

THE EXISTENCE VALUE OF TABON CAVES COMPLEX IN MUNICIPALITY OF QUEZON, PALAWAN PROVINCE, PHILIPPINES

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ABSTRACT

This study sought to find out how much are people willing to pay for the preservation of the Tabon Caves Complex (TCC) in Quezon, Palawan. Contingent Valuation Method was used to estimate the non-market values of TCC. This study further tested the significant relationship between the respondents' Willingness-To-Pay, level of importance of the TCC, and the socio-demographic profile of the respondents. The study employed stratified random sampling in selecting the samples. Statistical tests were used to determine the relationships between Willingness-To-Pay, attitudinal variables and the respondents' socio-demographic profile. In terms of attitude, the respondents regard the preservation of the TCC as very important to extremely important. Results showed that the respondents highly regard the studied resource and perceived that they have a moral obligation to preserve the TCC for the future generations to come. The findings indicated further that Willingness-To-Pay is a function of the respondents' income and occupation while their age, gender, educational attainment and civil status imposed insignificant relationship with their Willingness-To-Pay. The respondents' socio-demographic profile in terms of age, gender, educational attainment, and income had significant relationships with the perceived level of importance in terms of aesthetics, archaeological, cultural, and bequest values towards the preservation of the TCC.

Keywords: Tabon Caves Complex, Contingent Valuation, Willingness-to-pay

1. INTRODUCTION

Heritage sites in the Philippines contribute to the economic development of the country by meeting the needs and interests of poor communities and the whole society. Interest of visitors and researchers to the Tabon Caves Complex (TCC) in southern Palawan as a heritage site can be better sustained if the caves are carefully preserved and protected. While non-market valuation techniques have been applied in thousands of studies on environmental goods worldwide over the past 40 years, the interest in applying these techniques to heritage goods is quite recent (Seenprachawong 2010).

The legbone dubbed as the "Tabon Man", refers to the fossilized human remains discovered in the island of Palawan in the Philippines on May 28, 1962 by Dr. Robert B. Fox, an American anthropologist, along his team from the National Museum of the Philippines. These are believed to be the earliest human remains found in the Philippines. Numerous pre-historic jars were also

discovered in TCC, including the 2,000-year-old *Manunggul* jar. Because of the historic and cultural significance of this relic, it is now featured in the Philippines' 1,000-peso bill.

The TCC can be found in the Lipuun Point Reservation, a 138-hectare (ha) museum site reservation that lies along the western coastline of Southern Palawan. It lies northwest of the Poblacion of the municipality of Quezon, and is bound on its north, east and west parts by bodies of water. It is located on a limestone promontory which is visible from any direction for many kilometers and honeycombed with at least 200 caves and rock shelters. The place used to be an island, but is now an isthmus connected to mainland Palawan through an extensive mangrove forest (CLUP 2009).

People derive many types of benefits from the preservation of historic sites like TCC. Visiting an area may provide "use benefits" in the form of educational and historical gains. On the other hand, those people who are not able to personally visit the area can also derive non-use benefits. In both cases, it is expected that the economic value is primarily derived from human use of the resource now and in the future. The existence value of a heritage site to society is the sum of the individual's willingness to pay for the existence of the TCC. At present, TCC and all of the Lipuun Point Reservation is managed and supervised by the National Museum.

Now TCC is considered as window of the past, it is here were the human legbone, believed to be that of the earliest Filipino, was found. Thus, the general objective of the study is to determine the existence value of the TCC as viewed by the respondents to maintain the existence of the caves. It also takes into account respondents' perceived level of importance of the existence of TCC in terms of the caves' contribution to aesthetic and landscape, history, culture, archaeology and the significant relationship between the respondents' socio-demographic profile and the existence value of TCC and level of perceived importance of its existence.

The findings of this study may become a useful information to the National Museum Administrator and the LGU of Quezon, Palawan as they may craft policies which will be appropriate for the caves complex, based on the information derived from the study and other researchers as far as the existence value of TCC is concerned.

The existence value of TCC was obtained using the Contingent Valuation Method (CVM). This is the most widely used method to determine the value of non-market goods or services of an environmental resource. This method in valuation involves directly asking people, through a survey, how much they are willing to pay for a specific environmental service. The existence value of TCC is not yet recorded in any literature, hence, this study was undertaken.

1.1 Existence Value of Tabon Caves Complex

Existence value reflects benefits from simply knowing that a certain good or service exists. Some people derive satisfaction from the fact that TCC exists. Many people are willing to pay for protection of its existence, even those located in remote, hard to access areas. Although some may never travel to these places, or see the caves they nonetheless value the knowledge that such caves exist. The mere existence of TCC affords satisfaction to a person in the form of deriving pride of its heritage.

1.2 Conceptual Framework

The researcher considered variables that could have a possible effect on the individuals' WTP for the existence of TCC. These variables are the civil status, gender, occupation and ethnicity. The level of importance of TCC to the respondents was also explored. Hence, the researcher developed the research paradigm as illustrated hereunder.

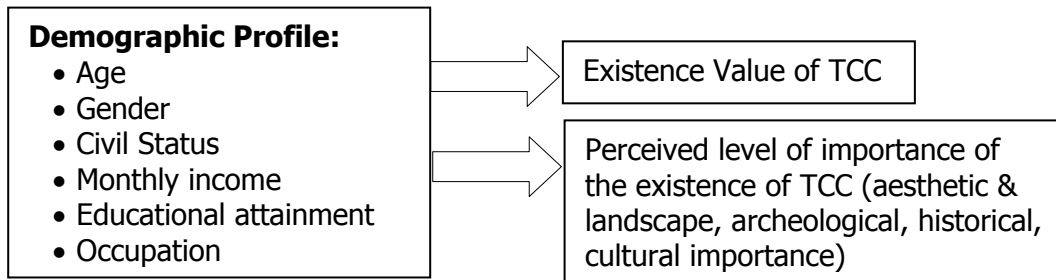


Figure 1. Research Paradigm

2. METHODOLOGY

This study used the descriptive design to determine the socio-demographic profile of the respondents in relation to their willingness to pay and their perceived level of importance for the existence of TCC.

2.1 Contingent Valuation Method

The contingent valuation method (CVM) was used to estimate the existence value of TCC. This method has great flexibility, allowing valuation of a wider variety of non-market goods and services than is possible with any other non-market valuation technique. It can be used to estimate both use and non-use values, and it is the most widely used method for estimating non-use values (Seenprachawong 2010). Contingent valuation method involves directly asking people, in a survey, how much they would be willing to pay for specific environmental service. In some cases, people are asked for the amount of compensation they would be willing to accept to give up specific environmental service. It is called "contingent" valuation because people are asked to state their willingness to pay, contingent on a specific hypothetical scenario and description of the environmental service. In the application of CVM, a researcher-designed survey questionnaire was used. Respondents were asked to express a hypothetical WTP for the existence value of the historic TCC.

The good being considered in this study is the existence value of TCC which was fully described to the respondents during the interview in order for them to fully understand what they are "buying". It is vital that the respondent knows what level of the existence value or good was being undertaken.

In order to know the willingness to pay of the respondents, the researcher formulated a survey questionnaire that revealed the amount in Philippine peso the people are willing to pay to maintain the existence of TCC. The questionnaire was designed to reflect significant information

affecting the value given by the respondents. The description of the good being provided, the vehicle of payment as well as the reasons for not willing to pay were included in the questionnaire.

2.2 Site Description

The municipality of Quezon in the province of Palawan is located in the southwest portion of the mainland Palawan and lies about 117° 45' to 118° 15' 30" longitude and 8° 45' 4" to 9° 30' 15" latitude.

The extent of the municipality starts from Berong on the north bounding itself with Aborlan, spreading out to the municipality of Narra on the east, spreading to the South China Sea on the west and down to the municipality of Jose P. Rizal on the south.

2.3 Population and Sample Size

The research study involved the people residing within the political boundaries of the municipality of Quezon, province of Palawan, Philippines and the visitors of TCC. There are 10,405 households in the municipality based from the 2007 NSO Census of Population and Housing Report. A total of 404 respondents including the visitors of TCC were randomly selected. The target number of respondents per *barangay* was proportionately taken using the ratio of the target population from the current population in terms of household.

Visitors of the TCC during the data gathering period were also interviewed. Only 5 out of the 13 visitors have completely answered the questionnaire. Thus, a total of 404 respondents were interviewed in the entire data gathering period.

2.4 Instrumentation

A researcher-designed survey questionnaire was used to determine the level of importance of the respondents in Quezon, Palawan to the existence of TCC. They were likewise asked the amount they are willing to pay for the preservation of the existence of TCC.

2.5 Statistical Treatment

The data gathered were analyzed and interpreted using frequency count, mean, percentage and rank. Pearson's coefficient of correlation and the Analysis of Variance were used to determine relationships of variables particularly between WTP and socio-demographic profile and between the perceived level of importance of the respondents of the TCC and their socio-demographic profile.

Frequency count, rank, and percentages were used to describe the respondents' socio-demographic profile, the reasons for their visit and preservation of TCC, the reasons for the willingness to pay for the preservation of Tabon Caves Complex, the amount they are willing to pay and their reasons for being not willing to pay.

3. RESULT AND DISCUSSIONS

3.1 Socio-demographic characteristics

Of the 404 respondents, 220 (54.46%) were female. The youngest was recorded at 12 years old and the oldest at 84 years old. Majority were married (71.29%). The largest proportion of the respondents (40.35%) reached high school level while 25.49% reached college level of education. Those that never had formal education accounted to 3.96%.

In terms of sources of income, 33.66% rely on farming, while those that derive from other sources of income were 17.82%. Students or those that were yet to earn an income were recorded at 15.59%. The respondents mean income was PhP 3,843.51. There were 49.5% that earned PhP 3,000.00 and below, 1% earned between 15,001 to 18,000 pesos and, 2.22% earned more than 18,000.00 pesos in a month. Ilonggos ranked highest among the ethnic groups followed by the Cebuanos or Visayan speaking groups and the Tagalogs.

3.2 Perceived Level of Importance

Two hundred seventy six or 68.32% of the respondents have visited the caves complex while 128 or 31.68% have not. Among those who had visited, 31.88%, said they visit the TCC because of its natural beauty and beautiful landscape. This also implies their appreciation of the natural beauty of the current state of the caves complex. The people of Quezon also valued the archeological discoveries at the caves. The caves complex was once one of the sites for cultural activities of the early people was rated highly by the respondents. The result further showed that the respondents also displayed awareness that the earliest living Filipino was traced to have inhabited the caves complex. The respondents rated "extremely important" and very important on the statement about the bequest value of TCC. This expresses the concern of the respondents in the municipality of Quezon, Palawan the significance of passing the TCC to the future generations to come. And finally, the respondents also stated that the Caves Complex may offer other significant land use options in the future.

3.3 Existence Value of TCC

The mean annual WTP of the respondents in the preservation of TCC is PhP 95.41. This would transform to close to one million pesos of funds annually that would help the National Museum administration preserve the resource.

The study reflected that there is a proportion of the respondents who are not willing to pay anything to preserve the TCC. Some of these responses may be considered as protests against some aspect of the survey instrument such as rejecting the contingent scenario, hence, are not a reflection of the individuals' true preferences. Others however explicitly indicated true zero values because of budget constraints and/or lack of interest in cultural or historical issues.

Results from the contingent valuation study showed that two systems of regulating the provision of public good can be considered: the government, local or national, and a non-government organization, management board. Under the first system, the good is provided by public institutions like the National Museum. All of the residents of Quezon, Palawan are included in the

consumption of the public good TCC provides and the total cost for the preservation of the resource is covered through donations.

3.4 Significant Relationship Between WTP, Socio-demographic Profile and Respondents' Perceived Level of Importance to TCC

Test for significant relationship using multiple regression, Pearson's coefficient correlation and the Analysis of Variance showed that there is a significant relationship between the respondents' monthly income and WTP. The level of importance of the respondents in the preservation of TCC's existence as to aesthetics, archaeological, cultural and bequest values have significant relationship to age, civil status, educational attainment and monthly income.

This study revealed that the people of Quezon in Palawan have a positive attitude towards the preservation of the current state of TCC. This implies the concern of the people of Quezon to pass to their future generations the public good TCC has to offer. Result also showed that the public is willing to pay to preserve the TCC's current state.

4. CONCLUSION

Based from the findings of the study, the following conclusions are drawn by the researchers:

1. There is a significant relationship between the respondents' willingness-to-pay and the respondents' income and occupation. Results also showed that there is no significant relationship between the respondents' willingness-to-pay for the preservation of Tabon Caves Complex and their demographic profile in terms of age, gender, civil status, educational attainment, and ethnicity.
2. There is a significant relationship between the perceived level importance of the respondents with respect to aesthetics, archaeological, cultural and bequest values and the age, civil status, educational attainment and monthly income. Results further showed that there are no significant relationships between the respondents' perceived level of importance of TCC in terms of aesthetics, archaeology, cultural and bequest values and their gender, occupation and ethnicity.
3. There is no significant relationship between respondents' perceived level of importance of TCC in terms of historical and option values and their socio-demographic profile.
4. The existence value of Tabon Caves Complex as perceived by the people of Quezon, Palawan is PhP 992,741.05. Generally, this study found that the people in the municipality of Quezon, Palawan have positive attitude towards the preservation of the existence of the historic Tabon Caves Complex.

5. RECOMMENDATIONS

Based on the findings and conclusion of this study, the researchers recommend that further valuation studies be conducted to fully assess the value of the resource since this present study is only a small part of the total economic valuation of TCC. These, together with the results of this study, can serve as a comprehensive reference for decision makers intending to undertake development projects in the TCC. It is also recommended that the decision makers assess the

possibility of the LGU handling the collection of entrance fees of tourists or guests visiting the TCC since majority of the respondents have mentioned their preference for this scheme.

Furthermore, it is recommended that fund-raising activities be organized by the Municipal Tourism Council of the Municipality of Quezon, Palawan so that they can generate additional funds for the preservation of TCC. For instance, the Council may sell postcards, T-shirts, and other souvenir items to tourists. Cultural shows or classical dance shows may also be organized in the municipality for minimal fee. Cultural festivities may also be held all year round to create cultural awareness and appreciation of the existence of TCC for the young generation. By raising the youth's awareness regarding the importance and appreciation of TCC, they will continue to preserve the historic site.

The Municipality of Quezon which has jurisdiction over the TCC also needs to take a more active role in preserving the site by conducting regular assessments of the TCC, allocate budgets to TCC based on this inventory, and involve its local communities in conserving the reserve. The local communities can be very helpful in information and dissemination campaigns highlighting the existence of TCC and the importance of its preservation. Another main player that can play a crucial role in the preservation of TCC is the private sector. Through public-private partnerships, preservation of the resource as well as profitability from it may be explored. Ecotourism can be considered as one of the possible land use options for the Lipuun Point where TCC is located. Development concepts utilizing renewable sources of energy such as that of the Zero Carbon Resorts (ZCR) principle can be applied.

Relative to the findings that the age, gender, civil status, educational attainment and ethnicity did not affect the respondents' WTP in the preservation of TCC, similar research to uncover other possible characteristics that may affect WTP of visitors to TCC can be carried out. Heritage sites like TCC attract visitors and researchers if they are carefully preserved and protected, thus, parallel researches on other cultural sites in the Philippines can be conducted. Parallel research considering the different sectoral groups in the municipality of Quezon is also further recommended.

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The study site (Map of Palawan showing the Municipality Of Quezon)



The Lipuun Point where TCC is Located Miniature of Lipuun Point

PHOTO GALLERY OF TABON CAVES COMPLEX



Entrance to TCC

Diggings inside the TCC

Guano Fertilizer



Place where the Tabon Man was discovered



Artifacts and Minerals Found at TCC



The 1000 Php Bill with the Manunggul Jar