Psychosocial and health impacts of bauxite mining among Felda Bukit Goh communities in Kuantan, Malaysia

ABSTRACT

Introduction: Communities who live near bauxite mining areas experienced social, psychosocial and health impact from the environmental activities. Some of the problems identified were the nuisance by noise emanating from bauxite lorries, traffic congestions, road damage with red mud, deforestation, increase of erosion, air pollution such as dust which resulted in bad vision during hot dry days, dusty homes and properties, respiratory and skin problems, soil and water pollutions. Objectives: The objectives were to study the social, psychosocial and health impacts of bauxite activities on the Felda Bukit Goh and its neighboring communities. Methodology: One hundred and sixty two residents within the bauxite mining areas were selected randomly as respondents. Face to face interview using questionnaires were used to collect data. Result: A majority of respondents reported medium scores of psychosocial impact (43.2%).. The environmental problems were mainly due to the mining activities which increased air pollution (87.7%) dustier house (87.7%) and frequent cleaning (79.6%), road damage (69.8%), agricultural problem (53.1%) and loss of calmness (46.35). The health symptoms (27.2%), was mainly due to stress. Stress (35.8%), cough with phlegm (27.8%) and itchiness (19.1%) were some of the health symptoms reported There was significant correlation between the psychosocial impacts (stress) due to the environmental factors with health complaints. Psychosocially, the stress experienced by respondents were significantly associated with noise, dusty and dirty environment, contaminated and disrupted water supply, damaged roads, congested traffic and frequent cleaning of properties. The stress finally impaired their physical system (increased respiratory and dermal symptoms reported (p<0.001), reduced energy (p=0.019) and reduced appetite (p=0.020), sleep disturbance (p=0.023) as well as musculoskeletal system disorder (p=0.047), were reported. Conclusion: The combined effects of the environmental disturbance due to mining activities have culminated into health problems among the surrounding communities. These impacts on these communities would be worst if no appropriate mitigating measures provided to protect the environment and human well-being.

Keyword: Health symptoms; Psychosocial impacts; Environmental problems