

## Assessment of facilities for green tourism in Japan: Fifty-six indices in eight regions using online data

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### Background and Objectives

Green tourism is a dynamic and growing global trend. Cities are seeking ways to development by building tourism based on sustainable, environmentally friendly, and responsible activities. City planners are increasingly aware of the great possibilities of the relationship between tourism and cities' natural environments. This study's goal was to develop an objective assessment of green tourism regarding non-human conditions. A scientific evaluation might reveal the specific tourist attractions or places that receive the most tourist attention in Japan.

### Methods

The Green Destinations Standard (available on the Green Destinations website) was modified for the purposed assessment. After studying and modifying the standard of green tourism, two types of variables were chosen for the analysis: dichotomous variables (indicators) and continuous variables. The indicators were nature conservation, facilities, popular seasons, management, and resources. The continuous variables were access (types of transportation), capacity/volume (numbers of tourists), and average cost (JPY). We found eight cases of green tourism in eight different regions of Japan and coded their data into the variables for the analysis. Ultimately, 56 indices were created.

The data were analyzed using reliability analysis, binary variables, and descriptive statistics in JASP software. The reliability analysis determined the reliability of the data, and the binary variables assessed the data regarding non-human conditions. The descriptive statistics were used to assess green tourism in the different regions of Japan regarding non-human conditions.

## Results

The reliability analytical results were not satisfactory, and the reason might be that the alpha reliability test was not appropriate for binary data. The binary variable and descriptive analyses were performed to assess the data.

First, it seemed that nature conservation was a necessary condition for green tourism because the mean of this variable was 0.88. The data indicated that green tourism in Japan was mainly about the development of nature, and protecting cultural heritage was a less frequent response. Second, most of the areas had perfect and diverse methods of transit, including bicycles, cable cars, boats, walkways, and tourist buses. Although Japan has many mountains and seas, there were just a few cable cars and boats. The tourist attractions were easily reached by walking to them. We concluded that, when Japan developed green tourism, it first considered people's needs and convenience. In addition, most areas were government-managed, although a large proportion was privately administered. Last, the mean amount of tourism for the winter season was low (0.71), which was the lowest mean among the seasons. Apparently, although there are holidays in the winter, green tourist attractions open during the winter is less attractive. (**Table 1**. Descriptive statistics)

## Conclusion

In sum, the scores were summarized by region. The highest score computed by the binary variable method was in the Chubu region, and the lowest score was in the Shikoku region. The Kansai cultural center and the Kanto economic center were not major areas of green tourism. If we have an opportunity to conduct in-depth research to explore this phenomenon, our findings might benefit the development of green tourism in Japan. (**Figure 1**. Total scores by region)

キーワード : Green tourism、 assessment、 binary variable、 Japan

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Table 1. Descriptive statistics

Descriptive Statistics														
	Nature Protection	Bicycle	Pedestrian	Cable car/ Rope way(Mountain)	Tourism bus/ Train	Water transport	Spring	Summer	Autumn	Winter	Official	Private	Natural	Cultural (Heritage)
Valid	56	56	56	56	56	56	55	56	56	56	56	56	56	56
Missing	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Mean	0.8750	0.5179	0.9643	0.1607	0.6071	0.3750	0.9091	0.9286	0.8929	0.7143	0.8750	0.5536	0.9286	0.6786
Std. Deviation	0.3337	0.5042	0.1873	0.3706	0.4928	0.4885	0.2901	0.2599	0.3121	0.4558	0.3337	0.5016	0.2599	0.4713

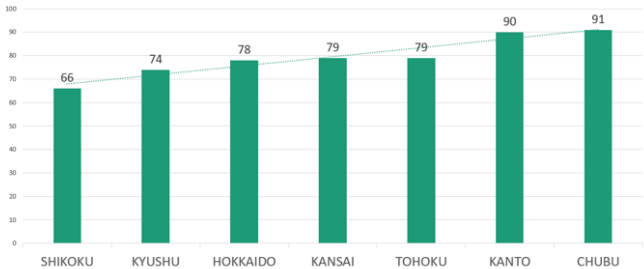


Figure 1. Total scores by region.(The full score is 112 points.)