

## Oral presentation

### Valuing biodiversity conservation in target communities in PNG: communities' economic values for terrestrial biodiversity in the Adelberts Range, Madang Province

Billy Manoka<sup>a</sup>

<sup>a</sup>Head of Economics Department, University of Papua New Guinea, PO Box 293, UNIVERSITY NCD, Papua New Guinea

The focus of this International Cooperative Biodiversity Group (ICBG)<sup>1</sup> study is the economic valuation of biodiversity conservation of the Adelberts Range forest. The Adelberts range is a Nature Conservancy target conservation area located in the north coast area, of Madang province. The specific objectives are (1) to identify cash income activities, and (2) estimate the economic value of biodiversity from the community's perspective.

The Adelberts range site is rich in terrestrial biodiversity but has been greatly threatened by development pressures such as logging, mining and oil palm development. Efforts to protect the area need to be sustained and even expanded, but would locals be willing to support the protection of this rich terrestrial biodiversity site?

The willingness-to-pay (WTP) of locals towards biodiversity conservation of the Adelberts Range Forest (ARF) was assessed in Urumarav village. The personal interviews (PI) data collection method was employed in a dichotomous choice contingent valuation method (CVM) involving 15 households. All the survey forms were found complete and used in the analysis.

One hundred percent of the respondents were willing to pay towards a Ward Development trust fund for biodiversity conservation of the Adelberts Range forest and forest in Madang province in general. The bid amounts per year ranged from K2 to K10 for the conservation of biodiversity in the Adelberts range, with a mean of K5.23 and K1 to K30 for the conservation of biodiversity in Madang province in general, with a mean of K7.40 (see Figure 1). The main motives for positive WTP were: direct use value/motive, bequest value/motive (concern for future generations), existence value/motive (on the rights of terrestrial plants and animals to exist and on one's pleasure knowing that the Adelberts Range forest exist), and altruistic value/motive (concerned about the people who depend upon the goods and services provided by Adelberts range forests). Only three households were uncertain about their WTP for the conservation of biodiversity in the Adelberts Range and the following reasons were given: "I am not certain but would help conservation in the Adelberts", "I am not certain because money is scarce to me", "I am not certain whether the trust fund activities will benefit me or the future generation" (see Figure 2). Only five households were uncertain about their WTP for the conservation of biodiversity in Madang Province in general and the following reasons were given: "Financial constraint", "I do not believe the idea", "I do not understand the trust fund concept and I do not have the money", "I am not certain whether the trust fund activities will benefit the province", "I think the Madang Province will not support the idea" (see Figure 3). In other words, the main reasons for being uncertain were: limited income, the lack of effort for conservation by the provincial government, the lack of understanding about the trust fund even though it was made clear to them that it was merely a hypothetical situation, and mistrust of the institutions handling the conservation funds.

Presenting Author: Billy Manoka, Billy.Manoka@upng.ac.pg