Economic Valuation of Medicinal Plants in Jagoi Area, Bau, Malaysia

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Abstract

The use of indigenous plants based on traditional knowledge is widely known among the Bidayuh community in Sarawak. Following a study carried out among the Bidayuh community of Jagoi area, a total of 117 species of plants with economic and cultural significance, particularly plants with medicinal uses, were documented and collected. Of these, 60 species were recorded for medicinal purposes while 57 species of plants were for other uses. The plant family with the most species used were Euphorbiaceae and Moraceae (8 species each), Fabaceae (7 species), Arecaceae, Asteraceae and Dipterocarpaceae (5 species each), followed by Piperaceae, Poaceae and Zingiberaceae (4 species each). Information was obtained by interviews with medicine men and women, recognized as having knowledge of their culture. Information collected included the species of plants used, their specific use, and the method of preparation or applications. In this study, the use of medicinal herbs collected from the forest resources by local communities is an example of non-marketed and marketed direct use. During this study, market visits were made in all local markets in Bau District during weekends. Interviews were conducted with people selling plants and herbal products. The price of the plants and herbal products were noted. For non-marketable resources, the costs of the plants were estimated based on the availability cost and time to get the plants. How easy or difficult it was to obtain the plants and the number of hours spent to get them was also considered. A use and valuation survey on these plant species also revealed that the average value per household was estimated at RM 2,961 per year. With the assumption that 10% of the total population living around Gunung Jagoi depends on the forest area, the total estimated value of plants for the Bidayuh Jagoi community was RM 2,087,505 per year. The results of this study have provided a baseline on the economic value of the resources from the forest and will contribute towards a better management of the area as a community heritage site. The involvement, knowledge and reliability of the information obtained from the active Traditional Medicine Practices (TMPs) helped greatly in producing good estimated potential values of the useful plants as well as the net revenue of the TMPs in the area selected for the study.

Keywords: ecosystem service; Bidayuh; Community based natural resource management; traditional medicinal plants; Jagoi

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