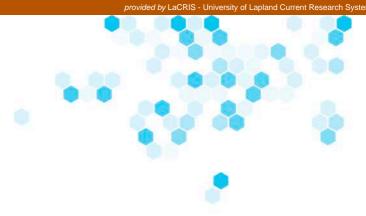


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Stakeholder engagement in exploration and mining course

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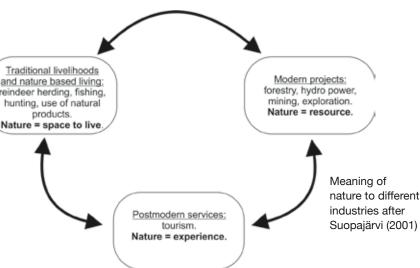
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or mining and exploration companies, it is increasingly important to gain the trust and approval from the stakeholders, including local communities. The formal license to operate from the authorities is no longer enough. Social License to Operate (SLO) continues to be the top risk for miners, based on the survey done by Ernst and Young (2019) for the mining and metals executives. Especially in mineral exploration projects, the exploration geologists are the key persons in creating positive image of the respective company to the local stakeholders, as they are often the first persons on the ground. The first encounter and interaction with the local communities in the very early stages of exploration is important, as it will set the ground for trust of the locals towards the company and the project (e.g., Eerola, 2013). Moffat and Zhang (2014) stated that positive contact between mining company personnel and community member will promote the gaining of trust and hence increase the likelihood that mining developments are accepted by a community. Therefore, educating social aspects and the sociological context of the mining cycle to mining related professionals during their university studies are important.



Dr. Leena Suopajärvi





1. The EXpIORE project

The EXplORE is an EIT RawMaterial Academy funded project started in 2018 and it is coordinated by the Luleå University of Technology. The project has four partner universities along with the industry partners:





Eero Yrjö-Koskinen from the Finnish Network of Sustainable Mining.

The EXplORE project aims to create a MSc exchange program in exploration involving University of Oulu, Luleå University of Technology, AGH University of Science and Technology and TU Bergakademie Freiberg. In addition, the development of short courses in various fields related to exploration together with the industry partners is one of the key goals of the EXplORE. For more information about the project, visit http://www.explore.agh.edu.pl/



2. Stakeholder engagement in exploration and mining -course

As a part of the EIT RawMaterials Academy-funded EXplORE-project, Oulu Mining School organized an advanced level course "Stakeholder engagement in exploration and mining" in collaboration with the University of Lapland, Mawson Resources Ltd. and Finnish Network for Sustainable Mining. The course was organized between 31th of October and 8th of November, 2019. Main lecturer for the course was Dr. Leena Suopajärvi (Univ. Lapland) who holds an adjunct professorship in the Oulu Mining School. Janne Kinnunen from Mawson Resources Ltd. presented their case study from the Au-Co prospect in northern Finland. In addition, we had the pleasure to get the secretary general, Eero Yrjö-Koskinen from the Finnish Network of Sustainable Mining to talk about their network and mission. Course gained interest not only in the academic side, but also in the industry. Altogether 21 students from the University of Oulu and two students from TU Bergakademie Freiberg registered into the course. From the industry side, participants from Boliden



Janne Kinnunen from Mawson Resources Ltd.

AB and Pöyry Finland attended the course partly by physical presence and partly via video connection. The course comprised altogether 18 h of lectures, which were held during two weeks.

The course started in 31st of October with the presentation by Dr. Jukka-Pekka Ranta who introduced the EXplORE project and explained the context why the social studies are important to geologists and other mining related professionals. Dr. Leena Suopajärvi continued the lecture by discussing the social scientific approach to natural resource management. The lecture started with deep discussions about the importance of the nature and how the society and nature are intertwined. During the day, the issue of "How the nature became a social issue" was discussed. This included a historical overview of the natural conservation movement in Finland from the late 1960's to the rise of the climate warming concerns during the 1980's. Natural resource management, it's meaning and disputes about the nature in the Finnish Lapland were the issues discussed during the last part of the lectures of the first day. Traditional livelihoods have to adapt and make compromises in today's society as they are faced to cope with the postmodern tourism and modern projects, including for example forestry, mining and mineral exploration activities. For each of these different operators, the term nature has a different meaning ranging from "space to live" for the traditional livelihoods to experience and resource for tourism and modern projects, respectively.

The subject of the 2nd day was social impact assessment (SIA) in mining industry in Finland. The lecture included explanations of what is SIA and what the impacts (positive or negative) mean in this context. Case study examples were given from the Sodankylä and Kittilä areas. Identification of relevant stakeholders is an important part of the social impact assessment. Stakeholders are persons or organizations with an interest or direct/indirect relationship to the operation and those who may be affected or have an affect on the project. Along with SIA, also social impact management plan (SIMP) is important. In SIMP plans to manage impacts in co-operation with different stakeholders are made. Case study of SIMP process on the Sodankylä municipality was given.

The 3rd lecture was given by Eero Yrjö-Koskinen (Fig. 3) from the Finnish Network of Sustainable Mining. He discussed sustainable raw materials, low-carbon society and sustainable resource extraction in the Arctic. Our society today is heavily dependent on the use of fossil fuels and the goals to reduce carbon emissions during the next decades create challenges in the raw material supply. The energy transition towards more low-carbon sources affects both individuals and businesses, which may create oppositions, as for example the "yellow vest" movement in France. The goal of the Finnish Network of Sustainable Mining is to be a forum for the mining/ exploration sector and it's key stakeholders. The network aims to create principles of sustainable development standard that can be used by mining industry planning to operate or already operating in Finland.

In the 4th lecture Dr. Suopajärvi introduced the concepts of social license to operate and social license to explore. The division of these terms is based on the difference between mining operations and mineral exploration. The gaining of the social license is case sensitive and cannot be transferred from one area to another. It is also under constant evaluation by different stakeholders and therefore needs continuous effort from the mining or exploration companies. The gaining of trust is one of the key parameters in local acceptance. Janne Kinnunen, senior geologist from Mawson Resources presented their Au-Co project (Rompas-Rajapalot) in northern Finland and discussed their stakeholder engagement strategies. The Rompas-Rajapalot Au-Co is one example of the successful stakeholder engagement process for organizing "open door" days and using local workers and businesses as much as possible in their operations. With the honest, open, responsible approach towards stakeholders, the company has gained trust within the local communities of their operation. In the 5th lecture Dr. Suopajärvi presented case example of mining conflicts in Lapland. The global drivers, risks and reasons behind the mining conflicts were also discussed.

3. Feedback from the course

After the course, feedback was collected from the participating students and industry representatives. The results were positive, participants acknowledged the need for this type of education within the mining related studies and felt that they will likely think these types of issues differently in the future. The only negative issue which was raised was the inability to participate into the group discussions via video participation with the current setup. This issue will be addressed in the future.

"Good course that gave a lot of new perspectives"

"Great lecturers, good interaction with students during lectures. Provided different aspect to geological thinking towards mining"

"Overall a very good and relevant course."

4. Outlook for the future

This was the first time the Stakeholder engagement in exploration and mining -course was organized in the Oulu Mining School. The EIT RawMaterial Academy -funded EXplORE –project enabled the funding of the course. The need of this type of "soft-skills" education within the more technical curriculum of geosciences and mining related education is evident. In order to develop more sustainable and responsible mining in the future, the integration of this type of course into the curriculum of the Oulu Mining School is planned. ▲

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