

**Impact of Rock Quarrying on Environment and the Health of
Nearby Residents in Ralapanawa GN Division in Anuradhapura
District, Sri Lanka.**

D. R. P. Sendanayake and R.U.K. Piyadasa

Department of Geography, University of Colombo

Quarries are important for the economy of developing countries including Sri Lanka. For the rapid development in the country there should be a developed road system, irrigation and building construction. In the recent past main development projects were implemented in our country. They are the construction of expressways, buildings, harbors etc. This rapid development has led to an increased demand for rock as a construction material. There are many rock quarries island wide. Quarrying products are increasingly demanded for industrial, domestic, agricultural and other purposes so as to satisfy the needs of the rapidly growing population. Quarry operations generally involve removal of over burden, drilling, blasting and crushing of rock materials. This major impact has been accompanied by loss of habitat, noise, dust, vibrations, chemical spills, erosion and sedimentation of the quarry site. Therefore, many environmental issues are raised. The aim of this study is to identify the environmental effects of rock quarrying on the health of the nearby residents in the Ralapanawa GN division in Anuradhapura district. The objective of the study is therefore to assess the environmental effects of rock quarrying and its effects on the health status of the community. Both primary and secondary data were used for the study and Microsoft Excel and SPSS was employed for the data analysis. Primary data were obtained through a questionnaire survey and field observations in the study area. Secondary data were collected from different government agencies. The main finding of the study was the impacts of the mining activity on the environment which included the impact on buildings, farmlands, crops, change in of land use and surface water. High concentrations of dust on the plants result in poor plant performance, yield and health problem of the nearby residents as nasal infection. Because construction activities such as drilling, blasting and removal of vegetation, a deep and large hole has been created in that rock quarrying area. The negative effects of quarrying operations on human health and the environment were identified.

Keywords: Environmental hazards, Quarry impact, Opencast mining, Health effects