

**Heritage as a Community Asset**  
**- Monetary Valuation of Heritage using CVM and Policy Related Issues -**

Emiko Kakiuchi, Ph.D.  
Professor, Director, Cultural Policy Program,  
National Graduate Institute for Policy Research (GRIPS)  
2-2 Wakamatsu-cho, Shinjuku-ku,  
Tokyo 162-8677 JAPAN  
TEL/FAX: +81-3 3341 0429  
Email: [kakiuchi@grips.ac.jp](mailto:kakiuchi@grips.ac.jp)

**Introduction**

Japan has a long history of heritage conservation and particularly in recent years cultural heritage has been regarded as a precious stock of the community. As Japanese society and the economy have matured, and the national demand for a better quality of life has increased. People are seeking their own identity, and cultural activities have been integrated into local communities and are considered an important component of a high quality lifestyle. From an urban planning perspective, the focus has shifted to improvement of amenities and quality of life rather than fulfilling minimum requirements.

It is not easy to evaluate the benefit of investment in culture. Because of competition for limited resources, it is necessary to estimate the benefits and identify the beneficiaries of cultural heritage, which include both use and non-use values. In this presentation, I will briefly introduce Japanese cultural protection system and its history. I will then discuss a method for monetary valuation of heritage using the CVM (Contingent Valuation Method), and will also discuss policies and systems for heritage conservation.

**1. Brief History of Heritage Conservation in Japan<sup>1</sup>**

**1) Pre-war period-1950's**

Heritage conservation efforts by the Japanese government date back to 1871, just after the Meiji Restoration, when Japan abandoned its policy of isolationism. Heritage conservation at that time focused on protecting antique arts, including artifacts and Buddhist statues, against Westernization and the anti-Buddhist movement, preventing the drain of artifacts to foreign countries, and repairing temples and castles, as well as preserving historic sites, places of scenic beauty, and natural monuments. During and after World War II, efforts on heritage conservation almost completely stopped. Immediately after the war, heritage conservation efforts faced great difficulty because of hyper-inflation, heavy taxes, and the psychological damage from Japan's defeat, as well as a public loss of interest in tradition. In 1949 a fire at the Horyuji temple, the oldest wooden structure in Japan, which is now included in the UNESCO World Heritage List,

---

<sup>1</sup> Kakiuchi, E. (2003), *Heritage Conservation and Sustainable Development in Japan*, (DVD) produced in cooperation with the World Bank Institute.

destroyed outstanding wall paintings in its Buddha Hall. This accident induced a strong national sentiment for cultural heritage protection, which led to the enactment of the Cultural Properties Protection Law in 1950.

The Cultural Properties Protection Law defines “cultural properties,” integrating pre-war tangible heritage such as artifacts and, buildings, and historic sites with the new concept of intangible cultural properties such as stage arts. The national government selects and designates the most important cultural properties and imposes restrictions in areas such as alteration to existing appearance, repairs, and exports. The government also undertakes a range of measures for preservation and utilization. Unlike the pre-war era when only the national government could designate national treasures, the prefectural and municipal governments designate and protect additional cultural properties of regional or local interest, which contributes to democratization in the designation of cultural properties.

## **2) 1960's-1970's**

In the 1960s and 70s, when Japan experienced rapid economic growth<sup>2</sup>, serious social problems occurred such as disorderly development, public nuisance, excessive centralization and depopulation of rural areas. On the other hand, urbanization and economic development destroyed historic old towns and the environment surrounding traditional buildings deteriorated. Due to the drastic change in industrial structure and modernization of life style, performing folk arts, traditional customs, and buried cultural properties were lost.

In 1965, triggered by the development of building land in the backyard of the famous Tsurugaoka Hachimangu Shrine at the heart of Kamakura, a city near Yokohama, a civic movement for the protection of not only historic buildings but also historic landscapes, gained support from the mass media and public opinion. This led to the enactment of a new law for Preservation of Ancient Capitals in 1966. This law applies only to ancient national capitals in terms of politics and culture, such as Kamakura, Kyoto, Nara, and several other cities. Many other local governments started to enact regulations to protect historic landscapes, seeking quality of living environment and reevaluating historic landscapes which were lost due to rapid development<sup>3</sup>.

These movements by citizens and local governments led to the revision of the Cultural Properties Protection Law by the national government in 1975. In addition to several important changes and revisions at that time, a new category of cultural properties, “Important Preservation Districts for Groups of Historic Buildings,” was introduced.

In these districts, it became possible to protect not only each designated building but also

---

<sup>2</sup> The National Income Doubling Plan, and the Comprehensive National Development Plan were put into effect in 1960 and 1962, in 1964 the Shinkansen (bullet train) service was inaugurated, and the Olympic Games were held in Tokyo.

<sup>3</sup> The city of Kanazawa was the first to enact such an ordinance in 1968, aiming to prevent destruction of the traditional environment of the city, preserve the form of the traditional environment in coordination with modern city, and pass it on to succeeding generations, through a zoning system for the traditional landscape, extending subsidies, and other related measures, trying to create a livable city and attain endogenous development.

groups of historic buildings, where people still live. The exteriors of the buildings are the main objects to be protected, while both the exterior as well as the interior of designated cultural properties are preserved. It is the responsibility of local governments to determine these districts based on a consensus of the residents, while the national government selects districts with extremely high value from among those locally determined ones and covers a part of the expenses for protection. Thus regional development and urban planning are compatible with heritage conservation.

### **3) 1980's-1990's**

In the 1980s and 90s, “culture” and “region” became increasingly became key words for all aspects of life, and people gradually recognized cultural properties as a stock for regional development. Many local governments took action to preserve the historic atmosphere of each town and utilize historic sites. Various entities emerged and became actively involved in protection of cultural properties<sup>4</sup>.

Also people started to recognize the importance of heritage and cultural properties as a resource for tourism, commerce and industries, and in 1992 a new law was enacted to promote regional industries and businesses utilizing traditional performing arts and other related activities. Since Japan signed the UNESCO World Heritage Convention in 1992, heritage sites in Japan have been added in to the World Heritage List. The public has become increasingly aware of the importance of heritage conservation, and governments are undertaking various measures to protect not only the heritage sites but also buffer zones.

### **4) 2001 and present**

In 2001 the Fundamental Law for the Promotion of Culture and Arts was enacted. This law reflects a broad social consensus on the importance of culture. It adopts a broad and inclusive definition of culture, and also makes provisions for support of cultural activities by local governments, non-governmental organizations, companies, and individuals.

In 2004, the Act of Scenery was enacted, aiming to create pleasant and beautiful scenery in cities and villages. It is the first law which refers to the importance of the “beauty” of the cities and villages, and stipulates that the national government is responsible for extending public support through zoning, and if necessary, restriction of private rights of land owners for the above purpose, with active participation of citizens, NPOs, and NGOs required. At the same time, the new category of “cultural landscape” was added to the concept of cultural properties.

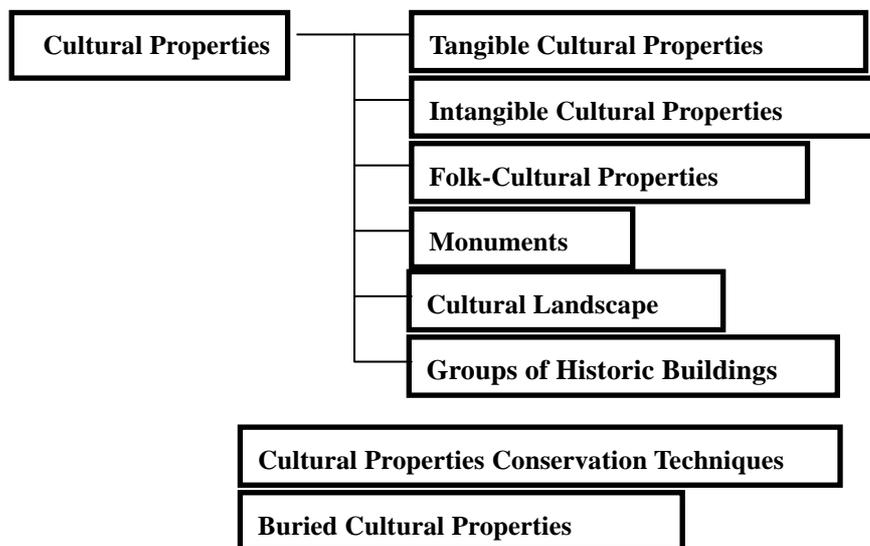
## **2. The Concept of “Cultural Properties” in Japan**

In 2004, cultural properties designated, selected, and registered by the national government include the various categories shown in Table 1. Tangible cultural properties such as artifacts and buildings (about 12,430 designations, including about 2,260 designated buildings, besides 4,140 registered buildings), intangible cultural properties such as theatrical performances (about 110 designations), folk-cultural properties such as clothing, housing, and customs (about 430

---

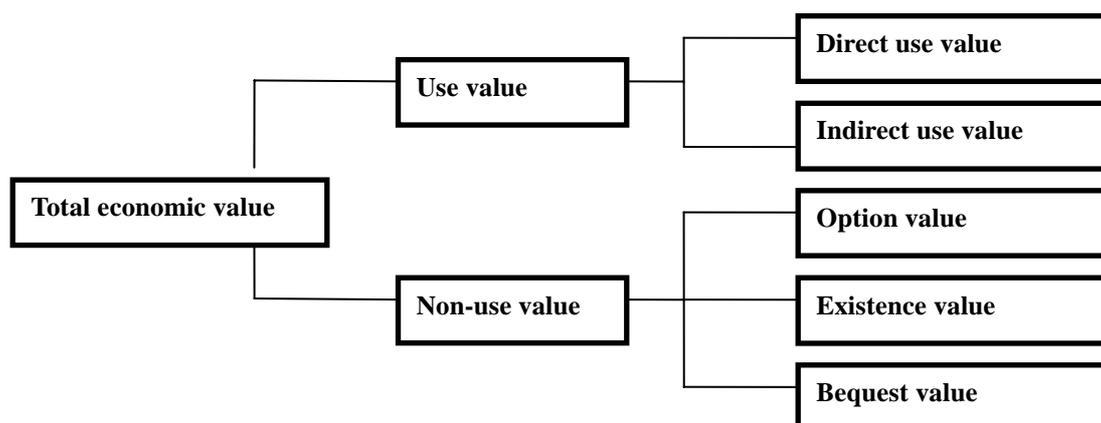
<sup>4</sup> Under a new law to promote specified non-profit activities in 1998.

**Table 1. Cultural Protection System**



designations), monuments such as historic sites, places of scenic beauty and natural monuments (about 2,710 designations), important preservation districts for groups of historic buildings (about 60 selections), as well as cultural properties conservation techniques (about 70 selections) and buried cultural properties. The new category of “cultural landscape” which was introduced in 2004 aimed to protect the significant cultural landscape sites such as rice terrace and coppice woodland. Conservation of rice terraces should include not only conserving paddies but also intangible assets as the water supply management system. Cultural heritage is sometimes thought to consist of mainly buildings and monuments, but it is really rather a much bigger concept, notion including intangible cultural properties such as festivals and traditional customs, artifacts and conservation techniques.

**Table 2. Economic values**



Cultural value has the nature of public goods such as externalities (prestige values, identity, social contribution, economic merits, or educational merits), which justifies public support. In general, the economic value of cultural heritage is considered to be composed of use value and

non-use value<sup>5</sup> as shown in Table 2. The opportunity to visit the heritage in the future, is part of the option value while the ability to pass the heritage on to successive generations is included in the bequest value, and satisfaction from the continued existence of the heritage is part of the existence value.

### **3. Outline of the Gokayama historic villages**

The historic villages of Gokayama are located in a mountainous area in Toyama Prefecture, in the northern central part of Japan, and are well known for traditional wooden houses which are one of the representative forms of Japanese architecture. Harmonizing with the surrounding harsh natural environment, the steep thatched roofs of the houses, which are made of natural materials from nearby forests, can endure the heavy snows of this region. These houses had been maintained by “yui” (community cooperation), and the necessary skills had been transmitted from generation to generation among the residents. However, due to the rapid economic growth and changes of social structure in the 1950’s - 1970’s, most of these houses and historic villages vanished, with the notable exception of the village of Shirakawa-go, Gifu Prefecture, and the two smaller villages of Gokayama, Toyama Prefecture (Ainokura and Sukanuma, Figure 1 and 2). These three villages are now designated as “districts of groups of important historic buildings” under Japan’s Law for Protection of Cultural Properties (hereafter referred to as “the Law”), and are registered in the UNESCO World Heritage List. The two villages of Gokayama were also designated as “national historic sites” under the Law in the 1970’s, and changes in both the interior and exterior of houses have been strictly restricted since then. Maintaining “buffer zones” to preserve the natural environment of the rivers, forests, and mountains surrounding the heritage sites is at the discretion of the national and local governments, although in practice priority is given to World Heritage sites.

Ainokura village is composed of 27 households with a total population of less than one hundred. An 18 ha preservation area around the village has been designated under the Law, including village houses, temples and shrines, storehouses, and surrounding forests. Sukanuma village is located 7 km from Ainokura village, and a 4.4 ha preservation area around Sukanuma has been designated under the Law, including houses and surrounding facilities. The number of tourists visiting the villages has increased dramatically since their registration in the UNESCO World Heritage List in 1995.

Depopulation, rural decay due to nationwide economic development, aging, and the increase of tourism-related family business have weakened various functions for maintenance of the villages such as making paddy fields, managing forests, and re-roofing historic houses. In order to maintain the cultural value of the heritage, it is necessary to make the villages sustainable and livable. Thus job creation and upgrading living conditions are essential (Taira village, 1996).

Ainokura established a foundation for collecting fees from tourists in 1996. The foundation

---

<sup>5</sup> In general, non-use value (passive use value) is considered to include option value, existence value, and bequest value. See *Ohio v. Department of Interior*, 880 F.2d 432 (D.C. Cir. 1989). In our research we conducted pre-survey focus group interviews which strongly suggested the importance of the aesthetic value of the heritage villages, so we also included aesthetic value in the questionnaires.

also works toward maintaining the natural environment surrounding the village. At present, the foundation has funds for only a few jobs, mostly part-time<sup>6</sup>. The other Gokayama village, Suganuma, has built a museum and accommodations at a nearby site, and is trying to keep the living heritage as was in the past. There is only one hostel within this village, and visitors are free to enter the village.



**Figure 1. Ainokura village**



**Figure 2. Sukanuma village**

It is becoming increasingly important to secure the necessary resources for maintaining the daily life of the villages, and to create a new system which can replace traditional community cooperation to preserve the environment surrounding the villages. As the historic villages of Gokayama are designated as historic sites under the Law, the national government has extended

---

<sup>6</sup> As of 2001, the foundation had a staff of 8 employees, all of whom are part-time. The foundation collected 19 million Yen in 1999, by charging fees of 2,000 Yen per tour bus, 300 Yen per car, and 100 Yen per motorcycle visiting the village.

public subsidies for preservation as well as disaster prevention. However the existing public support does not fully cover the costs of maintaining the heritage, and further support, including additional job creation and upgraded living standards, is necessary to facilitate the sustainable existence of the villages.

#### **4. Method, results and analysis**

##### **1 ) Survey design and profile of respondents**

The benefits of cultural heritage are consist of use value and non-use value. Any evaluation of the social benefit of the villages of Gokayama should include an objective evaluation of their non-use value. There are several categorizations of non-use value as we have already seen in section 2. In this study, we consider “option value,” “existence value,” “bequest value,” “educational value,” and “aesthetic value” as non-use values. We use the Contingent Valuation Method (CVM) in this study (Mitchell and Carson, 1989). CVM is used to estimate economic values for a wide variety of services, by directly asking the survey respondents how much they would be willing to pay for specific services. Use of the CVM is becoming increasingly common in Japan, especially to evaluate the benefits of agricultural functions and the natural environment<sup>7</sup>. There are many CVM surveys on cultural values internationally<sup>8</sup>.

We conducted interviews and studied reports of local governments and previous surveys in details. We concluded that the two issues to be examined by my research were coexistence with tourism, and upgrading community welfare. Therefore the scenario for the CVM survey should include not only conserving heritage houses but also repairing thatched roofs, conserving the surrounding forests, and preserving the technology needed to make repairs in the future. This survey is the first of this kind dealing with cultural heritage in Japan.

A nationwide survey was conducted with 3,000 samples which were randomly extracted from all over Japan using a stratified two stage sampling. Using a questionnaire similar to the nationwide survey, an on-site survey of tourists was conducted as a mall-intercept respondent-completed survey, and response rate is shown in Table 3. Respondents in nationwide survey are biased with age, gender and profession, while respondents in tourist survey are biased with residential area. Both groups are more educated than the national average (Table 4).

**Table 3. Response rate**

	<b>Distribution</b>	<b>Usable Response</b>
<b>Nationwide survey</b>	<b>2,903</b>	<b>782 (26.9%)</b>
<b>Tourist survey</b>	<b>2,119</b>	<b>1,508 (71.2%)</b>

<sup>7</sup> There have been many CVM studies of agriculture-related topics in Japan. Topics include preservation of the landscape of rural villages (Yoshida et al., 1997), the value of clean water river (Hidano and Kato, 1999), and the environmental value of Yakushima (Kuriyama et al., 2001).

<sup>8</sup> There have been many CVM studies, a classical CVM study by Throsby and Withers (1983), a CVM study on the Danish Opera House (Hansen, 1997), and an Italian CVM case study on the museums “Napoli Musei Aperti” (Santagata and Signorell, 2000).

**Table 4. Profile of respondents**

	<b>Nationwide survey</b>	<b>Tourist survey</b>	<b>National average**</b>
<b>Residential area (Hokuriku*)</b>	<b>0.06</b>	<b>0.457</b>	<b>0.044</b>
<b>Average age (years)</b>	<b>60.1</b>	<b>42.3</b>	<b>47.3</b>
<b>Gender: male=1</b>	<b>0.80</b>	<b>0.49</b>	<b>0.49</b>
<b>Profession: agriculture=1</b>	<b>0.059</b>	<b>0.013</b>	<b>0.029</b>
<b>Annual household income (unit: million Yen)</b>	<b>557.3</b>	<b>614.2</b>	<b>708.2</b>
<b>Education: Higher education=1</b>	<b>0.36</b>	<b>0.52</b>	<b>0.24</b>

Cf. \* Hokuriku is the region where the villages are located.

\*\*National average is estimated from the population over 15 years old based on the national census of 2000.

## **2) Nationwide survey**

The average willingness to pay was estimated to be 10,345 Yen, and the mean WTP was estimated to be 1,885 Yen. Estimated total WTP (TWTP) in the nationwide survey was 479.8 billion Yen. After correcting for warm glow and some bias (part and whole bias, symbolic bias and others), and multiplying by the response rate, the TWTP still exceeded 129.1 billion Yen. On the other hand, Median TWTP is meaningful for policy makers as it is the amount which a half of the group will agree to pay. The Median TWTP is 87.4 billion Yen, and even after multiplying by the response rate, it exceeds 23.5 billion Yen (Table 5).

Among the factors influencing WTP are non-use values such as bequest value and existence value. Neither past visit experience nor the intention to visit the village in the future was a significant factor. No clear correlations were shown between WTP and personal characteristics such as residential area, gender, age, education, or profession (Table 6). We conclude that the benefits of cultural heritage such as the Gokayama village accrue to Japanese society as a whole rather than only to a particular segment of society.

## **3) Tourist survey**

The average WTP per tourist is estimated as 19,941 Yen, and the median WTP is estimated as 3,117 Yen. In all estimates, TWTP exceeds 1 billion Yen per year (Table 5), while the Median TWTP exceeds 200 million Yen per year.

According to official data there are more than 800,000 visitors per year to Gokayama, most of whom are thought to visit the heritage village. However we estimate the annual number of visitors to the heritage village as 95,000, based on the number of parked cars and visitors to museums, as other detailed data are not available.

The factors influencing WTP are recognition of aesthetic value, culture importance, bequest value, existence value, and volunteer activities. No clear correlations were shown between WTP and such personal characteristics as residential area, gender, age, education, or profession in the tourist survey (Table 6).

**Table 5. Estimate of WTP (Yen)**

	Nationwide survey	Tourist survey
Mean WTP	10,344.9	19,941.0
Median WTP	1,885.3	3,116.6
Estimated number of households (unit: thousand)	4,637.6	---
Estimated number of tourists (unit: person)	---	95,436
Response rate (%)	26.9	71.2
Mean TWTP (1) (Yen)	479,757,047,815	1,903,084,057
Mean TWTP (2) (Yen)	129,054,645,862	1,354,995,848
Median TWTP (1) (Yen)	87,430,840,948	297,436,966
Median TWTP (2) (Yen)	23,518,896,215	211,775,120

Cf. (1) is a conventional model, multiplying WTP with the number of population.

(2) is multiplying model with the response rate of the survey, assuming that non-respondent has zero WTP.

**Table 6. Variables and coefficients**

Variables	Nationwide survey	Tourist survey
Constant	++	++
In (T) bid amount	++	++
Spontaneous visit to the villages	---	++
Recognized as beautiful landscape	---	++
Recognized as mountain villages	---	++
Recognized as designated cultural property	---	+
Recognition of cultural value	---	++
Recognition of bequest value	++	++
Recognition of existence value	++	---
National government should support the villages	---	++
Gender:female	---	---
Age (years)	++	---
Income (unit:10 thousand Yen)	++	---
Volunteer experience in the last one year	---	++

Cf. + 5% significance level, ++ 1% significance level.

## 5. Implication of CVM studies

TWTP in the nationwide survey is 479.8 billion Yen and Median TWTP 87.4 billion Yen. The price of these historic houses in the real estate market is almost negligible, but people are willing to pay a large amount of money to conserve them as they are now. Even after multiplying by the response rate, these quantities exceed 129.1 billion Yen and 23.5 billion Yen respectively. The historic villages should be considered as important cultural capital, and it should be noted that the

WTP is for the purpose of preserving the villages as they are now, and passing them on to succeeding generations.

Considering the survey results, 1) there is a strong consensus among tourists as well as nation that the villages can not be preserved only by the efforts of residents, 2) the cultural landscape provides huge benefit to the society as a whole, 3) it can be said that the results justify more public support by both national and local governments<sup>9</sup>, 4) national benefit of the villages derived from non-use value such as bequest value and existence value, 5) the most important and fundamental value of the cultural landscape of the villages is the bequest value, 6) cultural heritage is a public good, and 7) tourists are willing to pay donations for preservation of the villages and offer volunteer works based on their judgment of aesthetic, cultural, and bequest values of the villages.

The above findings suggest possible options where the cultural landscape can be maintained by the tourists, who are sensitive to various values of the villages, in addition to public funding. On the other hand, the residents of the villages are required to make more efforts to provide appropriate information, and opportunities to learn about the villages, and to attract such supporters from the vast tourist pool.

## **6. Conclusion**

Article 1 of the Law for the Protection of Cultural Properties in Japan (enacted in 1950) sets its goal as "...to preserve cultural heritage, to promote its utilization, and to contribute to upgrading the national culture as well as progress of the world culture," and the government has been taking various measures for heritage preservation. However, it has not yet been fully accepted in Japan that cultural heritage is a public good. Even now the national government spends only 0.1% of total budget for cultural heritage conservation and arts promotion.

The results of this research show the nationwide accrual of the benefit of cultural heritage on a large scale, based on non-use/non-market values such as bequest value and existence value. Also it provides objective data for public support of heritage preservation. Moreover, as for the relationship between tourism and heritage preservation, this study shows that better understanding of culture might improve the quality of cultural tourism and lead to greater satisfaction by tourists. It is important to provide more information to tourists and promote membership programs to involve tourists in preservation of heritage. Through such efforts, it might be possible to attract more support from tourists and avoid overuse of the heritage.

In actual process of policy planning, there are various factors to be considered, and CVM results are only estimates of certain social benefits based on peoples' preference. However, the CVM results can be interpreted as a public opinion, as the median WTP is the amount of which a half of the population will agree to pay. In this sense, it can function as a public voting, and one of

---

<sup>9</sup> The public support of governments varies each year. In recent years, totaling around 40 million Yen to 90 million Yen have been allocated for preservation of the villages: 18 million Yen to 41 million Yen from the national government, 10 million Yen to 22 million Yen from the prefectural government, and 11 million Yen to 22 million Yen from the municipal government. In addition to these subsidies, 100 million Yen was allocated by the national government from funds for upgrading the infrastructure of rural areas.

the methods to assume policy consensus in terms of cost of the policy.

**Acknowledgements:** We are grateful to the Suntory Foundation who funded the surveys.

## **References**

- Agency for Cultural Affairs (1979), *The Guideline for Subsidies for Preservation of Historic Sites and Disaster Prevention at Historic Sites*, Tokyo, Japan
- Hanemann, M., J. Loomis, and B. Kanninen (1991), 'Statistical efficiency of double-bounded dichotomous choice contingent evaluation', *American Journal of Agricultural Economics* 73: 1255-1263.
- Hansen, B.T. (1997), 'The willingness to pay for the royal theatre in Copenhagen as a public good', *Journal of Cultural Economics* 21:1-28.
- Kuriyama, K., Y. Kitabatake, and Y. Oshima (2001), *Economics of the World Heritage*, Keiso Shobo, Kyoto, Japan (Japanese).
- Mitchell, R.C., and R.T. Carson (1989), *Using Surveys to Value Public Goods: The Contingent Valuation Method*, Washington, DC: Resources for the Future.
- Santangata, W., and G. Signorell (2000), 'Contingent valuation of a cultural public good and policy design: The Case of Napoli Musei Aperti', *Journal of Cultural Economics* 24:181-204.
- Sato, K., K. Demura, and H. Iwamoto (1999), 'Valuing public benefits from agriculture in Hokkaido,' *Journal of Rural Problem* 7:71-74 (in Japanese).
- Taira Village and Kamitaira village (1996), *Planning Report on Community Development* (in Japanese) (title translated by author).
- Throsby, D., and G. A. Withers (1983), 'Measuring the demand for the arts as a public good: Theory and empirical results' in Shanahan, J. L. et al., eds., *Economic Support for the Art*, University of Akron Center for Urban Studies.
- Yoshida, K., J. Kinoshita, A. Egawa (1997), 'Valuing Economic Benefits of Agricultural Landscape by Double-Bounded Dichotomous Choice CVM - A case Study of Nose-town, Osaka Prefecture - ', *Journal of Rural Planning Association* 16-3:205-215 (in Japanese).