

## Mineral exploration potency in Southeast Sulawesi Indonesia: An opportunity for research collaboration

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**Abstract:** The high mineral exploration in Indonesia has become pay attention to foreign investors. Especially, in Southeast Sulawesi Province has attended many foreign companies (China, South Korea, and America) to explore and exploit the minerals. There are 16 foreign companies that have obtained a permit from the government based on a decree mining license 2010's. Total of mining area exploration in Southeast Sulawesi achieve 328,291.37 Ha or 8.61% of the total land area. The metal mineral deposit content has abundant and consists of Ferronickel (iron, nickel, cobalt, chrome, manganese, molybdenum, titan), precious metals (gold, silver, platinum), base metals (zinc, copper, lead, lead, mercury), and rare metals (bauxite and monazite). One of the minerals abundant in Southeast Sulawesi is laterite as a source of nickel.

Mining activity and nickel industry in Pomalaa area have affected the environment. It is expected

that the implementation of good mining practice, industrial ecology, and social responsibility (CSR) will balance the mining and industrial activities with the sustainability of environment. The problems caused by the mining activity and nickel industry are the changes of environmental quality. This work aims to analyze the environmental conditions of the community as well as creating a balanced model of the sustainable mining area and nickel industry. The balanced model of the mining area and sustainable nickel industry can be realized by implementing the concept of good mining practice, industrial ecology, and CSR in a balanced manner. The products have been exporting to abroad for high purification of Ti, Fe, Ni, etc.

**Keywords:** mineral, purification, exploration, Southeast Sulawesi, Indonesia