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Recreationists Willingness to Pay for Conservation of a Forest ecosystem: An Economic study of *Basavana Betta* State Forest, Karnataka state, India

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Recreationists Willingness to Pay for Conservation of a Forest ecosystem: An Economic study of *Basavana Betta* State Forest, Karnataka state, India

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Abstract

An economic study on willingness to pay by general recreationists' who visited Basavana Betta State Forest, Karnataka, India, for water recreation revealed that average WTP for conservation of the forest ecosystem, based on the double bounded dichotomous contingent valuation method, was Rs. 846 (\$17.63) per visitor as onetime payment. On the contrary WTP of recreationists of a well developed recreation spot (resort) was higher at Rs. 2367 (US\$ 49.31) per visitor. There was a negative relationship between the bid amount and WTP and a positive relationship between income and WTP in both the cases.

Introduction:

Forest ecosystems are the major source of a large array of ecosystem services (ESS) to the society and according to the Millennium Ecosystem Assessment, (MEA, 2005) ecosystems are natural capital components that are supporting and supplying various types of services that are highly indispensable to human livelihoods. Ecologists, economists, policy makers and others have recognized clearly the crucial roles that ecosystems are playing in providing required goods and services for the survival of human societies. This recognition has paved the way for integration of economics, social and ecological dimensions of ESS which clearly enable us to capture these interactions in more meaning and useful ways. Such awareness and recognition could lead to precise estimation of economic value of ESS which in turn could be an important input in the conservation and sustainable management of ecosystems including forest and other fragile ecosystems.

The MEA classifies ESS into four broad groups as provisioning, regulating, supporting and cultural services. Valuation of these ESS is a challenging task mainly due to the fact that most of these services are not amenable for pricing under conventional market mechanism due to their public good nature for which markets are imperfect. Over the last several decades, economists have made concerted efforts to evolve appropriate methodologies for valuation of ESS. These valuation approaches fall into two broad types, namely, revealed preference and stated preference methods (Boxall *et al.*, 1996 and Brauer, 2003).

Karnataka is one of the southern states of India which has 4.33 million ha of recorded forest area forming about 23 per cent of state's geographical area. Karnataka is endowed with the most magnificent forests in the county ranging from majestic evergreen forests of the Western Ghats to the scrub jungles of the plains. The Western Ghats of Karnataka is one of the 25 global biodiversity hotspots and one of the two on the Indian subcontinent for biodiversity conservation. Karnataka forests are endowed with rich wildlife, which harbor 25 per cent of the elephant population of India and 10 per cent of the tiger population. The state has five national parks and 21 sanctuaries which together occupy 14.80 per cent of total forest area (as protected area for wildlife and biodiversity). The state ranks fourth among all the states and union territories in India in respect of area under tree cover. It is home for world-famous sandal and rosewood trees. From the Western Ghats region, several rivers including the river Cauvery originate (Anon, 2010).

Basavana Betta State Forest (BBSF) is an important biodiversity region along the confluence of the Eastern and Western Ghats region of Karnataka state. It is rich in biodiversity and performs various functions and provides a plethora of services to the communities within and outside of it. These services (ESS) include non-timber forest products, grazing of livestock, firewood, construction materials, medicinal plants, fodder, recreation & ecotourism, wildlife etc. Presence of different types of flora and fauna and narrow strips along the hilly sections of the river Cauvery have

created along its course beautiful recreation and natural scenic spots in BBSF.

Approximately 220000 people visit BBSF annually to derive various recreational benefits, but mainly water related recreation along the banks of river Cauvery. Lack of appropriate regulatory mechanism on the entry into BBSF has resulted in heavy human interference with the forest ecosystem leading to forest fire, pollution, piling up of plastic debris and other forest related destruction. Communities living in and around BBSF are extracting various forest goods and services which may lead to unsustainable extraction and over grazing of forest land as population pressure increases. Therefore, conservation and maintenance of BBSF assume critical importance from the view of point of intergenerational equity. Therefore, beneficiaries of ESS from BBSF are expected to make monetary and non-monetary contributions and efforts for conservation of BBSF. Among various ESS, recreation is the major activity that attracts large of number of visitors to BBSF and this in turn is likely to lead to deterioration of services and pollution of recreation site in BBSF. The present study analyses willingness to pay (WTP) by recreation visitors for conservation and maintenance of BBSF forest ecosystem. Other beneficiaries include tribal communities within the forest system who extract non-timber forest products, farming communities living around BBSF who derive services and goods such as livestock grazing, fodder, firewood, construction materials, groundwater recharge etc and the entire society which gets different types of timber and related products. In addition, the whole region is bestowed with clean air and serene atmosphere.

Methodology

The study was carried out in *Basavana Betta* State Forest (BBSF) area, Karantaka state, India. The total notified area of the BBSF covers 10035 ha. Out of the total notified area, an area of 3765 ha is in Cauvery wildlife division, which is famous for water recreation (Anonymous, 2010).

Sampling design and collection of data

BBSF provides several ESS and recreation is an important service as revealed by table 3. Although timber is the main product/service from BBSF, recreation is emerging as a potential for developing BBSF into an ecotourism region. Presently a large number of recreationists throng BBSF. There is no regulatory mechanism in place to curb activities of recreationists that lead to pollution, wastage/garbage pile up, prevention of forest fire and related hazards. The potential damage to the fragile ecosystem may be more from recreationists as their activities cannot be regulated. Hence, there is a need for conservation and maintenance of the recreation sites in the interest of intergenerational equity. Therefore the present study focussed on recreation visitors' WTP for conservation of BBSF. It is hypothesized that higher the incomes of the recreationists greater is the WTP and larger the bid amounts lower would be the WTP.

In BBSF region, on the bank of river Cauvery there is a good recreation spot and an ancient temple close by. These two spots attract a good number of visitors from surrounding regions. A sample of 300 recreation visitors to BBSF was selected randomly. Although their main purpose is recreation, a good number of visitors also offer prayers in the ancient temple. In addition, a sample of 60 visitors who mainly visit a resort with good facilities to derive cultural services in the form of water and other forms of recreation from BBSF was also selected randomly.

The required primary data were collected from the selected respondents using a pre-tested schedule by personal interviews. Data regarding the socioeconomic details of respondents, benefits derived from BBSF and willingness to pay for maintenance and conservation of BBSF ecosystem were collected from the sample respondents. The value of recreation services of BBSF was drawn from Yashoda (2011), who estimated the recreation use value of selected recreation sites of Cauvery wildlife area of BBSF.

User WTP for conservation of BBSF

Frequent human visits to natural ecosystems like BBSF for various purposes including recreation may lead to its degradation in one or other forms. This is highly conspicuous and pervading in the case of public goods such as forest ecosystem where exclusion of communities/ individuals to access services is highly difficult or costly to do so. Therefore conservation of natural ecosystems, particularly those frequented by human beings should be a priority. Hence, participation in the conservation and contribution of people for this endeavour especially by those who access the natural ecosystem is essential. Thus exploring beneficiaries or users' willingness to pay (WTP) for such endeavours is an important policy input in the evolution of appropriate programs including determining entry fee for conservation and sustainable management of the natural ecosystems.

The Contingent Valuation Method (CVM) is an appropriate framework for eliciting WTP which in turn can be used to infer about the price of a good. This method is useful in cases where price of a resource or good is not known or cannot be determined under conventional market mechanism. In circumstances where values do not necessarily completely reflect the observable behaviour, CVM is an appropriate method for estimating the total social value of an environmental good (Hanemann *et al*, 1991). In the present study the double bound format of contingent valuation was used to estimate the user WTP for conservation of BBSF because of its higher efficiency compared to the single bounded dichotomous choice method.

In CVM, a hypothetical market is created in which a brief description about services provided by BBSF to different sections of society including recreationists and importance of maintenance and conservation of BBSF was given.

The present study is structured based on the theoretical framework developed by Hanemann (1984), in which he gives a detailed account of development of hypothetical market based on the utility function derived for two situations which are described as provision of the new program or its

non-provision. Using the concept of compensatory variation, he develops the theoretical setting for the estimation of consumers' willingness to pay (WTP) for a new program. The framework enables us to understand the nuances of development of hypothetical market/product such that one can conveniently adopt this framework for estimation of WTP under different alternative product/service provision such as the one in the current study. In the present study, WTP for conservation of BBSF by recreationists was estimated. For details of WTP theoretical framework, readers are suggested to refer Hanemann's (1984) seminal work.

The referendum or dichotomous choice contingent valuation question begins with a pre-determined amount and the response of respondent is elicited whether he or she is willing to pay that amount for the good in consideration. In the single bounded dichotomous choice CVM method which was pioneered by Bishop and Heberlein (1979) only one dichotomous question is asked with a threshold amount and the respondent is asked to answer either 'yes' or 'no' to that amount. But this method has many limitations. Hence, the double bounded dichotomous choice contingent valuation method was used in present study.

Double bound dichotomous contingent valuation:

The Dichotomous Choice Contingent Valuation Method (DC-CVM) developed by Hanemann (1991) is the most popular approach among users of contingent valuation method as it can be used with ease in data collection. Under this method, the respondent is only required to answer 'yes' or 'no' to the bid amount he is presented with, for the good or service under consideration. In this format, instead of single bidding, two times bidding is practiced. The participant has to respond to the first bid and then he will face the follow up question involving another bid amount depending on the response to the first question. If the response to the first bid is 'yes' then the bid amount is increased and presented to the participant. If the response to this new amount is 'no', a lower bid is presented. This double bound approach was first suggested by Hanemann (1984). Later Hanemann

et al (1991) proved that the double bound DC-CVM is asymptotically more efficient than the single bound mode and Leon (1995), confirmed this property for finite samples as well.

In the present study, the bid structure was designed by pre-testing an initial bid structure among the potential respondents in the study region using the open ended question format in the schedule.

A double bounded Logit model was used to analyze the data. For double bound model, we observe two dichotomous variables, i. e. the answers to the first question and its follow-up answer. There are four possible outcomes of dichotomous choices, namely, 'YES YES' (YY), 'YES NO' (YN), 'NO YES' (NY), and 'NO NO' (NN).

Following Hanemann *et al* (1991), the following response probabilities were obtained for the Logit model.

$$P_i^{YY} = 1 / (1 + e^{-(\alpha + \beta \text{ HIGH BID})}) \quad \dots(1)$$

$$P_i^{NN} = 1 - 1 / (1 + e^{-(\alpha + \beta \text{ LOW BID})}) \quad \dots (2)$$

$$P_i^{YN} = 1 / (1 + e^{-(\alpha + \beta \text{ HIGH BID})}) - 1 / (1 + e^{-(\alpha + \beta \text{ FIRST BID})}) \quad \dots (3)$$

$$P_i^{NY} = 1 / (1 + e^{-(\alpha + \beta \text{ FIRST BID})}) - 1 / (1 + e^{-(\alpha + \beta \text{ LOW BID})}) \quad \dots (4)$$

Where

FIRST BID – Starting bid value

LOW BID – Follow-up Lower bid value

HIGH BID – Follow-up Higher bid value

The double bound log-likelihood function is

$$L^{DB} = \sum I_i^{YY} \log P_i^{YY} + \sum I_i^{YN} \log P_i^{YN} + \sum I_i^{NY} \log P_i^{NY} + \sum I_i^{NN} \log P_i^{NN} \dots\dots (5)$$

$i = 1 \dots\dots\dots n$

Where, I_i indicates the response category of each respondent i .

Hanemann *et al* (1991) showed that the mean willingness to pay can be estimated as below

$$WTP^* = \alpha / |\beta|$$

The truncated or restricted mean is given by

$$WTP^* = \ln(1+e^\alpha) / |\beta|$$

Where

$|\beta|$ - Absolute value of bid coefficient

Referendum CVM programs (GAUSS) written by Cooper (1999) was used for estimation of the double bound Logit regression.

The parameters (α and β) estimated for calculation of welfare measures are random in nature (Bockstael and Strand, 1987). Hence it is essential to determine a confidence interval for the welfare estimates. Krinsky-Robb confidence interval estimation procedure as suggested by Park *et al* (1991) was employed in the study. This procedure can be applied using the information given by the estimated logit model, in the form of estimated variance-covariance matrix (denoted as V^\wedge). A new parameter vector β^\wedge was created through multiple random drawings from multivariate normal distribution with variance-covariance vector V^\wedge and mean β^\wedge . For each drawing of β^\wedge , WTP was calculated. Further, an empirical distribution for WTP was developed for the logit model using the complete set of replications. A $(1-\alpha)$ confidence interval was obtained by ranking the vector of calculated WTP values and dropping the $\alpha/2$ values from each tail of the ranked vector. Krinsky Robb confidence interval was obtained using the Referendum CVM programs (GAUSS) written by Cooper (1999).

Both double bounded dichotomous choice and payment cards were used initially in the present study to elicit the WTP but double bound dichotomous choice was consistent compared to payment card. Hence, the double bounded dichotomous choice was retained for the present study.

Details of bid structures for two categories of recreationists are presented in tables 1 and 2.

Results and Discussion

Basavana Betta State Forest (BBSF) provides many direct ecosystem services to the communities inhabiting within and around of it. In addition, it also provides many indirect use values including recreational service. About 173 tribal households and 487 households adjoining it derive benefits from the BBSF according to the report of village forest society of BBSF. About 219000 people from Bangalore and surrounding areas visit annually for the water recreation along the river Cauvery. An exclusive recreation resort with all facilities for boating and other forms of recreation attracts a good number of wealthy people from different parts of the state, but mainly from Bangalore city.

**Table 1: Bid structure of double bound dichotomous contingent valuation
(Recreation Religious visitors)**

Type of question and number of respondent posed the question	First WTP question Are you willing to pay Rs. X If yes go to a If No go to b	Are you willing to pay Rs. Y (higher bid, lower bid)
Question 1	Rs.50	a) Rs.75 b) Rs.25
Question 2	Rs.200	a) Rs.300 b) Rs.100
Question 3	Rs.400	a) Rs.600 b) Rs.200
Question 4	Rs.600	a) Rs.900 b) Rs.300
Question 5	Rs.800	a) Rs.1200 b) Rs.400
Question 6	Rs.1000	a) Rs.1500 b) Rs.500
Question 7	Rs.1200	a) Rs.1800 b) Rs.600
Question 8	Rs.1400	a) Rs.2100 b) Rs.700
Question 9	Rs.1600	a) Rs.2400 b) Rs.800
Question 10	Rs.1800	a) Rs.2700

		b) Rs.900
Question 11	Rs.2000	a) Rs.3000 b) Rs.1000
Question 12	Rs.2200	a) Rs.3300 b) Rs.1100
Question 13	Rs.2400	a) Rs.3600 b) Rs.1200
Question 14	Rs.2600	a) Rs.3900 b) Rs.1300
Question 15	Rs.2800	a) Rs.4200 b) Rs.1400
Question 16	Rs.3000	a) Rs.4500 b) Rs.1500
Question 17	Rs.3200	a) Rs.4800 b) Rs.1600
Question 18	Rs.3400	a) Rs.5100 b) Rs.1700

**Table 2: Bid structure of double bound dichotomous contingent valuation
(Resort recreation visitors)**

Type of question and number of respondent posed the question	First WTP question Are you willing to pay Rs. X If yes go to a If No go to b	Are you willing to pay Rs. Y (higher bid, lower bid)
Question 1	Rs.1000	a) Rs.1500 b) Rs.500
Question 2	Rs.2000	a) Rs.3000 b) Rs.1000
Question 3	Rs.3000	a) Rs.4500 b) Rs.1500
Question 4	Rs.4000	a) Rs.6000 b) Rs.2000
Question 5	Rs.5000	a) Rs.7500 b) Rs.2500
Question 6	Rs.6000	a) Rs.9000 b) Rs.3000
Question 7	Rs.7000	a) Rs.10,000 b) Rs.3500

Ecosystem services/benefits realised by respondents from BBSF

The BBSF is rich in biodiversity; therefore, families inhabited within and outside of it as well as the society derives several ecosystem services (ESS) or benefits. A major river Cauvery flows through BBSF creating ample opportunities for water recreation. The table 1 furnished below summarises the monetary value of ESS/benefits from BBSF.

Table 3: Aggregate value of the selected ecosystem services of BBSF

Service/Benefit	Total value (Rs. Millions)	Total value (US \$ millions)	Percent
Timber	10901.1	231.938	94.44
NTFP	0.072	0.0015	Neglible
Fire wood	0.813	0.0173	0.01
Grazing	7.668	0.163	0.06
Carbon sequestration	521.630	11.099	4.52
Recreation	111.800	2.379	0.97
Total	11543.080	245.597	100.00

Source; Yashoda (2011)

Various ESS that communities and society around BBSF deriving were timber, livestock grazing, carbon sequestration, recreation services and so on. The value of timber from BBSF accounted for more than 94 percent of total value of ESS from BBSF. Perhaps, relatively perfect market for timber is reflecting its scarcity value and therefore its value is highly conspicuous. Firewood is an important service derived from BBSF by the communities living in and around BBSF. It is a direct service to the households as it supplies required energy for preparation of food and other household chores. The value of carbon sequestration of BBSF as assessed by Yashoda (2011) was based on several assumptions regarding the standing tree population, its biomass, specific gravity etc. The value of carbon sequestration in the

total value was about five percent. Though this value was comparatively lower, its importance in mitigating green house gases is immense and if enough markets were there (CDM or carbon credits), its value could have gone up substantially. Another important value of BBSF is recreational value. The rich biodiversity of BBSF, scenic beauty created by the undulating landscape along the river Cauvery and water flows rendered several sites for recreation in BBSF. Thus natural forests like BBSF, are storehouses of various cultural services to the society through recreation, ecotourism, aesthetic experience etc. Though the recreational value was smaller (0.97%) compared to timber value it is quite noteworthy and in future its value is likely to leapfrog due to increasing demand for recreation as a result of rising personal incomes.

Socioeconomic characteristics of respondents

The socioeconomic characteristics of the general respondents was analysed in terms of education, occupational status and income levels. The mean age of recreationists was 37 years and youngsters accounted for more than 62 percent of total respondents. About 82 percent of respondents were literates and a small percent of them had higher degrees. The business group and employees formed 51 percent, farmers constituted 33 percent and students' percentage was 4.67. The monthly income ranged from Rs. 2500 to 25000 with 10 percent of respondents having income more than Rs. 25000.

The mean age of resort visitors was 36 years and respondents in the age group of 20 to 40 years formed highest percent of 75. People with different levels of education visited resort but most of them were educated above graduation level. The percentage of graduates was highest at 58.33 per cent. More than 71 percent of respondents were working for private

firms and percent of business people was 10. The average income of the respondents was quite high at Rs. 63708 per month.

WTP of religious and recreation visitors

The recreation and religious visitors' WTP was assessed for the reasons explained earlier. Though there are differing opinions about the relevance and application of WTP in developing countries, we did not find any difficulty in administering hypothetical context to respondents for eliciting WTP. This is because most of the respondents were literates and they could understand importance of conservation and maintenance of BBSF ecosystem and need for WTP. During our interaction with respondents, we found them highly concerned with conservation of BBSF ecosystem. Most of the respondents were willing to make a onetime payment towards common fund to manage and conserve ecosystem of BBSF in a sustainable manner. The WTP of recreationists was elicited by administering the predetermined bid structure (table 1) which was based on the preliminary survey in the study area.

The WTP of general recreation and religious visitors was estimated through a double bounded dichotomous logit model and results are presented in table 4. Results showed that the coefficients of intercept and the variable bid were negative and significant. This indicates that as bid value increases the WTP tends to decrease. The variables of monthly income, age and education had direct relationship with WTP and the coefficients were significant. The results proved our hypotheses that as incomes increase the magnitude of WTP increase and as bid values increase WTP values tend to decrease.

Aged people were willing to pay more, as also educated people. Interestingly during interview, many respondents came forward with cash offering, thinking that WTP means instant payment. This clearly demonstrates their concern for conservation of BBSF. The log likelihood function was -308.98 and significant. The Krinsky-Rob confidence interval ranged between Rs. 693.08 and Rs. 983.92 (table 5). The mean value was

Rs. 848.86. The restricted mean WTP estimated was Rs. 846.10 per visitor as onetime payment. Total WTP estimated for total visitors of the BBSF recreation site for the maintenance and conservation was Rs. 185.5 million (US\$ 3.86 million). The estimated total WTP is quite substantial amount for the maintenance of BBSF. However, a moot point is whether such a big amount can be mobilised as WTP and actual payment behaviour differ significantly in the real world contexts. But, the WTP can be taken as an indicator of the intention of recreationists towards the conservation of BBSF. The restricted WTP can be taken as the basis for determining the entry fee for the BBSF ecosystem. Even if 25 percent of estimated WTP is considered as the entry fee, the total amount that could be collected works out to Rs. 46.6 million which is quite a substantial amount. Perhaps this amount could meet the conservation needs of BBSF. However, a research study needs to be initiated to identify conservation requirements of BBSF and monetary needs under different scenarios.

Table 4: Religious and recreation visitors WTP for maintenance and conservation of BBSF- Double bounded logit analysis (double bounded dichotomous CVM)

Variable	Coefficient	Standard error	T value
Constant	-2.443**	0.812	-3.00
Bid	-0.001**	0.000	-10.69
Monthly income	4.7E-05**	0.00	3.11
Age	0.041*	0.015	2.62
Gender	0.433	0.352	1.22
Marital status	-0.080	0.372	-0.21
Education	0.077*	0.036	2.13
Family size	0.091	0.085	1.06
Dummy for recreation purpose	0.115	0.414	0.27
Dummy for joint purpose	-0.291	0.338	-0.86
Log likelihood value			-308.98

** and * significance at 1 and 5 percent

Number of YES-YES Cases = 48

Number of YES-NO Cases = 32

Number of NO-YES Cases = 62

Number of NO-NO Cases = 158

Table 5: Religious and recreation visitors WTP for maintenance and conservation of BBSF- Krinsky and Robb confidence intervals using 1000 repetitions

99% C.I.	693.08 to 983.92
95% C.I.	738.55 to 957.23
90% C.I.	758.64 to 938.22
Average of the Krinsky and Robb CS values	849.04
Median of the Krinsky and Robb CS values	848.86
Restricted WTP point estimate	846.10
WTP for entire BBSF (crores)	18.55
Per ha WTP (Rs)	18464.96

WTP of resort visitors

Visitors to the resort, which offers all amenities for water recreation on the banks of river Cauvery, comprise mostly rich people. The resort offers recreation facilities along with comfortable stay for which it charges a substantial fee. Therefore the visitors of the resort are mostly rich and highly educated people. Therefore, administering them the hypothetical context for WTP in respect of conservation and maintenance of BBSF was relatively easy and we were able to elicit good responses from them. The details of bid structures and results of estimated results of double bounded dichotomous logit model are presented in tables 2 and 6 respectively.

The results of double bounded logit model showed that the coefficient of variable bid amount was negative and significant, indicating the inverse relationship between the two variables. The variables age and family size were significant indicating as age and family size increase WTP also tends to

increase. Perhaps this result may not be surprising because aged people will have more concern in respect of conservation of natural resources and hence higher amount of WTP.

The restricted mean WTP was estimated as Rs. 2366.58 per visitor as onetime payment (table 7). The WTP value was higher than that of general recreationists. The incomes and higher education level of the resort visitors might have induced these people to show exemplary stewardship in the conservation behaviour by way of higher WTP than other stakeholders. The total WTP for entire BBSF for the resort visitors was Rs. 21.99 million which was lower than that of general recreationists, mainly due to their small number (about 9000 visitors per year).

Conclusion:

Results of the study revealed that both general recreationists and resort visitors are willing to pay for the conservation and management of BBSF. The state forest department need to evolve appropriate regulatory mechanism that should not only regulate entry into the BBSF recreation area but also evolve appropriate conservation measures besides providing facilities for the tourist such that the place is maintained hygienically and pressure on the site is reduced for civic and other amenities. In-depth studies may be initiated to explore the site for promoting ecotourism besides developing data base for evolving appropriate conservation measures for the BBSF.

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Table 6: Resort visitors WTP for maintenance and conservation of BBSF – Double bounded logit analysis (double bounded dichotomous CVM)

Variable	Coefficient	Standard error	T value
Constant	-7.932	4.54	-1.74
Bid	-0.0007**	0.00	-5.18
Monthly income	-4.6E-07	0.00	-0.10
Age	0.078*	0.04	1.96
Gender	-0.121	0.60	-0.20
Marital status	1.003	0.84	1.18
Education	0.246	0.24	1.01
Family size	0.556*	0.23	2.34
Log likelihood value	-74.00		

** and * significance at 1 and 5 percent

Number of YES-YES Cases = 12

Number of NO-YES Cases = 16

Number of YES-NO Cases = 8

Number of NO-NO Cases = 24

Table 7: Resort visitors WTP for maintenance and conservation of BBSF- Krinsky and Robb confidence intervals using 1000 repetitions

99% C.I.	1512.66 to 3450.93
95% C.I.	1775.77 to 3158.33
90% C.I.	1881.49 to 3035.04
Average of the Krinsky and Robb CS values	2399.22
Median of the Krinsky and Robb CS values	2359.39
Restricted WTP point estimate	2366.57
WTP for entire BBSF (crores)	2.19
Per ha WTP	2192.06