A Non-Market Valuation Method: Contingent Valuation (Willingness-to-Pay)

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Abstract: This study reviews the most recent theories concerning the non-market valuation methods. After briefly reviewing Hedonic pricing, Travel Cost, and Random Utility Models, "Willingness to Pay" (WTP) and "Willingness to Accept" (WTA) approaches are explained in detail. The economic and statistical models for WTP and WTA approaches are discussed. Statistical tests that can be used in the models are explained briefly. The model was applied to forested wetlands in the Tensas River basin. According to the results obtained, the households in the region are willing to pay $44.00.
Key Words: Non-Market Valuation, Hedonic Pricing, Travel Cost, Random Utility, Willingness to pay, Willingness to Accept.

Pazarı Olmayan Varlıklara Yönelik Bir Kıymetlendirme Metodu: Ödeme İsteği

Özet: Bu çalışma, Pazardışı kıymetlendirme metodları ile ilgili en son teorileri tetkik etmektedir. Hoşnutluk Fiyatlandırması, Seyahat Masrafi ve Tesadüfi Fayda Metodları kısaca anlatıldıktan sonra "Ödeme İsteği" ve "Kabullenme İsteği" Yaklaşımları detaylı bir şekilde açıklanmaktadır. Ödeme İsteği ve Kabullenme İsteği için kullanılan ekonomik ve istatistiki yaklaşımlar tartışılmaktadır. Modellerde kullanılan istatistiki testler kısaca açıklanmaktadır. Model Tensas nehri havzasında ormana dönüştürülen sulak alanlara uygulanmıştır. Elde edilen sonuçlara göre bölgedeki hanehalkının ortalama ödeyebilme isteği 44 dolardır.
Anahtar Kelimeler: Pazarı Olmayan Varlıkların Kıymetlendirilmesi, Çevreye Göre Değer Biçme, Seyahat Maliyeti, Rastgele Fayda, Ödeme İsteği, Kabullenme İsteği

Introduction

There are extensive researches on the valuation of the qualitative aspects of natural resources. The purpose of this study is to understand and develop the most recent theories and problems regarding economic valuation methods, with specific attention given to the "willingness to pay" (WTP) approach. Accounting for the non-market valuation of resources requires the development of analytical procedures significantly different from traditional neoclassical economic assessments.

Commonly referred to as the "willingness-to-pay" or "willingness-to-accept" method, the literature on contingent valuation is not restricted within the environmental sciences or natural resource economics. Rather, the literature covers a broad spectrum of the social sciences as well. Increasingly, the "hard" natural sciences and "soft" social sciences are synthesizing their research efforts in order to present a more comprehensive approach to environmental problems and decision making. This Study will largely be organized around the main themes found predominantly in the ecological and natural resource literature such as the work by, among others, Mitchell and Carson (1991), Freeman (1993), Van Kooten (1993), and Isaacs (1998).

The existing empirical work on the valuation of environmental amenities can be classified as indirect and direct measurements techniques. *Indirect techniques* are based on observable behavior to deduce how much something is worth to an individual even though it is not traded in markets. These methods produce value estimates that are conceptually identical to the market values, but they must be measured more creatively since market data are not available. The *direct techniques*, on the other hand, directly question individuals on their willingness-to-pay for a good or service.

The indirect techniques show three broad methodological categories (Simpson 1998). The first is "*hedonic pricing*", that intends to capture the willingness to pay measures associated with variation in property values that result from the presence or absence of specific environmental attributes, for instance air pollution, noise or water views. By comparing the market value of two items which differ only with respect to a specific environmental attribute, economists may asses the implicit price of that amenity (or its cost when undesirable) by observing the behavior of buyers and sellers. The advantage of this technique is that the observable data are resulting from the actual behavior of individuals. The disadvantage of the technique is that most environmental incidents will have only small, if any, effects on prices. Even where effects do exist, it may be difficult to estimate using econometric methods. Waterfront property, for example, has a greater real estate value because of the aesthetic view and natural beauty one could enjoy from their back yard.

The second method of natural resource valuation is the "*travel cost*" method which is the oldest method for the economic valuation of natural resource amenities. This method reasons that the value a person places on, for example, a natural or aesthetic view, should be reflected in the amount of time spent and money forfeited to appreciate the amenity (Simpson 1998). The travel cost method measures peoples' expenditures of time and money in visiting natural ecosystems. The next step in the process is to come up with a measure of how they value these natural areas such as through trips to parks and other public space. Advantages of this technique are that they are relatively uncontroversial because it mimics empirical techniques used elsewhere in economics. They are based on actual behavior rather than verbal responses to hypothetical scenarios. This model can be applied without enormous expense. While the disadvantage of the model is that it can not be employed unless there is some easily observable behavior that can be used to reveal values. Thus in the case of nonuse values, this method is not appropriate.

The third method, the Random Utility Model (RUM), is similar to the TCM, but does not focus on the number of trips recreationists make to a given site in a season rather, it focuses on the choices of recreationists among alternative recreational sites. In particular this model is appropriate when substitutes are available to the individual so that the economist can measure the quality characteristics value of one or more site alternatives. The same advantages that apply to travel cost models are applicable with random utility models. The approach has all the disadvantages of the travel cost method, though it is much more data intensive.

Finally, the contingent valuation method (also called "willingness to pay") is a direct measurement technique that is one of the most frequently used methods of valuing non-market goods and amenities such as wetlands or aesthetic beauty. The contingent valuation method employs the use of surveys which require the respondent to state their willingness to pay or willingness to accept compensation for a change in an environmental amenity (Carson, 1996; Isaacs, 1998; Simpson, 1998). Although CVM is highly controversial for some researchers (Diamond and Hausman, 1994; Hanemann, 1994; Portney, 1994), it is the only one among the four approaches in this paper presented on economic valuation which can estimate "existence values" (Freeman, 1993). Existence value is perhaps most exemplified by The Endangered Species Act of 1973. CVM can be used to estimate the economic value of anything, even if there is no observable behavior available to deduce values through other means. It is known as the only method that has any hope of measuring "existing values", i.e., the value that the individual's place on simply knowing the natural resource exists in an improved state. The main disadvantage of the CVM is that it is too expensive.

The contingent valuation method is a survey or questionnaire-based approach to the valuation of non-market goods and services. The dollar values obtained for the good or service are said to be contingent upon the nature of the constructed (hypothetical or simulated) market and the good or service described in the survey scenario. Contingent valuation studies in natural resources generally derive values through the elicitation of respondents' willingness-to-pay to prevent damages, degradations, or to restore damaged, degraded natural resources.

In CVM, randomly selected samples or stratified samples of individuals selected from the general population are taken, giving information about a particular problem. They are then presented with a hypothetical occurrence such as a disaster and a policy action that ensures against a disaster. They are then asked how much they would be willing to pay, for example, in extra utility taxes, income taxes, or access fees, either to avoid a negative occurrence or bring about a positive one. The format may take the form of a direct question ("how much?") or it may be a bidding procedure (a ranking of alternatives) or a referenda (yes/no) vote. This referenda method of eliciting values is generally preferred by economists since it is one most people are familiar with (Issacs, 1998). CVM studies are conducted as face-to-face interviews, telephone interviews, or mail surveys. The collected data is then analyzed statistically and extrapolated to the population that the sample represents (NOAA, 1995).

Some advantages of the CVM are, among others: (1) it is based in economic utility theory and can produce reliable estimates; (2) most biases can be eliminated by careful survey designs; (3) it is the only method available to measure nonuse values associated with natural resources; and (4) it has been used successfully in a variety of situations (NOAA, 1995).

The empirical analysis under consideration requires the application of qualitative dependent variable econometric models (Judge, et al., 1988; Isaacs, 1998). Considering that an econometric model is supported by an economic model, then the economic model is presented first. After that, the statistical properties, the interpretation of the estimates, and drawbacks of the qualitative dependent variable econometric model, among other important considerations, are presented. The model is applied to the forested wetlands in the Tensas River basin.

The Economic Model

Different measures of welfare have been proposed to model willingness-to-pay, (Mitchel and Carson, 1989). Consumer surplus is known as the traditional measurement of welfare, and looks at the ordinary Marshallian demand curve and the price (P) range. The ordinary demand curve allows a variation in the utility level, which is why there have been some problems using ordinary demand to calculate the consumer surplus as a measure of benefits (Mitchell and Carson, 1989).

Compensating variation (CV) –or compensating surplus, and equivalent variation (EV) –or equivalent surplus, are two alternative techniques to the ordinary demand as a measurement of welfare. Compensating variation is defined as the quantity of income that compensates a consumer for a price change by returning him or her to the original level of utility, i.e.:

$$CV(p_0, p_1) = e(p_1, u_0) - e(p_0, u_0) \quad (1)$$

Where $e(.)$ represents the expenditure function, which is a function of price p and the utility level u_0 before the change in price.

Equivalent variation is defined as the income change that would be required in place of a price change in order to reach the same level of utility that would have been attained with the price change, i.e.

$$EV(p_0, p_1) = e(p_1, u_1) - e(p_0, u_1) \quad (2)$$

In the case of environmental goods, welfare measures are concerned with a change in the quantity of a good rather than a change in price. Biodiversity and other environmental goods can be treated as non-priced commodities. In such case, compensating and equivalent variation should be rewritten as a function of quantity changes. If the quantities of the good may be finely varied, equivalent and compensating variation measures are recommended (Randall and Stoll, 1980). Since the consumers are generally restricted to consume the commodity in fixed or lumpy quantities, equivalent and compensating surplus measures should be used.

Mitchell and Carson (1989) distinguish between willingness-to-pay and willingness-to-accept in contingent valuation surveys, which depends on questions that are related to increases or decreases in prices and quantities of the composite good. Table 1 adequately associates the measures of welfare compensating and equivalent variation-surplus, type of changes in prices and quantities, and the different willingness that can be studied through a contingent valuation survey.

Based upon theoretical and empirical research, analysts recommend that contingent valuation surveys use WTP questions (Isaacs, 1998). As the nature of WTP is more familiar to respondents than WTA, WTP questions are less vulnerable to strategic bias (Mitchell and Carson, 1989; NOAA, 1995).

Table 1: Welfare measures for Contingent Valuation Surveys

Change	Willingness to Pay	Willingness to Accept
Quantity increase	Compensating surplus	Equivalent surplus
Price decrease	Compensating surplus; Compensating variation	Equivalent variation
Quantity decrease	Equivalent surplus	Compensating surplus
Price increase	Equivalent variation	Compensating variation

The elicitation method is important in estimating the respondent's maximum WTP for the amenity before he or she would prefer to go without it. Different elicitation formats exist, which thoroughly summarizes Isaacs (1998). Among them, the dichotomous choice format has been recommended to evaluate passive use value of an amenity (NOAA, 1995).

The passive use value of an amenity (e.g., biodiversity) for a given individual can be modeled (Isaacs, 1998) upon the utility function $U_{ij}(x, S_j)$, where i denotes the i-th individual, x represents a bundle of market goods, and S_j a measure of the condition of species diversity S under the j-th choice, for j=1,2 .

It is assumed the individual know her/his preferences with certainty, although the observer can not observe all components of the utility function. Thus, treating the unobservable components as stochastic, the level of utility is a random variable with mean $V_{i,j}(x,S_j)$ and stochastic error ε_{ij}

$$U_{ij}(x,S_j) = V_{ij}(x,S_j) + \varepsilon_{ij} \quad (3)$$

In a dichotomous choice contingent willingness-to-pay scenario, the individual is presented with two alternatives. The first alternative is to consume the same quantity of the numeraire and the existence good:

$$U_{i,1}(x,S_1) = V_{i,1}(x,S_1) + \varepsilon_{i1} \quad (4)$$

The second alternative is to consume a dollar amount $B less of the numeraire in exchange for an increase on the provision of the existence good:

$$U_{i,2}(x,S_2) = V_{i2}(x - \$B, S_2) + \varepsilon_{i2} \quad (5)$$

Where *$B* is a random selected dollar amount presented on individual i's questionnaire.

The i-th individual will select alternative 2 only if $U_{i2} > U_{i1}$. An individual who is presented a request to pay *$B* to increase species diversity from S_1 to S_2 will pay the amount only if

$$V_{i,2}(x - \$B, S_2) + \varepsilon_{i2} \geq V_{i,1}(x,S_1) + \varepsilon_{i1} \quad (6)$$

The statistical model

The individual response is a random variable Y with only two possible outcomes, i.e. outcome A defined as "individual i is willing to pay", and outcome B as "individual i is unwilling to pay". Thus, the probability distribution function of Y is:

$$P_1 = P[Y = A]$$
$$= P[V_{i,2}(x - \$B, S_2) + \varepsilon_{i2} \geq V_{i,1}(x,S_1) + \varepsilon_{i1}] \quad (7)$$
$$= P[\{V_{i,2}(x - \$B, S_2) - V_{i,1}(x,S_1)\} \geq \{\varepsilon_{i1} - \varepsilon_{i2}\}]$$
$$= P[\Delta V \geq \eta] \quad (8)$$

It is worth noting in (8) that $\eta = \varepsilon_{i1} - \varepsilon_{i2}$ is also a random variable, and it will be assumed that its cumulative distribution function is $F_\eta(.)$. Thus, the probability of willingness-to-pay can be written as:

$$P_1 = F_n(\Delta V) \quad (9)$$

Different cdf's $F_\eta(.)$ has been proposed in the literature. Among the most important are the probit model, in which the cdf is a normal distribution, and the logit model, with a logistic distribution (Madalla, 1983; Hanemann, 1984). In order to model willingness-to-pay, the probit model is preferred (NOAA, 1995; Isaacs, 1998)), because it allows for the error terms to be correlated, and thus the utility levels, which in turn are contemporary correlated with the error terms.

Probit Models

In the Probit Model, the random variable adopts the form of a Bernoulli r.v., i.e.

$$y_i = \begin{cases} 0\, if\ alternative\ 1\ is\ selected \\ 1\, if\ alternative\ 2\ is\ selected \end{cases} \quad (10)$$

As y_i is a Bernoulli r.v. then its probability distribution function has the form,

$$f_i(y_i|\beta) = P_i^{y_i}(1-P_i)^{1-y_i} \quad (11)$$

where β is a vector of k unknown parameters.

Then, P_i is defined in the Probit model as the following cumulative distribution function,

$$P_i = P[y_i = 1] = F(x_i^{\prime}\beta) = \int_{-\infty}^{x_i} \frac{1}{\sqrt{2\pi}} \exp(-\frac{1}{2}t^2)dt \quad (12)$$

Where $x_i^{\prime}$ is a vector of k explanatory variables for the i-th observation. Note that $F(.)$ in (12) is the normal distribution function.

Assuming that we have a random sample, then (12) can be easily estimated by maximizing the log likelihood function, given by,

$$\ln L = \ln[\prod_{i=1}^{T} f_i(y_i|\beta)]$$
$$= \ln[\prod_{i=1}^{T} P_i^{y_i}(1-P_i)^{1-y_i}]$$
$$= \sum_{i=1}^{T}[y_i * \ln F(x_i^{\prime}\beta)] + \sum_{i=1}^{T}[(1-y_i)*(1-\ln F(x_i^{\prime}\beta))] \quad (13)$$

i.e. the MLE of the unknown vector of parameters β, $\tilde{\beta}$, is such that the log likelihood is a maximum evaluated at $\tilde{\beta}$. More over, at $\tilde{\beta}$ the log likelihood function is a global optimum for the Probit model, been the estimator consistent (for large samples the estimator $\tilde{\beta}$ converges to the true parameter β), asymptotic efficient (for large samples it has minimum variance), and asymptotically normally distributed, with mean β and matrix of variances and covariances equal to the inverse of the information matrix $I(\beta) = X^{\prime}DX$, with D, a diagonal matrix with $d_{ii} = f_i(y_i|\beta)/[F(x_i^{\prime}\beta)*(1-F(x_i^{\prime}\beta))]$ (Maddala, 1983; Judge et al., 1988).

The likelihood ratio test can be used to test the overall significance of the model under the null hypothesis:

$$H_0 : \beta_2 = ... = \beta_k = 0$$
$$H_0 : At\,least\,one\,of\,the\,\beta's\,is\,different\,than\,zero \quad (14)$$

The likelihood ratio test is,

$$\lambda = -2(\ln L_{Restricted} - \ln L_{Unrestricted}) \quad (15)$$

where $\ln L_{Restricted}$ stand for the log-likelihood function maximized under the null hypothesis, i.e.

$$\ln L_{Restricted} = \ln L(\beta_2 = ... = \beta_k = 0)$$
$$= T\ln(n/T) + (T-n)\ln(T-n)/T) \quad (16)$$

Under the null hypothesis, λ has a χ^2 with k-1 degrees of freedom. Large values of λ leads to the rejection of the null hypothesis that all the parameter estimates, except the intercept, are not significantly greater than zero (Judge, 1988).

Interpretation of Probit Estimates

Unlike linear regression models, the parameters of Probit models are not slopes. The parameters ought to be interpreted and examined on the basis provided by the economic model (Judge at al., 1988). It should be noted that the expected value of the choice variable y_i equals the probability that alternative 2 is chosen (see equation (10)), i.e., the Probit model helps us in explaining what is the proportion of the population under study that is willing to pay to increase species diversity from S_1 to S_2 (see equations (5) and (6). Therefore, it is also possible to have an estimate of the proportion in the target population that is not willing to pay to increase species diversity.

As previously introduced, the parameters are not slopes, but they show the direction of the effects, and can be used to determine the significance of the influence of the independent variables, justified to be included by the economic model, on the binary choice. One possible interpretation of the model is the following. If the independent variables describes the characteristics of the persons in the target population then the estimated model can be used to explain which are the "main" characteristics of the persons that are willing to pay, and that of those that are not willing to pay (Hill, 1998). This information can be useful in policy-making decisions.

The intercept of this model can be interpreted as the "intrinsic" preference for one alternative relative to the other (Hill, 1998). As it is not possible to say if it is zero, in fact it is needed for this hypothesis to be tested.

The Application of the Model

The willingness-to-pay methodology is used to study a voluntary fund, which has been proposed to acquire an amount of forested wetlands in the Tensas River basin to support the variety of plants and animals that occur in the habitat. Based on the literature review discussed above, it is suggested that the WTP methodology is the most appropriate technique to use in this research.

The research area selected for this analysis focuses on the Tensas River Valley, a section of the Lower Mississippi Valley ecosystem in northeast Louisiana. The Lower Mississippi Valley encompasses twenty-six million acres in seven states. This ecologically unique and diverse area contains prime bottomland hardwood and wetlands which are considered to be among the most important wildlife habitat areas in the United States. The Tensas River Valley is an endangered ecosystem that is a good testing ground for using WTP methodology to evaluate passive use of environmental amenities.

A mail survey was conducted by the Louisiana State University, Department of Agricultural and Agribusiness, in 1997 following Dillman's Total Design Method (TDM), which is an established methodology for mail and telephone data collection and survey design, improving both response rate and quality (Isaacs, 1998).

The mail survey was sent to 1,425 individuals selected from 3,169 applicants in a lottery system conducted by the Tensas River National Wildlife Refuge. The response rate was 50 percent. After manipulating and validating the electronic data file containing all the responses, 663 records were available to conduct this empirical analysis.

The variables considered pertinent for the WTP analysis are described below. WTP is hypothesized to be a function of socioeconomic and attitudinal characteristics of the respondents.

WTPAY = f (Socioeconomic,Attitudinal) + ε,
where,

WTPAY: 1 if the respondent answered "yes" to the willingness to pay for biodiversity habitat conservation in the Tensas River basin question; 0 otherwise.

Socioeconomic Variables:

(the signs in parenthesis describes the hypothesized relationship between WTPAY and the variable being described).

LGINCO (+) Respondent's income; logarithm

GENDR (+/-) 1: Male, 2: Female

AGE (+) Respondent age

EDUC (+) Respondent education

LIVE (+/-) 0: Urban area of residence, 1: Rural area of residence

MINOR (+/-) Number of persons less than 18 years old in the respondent household

OTHERST (-) Respondent age; 1 if respondent is older than 66; 0 otherwise

Attitudinal Variables:

HUNTSKIL (+) Likert Scale Indicator (LSI) of respondent's self-reported hunting skills. 1=Beginners,...,4=Expert

OUTSKIL (+) LSI for self-reported skills at nonmotorized, nonconsumptive outdoor recreational activities.

IMPDEV (+) LSI of the respondent's belief regarding the importance of an environmental issue

BIOKNOW (+) 1 if the respondent has heard of the term "biodiversity"; 0 otherwise

SPECKNOW (+) 1 if the respondent correctly identified the decrease in the number of plant and animal species worldwide; 0 otherwise

WTPA (+) Randomly assigned amount of the WTPA=$1, $5, $10, $25, $50, $100, $150

NEP (+) Summary score of the items constituting the NEW Ecological Paradigm

Table 2. presents probit parameter estimates and summary statistics of the variables described above. The mean of income was $44,419, while LGINCO was significant in explaining WTP; Mean education level was "some college", and EDUC was a significant variable in explaining WTP; 70% of the respondents were male, and GENDR was not significant; Mean age of respondents was 51 years old, and AGE was not significant; With a scale from 0-4, the mean hunting skills was 0.76 (beginners=1), and HUNTSKIL was not significant; On the same scale, the mean outdoor skills was 0.83, and OUTSKIL was significant; Mean biological knowledge was 0.34, in a range of 0-1, and BIOKNOW was not significant; Mean species knowledge was 0.71, in the range of 0-1, and SPECKNOW was significant; Mean NEP was 51 (range 20-75), showing a significant relationship with WTP. Finally, the estimated mean WTP was $44, with a standard deviation of ±$51.

Not surprisingly, the education and income level variables were found to be the most significant variables describing the relationship of WTP for recreationists in the Tensas River Valley. Although the correlation between education and income level is well known to have a high positive relationship, it is important to mention that the observed correlation is 0.51, and that these two variables were preserved in the analysis because they assisted with increasing the overall significance of the Probit model.

Table 2: Summary statistics of the socioeconomics and attitudinal variables considered in the WTP analysis.

	Estimate	ChiSquare	Mean	Std Dev	Minimum	Maximum
INTERCEPT	-5.288	(16.90)**				
INCO	.		44419.28	30871.59	7500.00	112500.00
LGINCO	0.257	(6.50)**	10.42	0.82	8.92	11.63
GENDR	-0.157	(-0.98)	1.30	0.49	1.00	5.00
AGE	-0.001	(-0.01)	51.03	16.19	7.00	93.00
EDUC	0.130	(4.70)**	3.96	1.35	1.00	6.00
LIVE	0.011	(-0.03)	3.40	1.18	1.00	5.00
MINOR	-0.197	(7.44)**	0.62	1.01	0.00	6.00
OTHERST	-0.056	(-0.07)	0.11	0.31	0.00	1.00
HUNTSKIL	0.011	(-0.04)	0.76	1.26	0.00	4.00
OUTSKIL	0.046	(-0.53)	0.83	1.07	0.00	4.00
IMPDEV	0.209	(2.91)*	3.58	0.64	1.00	4.00
BIOKNOW	0.208	(-2.22)	0.34	0.47	0.00	1.00
SPECKNOW	0.398	(5.54)**	0.71	0.45	0.00	1.00
WTPA			44.05	51.31	1.00	150.00
WTPAY	-0.011	(58.65)**	0.66	0.47	0.00	1.00
NEP	0.024	(6.93)**	51.12	8.43	20.00	75.00

** Significant at 0.05, * Significant at 0.10.

The higher levels of species knowledge and environmental concern regarding the "New Ecological Paradigm" is consistent with the national trend towards greater environmental awareness by recreational users. These findings are supportive and consistent with other research efforts concerning the economic valuation of natural resource amenities, such as in the work by Isaacs (1998).

The estimated WTP of $44.00 per household suggests that recreationists in Louisiana value relatively high levels of biodiversity compared to Isaacs' estimates of $36.84 per household. The difference between the two estimates can be explained by the inclusion of different variables in the Probit model. These results, however, should be accepted with caution, due to the possible presence of heteroskedastic error terms in the Probit model, a problem that deserves future analysis.

Despite some weaknesses within this analysis, the contingent valuation method can reveal useful information regarding natural resource valuation with regards to passive use values of recreationists in the Tensas River Valley.

Conclusions

This study briefly presents and discusses contingent valuation as an economic valuation tool, defined as a direct measurement technique for valuing non-market goods and amenities such as wetlands or aesthetic beauty. The methodology of willingness-to-pay has been discussed beside the framework of neoclassical environmental economics. This method employs the use of surveys to state the respondents' willingness to pay or accept compensation for a change in an environmental amenity, following a methodology different from traditional neoclassical economic assessments. The model was successfully applied to a voluntary fund, which has been proposed to acquire an amount of forested wetlands in the Tensas River basin to support the variety of plants and animals that occur in the habitat. According to results, the households of the region are willing to pay 44$ as voluntary fund.

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