

Environmental crime in Armenia

A case study on mining

Work Package 4 "Case Studies"



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ABSTRACT

Since its independence in 1991, the Republic of Armenia (RA) has steadily increased its political and economic ties to the European Union. For instance, in 2009 RA became a member of the EU's Eastern Partnership program. Moreover, several EU-based companies have stakes in the Armenian economy. Despite the EU's efforts to promote good governance in RA, economic resources and political power have become interwoven in often-illicit ways. Corruption is widespread at all levels of the state apparatus. Under these circumstances, the environment frequently falls prey to the financial interests of bureaucrats, politicians, and businesspeople. Despite the fact that RA is signatory to several international environmental treaties and conventions, environmental laws are weak, contradictory, and rarely enforced. The victims of a lax regulatory framework and environmental crime are often ordinary citizens, the economy at large and even the country's national security. Common problem areas linked to environmental crime include RA's vast mining sector, the logging industry and the hydroelectric sector. In recent years, environmental non-governmental organizations (NGOs) have emerged as the crucial defenders of RA's environment, monitoring environmental pollution and denouncing offenders. Under the current conditions, RA's civil society is the only credible champion of the environment. The EU and the governments of its Member States should therefore support RA's environmental NGOs in addition to the already existing technical cooperation projects that involve RA's state agencies and harness the diplomatic pressure the EU and Member States occasionally exert on RA's government officials.

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Adaptable text

LIST OF ABBREVIATIONS

RA	Republic of Armenia
NGO	Non-governmental organisation
EU	European Union
PCA	Partnership and Cooperation Agreement
ENP	European Neighbourhood Policy
DCFTA	Deep and Comprehensive Free Trade Area (DCFTA)
EBRD	European Bank for Reconstruction and Development
UNDP	United National Development Programme
UNEP	United Nations Environment Programme
EIA	Environmental Impact Assessment
EIE	Environmental Impact Expertise
SEA	Strategic Environmental Assessment
UNECE	United Nations Economic Commission for Europe

1 Introduction

In 1991, following the collapse of the Soviet Union, the former Socialist Soviet Republic of RA gained independence. During the first years of its independence, the Republic of Armenia (RA) was embroiled in an ethnic war with Azerbaijan over the Armenian enclave of Nagorno-Karabakh. RA supported the Armenian separatist forces of Nagorno-Karabakh which eventually emerged victorious. In response to RA's support for the separatists, Azerbaijan and its ally Turkey have an imposed blockade on RA which remains one of the economy's biggest drains. The political transition from Soviet rule, on the other hand, proceeded relatively smoothly as the Communist Party peacefully negotiated the transfer of political power to the Armenian National Movement under the leadership of RA's first president, Levon Ter-Petrosyan (1991-98). In later years, the Republican Party became the dominant political force in RA. Robert Kocharyan (1998-2008) and Serzh Sargsyan (2008-) succeeded Ter-Petrosyan in the presidency of RA.¹

According to its constitution, RA is a presidential democracy. In reality, informal practices of authoritarian rule undermine the country's formal democratic institutions. Freedom House, which ranks countries according to the degree of freedom that governments are willing and able to protect, accordingly considers RA partially free but not democratic. It is especially the fusion of political power and economic resources that weaken the electoral process and the rule of law more generally. The executive branch routinely ignores the independence of the legislative and judiciary branches that is formally enshrined in the constitution. Moreover, corruption is widespread, further compromising good governance in RA.²

The lack of governmental accountability, bad governance and systemic corruption is a severe threat to the Armenian environment. Environmental protection frequently falls prey to the economic interests of business elites who occupy key positions in the parliament and the executive branch and who bankroll electoral campaigns. It is therefore not surprising that

¹ Christoph H. Stefes, *Understanding Post-Soviet Transitions: Corruption, Collusion and Clientelism*, Euro-Asian Studies (Palgrave Macmillan, 2006).

²"Armenia," *Freedom House*, 2014, https://freedomhouse.org/report/nationstransit/2014/armenia#.VGCcXIcY1t4.

environmental standards in RA are lax. Moreover, environmental laws are frequently violated with impunity as lack of funds and widespread corruption enfeeble law enforcement and adjudication. Yet it would be too short-sighted to focus on just these concrete instances of criminal activities.

From a legal perspective, environmental crime could be defined as "an unauthorised act or omission that violates the law and is therefore subject to criminal prosecution and criminal sanctions. This offence harms or endangers people's physical safety or health as well as the environment itself. It serves the interests of either organizations – typically corporations – or individuals".³ It is clear that in RA these acts and omissions do indeed take place. Yet in RA, as in many other countries around the world, behaviour that severely harms the environment might not necessarily violate any laws. A non-legal definition might therefore be more apt. For instance, Clifford and Edwards define environmental crime as "an act committed with the intent to harm or with a potential to cause harm to ecological and/or biological systems and for the purpose of securing business or personal advantage."⁴ While useful insofar as it goes beyond a narrow legal definition, which might miss many environmentally harmful acts due to lax environmental legislation in RA, it misses an important point – the fact that there is insufficient environmental legislation.

We would argue that in RA, environmental crime starts well before the breaking of relevant legislation. It begins with the often illicit collusion of political power and economic interests that prevents the passing of more stringent environmental regulations and the allocation of sufficient administrative resources to those government agencies which are formally tasked with the protection of the environment. In other words, the often illegal activities that prevent the passing of stringent environmental legislation should already be considered environmental crime. We therefore straddle a middle ground between a narrow legal and a broad non-legal definition and define environmental crime as any intentional act or omission that violates the law and thereby prevents the passing of more stringent environmental legislation (e.g., due to corruption), hinders the adequate allocation of resources to public or private agencies charged with protecting the environment, and/or harms the environment. We therefore assume a legal approach, but our point of departure starts before

³ Yingyi Situ and David Emmons, *Environmental Crime: The Criminal Justice System's Role in Protecting the Environment* (Tousand Oaks: Sage, 2000).

⁴ Mary Clifford and Terry D. Edwards, "Defining 'Environmental Crime", in: Clifford and Edwards (eds.) Environmental Crime. Enforcement, Policy, and Social Responsibility (Aspen Publishers, 1998): 5-30.

existing laws. Instead, we also look back at the law-making process and emphasize that illegal acts committed at this stage should also be considered environmental crime insofar as they fail to criminalize behaviour that poses a severe threat to the environment. This approach appears to be particularly apt for political systems in which the law-making process is literally corrupted due to the collusion between public and private interests.

Nowhere is environmental crime more prevalent and harmful than in RA's mining industry. The country is rich in copper, iron, molybdenum, zinc, gold and other metals. In addition to base metals, other metals include rhenium, selenium, tellurium, cadmium, indium and bismuth.⁵ With almost 700 mines in operation, mining is considered an important economic sector in RA, accounting for over half of the country's exports.⁶ The ownership of these mines is often unclear, as many companies are registered offshore. It is clear though that members of RA's political elite have stakes in these companies. Some companies that operate in RA are formally based in the European Union (EU). In general, RA's government attempts to encourage investment in the mining industry through low tax rates as well as lax and ambiguous environmental and labour regulations. Ambiguities in the law are routinely interpreted in ways that benefit the mining industry.⁷ Moreover, even these weak regulations are frequently violated with impunity. Lack of administrative resources, collusion between private and public interests and the resulting lack of political will and outright corruption are responsible for the lack of enforcement (Aghalaryan, Amirkhanian, Ayvazyan, Barker and Zarafian, interviews).

The way mining is conducted in RA has disastrous consequences for the country's environment and the well-being of its citizens. Mining has led to widespread deforestation and the destruction of arable land. Moreover, heavily polluted tailings are discarded in ways that contaminate lakes, rivers and soil. Smelters pollute the air. Mining thereby endangers the health and the subsistence of RA's citizens. Since rivers often cross borders, mining-related pollution endangers the environment and citizens of neighboring countries as well, namely Georgia and Azerbaijan. In a volatile region of mutually distrusting governments, cross-border pollution is not managed and could further aggravate hostilities between the nations of the

⁵"Armenia," *Mining Journal Special Publication*, June 2011, http://www.mining-journal.com/__data/assets/supplement_file_attachment/0004/274972/Armenia_2011scr.pdf.

⁶ Ishkanian, Civil Society, Development and Environmental Activism in Armenia, 2013.

⁷ Alen Amirkhanian, *Review and Gap Analysis of RA Legislation Related to Environmental Protection: Focus on Assessment, Valuation and Economic Instruments*, n.d.

South Caucasus (Zarafian, two anonymous mid-ranking officials of the RA government, interviews).

So far, RA's nascent environmental movement has been the only actor able and willing to monitor mining-related environmental destruction, point fingers at the perpetrators, demand stricter environmental regulations and take legal steps, so far, with some success. The European Union (EU) could strengthen environmental protection in RA by supporting environmental NGOs, assisting the government of RA in the formulation and implementation of stricter environmental regulations and insisting in RA's compliance with domestic laws and international treaties.

The EU and the RA signed a Partnership and Cooperation Agreement (PCA) in 1996 which went into force in 1999.⁸ The PCA was meant to spur cooperation in trade, political dialogue, technology, social issues, civil science, investment, economy, culture and lawmaking.⁹ In 2004, RA became a part of the European Neighbourhood Policy (ENP), finalizing its ENP Action Plan in 2006.¹⁰ The ENP is meant to strengthen relations between the RA and the EU through shared dedication to international law and fundamental values.¹¹ The EU Advisory Group provides the RA government with policy advice on a range of issues to spur the implementation of the reform agenda and strengthen its international commitments.¹² In July 2013, negotiations on an Association Agreement and a Deep and Comprehensive Free Trade Area (DCFTA) were finalized to deepen the relations between RA and the EU even further. However, only a few months later, the Armenian government declared that it would not join the DCFTA after all, but would become part of a Russian-led Customs Union (Eurasian Economic Union).¹³

Despite RA's recent U-turn, the EU's long-standing assistance programs in the area of environmental protection are likely to continue. The EU and RA have cooperated in this area for years. The two parties are signatories to several bi- and multilateral environmental

⁸ "EU in Armenia | Eucentre," n.d., http://eucentre.am/eu-in-armenia/#pca.

⁹ The European Union and the Republic of Armenia Partnership and Cooperation Agreement, n.d., http://www.ces.am/images/stories/CESPDF/pca_armenia.pdf.

¹⁰ "EU in Armenia | Eucentre."

¹¹ "Eastern Partnership," *European Union External Action*, n.d., http://eeas.europa.eu/eastern/index_en.htm.

¹² European Union Advisory Group to the Republic of Armenia, n.d., http://www.euadvisorygroup.eu/.

¹³ "Armenia," *European Union External Action*, n.d., http://eeas.europa.eu/armenia/index_en.htm.

agreements and treaties, most notably the Aarhus Convention.¹⁴ Moreover, the EU has provided funding for numerous environmental projects in RA. The total EU funding given to current projects and those that were active in the past twelve months amounts to more than 10 million Euros.¹⁵ While these are encouraging steps, the EU needs to step up its efforts to curtail environmental crime in the Armenian mining sector. This report will propose a few steps that the EU could take.

Starting with a literature review of environmental crime related to mining in several countries around the world, the report continues with a summary of the methodology that was used to compile the empirical evidence for this case study. Thereafter, we present the case by identifying domestic, foreign and international actors, formal and informal institutions and processes related to mining-related environmental pollution. In this section, we further analyze the nature of environmental crime in RA's mining industry, its causes as well as its consequences. The report concludes with some conceptual notions that should further our understanding of environmental crime in non-democratic and badly governed countries. It will also proffer a few suggestions for how environmental crime could be fought in these countries and what the role of the EU could be in this fight.

2 Literature Review

According to an extensive sourcebook developed by the World Bank for poverty reduction strategies, the mining sector has the potential to be a national asset for developing countries. However, mismanaged mining can increase poverty levels and have negative repercussions for governance and macroeconomic development. Substantial mining profits within a material-dependent economy can create widespread corruption. Amidst institutional corruption, the environment, health, human development, and economic development might therefore suffer. In approximately 60 developing and transition countries, mining could

¹⁴ "List of Treaties by Country: Armenia," European External Action Service Treaties Office Database, n.d., http://ec.europa.eu/world/agreements/searchByCountryAndContinent.do?countryId=3858&countryNa me=Armenia.

¹⁵ "List of Projects," *Delegation of the European Union to Armenia*, n.d., http://eeas.europa.eu/delegations/armenia/projects/list_of_projects/projects_en.htm.

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become an important economic activity or already is. This indicates that environmental crime related to the mining sector is of global importance.¹⁶

Some studies describe the extent of environmental degradation related to mining activities in various countries. According to a 2012 study conducted by Human Rights Watch, bad policies and weak institutions combined with notable economic growth in the mining industry of India set the stage for corruption, causing government oversight and regulation to lack effectiveness. Illegal mining is so ubiquitous that according to official statistics, for every one legitimate mining operation, there were 30 illegitimate operations in 2010 in India. Laws that are meant to protect Indian citizens exist, but they are either poorly designed or not enforced, threatening health and the environment in favor of preserving a corrupt mining structure. Environmental Impact Assessments are also largely ineffective as companies often pay for their own assessments, creating conflicts of interest that are magnified by widespread corruption. These problems are seen in both legal and illegal mining activities, although oftentimes it makes little difference if activities are done legally or illegally. As lawyer and activist Ritwick Dutta explained, "I find it very strange and foolish to mine illegally because all of the things you are doing illegally, you could be doing legally if you just ask them [the government]."¹⁷

India is just one of several nations experiencing this kind of corruption in the mining sector, breeding a system in which environmental crime leads to concerning environmental degradation. A Joint Evaluation of Support to Anti-Corruption Efforts for Zambia stated that the government is suspected of conducting highly corrupt activities with mining companies amidst extensive price manipulations, tax evasion and transfer prices. Within the resulting weak regulatory system, environmentally damaging projects are approved with greater frequency.¹⁸ The Council on Hemispheric Affairs noted various examples of mining sector corruption throughout Latin America, particularly in Mexico and Argentina and how this negatively impacts the environment.¹⁹ Weaknesses in new mining laws in Afghanistan have

¹⁶ Monika Weber-Fahr et al., "Mining," in *A Sourcebook for Poverty Reduction Strategies*, vol. 2: Macroeconomic and Sectoral Approaches (Washington D.C.: The World Bank, 2004), 444.

¹⁷ Out of Control: Mining, Regulatory Failure and Human Rights in India (Human Rights Watch, 2012), http://www.hrw.org/sites/default/files/reports/india0612ForUpload_0.pdf.

¹⁸ Norad, Joint Evaluation of Support to Anti-Corruption Efforts Zambia Country Report (Oslo, Norway: Norwegian Agency for Development Cooperation, 2011), http://www.oecd.org/countries/tanzania/48912843.pdf.

¹⁹ COHA, "Canadian Mining in Latin America: Exploitation, Inconsistency and Neglect," 2014, http://www.coha.org/canadian-mining-in-latin-america-exploitation-inconsistency-and-neglect/.

created concern that this will fuel corruption in the sector as well, increasing the odds that environmental crime and environmentally harmful practices will be conducted.²⁰ A 2011 study from the local chapter Forum Civil of Transparency International concluded that in Senegal, improved legislation and oversight to support better governance in the mining sector is greatly needed. It recommended a complete overhaul of its mining code in order to strengthen governance and civil rights.²¹ Moreover, the significance of illegal artisanal mining in Indonesia, a practice that results in revenue loss and environmental damage, has been cited by the Natural Resource Governance Institute.²²

In addition to corruption, abandoned mines pose problems for the environment and governments. A 2010 report supported by the United Nations Environment Programme on mining in the Western Balkans notes the challenges posed by mines that were not properly closed. These now dispossessed mines must be properly closed by governments who often lack the funding and resources to do so, causing significant environmental repercussions. The consequences of these mines as well as possible ways to address them were conducted for Albania in particular but also for areas in Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia, Montenegro, Serbia and Kosovo.²³

This case study takes a particular look at the status of environmental crime in RA's mining sector while analyzing the role of national and international legislation in the environmental crime process, offering suggestions on how environmental crime can be reduced by engaging local stakeholders in tandem with international players. Although other studies have been conducted on environmental consequences of mining, there is little literature on RA to this effect, particularly on the role that the international community, particularly the EU, can play in combating environmental crime in the country. This study, therefore, offers new research on this topic.

²⁰ "Gaps in New Afghan Mining Law Pose a Threat to Stability | Global Witness," *Global Witness*, August 19, 2014, http://www.globalwitness.org/library/gaps-new-afghan-mining-law-pose-threat-stability.

²¹ "Making Mining More Transparent: Senegal and Ukraine," *Transparency International*, November 15, 2013,

http://www.transparency.org/news/feature/making_mining_more_transparent_senegal_and_ukraine.

²²"Indonesia- Transparency Snapshot," *Natural Resource Governance Institute*, n.d., http://www.resourcegovernance.org/countries/asia-pacific/indonesia/transparency-snapshot.

²³ Zoi Environment Network, *Mining and Environment in the Western Balkans* (United Nations Environment Programme, 2010), http://www.unep.org/pdf/MiningBalkans_screen.pdf.

3 Methodology

The case study is primarily based on qualitative empirical analysis. It includes desk research as well as nine interviews that one of the authors of this report, Christoph Stefes, conducted on the ground in RA in November/December 2013 (eight interviews) and via Skype (one interview). To prepare for the research trip to RA, basic background research was conducted, relying primarily on sources available on the internet. This background research, helped to formulate the questionnaire for the interviews. The interviews were conducted in a semi-structured fashion, asking open-ended questions and asking follow-up questions when necessary. Each interview lasted between one and two hours. The Skype interview was conducted in German. Six interviews were conducted in English and two interviews were conducted in Armenian with the help of bilingual, but not professional translators (two graduate students of the American University of Armenia). Of the nine interviewees, six agreed to be fully named (name and affiliation as well as date and time of the interview) and allowed the interviewer to tape the interview. Three interviews were conducted completely anonymously. The interviewees only agreed that their general affiliation could be named (two mid-ranking officials of the RA government and an environmental officer of an international organization with an office in RA).

The individuals interviewed for this research consist of two foreign nationals, one working for a local NGO and one representative of the EU delegation to RA as well as seven Armenian nationals, two government representatives (anonymous), one investigative journalist, one representative of an international organization and three members of environmental NGOs. All interviews with the exception of the Skype interview were conducted in the Armenian capital Yerevan. While it would have been preferable to interview more individuals and to visit a couple of mining sites to talk directly to affected citizens, the interviewer lacked the resources to do so. Nevertheless, the nine interviewees represent almost all actors that are in some way or another involved in RA's mining industry. It was not possible, however, to find representatives from the mining companies willing to be interviewed.

Dr. Yevgenya (Jenny) Paturyan, a professor in the Political Science and International Affairs Program at the American University of RA, prepared an initial list of interviewees which was later extended through a snowball sampling method – i.e., the initial interviewees were asked to identify others who were competent to talk about the subject. Through personal

contacts, which helped to generate trust among the interviewees, it was also possible to identify two government officials willing to be interviewed under the condition of strict anonymity.

To assess the reliability of the information provided by the interviewees, data triangulation was employed. In other words, to neutralize inevitable biases of the interviewees, statements were weighed against each other, identifying agreements and disagreements. In addition, by relying on secondary sources, including journalistic accounts and scientific studies, additional data became available that was also used to assess the reliability of the interview data (and vice versa). Secondary sources were gathered through the nternet. The researchers searched databases in German, English and Russian. Investigative journalists in RA primarily publish their material in both Armenian and Russian.

Nevertheless, it should be clear that research conducted on such a sensitive topic as environmental crime cannot generate completely reliable findings. The problem is augmented by the fact that the research takes place in an authoritarian country in which the government restricts freedom of expression and the media and where corrupt practices are widespread, leading to an illicit collusion between private and public actors. This admission of possible research shortcomings inevitably raises ethical concerns. However, this research team acknowledges that social scientific research can rarely rely on completely reliable findings. Social scientific research would be severely limited in scope if it merely focused on "hard facts." Another ethical concern is the personal safety of the interviewees. The interviewer protected their privacy to the degree it was asked of him. Although RA is not a democratic country, it is not a very repressive country either. The research team therefore feels confident that the names and affiliations of the six individuals can be shared without jeopardizing their physical well-being.

4 Case Presentation

4.1 Introduction

Straddling the Europe-Asia divide, the RA covers an area of almost 28,000 square kilometers, an area slightly smaller than Belgium. A landlocked country, RA is located in the South Caucasus, bordering Georgia and Azerbaijan in the North and East as well as Iran and

Turkey in the South and West. Almost 98 percent of its three million citizens are ethnic Armenians.²⁴



Figure 1: Map of Armenia

Sources: http://www.worldatlas.com/webimage/countrys/europe/ameu.gif and http://geology.com/world/armenia-map.gif

Mining sites are located across the entire country but are concentrated in the Northern and Western parts of the country at its borders with Turkey and Georgia.



Figure 2: Armenian Mining Sites

Source: Ishkanian (2013): 74.

²⁴"The World Factbook - Armenia," *Central Intelligence Agency*, June 23, 2014, https://www.cia.gov/library/publications/the-world-factbook/geos/am.html.

To map the political landscape of mining and related (environmental) crime in RA, we start with an overview of the RA governmental institutions at the local, regional and national level, followed by a summary of the various private actors, profit and non-profit (e.g., companies, environmental NGOs, etc.). This overview will also discuss the interests, resources and strategies of the various actors. Furthermore, we identify the relevant international governmental and non-governmental actors that play a role in RA's mining industry. We continue with a cost-benefit analysis of mining in RA, considering economic, environmental and societal costs and benefits. This section concludes with an assessment of the various national laws and international treaties related to mining in RA, the law implementation process and the probable causes for weak national legislation and even weaker enforcement of national law and international treaties. We will show that in RA, environmental crime already starts at the law-making stage. A legalistic approach to environmental crime would therefore be too narrow. In other words, environmental laws are undoubtedly violated. Yet the bigger concern is with the lax environmental standards themselves. Environmental crime therefore begins with the illicit processes of drafting and passing these laws, involving the collusion of government officials, parliamentarians, and the country's economic elite.

4.2 Government Institutions

As is typical for presidential systems in non-democratic countries, power is heavily concentrated in the presidency. According to RA's constitution, the head of state who is directly elected for a five-year term with a two-term limit appoints and dismisses the prime minister and individual members of the cabinet upon recommendation of the prime minister, dissolves the parliament, appoints and dismisses judges and prosecutors, is the commander-inchief of the armed forces and can issue orders and decrees and declare a state of emergency. The prime minister, as head of government, is primarily responsible for overseeing the implementation of laws and presidential orders and decrees and coordinates the work of the ministries. While prime ministers were frequently appointed and dismissed throughout the 1990s, since 2000, two prime ministers were in office for six and seven years respectively, indicating a stable working relationship between government and president.²⁵

²⁵ "The Constitution of the Republic of Armenia (with Amendments)," *National Assembly of the Republic of Armenia*, July 5, 1995, http://www.parliament.am/parliament.php?id=constitution&lang=eng.

Two ministries are of special importance for RA's mining industry. The Department of Mineral Resources within the Ministry of Energy and Natural Resources issues licenses for the exploration of mining sites and the extraction of mineral resources. It also monitors the operation of mining companies in RA. The Ministry of Nature Protection is responsible for assessing and monitoring the potential and actual environmental impact of mining operations in the country. In the unofficial hierarchy of ministries, the Ministry of Nature Protection ranks very low, which is reflected by the lack of funding the ministry receives; it is notoriously understaffed and underequipped (Barker and Amirkhanian, interviews).

The 131-seat National Assembly is currently dominated by two pro-government parties, the Republican Party of RA whose leader is President Sargsyan and Prosperous Armenia whose leader is one of the richest businessmen in RA. Together, these two parties occupy 106 seats. Some of the richest entrepreneurs in RA occupy a significant number of pro-government seats. Being a member of parliament does not only grant these so-called oligarchs immunity but also access to important policy-making forums and government agencies.²⁶ In contrast, the opposition plays a negligible role in the parliament. Of the opposition parties, the Heritage Party has been an outspoken critique of mining practices in RA.²⁷ Yet Heritage only holds 5 seats.²⁸ Nevertheless, the leader of Heritage, Raffi Hovannisian, came in second place in the 2013 presidential elections with respectable 37 percent of the votes.²⁹

The court system is formally independent. However, the authority of the president over the appointment and dismissal of judges limits the independence of the courts. Moreover, judges are notorious for accepting bribes. According to a 2013 report by the Human Rights Ombudsman of RA, "bribe-taking is so rampant in Armenian courts that judges even use an

²⁶ Liana Aghajanian, "Breaking the Grip of the Oligarchs: How a Tragic Twist of Fate Is Fueling a Revolt against Armenia's Overweening Tycoons," *Foreign Policy*, November 5, 2012, http://www.foreignpolicy.com/articles/2012/11/05/breaking_the_grip_of_the_oligarchs.

²⁷ Armine Ishkanian, *Civil Society, Development and Environmental Activism in Armenia* (London, England: London School of Economics and Political Science (LSE), Department of Social Policy, 2013), http://eprints.lse.ac.uk/54755/1/Ishkanian_Civil_Society_Development_Environmental_Activism_America _2013.pdf.

²⁸ "Armenia - Political Parties," *GlobalSecurity.org*, March 27, 2013, http://www.globalsecurity.org/military/world/armenia/political-parties.htm.

²⁹ Weekly Staff, "Commission Releases Final Results, Declares Sarkisian Victorious," *The Armenian Weekly*, February 25, 2013, http://armenianweekly.com/2013/02/25/commission-releases-final-resultsdeclares-sarkisian-victorious/.

unofficial price list for kickbacks.³⁰ In general, corruption is rampant in RA. Transparency International puts RA in 94th place of 175 countries in its widely published Corruption Perception Index.³¹

RA is divided into 11 regional administrations, headed by governors who are appointed by the central government and are tasked with the implementation of the governments' regional policies. Below the regional level, 654 local governments exist whose members are directly elected. The budgets and formal authorities of the regional and local governments are very limited. Moreover, the dominance of the ruling party in the national parliament extends to the local and regional assemblies. Given the dominance of the Republican Party in the regions, limited funds, and their dependence on the central government for the allocation of these funds, local and regional governments play a limited role in regulating RA's mining industry. In general, they have overwhelmingly supported mining projects in their localities (two anonymous mid-ranking officials of the RA government, interview).³²

The Armenian government has been very supportive of expanding mining operations in RA. It considers the mining sector "a key contributor to the national economy." Accounting for over half of the country's exports, it is RA's "most important economic driver." The government lauds RA for being a "mining friendly" country and promises to maintain and enhance legislation that could attract even more investors.³³ In short, the government argues that mining serves the public interest of RA. This claim will be further investigated below. At this point, it should be emphasized though that the mining industry also serves the pecuniary interests of individual parliamentarians and government officials. As Liana Aghajanian states in *Foreign Policy* magazine:

"Armenia is rich in molybdenum and gold, and that has led to considerable competition among the oligarchs to grab their shares of the resulting profits. National Assembly Chairman Hovik Abrahamyan and member of parliament Tigran Arzakantsyan are both

³⁰ Hovannes Shoghikian and Naira Bulghadarian, "Armenia's Ombudsman Highlights Court Graft With Bribery 'Price List," *Radio Free Europe Radio Liberty*, December 11, 2013, sec. Armenia, http://www.rferl.org/content/armenia-judicial-corruption-price-list/25197495.html.

³¹ "Tabellarisches Ranking," *Transparency International Deutschland e.V.*, 2013, http://www.transparency.de/Tabellarisches-Ranking.2400.0.html.

³² "Armenia," *Freedom House*, 2012, https://freedomhouse.org/report/nationstransit/2012/armenia#.VGHXYWNNf-t.

³³ *Mining Industry in Armenia 2011* (Armenia-Canada Chamber of Commerce, n.d.), www.ada.am/files/622/publications/Mining-industry-in-Armenia.pdf.

shareholders in one leading mining company. One of the most prominent tycoons linked with mining is former Minister of Environmental Protection, Vardan Ayvazyan, who was in charge of regulating large parts of the industry during his stint in government. In September, a U.S. court ordered Ayvazyan to pay \$37.5 million in damages to a U.S. mining company that accuses him of corruption relating to his own business interest in the sector.³⁴

As most interviewees for this study, including the two government representatives, argue, corruption in the mining industry is ubiquitous. Government officials and parliamentarians as well as close relatives have direct stakes in mining companies, most of which are registered offshore to hide the ownership (Aghalaryan and Ayvazyan, interviews). Articles 65 and 88 of the RA constitution explicitly states that members of the government and parliament must not engage in entrepreneurial activities.³⁵ Moreover, bribes are frequently taken for issuing licenses and determining the tax and fee rates for mining operations, which are by international standards extremely low. This personal stake of public officials in the mining industry seriously compromises its regulation.

4.3 Private Actors

Starting with the for-profit sector, among the dozens of mining companies operating in RA, several are registered in the country, including Meghradzor Gold, Paramount Gold Mining, various companies of the Vallex Group and Multi Group which is owned by the leader of Prosperous Armenia and one of the most influential oligarchs in the country, Gagik Tsarukyan. Many of these companies are, however, either subsidiaries of foreign-owned companies or foreign-owned companies have substantial stakes in these companies. Tsarukyan is not the only politician who is financially invested in such companies. For instance, Tigran Arzakantsayan of Paramount Gold Mining holds a parliamentary seat for the Republican Party. It is often not clear, though, who has financial interests in these companies as they are often parts of larger conglomerates that are usually registered offshore (e.g., in Lichtenstein and Cyprus), allowing them to hide their true owners. The various links between companies and banks creates an opaque web of subsidiaries, joint ventures, etc. that makes it almost

³⁴ Aghajanian, "Breaking the Grip of the Oligarchs: How a Tragic Twist of Fate Is Fueling a Revolt against Armenia's Overweening Tycoons."

³⁵ "The Constitution of the Republic of Armenia (with Amendments)."

impossible to identify ownerships and assign responsibility, as a report by Hetq about the Vallex Group and its various affiliates shows.³⁶

It is generally assumed that any lucrative businesses, including mining companies, cannot operate in RA without close contacts to the government (Ayvazyan and Representative of International Organization, interviews). Like in most post-Soviet countries, the business sector is not well organized. Business owners usually protect their interests through informal contacts to government officials.³⁷ This holds especially true for the companies in the mining sector.

In the non-profit sector, environmental NGOs and grassroots community movements have been in vocal opposition to mining operations throughout the country. The more established and professional as well as better-funded (also accepting foreign donations) NGOs rarely consist of more than a dozen representatives. They have used their resources to undertake studies and inform citizens through public relations campaigns. They are also ready to take formal steps to oppose the mining companies. They lobby the RA government to pass tougher regulations and take companies to court. Among the NGOs most active in monitoring and criticizing mining practices in RA are the Armenian Aarhus Centers which receive support from the Organisation for Security and Cooperation in Europe, the Armenian Women for Health and Healthy Environment, the Acopian Center for the Environment, Ecolur, Armenia's Union of Greens, For Sustainable Human Development Association and the Helsinki Citizens' Assembly with various offices across RA.

Many Armenians distrust NGOs which they consider elitist and removed from the actual problems that citizens face in their daily lives, especially in the more remote areas of the country. In response to the growing stress that mining operations inflict on Armenians in rural areas, grassroots movements have emerged throughout the country. These groups are less organized and financially endowed. They also mistrust foreign donors and do not take funding from them. They are, however, willing to build coalitions among themselves and often cooperate with Armenian NGOs.³⁸ The Save Teghut Civic Initiative is probably the most

³⁶ Kristine Aghalaryan and Edik Baghdasaryan, "Teghout's Offshore Labyrinth and Valeri Mejlumyan's Business Empire," *Hetq Investigative Journalists*, April 29, 2014, http://hetq.am/eng/news/54322/teghouts-offshore-labyrinth-and-valeri-mejlumyans-business-empire.html.

³⁷ Stefes, Understanding Post-Soviet Transitions: Corruption, Collusion and Clientelism.

³⁸ Armine Ishkanian, *Civil Society, Development and Environmental Activism in Armenia* (London, England: London School of Economics and Political Science (LSE), Department of Social Policy, 2013), p. 10 http://eprints.lse.ac.uk/54755/1/Ishkanian_Civil_Society_Development_Environmental_Activism_America_2013.pdf.

prominent example. It is able to rally hundreds of citizens and enjoys support from individuals and groups in RA and in Western countries.³⁹ Founded in 2007, the goal of Save Teghut is "to stop, by means of a strong civic engagement, execution of the unlawful decision adopted in 2001 by the Armenian Government commissioning exploitation of a copper-molybdenum mine in Teghut. Save Teghut aims at defending the rights of Shnogh and Teghut communities to their property, healthy environment and dignified work."⁴⁰ Finally, critical journalists should be mentioned as well. For instance, journalists regularly report about environmental degradation related to the mining industry in RA.⁴¹

4.4 Foreign and International Actors

As already mentioned, several foreign mining companies are operating in RA. Among these companies are GeoPro Mining (Russia), Global Gold (United States), Lydian International (UK), Cronimet (Germany) and FLSmidth (Denmark). As is the case with Armenian mining companies, ownership is not always clear as subsidiaries are frequently registered offshore. It is generally assumed that foreign companies have to maintain friendly relations with high-ranking government officials to receive and maintain business licenses. Corrupt practices seem to be widespread (Aghalaryan and Ayvazyan, interviews).⁴²

Among the many international governmental organisations that have offices in RA are the World Bank, the European Bank for Reconstruction and Development (EBRD), the EU and various organizations of the United Nations such as the United National Development Programme (UNDP) and the United Nations Environment Programme (UNEP). It appears that the international financial organisations in particular have assumed an ambiguous position towards mining. On the one hand, they stress the need for sustainable economic development and mining regulations that are more protective of the environment. On the other hand, their involvement in the most recent revisions of the mining codes has not led to tougher environmental regulations. It should be kept in mind that as large lenders to the RA

³⁹ Mary Matosian, "'Save Teghut' Redefines Environmental Activism in Armenia," *The Armenian Weekly*, February 21, 2012, http://armenianweekly.com/2012/02/21/save-teghut-redefines-environmental-activism-in-armenia/.

⁴⁰ "Who We Are," *Save Teghut Civic Initiative*, September 26, 2012, http://teghut.am/en/who-we-are/.

⁴¹ "Hetq - News, Articles, Investigations," n.d., http://hetq.am/eng/.

⁴² Liana Aghajanian, "Breaking the Grip of the Oligarchs: How a Tragic Twist of Fate Is Fueling a Revolt against Armenia's Overweening Tycoons," *Foreign Policy*, November 5, 2012, http://www.foreignpolicy.com/articles/2012/11/05/breaking_the_grip_of_the_oligarchs.

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government, they are interested in the repayment of the loans and mining is still considered one of the few lucrative economic sectors in RA.⁴³

The EU has also been hesitant to address the mining business in RA. As outlined in the Introduction, RA and the EU have maintained close economic, social and diplomatic relations since the mid-1990s. The EU has also sponsored numerous environmental programs in RA. Programs that are currently active or were active in the past 12 months have focused on a variety of topics. The majority of funded projects have addressed issues of biodiversity, climate change adaptation and safety of nuclear power plant operations. Other projects focus on agricultural land resources, basic drinking water supply and sanitation, waste management and disposal and environmental education and training. The EU has spent more than 10 million Euros on these projects. It is noteworthy that not a single project has addressed environmental degradation caused by mining.⁴⁴

The diplomatic representations of EU member states and other Western countries have also avoided publicly criticizing the RA government and mining companies. In March of 2014, the RA government and the World Bank, with the support of the International Finance Corporation, EBRD and the embassies of the United States, United Kingdom, Canada and Germany, organized a joint conference on "Responsible Mining" in RA. Although it was one of the declared goals of the conference to "explore various perspectives on responsible development of the mining sector in RA, including improvement of social and environmental management," representatives of the major NGOs and grassroots movements involved in the mining area were not invited.⁴⁵ In response, these groups staged a protest in front of the conference venue and organized a counter-conference entitled "Irresponsible Mining in Armenia," considering the official conference "an attempt to legitimize the widespread pillage of Armenia's natural resources and an effort to disguise the catastrophic effects of mining on human health and the environment."⁴⁶

Armenian groups in opposition to current mining practices receive some support from international non-governmental groups. For instance, the Worldwide Fund for Nature

⁴³ Alen Amirkhanian, Director of AUA Acopian Center for the Environment, November 28, 2013.

⁴⁴ "List of Projects," *Delegation of the European Union to Armenia*, n.d., http://eeas.europa.eu/delegations/armenia/projects/list_of_projects/projects_en.htm.

⁴⁵ "Responsible Mining Conference," *Responsible Mining Conference*, 2014, http://responsiblemining.am/.

⁴⁶ "Alter-Conference: Press Release," *Save Teghut Civic Initiative*, May 28, 2014, http://teghut.am/en/2014/03/alter-conference-press-release/.

maintains an office in RA and supports local environmental groups. The International Union for Conservation of Nature and the Blacksmith Institute are also active in RA and support environmental programs.

In short, an informal pro-mining coalition of government officials, politicians, and oligarchs supports the rapid exploration of mining sites in RA with little respect for the environmental impact, using legal and illegal ways to do so. However, local environmental NGOs and movements, with some support from international actors, have attempted to stop irresponsible mining in RA. International financial organizations as well as Western governments and the EU appear to sit on the fence, publicly condoning environmental groups without putting any pressure on the pro-mining coalition.

4.5 Cost-Benefit Analysis of Mining in RA

Mining practices in RA have put considerable stress on the environment. Mining has contributed to rapid deforestation in the country. Between the 1990s and today, the area covered by forests has dropped from 20 percent to around 7 percent. The World Bank calculates that at the current rate, RA might lose all of its forests by 2030.⁴⁷ In turn, the loss of forests causes the extinction of endangered species and the loss of rare plants. It will also lead to landslides that pose a direct threat to peoples' lives, taking into account that many mining sites and villages are located in close proximity to RA's mountainous areas. Mining also leads to a loss of arable land, depriving many farmers of their means of subsistence. Mining therefore especially hurts the already impoverished population of RA's rural areas.⁴⁸

As much as the loss of arable land is regrettable, the mine tailings pose a more direct environmental threat to peoples' lives. Tailings consist of materials that are left over from the processing of ore in which the valuable components are removed. This process involves two stages. During the first stage, rocks are removed to extract the ore. Once the ore is extracted, remaining rock is separated from the valuable ore through the use of pressure, water and/or chemicals. Mining therefore produces two types of waste - weakly contaminated rocks and the highly contaminated tailings. The latter requires special and expensive treatment in which the material is gathered in insulated ponds that prevent any leaks of the tailings into the

⁴⁷ Kirk Wallace, "Teghut III – The Dangers," *Armenian Environmental Network*, April 5, 2012, http://www.armenia-environment.org/2012/04/05/teghut-iii-the-dangers-2/.

⁴⁸ "They Are Now Begging the Diaspora for Money to Exploit Amulsar Mine," *U1+*, November 7, 2014, http://en.a1plus.am/1199767.html.

environment. In RA, leakages are frequent because the ponds are usually unsafe. Furthermore, ore is often smelted near the extraction site to avoid transportation costs. The smelting of ore releases toxins into the air. Villages located close to these smelters are hit hardest, as these toxins can be found in high concentrations in the soil that is used for gardening and farming. It therefore requires sophisticated filtering techniques to minimize this air pollution.⁴⁹

In RA, mining and smelting proceed without any significant environmental precaution. Tailings are dumped into porous and instable ponds. Toxic material therefore regularly leaks into the ground, poisoning the groundwater, rivers and lakes. Used for irrigation, poisonous water enters the food chain. Moreover, smelters either do not use any advanced filters or do not use any filters at all. Most filters were removed and sold as scrap metal when smelters closed down in the wake of a severe economic recession following the collapse of the Soviet Union. When the smelters were reactivated, no new filters were installed.⁵⁰ The amount of toxins released into the air, ground, and water is very difficult to assess because the mining companies do not gather and release data. We therefore can only rely on environmental studies that target specific areas in RA. During a research project that the Acopian Center for the Environment, the Blacksmith Institute and the RA government conducted in 2013, soil samples from 25 mining sites across five regions were gathered. The samples revealed heavy metal concentrations that were well above internationally accepted limits. "Tailing ponds in these mining communities were in a neglected state with no proper fencing and no systematic or adequate monitoring. In addition, these locations had reported many cases of accidents that had resulted in leakage of the toxic pollutants."⁵¹

Since tailings pollute rivers that cross international borders, environmentally unsafe mining practices in RA also negatively affect neighbouring countries, namely Georgia and Azerbaijan. Transboundary pollution adds fuel to the already unstable geopolitical situation in the South Caucasus that has witnessed numerous wars since the disintegration of the Soviet Union in 1991.⁵² Mining-related environmental pollution in RA must therefore be considered a threat to peace and security in the South Caucasus.

⁴⁹ "Mining Facts: Resources on Mining and Mining Policy," *Mining Facts*, n.d., http://www.miningfacts.org/.

⁵⁰ Barbara Siebert, Program Director at Foundation for the Preservation of Wildlife and Cultural Assets, Skype, December 19, 2013.

⁵¹ Ishkanian, Civil Society, Development and Environmental Activism in Armenia, 2013.

⁵² Joshua T. Newton, "Case Study of Transboundary Dispute Resolution: The Kura-Araks Basin," *Instutute for Water and Watersheds at Oregon State University*, 2007, http://www.transboundarywaters.orst.edu/research/case_studies/Kura_Arkas_New.htm.

The RA government and the mining industry point out that the economic gains from mining are substantial: "In Armenia the mining sector is a key contributor to the national economy. Ore concentrates and metals produced in Armenia account for over half of our country's exports, making the mining industry Armenia's most important economic driver."⁵³ Indeed, mining is the biggest recipient of foreign direct investment in RA.⁵⁴ It also creates jobs in impoverished rural areas of the country. At the same time, the economic benefits of mining are not clear-cut. According to official government statistics, mining employs just around one percent of RA's workforce. The reason for this low number is that the ore is usually shipped abroad for further processing which is more work-intensive. Mining also accounts for just three percent of RA's GDP. Furthermore, gains from mining in RA are highly concentrated, benefiting primarily foreign companies and Armenian oligarchs.⁵⁵ Finally, due to its geographical spread and environmental burden, mining imposes high costs on other economic sectors such as agriculture and tourism. These sectors could potentially contribute to sustainable economic growth, whereas mining relies on finite resources.

The net beneficiaries of mining in RA are foreign companies, Armenian oligarchs and the few thousand people employed in the mining industry. The losers are the people who live in close proximity to the mines and smelters. Environmental pollution directly threatens the health of these people who live primarily in rural communities. Yet the toxic material released by Armenian mines travels beyond this, reaching people hundreds of kilometres away, through the air, water streams and the food chain. Mining also negatively affects the economic potentials of other sectors such as tourism and agriculture. In general, due to its socioeconomic and environmental consequences, mining in RA is a threat to domestic and regional security. Given this balance sheet, the question arises whether environmental regulations in RA are either insufficient and/or weakly enforced. The answer is both.

4.6 Domestic and International Legislation

Among local experts, it is commonly agreed upon that RA's environmental laws are vague, convoluted, contradictory, and often outdated. They are typically drafted by

⁵³ *Mining Industry in Armenia 2011* (Armenia-Canada Chamber of Commerce, n.d.), www.ada.am/files/622/publications/Mining-industry-in-Armenia.pdf.

⁵⁴ Country Development Cooperation Strategy FY 2013-2017 (USAID l Armenia, August 2013), http://www.usaid.gov/sites/default/files/documents/1863/Armenia-CDCS.pdf.

⁵⁵ "AUA Study: Mining in Armenia Creates Poverty, Income Inequality," AUA Newsroom, April 15, 2013, http://newsroom.aua.am/2013/04/15/aua-study-mining-in-armenia-creates-poverty-incomeinequality/.

presidential staffers who have the licit and illicit interests of oligarchs in mind instead of officials of the Ministry of Nature Protection who are better trained and more removed from the economic elite. Add to these shortcomings the fact that presidential decrees and orders occasionally contradict environmental laws which they constitutionally must not do (but are executed nevertheless) and it becomes readily apparent that RA's legislation is inadequate to protect the country's environment (Zarafian, Ayvazyan and anonymous representative of international organization, interviews). The ineffectiveness of laws is especially prevalent in the mining sector.

According to an unpublished study by the Acopian Center for the Environment at the American University of Armenia, which is in our possession, several gaps characterize environmental law in RA, especially in the country's mining sector. First, to approve any mining licenses, an Environmental Impact Assessment (EIA) is required. However, there are no guidelines as to who should undertake these assessments, which data should be included and which methodology should be employed.⁵⁶ Consequently, the mining companies subcontract these studies to one of their subsidiaries that will always provide favourable assessments. For instance, companies of the Vallex Groups commission the Lernametalurgiai Institute, a subsidiary of Vallex Groups, to write the EIAs for their mining operations including the one in Teghut. Lernametalurgiai Institute is currently the primary author of most EIAs in RA.⁵⁷

In general, current RA legislation is vague on methodologies that would fairly calculate natural resource and environmental protection fees. Internationally accepted methodologies are omitted. It is therefore unsurprising that RA has among the lowest fees for exploiting natural resources in the world. In RA's new mining code, a natural resource fee has been completely eliminated and replaced with, a royalty fees that is very modest judged by international standards. Yet by imposing fees based only on the proceeds of actual sales, the use of efficient mining technology is discouraged. If the companies would be taxed according to the estimated amount of ore, they would be more inclined to mine more efficiently.

It is even more absurd that the environmental protection fees for the disposal of mining waste are extremely low. There is no fee for the removal of rocks during the first stage of mining. This waste is wrongly considered non-hazardous and the highly toxic tailings which

⁵⁶ Alen Amirkhanian, *Review and Gap Analysis of RA Legislation Related to Environmental Protection: Focus on Assessment, Valuation and Economic Instruments*, n.d.

⁵⁷ Ishkanian, Civil Society, Development and Environmental Activism in Armenia, 2013.

are the product of the second stage are classified as low-hazardous waste (4th class, the lowest class, according to RA regulations). The fee is accordingly set at less than three Euros per ton. It should, however, be considered 1st class hazardous waste for which the fee per ton is almost 100 Euros. Mining companies in RA therefore save millions of Euros each year.⁵⁸ Moreover, after concluding their operations, mining companies are no longer liable for the sites. Taking care of the rocks and tailings becomes the responsibility of the state of RA, which means that RA taxpayers have to shoulder the financial burden.⁵⁹ These regulations provide little incentive for mining companies to conduct their businesses in efficient and environmentally protective ways. Instead, they encourage rapid and inefficient exploration with little consideration for the long-term environmental effects of mining operations. It needs to be emphasized that RA law does not include criminal penalties for acts that harm the environment.

RA's environmental legislation thereby violates numerous international treaties and conventions that the country has signed since its independence. Article 6 of the RA Constitution and the Article of RA Law on International Agreements clearly state that international treaties trump national law. Environmental advocates routinely point to three international conventions which would, if properly enforced, significantly empower environmental advocacy in RA and thereby improve RA environmental legislation: the Aarhus Convention, the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) and the SEA (Kyiv) Protocol (Amirkhanian and Ayvazyan, interviews).

Most notably, the Aarhus Convention requires RA to assure that rights that the Convention grants the public are upheld. These rights include access to environmental information, public participation in environmental decision-making and access to justice.⁶⁰ Currently, RA legislation is not in compliance with the Aarhus Convention. RA's Law on Environmental Impact Expertise (EIE) regulates the organization and implementation of public hearings through which the public can share their opinions on proposed economic activities but according to this law, this public input does not need to be considered in the final

⁵⁸ Hakob Arpak Sanasaryan, "Armenia Must Change Its Mining Policy," *Keghart.com*, August 2008, http://www.keghart.com/print/1635.

⁵⁹ Amirkhanian, Review and Gap Analysis of RA Legislation Related to Environmental Protection: Focus on Assessment, Valuation and Economic Instruments.

⁶⁰ "Aarhus Convention," 1998, http://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf.

decision. Although Paragraph 8 of Article 6 of the Aarhus Convention expressly stipulates that public opinion must be considered in decision-making, the RA government is instead referring to its national legislation in direct violation of the Convention.⁶¹ In respect to access to justice, NGOs filed a lawsuit against the RA government in 2004 for violating the Aarhus Convention and the RA Constitution. The lawsuit was in response to passed legislation which did not seek public participation prior to the legislation being approved. However, the lawsuit was deemed inadmissible because the NGOs lacked jurisdiction to file. Only the president, the government and the National Assembly could make appeals to the Constitutional Court of RA on the grounds of violations of the RA Constitution.⁶² Additionally, existing legislation does not allow NGOs to go to court in protection of public law which is also in direct violation of the Aarhus Convention. The Mining Code also prevents access to geological data, for example, which is regarded as a commercial secret in violation of the Convention's protection of access to information relevant to the environment.⁶³ If the Aarhus Convention were fully enforced in RA, these laws would need to be changed, allowing for greater access to information, public participation in the decision-making process, and legal support to combat environmental crime.

RA is also party to the international Espoo Convention or Convention on Environmental Impact Assessment in a Transboundary Context. It is therefore obligated to conduct environmental impact assessments for particular activities early on in their development as well as to notify and discuss with other states all projects with the potential to have an adverse environmental impact beyond their borders. It further requires Parties to allow public participation and preparation of assessment documentation and assessments must be conducted prior to decisions being made.⁶⁴ RA's Law on EIE has an article on transboundary environmental impacts but is nevertheless not aligned with its obligations under the Espoo Convention. According to RA law, instances in which RA is the affected Party are not

⁶¹ Amirkhanian, Review and Gap Analysis of RA Legislation Related to Environmental Protection: Focus on Assessment, Valuation and Economic Instruments.

⁶²Aarhus Convention Compliance Committee, Report on the Eleventh Meeting: Findings and
Recommendations (Geneva, Switzerland, 2006),
http://www.unece.org/fileadmin/DAM/env/documents/2006/pp/ece.mp.pp.c.1.2006.2.add.1.e.pdf.

⁶³ Amirkhanian, Review and Gap Analysis of RA Legislation Related to Environmental Protection: Focus on Assessment, Valuation and Economic Instruments.

⁶⁴ Convention on Environmental Impact Assessment in a Transboundary Context, Convention (Espoo, Finland: United Nations, 1991), http://www.unece.org/fileadmin/DAM/env/eia/documents/legaltexts/Espoo_Convention_authentic_EN G.pdf.

addressed. It lacks a method of accessing public opinion and does not include stipulations to conduct a post-project analysis which is required under Article 7 of the Convention.⁶⁵ Full enforcement of the Espoo Convention would serve to provide more information on project environmental impacts within RA prior to and following their implementation as well as lead to better decision-making with the inclusion of public opinion.

The SEA (Kyiv) Protocol requires Parties to examine potential environmental consequences of official draft plans and programmes by conducting strategic environmental assessments (SEA). These are done earlier in the decision-making process in comparison to environmental impact assessments. The SEA Protocol also calls for public engagement, access to information throughout the process and the notification of potential transboundary environmental impacts.⁶⁶ The Protocol is a part of the Espoo Convention and while they have similarities, the Espoo Convention is mainly relevant for activities that are likely to cause transboundary effects whereas the SEA Protocol applies to programmes and plans even if they may not have transboundary effects. Currently, the RA Law on EIE, does not account for public health impacts of plans or programmes, though this is required under the SEA Protocol. Its requirements for reporting SEAs are also not in line with Article 7 of the Protocol. Compliance with the SEA Protocol would take into account the health impacts associated with plans and programmes which are particularly relevant to the mining industry and create reporting which clearly described likely environmental impacts, public interest in plans and programmes, and information needs to improve environmental conduct in RA.⁶⁷

Proper implementation of the Aarhus Convention, Espoo Convention and SEA Protocol would all lead to the same things for RA – more public participation and access to information. Environmental crime in the RA mining sector cannot be fully addressed without increasing public participation and access to information and therefore, it is critical that RA enforces these international laws. It is worth noting that international bodies such as the EU can help pressure RA to meet its international obligations.

⁶⁵ Amirkhanian, Review and Gap Analysis of RA Legislation Related to Environmental Protection: Focus on Assessment, Valuation and Economic Instruments.

⁶⁶ Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context, Protocol (Kiev: Extraordinary meeting of the Parties to the Espoo Convention, May 2003), http://www.unece.org/fileadmin/DAM/env/eia/documents/legaltexts/protocolenglish.pdf.

⁶⁷ Amirkhanian, Review and Gap Analysis of RA Legislation Related to Environmental Protection: Focus on Assessment, Valuation and Economic Instruments.

4.7 Law Enforcement and Adjudication

The Ministry of Environmental Protection is the principal agency to uphold environmental law in RA. For several reasons, it largely fails to do so. First, the ministry is woefully understaffed. As it ranks at the bottom of the ministerial hierarchy, it does not receive the financial means to fulfil its protective role. Budget cuts and political considerations have led to the elimination of several oversight committees in the ministry. For instance, in 2005, the Geology Department's Scientific Council was eliminated. This council was critical in issuing permits for the exploitation of new mines. Regular bureaucrats in the ministry with no scientific training now issue these permits, putting the companies with their paid EIAs in an advantageous position. The ministry rid itself of the expertise to conduct independent assessments about the environmental harms of proposed mining projects. The ministry is therefore essentially condemned to rubber stamp the EIAs that were conducted by the mining industry such as by the Lernametalurgiai Institute (Ayvazyan and Barker, interviews).⁶⁸

Moreover, with the low priority that the RA government ascribes to environmental protection, the Ministry of Environmental Protection is under constant pressure from the presidential apparatus and other ministries to turn a blind eye on environmental issues. The oligarchic influence is palpable. As a general rule, the greater the oligarchic influence, the less environmental enforcement there appears to be (Aghalaryan, Barker, Zarafian, Anonymous representative of international organization, interviews). Moreover, like in most other areas, endemic corruption compromises law enforcement. As the case of the former Minister of Environmental Protection Vartan Ayvazian demonstrates, corruption reaches even the highest levels of the RA government. Ayvazian revoked a mining license given to a foreign company after the company refused to pay a multi-million dollar bribe to the minister.⁶⁹ For a bribe or a well-hidden stake in a mining company that is registered offshore, fines and fees are waived or significantly reduced, forest areas are simply declared non-forest areas (in which case mining becomes permissible), and scientific evidence of pollution is ignored.⁷⁰ For instance, if fish stocks are depleted due to pollution, the ministry calculates the compensation for local

⁶⁸ Sanasaryan, "Armenia Must Change Its Mining Policy."

⁶⁹ Varuzhan Hoktanyan, "No Impunity: Armenian Politicians Duck Justice | Space for Transparency," *Transparency International*, October 26, 2012, https://blog.transparency.org/2012/10/26/no-impunity-armenian-politicians-duck-justice/.

⁷⁰ Sona Ayvazyan, Deputy Director of Tranparency International Armenia, in person, December 5, 2013.

villagers based on the market value of the dead fish. It does not consider the long-term costs of severely depleted fish stocks or the costs to the environment that cannot be calculated according to market prices such as the destruction of microorganisms (anonymous representative of international organization, interview).

To assume that courts could hold mining industries and government officials accountable is equally unrealistic. Villagers most affected by mining operations are generally too afraid to go to court. They might lose their jobs and the level of physical intimidation through local thugs is high. Moreover, with their livelihood destroyed due to the pollution of agricultural land, the only way to survive is to take one of the few jobs that mines offer. As a representative of an international governmental organization said in an interview, "Nobody bites the hand that feeds him" (anonymous mid-ranking official of the RA government, interview). Environmental NGOs based in Yerevan have been more willing to take legal action against the mining corporations. However, in violation of international obligations and in contradiction to a ruling by RA's Constitutional Court, lawsuits brought forward by NGOs were thrown out on the grounds that the NGOs' interests were not at stake in these mining operations. Only people directly affected by these operations could take legal action.⁷¹ While it is not clear if illicit payments facilitated these rulings, it would not be surprising. Armenian judges are notorious for taking bribes. Moreover, a remnant of Soviet times still exists, called "telephone justice." It describes the practice of top government officials (in Soviet times, the nomenklatura) calling judges to tell them how to rule in cases that affected their political and/or economic interests. Phone calls were used to leave no written traces. The independence of the RA court system is therefore a sham (Aghalaryan, interview).⁷²

4.8 The EU's Role in Combating Environmental Crime

In addition to strengthening national watchdog organizations, the EU could increase funding opportunities for environmental protection groups and increase EU transparency when negotiating agreements with RA by engaging with the public. Providing more support for organizations which monitor government agencies such as law enforcement and special

⁷¹ Amirkhanian, Review and Gap Analysis of RA Legislation Related to Environmental Protection: Focus on Assessment, Valuation and Economic Instruments.

⁷² Christoph H. Stefes, Understanding Post-Soviet Transitions: Corruption, Collusion and Clientelism, Euro-Asian Studies, Ch. 3 and 4 (Palgrave Macmillan, 2006). With a rating of 5.5, with 1 being the best and 7 the worst rating, RA's judicial framework and independence, Freedom House gives the country a scathing review. Freedom House. Nations in Transit: Armenia 2014, https://www.freedomhouse.org/report/nations-transit/2014/armenia#.VK-ofmMhD0Q.

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environmental task forces to assure they are acting in law-abiding ways is another way the EU can help combat environmental crime in RA.⁷³

The EU can use their influence to reinforce current international laws that discourage environmental crime in RA. In 2004, NGOs presented a case to the United Nations Economic Commission for Europe (UNECE) claiming that RA was not compliant with the Aarhus Convention. Upon review, the UNECE agreed and has since pressured RA to take steps to become compliant.⁷⁴ Additionally, the World Bank has been developing a new Convention compliant Environmental Impact Assessment Law with RA.⁷⁵ The EU could support international bodies such as the UNECE and World Bank in their efforts to help RA abide by international law while pressuring them to be more receptive to NGO concerns in accordance with the Aarhus Convention and other international treaties.

The EU can use its position as RA's main trading partner and largest import and export market⁷⁶ to its advantage when discouraging environmental crime. The EU proposed financial aid to RA for 2014 – 2017 ranges from €140 to €170 million.⁷⁷ RA's closed borders with Turkey and Azerbaijan have limited Armenian economic activity and play a role in RA's heavy dependency on international assistance. In response to past international recommendations, including those given by the EU, to enact anti-corruption measures, RA complied. However, these measures have proved to be mostly symbolic as a means to continue to receive foreign aid. The EU can use its economic position to encourage RA to enact policies that are truly effective in combating environmental crime and compliant with international law as a term of continuing current business relations and financial assistance.⁷⁸

⁷³ Transparency International, "Corruption and the Eastern Partnership," 2013, http://www.transparencyinternational.eu/wp-content/uploads/2013/11/2013-11-27_-Eastern-Partnership-position-paperFINAL.pdf.

⁷⁴ Aarhus Convention Compliance Committee, Report on the Eleventh Meeting: Findings and Recommendations.

⁷⁵ The World Bank, "Discussing the Draft Law on Environmental Impact Assessment in Armenia," Discussing the Draft Law on Environmental Impact Assessment in Armenia, 2013, http://www.worldbank.org/en/news/feature/2013/06/08/discussing-the-draft-law-on-environmentalimpact-assessment-in-armenia.

⁷⁶ European Comission, "Countries and Regions," 2014, http://ec.europa.eu/trade/policy/countries-and-regions/countries/armenia/.

⁷⁷ European Commission, "Armenia," *Development and Cooperation - Europeaid*, 2014, http://ec.europa.eu/europeaid/countries/armenia_en?language=bg.

⁷⁸ Tanja A. Börzel and Yasemin Pamuk, Europeanization Subverted? The European Union's Promotion of Good Governance and the Fight against Corruption in the Southern Caucasus (Freie Universität Berlin: KFG

5 Conclusions and Policy Implications

There exists a double gap in the RA mining sector which fuels environmental crime in this area. There is a gap between national law and international commitments and a gap between national law and its enforcement and adjudication. In order to mitigate environmental crime in RA, the EU needs to address both gaps. In respect to the first gap, the EU can pressure RA to honour its environmental commitments as well as help it to develop legislation which will be in compliance with these international agreements. Reminding the RA government of its international obligations so that they are enforced in RA will also serve to strengthen the most important pro-environmental actors in RA, namely local movements and NGOs. EU support for these actors in other ways, such as through technical support and funding, can also strengthen their ability to address environmental crimes in their own country. The EU can play a role in addressing the second gap as well. The EU could provide incentives to EU owned companies working in RA's mining sector to operate in environmentally responsible and transparent ways. The EU could further use its civilian and normative power to convince the RA to enforce national and international law as a term of doing business.

In RA, environmental crime is fuelled by a cyclical process. Rich with mineral resources, RA continues to depend on the mining industry to strengthen its economy. It is also a means for RA to make an income which can be used to pay back international loans which further develop RA. Due to the need to increase national revenues, the mining sector has dominated RA's economic agenda and its profits have attracted corruption and malpractices which increase mining production at the expense of human health and the environment. International demand for mining resources encourages RA to continue exploiting its natural resources instead of developing other industries. As a result, mining continues to be the main method for RA to develop. In the setting of RA, environmental crime can be conceptualised as a process that starts and ends with the dependence of the RA economy on mining. In addition to better regulating the mining industry, RA must break from its heavy dependence on mining in order to develop industries which are not so prone to environmental crime.

Though this case study has delved into the relationship between the mining industry and environmental crime in RA, the general characteristics and sources of environmental crime found in this study are not unique to RA. As explored through the literature review, corruption

The Transformative Power of Europe, 2011), http://www.polsoz.fuberlin.de/en/v/transformeurope/publications/working_paper/WP_26_B_rzel_Pamuk.pdf?1367706588.

is a common symptom of mining sectors all over the world which leads to environmental crime that harms the environment and local population. In a world still largely fuelled by non-renewable resources, developing countries have an incentive to continue to invest in the mining sector over other industries as a means to increase the pace of their development. For these countries, developing other industries would help to break their dependence on a single sector and the resulting power imbalance and environmental crimes this causes. However, to accomplish this not only in RA but also in countries with similar mining sectors, outside forces such as international institutions and the EU need to incentivize compliance with international agreements and help develop local institutions to enforce both international and national laws. Incentives from outside players to create a mining sector that complies with applicable laws are an important factor to counterbalance the incentives of the mining sector to commit environmental crimes. In this sense, the results of this case study can be applied to mining sectors in other developing countries as well.

6 Interview and Reference Lists

6.1 Interview List

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- 2. Inga Zarafian, interview by Christoph Stefes, Yerevan, December 2, 2013.
- 3. Kristine Aghalaryan, interview by Christoph Stefes, Yerevan, December 3, 2013.
- 4. Sona Ayvazyan, interview by Christoph Stefes, Yerevan, December 5, 2013.
- 5. John Barker, interview by Christoph Stefes, Yerevan, December 4, 2013.
- 6. Barbara Siebert, interview by Christoph Stefes, Skype, December 19, 2013.
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- 8. Two anonymous mid-ranking officials of the RA government, interview by Christoph Stefes, Yerevan, December 2013

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