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Extractivism and Conflict: Comparative Study of Serbia and the DRC

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This study explores how populations in Serbia and the DRC have been affected by and responded to natural resource extraction. Specifically, protests and other activist engagement were examined by surveying social movements' participants from civil society and academia. Both qualitative and quantitative methods of inquiry were used. Data was collected from multiple sources, including academic and online sources pertaining to the topic of extractivism, and a survey of 71 participants. The results indicate that both Congolese and Serbian participants have grave concerns about extractivism and its impact on the environment, peace, stability, health, and well-being but differ in their ability to resist extractive projects and their impacts on local communities. Protests in the DRC were organized locally and sporadically, while in Serbia the environmental movement was present at all societal levels, which led to different outcomes. Exploitation of mineral resources without local development, environmental protection, and improvement of life conditions of the local communities may contribute to the deepening of already grave inequities and instability in both countries.

Keywords: extractivism, conflict, mining, peace, environmental justice, protest

Introduction

In December 2021, the environmental justice movement got a boost as thousands of demonstrators took to the streets of Serbia, blocking main roads in several cities in opposition to the opening of a large lithium mine by Anglo-Australian mining company Rio Tinto near the town of Loznica in the western Jadar Valley (Reuters, 2021). These people protested against the potential for irreversible damage to the unspoiled landscape and contamination of the region's water supplies. Just a month earlier in November 2021, policymakers in the Democratic Republic of Congo asked Barrick Gold Corporation, a Canadian mining company, to secure the perimeter of its Kibali gold mine after a protest in response to the eviction of people living on the company's concession turned deadly (Holland, 2021).

This study explores how populations in Serbia and the DRC have been affected by and responded to natural resource extraction. Specifically, protests and other activist engagement were examined by surveying the social movements' participants from civil society and academia. Both qualitative and quantitative methods of inquiry were used. Data was collected from multiple sources, including academic and online sources pertaining to the topic of extractivism, and a survey of 71 participants.

Although we are on different continents and from different socio-political contexts, we decided to compare environmental protests in Serbia and the DRC because both countries belong to a group

of developing nations rich in minerals that are of interest to mining companies from the developed world. In recent years, both countries have had organized protests against these foreign mining companies. The goal of this study was to explore the processes and reasoning behind those protests and how they may affect peace and stability in their respective societies. This study will also provide insight into why nonviolent resistance to extractive projects has led to different outcomes in Serbia and the DRC and will argue for finding sustainable solutions that address these countries' economic, social, and environmental challenges.

Literature Review

To examine the cases of the DRC and Serbia, we used an environmental justice lens. The environmental justice lens provides a theoretical framework for understanding the impact of civil disobedience, protest, and activism aiming to promote fairness and justice for local populations affected by environmental degradation due to extractivism (Pellow and Guo, 2018; Wenz, 2015). Extractivism, defined as "the exploitation of the raw materials from the Global South essential for the industrial development and prosperity of the Global North," (Lander, 2012) has been one of the central focuses of environmental justice movements.

The concept of environmental justice, which focuses on the harms experienced by marginalized groups due to environmental pollution, emerged in the United States in the 1980s and has since spread around the globe. Environmental justice connects issue of public health, human rights, conflict management, and ecological sustainability with strategies such as civil disobedience, public protest, and legal action in order to combat the development of "unwanted facilities" (Pellow & Guo, 2018). Environmental justice movements are linked with a flurry of other movements, which demonstrates that the struggle for environmental causes is also a struggle against inequality, poverty, and conflict (Alonso-Fradejas, 2017; Veltmeyer & Bowles, 2014)). Environmental justice is rooted in the struggle for indigenous rights and the rights of those whose voices are marginalized in society (Picq, 2014).

Environmental justice focuses on ecological sustainability and preserving life on earth for the communities that are most affected by environmental degradation and climate change. As Grable put it, "since nature is at the intersection of most indigenous peoples' identity, religion, culture and community, we are therefore compelled to protect it" (Grable, 2019). Indigenous communities are one of the groups most affected by climate change as their lands are home to "80% of the planet's biodiversity" (Grable, 2019). Environmental justice movements have been shown to be successful only if their approaches take into consideration local social, cultural, and ethical factors. Our goal was to use the case studies of Serbia and the DRC to explore commonalities and differences that may exist at the local level in two different parts of the world.

Another set of important concepts for this article are environmental conflict and peacebuilding. Since 1946, at least 40% of all conflicts within states have involved disputes around natural resources (Bruch, 2022). According to Ogden (2018), "one challenge of environmental peacebuilding in practice is that the theoretical links among natural resources, environmental cooperation, and peace are poorly understood." The DRC has been stricken by violent conflict for a long time now. Many of these conflicts are rooted in "the resource curse" (Collier, 2007). The fact that the country is rich in primary commodities, and especially in minerals, has attracted foreign companies and governments interested in exploiting those resources to the detriment of the

local population and environment. With an estimated 200 million tonnes of ore, it is now believed that the area around the Serbian town of Loznica in the Jadar Valley is one of the most abundant deposits of lithium in the world. Land in Jadar can be mined to produce battery-grade lithium carbonate, a critical mineral used in large scale batteries for electric vehicles and storing renewable energy. Mining in Jadar also contains borates, which are needed for the development of renewable energy equipment such as solar panels and wind turbines (Somali, 2022). Due to the expansion of the electric cars industry, it is projected that the global demand for lithium will grow fourfold in less than 10 years (Levitan & Pike, 2022).

Serbia is a country that underwent a decade of violent conflict in the 1990s and its fragile peace continues to be challenged. Conflicts between protestors and the government-supported foreign mining companies can be largely characterized as nonviolent, low-intensity conflicts (Arce, 2016). In Serbia, civil mobilization took place at all societal levels, leading the government to suspend its agreement with Rio Tinto. In the DRC, there has been much less success. There, mobilization against extraction has been sporadic and geographically dispersed, exerting little influence on national policy regarding extractivism.

Nonviolent protest has its advantages and disadvantages. As empirical data shows, change generated through nonviolent means leads to a more sustainable peace (Anderson, 2012; Chenoweth, 2013; Nagler, 2001). Nonviolent protest as a peacebuilding strategy can lead to what Galtung (1969) calls a "positive peace." Positive peace is defined not only by the absence of violence, but also by progress toward a more just social structure and fairer relationships which enable the voice of the people to be heard instead of subdued. Nonviolent action, in many conflict situations, is arguably a more responsible option than violent action, but, at the same time, we need to be aware of the limitations of nonviolent strategies. The obvious disadvantage of nonviolent mobilization is that it takes more time and it requires significant support from the citizenry in order to achieve the desired outcomes (Chenoweth & Cunningham, 2013). Nonviolent protests can often lead to open violence, including riots, due to the increased potential for chaotic, rushed responses in large groups. This is evident in the cases of both Serbia and the DRC, where protestors have clashed with counter-protestors and police, leading to an escalation of violence and even loss of life in the DRC.

In their seminal work mapping the frontiers of environmental justice, the EJAtlas, Temper, Bene, and Martinez-Alier (2015) point out that "through the globalization of governance processes and Environmental Justice (EJ) movements, local political ecologies are becoming increasingly transnational and interconnected." Interestingly, the idea of environmental justice gained traction in the late 1980s in the Global North with reports on the disparities in environmental degradation and pollution facing minority and low-income communities (Lee, 2019). Through the globalization process, the concept of environmental justice has become widespread in the Global South, inspiring those protesting inequities due to the exploitation of natural resources and environmental degradation (Mohai et al., 2009). There is a need for more comparative studies as well as empirical evidence that would serve as the foundation for policy to prevent environmental degradation and conflict. This comparative study is an attempt to learn from activists about the ways in which to build stable, peaceful, and prosperous societies amid a time of great environmental challenges and the ongoing race to exploit natural resources.

The Case of Serbia

Although the conflict in the Balkans ended more than two decades ago, research has demonstrated that negative peace, intolerance, difficult economic situations, and unstable neighborhoods continue to create the conditions for the reemergence of conflict in Serbia (Bašić et al., 2020). These challenges have been exacerbated by extractive projects as well as the actions of various leaders whom the Serbian people perceive as corrupt.

Serbia is considered a developing country and is ranked 83rd of the major economies in the world, 71st among the richest countries. In 2021, Serbia's gross domestic product (GDP) reached USD\$9,230 per capita and USD\$63.08 billion for the entire country (World Bank, n.d.). Serbia has been a mining hub for centuries, however, due to its rich ore deposits. Historically, Belgium and France had mining concessions for gold and copper in the East Serbian mines of Bor and Majdanpek before the foundation of socialist Yugoslavia. In recent times, the Bor copper mine was sold to the China-based Zijin Mining company, which possesses a 63% stake in the asset (Jamasmie, 2018). In the past, Western Serbia (which is of interest to Rio Tinto) has been primarily mined for antimony and lead by various domestic and foreign-run operations since the late 19th century (Nikolic, 2022). The mining of lead has been detrimental to the environment. In one recent incident, the lead smelter in Zajača caused major air pollution in the nearby village and a public inquiry found dangerous levels of lead in local children's blood (EJOLT, n.d.). With the discovery of lithium borate in 2004 in Western Serbia, the interest of foreign mining companies in new extractivist projects grew significantly. Currently, there are 35 companies with 130 exploration licenses and 220 exploitation sites in Serbia (World Bank Group, 2020). International companies include giants such as American Freeport McMoRan, Canadian Nevsun, Mundoro, Dundee Precious Metals, British-Australian Rio Tinto, and English Mineco among others (World Bank Group, 2020)

The discovery of jadarite, a lithium sodium borosilicate mineral, in the Jadar Valley near the city of Loznica in 2004 could make Serbia one of the major global producers of this mineral (BBC News, 2022). The proposed extraction plan would have included "an underground mine with associated infrastructure and equipment, including electric haul trucks, as well as a beneficiation chemical processing plant to produce battery-grade lithium carbonate" (BankTrack, 2021).

However, the valley of the river Jadar is one of the most populated rural areas in Serbia, home to some 18,000 people cultivating agricultural land. Mining in the Jadar Valley would not only lead to environmental degradation but also to the relocation of villagers (Panic, 2021). This was the primary reason why thousands of people took to the streets of Serbian cities in September 2021. The protest was organized to prevent Rio Tinto and the Serbian government from starting the mining project.

Serbia is notorious for its resistance to oppression and exploitation, both internal and external, and its people have developed a tradition of peaceful responses to tyranny such as protest, activism, and other nonviolent means of resistance. This can be seen in how some groups or individuals in Serbia respond to conflicts and social challenges through nonviolent means, such as the Otpor movement that toppled president Milošević in 2000 (Popovic & Miller, 2015). Recent protests against Rio Tinto's extractivist plan in the Jadar Valley in 2021 had such widespread support among citizens that the government had to back down on the lucrative deal with the Anglo-

Australian mining giant. Extractive initiatives in the Jadar Valley are far from over, however. Rio Tinto has bought the land there and it is considering legal action that would enable extraction.

The Case of the DRC

The DRC is one of the most resource and mineral rich countries in the world. This includes minerals such as diamonds, gold, copper, cassiterite (tin ore), and coltan, as well as oil and many other resources. The GDP of the DRC was worth USD\$53.96 billion in 2021, 0.02% of the world economy (Trading Economics, n.d.). While these resources are found all over the DRC, the biggest portion is concentrated in the eastern region of the country. According to the International Trade Administration, the total mineral wealth of the DRC is estimated to be in the tens of trillions of dollars. However, instead of benefiting the local population, the presence of these vast resources have contributed to numerous conflicts (Congdon Fors & Olsson, 2004) and serious human rights abuses and violations of international humanitarian law (UN Human Rights, 2010).

Durba is a region in the northeastern area of the DRC with a huge reserve of gold. It is located in the Haut-Uele province and has attracted multiple international mining companies, including the Kibali Gold Mine. This is owned by Barrick Gold Corporation, a Canadian mining company operating in 13 countries around the world. In October 2021, there were protests over the eviction of people living around the perimeter of the Kibali Gold Mine's concession in Durba, which led to the loss of several lives.

This study examines how local populations are affected by mineral resource extraction, how they respond to it, and how to preserve the environment and ensure peace and stability.

Differences and Similarities: Protests and Extraction Projects in Serbia and the DRC

Both Serbia and the DRC are developing nations. They are rich in minerals and have had organized protests against the government supported foreign mining companies in recent years. As we delved deeper into the two case studies, we discovered significant socioeconomic similarities, such as their histories of civil conflicts as well as communal resistance to exploitation and civil disobedience. It is not our intention to conceptualize people's resistance in a monolithic manner and we recognize a whole spectrum of "political reactions from below" (Borras & Franco, 2013). Our aim in this study, rather, was to focus on the phenomenon of people's intensified mobilization in recent years in both countries. Protests against foreign mining companies have recently intensified in both Serbia and the DRC. In October 2021, protests over the eviction of people living around the perimeter of the Kibali Gold Mine's concession in Durba led to the loss of several lives. At approximately the same time, the largest ever protests against Rio Tinto emerged in Serbia, which led to violence against the protestors (Sattar, 2021).

The Serbian protests were primarily driven by environmental and social concerns, while the protests in the DRC were driven by socioeconomic issues. In Serbia, protesters expressed opposition to Rio Tinto's proposed lithium mine development due to concerns about the potential impact on water quality and the landscape as well as the relocation of people. In the DRC, people protested the demolition of homes and evictions in the concession of the Kibali Gold Mine, which was an area designated for mining activities. The level of resistance to the protests in the two countries differed significantly. Reports indicated that the protests in Serbia had been largely peaceful with some incidences of violence, while the protests in the DRC had been harshly

repressed by the police, resulting in the deaths of at least seven individuals (France24, 2021). In terms of scale, the protests in the DRC in recent years have been more sporadic, more grassroots, and have gained less traction, while the protest in Serbia took place at all societal levels, including the national one. The outcomes of the protests also differed significantly: in Serbia the protest resulted in canceling Rio Tinto's mining project, while in the DRC people were evicted from their homes and Barrick Gold Corporation continued mining.

Intensified protests can easily turn to violence, especially in countries that have been struggling with legacies of political turmoil, economic uncertainty, and civil war, as can be seen in the cases of Syria, Libya, and Egypt. While the recent protests in Serbia and the DRC have not resulted in wide-spread violence, the possibility of violence is still important to understanding the challenges to bringing about positive change through nonviolent civil resistance. The history of violent conflict can be an important challenge to peaceful protest; some studies suggest that past violence and grievances can contribute to more violence in the future (Collier, 2007). The 1990s were a tumultuous period for both Serbia and the DRC. Both countries were plagued by war and political instability, leading to the movement of large numbers of refugees. Serbia was embroiled in the Yugoslav wars, which resulted in a significant number of refugees fleeing the warzone. The country faced numerous challenges as it struggled to maintain its sovereignty and territorial integrity in the face of internal conflicts and foreign intervention. On the other hand, the DRC was affected by the genocide in Rwanda in 1994, which led to a massive influx of refugees into the eastern region of the DRC. The country was already facing its own set of political and economic challenges and the influx of refugees further exacerbated the situation. At the same time, armed rebel groups were organizing to overthrow then-President Mobutu Sese Seko, who had been in power for 32 years. Eventually, rebel leader Laurent Kabila took power, but the country continued to face instability and internal conflicts.

Civil resistance has also been shaped by the scale of extractivist projects and people's dependency on foreign companies for their livelihoods. Both the DRC and Serbia have large-scale mining operations that are carried out by international companies and government-owned firms. Despite the abundance of mineral resources and a long tradition of mining, the mining sectors of both countries have long been hampered by poor infrastructure, lack of investment, and political instability.

From a socioeconomic perspective, both extraction projects were expected to contribute significantly to job creation in local communities. Rio Tinto planned to invest up to 2.4 billion dollars in its Serbian mining project, which would create numerous local jobs. Meanwhile, Kibali Gold Mine is already a major employer in the local community, with more than 70% of management positions held by Congolese nationals (Kibali Gold Mine, 2022). The mine was commissioned in September 2013 after \$1.7 billion in development and was expected to operate for 18 years (Mining Technology, n.d.). According to Kibali Gold Mine's technical report, from 2012 to 2018, it was necessary to resettle approximately 36,700 people from 7,504 households due to construction of the project (Randgold Resources, 2018).

Serbia has recently been labeled as a new European mining hub by the Canadian Trade Commissioner Service. The country has a rich history of mining and has long been known for its abundant mineral resources. The presence of huge reserves of minerals such as lithium, copper,

gold, and silver have confirmed Serbia's potential for mineral wealth, which is estimated to be worth hundreds of billions of dollars. This has renewed foreign mining giants' interest in the country's mining sector and the development of new projects and investments. Many of the resources found in Serbia can also be found in abundant reserves in the DRC, attracting the attention of multinational companies. The DRC is also known for its rich mineral resources and the country has long been a major producer of cobalt, copper, diamonds, gold, and, more recently, coltan. The mineral resources of the country are estimated to be worth more than a trillion dollars, drawing the attention of international companies and investors.

The extraction of minerals such as lithium and gold could pose a significant threat to the environment and the health of people in these countries. Serbia and the DRC's reliance on foreign companies to implement the mining projects as well as a lack of proper investment in infrastructure and facilities that can counteract the effects of environmental degradation have created vicious cycles of dependency and exploitation that pose serious challenges to peace and stability in both countries.

Research Methodology

This research seeks to answer the following research questions:

- 1. How have the populations of Serbia and the DRC been affected by natural resource extraction and what are people's responses to it?
- 2. What are the key challenges and ways forward to preserving the environment, preventing conflict, and ensuring peace and stability for indigenous populations?

We used a mixed method of qualitative and quantitative inquiry. The research is based on a constructivist approach that emphasizes context, symbols, history, and culture to gain information about how best to address challenges related to research and methodology (Flick, 2009). Data was collected from academic and online sources pertaining to the topic of extractivism and conflict and from a survey with 71 participants. A survey questionnaire was developed based on the research questions with the aim of eliciting concrete short answers as well as longer qualitative responses from the participants. The survey contained a combination of open-ended and Likert scale questions. Collected data was analyzed using content analysis. An overarching case study format was used to enable an in-depth study of the research questions, giving the researchers both structure and freedom to navigate through data, context, and the wider socio-economic systems that constrain and generate meanings. The comparative case study format provides a space for a more holistic and detailed analysis of the challenges and opportunities faced by the people of the DRC and Serbia. The aim of this case study is exploratory rather than causal, with the goal of gaining a deeper understanding of these cases to enhance our understanding of the effect of extractivism on local communities and their responses. Purposive sampling will be used for the relevant groups of subjects, including students, civil society leaders, activists, educators, and university officials.

Participants and Sampling

Purposive selection was used to identify people who possessed knowledge and perspectives that would contribute to elaborating and deepening our initial analysis. The participants were recruited through a network of civil society officials dealing with environmental issues and mobilization. A total of 39 individuals from Serbia participated in the survey and 32 from the DRC. The participants included individuals from academia and civil society from different parts of the DRC and Serbia who have

taken part in environmental activism. Before the survey was conducted, participants were given electronic consent forms and an explanation of the nature of the research, with particular consideration given to the ethical implications of dealing with respondents in volatile post-conflict contexts.

Data Collection

Data was collected from multiple sources, including document analysis of relevant academic and online sources pertaining to the topic and a survey. Survey questions were a combination of openended and Likert scale questions. Participants were accessed through established connections with local academic institutions and civil society organizations. The survey was distributed electronically through the Qualtrics platform, ensuring participants' anonymity. The confidentiality of the collected data was ensured by saving it on a password protected external drive.

Data Analysis and Findings

This study relies on a mixed method involving both qualitative and quantitative analysis of data generated through document analysis and survey responses. The data analysis began with looking into academic and non-academic sources (journal articles, books, newspaper articles, blogs, etc.) which would enable initial examination of the topic. Content analysis was used to uncover and compare patterns across respondents' replies to open-ended questions. Inductive coding was used as a ground-up approach to derive codes from the data. This style of coding does not start with preconceived notions of what the codes should be but instead allows the theory to emerge from the raw data itself. Comparisons were conducted amongst themes which occurred in the openended responses. Statistical data analysis provided an additional lens for understanding the research puzzle and added more depth to each of the relevant themes explored. The Likert scale responses were examined by making comparisons between mean scores, with higher scores on a 1 to 5 scale demonstrating higher levels of agreement with a statement. The participants were then asked to elaborate on their answers through open-ended questions. Participants' Likert scale responses to three statements were key for illuminating the research puzzle. Because this study is descriptive, samples were not representative of the population and the participants were not randomly assigned to groups. The point of introducing Likert scale questions into the questionnaire was to compare them to the findings from the open-ended questions to get a clearer picture of the possible effects of nationality (Congolese and Serbian) on participants' responses. Moreover, the use of mixed methods can enhance the validity of findings.

For the Likert scale questions, participants were asked to indicate how much they agreed or disagreed with the following statements:

- 1. I am concerned about preserving environment.
- 2. Protest and activism can be effective in the struggle to preserve the environment from extractivism and contribute to peace and stability.
- 3. Extractivism can contribute to conflict.

(1) Concern about preserving environment

Pollution in Serbia continues to worsen across the country, according to the Serbian Environmental Protection Agency (SEPA)'s Annual Report on the State of Air Quality in Serbia in 2020. This report highlights growing concerns about the negative impact of pollution on human health and the environment. In addition to the report from SEPA, Momcilovic (2022) states that ecological

degradation and social inequality are reaching alarming rates in Serbia. The pollution problem is not only affecting the health of the population but also exacerbating the already existing social inequalities.

The majority of Serbian participants, 56%, reported being concerned about preserving the environment of their country, while 33% were very concerned, 7.8% were neutral, and 2.5% were not concerned at all.

Table 1. Concern about preserving the environment (Serbs)

#	Answer	%	Count
1	Very concerned	33.33%	13
2	Concerned	56.41%	22
3	Neutral	7.69%	3
4	Unconcerned	0.00%	0
5	Not concerned at all	2.56%	1
	Total	100%	39

In their qualitative replies, participants provided more insight into the topic and two major themes were identified: education and raising awareness of the problem, and care and clean living. One participant argued that "Buying less plastic, giving old clothes or electronic devices for recycling, using a bike instead of car/bus when possible, separating trash for recycling, [and] buying in second hand stores" can reduce environmental crisis and serve as an example for others to follow. The participant suggested that "Everyone should begin in their own backyards. First, you make sure you set an example by trying your best to be the change you want to see in the world. Second, you support every entity and action that struggles for a better environment, as much as you possibly can."

The situation in Serbia bears a certain level of similarity to the DRC, where millions of people are exposed to pollution from mining and living in the areas around mining sites. Despite having half of Africa's forests and water resources, the DRC continues to face severe environmental degradation due to the lack of proper regulation and enforcement of laws related to mining.

In the DRC, just like in Serbia, the population understands that environmental issues constitute a threat if concrete actions are not taken in time to address them. The main environmental problems of this country include land degradation, deforestation, loss of biodiversity, water pollution, and air pollution. Conflicts are in themselves a source of environmental degradation and the environmental degradation in turn contributes to conflict.

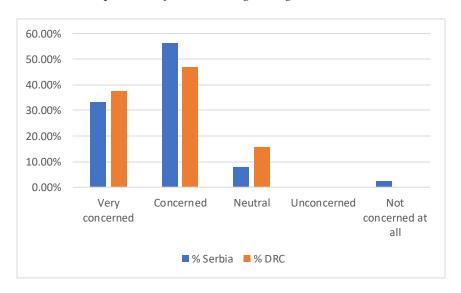
Table 2. Concern about preserving the environment (Congolese)

#	Answer	%	Count
1	Very concerned	37.5%	12
2	Concerned	46.9%	15
3	Neutral	15.6%	5
4	Unconcerned	0.0%	0
5	Not concerned at all	0.0%	0
	Total	100%	32

The above table shows the concern of the Congolese participants about environmental issues in the DRC. A total of 84.4% of participants reported that they were either concerned or very concerned. Although the majority of Congolese participants were concerned about environmental issues, they also suggested that steps still need to be taken to educate the general population about environmental issues. This is further explained by the themes that emerged from the responses to the open-ended questions, such as employment and poverty. The fact that people in the region are more concerned about the job creation that the mining companies provide than the pollution caused by those companies shows that poverty is a more relevant and immediate concern than environmental issues. "Poverty is more worthy to worry about and to fight it is more of a priority than environmental pollution," stated one of the participants from the DRC.

When looking at the chart regarding concerns about environmental issues, we can observe that the trends are very similar between the Serbian and Congolese data. Both Congolese and Serbs are concerned about the environment. However, the qualitative comparison gives us more insight into the different points of view of each side.

Chart 1. Comparison of concern regarding environmental issues



Although environmental issues were described as very important by both Serbian and Congolese participants, people from DRC tended to emphasize that local communities' livelihoods and employment often depend on mining companies. While addressing the disparities in communities caused by mining practices is important, the activists argued that the mobilization of people around these issues still lacks traction due to people's dependency on those mining companies. As one participant pointed out, "Many people believe that mining companies should continue to create jobs while taking into consideration the environmental issues."

Serbs suggest more detailed and specific solutions to tackling environmental issues, such as recycling, decreasing the use of public transportation that pollutes the atmosphere, and buying less new clothing, while Congolese solutions remain more generic. Responding to the question of whether preventing mining companies like the Kibali Gold Mine from extracting minerals would help to solve environmental issues, one participant stated that "mining companies have given employment to many people in our country. Preventing companies like Kibali Gold Mine from continuing their activities in the region would rather contribute to increasing poverty." Both countries are facing similar challenges when it comes to balancing economic development with environmental protection, but due to higher levels of poverty, lower standard of living, and higher dependency on the mining sector, the struggle for environmental justice and protest in the DRC has been more intense, but gained less traction and occurred more sporadically than in Serbia.

(2) Protest and activism can be effective in the struggle to preserve the environment from extractivism and contribute to peace and stability.

The majority of Serbian participants agreed with the statement that protest and activism can be effective in the struggle to protect the environment from extractive industries and that this can contribute to peace and stability. A total of 38% of Serbian participants strongly agreed with this statement, 43% agree, and 18% were neutral. Out of all Serbian participants in the survey, 60% had participated in protests and other types of activism against mining in the Jadar Valley. When asked about their participation in environmental justice movements and activism, 58% of participants stated that they had signed petitions about environmental issues, 11% had contributed money to a campaign, and 13% bought or boycotted a certain product or service because of the social or political views of the company that provided it. Other activities that participants reported taking part in with the aim of preserving the environment included rallies, artistic installations, movie presentations, and class discussions.

Table 3. The perceived effectiveness of protest in the struggle to preserve the environment and its contribution to peace and stability (Serbs)

#	Answer	%	Count
1	Strongly agree	38.46%	15
2	Agree	43.59%	17
3	Neutral	17.95%	7
4	Disagree	0.00%	0
5	Strongly disagree	0.00%	0
	Total	100%	39

Participants' qualitative responses can be grouped around the themes of awareness and joint action. Environmental justice movements are seen as an avant-garde movement that fights for justice through protest and activism. As one participant pointed out, "They contribute to resolving conflicts between government and people. They enable unification against a common problem. Everyone has a right to a healthy environment, and if there is a threat of pollution, the environmental justice movements are organized by people from that society to create awareness and bring them together with a common goal, which is the preservation of nature." Another participant focused on the importance of awareness, writing that "Protests raise awareness about the issues, spread the word and put the environmental justice theme in the public focus."

Similar to the Serbian participants, the majority of Congolese participants strongly agreed that protest can be effective in the struggle to preserve the environment from extractivism and contribute to peace and stability.

Table 4. The perceived effectiveness of protest in the struggle to preserve the environment and its contribution to peace and stability (Congolese)

#	Answer	%	Count
1	Strongly agree	46.9%	15
2	Agree	28.1%	9
3	Neutral	15.6%	5
4	Disagree	9.4%	3
5	Strongly disagree	0.00%	0
	Total	100%	32

The 75% of participants who agreed or strongly agreed that protest is effective reported thinking that it was the best way for the population to put pressure not only on those who destroy the environment, but also on those in the government who were supposed to oversee creating and enforcing policies for the protection of the environment. They also argued that protest was the most effective way to raise awareness among people who were not familiar with environmental issues due to the attention that it may attract in the street or in the media.

Moreover, in their open-ended responses, the Congolese participants argued that protests and activism could contribute to creating more peaceful and stable societies by (1) demanding oversight and monitoring of foreign companies by the authorities to ensure that they comply with environmental regulations, (2) creating mutual trust between the government, the companies, and local populations on questions related to environmental issues, and (3) demanding the development of social infrastructure that would counteract potential environmental challenges. One participant argued that "protest can be used to force our leaders to take the environmental issues more seriously," while another stated that "in countries where indigenous people are directly impacted by extractive activities and where countries do not have strong legal instruments to enforce legislation, I strongly believe that people must take responsibility for strong protests to awaken the consciences of leaders and call the extractive companies and nature conservation organizations to order."

Trust featured as another major theme in the open-ended responses. "A consensus must be found between the parties involved," argued one participant, which implies that it would be important to create mutual trust between the government, the companies, and local populations on questions related to environmental issues. Another participant argued for the foreign companies to develop social infrastructure in the interest of the local population, writing that "I think it is rather important that the agendas of the companies need to be leaning more towards the (social) well-being of the local population."

Although participants in both countries agreed that protest and activism was effective in preserving the environment from extractive industries, people in Serbia believed that awareness about these issues needs to be elevated at the individual level, while people in the DRC think that the government should be more involved in dealing with environmental challenges. Serbian participants show a higher level of awareness about environmental issues as well as more willingness to engage in activism to prevent extractive activities in their country. According to the respondents from the DRC, due to the lack of awareness about environmental issues and their consequences, people in the DRC tend to be less involved in activism. Protests in the DRC were organized locally and sporadically, while in Serbia the environmental movement was present at all levels, including at the national level and in most cities in Serbia.

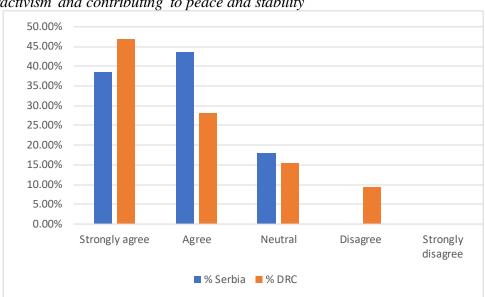


Chart 2. Comparison of the perceived effectiveness of protest in preserving the environment from extractivism and contributing to peace and stability

(3) Mining can contribute to conflict

The majority of Serbian participants, 54%, reported perceiving mining to be likely to contribute to conflict, with almost 31% thinking this is very likely and 13% responding neutrally to the question.

Table 5. Mining can contribute to conflict (Serbs)	<i>Table 5. Mining</i>	can contribute to	conflict (Serb	s)
----------------------------------------------------	------------------------	-------------------	----------------	----

#	Answer	%	Count
1	Very likely	30.77%	12
2	Likely	53.85%	21
3	Neutral	12.82%	5
4	Unlikely	0.00%	0
5	Very unlikely	2.56%	1
	Total	100%	39

The Serbian participants' qualitative responses show that the majority believe that mining activities could contribute to conflict. The main themes that emerged from these responses focus on (1) the divide between economic interests and values, (2) the unequal distribution of profit, and (3) ethical and health issues. According to one participant, "Mining provides an opportunity for a few to make huge profits, while it also strips the majority of the opportunity to live a decent life, which as a result, increases the tensions and divisions in a society." The mining of primary commodities leads to an unequal distribution of profits, with the elite benefiting and the majority of people suffering the consequences of environmental degradation. Conflict also arises from incompatible interests and values between the majority of people and elites. As one participant mentions, "On one hand, there is a blind following of economic interest of the mining company

and political establishment, and on the other hand, there are people defending health of the nature, respecting human life and wellbeing as the greatest value." Ethical and social justice issues also feature in participants' replies, especially in regard to increased division between people. One participant argued that "Mining makes a divide among people even larger; between [people] who are being bought out and people who are displaced, people who will be affected by the mining and those in power who don't work in the best interest of the populace. It splits society to two different sides which can lead to conflict."

The majority of Congolese participants, 78%, argued that mineral exploitation was likely to create social or armed conflicts, while 9% disagreed and 12% were neutral about the question. The displacement of communities as well as difficult relationships between large mining companies and local miners are common sources of conflict in the DRC (de Koning 2013). These conflicts have arisen due to the local population's fear of being forced to resettle by the mining companies and due to lack of compensation and disregard for the livelihoods of those communities.

Table 6. Mining can contribute to conflict (Congolese)

#	Answer	%	Count
1	Very likely	75%	24
2	Likely	3.13%%	1
3	Neutral	12.5%	4
4	Unlikely	9.37%	3
5	Very unlikely	0%	0
	Total	100%	32

In both Serbia and the DRC, more than 75% of participants confirmed that they perceived mining to be likely to create conflicts. The DRC respondents tended to be even more convinced, with the majority thinking that it was very likely that mining would contribute to conflict. In the DRC, the foreign exploitation of minerals has been ongoing for centuries, which has led to severe division and conflict in the region. In Serbia, the exploitation of minerals by foreign companies was not prevalent until the discovery of large lithium deposits in 2004.

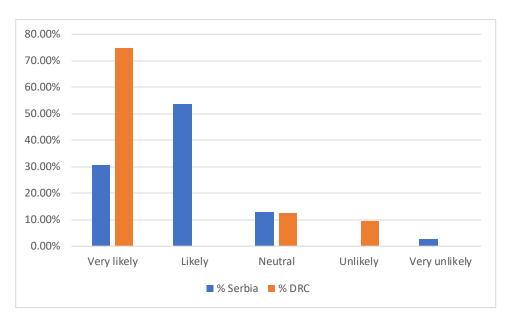


Chart 3. Comparison of participants' perceptions of how likely mining is to contribute to conflict

Conclusions and Questions for Future Study

This study explored how people in Serbia and the DRC have been affected by natural resource extraction. We also looked at participants' perceptions of the effectiveness of protest around environmental issues and the likelihood of conflict emerging from clashes between government supported foreign mining companies and local communities. Through the survey, the study aimed to understand the perceptions and concerns of the participants regarding environmental issues, conflict, and extractivism.

The results of the study indicate that both Congolese and Serbian participants have grave concerns about extractivism and its impact on the environment, peace, stability, health, and well-being. The data presented in our analysis demonstrates similarities and differences between Serbian and Congolese respondents when it comes to concerns about environmental issues and mining. Both groups of respondents have a high level of concern about environmental issues. However, participants' responses to open-ended questions revealed that the mobilization of people around these issues still lacks traction in the DRC due to communities' higher dependency on mining companies for their livelihoods as well as higher levels of poverty and the lower standard of living. Serbian participants showed a higher level of awareness of environmental issues and a greater willingness to engage in activism and protest to prevent extractivist activities in their country.

Furthermore, both countries have undergone violent conflicts in recent times. Both Serbian and Congolese respondents agreed that natural resources could be more of a curse than a benefit for the region, as foreign companies have been less interested in local development than in the exploitation of local resources. This study highlights the importance of finding sustainable solutions that address these economic, social, and environmental challenges. Sustainable solutions should be based on inclusive dialogue, participation, empowerment of local communities,

development of local infrastructure, and respect for human and environmental rights, including the rights of indigenous peoples and workers.

It is important to note that this study also revealed a lack of public awareness about environmental justice issues outside of the activist world in the DRC and Serbia. This is a significant problem that needs to be addressed in order to find sustainable solutions that would balance economic development with environmental protection. Raising awareness at the individual, community, and national levels about environmental challenges and their effects on human lives, and in particular the harms faced by marginalized groups due to environmental pollution, is crucial. Knowledge is power and, according to the respondents, people need more knowledge about the concepts of environmental justice and the consequences of extractivism to be able make an informed decision about their contributions to the struggle for the preservation of our common human home.

Much remains to be understood about the power of people to protest extractivist projects in the future. Based on our study, several hypotheses may be worth exploring. The first is a question of scale. In these two very different cases, what qualities of scale matter to the development and outcomes of resistance against extractive projects? How does the size of the population directly impacted by a project effect these outcomes? Under what conditions do large-scale protests emerge? Under what conditions are smaller communities mobilized?

The second is a question about how people negotiate high and low risk situations. Under what conditions are affected communities mobilized despite high risk to their personal safety and family and community security, and when does resistance happen as a last resort after great losses to security have already occurred?

The third is a question about solidarity and support. How are communities finding support from within their countries across communities both directly and indirectly affected by extractivist projects and how do affected communities mobilize with limited support?

A final question might be posed in future studies regarding the cost to international industry for pulling out of targeted project areas. Are environmental movements more likely to succeed when companies have diversified interests in a particular region or resource sector, making the particular project in question lower in value? How can scholars measure the resolve of industry to extract in key areas as a factor tilting the power dynamics toward or away from resisters?

These and similar questions can provide valuable insights into the communal struggle for environmental preservation and inspire future research in the fields of environmental justice, conflict studies, and sustainable development.

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