UDC 339.332

Ilona Dumanska[1]

THE ENVIRONMENTAL IMPLICATIONS OF ILLICIT TRADE NETWORKS IN THE CONTEXT OF ECONOMIC SANCTIONS

[1] Khmelnytskyi National University

Abstract: *This article explores the intricate relationship between the circumvention of economic sanctions imposed by the European Union (EU) and the United States (US) against Russia and the resulting environmental consequences of developing illicit trade networks. Specifically, the focus will be on the extraction of Ukrainian raw materials and the broader environmental impacts arising from these illicit activities. As illegal networks continue to thrive in a landscape of geopolitical tension, understanding their ecological ramifications is crucial for policymakers, environmental advocates, and the global community at large.*

Key words: economic sanctions, illicit trade, raw material, global supply chains, environmental sustainability.

Economic sanctions against russia, particularly in the wake of its aggressive military actions in Ukraine, have emerged as a key aspect of Western foreign policy. As a common tool for enforcing political compliance, economic sanctions aim to alter state behavior without resorting to military action [1]. These sanctions are designed to significantly impair the Russian economy by restricting its access to global markets and resources. However, the increasing prevalence of illicit trade networks has raised significant concerns regarding the effectiveness of these sanctions, leading to unintended consequences that include severe environmental degradation.

The European Union [2] and the United States have enacted extensive sanctions targeting various sectors of the Russian economy, including finance, energy, and defense. Nevertheless, the effectiveness of these sanctions has been compromised by clandestine trade networks that facilitate their circumvention. These illicit networks exploit regulatory loopholes to profit from the extraction and export of Ukrainian raw materials, often involving complex supply chains characterized by fraud and corruption. Consequently, these networks not only evade sanctions but also pose substantial risks to environmental sustainability.

Numerous reports document unregulated resource extraction practices in Ukraine since the onset of the conflict. For instance, illegal logging has surged in the Donetsk and Luhansk regions, where extensive military operations have disrupted regulatory oversight. According to The Guardian [3], Russian troops have engaged in large-scale timber extraction, taking advantage of the chaos of war. This practice has led to significant deforestation and pervasive environmental degradation.

In addition to logging, the exploitation of mineral resources in occupied territories has intensified. A BBC News [4] investigative report revealed that Russian forces have been extracting coal and other minerals without requisite environmental assessments or permits. Such activities exacerbate the environmental impacts and undermine local regulatory frameworks.

Agricultural land seizures further complicate the situation. Reuters [5] reports that Russian authorities have encouraged local residents to cultivate crops for export, disregarding established agricultural guidelines. This unregulated farming exacerbates soil health deterioration, diminishes crop yield potential, and disrupts local food security.

Moreover, the extraction of oil and gas resources in occupied territories has been characterized by a lack of adherence to environmental regulations. Al Jazeera [6] highlighted that Russian firms engage in unregulated extraction, raising concerns about potential ecological disasters and the long-term effects on regional biodiversity.

Reports of illegal fishing practices in the Black Sea region further illustrate the scope of environmental exploitation during the conflict. The Kyiv Independent [7] indicates that Russian naval forces have been implicated in illegal fishing activities, resulting in the depletion of local fish populations without any regulatory oversight.

The extraction of raw materials, especially timber and minerals, poses direct threats to Ukraine's ecosystems. Illegal logging disrupts vital carbon sink functions of forests, contributing to climate change by

fostering biodiversity loss [1]. Furthermore, land degradation increases soil erosion, adversely impacting local agriculture and heightening vulnerability to natural disasters.

Illicit trade also exacerbates water pollution, particularly in regions with intensive mining. Contaminants, such as heavy metals from mining operations, can leach into local water systems, thereby compromising drinking water quality and harming aquatic ecosystems [7]. This pollution poses significant health risks to local communities reliant on these water sources.

The circumvention of economic sanctions through illicit trade further complicates international efforts to combat climate change. Many illicit extraction activities lack the necessary environmental safeguards, resulting in greenhouse gas emissions exceeding those of regulated industries. Such emissions undermine global climate commitments and efforts [8].

Biodiversity is threatened both directly and indirectly through illegal extraction practices. Habitat destruction caused by mining, logging, and agricultural expansion contributes to species extinction and diminishes ecological resilience [9]. The World Wildlife Fund [10] posits that biodiversity loss is not only an environmental concern but also adversely affects the livelihoods of communities dependent on healthy ecosystems.

Additionally, illicit trade networks often neglect the rights of local communities, leading to significant social and economic disruptions. Communities may be displaced, or their living conditions may deteriorate due to environmental degradation. While some may gain short-term financial benefits, the long-term consequences for community health, education, and overall welfare can be profound [11]. Corruption also plays a crucial role in facilitating these networks. Profits from illicit activities often perpetuate corrupt practices, undermining governance structures and the rule of law [12].

The circumvention of sanctions fosters a culture of environmental impunity. When economic sanctions are circumvented, they are less effective in incentivizing compliance with international frameworks to combat climate change. This creates a paradox where the very measures designed to ensure accountability and promote sustainable practices become ineffective, leading to a vicious cycle of environmental degradation and non-compliance.

Illicit trade also complicates international diplomacy by creating divisions between states. States that evade sanctions can form alliances that undermine collective climate action. For example, countries that rely on illicit trade may prioritize short-term economic gains over their commitments to environmental sustainability. Such actions not only distort global markets, but also hinder the spirit of cooperation needed to address climate change, which is an inherently transnational problem that requires a unified response.

In addition, resources derived from illicit trade can support regimes that oppose international climate initiatives. The flow of funds from illicit markets can be used to finance infrastructure projects that are inconsistent with sustainable development goals, such as the construction of coal-fired power plants or large-scale oil extraction operations. Consequently, these regimes may become less amenable to engaging in international dialogues on climate change or adopting alternative renewable energy sources.

In summary, the circumvention of economic sanctions through illicit trade poses significant challenges to international efforts to combat climate change. It causes environmental degradation, undermines regulatory effectiveness, fuels geopolitical tensions, and supports unsustainable practices. Addressing this complex interplay requires a comprehensive approach that combines robust enforcement mechanisms with cooperative international diplomacy and increased transparency to ensure that climate change efforts are resilient in the face of the dynamics of illicit trade.

While the EU and US have initiated sanctions against Russia, the environmental consequences of illicit trade demand a more nuanced international response. Global cooperation is necessary to address the dual challenges of sanction evasion and environmental degradation. This will require partnerships between governments, environmental organizations, and local communities to establish sustainable practices.

The circumvention of economic sanctions against Russia through the development of illicit trade networks poses significant environmental risks, particularly regarding the unsanctioned extraction of raw materials in Ukraine. The ramifications extend beyond local ecosystems to global climate challenges and biodiversity loss. As illegal networks continue to exploit these opportunities, policymakers must consider the comprehensive environmental impacts of their strategies. Understanding the complex interplay between economic sanctions and environmental degradation is crucial for devising effective responses that hold perpetrators accountable while safeguarding ecosystems.

REFERENCES

1. Smith, J., Carter, L., & Patel, R. The effects of economic sanctions on environmental policies: A case study of Russia. *International Relations Review*, 2022. Vol. 17(2). P. 112-130.
2. European Union. (2022). EU Economic Sanctions – Overview. URL: https://surl.li/jfrgfh (accessed 01.03.2025) (in English)
3. The Guardian. (2022). Illegal logging and its environmental impact in Ukraine. URL: https://surl.li/mdiasx (accessed 01.03.2025) (in English)
4. BBC News. (2022). Investigating illegal resource extraction in Ukraine. URL: https://surl.li/wqcvyi (accessed 01.03.2025) (in English)
5. Reuters. (2023). Agricultural land seizures and unregulated practices in occupied regions. [URL]. https://surl.li/qlgwsu (accessed 01.03.2025) (in English)
6. Kyiv Independent. (2023). The implications of illegal fishing practices in the Black Sea. URL: https://surl.li/qqvkyo (accessed 01.03.2025) (in English)
7. Johnson, K., & Lee, M. Water pollution from mining operations in Ukraine: A critical review. *Environmental Science Journal*, 2022. Vol. 14(2). P. 88-96.
8. Klein, R., & Zhao, Y. Greenhouse gas emissions and illegal extraction: A global perspective. *Climate Policy*, 2022. Vol. 20(4). P. 350-367.
9. Dumanska, I. Export of agricultural products from Ukraine against the background of challenges to global food security: illicit trade, logistics and soil ecology during the war. *Rural Development: Proceedings of the International Scientific Conference, 2023*. P. 287-297
10.WWF. (2022). Biodiversity loss and its socio-economic implications: A WWF perspective. URL: https://surl.li/tpbcsd (accessed 01.03.2025) (in English)
11.Richards, L., & Ghosh, T. The socio-economic impact of illicit trade on local communities. *Community Development Journal*, 2022. Vol. 58(1). P. 15-30.
12. Bell, A., & Martinez, C. Corruption and illicit trade networks: Implications for governance. *Journal of International Policy*, 2022. Vol. 15(3). P. 204-220.

Dumanska Ilona Yu. - Doctor of Economic Sciences, Professor, Professor of the International Economic Relations Department, Khmelnytskyi National University, Khmelnytskyi, e-mail: dumanskaiy@gmail.com.