



BUILDING STRONGER COMMUNITY IN PARALLEL WITH THE EXPLORATION PROGRAMME – CASE STUDY: ESG MODEL DEVELOPMENT ON ROGOZNA GOLD PROJECT

Preliminary Communication
DOI: 10.5937/RGD240019P

Petrović Rastko

Taš Grupa, Belgrade, Serbia
rastko@tashgroup.rs

Abstract: *Zlatna Reka Resources (ZRR) took over the Rogozna Gold Project (RGP), formerly known as Karavansalija Mining Complex (KMC), with an intention to a make breakthrough in exploration, while in parallel to timely develop an Environmental-Social-Governance (ESG) programme. As for the environmental aspect, an environmental database was developed and baseline studies were initiated. As for the social aspect, a population assessment was conducted resulted in the stakeholder mapping. As for the governance, several local community projects were initiated. This paper summarizes conducted ESG activities during 2021 and 2022 on exploration license 2385 - Shanac.*

Key words: ROGOZNA GOLD PROJECT, ESG

INTRODUCTION

ZRR obtained a new exploration license (No 2385 - Shanac) on Rogozna Mountain (Novi Pazar, SW Serbia) in August 2020. Since then, ZRR has undertaken a series of exploration and evaluation programs to better understand the nature of the deposits culminating in the preparation of the Technical reporting on Mineral Resources. In parallel, another process has been developed. The ratio has been to get better understanding of the broad, inclusive and continuous process between ZRR and those individuals or groups affected by the project, that has been ongoing since the (new) beginning, with variable dynamics and intensity. Basically, an environmental social governance (ESG) programme has been developed.

It is necessary to highlight that ZRR is not a PR agency, but a junior exploration (geological) company. The fact it was decided to develop an ESG programme, at that stage of the project development, as an inhouse activity, was simple. Being a geologist means spending a lot of time in the field and consequently being in constant

communication with the local community. Therefore, development of proper relations with the local community was not a “task” of an individual or a department of ZRR, but rather a direction of the company in whole how to operate properly on a daily level, from season to season, during the project development, growing every day in terms of better understanding of prospects, while at the same time building a community where all stakeholders are sure that their position is in the right place.

A geologist spends a lot of time in the field, understands natural processes (soil development, water cycle, slope processes etc.), but also understands (better than anyone) exploration processes. That is why a geologist is the one to best understand eventual impact of activities on the environment and the local community. Also, given the fact the geologist is in constant communication with the local community, that is why he (she) is the one to disseminate the necessary environmental information.

Finally, needs of the local community cannot be understood from the office, but through the every-day communication on the ground. That is why a geologist is the one to understand them, make an initiative and specify what kind of support would have the greatest impact on the local community. Following that ratio, ZRR was able to develop proper ESG model.

METHODOLOGY

Methodologies for 3 directions of ZRR engagement through the considered period are described below, separately.

Environment. This direction of the ESG includes issues related to environmental responsibility, where an environmental program was supposed to be a representation of the ZRR's commitment and ability to minimize its environmental impact. This considered first and foremost development of proper environmental database. Further, it considered initiation of baseline environmental studies.

Social. This direction of the ESG was concerned with how ZRR was able to manage its relationships with stakeholders of this project. Therefore, initial task was to assess the population, further assess the land use and their share of land within the Shanac license. Finally, the task was to determine main stakeholder groups, define their concerns and identify an optimal communication mode.

Governance. This direction of the ESG included the extent to which ZRR management integrated sustainability considerations into corporate governance processes. This in particular and at the current stage of the project development referred to development projects for local community on one hand and communication on the other.

RESULTS

RGP is a large and long-lasting project, indicating that the database was supposed to be already well developed. However, in terms of the environmental data, the focus was apparently on some other aspects of the project. Therefore, the task was to develop an environmental database containing proprietary data organized in proprietary schema. This considered phase work, where initial phase was thorough analysis of the available

data, leading to the fieldwork with an intention to develop an inventory of hydrogeological occurrences, install weather station and setup monitoring system that included surface and groundwater quality monitoring.

Next logical phase was to initiate baseline studies, either by engaging representative consulting institutions or as an inhouse activity, using available data and team capacities. The ratio for selecting the scope of works was first and foremost to define the pre-existing environmental and social settings. However, the scope was also directed so it could meet the requirements of mandatory documents that would be requested along the permitting path (Table 1).

Table 1, Baseline environmental studies

	Document	Institution	Year
1	Preliminary Geomorphological Study	Inhouse	2021
2	Preliminary Hydrological Study		
3	Biodiversity Study		
4	Soil Characteristics		
5	Report on Soil Quality		
6	Geochemistry of Topsoil	IBISS, University of Belgrade (UB)	2022
7	Report on Air Quality	Faculty of Agriculture, UB	
8	Report on Hydrometric Measurements	Zaštita Beograd	
9	Surface Water and Groundwater Quality	Faculty of Mining and Geology, UB	2023
10	ESG Report	Inhouse	

Population trends of the RGP area are reviewed through available census data ordered from the Statistical Office of the Republic of Serbia (SOR), for the period 1961-2011. Given the fact RGP is located in the bordering parts of Novi Pazar, on the alpine terrain, where 90% of the area is at the elevation of 1100-1300 m asl, these 6 small communities share the fortune of all remote communities in Serbia, i.e., a constant desertification trend (Table 2).

The land of RGP is almost by half (49.41%) covered with forests of class from 4 to 8. Agricultural land covers 46.71% of the area and is represented with arable land, meadows, pastures, and orchards of various class. Remaining land types are significantly less common (Table 3). In terms of ownership, more than a half of the RGP land is privately owned (56.61%), while the rest is mostly owned by public enterprises (42.64%). The share of the state ownership is less than 1% (Table 4).

Table 2, Population of local communities along the area of the RGP, period 1961-2011

	Population					
	1961	1971	1981	1991	2002	2011
Bare	168	164	126	71	36	39
Brđani	525	524	503	379	195	137
Kašalj	269	182	117	56	35	19
Lopužnje	238	245	197	106	70	36
Rajetiće	442	372	206	105	63	30
Trnava	789	758	771	350	208	189

Table 3, RGP land use

	Land Use	Area	
		[km ²]	[%]
1	Agricultural land	11.0230	46.71
2	Forest	11.6596	49.41
3	Water body	0.0077	0.03
4	Building area, outside the urban fabric	0.7281	3.09
5	Other, non-specified land	0.1793	0.76
Σ		23.5976	100.00

Table 4, RGP land ownership

	Land Ownership	Area	
		[km ²]	[%]
1	Private	13.3559	56.61
2	Public	10.0607	42.64
3	State	0.1780	0.75
Σ		23.5976	100.00

Overlapping the distribution of land use and ownership (Fig. 1), it is clear that forests are owned by public enterprise JP Srbijašume, while agricultural land is mostly privately owned. Taking into consideration the class of land and forests, it indicates that the community is poor in terms of natural resources. Also, it indicates major entrepreneur activity: deforestation (Markus-Johansson, et al., 2010).

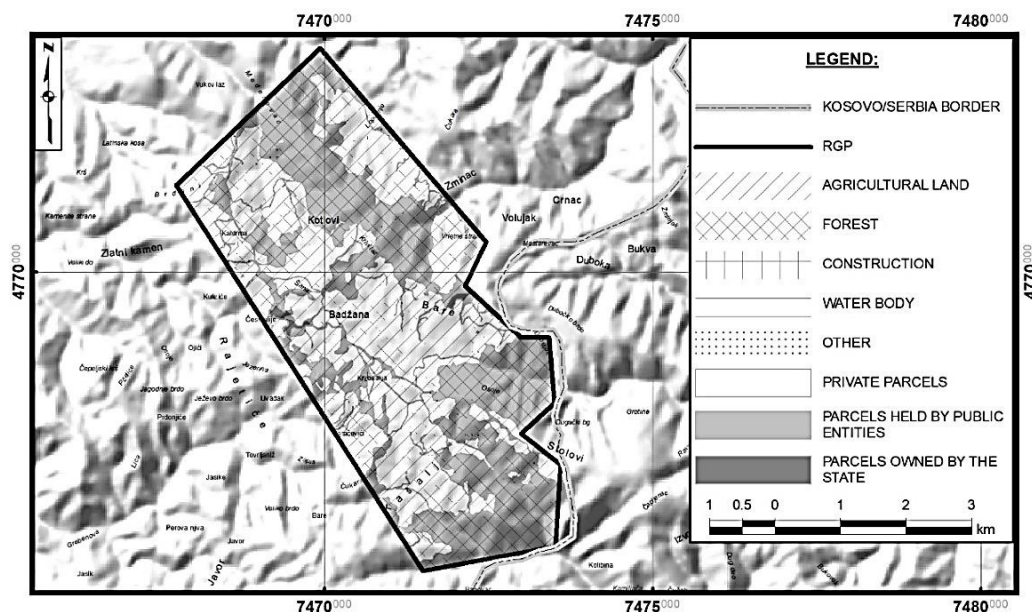


Figure 1, RGP land use and ownership

Understanding population trends and land use and ownership was a solid precondition to understand the mentality of local dwellers, of course, concurrently appreciating previous efforts and experiences, as well as spending a lot of time onsite, in direct communication. What turned out to be a common mistake in decision-making of great number of foreign companies investing in Serbia was misunderstanding of the mentality of local population, which is specific from region to region, especially taking into consideration religious and cultural diversity, but also uneven socio-economic development. Therefore, identifying stakeholders was not a default classification but a serious process to which a lot of attention and effort has been invested (Table 5).

Table 5, RGP stakeholders

	Stakeholders	Concerns	Communication
1	Employees	Occupational health and safety Equal rights and development	Regular Announcements/notifications Internal trainings Social events
2	Residents	Access to basic Access to the safe environment Access to the right enviro information Water resources management Community development	Daily, during exploration campaigns Seasonal, for community projects Seasonal, for dissemination of enviro info Sporadically and as needed
3	Landowners	Maintaining clean/safe environment Maintaining/adding value	Sporadically and as needed
4	City administration	Compliance with the law Maintaining clean/safe environment Driving economic growth Boosting employment	Periodical When needed
5	Entrepreneurs	Project development Community development	Daily, during exploration campaigns When needed
6	Media	Business ethics and transparency Maintaining clean/safe environment	Periodical When needed
7	Police	Compliance with the law Maintaining clean/safe environment Traffic safety	Regular Periodical When needed

Described efforts lead to the initiation of local community projects (Table 6). This should get special attention as it was all initiated with limited budget.

Table 6, RGP community projects

	Community project	Description	Impact
1	Renovation of the water supplying system "Vrelo"	Built for supplying of the police, primary school, community health center and several households in local communities Kašalj and Rajetiće Not operating for at least 10 years	Resolving long-lasting problem Revealing community's lack of unity in harsh times
2	Water quality for drinking – local dwellers	Soil quality analyses indicated anomalous values of heavy metals, bringing concerns that such high values may occur in groundwater Sampling campaign included all RGP permanent households along with school and public fountain/faucet	Providing basic sanitary conditions for households Bringing a whole new attention to the local community
3	Renovation of the primary school in Trnava	Renovation of the school kitchen and dining room, but also supporting the larger campaign the city is conducting on investing in education	Strengthening relationship with local authorities in Novi Pazar
4	Roof renovation of the primary school in Rajetiće	A single pupil from RGP goes to this school. Renovation considered assistance in manpower and good will	Setting up an example
5	Drilling for water in Trnava	Drilling a well for a household, bankrupted during Covid	Sending the message that every household matters
6	Agriculture support	Training for IPARD funds	Not recognized Community needs to be a bit better developed
7	Local sports clubs support	Supporting local football academy KMF „Raška“	Indispensable contribution Local employee's children playing for the academy
8	Groceries for socially endangered households	Periodically aiding local households	Sending the message that every household matters

DISCUSSION

Baseline surveys are supposed to be undertaken prior to the commencement of any new project development (Wilson et al, 2017), disregarding whether it is a geological prospect or any other project that will make a long-term impact on the environment and a local community. The essence is to define the pre-existing environmental and social settings, so eventual impact can be evaluated, mitigation measures developed, and alternative options assessed (Ahmand & Sammy, 1985). However, according to the local legislation, there are no guidelines for the structure of a Baseline Environmental Assessment Study (BEA). Still, for the Environmental Impact Assessment (EIA) such requirements do exist and there is a mandatory structure. EIA is a greater document, and,

within its structure, it contains 2 chapters (Chapter 2 – Description of the area of interest, Chapter 5 – Baseline) which can be linked to the BEA and given structure was used for the environmental database development and initiation of baseline studies. As for social impact, such documents do not exist in local legislation.

Methodology used for the ESG development was combinations of best practices and needs for local permitting path. Therefore, results can only subjectively be evaluated.

CONCLUSION

RGP represents a development project of potentially exceptional regional importance. At described stage of the project development, it was decided to develop an ESG programme, as an inhouse activity, with own manpower (geologists and technicians), where results showed that the decision was rational.

Environmental results showed that sufficient data was gathered so it could be used for better understanding of baseline conditions, but also for better understanding of eventual impact of ZRR activities on the environment and the local community. The database, as well as directed studies, were developed/prepared so they could be used as chapters of future BEA and EIA, following the mandatory structure of documents.

Social results showed that great effort was made to understand the mentality of local dwellers and avoid common mistake foreign companies make coming to Serbia. Consequently, main stakeholder groups were identified, along with their concerns and optimal communication mode.

Governance results showed that one junior exploration company was capable of developing an ESG model, after investing a lot of time in understanding the mentality of local community, their specifics and their needs. When invested completely, a company cannot fail in development of strong relationship with the community. In the past decade, “earning social license” became a common platitude in exploration industry. However, on this project, it was earned with hard work and strong commitment.

LITERATURE

- [1] Ahmand, Y.J. and Sammy, G.K., Guidelines to environmental impact assessment in developing countries, London, Hodder and Stroughton, 1985.
- [2] Markus-Johansson, M. et al, Illegal Logging in South Eastern Europe - Regional Report, Szentendre, Hungary, Regional Environment Center, 2010.
- [3] Wilson, J., et al., System-based Assessments- Improving the Confidence in the EIA Process. 95, s.l.: Environments, Vol. 4, 2017, ISSN: 2076-3298.