Project Update: November 2009

We have completed the vegetation analysis to identify the floristic composition on limestone hills based on the level of disturbance. Apparently, there was no significant difference in the diversity of flora on both sites. However, the species on Ciampea site reflect more abundant pioneer species than those in Nyungcung. A scientific paper is being prepared to provide complete description of floristic composition of limestone hills in Bogor. It will be the first survey of limestone flora dynamics after anthropogenic activities and is expected to contribute a lot as there is very scant information about limestone specific flora and its conservation.

Upon informal interviews with locals and workers at the quarries, we thought that the mining activities would not be able to be stopped. The local government itself did not pay attention to the environmental impact of ongoing mining activities. The limestone hill in Nyungcung was almost gone as the size of operation was bigger than happened at Ciampea hill.

Conservation of species in situ was hardly an option as the remaining field was bare rock that was very poor. Thus, ex situ conservation could be chosen as alternative. In addition, rehabilitation would be compulsory effort to reduce negative impacts that could happen such as erosion and landslides.

As proposed, we also tested a plant that is potential for the rehabilitation. We chose *Ficus fistulosa* as a test species. This species is common to limestone hill (based on our vegetation study); even other *Ficus* (Moraceae) that are frequently found on the site might also be potentially useful. Its ability to hold and grip rock and to maintain water storage is high. An experiment in the lab/ growth chamber was developed. Competition treatment versus grass and water availability treatment were assigned. We are at the final stage of collecting data to support our argument for species selection for limestone rehabilitation.