The value of the Okavango delta: A natural resource accounting approach

by

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ABSTRACT

Economic valuation of the Okavango Delta can support decision making in a complex socio-economic environment in which economic development depends on a deep understanding of the value of biodiversity. The use of a natural resource accounting framework in determining the value of goods and services is crucial. The total economic value of the Okavango Delta was estimated by using primary (household valuation) and secondary data. A natural resource accounting framework was used. The components of the total economic value were the composition of wild herbivores and vegetation, and the functional values, which comprised direct use values of wild herbivores, river reed, thatching grass, wild fruits, fuelwood and palm leaves, indirect consumptive values of honey production, carbon sequestration, livestock grazing, milk production, non-consumptive use of tourism, and existence and bequest values. The values of the composition and function are expressed in per/ha values. The value of the composition of wild herbivores was estimated at P1 444 992 400 (US$ 294 850 699.2) or US$ 27.4/ha, while the functional value was estimated at P185 913 117.4 (US$ 37 527 840.96 or US$ 619.77/ha. Of the estimated direct use values of vegetation, river reed had the highest value of US$ 29.0/ha, while the highest value among indirect use values was that of milk production (US$ 8.5/ha). These values of selected resources reflect the contribution of the value of biodiversity of the Okavango Delta to the overall economy of the country and represent initial estimates of costs to society if these resources are lost. The estimated values can be used to raise awareness among decision makers of the economic benefits of conserving the Okavango Delta. Overall, the findings showed that the various components of the total economic value of the Okavango Delta were comparable to other wetlands in the region.
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