Valuation of Religious Site Parshuram Kund in Arunachal Pradesh

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Abstract

Parasuram Kund or the well of Parasuram is a holy place located in the beautiful lower reaches of the Lohit River about 56 km by road from Tezu in Lohit District. The place is associated with the legend of Parasuram expiating his sins. The Kalika-Puran (C. 8th Century A.D.) makes mention of this kund as a sacred place. The Yogini-Tantra states that a bath in the kund washes away all sins. Streams of pilgrims visit during Magh Sankranti Mela held in the month of January every year. On this occasion, the place takes a festive look with thousands of devotees coming from far and near and elaborate arrangements are made by the Government to extend transport, lodging, medical and other facilities to them. The importance to this place for the Hindu pilgrimage was also narrated by the T.T. Cooper during his Mishmi Expedition in 1900 AD where he mention that people from Assam and Bangladesh used to visit this holy place.

Considering the multidimensional benefits of holy site from the tourism perspective, the present paper attempt for economic valuation of the Parshuram Kund by using the contingent valuation method. For this valuation purposes, the stakeholders are divided into four categories viz. Saint, Visitors on religious purposes, Visitors on commercial purposes and household nearby the Parshuram Kund. Different opinions and suggestions were compiled from the field survey conducted during Makar Sankranti 2019.

Keywords: Pilgrimage, Contingent Valuation Method and Stakeholders

Introduction

Harvey defines cultural heritage as the entire set of goods, real property, tangible and intangible assets, privately owned property, property pertaining to public and semi-public institutions, church property and national assets which have great historic, artistic, scientific and cultural value and which, therefore, are worthy of preservation by nations and peoples, serving as permanent features of people's identity down through the generations (Bedate, et.al, 2004). Such a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions which includes all aspects of the environment resulting from the interaction between people and places through time (Jagodzinska, et al 2015). Such value known as its cultural significance which means its aesthetic, historic, scientific, social or spiritual value for past, present or future generations (Allen Consulting Group, 2005). Further, cultural goods are understood to be not only living creations and expressions, such as modern day

performing arts and plastic arts, but also everything that is regarded as cultural heritage from a historical perspective, accumulated over the years and offering a sense of inheritance (Montenegro, et al 2009).

Cultural heritage goods are similar to environmental goods in that they are typically public goods. In order to be a pure public good, the good must have two properties i.e. non-excludible and non-rival in consumption (Ready and Navrud, 2002). Use value is defined as the maximum WTP to gain access to the site. Non use value includes benefits that people enjoy because they know that the site is being preserved. These benefits might be motivated by a desire that the site be available for others to visit (altruistic values), that the site be preserved for future generations (bequest values), that the current non visitor may decide to become a visitor in the future (option value), or simply that the site be preserved, even if no one ever actually visits it (existence values) (ibid). In economics terms, heritage values are measured in terms of an individual's willingness to pay or accept compensation. For historic heritage places to have economic value, a person must be willing to pay an amount of money to protect the place or willing to accept an amount of money as compensation for its loss (Allen Consulting Group, 2005).

However, the existence of cultural heritage sites is susceptible to various threats, physical and non-physical threats. The physical threats are pollution, climate, weather and non physical are urbanization, population growth and also tourist destination. Therefore, cultural heritage sites need protection and preservation. Hence, the present study attempts to study this aspect and future prospect in Parshuram Kund which is a religious site for hindu people and consequently the tourist destinations for Arunachal Pradesh.

Review of Literature

Alberini and Longo (2006), used travel cost method to study visitors on site at four locations- Garni, Haghardzin, Khor Virap and Tatev in Armenia where they found that the coefficient on price is negative which implies that starting at three trips per year, an increase in price by 3,000 AMD (a little less than 5 US $) reduces the number of trips by one. The surplus estimates value of accessing the site in its current conditions is over 21,000 AMD at Garni, 19000 AMD at each of Hughardzin and Khor Virap and 13850 AMD at Tatev. The low consumer surplus of Tatev area is due to poor road conditions and long distance from the capital. **Fonseca and Rebelo (2010)** studied to determine the demand and value of a specific cultural asset (Museum of Lamego) set in the Alto Douro Vineyard (ADV), the oldest wine demarcated region in the world where it was found that income, education and gender positively affect the number of visits to the museum whereas the travel cost negatively affects it. **Xuewang, et al (2011)** used CVM to measure the recreational value of Jiuzhaigou and found its value to be 3.4×10^8 yuan and per capita recreational value was 137.31 yuan per person in 2009. **Raherjo and Gravitiani (2012)** studied Sangiran Primodial human site by application of travel cost method, they found that visitation rate is negatively related to travel cost and distance and positively related with the age, education and level of income. The Willingness to pay per visitor to the activities of the addition of new facilities at the Sangiran Museum was Rp. 11,102.63, which is US $1.31. **Tuana and Navrud (2012)** studied My Son in Vietnam where the aggregate WTP of Vietnamese visitors to the area was $2914236 with the mean WTP of $2.27. For local residents the estimate was $715949. The revenue from visitors yields $345844 for foreign visitors and $57696 for Vietnamese visitors. **Varahrani (2012)** found that university education, income, satisfaction level, logarithm of money which visitor wants to pay and previous knowledge about Kakh Sadabad have positive willingness to pay of visitors.

Objectives

Keeping into multidimensional role of religious sites, the following objectives are frame for the present study:

(1) To find out the maximum willingness to pay for visit in the site.

(2) To identify the following threats and obstacle to visit in the site.

Methodology

The data was collected from both the primary as well as secondary sources. The relevant literatures and statistical abstract report were consulted to have an insight on the topic. For the primary data, pilot survey was conducted in the study site in 14 and 15 January 2019 during Makar Sankranti. Altogether, 300 questionnaires were distributed to the visitors out of which only 195 visitors responded.

Study Area

The present study was carried out in Parshuram Kund of Lohit District of Arunachal Pradesh. Parasuram Kund or the well of Parasuram is a holy place located in the beautiful lower reaches of the Lohit River about 56 km by road from Tezu in Lohit District. The place is associated with the legend of Parasuram expiating his sins. The Kalika-Puran (C. 8th Century A.D.) makes mention of this kund as a sacred place. The Yogini-Tantra states that a bath in the kund washes away all sins. Streams of pilgrims visit the Magh Sankranti Mela held in the month of January every year. On this occasion, the place takes a festive look with thousands of devotees coming from far and near and elaborate arrangements are made by the Government to extend transport, lodging, medical and other facilities to them. The importance to this place for the hindu pilgrimage was also narrated by the TT Cooper during his Mishmi Expedition in 1900 AD where he mention that people from Assam and Bangladesh used to visit this holy place.

The kund or pool stated to have existed at this place has now been submerged by the main course of the river probably as a result of the topographical changes and shifting of rivers brought about in this area by the great earthquake of 1950. There exists today somewhat like a rocky inlet where the real kund is supposed to have existed previously. The Lohit river at this point takes a south westerly course. Taking a sharp bend through a glen between three lofting hills, the river descends into the plains and rumbles down in two mighty currents on the sides of a cliff rising high from the river bed itself. Here a stream casading down from the hills merges itself into the kund. The neighbouring hills and dales import a picturesque scene to the whole area. There is a Dharamsala at the foothills on the way to the kund for the visitors. A Siva temple has also been constructed on the slope of the hill near the Dharamsala (Gazetter of India, Arunachal Pradesh, Lohit District, Govt. of Arunachal Pradesh, 1978, Editors S. Dutta Choudhury).

Result/Analysis

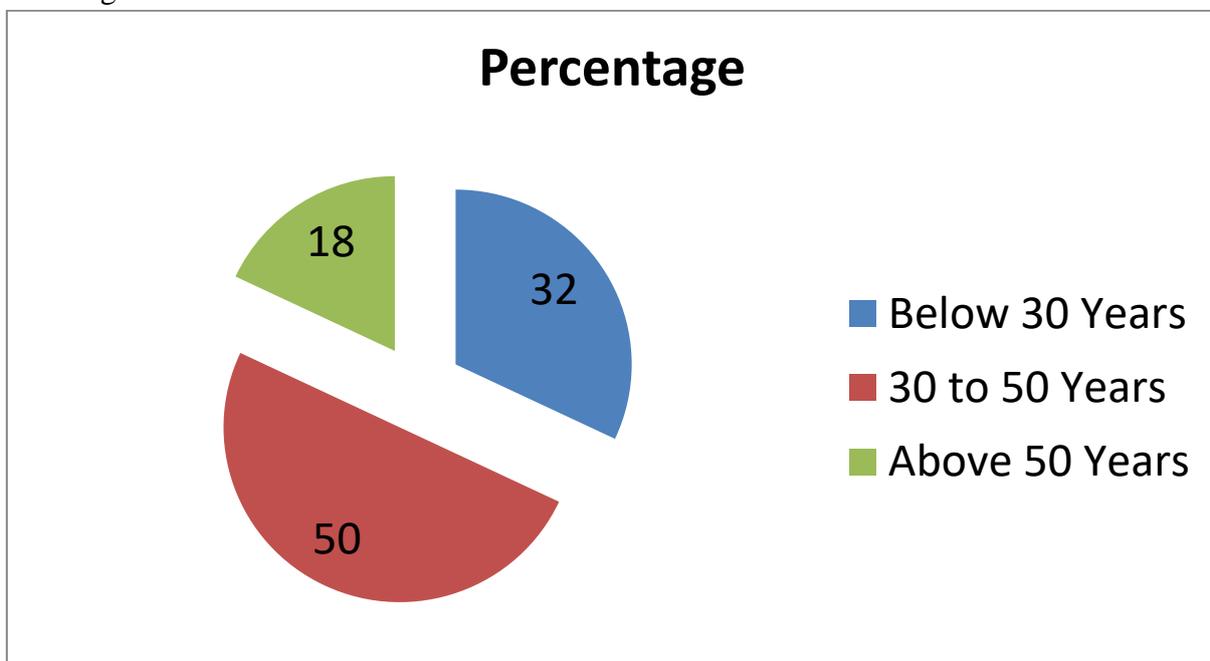### Classification of Visitors on the basis of Level of Education

The total visitors were classified on four levels on the basis of education viz., Illiterate, School Level, Graduation Level and Post Graduation and equivalent. It was found that 69 Percentage of visitors have only school level education followed by 18 percentage of them have graduation level.
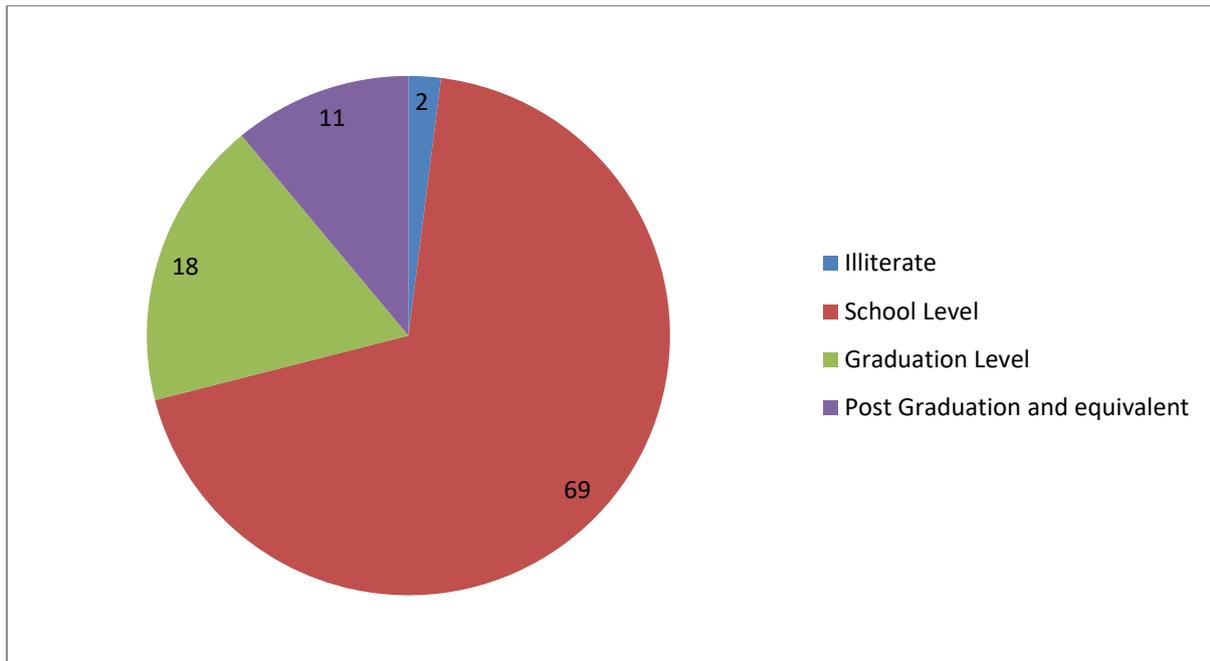
Source: Field Study, 2019

Classification on the Basis of Age of the Visitors

It was found that most of the visitors were in the age group of 30 to 50 years which constitutes 50 percentage, followed by 32 percentage of below 30 years of age and only 18 percentage were more than 50 years of age.
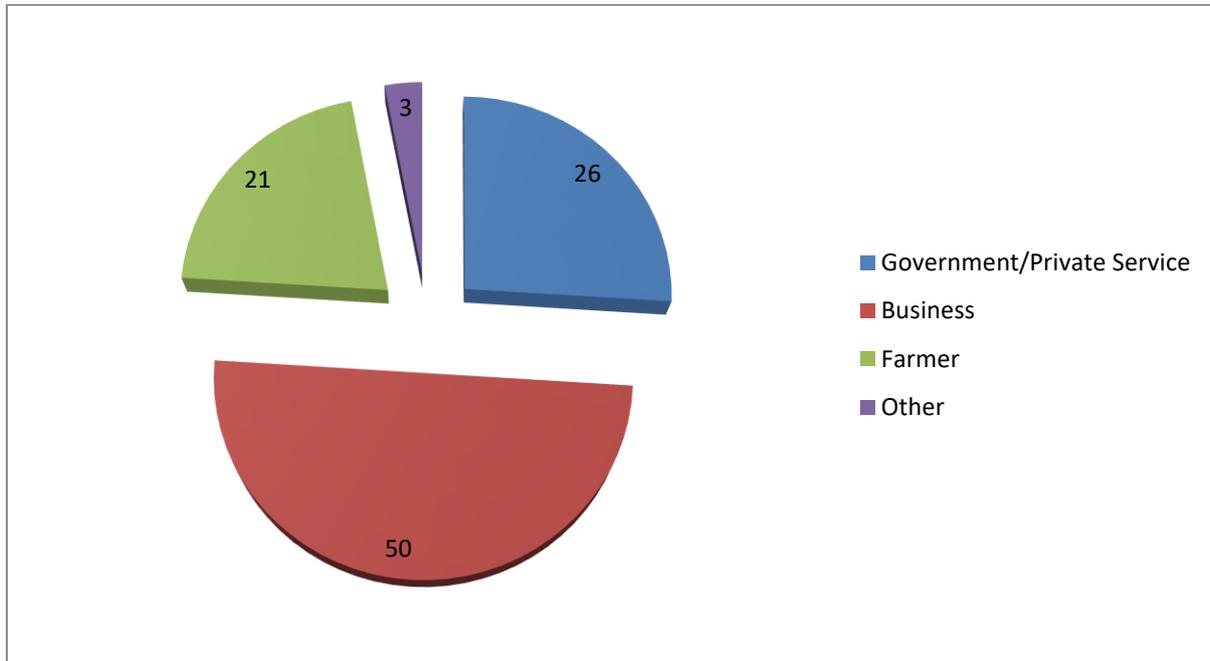

Source: Field Study, 2019

Classification of Visitors by Occupation

The occupations of the visitors are classified into four categories: Jobs in government or private sector, business, farmer and other which include students. On the basis of this category, it was found that most

of the visitors occupation were business which constitutes 50 percentage followed by 26 percentage in government or private jobs, 21 percentage in farming and only 3 percentage in other category.

Source: Field Study, 2019

Classification of Visitors by Level of Income

It was found that most of the visitors were from middle class income group or poor income level. 48 percentage of the visitors were having income range from Rs. 100000 to Rs. 300000, 38 percentage were earning less than Rs. 100000/-, 10 percentage of them are earning in between Rs. 300001 to Rs. 500000 and only 4 percentage are having income of more than Rs. 500000/- annually.
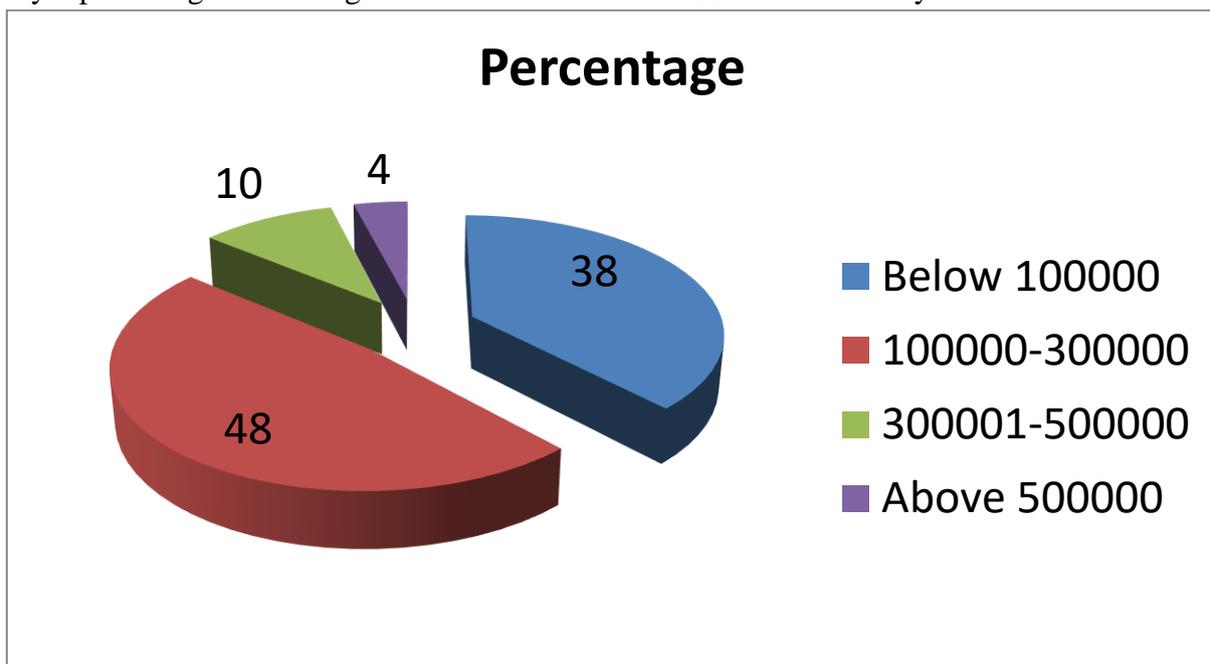
Source: Field Study, 2019

Classification of Visitors by Regionwise

Of the total 195 samples, 124 visitors were from Assam which constitutes 64 percentage to the total visitors followed by 27 visitors from Bihar which accounts for 14 percentage to the total visitors. It has been found that visitors were from 9 states of the country and 14 visitors were from Nepal country.

Sl No.	State/ Country	No.of Respondents	Percentage
01	Arunachal Pradesh	18	9
02	Assam	124	64
03	Bihar	27	14
04	Haryana	1	0.5
05	Karnataka	2	1
06	Maharashtra	2	1
07	Manipur	4	2
08	Nagaland	1	0.5
09	Nepal	14	8
10	Uttar Pradesh	2	1
	Total	195	100

Source: Field Study, 2019

## Classification of Visitors by Number of Visitation

It was found that 49 percentage of the visitors were visiting the site for the first time, 30 percentage 1-3 times visited earlier, 17 percentage of the visitors visited 4-7 times earlier and only 4 percentage visited more than 7 times earlier.
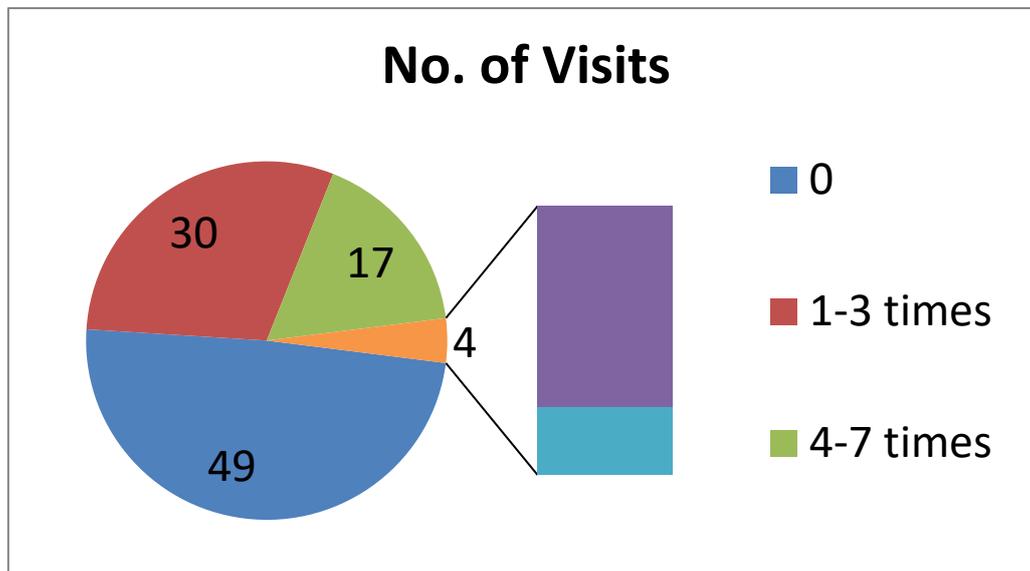
Source: Field Study, 2019

Classification of tourist on the basis of level of total cost of tour

Since, most of the visitors were from Assam, the total cost of tour were very less as compared with the other recreational site. 42 percentage of the visitors have spend less than Rs. 2000 to visit the Parshuram Kund site, followed by 22 percentage spending in between Rs. 2000 to Rs. 5000 and 20 percentage of the visitors spending in between Rs. 5000 to Rs. 10000. Only 16 percentage of the visitors have spend more than Rs. 10000 on total cost of tour.
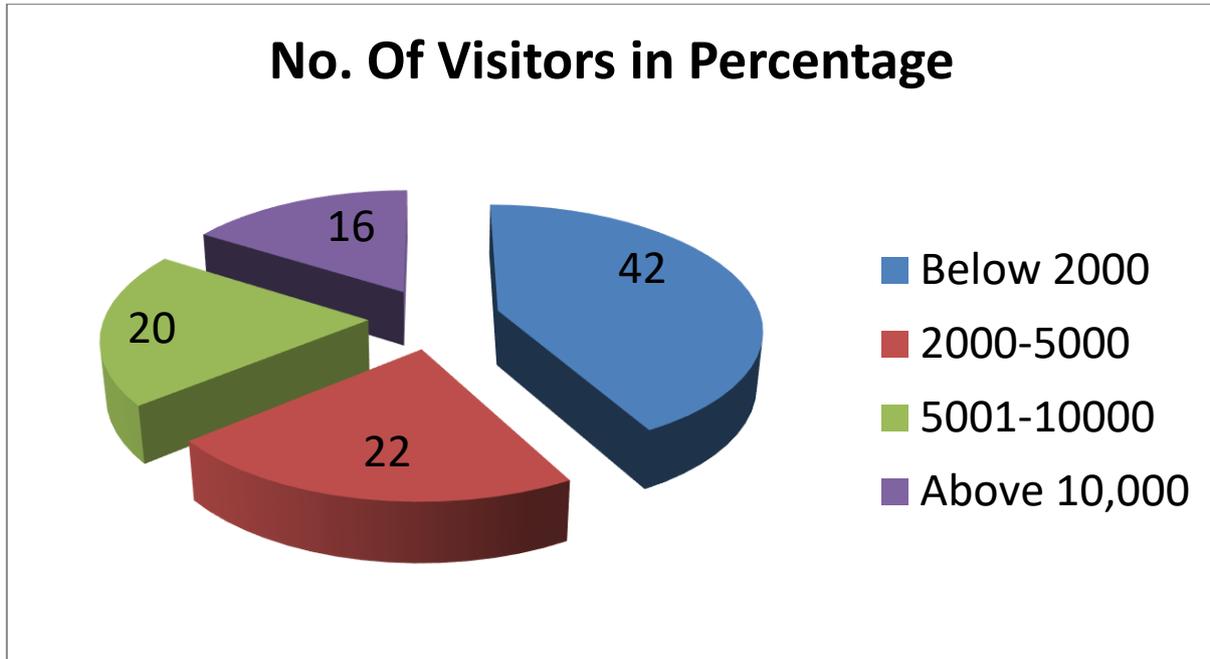
Source: Field Study, 2019

Sources of Information of Parshuram Kund

In terms of source of information about the Parshuram Kund, 57 percentage of the visitors have expressed that their source of information was from Newspaper, Magazine and Internet, 28 percentage of them state as Television and heard from the other people and 11 percentage expressed that they know this place from their previous visit.

Sl. No	Sources	No. of Person	Percentage
01	Newspaper	37	19
02	Magazine	37	19
03	Television	27	14
04	Internet	38	19
05	Word of Mouth	27	14
06	From Previous Visit	22	11
07	Any Other	11	6

Source: Field Study, 2019

Classification of Visitors on the basis of Purpose of Visit

48 percentage of the visitors expressed that their purpose of visit is purely on religious purposes, 28 percentage to see the natural beauty and 23 percentage for both religious and to enjoy the natural beauty.

Sl. No.	Purpose	No. of Visit	Percentage
01	Natural Beauty	46	24
02	Family Outing	3	2
03	Religious Purposes	93	48
04	Natural Beauty + Family Outing	6	3
05	Natural Beauty + Religious Purposes	45	23
06	Family Outing + Religious Purposes	2	1

Source: Field Study, 2019

## Type of Improvement Needed Expressed by the Visitors

Majority of the visitors expressed that there should be a provision of rest room for the visitors coming on pilgrimage purposes and the road conditions should be improved. 76 percentage of the visitors expressed that there should be facilities of rest room and 18 percentage stressed on the development of the road.

Sl. No.	Type of Services	No. of Person	Percentage
01	Sight Seeing	3	2
02	Rest Room	149	76
03	Provision of Boating	14	7
04	Road Conditions	35	18
05	Play Grounds	7	4
06	Walking Tracts	6	3
07	Provision of Waste Disposal	4	2
08	Food Services	10	5

Source: Field Study, 2019

Threats Perceived by the Visitors to the Parshuram Kund Area

Majority of the visitors perceived threats in terms of deforestation, encroachment and increasing numbers of visitors to the site. 35 percentage of the visitors perceived deforestation as major threats, 27 percentage to the increasing numbers of visitors and 26 percentage encroachment to the holy site.

Percentage

- Deforestation — 35
- Encroachment — 26
- Increasing No. of Visitors — 27
- Agricultural Waste — 4
- Others — 8
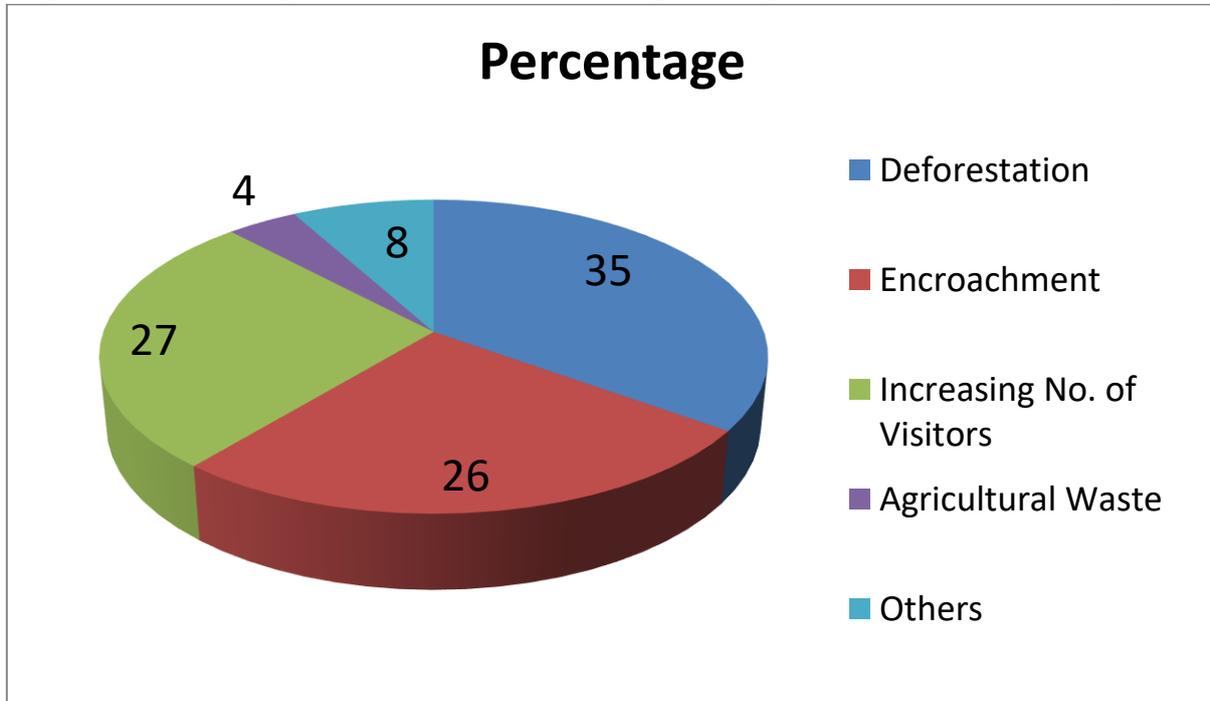
Source: Field Study, 2019

Economic Valuation of Parshuram Kund: Application of Contingent Valuation Method

The Contingent Valuation Method is used to assess the importance of Parshuram Kund from the economic point of view.

$$\text{Max WTP} = 173.528 + 15.540\,\text{EDN}^{**} + 0.01\,\text{INC}^{***} + 0.24\,\text{TC}^{***} - 16.197\,\text{HFM}^{**}$$
$$(2.437) \quad (2.421) \quad\quad (4.036) \quad\quad (5.911) \quad\quad (-3.288)$$

- F Statistics 28.402 at 0.01 significant level
- Standard Error of the Estimate is 318.250
- ** and *** represent significant level at 0.05 and 0.01 level.
- Figure in the parenthesis represent the t- values.

The Maximum willingness to pay for the preservation of Parshuram Kund was positively influenced by level of education, income and travel cost and negatively influenced by the household family members. It was found that level of education positively influenced the willingness to pay and it was significant at 0.05 level. This may be due to the fact that higher the level of education, the more aware about the places and consequently ready to pay for it. The income was also found to be positively influence the maximum willingness to pay and its significant level was 0.01 level. It is universally fact that higher income group would be willing to pay more for the preservation of culturally important places. It was interesting to note that the travel cost positively influencing the willingness to pay which is significant at 0.01 level. This may be due to the fact that most of the visitors were visiting this place only for the pilgrimage purposes and hence those who are coming from far distance would be

economically well off. Hence the positive relationship between the travel cost and maximum willingness to pay can be established. Further, numbers of household family members accompanying visitor were negatively influence the willingness to pay and are significant at 0.01 level. This may be due to the fact that the visitors with more numbers of family members has to incur more expenses in visiting such places and hence reluctant to pay for the preservation of such site. The overall F statistics was found to be 28.902 at 0.01 significant level.

Conclusion

During 2019, more than 15000 people took a holy dip in the Parshuram Kund. This suffices that this place can be developed as a tourist destination by developing some more infrastructures. The average willingness to pay per visitor was Rs. 525, which means the state government can make this place as source of revenue generation by developing it as tourist place.

REFERENCES

1. The Allen Consulting Group 2005, *Valuing the Priceless: The Value of Heritage Protection in*
2. *Australia*, Research Report 2, Heritage Chairs and Officials of Australia and New Zealand,
3. Sydney.
4. Bedate, Ana, et.al (2004): Economic Valuation of the Cultural Heritage: Application to four case studies in Spain, *Journal of Cultural Heritage*, Vol. 5:101-111
5. Driml, S. (2002): 'Travel Cost Analysis of Recreational Value in the Wet Tropics World Heritage Area', *Economic Analysis and Policy*, Vol. 32, No. 2, pp.11-26.
6. Fonseca, Susana and Revelo, Joao (2010): Economic Valuation of Cultural Heritage: Application to a museum located in the Alto Douro Wine Region- World Heritage Site, Revista de Turismoy Patrimonio Cultural, Vol. 8, Issue 2: pp. 339-350
7. Hanemann, W.M. (1994): 'Valuing the Environment through Contingent Valuation', *Journal of Economic Perspectives*, Vol. 8, No. 4, pp.19-43.
8. Kadekodi, G.K. et. Al. (Eds) (2000): *Water in Kumaon: Ecology, Value and Rights*, Gyanodaya Publications, Nainital.
9. Mitchell, R.C. and R.T. Carson (1989): *Using Survey to Value Public Goods: The Contingent Valuation Method, Resources for the Future*, Washington, D.C., The John Hopkins University Press, Baltimore, U.S.A., http://econweb.ucsd.edu /~rcarson/papers/UsingSurveysToValuePublicGoods.pdf
10. Montenegro, et. al (2009): The Valuation of historical sites: A Case Study of Valdivia, Chile, *Journal of Environmental Planning and Management*, Vol. 52, No. 1:pp 97-109.
11. Navrud, Stale and Ready, Richard C. (2002): Valuing Cultural Heritage: Applying Environmental Valuation Techniques to Historic Buildings, Monuments and Artifacts, Edward Elgar Publishing Ltd., UK, June 2002.
12. Raherjo, Mugi and Gravitiani, Evi (2012): The Economic Value of Sangiran Museum, Central Java, Indonesia, Application of Travel Cost Method, International Journal on Social Science, Economics and Art, Vol. 2 No. 2:pp:-39-43.
13. Tuana, Tran Huu and Navrud, Stale (2012): Capturing the Benefits of Preserving World Cultural Heritage Sites, International Centre for Research on the Economics of Culture, Institutions and Creativity, Working Paper No. 2/2012.

14. Varahrami, Vida (2012): Valuing of Cultural Heritage in Iran, Case Study: Kakh Sadabad, Global Journal of Human Science History and Anthropology, Vol. 12, Issues 9: pp. 1-4

15. Xuewang, Dong, et.al (2011): Measuring Recreational Value of World Heritage Sites based on Contingent Valuation Method: A Case Study of Jiuzhaigou, China Geographical Science, Vol. 21, Issue 1: pp 119-128.