Environmental Management for Rehabilitation of Post Mining in the Solomon Islands

(ソロモン諸島における廃鉱山のリハビリテーションのための環境管理)

Hokkaido University, Graduate School of Environmental Science,

Division of Environmental Science Development, Course in Global Environmental Management,

Edward Jonathan Danitofea

A large scale mining is a newly emerging industry in the Solomon Island. In 2013 the mineral commodity exported especially gold and silver accounted for 20% of the total exports (Central Bank of Solomon Islands, 2013). Despite its significance in the Solomon Islands economy, it also contributes to environmental issues in the country which cannot be overlooked. Therefore, it is of utmost importance that the relevant researches on these environmental issues must be undertaken to determine appropriate methods to minimise these environment impacts.

This aim of the study is to develop a guideline of the post mining rehabilitation (PMR) which is relevant to the Solomon Island. In this study three cases are investigated. The first two cases are Gold Ridge Mining limited (GRML) and Asia Pacific Investment Development (APID) which are at the developed stage. The third case is a mining at the planning stage which is owned by Sumitomo Metal Mining Solomon ltd (SMM). The study involved reviewing of environment impact statement (EIS) of the companies, questionnaire field survey and interview. For the field survey, three different sets of the questionnaire were prepared for the targeting communities near the mining, participants who have a consciousness on the related legislations to PMR and technical participants who know the PMR well.

By reviewing of the three cases of the EIS, it has seen that the level of study and process undertaken by each company for the PMR was varied significantly. This has resulted in variation of participants' attitude on PMR developments conducted by each study cases. From the results of the survey conducted at the communities, it has seen that 49 responders of all participants living near the mining at developed stage have stated the PMR development is poorly done. On the other hand, 58 responders who made of the majority of the participants living near mining at planning stage have stated that the PMR development conducted by the mining at planning stage is good whilst only 29 participants stated the PMR development of the mining at planning stage is poor. By calculating the Chi – square test, it has seen that there is a very strong evidence of the relationship between the participants from the location where mining is at developed and planning stage with their attitude on the PMR development. Based on these findings, it is recommended that a national guideline for the PMR has to be produced to ensure there is consistency in the PMR.