***Willingness to Pay for Ecotourism Management with Community Participation in Lipe Island, Satun Province***

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**Abstract**
Lipe island, specially the most popular tourist destinations in the southern island, Satun province Thailand. A part of beautiful beaches, crystal clear sea water, deep blue sky various kinds of corals and aquatics animals, there is a group of fishermen who have their own culture local language and identity which are the settle point and attract the tourist to learn their culture and way of living in Lipe island. This paper aims to examine factor which affected to the willingness pay for ecotourism management using a contingent valuation method (CVM) to maintain and conserved to the environment in their culture and communities whereas having to the increasing number of tourist and social development in Lipe island. The research instrument used a typical contingent valuation method by using a dichotomous choice CVM was applied with objectives and conceptual framework a questionnaires. The choice of sample size in a CVM study determines the precision of the sample statistics used as estimates of population parameters, also deployed to the samples were 560 tourists who arrival as tourist attraction during high season (November – March). The statistics used in data analysis were percentage, mean, standard deviation and logistic regression analysis. The results are that the average of the values of the willingness to pay for ecotourism was $5.28 per tourist-trip. Various factors such as tourist attraction, nationality, age and education background were found to have significant impacts on individuals' willingness to pay

Keywords: willingness to pay, ecotourism, tourist attraction, community participation

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**Introduction**

Ecotourism has been identified as a form of sustainable tourism expected to contribute to both conservation and development, In addition also meaning as "travelling to relatively undisturbed or uncontaminated areas with the specific objective of studying, admiring and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas" (Orams, 1995), ecotourism becomes tourist attraction in the natural sites as well, is growing at a rate almost three times faster than general tourism. Consequently, it is one strategy for supporting conservation and providing income for communities in and around protected areas. Actually, it can contribute to economic development and conservation of protected areas by generating revenues that can be used to sustainably manage protected areas and providing financial benefits and empowerment for local people. Small island tourism has become a very significant part of the ecotourism industry. Small island compromises islands which have size below 10,000 km$^2$ with a population equivalent or less than half a million (Ramdas & Mohamed, 2014). It has a variety of activities that can afford to tourist ranging from beach tourism, diving, recreational boating, cruises, snorkeling, recreational and deep sea fishing. The importance of island tourism is overwhelming that it is considered to extent that it is considered to the leading contributor in generating income of certain country's economy. However, ecotourism development without careful planning and management that balance ecological, social, and economic objectives, it may lead to environmental damage. Furthermore, envisioned as a positive approach towards sustainable development, unplanned or poorly planned and implemented tourism can have serious negative effects, can lead to environmental damage to the abundance natural area. Therefore, an understanding of the local residents' attitudes and perceptions toward tourism development, awareness, admission fee were using as a procedure protocol to conserve and maintain an ecotourist attraction.

Lipe Island is one of the most wonder places and most popular tourist destinations in Satun province, the southern of Thailand. Apart from beautiful beaches, white sands, crystal clear sea water, deep blue sky, and various kinds of corals and aquatic animals, there is a group of fishermen who are settled down since the reign of King Rama V. They have their own culture, local language and identity which are the selling point and attract the tourists to learn their culture and way of living in this island. Day trips to the surrounding islands are popular and highly recommend as they are the best way to explore the marine park. This cluster of islands is part of the much larger Tarutao National Marine Park, a nature reserve established in 1974 as Thailand's second National Park. It consists of about 50 islands and covers 1500 km². Nowadays, there are more than 4,000 people living within 2 square kilometers. Lipe island has seen a large increase in visitors in the last decade and has now become an all year destination. The island can be reached year around from Pak Bara. In high season boats also connect to Langkawi, Koh Lanta, Koh Phi Phi, Phuket and several small islands in the Andaman Sea.

Department of Tourism, Ministry of Tourism & Sports (2014) reported the information concerned to an internal tourism in Satun provice. The focus points also have a number of tourist, average length of stay and average expenditure from local and foreign visitors which elicited the economic value from tourists' willing to pay

were associate to conserved an ecotourist attraction, environmental sustainability while an increasing of tourist and services in Lipe island.

**Table 1** Internal tourism in Satun provice

|  | 2013 | 2014 |
|---|---|---|
| Tourist | 629428 | 642655 |
| Thai | 579333 | 592727 |
| Foreigners | 50095 | 49928 |
| Average Length of Stay (Day) | 2.94 | 2.89 |
| Thai | 2.96 | 2.92 |
| Foreigners | 2.67 | 2.57 |
| Average Expenditure ( Baht/Person/Day ) | | |
| Tourist | 2124.11 | 2173.49 |
| Thai | 2126.97 | 2174.28 |
| Foreigners | 2029.68 | 2101.13 |
| Revenue ( Million Baht ) | | |
| Visitor | 4759.58 | 4891.60 |
| Thai | 4451.96 | 4583.77 |
| Foreigners | 307.62 | 307.83 |
| Accommodation Establishments | | |
| Rooms | 2900 | 3032 |
| Occupancy Rate ( % ) | 46.73 | 50.91 |
| Number of Guest Arrivals | 145387 | 153679 |
| Thai | 129836 | 137916 |
| Foreigners | 15550 | 15764 |

*Source : Department of Tourism, Ministry of Tourism & Sports, Thailand 2014.*

The main objective of this study is to investigate use value of the ecotourist attractions through the contingent valuation method (CVM). More specially, this study aims to identify the willingness to pay (WTP) determinants from the dichotomous model to access the economic values that tourists placed for the purpose of conservation. Especially, this research obtain the amount of respondents were willing to pay to conserve the ecotourist attraction in Lipe island, Satun province which one of the most popular tourist destinations, beautiful beaches, white sands, crystal clear sea water, deep blue sky, and various kinds of corals and aquatic animals. This research also determined the variables which might be used to model this economic valuation.

## Literatures

Admission fee have utilized as effective visitor management tools and generally can change visitor' behavior by; controlling overall visitor or diverting a particular recreation activities to specific area or encouraging visitor to reduce individual per capita impact during particular activity. However, admission fee has been considered an effective visitor management tool in coping with social and/or environmental impacts (e.g. crowding, poor quality of facilities, or environmental concerns) on protected areas. Moreover, a visitor fee policy suggests that individuals are responsible for paying the appropriate price for using the resources and services providing at the tourist field. It seems that admission fee is reasonable only visitors who incur costs should pay the price without of non-visitor subsidies and affect to decrease the number of tourist, which in turn can positive mitigation congestion and crowding in tourist attraction and maintain an environmental sustainability in the ecotourism fields.

Willingness to Pay (WTP) basically can be perceived as an amount or cost that an individual intends to commit for a designated improvement or compensation. WTP can also be considered a measurement that indicates the tendency to act in monetary terms by an individual for the intended change or quality improvement. WTP is considered a constantly evolving measurement as it may change with the accumulation of new information. The willingness to pay for the conservation of the environmental attributes of the tourist represents their behavioral intention. The variables that would influence this behavioral intention would be the knowledge, attitude and motivation of the tourist. Ramdas & Mohamed (2014) reported that the relationship between environmental literacy with willingness to pay for environmental attributes. Also will be useful in giving an idea of what level willingness to pay that can be imposed on for environmental conservation of the attributes. It is believed that the application of WTP is also able to alter the behavior of tourist towards environmental attributes protection and conservation. The value of WTP refers not only to the financial values to enjoy the current benefits of the destination but also preserving it for future generation. WTP, perception of environmental awareness are important in enhancing environmentally significant behavior such as willingness to pay. Environmental education should be included formally into education systems of a country so that the citizens as tourists would display environmentally responsible behavior.

The contingent valuation method (CVM) has widely been applied in a variety of fields such as numerous studies using the CVM as an approach have been published in a variety of fields such as environment, land conservation, pollution management, energy system, culture heritage site, forestry and ecotourism as well.

Generally, there are three common methods of eliciting WTP within a CVM scenario:
1. Open-ended questioning. The respondent simply proposes the bid. However, this suffers from the problem that the respondent may need some reference point or indication to get the bid started.
2. Payment card. Identical to open-ended questioning except that the respondent is presented with a series of bids to choose from.

3. Dichotomous choice. This approach is split into different bid values, e.g. $1, $5, $10 as well. During the survey all the bid values will be used equally among the respondents, but each individual respondent is offered just a single bid which is selected at random. The respondent is then asked whether they would be willing to pay that amount for the service or improvement in support of the fee. If the response is negative, further questions may be asked to determine the reason and to eliminate protest and zero bids. In a single-bounded dichotomous choice, the bid is either accepted or rejected and no further bid is offered. In double-bounded, negative responses are followed with the offer of a lower bid, and positive ones with a higher option. This method improves the accuracy as reflected in a tighter confidence interval to the statistics.

A study of Beltran and Rojais (1996) CVM study, two WTP value for consumption types of entrance fee and donation in Mexico were estimated. A study of Chambers et al., (1998) estimate one time donation for a historic site by asking respondents to pick up one time of seven payment card. The result shown that female respondents who were the higher income earned tended to be more concerned about the historic site and were the higher WTP. Kim et al.,(2007) applied the CVM a directed questionnaires approach to estimate for use-value and non-use value of culture heritage site in Korea using CVM with dichotomous choice. The logistic regression models in both linear and logarithmic forms were employed to identify determinants from the dichotomous question, the mean WTP value were $5.70 and $6.00 in a log-linear model and a log-logit model, respectively. As a result, cumulative use value from the log-linear model was estimated as of approximately 1.93 million dollar only the number of domestic visitor was considered as this study did not include a survey of foreign visitor.

**Methodology**

This research aims to study the tourism situation in general, examine factor which affected to the willingness pay for ecotourism management using a contingent valuation method (CVM). Individuals CVM are asked what amount of money they would be willing to pay for public good, their response may depend on their perception of fairness. They also observed that perceived fairness significantly predicted WPT, and that equity-based fairness led to higher WTP that equality-base, to maintain and conserved to the environment in their culture and communities, obstacles and opportunity in order to manage tourist destinations. In-depth interview, also approach to the stakeholders toward the sustainable development by using the cooperation of local people, tourists and every part of stakeholders to create sense of awareness and focusing on the planning system and good management.

Assessment of CVM studies which have estimated the economic value of goods and services which attempted to identified the value of preserving grazing traditions and environmental preservation. In a typical contingent valuation method respondent are asked to consider a hypothesical scenario, where a potential market exits for the benefits of a public program being evaluated. In this study the hypothesical situation is "ecotourism in Lipe island" and the service is "willingness to pay for tourist attraction" There are various format for CVM survey, including open-ended, payment cards, biding games, and dichotomous choice. (Asgery, A., 2001) For the purposes of this study a dichotomous choice CVM was applied. The dichotomous choice asks

respondents a simple yes or no question regarding whether they would pay a specific amount, that is, 'if the fee amount were $XX, would you ve willing to pay that amount?" Ditribution of WTP in the sample may be gained from yes/no answers with the mean WTP value being estimated using non-parametric or parametric methods such as logit or probit regression (Loureiro et at., 2004)
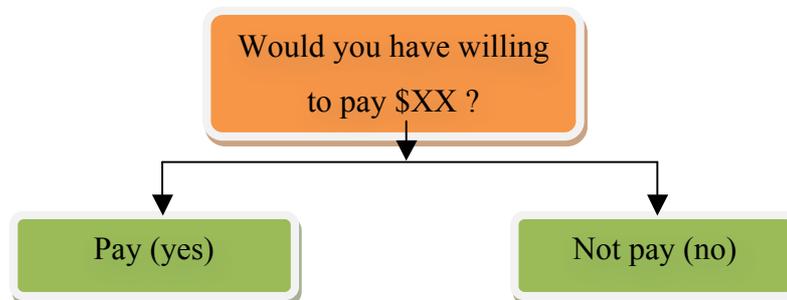


**Figure 1** single bound dichotomous choice

The closed-ended format is also termed a dichotomous choice and is further divided into a single bounded dichotomous choice and a double bounded dichotomous choice. Tsui (2011) studies indicated that statistical efficiency of the parameter estimate of the double bounded dichotomous choice is more significant that of the single bound dichotomous choice and the variance and covariance of the parameter estimate of the double bounded dichotomous choice are also lower than the single bounded dichotomous choice (Hanemann, L. et al.,1991).

Actually, this paper also determine WTP using the closed ended double bounded
The ensurement of WTP also includes the random-utility approach. In the price inquiry process, the double-bounded dichotomous choice successively questions respondents' WTP for the targeted product two times in the questionnaire. The price of the second price inquiry depends on the first price. Specifically, when respondents are willing to pay the first time, the second price would be higher than the first one, and is typically twice as much as the first one; when respondents are not willing to pay for the first price, the second price would be less than the first one and the second price is half of the first one. However, when respondents are willing or not willing to pay for two prices, the study could only realize that the respondents' WTP was more than or less than the second price. Thus, the double-bounded dichotomous choice may not result in the upper limit or lower limit of respondents' WTP. The price inquiry of the CVM of the double-bounded dichotomous choice is shown in Figure 2.
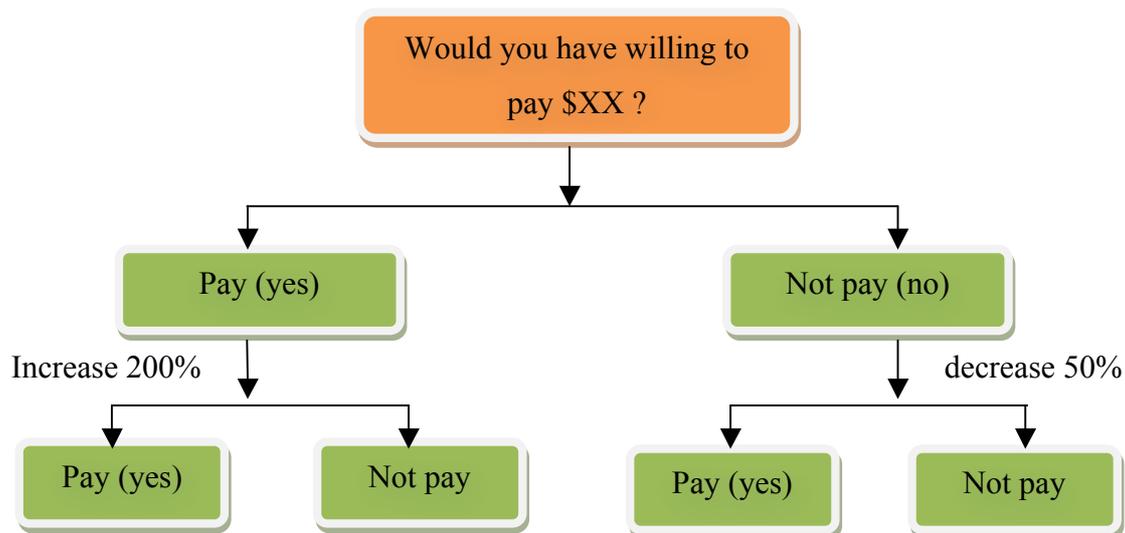
**Figure 2** double bound dichotomous choices

Generally, the large the sample the smaller the variation on the mean WTP as measured by the standard error and described in confidence intervals. In CVM studies, a sample size of 200 – 2000 respondents is generally required to achieve reasonable reliability from a sampling (confidence interval) perspective. Using Mitchell and Carson's recommended sample size for CVM studies under various procession level.

This research was based on a random survey of 560 respondents, consisting of 408 (72.86%) Thai visitors and 152 (27.14%) foreign visitors. All of these respondents showed the willingness to pay (WTP) for conserve and maintain the ecotourist sites to sustainability. This would mean that the estimate WTP would be allowed to deviate by only 10% from the true WTP approximately 95% of the time. The sampling method chosen for this study was a convenience cluster sampling from the tourists who arrival Lipe island during December 2014 – February 2015. The data used are derived from surveys conducted at Lipe island Satun province, eight hundred questionnaires were distributed and 560 questionnaires were collected from the end of December 2014 to the middle of February 2015.

A detailed survey questionnaire was developed to generate respondents' WTP on conservation of non-marketed goods and services in GGNP. The questionnaire consisted of four sections: Section A, B, C and D.

**Section A,** visitors were asked about their personal backgrounds. **Section B** covered on expenditure, activities, service and also satisfaction of paying such fee to the activities that they had gone through. The most crucial feedback required was in **Section C**. This was on their willingness to pay by a certain amount of conservation fee. For this, they Yes or No Next, question was to discover the WTP for conservation fee. The final **Section D** was simply asking them whether to visit in the future. In addition, accepting any comment and suggestion for improvement to the ecotourist attraction in Lipe island. The data derived from the questionnaires were analyzed by using SPSS software. Forms of data analysis that will be performed are descriptive analysis, coefficient correlation test and multiple linear regression analysis.

The equation of the multiple logistic regression given in terms of design variables is given below

$$prob(yes) = 1 - \left\{1 + \exp\left[\beta_0 - \beta_1(\$X)\right]\right\}^{-1} \qquad (1)$$

$$MeanWTP = \left\{\frac{\beta_0}{\beta_1}\right\} \qquad (2)$$

Where $\beta_0$ and $\beta_1$ denotes a coefficient of design variable and $X denote the amount of money the tourist was asked to pay. The logit specification when prob(yes) is specified as the cumulative distribution function of a standard logistic variation

Meanwhile, an in-depth interview, formal participant observation and informal participant observation also approach to the stakeholders toward the sustainable development by using the cooperation of local people, tourists and every part of stakeholders to create sense of awareness and focusing on the planning system and good management

**Results & Discussion**

The summarized of visitors' profile elicited, the majority of visitors were male (53.62%). More than 42.19% were between 25 – 40 years old, 23.12%, 16.23%, and 18.46 % were between 41 – 55 year old, 55 – 65 year old and lower than 25 year old, respectively. According to the educational background, More than half of visitor had had achieved a university undergraduate degree, 19% of visitors had completed diploma/high school and 12.5% had attained master degree. In term of occupation, most visitors were private employee and self-employee (76.13%) and government servant (18.29%). In term of income, the majority of visitors earned an annual income of more than $10,000 (74.57%) and lower than $10,000 which was 25.43%

**Table 2** demographics of visitors

| Demographics of visitor | N | % |
|---|---|---|
| Gender (n=560) | | |
|   Male | 300 | 53.62 |
|   Female | 260 | 46.38 |
| Age (mean=34.6, S.D.=11.82) | | |
|   lower than 25 year old | 103 | 18.46 |
|   25 - 40 year old | 236 | 42.19 |
|   41 - 55 year old | 129 | 23.12 |
|   55 - 65 year old | 91 | 16.23 |
| Nationality | | |
|   Thai | 408 | 72.86 |
|   Foreign | 152 | 27.14 |
| Education Background | | |
|   diploma/high school | 384 | 68.5 |
|   a university undergraduate | 106 | 19 |
|   a master degree | 70 | 12.5 |
| Occupation | | |
|   public services | 102 | 18.29 |
|   private services | 273 | 48.76 |
|   self-employee | 75 | 13.37 |
|   unemployment | 110 | 19.58 |
| Annual incomes | | |
|   lower than $10000 | 142 | 25.43 |
|   $10000-15000 | 337 | 60.16 |
|   $15000-25000 | 63 | 11.26 |
|   $25000 | 18 | 3.15 |

**Table 3** characteristics of visits

| Characteristics of visits | N | % |
|---|---|---|
| Frequency | | |
|   the first time | 368 | 65.67 |
|   1 - 2 times | 158 | 28.25 |
|   more than 2 times | 34 | 6.08 |
| Type of tourists' activities | | |
|   natural trail | 30 | 5.33 |
|   trekking | 10 | 1.83 |
|   hiking/climbing | 22 | 3.96 |
|   bird watching | 22 | 3.84 |
|   flora observation | 4 | 0.75 |
|   camping | 61 | 10.86 |
|   canoeing-kayaking | 42 | 7.49 |
|   boat sightseeing | 23 | 4.05 |
|   snorkel skin diving | 109 | 19.51 |
|   scuba diving | 98 | 17.54 |
|   relaxing | 139 | 24.84 |

Table 3 outlines the characteristics of visits. The results shows that more than half visitors (65.67%) first time visited Lipe island whereas 28.25% and 6.08% visited second time and more than second time, respectively.

A logistic regression was used to determine the response given to the dichotomous CVM question as the dependent variable and a number of the tourist behavioral, attitudinal, knowledge and perception for environmental sustainability in ecotourist's sites and demographic factor as explanatory variable.

The willingness to pay showed negative sign as expected with strong significant level. It seems that more visitors are likely to accept the lower bids for paying as opposed to higher bids. In depth interview found that the most respondents who accept the lower bids pay anymore, because it should be covered with an accommodation and service charge in ecotourist sites. Whereas, a demographic variable; age, gender, occupation and income were not found to have any significant impact on respondent's decision. Educational background, tourist behavioral, attitudinal, perception concerned about to an ecotourism and environmental sustainability contribute significantly to respondents' decision to accept the WTP.

**Table 4** Yes and No response to various willing to pay as an admission fee

| WTP bids | number of respondent who rejected the bids | number of respondent who accepted the bids | total |
|---|---|---|---|
| $0.38 | 18 | 30 | 48 |
| $0.76 | 27 | 65 | 92 |
| $1.52 | 10 | 48 | 58 |
| $3.03 | 71 | 192 | 263 |
| $6.06 | 13 | 18 | 31 |
| $12.12 | 6 | 22 | 28 |
| $24.24 | 14 | 26 | 40 |
| Total | 159 | 401 | 560 |

**Table 5** Logistic regression results

| Independent Variable | B | S.E. | Sig |
|---|---|---|---|
| Gender | 0.183 | 0.105 | 0.008 |
| Age | 0.206 | 0.119 | 0.017 |
| Education | 0.313 | 0.127 | 0.182 |
| Annual income | -0.275 | 0.079 | 0.010 |
| Frequency to visit | 0.013 | 0.228 | 0.125 |
| Bids for admission fee ($3.03) | -0.119 | 0.103 | 0.000 |

On the overall, all visitors pointed out their WTP for conservation fee in different level of price. There are few reasons why the visitors wanting to pay some amount to conserve this park. The payment should be charged to protect the environment. It is necessary for people to be aware and care about the protection of natural resources, ecosystem, services and municipal waste management in response to the price of admission fee. This research found that visitors' mean WTP for conservation fee was $4.41. The findings also revealed that international visitors were willing to pay $5.26

for conservation fee compared to local visitors at only $1.52. From these value of visitors' surplus or the WTP for conservation of ecotorism in Lipe island, the additional net benefit of Lipe island community can be computed as shown in Table 6. The estimated additional revenue from conservation fee is the additional benefit that Lipe island committee would gain besides the current admission fee charges. At the time of this survey, the entrance fee charge was $0.6 per entry per visitor.

**Table 6** value of annual willingness to pay

| | |
|---|---:|
| willingness to pay (mean $4.41) | |
| Thai | $1.52 |
| Foreign | $5.26 |
| number of tourists (as of December 2014) | |
| Thai | 592,727 |
| Foreign | 49,928 |
| total willingness to pay (TWTP) | |
| Thai | $900,945 |
| Foreign | $262,621 |
| average total willingness to pay (TWTP) | $2,834,109 |

An analysis of the WTP provided an opportunity to study the content and context validity of this survey. An ordinary least squares regression was used to analyze WTP. The regression revealed that the list of variables attained the expected signs as presented in table5 and total wiliness to pay for admission fee shown in table 6. As expected, an increase in the monthly gross income would increase the WTP: 1% increase in visitors' income would increase WTP by an average of 0.742%. The positive sign of education means that an increase in number of years of education would increase their WTP. More specifically, 1% increase in years of education; it would increase WTP by an average of 0.953%. Income and education are among the most applied variable to describe the profile of any research sample. This model has discovered that these two variables have a significant relationship with respondents' willingness to pay. It was found that an increase in income will result in a relatively low increase in WTP. On the other hand, an increase in education level relates to a higher increase in WTP. Meanwhile, an in-depth interview, formal participant observation and informal participant observation also approach to the tourists toward the sustainable development. However, when we asked about income, visitors have to consider other expenses such as accommodation, services, food, transportation fee and others. The effect of education on a visitor is lasting. As such, it will increase their perception concerned about an environmental sustainability and may ultimately have an impact on the awareness's tourist. This normally will shape perception and attitude in a more qualified manner. Since what they learn is embedded in them as individual, the effect of education on their respondents WTP. In this study, both income and educational level were found to be significant variables in influencing the WTP behavior is typically quite strong, especially, if it is consistent with their perception such as the WTP. From the study, there is a possibility that the education of respondents had a strong contribution to this research also found that nationality of visitors had an insignificant effect towards WTP. Local visitors are lesser in their WTP for admission fee compared to international visitors. On the other hand, gender of visitors was found to be insignificant in influencing WTP. Female visitors are

willing to pay more for conservation fee. The reason was they want experiencing what they were enjoying such as scenic beauty of the beaches, white sands, crystal clear sea water, deep blue sky, and various kinds of corals and aquatic animals and other tourist attraction. In conclusion of their depth-interview, they were more willing to pay to conserve the ecotourist places for future generation.

**Conclusions**

The study using contingent valuation method (CVM) has widely been applied in the use value and non use value market which also is a promising approach to obtain the willingness to pay (WTP) as they include a wide range of societal concerns about environmental management. This study was designed to identify the economic value of ecotourism and tourism attraction in Lipe island, Satun province. The mean values from logistic regression models were $4.41 and were higher that admission fees which launch from municipal committee. Mean WTP per visitor per visit was higher for international visitors compared to local visitors. This inferred to the attributes of higher income and general awareness that international visitors have. The management authority could also implement education programmes that can increase the level of awareness among visitors. It is believed that visitors, who have environmental conservation and awareness, are more positive in their perception and decision especially those involving payment. In addition, tourist attraction development, accommodation and services should contain some educational elements, contributing to knowledge and experience of the visitors. The management can use this to justify any changes such as increase in fees to the authorities. Therefore, the result of this study using CVM could be a useful tool in providing relevant information for decision makers and policy purposes in ecotourist attraction and conserved area management and development. Information on issues such as factors influenced visitors WTP and socio-demographic and economic characteristics of visitors will provide a guideline managerial sustainability in Lipe island, Satun province for an ecotourist places. There also contribute to the long-term sustainable development with the community participation which had a responsibility of conserving nature resources and beautiful scenic for future generation as well.

# References

Asgary, A. & Penfold, G. (2011). Willingness to Donate to Victims of a Hypothetical Future Earthquake Disaster in Vancouver. *International Journal of Business and Social Sciences*, 2 (16): 64 – 71.

Beltran, E., & Rojas. M, (1996). Diversified funding methods in Mexican archacology. *Annals of Tourism Research*, 23(12): 463 – 478.

Chambers, C.M., Chanbers, P.E., & Whitchead, J. (1998). Contigent valuation of quasi-public good: validity, reliability, and application to valuating a historic sites. *Public Finance Review*, 26(2): 137 – 154.

Department of Tourism, (2014). Internal Touristm in Satun Province. Retrieved January, 2015 from http://www.tourism.go.th/home/details/11/221/24335.

Hanemanne, M., Loomis, J. & Kanninen, B. (1991). Statistical efficiency of double bounded dichotomous choice contingent valuation. *American Journal of Agricultural Economics*, 73: 1255 – 1263.

Kamri, T. (2013). Willingness to pay for Conservation of Natural Resources in the Gunung Gading National Park, Sarawak. *Procedia – Social and Behavioral Sciences*, 101: 506 – 515.

Loureiro, M.L., Loomis, J.B., & Nuhuelhual, L. (2004) A comparison of a parametric and a non-parametric method to value a non-rejectable public good. *Journal of ForestEconomics*, 10(2), 61 – 74.

Hultman, A., Kazeminia, A.,& Ghasemi, V. (2015). Intention to visit and willingness to pay premium for ecotourism: The impact of attitude, materialism, and motivation; *Journal of Business research* 68; 1854 – 1867.

Mitchell, R.C. & Carson, R.T. (1989). Using Surveys to Value Public Goods: The Contingent Valuation Method. Washington DC: Resources for the Future.

Orams, M.B. (1995). Towards a more desirable form of ecotourism. *Tourism Management*. 16: 3 – 8.

Scongscop K.S., K.F. Wong & Cho, M. (2007). Assessing the Economic Value of a World Heritage Site and Willingness-to-Pay Determinants: A Case of Changdeole Palace. *Tourism Management*, 28: 317 – 322.

Tsui, H. (2012). Advertising quality, and willingness to pay: Experimental examination of signaling theory. *Journal of Ecomomic Psychology*, 33: 1193 – 1203.