



University of Zabol

Graduate School

Faculty of Agriculture

Department of Agricultural Economic

The Thesis Submitted for the Degree of Master of Science.

(In the Field of Agriculture Economic)

The Economic Evaluation of the Birak's protected forest area in Sistan and Baluchestan

Supervisors:

Dr. A. Keikha

Dr. M. Ahmadpour Borazjani

Advisor:

Dr. S. Ziaee

By:

R. Sheybak

2022

Abstract

The economic valuation of environmental resources is a step in the direction of controlling and preventing the destruction of places and environmental species. Among environmental resources, forest areas play a very important role in increasing human well-being. On the other hand, forest areas provide products such as fodder and medicinal plants and services such as carbon sequestration, oxygen production, soil and water protection. On the other hand, recreational uses such as walking and mountain climbing are used and they have existential and heritage values. In past research, many methods have been used for the economic evaluation of these products and services. Conditional valuation and calculation of people's willingness to pay for the recreational and protection benefits of forest parks is one of these methods. In the current research, the economic value of recreational services as well as the conservation value and the use value of the Birk forest area have been calculated. The necessary information for valuing recreational services was obtained by completing a two-dimensional double-choice questionnaire online, and the necessary information for consumption values was obtained by surveying and completing the questionnaire. Probit model has been used to measure people's willingness to pay. The results of this research showed that about 68% of the respondents are willing to pay the entrance fee. The variables of income, education level and gender had a positive effect on the acceptance of the proposed amount. Also, the estimated willingness to pay per person for recreational and protective use was found to be 4385 and 8850 thousand Tomans, respectively. Calculations showed that the total value of entertainment in the region is 1397 million rials. On the other hand, the annual value of major productions was 192,410 thousand Tomans, the annual value of environmental functions was 93109/5 million Rials, and the capital value of these services and products was 1662670 million Rials. In total, the total economic value of Birak protected area was calculated as 1663861 million rials.

Keywords: contingent valuation, Double- B ound Dichotomous Choic, Direct value, indirect value, Probit model