

D2.1 QUESTIONNAIRE ABOUT SOCIAL SUSTAINABILITY
AND ACCEPTANCE OF MINERAL EXPLORATION AND
MINING



Project no. 101058178

Project acronym: AGEMERA

Project title: Agile Exploration and Geo-Modelling for European Critical

Raw Materials

Call: HORIZON-CL4-2021-RESILIENCE-01

Start date of project: 01.08.2022

Duration: 36 months

Deliverable title: D2.1 Questionnaire about social sustainability and

acceptance of mineral exploration and mining

Due date of deliverable: 31.01.2023
Actual date of submission: 31.01.2023

Deliverable lead partner: University of Lapland

Dissemination level: Public

Author List

Name	Organization
Tulilehto, Mari	University of Lapland
Lempinen, Hanna	University of Lapland
Suopajärvi, Leena	University of Lapland
Kotavaara, Ossi	University of Oulu



Document History				
Version	Date	Note	Revised by	
01	12.12.2022	Draft of questionnaire in English	Tulilehto, Mari; Lempinen, Hanna	
02	20.12.2022	Full draft of questionnaire in Finnish	Tulilehto, Mari; Lempinen, Hanna	
03	13.1.2023	Full draft of questionnaire in English	Tulilehto, Mari; Lempinen, Hanna; Suopajärvi, Leena	
04	26.1.2023	Finalized questionnaire in English	Tulilehto, Mari; Lempinen Hanna; Suopajärvi Leena	
05	27.1.2023	Finalized questionnaire in Finnish	Tulilehto, Mari; Lempinen Hanna; Suopajärvi, Leena; Kotavaara, Ossi	



Disclaimer

The content of the publication herein is the sole responsibility of the publishers and does not necessarily represent the views expressed by the European Commission or its services.

While AGEMERA is funded by the European Union, views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the European Research Executive Agency (REA) can be held responsible for them.

While the information contained in the documents is believed to be accurate, the author(s) or any other participant in the AGEMERA consortium make no warranty of any kind with regard to this material including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

Neither the AGEMERA Consortium nor any of its members, their officers, employees, or agents shall be responsible or liable in negligence or otherwise howsoever in respect of any inaccuracy or omission herein.

Without derogating from the generality of the foregoing, neither the AGEMERA Consortium nor any of its members, their officers, employees, or agents shall be liable for any direct or indirect or consequential loss or damage caused by or arising from any information, advice, or inaccuracy or omission herein.

Copyright notice

© AGEMERA Consortium, 2022–2025. This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation, or both. Reproduction is authorized provided the source is acknowledged.





Executive summary

D2.1 Questionnaire about social sustainability and acceptance of mineral exploration and mining

AGEMERA project task 2.1 focuses on developing a questionnaire to address the local acceptance and sustainability of mineral exploration and mining (SLE/SLO) in case-study areas. The questionnaire includes a SoftGIS component that enables the collection of geographically anchored, detailed place-specific social and cultural data. This executive summary presents the key themes and features of the pilot version of the survey (project deliverable 2.1). The experience gained from piloting the survey will be utilized in further developing the questionnaire in different language versions for the launch and follow-up in project case-study areas during the project period.

The questionnaire presented in this executive summary is an unofficial translation of the pilot questionnaire that will be tested in the project case-study areas of Kuusamo, Posio, and Rovaniemi, Finland. This pilot version is **not intended** for use in other project case-study areas.

Thematically, the survey has a twofold focus: it includes items focusing on different aspects of social acceptance as well as items targeting different dimensions of social sustainability. While there is significant overlap between the notions of social acceptance/social license to operate and social sustainability, the analytical scope of social sustainability is both geographically and temporally broader. The double interest in acceptability and sustainability is what distinguishes the AGEMERA pilot survey from most existing research instruments on mining-sector activities.

The sections that explicitly focus on social acceptance (SLE/SLO) include various items addressing the respondents' acceptance of mineral exploration and mining in their own regions and in general as well as their views on: the benefits and harms arising from mineral exploration as well as on their just distribution; the impacts of mineral exploration on the social cohesion of their communities; the perceived opportunities to influence and participate in decision-making related to mineral activities; and their trust in various actors, entities, and institutions.

The parts of the survey that focus predominantly on social sustainability shift the focus from mineral exploration and mining itself to how the respondents see the relationship between planned and/or ongoing mineral sector activities and the current situation and future prospects of their communities. The items focus on the desired and less desired economic futures of the region and the desired and feared futures of their communities. Despite their broader focus, these items articulate the targeted interest



in how the role of the mineral sector is seen in the socioeconomic, sociocultural, and socioenvironmental fabric of the communities residing in the case-study areas.

The demographic variables collected comprise the respondents' year of birth, gender, education, socioeconomic status, home municipality, home postal code, and number of years lived in the municipality. The questionnaire also asks about the respondents' possible earlier interactions and experiences with mineral exploration companies. In addition to these variables that might mediate respondents' perceptions of mineral exploration and mining, the questionnaire also includes items that map the respondents' environmental attitudes and concerns as well as their views on contemporary environmental issues and climate change. These items offer valuable insight into how the respondents perceive the relationship between the supply and demand of metals and critical raw materials and the pressing environmental challenges of the Anthropocene.

The map-based items at the end of the questionnaire offer the respondents a chance to mark areas they view as suitable and unsuitable for mineral activities in great detail; in addition, the respondents are given a chance to further explain their selected map areas in writing. The areas of mineral potential are highlighted on the map; the potential areas with *critical* raw materials are marked in a different colour than are those with other metals. A separate item offers the respondents a chance to share how big a role the potential presence of critical raw materials had in their selection of areas on the map, shedding light on the respondents' acceptance of mineral exploration and mining specifically in the context of critical raw materials.

The research data will be gathered, processed, and used in accordance with the General Data Protection Regulation (GDPR) as well as strict ethical guidelines. Personal information will be anonymized so that individual respondents cannot be identified.

The survey will launch in Finland 3.2.2023.



Table of contents

Di	sclaimer	4
E	cecutive summary	6
Ta	able of contents	8
Q	uestionnaire	9
	Local people's views on mineral exploration in Kuusamo, Posio, and Rovaniemi	9
	Age, gender, and education	9
	Socioeconomic status and employment sector	9
	Mineral exploration in the home region	10
	Views on mineral exploration and mining	11
	Distribution of harms and benefits	12
	Economy and the future	12
	Threats and opportunities	14
	Impacts on the local community	14
	Participation and influence	15
	Environmental damage and environmental concerns	15
	Trust in different actors	16
	Relationship with the home region	17
	Map-based items	18
	Feedback and other matters	. 19



Questionnaire

Local people's views on mineral exploration in Kuusamo, Posio, and Rovaniemi

Age, gender, and education

- 1. Year of birth
- 2. Are you...
 - a) Female
 - b) Male
 - c) Other
 - d) Rather not say
- 3. What is your level of education? Choose the highest level of education you have.
 - a) Still in comprehensive school
 - b) Primary education
 - c) Upper-secondary education
 - d) Specialized vocational training or college-level training
 - e) Higher education
 - f) Other

Socioeconomic status and employment sector

- 4. Which of the following options best describes your current situation?
 - a) Employed
 - b) Unemployed
 - c) Student





- e) Stay-at-home mother or father, family carer
- f) In military or non-military national service
- g) Other

d) Retired

- 5. Choose the sector you currently work in or last worked in.
 - a) Public administration or national defence
 - b) Education and training
 - c) Health care and social services
 - d) Tourism
 - e) Construction
 - f) Logistics
 - g) Energy
 - h) Wellness
 - i) Creative
 - i) Extractive
 - k) Industry and manufacturing
 - 1) Commerce
 - m) Natural resources
 - n) Other
 - o) I don't have an occupational history.

Mineral exploration in the home region

- 6. Are you aware of the mineral exploration occurring in your home region?
 - a) Yes
 - b) No



- 7. Choose all the mineral exploration companies you have personally been in contact with.
 - a) Latitude 66 Cobalt Oy
 - b) Mawson Oy
 - c) Suhanko Arctic Platinum Oy
 - d) Nortec Minerals Oy
 - e) Oy Zawar Resources Finland Oy
 - f) Laakso Minerals Oy
 - g) Foriet Oy
 - h) I have been in contact with a company/companies but cannot remember which one/s.
 - i) I haven't been in contact with any company.
- 8. If you wish, you may say more about your experiences with mineral exploration companies.

Views on mineral exploration and mining

9. To what extent do you accept mineral exploration and mining?

Completely disagree, somewhat disagree, neither agree nor disagree, somewhat agree, completely agree, I don't know

- a) I generally approve of mineral exploration.
- b) I approve of mineral exploration in my home region.
- c) I generally approve of mining.
- d) I approve of mining in my home region.
- 10. I hope that exploration leads to the opening of a mine in my home region.

Nine-point Likert scale; completely disagree ... completely agree

11. How does mineral exploration affect your home region?





12. How does mineral exploration affect you and your family?

Distribution of harms and benefits

13. To what extent do you agree or disagree with the following statements?

Completely disagree, somewhat disagree, neither agree nor disagree, somewhat agree, completely agree, I don't know

- a) Mineral exploration benefits the local economy.
- b) Mineral exploration benefits villages and people living near the exploration sites.
- c) Mineral exploration benefits me personally.
- d) The costs and benefits of mineral exploration are evenly distributed in my home municipality.
- e) Mineral exploration positively affects the operating environment of other businesses.
- f) Mineral exploration has a negative effect on investments made by other businesses in the region.
- g) Mineral exploration does more harm than good to my home region.
- h) Mineral exploration primarily benefits people other than those of my home region.
- i) Large-scale mining projects are necessary to the vitality of my home region.
- j) Large-scale mining projects are a threat to small-scale local entrepreneurship.
- 14. How concerned are you about the effects mineral exploration has on other businesses in your home region?

Nine-point Likert scale; not at all concerned ... very concerned

Economy and the future

15. How do you see the future of your home region? Choose three economic sectors that in your opinion are the most important for the vitality of the area.





d) Tourism e) Construction f) Logistics g) Energy h) Wellness i) Creative j) Extractive k) Industry and manufacturing 1) Commerce m) Natural resources n) Other 16. Continuing to think about the future of your home region, choose three economic sectors that in your opinion are the least important for the vitality of the area. a) Education and research b) Health care and social services c) National defense d) Tourism e) Construction f) Logistics g) Energy h) Wellness i) Creative j) Extractive

a) Education and research

c) National defense

b) Health care and social services



- k) Industry and manufacturing
- I) Commerce
- m) Natural resources
- n) Other
- 17. If you wish, you may elaborate and say more about your views concerning your home region's future economy.

Threats and opportunities

- 18. When you think about the year 2050, what do you consider the biggest threats to your home region?
- 19. What is best that can happen to your home region by 2050?

Impacts on the local community

20. To what extent do you agree or disagree with the following statements concerning mineral exploration's social impacts?

Completely disagree, somewhat disagree, neither agree nor disagree, somewhat agree, completely agree, I don't know

- a) Mineral exploration has a positive effect on local atmosphere.
- b) Mineral exploration can be openly discussed in the locality.
- c) Mineral exploration divides opinions and thus negatively affects the community spirit in the locality.
- d) Mineral exploration causes uncertainty about the future of the region.
- e) Mineral exploration improves the opportunities of future generations to live in the area.
- 21. How concerned are you about the effect mineral exploration has on the community spirit in your home region?

Nine-point Likert scale; not at all concerned ... very concerned





Participation and influence

22. To what extent do you agree or disagree with the following statements concerning local people's participation and influence?

Completely disagree, somewhat disagree, neither agree nor disagree, somewhat agree, completely agree, I don't know

- a) Local people's opinions don't have much of an effect on the decision-making concerning the extractive sector.
- b) Mineral exploration companies are open and transparent about their operations.
- c) Mineral exploration companies don't listen to local people's concerns and wishes.
- d) Mineral exploration companies respect local people.
- e) Authorities take local people's concerns seriously.
- f) Legislation guarantees local people sufficient opportunities to influence matters concerning mining.
- 23. Who do you think should be compensated for the harms caused by mineral exploration? What should that compensation be like?

Environmental damage and environmental concerns

24. To what extent do you agree or disagree with the following statements?

Completely disagree, somewhat disagree, neither agree nor disagree, somewhat agree, completely agree, I don't know

- a) Science and technology will solve environmental problems without people having to change their lifestyle much.
- b) The severity of environmental problems is often exaggerated.
- c) I am often confused about what is good and what is bad for the environment.
- d) Human activities should be adjusted to nature's carrying capacity.
- e) Nature is resilient and thus able to recover even from heavy stress caused by human activities.



- f) It is necessary to open new mines to combat climate change.
- g) Material consumption should be restricted by political means.
- h) I am willing to pay more for products that are made using responsibly produced minerals.
- i) The EU should strive to be as self-sufficient as possible when it comes to the production of minerals.
- j) Extractive sector activities on conservation areas are acceptable
- 25. How concerned are you about environmental matters generally?

Nine-point Likert scale; not at all concerned ... very concerned

26. How concerned are you about mineral exploration's effects on the environment in your home region?

Nine-point Likert scale; not at all concerned ... very concerned

27. To what extent do the environmental problems associated with mining affect your views on mineral exploration?

Nine-point Likert scale; not at all ... very much

Trust in different actors

28. When it comes to matters concerning the extractive sector, how much do you trust the following?

Very much, relatively much, neither much nor little, relatively little, very little, I don't know

- a) European Union
- b) National political decision-making
- c) Local political decision-making
- d) Supervisory authorities
- e) Scientific community
- f) Environmental organizations





- g) Reindeer Herders' Association
- h) Mineral exploration companies
- i) Mining companies
- j) Traditional media
- k) Social media
- Close friends/relatives
- 29. Where do you get reliable information about extractive sector projects in your home region?

Relationship with the home region

- 30. Your primary municipality of residence is
 - a) Kuusamo
 - b) Posio
 - c) Rovaniemi
 - d) Other
- 31. What is your home postal code?
- 32. What is your relationship with the area? For example, are you from that area, do you work there, or do you own land or a cottage in the region?
- 33. How many years have you lived in the region?
- 34. How long do you think you will be living in the region?
 - a) Fewer than 5 years
 - b) 5-10 years
 - c) 10-20 years





- d) Over 20 years
- e) I don't know
- 35. What matters have affected or are affecting your choice to live in your current home region?
- 36. If you are planning to move, what would make you change your mind and stay in the area where you currently live?

Map-based items

Mineral potential areas have been pre-marked on the map. Areas with critical raw material potential are marked in yellow and those with other mineral potential are marked in turquoise. Critical raw materials are materials that are strategically and economically important but whose supply is associated with high risk.

- 37. Mark the areas that in your opinion are suitable for extractive sector use.
- 38. Mark the areas that in your opinion should be left untouched.
- 39. To what extent did the location of critical minerals affect the areas you marked on the map?

Nine-point Likert scale; not at all ... very much



Feedback and other matters

- 40. How did you find the survey?
 - a) Through a local newspaper
 - b) Through social media
 - c) Through a friend/relative
- 41. If you wish, you may comment on the survey or mention a matter that was not raised in the survey.