 13,700/kg, an increase of 9.6%, meanwhile the price of beef rose by 2.2% in March 2022, from IDR 126,600/kg to IDR 129,400/kg (Dihni 2022a).

These increases in domestic food prices have significantly affected the purchasing power of Indonesian consumers. World Bank projections for March 2024 show that food prices were quite variable, rising 10.33% year over year. This meant that low-income households (the bottom 40% of income) had 15-20% less buying power for food, prompting a shift toward cheaper and less nutritious alternatives. This shift illustrates how external price shocks, driven by global conflict dynamics, can translate into domestic food insecurity and nutritional vulnerability.

Beyond household consumption, this pattern of interdependence also manifests at the trade level. The Russia-Ukraine conflict has reduced the trade volume of Indonesia, both in terms of imports and exports. This is partly due to supply chain disruptions caused by the war and slower economic growth in countries that maintain trade relations with the warring parties. Sluggish growth in Indonesia's trading partners, such as the United States, China, Japan, India, and Malaysia, has affected the nation's trade dynamics.

Another cost stemming from this interdependence is the uncertainty in global and domestic financial markets. This uncertainty has been driven by rising interest rates from the Federal Reserve and the accelerated normalization of monetary policies in advanced economies. The conflict has limited capital flows and heightened global investor concerns regarding financial markets in developing countries, including Indonesia. Senior Deputy Governor of Bank Indonesia, Destry Damayanti (2022), reported that since the conflict began, foreign capital outflows from the Indonesian government bond market amounted to approximately IDR 30 trillion, while about IDR

4 trillion exited the stock (Dihni 2022a). This uncertainty has prompted investors to shift their investments to countries perceived as safer and more profitable, which has affected the value of the Indonesian Rupiah.

Western sanctions have forced Russian companies to postpone or withdraw from major projects, such as Rosneft's Rp211.9 trillion investment in the Tuban oil refinery (Shofa 2024) and Zarubezhneft's withdrawal from the Tuna Block in Natuna due to a ban on cooperation with Western companies such as Harbour Energy (Afanasiev 2024). These geopolitical tensions contributed to a 12.23% decline in Indonesia's foreign direct investment (FDI) in the second quarter of 2025 (Sulaiman 2025). Taken together, the decline in investment, combined with disruptions in wheat and fertilizer imports linked to the conflict, indicates that capital instability and food security pressures are interlinked within a broader framework of asymmetric dependence.

The Level of Balance in Indonesia's Interdependence with Russia and Ukraine

In this case, the interdependence between the three countries is unbalanced. This imbalance is evident from disruptions in food supply and other implications such as rising commodity prices, as well as increases in gas and oil prices due to the Russia-Ukraine conflict. The interruptions in international trade caused by the conflict demonstrate that Indonesia appears to be the more dependent party, particularly in terms of wheat and fertilizer imports.

According to a study conducted by Indonesia's Central Statistics Agency (Badan Pusat Statistik, BPS) using the Vector Error Correction Model (VECM) method, Indonesia's imports from Russia show a negative relationship with global oil and fertilizer prices in the short term (BPS 2023). Similarly, in the long term, the relationship remains negative. The study indicates that the primary dependency impact, both in the short and long term, stems from fluctuations in oil prices, while fertilizer has a significant effect only in the short term.

This imbalance in interdependence resulting from the Russia-Ukraine conflict has provided Indonesia with lessons to enhance self-sufficiency by seeking alternative sources of crude oil and fertilizer. One strategy has been to redirect oil import quotas from Russia to the United States and Middle Eastern countries. Meanwhile, fertilizer imports have been shifted to focus more on China and Canada. These measures aim to reduce Indonesia's uneven dependency on Russia.

As for the balance of interdependence between Indonesia and Ukraine, the relationship is also asymmetrical, although less impactful compared to the relationship with Russia. The ongoing conflict in Ukraine has resulted in losses for Indonesia in terms of reduced imports from Ukraine. The global rise in wheat prices significantly

affects the total wheat imports received by Indonesia. Consequently, the Indonesian government needs to explore alternative wheat sources, such as Australia, to meet its needs. The efforts described above to find alternative suppliers for wheat and fertilizer are evidence of the imbalance in interdependence between Indonesia, Russia, and Ukraine. The war between the two nations has threatened Indonesia's food supply, forcing the country to seek alternatives to ensure food security.

However, despite finding alternative suppliers to meet domestic food demands through imports from other countries, the complexity of global interdependence must also be considered. As previously discussed, the level of interdependence in the global food and economic systems is inherently unbalanced. A disruption in a supplier country will always have a ripple effect on other nations that maintain interdependence or dependency with that supplier. For instance, while European countries do not face food security threats directly due to their self-sufficiency, other factors, such as food access and industrial costs, may still have indirect and direct impacts on nations that depend on the European Union.

The Impact of the Russia-Ukraine Conflict on Indonesia's Food Security

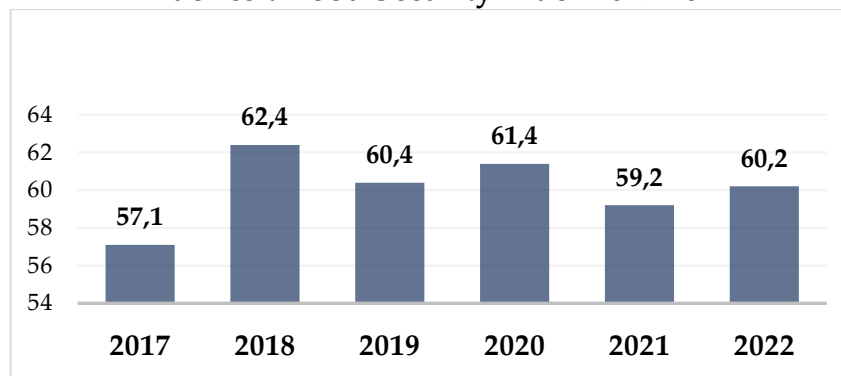
From the perspective of food availability, Indonesia has faced serious disruptions because Russia and Ukraine are key exporters of essential commodities for global food security, such as wheat and fertilizers. The conflict has stalled wheat imports from Ukraine, while global wheat prices surged rising. This situation has caused a global wheat shortage. For example, Indonesia's wheat imports from Ukraine dropped from 3.18 million tons in 2021 to 1.5 million tons in 2022 (BPS, 2024)

Russia, Indonesia's third-largest fertilizer supplier after China and Canada (BPS 2024), has also faced export disruptions, leading to higher global fertilizer prices. This significantly affects domestic food production. The rise in food and fertilizer prices not only leads to food scarcity but also affects the purchasing power of Indonesian consumers. Price increases are not limited to wheat but extend to other food commodities as well such as soybean (9.6% increase to IDR 13,700/kg in March 2022) and beef (2.2% to IDR 129,400/kg) (Dihni, 2022a). These price hikes make it harder for Indonesians to economically access diverse and high-quality food options.

Limited economic access to food affects food utilization among Indonesians. In response to the crisis, Indonesia has sought alternative food importers and substitution strategies, such as replacing wheat with local commodities like cassava for instant noodle production (Maulana 2022). While this effort demonstrates Indonesia's proactive response to the food crisis and a move toward food diversification, such abrupt changes may also influence consumption patterns and nutritional values of food consumed by the public.

Disruptions in the first three pillars of food security have also shaken Indonesia's food stability, creating uncertainty in both food supply and prices. The conflict has compelled the Indonesian government to take mitigation measures, such as setting natural gas price policies to support domestic fertilizer production and providing fertilizer subsidies to 16 million registered farmers (Yani 2023). However, this raises further questions about unregistered farmers, especially as some domestic fertilizer factories have been forced to cease operations. This multifaceted impact highlights the need for a more resilient and balanced food security strategy, minimizing reliance on external sources while strengthening domestic production capabilities.

Graph 1.
Indonesia Food Security Index 2017-2022



Source: GFSI, (Economist Impact 2023)

This conflict highlights the vulnerability of Indonesia's food security system, which is heavily reliant on imports. In this case, the dependence is evident in wheat imports from Ukraine and fertilizer components from Russia. Despite a slight improvement in food security in 2022, According to GFSI report, Indonesia is ranked 69th out of 113 countries, with a food security index score of 60.2, below the global average of 62.2. Although this score marked an increase from 2021 (59.2), it was still lower than the indices recorded between 2018 and 2020.

CONCLUSIONS

Interdependence should provide benefits for each country and is expected to generate mutual advantages through stable access to food supplies, price stability, and improved purchasing power accessible to the public. However, the Russia-Ukraine conflict, the benefits expected from this relationship have shifted into risks and losses, making Indonesia vulnerable to rising food prices, supply disruptions, inflation, and a decline in household purchasing power. This outcome reflects the asymmetrical nature of interdependence, in which Indonesia bears greater costs and faces an

escalating threat to national food security due to its higher dependence on wheat and fertilizer imports compared to exporting countries. As a result, the burden of interdependence becomes unequal, placing Indonesia in a more vulnerable position compared to the exporting countries.

Therefore, Indonesia must strengthen its domestic food security and reduce reliance on imports. In this effort, it is essential to focus on critical aspects such as providing support through training, investing in agricultural technology, and adopting environmentally friendly practices. Considering the current unstable global geopolitical landscape, coupled with environmental degradation and the looming threat of climate change, Indonesia must adapt to these unpredictable challenges to secure its food system.

This article recommends further research into the complex interdependence at the global level that influences the political-economic stability of a country, even when located in different regions. Further research could be conducted using primary data or other theoretical approaches, such as utilizing the concept of food security with its multidimensional etiologies that affect food insecurity or factors contributing to the failure to achieve the four main pillars of food security. A recommendation for the Indonesian government in addressing the current food vulnerability issue is to provide support for domestic food production efforts by optimizing the potential of food resources and prioritizing investment in agricultural technology. This is expected to reduce Indonesia's dependency on imports for domestic food supply, although Indonesia must continue diversifying food importing countries.

ACKNOWLEDGEMENT

The author would like to express gratitude to Mr. Broto Wardoyo, Ph.D., thesis advisor in the Graduate Program of International Relations at Universitas Indonesia, for his support and assistance in providing input for this writing.

BIBLIOGRAPHY

- Afanasiev, Vladimir. 2024. 'Russian State Player Takes over KNOC Stake in Gas Development Offshore Vietnam'. Upstream. 2024.
<https://www.upstreamonline.com/field-development/russian-state-player-takes-over-knoc-stake-in-gas-development-offshore-vietnam/2-1-1664500>.
- Ashley, John M. 2016. *Food Security in the Developing World*. Amsterdam: Elsevier.
- Baffes, John, and Peter Nagle. 2022. "Commodity Prices Surge Due to the War in Ukraine." World Bank. 2022.
<https://blogs.worldbank.org/en/developmenttalk/commodity-prices-surge-due-war-ukraine>.

-
- BPS. 2023. "Peluang Dan Tantangan Menuju Ketahanan Pangan Nasional. Katalog: Analisis Isu Terkini." BPS, 2023.
- BPS. 2024. "Impor Pupuk Menurut Negara Asal Utama, 2017-2023." Badan Pusat Statistik. 2024.
- Bryman, Alan. 2012. *Social Research Methods 4th Edition*. New York: Oxford University Press.
- Chaerul Ardan, Mochammad, Atika Puspita Marzaman, and Saiful Deni. 2023. 'The Russian-Ukrainian War Effects on Global Food Trade: A Review'. *Journal of Political Science and International Relations* 6 (2): 54–63.
<https://doi.org/10.11648/j.jpsir.20230602.14>.
- Collusi, Joana, Gary Schnitkey, and Carl Zulauf. 2022. "War in Ukraine and Its Effect on Fertilizer Exports to Brazil and the U.S." *Farmdoc Daily*. 2022.
<https://farmdocdaily.illinois.edu/2022/03/war-in-ukraine-and-its-effect-on-fertilizer-exports-to-brazil-and-the-us.html>.
- Damara, Dionisio. 2022. "Sri Mulyani Dan Menkeu AS: Perang Rusia-Ukraina Picu Krisis Energi & Pangan." *Ekonomi.Bisnis.Com*. 2022.
<https://ekonomi.bisnis.com/read/20220716/9/1555719/sri-mulyani-dan-menkeu-as-perang-rusia-ukraina-picu-krisis-energi-pangan>.
- Dihni, Vika Azkiya. 2022a. "Dampak Ekonomi Dan Harga Pangan Perang Rusia-Ukraina." *Katadata.Co.Id*. 2022.
<https://katadata.co.id/infografik/62425ef0216ee/dampak-ekonomi-dan-harga-pangan-perang-rusia-ukraina>.
- Dihni, Vika Azkiya. 2022b. "Impor Gandum Dari Ukraina Terus Meningkatkan 5 Tahun Terakhir." *Databoks.Katadata*. 2022.
<https://databoks.katadata.co.id/perdagangan/statistik/7537801670cf779/imporgandum-dari-ukraina-terus-meningkat-5-tahun-terakhir#:~:text=Tahun 2020 nilai impor kembali meningkat menjadi US%24705%2C6,dari total nilai impor gandum In>.
- Economist Impact. 2023. "Global Food Security Index: Indonesia." *Economist Impact*. 2023. <https://impact.economist.com/sustainability/project/food-security-index/explore-countries/indonesia>.
- FAO. 1996. "World Food Summit 1996." The Food and Agriculture Organization. 1996. <http://www.fao.org/3/w3613e/w3613e00.htm>.
- FAO. 2022. "Ukraine Crisis: The World Can Still Contain the Impact on Global Food Security with the Right Policies, FAO Director-General Says." Food and Agriculture Organization of the United Nation. 2022.
<https://www.fao.org/newsroom/detail/ukraine-crisis-the-world-can-still-contain>

-
- the-impact-on-global-food-security-with-the-right-policies-fao-director-general-says/en#:~:text=Russia and Ukraine together account for nearly 30,and about 80.
- Flick, Uwe. 2009. *An Introduction Qualitative Research Fourth Edition*. London: Sage Publication.
- Gading, Samuel. 2023. "Jokowi Sebut RI Impor 11 Juta Ton Gandum, 30% Berasal Dari Ukraina & Rusia." *DetikFinance*. 2023. <https://finance.detik.com/berita-ekonomi-bisnis/d-6956603/jokowi-sebut-ri-impor-11-juta-ton-gandum-30-berasal-dari-ukraina-rusia>.
- Hassen, Tarek Ben, and Hamid El Bilali. 2024. "Conflict in Ukraine and the Unsettling Ripples: Implications on Food Systems and Development in North Africa." *Agriculture and Food Security* 13 (1).
- Hussein, Hussam, and Matyas Knol. 2023. "The Ukraine War, Food Trade and The Network of Global Crises." *The International Spectator* 58 (3): 74–95.
- Komalasari, Tia Dwitiani. 2022. "Bahan Baku Pupuk Tak Lagi Andalkan Impor Rusia, Stok Pasokan RI Aman." *Katadata*. 2022. <https://katadata.co.id/berita/industri/62416a202509e/bahan-baku-pupuk-tak-lagi-andalkan-impor-rusia-stok-pasokan-ri-aman#:~:text=Indonesia sendiri mengimpor 743 ribu ton pupuk dari,Rusia mencakup 12%25 dari total impor pupuk In>.
- Kusnandar, Viva Budy. 2022. "Ini Daftar Barang Yang Diimpor Indonesia Dari Ukraina." *Databoks*. 2022. <https://databoks.katadata.co.id/datapublish/2022/02/24/ini-daftar-barang-yang-diimpor-indonesia-dari-ukraina>.
- Lamont, Christopher. 2015. *Research Methods in International Relations*. Los Angeles: SAGE Publications.
- Maulana, Rama. 2022. "Dampak Invasi Rusia Ke Ukraina Dalam Ketahanan Pangan Indonesia." *Forest Digest*. 2022. <https://www.forestdigest.com/detail/1904/ketahanan-pangan>.
- Nugrahapsari, Rizka Amalia, Harianto, Rita Nurmalina, and Anna Fariyanti. 2024. 'Impacts of the Russia–Ukraine War on the Welfare of Palm Oil Producers and Consumers in Indonesia'. *International Journal of Social Economics* 52 (10): 1337–56. <https://doi.org/10.1108/IJSE-06-2024-0531>.
- Nye, Joseph S. 2007. *Understanding International Conflicts (6th Ed.)*. New York: Pearson.
- Pristiandaru, Danur Lambang. 2022. "Daftar Barang Ekspor Antara Indonesia Dan Ukraina." *Kompas.Com*. 2022.

<https://internasional.kompas.com/read/2022/02/26/153100370/daftar-barang-ekspor-antara-indonesia-dan-ukraina>.

- Rabbi, Mohammad Fazle, Tarek Ben Hassen, Hamid El Bilali, Dele Raheem, and António Raposo. 2023. "Food Security Challenges in Europe in the Context of the Prolonged Russian–Ukrainian Conflict." *Sustainability (Switzerland)* 15 (6).
- Sembiring, Lydia Julita. 2022. "Rusia-Ukraina Perang, Ini Dampaknya Ke Ekspor-Impor RI." CNBC Indonesia. 2022.
<https://www.cnbcindonesia.com/news/20220315114735-4-322894/rusia-ukraina-perang-ini-dampaknya-ke-ekspor-impor-ri>.
- Shofa, Jayanty Nada. 2024. 'Russia's Rosneft in Talks to Renegotiate Tuban Refinery Project: Bahlil'. Jakarta Globe. 2024. <https://jakartaglobe.id/business/russias-rosneft-in-talks-to-renegotiate-tuban-refinery-project-bahlil>.
- Sulaiman, Stefano. 2025. 'Indonesia's FDI Drops 6.95% y/y in Q2, Biggest Fall since 2020'. Reuters. 2025. <https://www.reuters.com/world/asia-pacific/indonesias-fdi-drops-695-yy-q2-biggest-fall-since-2020-2025-07-29/>.
- Suryana, Achmad, Maino D. Hartono, Anggita T. Suryana, Muhammad R. Suryana, Jan P. Sinaga, and Aldho R. Irawan. 2024. "Stability of Rice Availability and Prices in Indonesia during the COVID-19 Pandemic and Russia-Ukraine War." *BIO Web of Conferences* 119:1–8. <https://doi.org/10.1051/bioconf/202411902013>.
- The Lancet Regional Health - Europe. 2022. "The Regional and Global Impact of the Russian Invasion of Ukraine." *The Lancet Regional Health - Europe*, 15.
- Utami, Rahmadini Agung Ayu, and Musa Maliki. 2024. 'The Impact of Russia and Ukraine War on Global Food Insecurity'. *Jurnal Studi Diplomasi Dan Keamanan* 16 (2): 25–39.
- Yani, Thalatie K. 2023. "Konflik Rusia-Ukraina Masih Ancam Ketahanan Pangan Nasional." Media Indonesia. 2023.
<https://mediaindonesia.com/ekonomi/590191/konflik-rusia-ukraina-masih-ancam-ketahanan-pangan-nasional>.