

[Home](#) > [Environmental Monitoring and Assessment](#) > [Article](#)

# Estimating willingness to pay for environment conservation: a contingent valuation study of Kanas Nature Reserve, Xinjiang, China

Published: 25 November 2010

Volume 180, pages 451–459, (2011) [Cite this article](#)




[Environmental Monitoring and](#)

[Assessment](#)

[Aims and scope](#) →

[Submit manuscript](#) →



[Fang Han](#) <sup>1,2</sup>, [Zhaoping Yang](#)<sup>1</sup>, [Hui Wang](#)<sup>1,2,3</sup> & [Xiaoliang Xu](#)<sup>1,2</sup>

 1412 Accesses  50 Citations [Explore all metrics](#) →

## Abstract

The primary objective of this study is to estimate publics' willingness to pay (WTP) for environment conservation and analyze factors influencing WTP. A questionnaire survey based on the contingent valuation method (CVM) was carried out at Kanas Nature Reserve, Xinjiang, China. Seventy-three percent of the 412 respondents were willing to pay at different levels, and the mean WTP value was RMB 54.60 (\$8.03). The results of this survey struck an optimistic note that publics were willing to contribute to improve environmental quality. Logistic regression analysis was employed to compare the characteristics of those who were and were not willing to pay. Chi-square tests were administered to identify

the relationships between various explanatory factors and WTP. Conclusions and implications of the empirical study can be provided to policy makers and site managers. In a wider sense, the findings of this study should make a good contribution to the literature related to WTP for environment conservation of natural attractions.

 This is a preview of subscription content, [log in via an institution](#)  to check access.

### Access this article

[Log in via an institution](#) →

[Buy article PDF 39,95 €](#)

Price includes VAT (Poland)

Instant access to the full article PDF.

Rent this article via [DeepDyve](#) 

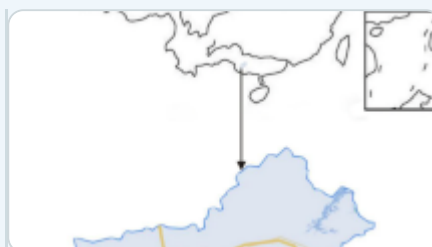
[Institutional subscriptions](#) →

### Similar content being viewed by others



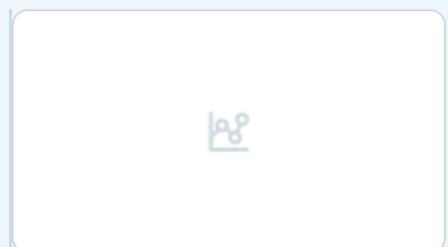
**[Who pays more to preserve a natural reserve, visitors or locals? A confidence analysis of a contingent valuation...](#)**

Article | 09 December 2014



**[Willingness to pay for ecological function regions protection based on a choice experiment method: a case...](#)**

Article | 02 July 2018



**[What do we know about public acceptance of designating marine protected area? The case of Jaran Bay in South...](#)**

Article | 05 June 2020

# Explore related subjects

Discover the latest articles, news and stories from top researchers in related subjects.

[Environmental Chemistry](#)

## References

---

Bateman, I. J., Langford, I. H., Turner, R. K., Willis, K. G., & Garrod, G. D. (1995). Elicitation and truncation effects in contingent valuation studies. *Ecological Economics*, 12(2), 161-179.

[Article](#) [Google Scholar](#)

Beltran, E., & Rojas, M. (1996). Diversified funding methods in Mexican archaeology. *Annals of Tourism Research*, 23(2), 463-478.

[Article](#) [Google Scholar](#)

Bille Hansen, T. (1997). The willingness-to-pay for the Royal Theatre in Copenhagen as a public good. *Journal of Cultural Economics*, 21, 1-28.

[Article](#) [Google Scholar](#)

Carlsson, F., & Johansson-Stenman, O. (2000). Willingness to pay for improved air quality in Sweden. *Applied Economics*, 32(6), 661-669.

[Article](#) [Google Scholar](#)

Carson, R. T. (2000). Contingent valuation: A user's guide. *Environment, Science and Technology*, 34(8), 1413-1418.

[Article](#) [CAS](#) [Google Scholar](#)

Chambers, C. M., Chambers, P. E., & Whitehead, J. (1998). Contingent valuation of quasi-public good: Validity, reliability, and application to valuing a historic site.

[Article](#) [Google Scholar](#)

Chase, L., Lee, D., Schulze, W., & Anderson, D. (1998). Ecotourism demand and differential pricing of national park access in Costa Rica. *Land Economics*, 74(4), 466-482.

[Article](#) [Google Scholar](#)

Davies, R. K. (1963). Recreation planning as an economic problem. *Natural Resources Journal*, 3, 239-249.

[Google Scholar](#)

Dutta, M., Banerjee, S., & Hussain, Z. (2007). Untapped demand for heritage: A contingent valuation study of Prinsep Ghat, Calcutta. *Tourism Management*, 28, 83-95.

[Article](#) [Google Scholar](#)

Eagles, P. (2002). Trends in park tourism: Economics, finance and management. *Journal of Sustainable Tourism*, 10(2), 132-153.

[Article](#) [Google Scholar](#)

Jim, C. Y., & Chen, W. Y. (2006). Recreation-amenity use and contingent valuation of urban greenspaces in Guangzhou, China. *Landscape and Urban Planning*, 75, 81-96.

[Article](#) [Google Scholar](#)

Kima, S. S., Wongb, K. K. F., & Choa, M. (2007). Assessing the economic value of a world heritage site and willingness-to-pay determinants: A case of Changdeok Palace. *Tourism Management*, 28, 317-322.

Laarman, J., & McGregersen, H. (1996). Pricing policy in nature-based tourism. *Tourism Management*, 17(4), 247-254.

[Article](#) [Google Scholar](#)

Lee, C.-K., & Han, S.-Y. (2002). Estimating the use and preservation values of national parks' tourism resources using a contingent valuation method. *Tourism Management*, 23, 531-540.

[Article](#) [Google Scholar](#)

Liu, X. L., Yang, Z. P., Di, F., & Chen, X. G. (2009). Tourism ecological security evaluation in nature heritage area: The case of Kanas nature reserve. *Chinese Geographical Science*, 19(3), 265-273.

[Article](#) [CAS](#) [Google Scholar](#)

Liu, X. L., Yang, Z. P., Xie, T., & Chen, X. G. (2007). An analysis on the value of world nature heritage in Kanas and study on its conservation and development. *Arid Zone Research*, 24(5), 723-727.

[Google Scholar](#)

Lockwood, M., Tracey, K., & Klomp, N. (1996). Analyzing conflict between cultural heritage and nature conservation in the Australian Alps: A CVM approach. *Journal of Environmental Planning and Management*, 39(3), 357-370.

[Article](#) [Google Scholar](#)

Mei, F. Q., & Zhang, S. (2006). Financing mechanism of protected areas in China. *Environmental Protection*, 1B, 48-51.

[Google Scholar](#)

Mmopelwa, G., Kgathi, D. L., & Molefhe, L. (2007). Tourists' perceptions and their willingness to pay for park fees: A case study of self-drive tourists and clients for mobile tour operators in Moremi Game Reserve, Botswana. *Tourism Management, 28*, 1044-1056.

[Article](#) [Google Scholar](#)

Peters, H., & Hawkins, J. P. (2009). Access to marine parks: A comparative study in willingness to pay. *Ocean & Coastal Management, 52*, 219-228.

[Article](#) [Google Scholar](#)

Pollicino, M., & Maddison, D. (2001). Valuing the benefits of cleaning Lincoln cathedral. *Journal of Cultural Economics, 25*, 131-148.

[Article](#) [Google Scholar](#)

Reynisdottir, M., Song, H., & Agrusa, J. (2008). Willingness to pay entrance fees to natural attractions: An Icelandic case study. *Tourism Management, 29*, 1076-1083.

[Article](#) [Google Scholar](#)

Salam, M. A., Noguchi, T., & Alim, M. A. (2006). Factors affecting participating farmers' willingness-to-pay for the tree farming fund: A study in a participatory forest in Bangladesh. *Environmental Monitoring and Assessment, 118*, 165-178.

[Article](#) [Google Scholar](#)

Salazar, S., & Marques, J. (2005). Valuing cultural heritage: The social benefits of restoring an old Arab tower. *Journal of Cultural Heritage, 6*, 69-77.

[Article](#) [Google Scholar](#)

Turpie, J. K. (2003). The existence value of biodiversity in South Africa: How

interest, experience, knowledge, income and perceived level of threat influence local willingness to pay. *Ecological Economics*, 46, 199–216.

[Article](#) [Google Scholar](#)

Venkatachalam, L. (2004). The contingent valuation method: A review. *Environmental Impact Assessment Review*, 24, 89–124.

[Article](#) [Google Scholar](#)

Wang, X. J., Zhang, W., & Li, Y. (2006). Air quality improvement estimation and assessment using contingent valuation method, a case study in Beijing. *Environmental Monitoring and Assessment*, 120, 153–168.

[Article](#) [CAS](#) [Google Scholar](#)

Whittington, D. (2002). Improving the performance of contingent valuation studies in developing countries. *Environmental and Resource Economics*, 22, 323–367.

[Article](#) [Google Scholar](#)

Zheng, H. Y., & Wang, G. X. (2009). Analysis on the construction of national nature reserves system in China. *Journal of Anhui Agriculture Science*, 37(18), 8641–8643.

[Google Scholar](#)

## Author information

---

### Authors and Affiliations

**Xinjiang Institute of Ecology and Geography, Chinese Academy of Science,  
818 South Beijing Road, Urumqi, 830011, China**

Fang Han, Zhaoping Yang, Hui Wang & Xiaoliang Xu

**Graduate School, Chinese Academy of Science, Beijing, 100039, China**

Fang Han, Hui Wang & Xiaoliang Xu

**School of Tourism, Bohai University, Jinzhou, Liaoning, 121000, China**

Hui Wang

## Corresponding author

Correspondence to [Fang Han](#).

## Rights and permissions

---

[Reprints and permissions](#)

## About this article

---

### Cite this article

Han, F., Yang, Z., Wang, H. *et al.* Estimating willingness to pay for environment conservation: a contingent valuation study of Kanas Nature Reserve, Xinjiang, China. *Environ Monit Assess* **180**, 451–459 (2011).

<https://doi.org/10.1007/s10661-010-1798-4>

Received

24 March 2010

Issue Date

September 2011

DOI

<https://doi.org/10.1007/s10661-010-1798-4>

Accepted

10 November 2010

Published

25 November 2010

## Keywords

[Willingness to pay](#)

[Contingent valuation](#)

[Environment conservation](#)

[Kanas Nature Reserve](#)



# Search

Search by keyword or author



## Navigation

Find a journal

Publish with us

Track your research