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## GLOBAL SECURITY THROUGH THE PRISM OF RESOURCES WARS

**Anita Ilieva-Nikolovska**

Lexicographic Centre, Macedonian Academy of Sciences and Arts, [anita.ilievanikolovska@gmail.com](mailto:anita.ilievanikolovska@gmail.com)

**Andrej Iliev**

Military Academy "Gen.Mihailo Apostolski", Skopje, R.N.Macedonia, [andrej.iliev@ugd.edu.mk](mailto:andrej.iliev@ugd.edu.mk)

**Abstract:** Human history has been marked by resource wars, which have often been the main motive for wars and imperialist ambitions. The struggle for limited natural resources such as land, water, minerals and energy has been a continuous theme in global history. They have always been a key factor in the strategic decisions of states, starting from ancient empires and until the modern era. Resources remain a major point of tension between states and that future conflicts will be even more complicated due to factors such as climate change, population growth and economic competition. International cooperation and sustainable resource management policies are necessary to reduce potential conflicts.

In ancient times, control of agricultural land and water resources was crucial to the survival of civilizations. An example of this is the conflict between city-states in Mesopotamia, where the struggle for control of the Tigris and Euphrates rivers was a frequent source of military conflict. Water wars remain significant in recent history, especially in arid regions, where access to water often determines economic and political advantages. They most often arose due to attempts to divert water for irrigation, which led to regional destabilization and violent conflict. These rivers were vital for agriculture, which gave economic and strategic importance to the communities that controlled them.

In the Middle Ages, the struggle for resources expanded to include minerals and trade routes. Control of gold and silver mines, as well as silk trade routes, was a major cause of military conflicts.

The exploitation of resources during this period not only strengthened the power of individual states but also created an unequal distribution of wealth and power, which often led to new conflicts.

In the Middle Ages, control of resources such as land, forests and minerals was of crucial importance to feudal states. Land provided the basis for economic power, while forests provided timber for construction and fuel. Minerals, especially iron and silver, were essential for the manufacture of weapons and coins, making them primary targets of conflicts.

The Crusades, although officially motivated by religious reasons, also had an economic dimension, as European powers competed for control of trade routes and the rich resources of the Levant. With the beginning of the colonial era, European states fought wars for control of the natural resources of Africa and Asia.

The evolution of territorial conflicts and conquests during this period were directly related to the need for raw materials such as sugar, cotton and oil. Colonial powers not only exploited natural resources, but also destroyed local economies and societies, leaving long-lasting consequences for global relations.

The paper aims to give an historical analysis of resources wars with focus during the Cold war era till now. Also, the paper gives a perspective on resources wars depending on technological development and demography.

**Keywords:** global security, resources wars, technological development, industrialization, demography

### 1. INTRODUCTION

With the Industrial Revolution, resources such as coal and oil became crucial to economic development and military power. This period marked a significant increase in energy conflicts, especially between the industrial powers of Europe and the United States. As Klare points out, oil became a strategic resource in the First and Second World War, where control of oil fields was vital to the success of military operations. More recent examples include the Gulf War (1990–1991) and the 2003 invasion of Iraq, where resource interests were key motives. Geopolitical and economic aspects play a crucial role in the evolution of global resource conflicts. Geopolitics focuses on the strategic importance of resources in the context of interstate relations, with natural resources being transformed into tools for power and dominance.

Control over critical resources such as oil, natural gas, and rare earth metals provides geopolitical advantages, as they are crucial for economic stability and military superiority. An example of this is the Gulf War, where oil was a central point of conflict, as well as the ongoing competition between China and the United States for rare earth metals, which are essential for technological innovation. Economically, resource conflicts are often driven by growing global demand and limited availability of key materials. Resource-rich countries face the challenges of the “resource curse,” where abundant natural resources lead to corruption, inequality and economic instability. On the other hand, countries that depend on resource imports are forced to form economic and political alliances to secure

their access. An example is the EU, which is investing in renewable energy sources to reduce its dependence on fossil fuel imports. Climate change also significantly complicates these aspects, as water is expected to become the most significant resource challenge of the XXI- st century.

The geopolitical risk associated with rivers such as the Nile and the Indus underscores the need for resource management through international cooperation and agreements. In the long term, economic sustainability will depend on investments in renewable sources, efficient resource management, and conflict reduction through equitable distribution (Johnson, 2013).

The Industrial Revolution laid the foundation for the modern world, transforming economies and societies through new technologies, but also creating the basis for modern conflicts over resources. The revolution brought about mass industrialization and a growing dependence on limited natural resources such as coal, iron, and later oil, which directly influenced the geopolitical strategies of nations. Resources not only support economic growth, but also become focal points of competition between nations. Modern resource wars reflect the economic and technological challenges of globalization. For example, competition for Arctic resources is intensifying as the ice sheet melts, opening up new reserves of oil and natural gas. At the same time, critical resources such as lithium and cobalt, which are essential for batteries in electric vehicles and other green technologies, are creating new forms of economic and political pressures, especially in regions where these minerals are abundant. Technological advances also highlight the importance of resources in the digital age. Dominance in the production of semiconductors and microelectronics, where silicon and rare earth metals play a key role, is becoming essential for military and economic supremacy. Countries are trying to secure their technological sovereignty through investments in research and development, but also by strengthening control over supply chains. At the same time, climate change and a growing global population are intensifying competition for basic resources such as water and agricultural land. Water scarcity in regions such as the Middle East and the Sahel is leading to serious social and political consequences, including migration and conflict. In the future, successful resource management will be critical to ensuring global stability and sustainable development. The exploitation of nature is a fundamental aspect of the evolution of global resource wars, which raises serious environmental and ethical questions.

The struggle for control of limited natural resources, such as fossil fuels, minerals, and water, has profound consequences for the environment and human rights, posing moral dilemmas for humanity about the future of the planet and social responsibility. The exploitation of resources often results in the destruction of ecosystems, the loss of biodiversity, and the permanent disruption of natural cycles. For example, the oil industry is among the biggest culprits in air, soil, and water pollution (Amnesty International, 2018).

In Nigeria, the Niger Delta has been plagued by decades of oil spills and uncontrolled exploitation by multinational companies such as Shell and Chevron. Local communities suffer from polluted drinking water, destroyed agricultural land and reduced fishing, leading to poverty and environmental degradation (UNEP, 2011).

Climate change, as a result of the overuse of fossil fuels, further complicates resource conflicts (The World Bank, 2021). The decline of glaciers, droughts and floods increase competition for basic resources such as water and agricultural land. An example is Ethiopia, where the construction of the Grand Ethiopian Renaissance Dam and the Blue Nile has caused tensions with Egypt, which is heavily dependent on the same river for its water supply. These environmental challenges highlight the need for sustainable resource management policies (Al Jazeera, 2023). The ethical implications of resource conflicts include issues of equity, accountability, and respect for human rights. In many cases, resource wealth is not distributed fairly, with profits being appropriated by corporations and elites, while local populations suffer (*The Guardian*, 2019). For example, in the Democratic Republic of the Congo the extraction of cobalt, a critical mineral for electric vehicle batteries, involves hazardous working conditions, child labor, and environmental destruction. Ethical dilemmas also arise in the context of global inequality. Countries in the global South are often rich sources of resources but lack the political or economic power to negotiate fair terms. At the same time, the largest consumers of these resources, such as the United States, China, and the European Union, use superior technology and financial power to dominate global markets. In addition, there is an ethical challenge regarding future generations. Exploitation of resources without regard to long-term consequences threatens natural resources for the future. The development of renewable energy sources and sustainable mining practices are essential to prevent global catastrophe. To address these challenges, global initiatives for equitable resource distribution and environmental sustainability are needed. An example is the Paris Agreement, which obliges countries to reduce greenhouse gas emissions. At the same time, human rights organizations are calling for transparency and accountability among corporations that exploit resources. Involving local communities in decision-making processes, investing in green technologies, and strengthening international cooperation are critical steps for ethical and ecological resource management. Only through an integrated approach that takes into account both human rights and nature protection can the harmful consequences of resource conflicts be minimized.

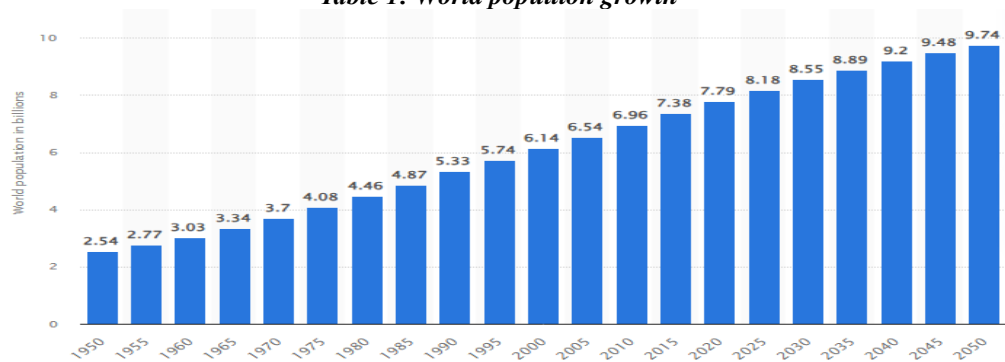
## 2. TECHNOLOGICAL ADVANCEMENT AND RESOURCE WARS

Technological developments have played a key role in the dynamics of global resource wars, bringing about significant changes in the way resources are extracted, distributed, and used. While technology has enabled more efficient use of natural resources, it has also created new geopolitical tensions and ethical challenges. Modern technology has significantly transformed access to resources (Lord Alderdice,2024). Advances in mining techniques, such as automated machinery and digital process control, have enabled the deep extraction of minerals that were previously inaccessible. For example, “fracking” (hydraulic fracturing) has revolutionized access to oil and natural gas, particularly in the United States, where the technology has transformed the country into one of the world’s largest energy exporters. However, such innovations do not come without a price. Fracking has been controversial due to its environmental impacts, including groundwater contamination and increased seismic activity. Additionally, while technology allows for the extraction of resources with less human labor, it can lead to job losses and economic instability in communities that rely on traditional mining methods. In the era of digitalization, resources related to the technology industry, such as rare earth metals, have become vital to global economies. Lithium, cobalt, and neodymium are just a few of the key materials used in the production of batteries, solar panels, and smart devices. China, which controls over 60% of global rare earth production, uses this position as a strategic advantage in international relations. Similarly, competition for technological superiority has created a race for dominance in the fields of artificial intelligence (AI) and quantum computing. These technologies depend on materials and energy sources that are becoming the subject of international conflicts. An example of this is the competition between the United States and China, where sanctions and trade restrictions are often used to limit access to key components and raw materials. Although technological progress offers solutions for more efficient use of resources, it also brings ethical dilemmas. Most often, mining activities for obtaining rare metals involve the exploitation of workers in countries of the global South. An example is the Democratic Republic of Congo, where a significant part of cobalt production is carried out in unsafe conditions, with frequent cases of child labor exploitation. In addition, the rapid pace of technological development raises questions about sustainability. The use of resources without proper management leads to serious environmental problems, such as soil degradation and increased greenhouse gas emissions. In this regard, there is a moral obligation to develop technologies that will focus on renewable energy sources and minimize environmental consequences (Lord Alderdice,2021). Technological progress has the potential to redefine global resource wars by promoting sustainable practices. Solar energy, wind energy and hydrogen technologies represent alternatives that can reduce dependence on fossil fuels. The European Union, for example, is investing billions of euros in initiatives such as the Green Deal to drive the transition to a circular economy. Global cooperation is key to ensuring the ethical and sustainable use of resources. The introduction of international standards for mining and responsible supply chain management will be the basis for creating a fair and stable world. Only by integrating technology with ethical principles and environmental policies can the consequences of the global race for resources be mitigated.

## 3. DEMOGRAPHIC CHANGE AS A SECURITY THREAT

Global birth rate and its dynamics have a direct impact on resource conflicts, security challenges and ecological stability. The increase or decrease in population in different regions creates pressure on natural resources, economic and political stability, which turns demographic change into a key security threat at the global level.

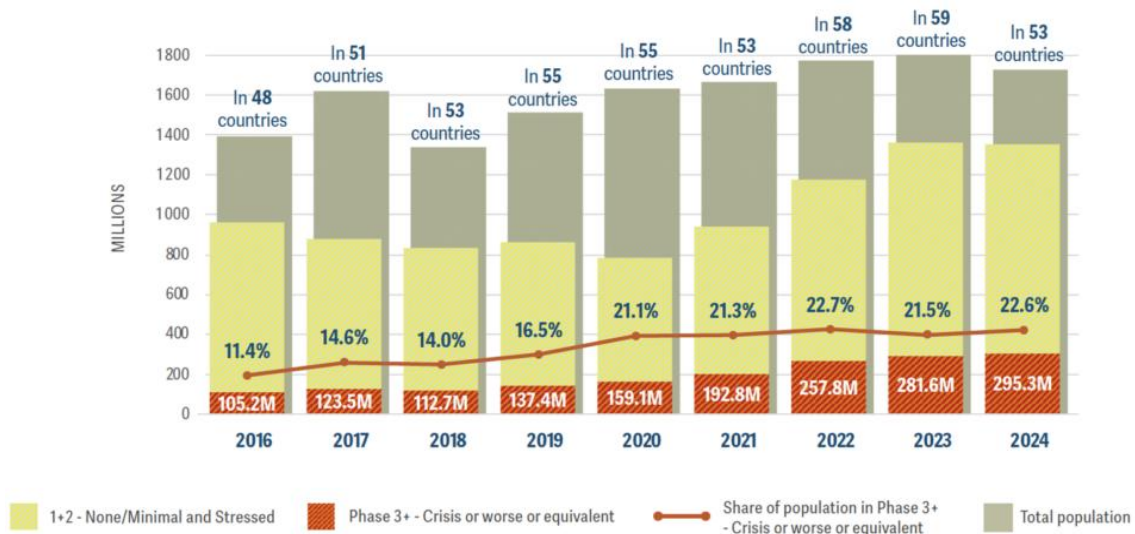
*Table 1: World population growth*



Source: Statista Research Department. (2024) Development of the world population until 2050. Development of the world population until 2050| Statista

Rising birth rates, especially in countries of the global South, are contributing to a dramatic increase in demand for food, water, energy and minerals (Muttarak, 2021). This growth is straining already limited resources, fuelling international and regional tensions. In Africa, which has the world’s fastest-growing population, more than 60% of the population depends on agriculture. This increases the risk of conflict over fertile land and water resources, especially in arid regions such as the Sahel. The growing demand for energy and minerals such as lithium and cobalt, driven by a growing population, is further intensifying competition between nations for critical resources. In contrast, low birth rates in developed countries pose a very different kind of threat. An ageing population is reducing economic productivity and increasing dependence on imported resources and labour. The European Union, for example, is facing a significant decline in birth rates, which is reducing the ability of its countries to remain competitive in the global market. This is fuelling the need to import critical resources and political instability through increased migration. Population declines in some countries also pose geopolitical risks. Russia, with a long-term demographic decline, is investing in expanding its control over resources in the Arctic, which creates potential tensions with other countries in the region. Population growth is directly linked to climate change, which worsens the distribution of resources and increases the vulnerability of communities. In regions such as South Asia, population density contributes to the escalation of climate disasters. Rising sea levels and increasing droughts in Bangladesh are creating migration, creating additional pressure on neighboring countries (Minello, Russo, 2025). At the same time, regions with low birth rates, such as Japan, are being forced to invest in automation and alternative technologies to reduce their dependence on natural resources and human labor. Rather than seeing birth rates solely as a threat, strategies need to be developed that integrate demographic trends into global sustainability plans. Developed countries should invest in education and health programs in regions with high birth rates to boost economic growth and reduce instability. At the same time, efforts to sustainably manage resources need to be globally coordinated. The Paris Agreement on climate change, green energy initiatives, and international programs for recycling critical minerals are examples of how resource challenges can be overcome through innovative policies.

**Table 2: World food shortage (2016-2024)**



Source: Global network against food crises (2025). Global report on food crises, p.27. Full Report.pdf

The modern economy, with its dependence on critical resources, plays a crucial role in shaping global resource conflicts. In an era of digital transformation, green energy, and advanced technologies, the battle for access to limited natural resources is becoming more complex, creating new challenges and tensions. As the global population and economic activity grow, the need for energy, minerals, and water is increasing dramatically. Modern technologies require materials such as lithium, cobalt, and rare earth metals, which are essential for the production of batteries, electric vehicles, and renewable energy sources. These resources are not evenly distributed across the world, creating competition between economic powers. The global shift to green energy is increasing the need for resources from Africa and South America, where the largest reserves of lithium and cobalt are located. This is intensifying geopolitical competition, as countries such as China, the United States and the European Union compete for contracts and concessions (Minello, Russo, 2025). The future economy will be driven by innovation and

sustainability, but will remain dependent on limited natural resources. In addition to traditional energy sources, much of the economic power will be concentrated around renewable energy sources and digital technologies. The problem is that these technologies are not completely “green” solutions, as they are imagined. The production of solar panels, wind turbines and batteries requires significant amounts of metals and minerals. In addition, the resources for sustainable technologies, such as hydrogen fuel, still require technological progress to become efficient and commercially available. In the future, economic blocs will play a central role in resource management. The European Union, through its “Green Agenda”, is investing in autonomy from energy imports through local production of renewable energy. Similarly, the United States and China are investing billions of dollars in research into alternative technologies to reduce dependence on critical materials. The future economy must rely on cooperation between nations to avoid conflict. Developing global agreements for the fair distribution of resources, a circular economy, and the ethical use of natural resources will be key to ensuring stability (Postar Behzadi, Doering op.cit al. 2023)

#### 4. CONCLUSION

The evolution of global resource wars mirrors human history and its ongoing struggle for survival, development, and dominance. From ancient times, when land and water were essential resources for survival, to modern conflicts over energy, minerals, and technological raw materials, this topic reveals the roots of many of today's geopolitical tensions. In ancient societies, resources such as fertile land and water were crucial for providing food and developing civilizations. Conflicts often arose from limited natural resources and the struggle for control over them. In the Middle Ages, trade routes and access to valuable minerals such as gold and silver were the basis for economic and military intrigues between kingdoms and empires. Colonialism introduced a new dimension to global resource wars, as European powers expanded their dominance through the exploitation of the natural resources of colonized territories. This era brought not only economic gains for the colonial powers, but also profound socio-economic and environmental consequences for the colonized peoples, which are still reflected in today's inequalities. The Industrial Revolution brought new resources into the spotlight, such as coal and oil, which became the main drivers of industrial and economic progress. The struggle for control of these resources resulted in new forms of conflict, including two world wars, which were marked by a race for dominance over strategic resources. The modern world faces complex dynamics in resource wars. Energy sources, such as oil and natural gas, remain the focus of many conflicts, but new resources, such as rare earth minerals, crucial for technology, are creating additional geopolitical tensions. Environmental and ethical aspects are also gaining increasing importance, as climate change and environmental degradation exacerbate competition for limited resources (Africa center for strategic studies,2023). Technological progress and demographic change further complicate this process. On the one hand, technology enables more efficient use of resources, but on the other hand, it creates new challenges related to its control and ethical implications. Demographic trends, such as population growth and urbanization, put additional pressure on resources, which can lead to new conflicts. In the future, the global community will have to face the challenge of fair distribution of resources, sustainable development and avoidance of violent conflicts. Technological innovations, together with international cooperation, must be aimed at finding solutions that will ensure global stability and reduce inequalities. Only through a holistic approach, which will take into account economic, environmental and ethical aspects, can humanity overcome the challenges of global wars for resources and create the basis for a sustainable future.

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