Applicating an Ordered Probit Model for Analysis of the influencing Factors on Tourist's Willingness to Pay

Case Study: Abyaneh Village; Esfahan, Iran

Mousavi S.N.*

M.A. of Economic Development and Planning, Islamic Azad University, Khomeini-Shahr Branch

Rajabi M.

Assistant Prof., Islamic Azad University, Khomeini-Shahr Branch

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Extended Abstract

Introduction

Nowadays because of various economic problems in rural areas it is necessary to pay attention to new economic activities such as tourism, in order to overcome economic challenges as well as achieving sustainable development goals. Estimating tourist's willingness to pay and analyzing the affecting factors on it, along with the economical and social demands of people could demands at people be useful in predicting needs, removing scarcities and expanding rural tourism. Abyaneh village acts as one of the central functions of Natanz city. Abyaneh is located in Esfahan province, and because of its natural and historical attractions, is in the focal point of attention. The aims of this research are as follows: estimating on of the tourist's willingness to pay (WTP) of Abyaneh village for visiting and recreation, using a contingent valuation method (CVM) and analysis of influencing factors.

Methodology

5

^{*} Responsible Author: nesa.mousavi@ymail.com

- Winter 2013

Contingent valuation method (CVM) is used to estimate economic values for a wide variety of goods and services, by directly asking the survey respondents how much they would be willing to pay for it. CVM has been widely used to estimate the economic benefits of environmental goods. CVM is a direct stated preference (SP) method by which the respondents are asked about their willingness to pay (WTP) for the benefits received, or their willingness to accept (WTA) compensation for their loss. Theoretically, the CVM is based on welfare economics and assumes that the stated WTP amounts are related to respondents' underlying preferences. Furthermore, CVM is the only technique of valuation that can capture non-use values. Applicating of the CVM to environmental goods and services is well suited, because the respondents accept the idea of public provision of these goods and services. The contingent valuation method has used for the mentioned reasons. This study is a survey research, and its methodology is based on consumer behavior. For estimating the tourists' willingness to pay of partial equilibrium analysis and survey have been used. More accurately with constant prices of other goods and services to the tourists' willingness to pay for the visit and the use of recreational Abyaneh village will be estimated. The data of this study are cross-sectional and the required data are collected from 250 completed questionnaires and confronting interview with tourists. The content validity of the questionnaire has been determined through consultation with economic and tourism experts. The reliability of the questionnaires is proved by using Cronbach's alpha method in a pretest of 0.714 for each questionnaire. The sample size in this study is based on Mitchell and Carson formula (1989), and the samples have been selected randomly.

Results

In estimating the willingness to pay of the variables gender, age, household size, distance, education, income, rural attraction, entrance fee and indicator variable starting point bias (group questionnaire) have been used. Considering the individuals willingness to pay coming from bid vectors of zero, 1-4, 4-8, 8-12, 12-16 and 16-20 thousand Rials, Ordered Probit model has been applied for analysis of influencing factors. When the dependent variables are ordinal, the metric used to code the variables is substantively meaningful. So that zero value for those who were not willing to pay for visit and recreation of ABYANEH village and values of 1 to 5 were selected for the range of 1-4, 4-8, 8-12, 12-16 and 16-20 Thousand, respectively. Ordered Probit model is estimated using maximum likelihood method.

6

- Winter 2013

Conclusion

It is noteworthy that 24.4% of visitors stated that they were not willing to pay any money to visit and recreation of Abyaneh village and 25.6%, 18.8%, 12%, 12.4% and 6.8% of the visitors have selected the range of 1-4, 4-8, 8-12, 12-16 and 16-20 thousand Rials, respectively. Based on findings, 75.6% of tourists were willing to pay for visit and recreation of Abyaneh village, and the mean value are Rials 5847 and 21926/25 per person and household, respectively. In this study, socioeconomic factors affecting tourists' willingness to pay have been, analyzed too. The results indicated that among the influencing factors the level of entrance fee and household income were significant at 1% level, education at 5% level, and distance and rural attraction are significant at 10% level. Therefore, by increasing the incomes of households, and enhancement of higher education, willingness to pay increases. But by increasing the entrance fee, willingness to pay will be reduced. Also, people that choose rural attractions as their main reason of travel were willing to pay more. The measurement of visitors' willingness to pay for rural tourism experiences in Abyaneh village showed encouraging results and most of the visitor's report that they are willing to pay substantially.

Keywords: Abyaneh village, Tourist, Contingent valuation method, Willingness to pay, Ordered Probit model.

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7