

Soil Remediation Degraded by Mining

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Georgia has 5000 years of gold mining history, what was the reason the country has become the oldest gold mining country in the human history, but it is the question, how deep history do Georgia has in the mining reclamation.

The project refers to the developing the reclamation method for the largest gold and copper mining company "RMG Gold and Copper" in the Bolnisi municipality.

Currently, there are four active open-pits in the RMG Gold and RMG Copper mine company licensed territory, their whole area is 1200 ha. The company is planning to open five pits in the near future. It should be noted that the operation life of any quarry is not permanent and the resources are exhausted after some time. RMG Gold and Copper has been functioning since 1975 (before called Madneuli), so, we can say that it is time to begin implementation of the reclamation projects. It is obvious that open-pits threaten the environment, by the wind dust, which often contains heavy metals, are moving over a long distances and causing contamination.

Reclamation is the process of leading degraded soils, changed territories and polluted water, as a result of mining processes, to such a condition that it can be used for domestic purposes in order to prevent the inclusion of animals and humans.

The project refers to the developing the reclamation method for the largest gold and copper mining company "RMG Gold and Copper" in the Bolnisi municipality. Within the framework of the project, an experiment will be arranged where the effectiveness of the reclamation methods will be examined.

The remediation method involves increase life in lifeless soil and bring it back to the environment to be used for the domestic purposes, also selection of plants that have phytoremediation properties and rejoice in strict conditions. Prior to the introduction of this method, it is necessary to conduct an experiment to determine the efficacy of this method.