



THE ACCEPTABILITY OF USING BIOREMEDIATION IN MOGPOG, MARINDUQUE, A MINED-OUT COMMUNITY IN THE PHILIPPINES

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ABSTRACT – Heavy metal contamination of soil and water were found in Barangay Capayang in Mogpog, Marinduque, Philippines after mining operations closed in 1982. Bioremediation activities to remove or neutralize hazardous substances were undertaken by UPLB scientists and the local officials since 2006. The survey of 259 households showed that bioremediation is acceptable as a solution to remove the toxic waste in water for domestic use (Z test =0.00 to 0.10). The study has also shown that the attendance to bioremediation lecture has positively changed the attitude of the attendees. The attitude scores for the 19 out of the 21 statements was significantly higher for the attendees as compared to the non-attendees. Moreover, the median acceptability scores on half of the 18 acceptability statements was also significantly higher among the lecture attendees. The focus group participants reiterate that bioremediation can lead to good health and can restore their agricultural livelihood. In addition, they have resolved not to allow future mining activities in their community. Continuous partnership among various stakeholders is recommended to sustain the bioremediation activities in the mined-out community.

Keywords: bioremediation, heavy metal contamination, mined-out community, social attitude and acceptability



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