





### STAKEHOLDER ANALYSIS OF THE MINING SECTOR IN ARMENIA

Prepared in the scope of the regional project

Promoting Environmental and Social Accountability in the Mining Sector in the Caucasus

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#### **Executive Summary**

This report presents the results of a stakeholder survey of the mining sector in Armenia. The objective of the survey is to identify and map the activities and capacities, the specific issues and needs of mining sector stakeholders, as well as the problems related to the mining sector in Armenia and their proposed solutions. The stakeholders that participated are national, regional and local governmental bodies, scientific institutions, local NGOs, mining companies and international organizations. Below are some key findings from the responses of each stakeholder group:

- National government Key problems in the mining sector identified by national government representatives include: A lack of expertise and investments and the need for targeted monitoring and training of specialists. In terms of future plans, national government respondents highlighted: Improvement of the legal framework to attract new investments, conducting environmental monitoring and epidemiological studies to reveal the causal relationship of non-infectious diseases, the creation of a larger number of good paying jobs, increasing the level of mine safety, and more cooperation with regional and local governmental bodies and international organizations.
- Regional government The problems noted by representatives of regional government are: A lack of investments, expertise and infrastructure, an excessive number of laws and regulations, as well as mineral resource extraction and processing being accompanied by large volumes of waste and emissions harmful to human health and the environment. For future plans, regional government representatives stated: The priority is to examine emissions produced as a result of mining in order to reduce the negative impacts and more cooperation with specialists and organizations.
- Local government Local government representatives stated that they
  face problems with: Collecting environmental taxes and fees, environmental
  protection, particularly with tailings flowing into nearby rivers that are used to irrigate
  farms, mass tree cutting, expropriation of agricultural lands through use of eminent
  domain, and air pollution. When asked how environmental standards can be
  updated, local government representatives stated that they should be made stricter,
  specifically for licensing and pollution reporting.
- Scientific institutions The scientific institutions noted facing the following challenges: Information about mining operations and geological data being mostly confidential and often inaccessible, recommendations provided by scientific institutions are mostly rejected and not applied, government does not consider proposals coming from sources outside of government, local experts are not engaged for mine exploration, project design, etc. by mining companies, and mining companies fail to provide internships for students to promote knowledge and capacity. The following are improvements in the mining sector scientific institutions would like to see: Increase in the level of transparency and public accountability, specifically in works related to geological studies, mining operations and environmental protection, avoidance of public hearings that go through the motions but do not seriously engage or integrate community input, and the opinions of respected scientific institutions being taking into consideration.
- Local NGOs Representatives of local NGOs identified the following problems related to Armenia's mining sector: Low level of public awareness on environmental and legal issues, a lack of organization in civil society that acts within a well-

developed political culture, relevant information not being made public by government institutions, complete lack of oversight by government authorities, and low level of expert involvement. In terms of solutions for the mining sector, local NGOs noted the following: Development of a comprehensive strategy for the sector based on realistic and scientifically justified assessment of revenues and long-term environmental damage, revision of the natural resource use and environmental payment system, an increase in taxes as well as other fees and fines, categorization of tailing dumps in accordance with their level of toxicity, and introduction of waste taxation.

- Mining companies The mining companies stated that the following steps should be taken to ensure up-to-date environmental protection and social responsibility standards in the mining sector: Improvement of the Law on Environmental Impact Assessment, building capacity for better environmental impact assessments, improvement of the process of issuing licenses, making pollution reporting requirements more strict, and improvement of safety regulations, and where necessary updating of old regulations to keep pace with technological progress. Related to future plans, one company stated that it intends to cooperate with all stakeholders to make their mining operations an exemplary project in terms of environmental and social management, as well as in public trust and support.
- International organizations The international organizations that took part in the survey noted the following problems in Armenia's mining sector: Poor enforcement of the law, a lack of information from mining companies, the irreversible impact on the environment and human health, impoverishment of areas with heavy mining, and the government's decision to become an "attachment" state that allows developed countries to exploit Armenia's natural resources, while paying low taxes and creating environmental problems. In terms of future plans, the international organizations noted: Studying the connection between poverty and the environment, supporting the regulation of mine waste, and further cooperation with all interested organizations.

### **1. INTRODUCTION AND METHODOLOGY**

This report is the product of a stakeholder analysis of the mining sector in Armenia conducted by the American University of Armenia Center for Responsible Mining, Caucasus Environmental NGO Network (CENN) and Transparency International Anti-Corruption Center in Armenia. The report is produced as part of the project, *Promoting Environmental and Social Accountability in the Mining Sector in the Caucasus*, implemented by American University of Armenia Center for Responsible Mining and CENN, with financial support from Brot für die Welt (Bread for the World).

From March 2015 until May 2015, stakeholders were invited to take part in the analysis (through an official request sent by Transparency International Anti-Corruption Center in Armenia), by completing a questionnaire (developed by CENN. See Annex 1), consisting of 25 questions designed to obtain the following information regarding each stakeholder group:

- Their profile and capacity
- Their issues and needs
- The problems related to the mining sector in Armenia and their potential solutions

Of the 56 stakeholders that were sent questionnaires, 32 responded. (See Annex 2 for a complete list.) A few preferred to respond to the questionnaire via face-to-face interviews.

For the purposes of this report, a *stakeholder* is a person, group, organization or governmental body that has an interest and/or decision-making power in the mining sector in Armenia. The following is a list of stakeholders in Armenia's mining sector:

- Governmental bodies (national, regional, and local self-government level)
- Scientific institutions
- Non-governmental organizations (NGOs)
- Private industry
- International organizations

The list of stakeholders contacted is presented below:

- 10 Republic of Armenia ministries; 2 territorial / regional administrative bodies in marzes (regions) where substantial mining activities take place (Lori Marz and Syuniq Marz); and 5 communities in these two marzes that are affected by mining operations
- 7 scientific institutions, including universities and departments of the National Academy of Sciences (NAS)
- 16 local NGOs
- 7 private companies operating metal mines in Armenia
- 9 international organizations that support the development of the mining sector in Armenia and have a certain level of impact on the mining industry

### 2. DESCRIPTION / ANALYSIS OF STAKEHOLDER GROUP

#### 2.1 GOVERNMENT (national, regional and local self-government)

Representatives of seven ministries, one marzpetaran (regional seat of government) and three municipalities provided completed questionnaires. Their responses are summarized below:

#### Profile and capacity

Table 1 provides the list of national, regional and local government bodies that responded to the questionnaire, with their activities related to the mining sector.

Structures	Activities
National Government <sup>2</sup>	
Ministry of Energy and Natural	Legislation
Resources	Regulation
	Management
Ministry of Health	Social assessment
	Examination
Ministry of Labor and Social Affairs	Social assessment
Ministry of Nature Protection	Legislation
	Regulation
Ministry of Territorial Administration	Examination
and Emergency Situations	
Ministry of Transportation and	Regulation
Communication	Devide the
Ministry of Urban Development	Regulation
Regional Government	
Lori Marzpetaran	Regulation
	<ul><li>Management</li><li>Examination</li></ul>
	<ul> <li>Examination</li> <li>Environmental and social assessment</li> </ul>
	Land management / sales
Municipalities	
Shnogh Community	Land management / sale
Teghut Community	Land management / sale
	Examination
Qajaran Community	Land management / sale
	<ul> <li>Environmental and social assessment</li> </ul>

#### Table 1. Governmental bodies - activities<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Q1 <sup>2</sup> Q3

Table 2 provides the scope of responsibilities of national, regional and local self-government bodies.

National government	Regional government	Local government
Policy Making	<ul> <li>Land management</li> </ul>	<ul> <li>Law enforcement</li> </ul>
Legislation	<ul> <li>Enforcement</li> </ul>	<ul> <li>Land management</li> </ul>
<ul> <li>Land management</li> </ul>	<ul> <li>Monitoring</li> </ul>	<ul> <li>Monitoring</li> </ul>
Enforcement	<ul> <li>Public accountability</li> </ul>	<ul> <li>Public accountability</li> </ul>
Monitoring		
Impact evaluation / comments		

Table 2. The sco	pe of responsil	bility of aovernm	ental bodies <sup>3</sup>
		Sincy of governm	

Representatives of all ministries, except for the Ministry of Nature Protection, stated that the mining sector does not have any impact on their activities. The Ministry of Nature Protection responded that mining has a negative impact given that all mining activity has an effect on the environment. Lori Marzpetaran stated that mining issues are related to their activities, without specifically stating any positive or negative impacts. Representatives of Teghut and Qajaran communities expressed opinions that the mining industry has both positive and negative effects, while the representative from Shnogh community only noted the negative impacts.<sup>4</sup>

In response to the question related to the number of individuals working on mining related issues, representatives of national government bodies stated that the number of such employees is between 1 and 10. The Ministry of Transport and Communication and Ministry of Urban Development did not respond to this particular question. Representatives from both Lori Marzpetaran and Qajaran Municipality stated the range of such employees as between 2 and 10 people. Shnogh and Teghut municipalities indicated the number of people engaged in the sector within the range of 100 to 500.<sup>5</sup>

The knowledge and experience of the responding governmental bodies in terms of mineral resource management issues is presented in Table 3.

rable of Allowicage and experience of governmental boards		
National government	Regional government	Local government
<ul> <li>Monitoring process</li> </ul>	<ul> <li>Law enforcement</li> </ul>	<ul> <li>Law enforcement</li> </ul>
<ul> <li>Law enforcement</li> </ul>	<ul> <li>Monitoring process</li> </ul>	Civil involvement in decision-
<ul> <li>Environmental protection</li> </ul>	<ul> <li>Civil involvement in</li> </ul>	making
	decision making	<ul> <li>Human rights</li> </ul>
	<ul> <li>Human rights</li> </ul>	<ul> <li>Environmental protection</li> </ul>
	<ul> <li>Environmental protection</li> </ul>	

Table 3. Knowledge and experience of governmental bodies<sup>6</sup>

<sup>&</sup>lt;sup>3</sup> Q15

<sup>&</sup>lt;sup>4</sup> Q2

<sup>&</sup>lt;sup>5</sup> Q6 <sup>6</sup> Q5

Table 4 provides the list of mechanisms used by the responding governmental bodies to monitor mining activity.

National government	Regional government	Local government
<ul> <li>Check compliance with laws</li> <li>Document monitoring</li> <li>Conduct examinations of security certificates</li> </ul>	<ul> <li>Regular monitoring by relevant specialists of mine operators to identify problems and provide instructions</li> <li>Informing the relevant bodies in cases of environmental and natural resource use violations</li> </ul>	<ul> <li>No monitoring mechanisms</li> </ul>

#### Table 4. Monitoring mechanisms used by governmental bodies<sup>7</sup>

Table 5 provides the list of technical resources used by government bodies to address the issues and activities related to the mining sector.

#### Table 5. Technical resources used by governmental bodies<sup>8</sup>

National government	Regional government	Local government
<ul> <li>Human resources (some relevant specialists listed)</li> <li>Technical capacities (computers, laboratory equipment)</li> <li>Mass media</li> </ul>	<ul> <li>Human resources (some relevant specialists listed)</li> <li>Mass media</li> </ul>	<ul> <li>Human resources</li> <li>Mass media</li> </ul>

Sources of information about the mining sector for various governmental bodies in the order of importance for the stakeholders are listed in Table 6.

#### Table 6. Main sources of information for governmental bodies<sup>9</sup>

National government	Regional government	Local government
<ul> <li>National media</li> </ul>	<ul> <li>RA government</li> </ul>	<ul> <li>National media and</li> </ul>
• Reports by mining companies /	Local self-government bodies	Reports by mining
websites	<ul> <li>Scientific papers</li> </ul>	companies / websites
<ul> <li>RA government</li> </ul>	<ul> <li>Reports of international and</li> </ul>	<ul> <li>Ordered research /</li> </ul>
<ul> <li>Local self-government bodies</li> </ul>	local NGOs / websites	reports, scientific
<ul> <li>Reports of international and</li> </ul>	<ul> <li>National media</li> </ul>	articles
local NGOs / websites	Local media	<ul> <li>Local media</li> </ul>
<ul> <li>Commissioned studies /</li> </ul>	<ul> <li>International media</li> </ul>	<ul> <li>International media</li> </ul>
reports	<ul> <li>Reports by mining companies</li> </ul>	

<sup>&</sup>lt;sup>7</sup> Q13

<sup>&</sup>lt;sup>8</sup> Q16

<sup>&</sup>lt;sup>9</sup> Q20

Scientific papers	/ websites	
Local media	<ul> <li>Commissioned studies /</li> </ul>	
<ul> <li>International media</li> </ul>	reports	

Public relations (PR) methods used by governmental bodies include utilizing national and local media outlets and local community meetings. Some of the responding ministries (i.e. Ministry of Nature Protection, Ministry of Health) also use their official websites as a PR tool.<sup>10</sup>

Main target groups for governmental bodies are listed in Table 7.<sup>11</sup>

National government	Regional government	Local government
<ul> <li>National government</li> </ul>	<ul> <li>Did not provide any</li> </ul>	<ul> <li>Local government</li> </ul>
<ul> <li>Local population</li> </ul>		<ul> <li>Public administration</li> </ul>
Mining companies		<ul> <li>Local population</li> </ul>
<ul> <li>Local government</li> </ul>		Mining companies
• NGOs		<ul> <li>Local businesses</li> </ul>
		• Farmers

Table 8 provides the list of organizations, with whom national, regional and self-government bodies cooperate, including the areas of cooperation.<sup>12</sup>

Organizations	Directions
National governmental bodies	
Ministries	<ul> <li>Access to and exchange of information</li> </ul>
<ul> <li>State and local government bodies</li> </ul>	<ul> <li>Issues related to safety</li> </ul>
<ul> <li>Regional government</li> </ul>	<ul> <li>Access to and exchange of information</li> </ul>
Local self-government structures	Access to and exchange of information
Local NGOs	<ul> <li>Issues related to safety</li> </ul>
<ul> <li>International NGOs</li> </ul>	<ul> <li>Issues related to safety</li> </ul>
Mining companies	Development of safety certificates
Regional government	
<ul> <li>National government</li> </ul>	<ul> <li>Discussions regarding legislative issues</li> </ul>

#### Table 8. Organizations and directions of cooperation with governmental bodies

<sup>&</sup>lt;sup>10</sup> Q11

<sup>&</sup>lt;sup>11</sup> Q7

	Access to and exchange of information
<ul> <li>Local NGOs and public</li> </ul>	<ul> <li>Discussions of issues and identification of problems</li> </ul>
Mining companies	<ul> <li>Issues related to mining</li> </ul>
<ul> <li>Media at national and regional level</li> </ul>	<ul><li>Clarification</li><li>Information dissemination</li></ul>
Local government	
Environmental NGOs	<ul><li>Environmental protection</li><li>Integrity of use of natural resources</li></ul>

#### Issues and needs

Table 9 provides a summary of issues faced by governmental bodies related to the mining sector, including possible solutions to the problems that are identified.

Table 9. Problems faced by governmental bodies and their potential solutions		
National government	Regional government	Local government
Problems <sup>13</sup>		
<ul> <li>Legal issues</li> <li>Lack of data on soil pollution</li> <li>Targeted monitoring</li> <li>Need for training of specialists</li> </ul>	Mining and environmental issues in the region	<ul> <li>Collecting environmental taxes and fees</li> <li>Environmental protection, particularly related to tailings flowing into nearby rivers used for farm irrigation</li> <li>Mass tree cutting</li> <li>Expropriation of agricultural lands through use of eminent domain</li> <li>Air pollution</li> </ul>
Solutions <sup>14</sup>		
<ul> <li>Improvements and amendments to legislation</li> <li>Training of specialists</li> </ul>	<ul> <li>Solutions are listed in 2014-2017 Social- economic Development Program for Lori Marz</li> </ul>	<ul> <li>Did not provide any solutions</li> </ul>

Table 9 Problems faced by governmental bodies and their potential solutions

Taking into account the responses, all levels of government need technical training and practical experience to build capacity and increase knowledge in order to work more effectively.15

The types of technical support needed for this purpose are listed in Table 10.

<sup>&</sup>lt;sup>13</sup> Q9

<sup>&</sup>lt;sup>14</sup> Q10 <sup>15</sup> Q18

National government	Regional government	Local government
<ul> <li>Staff capacity building</li> <li>Information / data</li> </ul>	<ul> <li>Staff capacity building</li> <li>Responsibility / authority</li> </ul>	<ul> <li>Responsibility / authority</li> </ul>
<ul><li>Equipment</li><li>Financing</li></ul>	Information / data	Staff capacity     building
		<ul> <li>Information / data</li> </ul>

#### Table 10. Type of technical support needed by governmental bodies<sup>16</sup>

Particularly useful training topics identified by governmental bodies are listed in Table 11.

#### Table 11. Useful training topics identified by governmental structures<sup>17</sup>

National government	Regional government	Local government
<ul> <li>Legislation, regulations (ranging from 2 to 15 days)</li> <li>Best international practice in mining (ranging from 2 to 15 days)</li> <li>Land ownership issues (about 15 days)</li> <li>Corporate social responsibility (about 5 days)</li> <li>Public outreach and awareness raising</li> <li>Transparency</li> </ul>	<ul> <li>Laws, legislation, regulations (about 1 week)</li> <li>Best international practice in mining (about 1 week)</li> <li>Discussions with respective authorities and academia (about 1 week)</li> </ul>	<ul> <li>Public outreach and awareness raising</li> <li>Legislation, regulations</li> <li>International best practices for mining operations</li> <li>Transparency</li> <li>Corporate social responsibility</li> </ul>

#### Problems and solutions

Stakeholders in government highlighted the following problems related to the mining sector in Armenia.

### Table 12. Problems related to the mining sector highlighted by government<sup>18</sup>

National government	Regional government	Local government
<ul> <li>Lack of investment</li> </ul>	<ul> <li>Lack of investment</li> </ul>	<ul> <li>Lack of</li> </ul>
<ul> <li>Lack of minerals</li> </ul>	Lack of minerals	investment
<ul> <li>Lack of expertise</li> </ul>	<ul> <li>Lack of expertise</li> </ul>	<ul> <li>Lack of expertise</li> </ul>
<ul> <li>Lack of access to</li> </ul>	<ul> <li>Lack of access to equipment</li> </ul>	<ul> <li>Lack of laws and</li> </ul>
equipment	Lack of infrastructure	regulations
<ul> <li>Lack of infrastructure</li> </ul>	<ul> <li>Too many laws and regulations</li> </ul>	Poor enforcement
<ul> <li>Lack of laws and</li> </ul>	Mining is accompanied by large	of laws
regulations	volumes of waste and emissions that	

<sup>&</sup>lt;sup>16</sup> Q17

<sup>&</sup>lt;sup>17</sup> Q19

<sup>&</sup>lt;sup>18</sup> Q22

The opinions of government stakeholders related to mining sector laws and regulations are presented in Table 13.<sup>19</sup>

Table 13. Remarks of governmental bodies on the adequacy of laws and regulations		
National government	Regional government	Local government
<ul> <li>Mining sector laws and</li> </ul>	<ul> <li>Laws always need to be</li> </ul>	<ul> <li>Mining sector laws and</li> </ul>
regulations are adequate	improved	regulations are adequate
<ul> <li>Mining sector laws and</li> </ul>		<ul> <li>Mining sector laws and</li> </ul>
regulations are not strict		regulations are not strict
enough		enough

Table 14 presents the steps listed by governmental bodies to be taken to ensure up-to-date environmental and social responsibility standards in the mining sector.

#### Table 14. Steps to ensure up-to-date environmental and social responsibility standards <sup>20</sup>

National government	Regional government	Local government
<ul> <li>Pollution reporting requirements</li> </ul>	<ul> <li>All standards should</li> </ul>	<ul> <li>Licensing requirements</li> </ul>
should be made stricter	be made stricter	should be made stricter
<ul> <li>Financial reporting requirements</li> </ul>		<ul> <li>Pollution reporting</li> </ul>
should be made stricter		requirements should be
<ul> <li>All standards should be made</li> </ul>		made stricter
stricter		<ul> <li>All standards should be</li> </ul>
		made stricter

The future plans for the mining sector by governmental bodies are presented in Table 15.

Table 15. Future plans of governmental bodies <sup>21</sup>		
National government	Regional government	Local government
<ul> <li>Realization of programs and</li> </ul>	<ul> <li>As mining is accompanied by</li> </ul>	<ul> <li>Oversight of the</li> </ul>
strategies by adoption of needed	large volumes of emissions	mining process
laws	and waste affecting the	
<ul> <li>Cooperation with relevant</li> </ul>	environment and human	
individuals and companies	health, the priority is to	
• Improvement of the legal framework	examine the emissions in	

<sup>&</sup>lt;sup>19</sup> Q23

<sup>&</sup>lt;sup>20</sup> Q24 <sup>21</sup> Q25

order to mitigate the negative	
impacts.	
<ul> <li>There are opportunities</li> </ul>	
available, but there is a lack	
of cooperation between	
relevant specialists and	
organizations. (Marzpetaran	
cooperates with YSU and	
other scientific groups in	
order to resolve the	
problems.)	
	• There are opportunities available, but there is a lack of cooperation between relevant specialists and organizations. (Marzpetaran cooperates with YSU and other scientific groups in order to resolve the

#### 2.2 SCIENTIFIC INSTITUTIONS

Six of seven scientific institutions that were approached to take part in the survey responded to the questionnaire. Two of those that responded, Armenian State University of Economics and Yerevan State University Geography Department, were each represented by two scholars.

The responses from scientific institutions are provided below:

#### Profile and capacity

Table 16 provides the list of responding scientific institutions and their respective activities related to the mining sector.

Table To. Scientific Institutions - activities		
Scientific institutions and universities	Activities	
National Academy of Sciences (NAS), Center for Ecological- Noospheric Studies	<ul><li>Environmental and social assessment</li><li>Research</li></ul>	
NAS Institute of Economics	Research	
NAS Institute of Hydrology and Ichthyology	<ul> <li>Assessment of impacts on water ecosystems and biodiversity</li> </ul>	
Yerevan State University, Geography Department	<ul> <li>Environmental and social assessment</li> <li>Research</li> <li>Teaching</li> <li>Consultancy</li> </ul>	
Yerevan State University, Geology Department	<ul><li>Environmental and social assessment of extractive industry</li><li>Research</li></ul>	

#### Table 16. Scientific institutions - activities<sup>22</sup>

Armenian State University of Economics

The above-listed stakeholders have been working on issues related to the mining industry in Armenia<sup>23</sup> for more than 5 years<sup>24</sup>. The respondents stated that mining activity does not have any direct impact on their organizations. However, some highlighted the negative impact of the mining industry on the environment and human health.<sup>25</sup>

To the question regarding the number of people that engage in work related to mining at their particular institution, two institutions checked the range of 2-10 people, three checked the range of 11-20 people, and one checked the range of 20-50.<sup>26</sup>

The specialization in knowledge of the scientific institutions responding to the questionnaire included the following:<sup>27</sup>

- Environmental protection
- Exploration of mineral deposits
- Estimation of mineral resources
- Monitoring process
- Law enforcement
- Civil engagement in decision-making
- Human rights
- Examination of changes of the quality of water and of fauna

None of the responding institutions have established mechanisms to conduct monitoring of mining activity.<sup>28</sup>

The responding scientific institutions use their human resources, technical equipment, and media outreach to address issues and conduct their activities related to the mining industry.<sup>29</sup>

According to results of the analysis, the main sources of information for scientific institutions about the mining industry are the following, in the order of importance as stated by the respondents:<sup>30</sup>

- Reports of international and local NGOs / websites
- RA Government
- Scientific papers and reports from mining companies / websites
- Commissioned studies / reports
- Local media

<sup>&</sup>lt;sup>23</sup> Q3

<sup>&</sup>lt;sup>24</sup> Q4 <sup>25</sup> Q2

<sup>&</sup>lt;sup>26</sup> Q6

<sup>&</sup>lt;sup>27</sup> Q5 <sup>28</sup> Q13

<sup>&</sup>lt;sup>29</sup> Q16

<sup>&</sup>lt;sup>30</sup> Q20

- National media
- International media
- Local self-government bodies

Two of responding institutions highlighted that there are no commissioned studies / reports and / or the necessary information is not accessible.

Public relations methods used by scientific institutions include: <sup>31</sup>

- National media communications
- Local media communications
- Local community meetings
- Internet
- Webpages of institutions

Main target groups for scientific institutions are identified as the national government, mining companies, local population, NGOs and scientists that study the impacts of mining.<sup>32</sup>

Table 17 provides the list of organizations with whom scientific institutions cooperate, including the areas of cooperation.<sup>33</sup>

Organizations	Directions
<ul> <li>International organizations</li> </ul>	<ul> <li>Studies of environmental impact assessment</li> </ul>
<ul> <li>Ministries and</li> </ul>	Proposals about mining
marzpetarans	<ul> <li>Geological exploration of mines</li> </ul>
	Mining
	Environmental protection
	<ul> <li>Effective management of natural resources</li> </ul>
NGOs, Aarhus	Environmental protection and effective management of natural
Centers	resources
	<ul> <li>Assessment of environmental impacts of the mining industry</li> </ul>

#### Table 17. Organizations and areas of cooperation

One of the scientific institutions complained that the cooperation is usually one-sided and takes place mainly upon their initiative.

#### Issues and needs

Table 18 provides a summary of issues faced by scientific institutions in their work related to mining, including possible solutions to the identified issues.

<sup>&</sup>lt;sup>31</sup> Q11

<sup>&</sup>lt;sup>32</sup> Q7 <sup>33</sup> Q8

Problems/Issues <sup>34</sup>	Solutions <sup>35</sup>
<ul> <li>Information about mining operations and geological data are mostly confidential and often inaccessible or very expensive for scientists</li> <li>Recommendations provided by scientific institutions are mostly rejected and not applied</li> <li>There is a low level of cooperation between the Mining department of the Ministry of Energy and Natural Resources and the mining companies</li> <li>Studies have revealed endangered species on mining grounds, thus there were proposals to stop the mining activity or modify the project, however, they were not taken into consideration</li> <li>Lack of willingness by the government to consider proposals coming from sources outside of government</li> <li>Lack of engagement of local experts in mine explorations, project design, etc. by the mining companies and lack of willingness to provide internships for students to promote capacity in knowledge</li> </ul>	<ul> <li>Increase the level of transparency by passing legislation</li> <li>Increase the public accountability of the mining industry</li> <li>Increase the transparency and accountability of works related to geological studies, mining and nature protection</li> <li>Avoid public hearings that go through the motions but do not seriously engage or integrate community input</li> <li>In parallel with expert conclusions request the opinion of respected scientific institutions</li> <li>Refer to the undertaken scientific studies</li> <li>Demonstrate political will to establish legislative and enforcement mechanisms to ensure transparency of sustainable and responsible mining, implementation of environmental management plans and monitoring</li> </ul>

#### Table 18. Problems faced by scientific institutions and their potential solutions

To build capacity and increase knowledge in order to be more effective in their work related to the mining sector, scientific institutions highlighted the need for:<sup>36</sup>

- Training
- Practical experience
- Professional consultations
- Access to the information related to the mining sector

In order to work more effectively on issues related to this field, the following technical support is needed:37

<sup>&</sup>lt;sup>34</sup> Q9 <sup>35</sup> Q10

<sup>&</sup>lt;sup>36</sup> Q18 <sup>37</sup> Q17

- Information / data
- Responsibility / authority
- Equipment
- Funding

Topics of training that representatives of scientific institutions identify as necessary are:<sup>38</sup>

- Legal and regulatory framework (approximately 1 week)
- International best practices for mining (approximately 1 week)
- Environmental impacts of the operation of open-pit and closed mines (approximately 10 days)
- Introduction to the environmental and social responsibility related activities of mining companies in Armenia, including positive practices and shortcomings, to be accompanied with field visits (12-16 hours)

#### Problems and solutions

Representatives of the scientific institutions highlighted the following problems related to the mining sector in Armenia:

- Lack of investment
- Lack of minerals
- Lack of expertise
- Lack of access to equipment
- Lack of infrastructure
- Lack of laws and regulations
- Poor enforcement of laws
- Poor governance and participation by the state
- Lack of clear criteria for decision-making related to the national strategy in the mining sector and exploitation of mines
- Lack of thinking about mineral resources as public property
- Disregard for technological alternatives to exploitation
- Poor state oversight over the implementation of environmental impact assessment requirements and environmental management plans
- Disregard for the financial environmental impacts costs during decision-making on mine exploitation
- Poor environmental impact assessment and subjective nature of the state environmental review (expertise)
- Absence of guidelines to conduct environmental impact assessments
- Lack of mechanisms to follow international standards
- Lack of consistent monitoring
- Disregard for the public interest

The views of representatives from scientific institutions about mining sector laws and regulations are the following:<sup>39</sup>

<sup>&</sup>lt;sup>38</sup> Q19

- Laws and regulations are adequate
- Laws and regulations are not stringent / strict enough
- There are contradictory provisions in the Mining Code
- Mechanisms to ensure the enforcement of the Mining Code are weak. In particular, mechanisms to ensure the rational use of mineral resources and implementation of environmental management plans are missing
- Environmental and health impacts are often disregarded

Scientific institutions mentioned a number of steps to be taken to ensure the introduction of up-to-date standards in terms of environmental protection and responsibility in the mining sector, including the following:<sup>40</sup>

- All requirements should be made stricter
- Environmental impact assessment standards should be made stricter
- Licensing requirements should be made stricter and there needs to be follow-up to ensure compliance with the conditions of license agreements
- Pollution reporting requirements should be made stricter and transparent, and accessible to the public
- Financial reporting standards should be made stricter and transparent, and accessible to the public
- Safety regulations for companies operating in the sector should be made stricter and there needs to be follow-up ensuring compliance
- Mineral resources should be utilized in a rational manner with minimization of waste and an increase in the volume of extraction of valuable minerals
- Authorities should be consistent and require compliance to project parameters agreed upon in the contract
- There should be guidelines developed to conduct environmental impact assessment in the mining sector
- There should be criteria developed for the issuance of positive conclusions of state environmental review (expertise) in the mining sector
- Licenses should be issued only to those companies that ensure environmental monitoring of the mining processes, including companies that use international best practices for the safety of tailing dumps and waste treatment
- Requirements for justification of pollution-related data / information should be made stricter
- Transparency and access to financial reports should be increased
- Safety, health-related and social responsibility standards should be brought in compliance with international norms
- Conclusions of scientific research should be objective
- The fight against corruption should be strengthened

In terms of their future plans related to the mining sector, scientific institutions mentioned interest in cooperating with the government, NGOs and mining companies.<sup>41</sup>

<sup>&</sup>lt;sup>40</sup> Q24

<sup>41</sup> Q25

#### 2.3 LOCAL NGOs

#### Profile and capacity

Of the 16 NGOs that were invited to participate in this analysis, 10 responded to the questionnaire. From this group of responding organizations, Pan-Armenian Ecological Front and Save Teghut Initiative are non-registered associations. Two more, Aarhus Centers in Alaverdi and Kapan are established by a Memorandum of Understanding between the Ministry of Nature Protection and the OSCE Office in Yerevan.

Table 19 provides the list of responding NGOs, their respective activities, and years of experience related to the mining sector.

Local NGOs	Activities <sup>42</sup>	Duration <sup>43</sup>
Alaverdi Aarhus Center	<ul><li>Research</li><li>Environmental and social assessment</li></ul>	<ul> <li>1-5 years</li> </ul>
Pan-Armenian Ecological Front	<ul> <li>Environmental and social assessment</li> <li>Conducting analyses through experts</li> <li>Visiting and surveying mining affected sites, discovering violations</li> <li>Surveying government bodies and mining companies, publishing videos, writing analytical articles</li> </ul>	●1-5 years
Association of Young Environmental Lawyers and Economists	<ul><li>Management</li><li>Environmental and social assessment</li></ul>	<ul> <li>More than 10 years</li> </ul>
Association for Sustainable Human Development	<ul> <li>Environmental and social assessment of extractive industry</li> </ul>	<ul> <li>More than 10 years</li> </ul>
Center for Bird Lovers	Environmental and social assessment	<ul> <li>More than 10 years</li> </ul>
Ecoera	<ul> <li>Environmental activism, criticism, public awareness, law enforcement</li> </ul>	<ul> <li>1-5 years</li> </ul>
EcoLur	<ul> <li>Environmental and social assessment</li> </ul>	<ul> <li>More than 10 years</li> </ul>
Environmental Rights	Research	<ul> <li>1-5 years</li> </ul>
Kapan Aarhus Center	<ul> <li>Data collection and dissemination of environmental and nature protection related information</li> </ul>	<ul> <li>More than 10 years</li> </ul>

#### Table 19. NGOs - activities and years of experience

Save Teghut Civic	Other:	• 5-10 years
Initiative	Public awareness	
	Advocacy	
	Environmental protection	
	campaigns, social movements,	
	public events	

Kapan Aarhus Center and Alaverdi Aarhus Center operate in Syuniq Marz and Lori Marz respectively, while the others implement activities throughout Armenia, working on national level issues.<sup>44</sup>

Related to the influence of the mining sector on NGOs, the respondents emphasized the negative impact on health, environment, agriculture and socio-economic situation in Armenia rather than any direct influence on their organizations. NGOs expressed concern regarding the dangerous dependency of the country's economy on mining, corruption in the licensing process, amongst others.<sup>45</sup>

Responding NGOs indicated a range of 1 to 10 people working on mining related issues. Pan-Armenian Ecological Front civic initiative indicated a range of 20-50 and Save Teghut Civic Initiative cited approximately 8000, referencing the membership of the Initiative's webpage.<sup>46</sup>

The knowledge and experience of the responding NGOs in terms of mining sector issues includes:

- Monitoring process
- Environmental protection
- Law enforcement
- Human rights
- Public involvement in decision making
- Public hearings

Monitoring mechanisms used by NGOs are:47

- Studying of legislation and documents, informational technologies and field visits
- Periodic visits to mining affected sites, examination, sampling, analysis of public information and presentation, inquiries and whistle-blowing
- Active public engagement in monitoring
- Monitoring that involves volunteers, independent experts
- Observations, corresponding with relevant authorities, interviews, independent expert assessments, comparative analysis and discussions

<sup>&</sup>lt;sup>44</sup> Q3

<sup>&</sup>lt;sup>45</sup> Q2 <sup>46</sup> Q6

<sup>47</sup> Q13

Among the resources utilized by NGOs to address the issues and conduct their activities related to the mining industry are:<sup>48</sup>

- Human resources (environmentalist economists, lawyers and other specialists, groups of volunteers)
- Technical capacity (informational sources, such as newsletters, websites, experts database, satellite remote sensing, GIS software, radiation detection devices)
- Public discussions, seminars
- Media outreach

Main sources of information for NGOs in order of importance are the following:49

- RA Government
- National media
- Reports of international and local NGOs / websites
- Local government
- Commissioned studies / reports
- Scientific papers
- Local media
- Reports by mining companies / websites
- International media

One of the NGOs also cited social media, reports of emergency situations received from concerned citizens, personal connections, conferences, discussions and projects. Another NGO stated that local government bodies do not possess relevant information and that mining companies do not have websites, and even those that do contain insufficient information.

Public relations methods used by local NGOs are:<sup>50</sup>

- National media communications
- Local media communications
- Local community meetings
- International media
- Universities
- Social networks

Target groups for NGOs are:<sup>51</sup>

- Local government
- National government
- Local population
- Mining companies
- NGOs

<sup>48</sup> Q16

<sup>49</sup> Q20 <sup>50</sup> Q11

<sup>&</sup>lt;sup>51</sup> Q7

- Local businesses
- Farmers
- Tourists

Table 20 provides the list of organizations that NGOs cooperate with and the areas of cooperation:  $^{\rm 52}$ 

Organizations	Directions
<ul> <li>Environmental, economic, anticorruption, human rights NGOs (including Environmental Public Alliance, local and international)</li> </ul>	<ul> <li>General ecological issues, monitoring, projects</li> </ul>
<ul> <li>Government, ministries, National</li> </ul>	Access to information
Assembly staff, marzpetarans, local	<ul> <li>Laws, regulations</li> </ul>
self-governance bodies	Discussions
<ul> <li>International organizations</li> </ul>	<ul> <li>Public awareness events</li> </ul>
	<ul> <li>Developing mechanisms for law enforcement</li> </ul>
	<ul> <li>Environmental policy analysis</li> </ul>
	Working with communities
Scientific institutions (NAS, American	Expert assessments
University of Armenia)	Lab analysis
Mining companies	Access to information
	Discussions
Media outlets	Awareness raising

#### Issues and needs

Table 21 provides a summary of issues that NGOs stated they have faced while working on mining related topics as well as the possible solutions to those issues. Most of the problems and potential solutions highlighted by NGOs are associated with the general challenges affecting citizens of Armenian rather than issues related to the organizations themselves.

Problems/Issues <sup>53</sup>	Solutions <sup>54</sup>
General lack of capacity	Regulation of social problems
Low level of public awareness	Increase of information and training
on environmental and legal	Development of a comprehensive strategy for the
issues	sector based on the real and scientifically justified
• Low level of awareness in local	assessment of revenues and long-term environmental
communities	damage
Lack of organized civil society	• Revision of the natural resource use and environmental
that acts within a well-	payment system and increase of taxes, other fees and
developed political culture	fines
Lack of information publicized	Categorization of tailing dumps in accordance with their
by state institutions on certain	danger and introduction of waste taxation
issues	<ul> <li>Implementation of the "polluter pays principle" in</li> </ul>
<ul> <li>Formal nature and non-</li> </ul>	accordance with the damage caused to the
professional conduct of the	environment
state environmental review	<ul> <li>Introduction of water circulation systems in all ore-</li> </ul>
(expertise)	processing plants and tailing dumps to exclude the
Complete lack of oversight by	possibility of discharge of waste into the environment,
relevant authorities	preceded by the setup for the control of discharge sites
<ul> <li>Lack of response to obvious</li> </ul>	and the conducting of periodic sampling and research
violations	Conducting safety-related studies in all tailing dumps
Inaction of state organizations	and assessment of the strength of dams in case of
in cases of illegal actions of	emergencies, such as earthquakes, landslides, floods
mining companies	<ul> <li>Establishment of strict state and public oversight in all</li> </ul>
Low level of expert	stages of mining, publicizing of the results of monitoring
involvement	in accordance with the environmental management
<ul> <li>Lack of serious scientific</li> </ul>	plans of companies
research	Periodic examination and publicizing of health
Lack of bureaucrats in the	conditions of the affected population during mining
system of governance that are	activities
able to make good decisions	Instead of exploiting new mines, conducting economic
Corruption in the judiciary and	assessment and extraction of various valuable minerals
state institutions	contained in tailing dumps, which will be more profitable
Lack of active public	and less dangerous than exploitation mines such as
participation that is caused by	Teghut or Amulsar
social problems	<ul> <li>Increase of the efficiency of extraction, particularly through increase of the extraction of main metals</li> </ul>
Policies of international	through increase of the extraction of main metals, including other useful and precious elements, to 90-
financial institutions, that on	95% instead of current 65-70%
the one hand result in	<ul> <li>Creation of a fund, where the mining companies would</li> </ul>
environmental catastrophes	<ul> <li>Creation of a rund, where the mining companies would pay sufficient amounts that will be used for protection of</li> </ul>
and on the other hand serve	pay sumperir amounts that will be used for protection of

Table 21. Problems faced by NGOs and their potential solutions

<sup>&</sup>lt;sup>53</sup> Q9 <sup>54</sup> Q10

<ul> <li>corporate interests without promoting the economic development of Armenia</li> <li>Improper governance</li> <li>Corrupt mining companies (almost all are registered in offshore zones)</li> <li>Deficiencies in laws</li> <li>Lack of mechanism for economic valuation of environmental damages</li> <li>Health problems</li> <li>Poverty</li> <li>Mineral resources in Armenia are not exploited but rather stolen, including the Teghut</li> </ul>	<ul> <li>environment and human health, reclamation of polluted areas, elimination of consequences of possible accidents and conducting objective scientific research</li> <li>Raise standard of living in Armenia to slow down emigration, mining policy must be made with consideration for present and future needs through stricter environmental protection and tax conditions, restoration of justice and closure of illegal mines</li> <li>Ensure good governance is in place, improvement of legislation, high quality of experts, methodologies for environmental impact assessment, state and public oversight, accountability of offshore companies and restrictions on such companies to operate in Armenia</li> <li>Developed understanding that the metal resources will be exhausted one day and there is a need to spend the money received from their exploitation on strengthening Armenia and other sectors of the economy rather than</li> </ul>
<ul><li>environmental damages</li><li>Health problems</li><li>Poverty</li><li>Mineral resources in Armenia are not exploited but rather</li></ul>	<ul> <li>environmental impact assessment, state and public oversight, accountability of offshore companies and restrictions on such companies to operate in Armenia</li> <li>Developed understanding that the metal resources will be exhausted one day and there is a need to spend the money received from their exploitation on strengthening Armenia and other sectors of the economy rather than enrichment of offshore-registered companies and a few</li> </ul>
while the metals and minerals located underground are considered as such.	families

One of the responding NGOs stated that solutions will only be realized when Armenia has professional leadership who are concerned with the future of the country and have the willingness and ability to make good decisions.

In order to work more effectively on mining related issues, NGOs highlighted the need for trainings, consultations and practical experience.<sup>55</sup>

Technical support needs mentioned by NGOs in order to work more effectively on issues related mining include: <sup>56</sup>

- Staff capacity building
- Equipment (laboratory devices for analyses, detection devices)
- Information / data
- Responsibility / authority

Topics of trainings that NGOs would like to attend are the following:57

- Legal and regulatory understanding (6-8 hours)
- International best practices for mining operations (4-6 hours)
- Transparency (1-2 hours)
- Corporate social responsibility (1-2 hours)
- Land / mineral ownership (2-4 hours)

<sup>&</sup>lt;sup>55</sup> Q18

<sup>&</sup>lt;sup>56</sup> Q17 <sup>57</sup> Q19

- Public outreach and awareness raising (time duration not provided)
- Management of tailings, reclamation of lands, closure of mines (time duration not provided)
- Analysis and comparisons with other countries for taxation system, environmental and natural resource payments, royalties. (time duration not provided)
- Analysis of performance of international financial institutions and mining companies (time duration not provided)
- International experience of radical activism (time duration not provided)
- Transboundary policies (time duration not provided)

#### Problems and solutions58

Representatives of NGOs also highlighted the following problems related to the mining sector in Armenia:

- Lack of expertise
- Lack of access to equipment
- Lack of infrastructure
- Lack of laws and regulations
- Poor enforcement of the law
- Incorrect governance of the sector
- Lack of wisdom, integrity, democracy, sovereignty and long-term perspective

Comments from the responding NGOs about mining sector laws and regulations:59

- Laws and regulations are not stringent / strict enough
- Laws and regulations do not comply with the requirements of environmental protection of the country and best international practice
- Environmental and resource use fees are low and are intended to serve the corporate business interests disregarding the environmental and economic impacts and the public interest
- Mining waste is not classified as waste in the Mining Code, thus mining companies do not pay anything for the tailings they produce
- There are no mechanisms to compensate for damage to human health and property
- Environmental impact assessment and state environmental review (expertise) do not have a requirement for assessment of impacts on ecosystems
- Legislation is not reasonable, the necessary concepts and strategies are not in place
- Laws lack enforcement mechanisms

NGOs mentioned a number of steps to be taken to ensure the introduction of up-to-date standards for environmental protection and responsibility in the mining sector, including the following:<sup>60</sup>

- All the standards should be made stricter
- Pollution reporting requirements should be made stricter
- Financial reporting requirements should be made stricter

<sup>&</sup>lt;sup>58</sup> Q22

<sup>&</sup>lt;sup>59</sup> Q23

<sup>60</sup> Q24

- Environmental impact regulations should be made stricter
- Licensing requirements should be made less strict (one respondent stated that they should be stricter)
- There is a need for worker unions and self-governance
- There should be oversight regarding enforcement of the law on environmental impact assessment
- Access to information on natural resources should be guaranteed
- Transparency and publicity of financial reports should be guaranteed
- There should be mechanisms for mandatory health insurance
- There should be a new law on environmental impact assessment
- Licensing requirement should be made more transparent
- Pollution reports should be made accessible to the public
- State and public oversight should be in place

In terms of future plans with respect to the mining sector, NGOs stated the following:61

- Cooperation with all interested parties, including civil society organizations, scientific institutions, experts, international organizations, specifically those who work on environmental issues, emergency situations, risk reduction and community programs
- Litigation
- Environmental monitoring
- Oversight of the development processes, use and production of natural resources, prevention and elimination of negative impacts of economic activities on the environment, distribution of income from natural resources
- Formation of a national network for coordination of action aimed at environmental protection, rational economic development and social justice, to operate on principles of legality, transparency, accountability and rationality
- Presentation of the monitoring results to the public and state institutions. In case of failure of the state to resolve problems, to make the necessary demands and / or implement measures to prevent potential damage or remedy damage that has already been caused

#### 2.4 MINING COMPANIES

Of the 7 mining companies who were invited to participate, 2 returned a completed questionnaire.

#### Profile and capacity

Table 22 describes the responding companies, their activities and experience.

<sup>&</sup>lt;sup>61</sup> Q25

Local NGOs	Activities <sup>62</sup>	Duration <sup>63</sup>
Armenian Copper Programme CJSC	Extraction	<ul> <li>More than 10 years</li> </ul>
Geoteam CJSC	<ul> <li>Exploration</li> <li>Extraction</li> <li>Environmental and social assessment</li> </ul>	• 5-10 years

#### Table 22. Mining companies – activities and years of experience

Armenian Copper Programme operates Teghut mine in Lori Marz and employs more than 500 people. Geoteam operates in Vayots Dzor and Syuniq marzes and has 20-50 people working in the organization. Both companies hold mining rights / licenses required by Armenian legislation.

The knowledge and experience of the mining companies includes:

- Monitoring process
- Civil involvement in decision-making
- Human rights
- Environmental protection

As a monitoring mechanism the companies noted environmental monitoring as well as environmental and social management plans.

The main sources of information for the companies in order of the importance (this relates only to Geoteam as Armenian Copper Programme did not respond to the question) are the following:<sup>64</sup>

- Commissioned studies / reports
- Scientific papers
- National media
- International media
- NGO/INGO reports / websites

Public relations methods used by the companies are:65

- National media communications
- Local media communications
- Local community meetings
- National stakeholders (NGOs, interested parties) meetings.

<sup>&</sup>lt;sup>62</sup> Q1 <sup>63</sup> Q4

<sup>&</sup>lt;sup>64</sup> Q20

<sup>65</sup> Q11

Their target groups are:

- National government
- Local government
- Mining companies
- Local population
- NGOs
- Local businesses
- Farmers
- Armenian Copper Programme also stated other groups referring to its Stakeholder Engagement Plan document

Table 23 provides the list of organizations that Geoteam cooperates with (Armenian Copper Programme did not respond to the question) and the areas of cooperation:<sup>66</sup>

Organizations	Directions
<ul> <li>National Government</li> </ul>	Permitting, licensing, etc.
<ul> <li>Local Government</li> </ul>	Stakeholder engagement
	Social projects
	Development projects
	Project development
<ul> <li>Local population</li> </ul>	Stakeholder engagement
	Social development projects
	Employment
• NGOs	Stakeholder engagement
	Research
	Monitoring
Local businesses	Subcontracting, outsourcing
• Farmers	Agricultural development projects

 Table 23. Organizations and directions of cooperation

Among corporate social responsibility policies, the companies mentioned the following:

- Engagement plans / community involvement
- Public reporting
- Environmental sustainability plans
- Ethical marketing
- Insurance (for company employees)
- Social Events
- Community Development Projects
- Other, with a reference to Armenian Copper Program's Social Policy.

<sup>&</sup>lt;sup>66</sup> Q8

#### **Issues and needs**

Because the gold mine which Geoteam owns is not operational yet, the company stated it would be difficult to specify the issues that they will face in the future. Nevertheless, they anticipate facing capacity issues among different stakeholders groups, including future employees and regulators. The solution will be capacity building programs, engagement, and improvement of the regulatory framework.

In order to work more effectively in managing their mining operations, Geoteam highlighted the need for consultations, training and practical experience of the local staff.<sup>67</sup>

Technical support needs mentioned by Geoteam in order to work more effectively on issues managing their mining operations included:

- Staff capacity building
- Equipment
- Information / data
- Responsibility / authority

Topics of training that Geoteam would like to attend are the following:

- Legislation and regulatory understanding (1 week)
- International best practices for mining operations (1 week)
- Transparency (3 days)
- CSR (1 week)
- Land/mineral ownership (1 day)

.

Armenian Copper Programme did not respond to questions related to issues and needs.

#### Problems and solutions 68

The mining companies highlighted the following problems related to the mining sector in Armenia:

- Lack of investment
- Lack of expertise
- Lack of access to equipment
- Lack of infrastructure
- Poor enforcement of the law
- Poor implementation of laws and regulations

With respect to mining sector laws and regulations, Armenian Copper Programme noted that they are adequate. The Geoteam representative stated that mining laws in Armenia are strict and even excessively strict in some cases, and that the pros and cons of the laws are seen only when they are enforced.

<sup>&</sup>lt;sup>67</sup> Q18

The companies stated that the following steps should be taken to ensure introduction of upto-date standards in terms of environmental protection and responsibility in the mining sector:<sup>69</sup>

- Improve the law on Environmental Impact Assessment
- Build capacity for better environmental impact assessment
- Improve the process of issuing licenses
- Improve, make stricter pollution reporting requirements
- Improve, make stricter safety regulations
- Where necessary update old regulations to keep pace with technological progress

In terms of future plans with respect to their mining operations, Geoteam stated that it plans to operate the Amulsar Gold Mine and to cooperate with all stakeholders to make it an exemplary project in terms of environmental and social management, as well as public trust and support. Armenian Copper Programme did not respond to this question.<sup>70</sup>

#### 2.5 INTERNATIONAL ORGANIZATIONS

Of the 9 international organizations approached for this study, 4 returned completed questionnaires.

#### Profile and capacity

Table 24 provides the list of international organizations that responded along with their respective activities and years of experience related to the mining sector.

International organizations	Activities <sup>71</sup>	Duration <sup>72</sup>
IUCN	No relation	
OSCE Office in Yerevan	<ul> <li>Assistance to the government and civil society in the management of natural resources</li> </ul>	<ul> <li>More than 10 years</li> </ul>
UNDP	Research	<ul> <li>From 6 months to 1 year</li> </ul>
World Bank	<ul><li>Regulation</li><li>Research</li></ul>	• 1-5 years

Table 24. International organizations - activities and years of experience

To the question on the number of people engaged in work related to the mining sector, one organization checked the option of one person and two selected the range of 2-10 people.

<sup>&</sup>lt;sup>69</sup> Q24

<sup>&</sup>lt;sup>70</sup> Q25 <sup>71</sup> Q1

<sup>&</sup>lt;sup>72</sup> Q4

One organization, IUCN, did not respond to the question given that it does not have ongoing activities in this sector.<sup>73</sup>

The knowledge and experience of the responding international organizations related to the mining sector includes:<sup>74</sup>

- Environmental protection
- Enforcement of the law

The responding international organizations do not have monitoring capacity.75

Technical resources used by international organizations to address the issues and conduct their activities related to the mining industry include:<sup>76</sup>

- Human resources (e.g. hygienists, engineers, biologist, statistician. etc.)
- Technical capacity (laboratory equipment)
- Financial means
- Mass media

Main sources of information for international organizations in order of importance are the following:<sup>77</sup>

- Scientific papers and commissioned studies / reports
- Reports of international, local NGOs, publicly available company reports, websites
- RA Government
- National and international media
- Local government
- Local media

Public relations methods used by the responding international organizations are:78

- National media communications
- Local media communications
- Local community meetings
- Meetings with the representatives of a particular field

Target groups for international organizations related to the mining sector in the geographical regions in which they operate are:<sup>79</sup>

- National government
- Local population
- Farmers

<sup>&</sup>lt;sup>73</sup> Q6

<sup>&</sup>lt;sup>74</sup> Q5

<sup>&</sup>lt;sup>75</sup> Q13 <sup>76</sup> Q16

<sup>&</sup>lt;sup>77</sup> Q20

<sup>&</sup>lt;sup>78</sup> Q11

<sup>&</sup>lt;sup>79</sup> Q7

• NGOs

Table 25 provides the list of stakeholders that international organizations cooperate with and the areas of cooperation:<sup>80</sup>

Organizations	Directions
<ul> <li>International organizations (e.g. OSCE, UNDP, World Bank, WWF Armenia)</li> </ul>	<ul><li>Implementation of ENPI FLEG program</li><li>Removal of consequences</li><li>Studies</li></ul>
<ul> <li>RA Government, Ministries (e.g. Ministry of Nature Protection, Ministry of Emergency Situations)</li> </ul>	<ul><li>Legal regulations</li><li>Data collection</li><li>Removal of consequences</li></ul>
National Statistical Service of RA	Data collection
<ul> <li>Mining company (Armenia Copper Program)</li> </ul>	Feedback about legislative amendments
Yerevan State University, Sustainable     Development Center	Mineral resource management
NGOs (including Aarhus centers)	<ul><li>Legal analysis, economic-tax analysis</li><li>Awareness raising</li></ul>

Table 25. Organizations and directions of cooperation of international organizations

#### Issues and needs

Table 26 provides a summary of issues that the responding international organizations have faced while working in the mining sector, as well as the possible solutions to those issues.

Problems/Issues <sup>81</sup>	Solutions <sup>82</sup>
<ul> <li>poor management, enforcement of law</li> </ul>	<ul> <li>systemic approach, legal reforms, and</li> </ul>
lack of information from mining companies	development of human resources
• irreversible impact on the environment and	<ul> <li>strengthened preventive mechanisms</li> </ul>
human health	<ul> <li>harmonization of the legal framework to</li> </ul>
<ul> <li>impoverishment of areas with heavy</li> </ul>	international standards and adoption of
mining	applicable regulations
<ul> <li>government's decision to become an</li> </ul>	<ul> <li>campaigns, awareness raising and</li> </ul>
"attachment" state allowing developed	education
countries to exploit its natural resources,	<ul> <li>the major issue is the government's mining</li> </ul>
paying low taxes, creating environmental	policy, which needs to be changed
problems	

<sup>&</sup>lt;sup>80</sup> Q8

<sup>&</sup>lt;sup>81</sup> Q9 <sup>82</sup> Q10

In order to work more effectively on mining related issues, international organizations highlighted the need for trainings and cooperation with government bodies.<sup>83</sup>

Among the technical support needs the international organizations highlighted are access to information / data.<sup>84</sup>

Topics of the trainings that international organizations would like to attend are the following:<sup>85</sup>

- Legal and regulatory understanding (4 hours)
- International best practices for mining operations (4 hours)

#### Problems and solutions

Representatives of international organizations highlighted the following problems related to the mining sector in Armenia:<sup>86</sup>

- Lack of expertise
- Lack of access to equipment
- Lack of infrastructure
- Lack of laws and regulations
- Too many laws and regulations
- Poor enforcement of the law and management
- Corruption in Armenia and the direct involvement of state officials in mining business

The comments of representatives of international organizations about mining sector laws and regulations are the following:<sup>87</sup>

- Laws and regulations are adequate
- Laws and regulations are not too stringent / strict

International organizations mentioned a number of steps that need to be taken to ensure the introduction of modern standards in terms of environmental and social responsibility in the mining sector, such as the following:<sup>88</sup>

- All the standards should be made stricter
- Environmental impact regulations should be made stricter
- Pollution reporting requirement should be made stricter
- Safety regulations should be made stricter
- Licensing requirements should be made less strict
- There should be systemic regulation of the field

<sup>&</sup>lt;sup>83</sup> Q18

<sup>&</sup>lt;sup>84</sup> Q17 <sup>85</sup> Q19

<sup>&</sup>lt;sup>86</sup> Q22

<sup>&</sup>lt;sup>87</sup> Q23

<sup>&</sup>lt;sup>88</sup> Q24

In terms of future plans related to their work on mining related issues, international organizations noted the following:<sup>89</sup>

- Study of the connection between poverty and the environment (UNDP)
- Support the legal regulation of waste (WB)
- Cooperation with all interested organizations

#### 2.6 STAKEHOLDER INFLUENCE

Based on stakeholder responses to question 21 of the questionnaire, stakeholder groups are listed below in order from the most to least influential related to their level of influence on the mining sector:

- Government bodies
- Private sector
- Civil society
- International organizations
- Media

### ANNEX 1 – SURVEY QUESTIONNAIRE

# Stakeholder analysis within the framework of the project, "Promoting environmental and social accountability in the mining sector in the Caucasus"

American University of Armenia (AUA) Center for Responsible Mining, Caucasus Environmental NGO Network (CENN) and Bread for the World (Brot für die Welt) are implementing the project "Promoting environmental and social accountability in the mining sector in the Caucasus."

The project target region is Republic of Armenia, specifically Lori Marz. During the first stage of the project implementation one of the specific objectives is to conduct an analysis of and map the stakeholders of the mining sector in Armenia. Assessing the needs and capabilities of stakeholders will be useful for their future work and involvement in the mining sector.

Within the scope of the project the stakeholders are: national, regional, and local governmental bodies, scientific institutions, local NGOs, mining companies and international organizations.

Please fill the information be	low:		
Name of Organization:			
First and last name:			
Position at the organization:			
Contact information:			
Address:	Telephone:	E-mail:	

- 1. What kind of connection do you have with the mining sector and what kind of activities are you involved in concerning this sector?
- Regulation
- o Management
- Exploration
- Extraction
- Processing
- o Environmental and social assessment of extractive industry
- Land management/sales
- Other, please describe

#### 2. What kind of impact does this sector have on you / your organization?

- Negative (please describe):
- Positive (please describe):
- Both (please describe):

3. What is the geographical area of your organization's activities?

Region: Municipality: Village:

- 4. How long has your organization worked on issues related to the extractive industry?
  - o <6 months
  - o 6 months 1 year
  - $\circ$  1 5 years
  - $\circ$  5 years
  - >10 years
- 5. What kind of experience and knowledge do you or your organization have about mining related issues?
  - Monitoring process
  - Cultivation process
  - o Civil involvement in decision making
  - o Human rights
  - Environmental protection
  - Other, please describe:
- 6. How many people are working on mining related issues in your organization / community? (List by issue/activity or all together, please specify if they are divided by departments)
  - o **1**
  - o **2-10**
  - o **11–20**
  - $\circ$  20 50
  - o **51 100**
  - o **100 500**
  - > 500
- 7. Please, list your organization's target groups (*by issue or activity if relevant*) related to the mining sector in the geographical area your organization is working in this direction.
- Central government
- Local government
- o Mining companies
- Local population
- o NGOs
- o Local businesses
- o Farmers

- Tourists
- Other, please specify:

#### 8. Which organizations do you cooperate with and in which directions?

Organization	Direction

## 9. What are the problems faced by your organization in your work related to the mining sector?

#### 10. In your opinion, what could be the problem / solution (s)?

#### 11. What types of public relations methods does your organization utilize?

- National media communications
- Local media communications
- Local community meetings
- o None
- Other, please describe

#### 12. Does your organization have any kind of certification?

- Yes, please describe:
- o No

# 13. Does your organization have any kind of monitoring mechanism related to the mining sector?

- Yes, please describe:
- **No**
- **14. What kind of corporate social responsibility (CSR) does your organization have?** (Only for companies involved in minerals resource management sector)
- Engagements plans/community involvement
- Public reporting
- Environmental sustainability plans
- o Ethical marketing
- o Insurance
- o Social Events
- Others, please specify
- **15. What is your organization's responsibility related to the mining sector?** (For governmental and state institutions only)

- o Policy Making
- o Enforcement
- o Monitoring
- Land management related
- o Public accountability
- Other, please describe:

# 16. What technical resources does your organization use to address the issues/activities related to extractive industry?

- Human resources (Please, specify the specialties)
- Technical capacity (Please, specify)
- o Financial means
- o Media outreach
- Other, please describe:

# 17. What kind of technical support is needed for your organization to work more effectively on issues related to the mining sector?

- Staff capacity building
- o Equipment
- o Information/data
- o Responsibility/authority
- o Other, please describe:
- 18. What are your organization's needs for capacity building and increasing knowledge (trainings, consultations etc.) to work more effectively on mining related issues?
- Trainings
- Consultations
- Practical experience
- Other, please describe:
- 19. What would be the topics (related to the mining sector) and duration of the trainings that you would like to attend?

#	Topic of the training	Duration of the training
1.	Public outreach and awareness raising	
2.	Legal and regulatory understanding	
3.	International best practices for mining operations	
4.	Transparency	
5.	CSR	
6.	Land/mineral ownership	

#### 7 Other, please describe

- 20. What are the main sources your organization gets information from about the mining industry? (Please, rank them from 1 to 5, 1 most important, 5 least important)
- o Government
- Local government
- Publicly available company reports/websites
- o Commissioned studies/reports
- o Scientific papers
- NGO/INGO reports/websites
- National Media
- o Local media
- o International Media
- Other, please describe:
- 21. In your opinion, which organizations have the most influence on the issues related to the mining sector? (*Please, rank them from 1 to 5 accordance of the degree of their influence, 1 most influential , 5 least influential*)
- o Government bodies
- o Civil society
- o International organizations
- Private sector
- Local population
- o Media
- o Other, please describe

### 22. In your opinion, what are the problems in the country related to the mining sector?

- Lack of investment
- o Lack of minerals
- o Lack of expertise
- Lack of access to equipment
- o Lack of infrastructure
- Lack of laws and regulations
- Too many laws and regulations
- Poor legal enforcement
- Other, please describe

### 23. What remarks do you have with respect to the management of mining sector laws and regulations?

- They are adequate
- They are too stringent/strict, please describe
- They are not stringent/strict enough, please describe

- o Other, please describe
- 24. In your opinion, what steps should be taken to ensure introduction of modern standards in terms of environmental and social responsibility in the mining sector?

Reform	Change
Concerning environmental impact	Make more strict
assessment	Make Less strict
	Other
Concerning issuing of licenses	Make more strict
	Make Less strict
	Other
Concerning pollution reporting requirements	Make more strict
	Make Less strict
	Other
Concerning financial reporting requirements	Make more strict
	Make Less strict
	Other
Safety regulations for companies operating	Make more strict
in the sector	Make Less strict
	Other
Other:	Make more strict
	Make Less strict
	Other

25. What are your organization's future plans and strategy related to the mining sector? Which organizations do you cooperate with or are planning to cooperate with in the future? (*Please specify*)

### ANNEX 2. LIST OF STAKEHOLDERS CONTACTED

ANNEX 2. LIST OF STAREHOLDERS CONTACTED				
Names	Number of institutions	Number of institutions		
	contacted	responding -		
National governmental bodies	10	7		
1. Ministry of Agriculture	Did not respond			
2. Ministry of Economy	Did not respond			
<ol> <li>Ministry of Energy and Natural Resources</li> </ol>		Responded		
4. Ministry of Finance	Did not respond			
5. Ministry of Health		Responded		
6. Ministry of Labor and Social Affairs		Responded		
7. Ministry of Nature Protection		Responded		
8. Ministry of Territorial Administration and Emergency Situations		Responded		
9. Ministry of Transportation and Communication		Responded		
10. Ministry of Urban Development		Responded		
Regional governmental bodies	2	1		
11. Lori Marzpetaran		Responded		
12. Syunik Marzpetaran	Did not respond			
Local governmental bodies	5	3		
13. Agarak community		Did not respond		
14. Alaverdi community		Did not respond		
15. Shnogh Community		Responded		
16. Teghut Community		Responded		
17. Qajaran Community		Responded		
Scientific institutions	7	6		
18. National Academy of Sciences, Center for Ecological-Noosphere Studies (NAS)		Responded		
19. NAS Institute of Economics		Responded		
20. NAS Institute of Geology	Did not respond			
21. NAS Institute of Hydroecology and Ichthyology		Responded		
22. Yerevan State University Geography Department (YSU)		Responded		
23. YSU Geology Department		Responded		
24. Armenian State University of Economics (ASUE)		Responded		
Local NGOs	16	10		
25. Aarhus Center - Alaverdi		Responded		
26. Armenia Tree Project	Did not respond			
27. Pan-Armenian Ecological Front		Responded		
28. Association of Young		Responded		

Environmentalists and Lawyers		
29. Armenian Greens Union	Did not respond	
	•	
30. Armenian Society for the Protection of Birds	Did not respond	
31. Association for Sustainable Human Development		Responded
32. Center for Bird Lovers		Responded
33. Ecoera		Responded
34. EcoLur		Responded
35. Environmental Rights		Responded
36. For Ecological Safety and	Did not respond	
Developing Democracy		
37. Helsinki Citizens Assembly Vanadzor	Did not respond	
38. Kapan Aarhus Center		Responded
39. Save Teghut Civic Initiative		Responded
40. Vanadzor Aarhus Center	Did not respond	
Mining companies	7	2
41. Armenian Copper Programme CJSC		Responded
	Did not roopond	Responded
42. Dundee Precious Metals Kapan CJSC	Did not respond	
43. Geoteam CJSC		Responded
44. Geopromining Gold Ltd.	Did not respond	
45. Metal Prince Ltd.	Did not respond	
46. MultiGroup Ltd.	Did not respond	
47. Zangezur Copper-Molybdenum Combine CJSC	Did not respond	
International organizations	9	4
48. Asian Development Bank (ADB)	Did not respond	
49. European Bank for Reconstruction and Development (EBRD)	Did not respond	
50. International Financial Corporation (IFC)	Did not respond	
51. International Union for Conservation of Nature and Natural Resources (IUCN)		Responded
52. OSCE Office in Yerevan (Organization for Security and Cooperation in Europe)		Responded
53. United Nations Development Program (UNDP)		Responded
54. World Bank (WB)		Responded
55. World Health Organization (WHO)	Did not respond	
56. World Wildlife Fund (WWF) Total – Stakeholders sent questionnaire	Did not respond	