This research was conducted in order to identify biophysic’s potential and estimate direct use value of Karst Ecosystem of Cibodas Mountain. The research would provide information which served as consideration in the management of the area. The observation was held in December 2010 to May 2011 at Cibodas Mountain, Bogor, West Java. The data was collected through interview, field survey, and literature study. Market price method, indirect substitution value, travel cost method, contingency valuation method, and residual driven method was used to count the potential value of the ecosystem.

Biological element of Cibodas Mountain was comprised of plants and animals. There were 254 plants species of 84 family (Soemarno et al. 2006), 37 bird species from 21 family, 5 mammals species from 5 family, and 20 species of herpetofauna from 12 family. Plants were used for firewood, fodder, and vegetables, while the animal was used for sale. Plant species used were Calliandra calothyrsus and Cecropia umbellata for firewood, Leucaena glauca for vegetable, and the grass for fodder. The species of animal used for sale was Cynopterus sp. Physical element included caves, cliffs, water source, and limestone. There were 15 caves found during the research and these caves were used for caving exploration (sport), bird nest source, and guano source. Cibodas Mountain had two location of cliffs, one at the west side and the other at the east side of the mountain. However only the west side was used for sport (climbing) area with 12 climbing routes. Water resource was found at the north side of Cibodas Mountain and it was flowing in to Cisadane river. Water was used for daily needs such as bathing, washing, etc. Cibodas Mountain was a karst ecosystem rich with limestone, and it was being used by the people as a mining location.

The direct use value of Karst Ecosystem of Cibodas Mountain was about Rp 1,098,516,600 per year, which consist of the value of firewood, fodder, bat,