



Principles of adoption of the successful environmental practices used in developed countries into mining industry in developing countries.

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The successful implementation of the environmental practices in the mining industry is of a paramount importance, as it not only prevents both local and trans-border pollution but also guarantees clean and healthy environment for the people regardless of their place of habitation. It is especially important to encourage the progress of the environmental practices implementation in developing countries because such countries have resource-oriented economy based on exploitation of nonrenewable resources. Poor environmental practices in developing countries will lead to local environmental crises that could eventually spill into surrounding countries including the most economically advanced.

This abstract is a summary of a two-year research project attempted (1) to determine deficiencies of the mining sector ecological practices in developing countries and (2) to suggest substitute practices from developed countries that could be adapted to the developing countries reality.

The following research methods were used:

1. The method of the system analysis, where the system is an interaction of the sets of environmental practices with the global mining sector;
2. The comparative method of inquiry, where the comparison was made between environmental protection practices as implemented in the US (developed country) and the developing countries such as RF, Mongolia mining sectors;
3. Quantitative data analysis, where data was collected from "The collection of statistic data", Russian Geographic Society Annual reports, the US EPA open reports, and the USGS Reports;

The following results were obtained:

Identified the systemic crisis of the ecological environmental policies and practices in the mining sector in developing countries based on the exploitation of nonrenewable resources, absence of the ecological interest by the mining companies that lack mechanisms of environmental and public health protection, the lack of insurance policy, the lack of risk assistance, and in the presence of the audit and monitoring that do not address the local conditions of the mining operations.

Based on the above the following concepts were thought of to improve the environmental conditions in mining sector:

1. Was developed the Regional Environmental Management principle based on the local conditions such as physiographic region, local population, and socioeconomic conditions of the area;
2. Devised were criteria for the risk assessment for developing countries. Where the fundamental principals were public health, both near and far from the operation, environmental and biodiversity impact, waste management, long- and short- term rehabilitation plans, compliance with international standards and norms.
3. Developed was the mechanism of the economic motivation to make mining operations "environmentally friendly" that includes defrayal of expenses from both direct and indirect damages.
4. Identified were spheres of possible cooperation between mining companies, government organizations, and the NGOs. These include development of international standards for Good Neighbor Agreement, exchange of environmental information, exchange of successful environmental, health, and safety practices between mining operations from developed and developing countries.

The study showed the dire necessity for the mining industry that operates in developing countries to adopt the successful environmental practices used in developed countries.

To achieve this goal the Regional Environmental Management principle, the risk assessment criteria, the mechanism of the economic motivation and the principles for international cooperation can play an extremely important role.