Conservation and Management of Cultural Landscapes

Hiroko Edani, Cultural Landscape Section, Nara National Research Institute for Cultural Properties

1. Definition of "Cultural Landscape"

When we travel through various parts of Japan, we feel that each region has its unique characteristics. What elements make one region so distinctive from another? The gently curved lines of terraced rice paddies..., a vegetable field stretching over the hill..., a group of houses roofed with locally produced tiles..., or a hot spring resort with its old-fashioned streets? From region to region landscapes change along with the natural settings. The impressions received from the same landscape will also differ from person to person. However, whatever the region, local residents have shaped its distinctive landscapes over a long period by working on their local environment. These landscapes, though they may not appear to be sophisticated, nonetheless impress viewers with their solid and down-to-earth beauty. Such landscapes, which we may call "combined works of nature and man," are Japanese important assets, inherited from our ancestors who long maintained a harmonious lifestyle with nature.

On April 1, 2005, the Japanese government inaugurated a new system to conserve such landscapes, regarding them as cultural properties. Since the recent revision of the Law for the Protection of Cultural Properties, these landscapes, known as cultural landscapes, have been recognized as a category of cultural properties. The Law for the Protection of Cultural Properties defines cultural landscapes as "landscape areas that have developed in association with the modes of life or livelihoods of the people and the natural features of the region, which are indispensable for an understanding of our people's modes of life and livelihoods" (Article 2, Paragraph 1, Item 5 of the Law for the Protection of Cultural Properties). As for a mechanism to conserve such cultural landscapes, the Law stipulates the need for protecting and sustaining the entire system, comprising the natural environment and the modes of life or livelihoods of the people, since these elements are essential for conserving cultural landscapes.

2. Background to Establishing the Cultural Landscape Conservation System

The establishment of the new system to conserve cultural landscapes was driven by two major movements—one inside and one outside Japan.

In Japan, there was a nationwide movement to reassess the value of local natural settings, including rice terraces and *satoyama* (managed woodlands and grasslands near human settlements), and to conserve the original landscapes of individual areas. At the same time, UNESCO began to review its criteria for World Heritage sites to reevaluate the areas that were neither purely cultural nor purely natural in order to enable their potential listing as world heritage sites. As a result of the review, in 1992, a new concept of "cultural landscape" was introduced into the World Heritage Convention. As

of May 2012, over 70 locations are inscribed as cultural landscapes on the World Heritage List. They include the vineyards in the Jurisdiction of Saint-Emilion, France, and Rice Terraces of the Philippine Cordilleras.

In response to such growing demands both within and outside Japan, the Japanese government established its own cultural landscape conservation system in 2005.

3. Different Concepts of "Cultural Landscape" as Defined by the World Heritage Convention and the Law for the Protection of Cultural Properties of Japan

The World Heritage Convention defines "cultural landscape" as "combined works of nature and man," and that "they are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic, and cultural forces, both external and internal." Cultural landscape" is further classified into the following three categories:

- i) A "landscape designed and created intentionally by man"
 Such landscapes include gardens and parks created for aesthetic reasons, and many of them (though not all) are part of religious or commemorative facilities or their complexes.
- ii) An "organically evolved landscape"

Landscapes that originated in social, economic, administrative, or religious norms, and that have evolved into the present status in relation to, or in response to, the natural environment. Such landscapes are further classified into the following two sub-categories:

- "Relic (or fossil) landscape"
 Landscapes that represent a certain period of time and whose evolutionary process terminated either suddenly or gradually
- "Continuing landscape"
 Landscapes that are closely related to a traditional way of life, which continues to play positive social roles in present society, and whose evolutionary process is ongoing
- iii) An "associative cultural landscape"

A landscape that may be valued because of the religious, artistic, or cultural associations of the natural elements

The definition of "cultural landscape" by the World Heritage Convention differs from that in Japanese law in that the former includes the landscapes of the past, where no contemporary residents maintain the modes of life or livelihood activities related to the landscapes, in addition to the continuing landscapes, where local people continue to engage in the livelihood and daily life activities related to the evolution of the landscapes.

Of the three major categories of the "cultural landscapes" listed above, categories ii) and iii) have particularly strong relations with the "cultural landscapes" stipulated in the Law for the Protection of Cultural Properties of Japan. Regarding category ii), however, there is a difference between the definition by the World Heritage Convention and the Japanese law. Whereas the former includes the landscapes of the past, where no present residents maintain the modes of life or livelihood activities related to the landscapes, the latter includes only the continuing landscapes, where local people continue to engage in the livelihood and daily life activities related to the evolution of the landscapes.

This is because most of the former type of landscapes are already protected in Japan under the same Act, either as "tangible cultural properties" or "monuments." Accordingly, the Law for the Protection of Cultural Properties places greater emphasis on the continuity of the livelihoods and daily lives of local people. In addition to the landscapes shaped in relation to agriculture, forestry, or fisheries, urban cultural landscapes are also included in the targets of protection. This also distinguishes the cultural landscapes in Japan from those protected by the World Heritage Convention.

4. Systems to Protect Cultural Landscapes

In Japan, at the request of local governments (prefectural governments and municipalities), the national government selects and designates cultural landscapes of especially high value as "Important Cultural Landscapes." As such, the Wetland in Omi-hachiman (Omi-hachiman City, Shiga Prefecture) was the first to be selected in 2006. Following the wetland, other landscapes have been designated as Important Cultural Landscapes, the total number of which has now reached 30. Moreover, surveys to gain this designation are currently under way in a further 50 areas across the nation. (See Data 1.) In Nara Prefecture, the southeastern area of Asuka Village (comprising Inabuchi, Kaya-no-mori, and Nyudani districts) was designated as the first Important Cultural Landscape in the prefecture on September 21, 2011, under the title: Cultural Landscape of Asuka Hinterland.

Cultural landscapes are jointly created by nature and people, reflecting the daily lives and livelihood activities of the local people which are closely related to the natural settings and local climate. Such landscapes can be observed in any inhabited region across the country. In addition to farming, mountain, and fishing villages, cities also have valuable cultural landscapes, which have been fostered in association with urban industries and the daily lives of urban dwellers. As Important Cultural Landscapes, the Japanese government designated Uji City, Kyoto Prefecture (Cultural Landscape in Uji) in 2009 and Kanazawa City, Ishikawa Prefecture (Cultural Landscape in Kanazawa; Tradition and Culture in the Castle Town) in 2010. As is evidenced by these cases, efforts to conserve and promote cultural landscapes are also well under way in Japanese cities.

5. Surveys of Cultural Landscapes

Surveys of cultural landscapes should be conducted from three viewpoints of natural environment, history, and the daily lives or livelihoods of local residents. Furthermore, surveys must be conducted to 1) specify the landscape units: 2) determine their constituents: 3) clarify organic interrelations between

the landscape units and constituents: 4) reveal local residents' recognition of the landscape units: and 5) determine the essential value of the landscape. The fifth item—determining the essential value of the landscape—particularly entails a comprehensive and integrated analysis of survey results, incorporating all three viewpoints mentioned above. In Japan, however, it is necessary to foster resources who can fully assess this essential value. Since researchers involved in these survey programs are specialists in their respective academic fields, many of them, if not all, are not so good at integrating survey results and understanding them holistically. As a result, in many cases, researchers, engaged in fragmental surveys, are unable to find the overall value in a particular landscape.

While the system to protect cultural landscapes targets only tangible elements, the value of such tangible elements are created and sustained by the intangible activities of local residents. In their daily life activities and efforts to maintain their livelihoods, people are conserving cultural landscapes in their respective regions. In surveys of cultural landscapes, however, many researchers tend to focus their attention on the tangible elements, such as rice paddies, vegetable fields, forests, and groups of buildings, along with their geographical distribution. It is essential, however, to clarify residents' activities that sustain such elements and in what way they influence local landscapes. For example, in Uji City, Kyoto Prefecture, we see tea plantations covered by shading screens made of reeds and straws. Conservation of this cultural landscape, however, entails maintaining the system to produce reeds and straws, as well as systems to grow tea plants, and produce and market tea leaves. (See Data 2) In other words, what is visible (the tangible landscape) is supported by invisible efforts (intangible systems). Accordingly, surveys of cultural landscapes must incorporate studies of both tangible and intangible elements.

6. Effective Use of Cultural Landscapes for Community Development

Among the various types of cultural properties, cultural landscapes have particularly close relations with the various modes of people's lives in the region concerned. Throughout a long history, these modes of life have been constantly changing. Accordingly, changes are inevitable in cultural landscapes, and this should be accepted. In some sites of Important Cultural Landscapes, such as the Farm Village of Hondera Area, Ichinoseki. and the Landscape with the Tsujun Irrigation Channel and Rice Terraces in Shiraito Plateau, conservation plans are conducted incorporating potential changes.

Since cultural landscapes are products of local people's modes of life and livelihood activities, the landscapes cannot be conserved without also sustaining their modes of life, which is an intangible element as discussed in the previous section. To conserve these landscapes, it is therefore necessary to raise local residents' awareness of the value of the cultural landscapes and promote their understanding of the need for their continuing activities. Based on this enhanced awareness on the part of community residents, a new system to promote conservation of the landscapes must be established, involving local residents as leading players.

The new concept of "cultural landscape" can have several positive impacts on local communities.

Even in communities that have been considered to date to have no special assets, residents can find the value of their respective communities if they review their own communities from the viewpoint of cultural landscapes. The introduction of this concept also provides community members with good opportunities to acknowledge the attractive features of the landscape, as well as their own contribution to sustaining such features. In this view, efforts to conserve cultural landscapes should be regarded as a means to develop a better community by using cultural landscapes, rather than merely improving the cultural landscapes themselves.



Conservation of a reed production center (Wetland in Omi-hachiman, Omi-hachiman City, Shiga Prefecture)



Pottery center using local resources (Ontayaki Village, Hita City, Oita Prefecture)



Cultivating land with a small tractor (Rice Terraces in Obasute, Chikuma City, Nagano Prefecture)



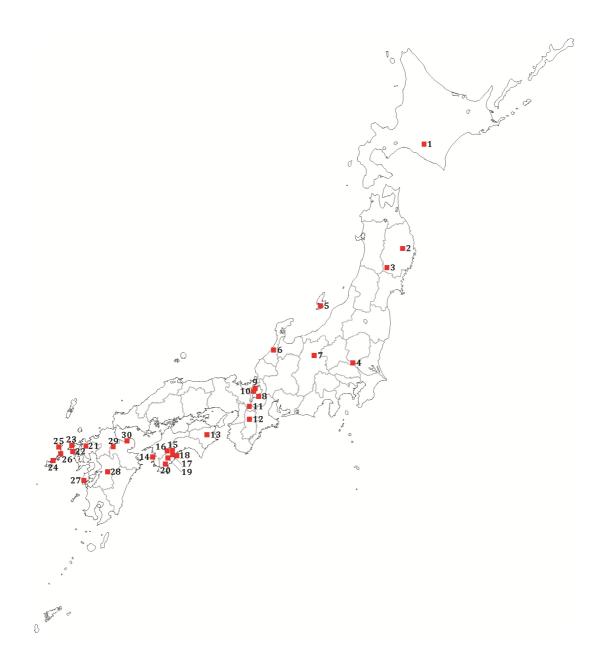
Traditional houses of tea producers (Cultural Landscape in Uji, Uji City, Kyoto Prefecture)

[Data 1] List of Important Cultural Landscapes and Nominated Cultural Landscapes (as of May 18, 2012)

No.	Prefecture	Location	Name	
1	Hokkaido	Biratori-cho, Saru-gun	Cultural Landscape of the Saru River Basin Based on Ainu Tradition and	
		Zimon viio, suiu guii	Modern Reclamation	
2	Iwate	Tono City	Tono - Arakawa heights stock farm	
3	Iwate	Ichinoseki City	Rural Landscape of Ichinoseki Hondera	
4	Gunma	Itakura-machi, Oura-gun	Fluvial Landscape in the Confluence Zone of the Tone and Watarase Rivers	
5	Niigata	Sado City	Landscape of Farming and Mountain Villages, Site of Former Gold Mine Located in Nishimikawa, Sado	
6	Ishikawa	Kanazawa City	Kanazawa Cultural Landscape - Tradition and Culture of a Castle City	
7	Nagano	Chikuma City	Obasute Rice Terraces	
8	Shiga	Omihachiman City	Omihachiman Lakeside District	
9	Shiga	Takashima City	Lakeside Landscape of Kaizu, Nishihama, Tinai in Takashima-shi	
10	Shiga	Takashima City	Lakeside Landscape of Harie, Shimohuri, Tinai in Takashima-shi	
11	Kyoto	Uji City	Uji Cultural Landscape	
12	Nara	Asuka-mura, Takaichi-gun	Okuasuka Cultural Landscape	
13	Tokushima	Kamikatsu-cho, Katsuura-gun	Kashihara Rice Terraces	
14	Ehime	Uwajima City	Yusu Mizugaura Terraced Fields	
15	Voobi	Tauno aho Takaaka gun	Cultural Landscape of the Shimanto River Basin -Mountain Villages on	
15	Kochi	Tsuno-cho, Takaoka-gun	Headwater	
16	Kochi	Yusuhara-cho,	Cultural Landscape of the Shimanto River Basin - Mountain Villages and	
		Takaoka-gun	Rice Terraces Upstream	
17	Kochi	Nakatosa-cho,	Cultural Landscape of the Shimanto River Basin - Rural / Mountain Villages	
		Takaoka-gun	and Distribution / Traffic on Upstream	
18	Kochi	Nakatosa-cho, Takaoka-gun	Port and Fishing Town Landscape of Kure	
		Shimanto-cho,	Cultural Landscape of the Shimanto River Basin - Rural / Mountain Villages	
19	Kochi	Takaoka-gun	and Distribution / Traffic on Midstream	
	Kochi	Shimanto City	Cultural Landscape of the Shimanto River Basin - Occupation Distribution /	
20			Traffic Downstream	
21	Saga	Karatsu City	Warabino Rice Terraces	
22	Nagasaki	Sasebo City	Cultural Landscape of Kuroshima Island, Sasebo-shi	
23	Nagasaki	Hirado City	Hirado Island Cultural Landscape	
24	Nagasaki	Goto City	Cultural Landscape of Hisaka Island, Goto-shi	
25	Nagasaki	Ojika-cho, Kitamatsuura-gun	Ojika Islands Cultural Landscape	
26	Nagasaki	Shinkamigoto-cho, Minamimatsuura-gun	Cultural Landscape of Kitauonome, Shinkamigoto-cho	
27	Kumamoto	Yamato-cho, Kamimashiki-gun	Fishing Village Landscape of Sakitsu in Amakusa-shi	
28	Kumamoto	Amakusa City	Tujun Irrigation Canal and Rice Terraces Landscape of Shiraito Tableland	
29	Oita	Hita City	Onta Pottery Village	
30	Oita	Bungotakada City	Rural Landscape of Tashibunoshou Ozaki	
			_	

Selection Date (Nomination Date)	Additional Selection Date	Area (ha)	Selection Criteria
July 26, 2007		4381.0	2(2,3,5,7,8)
March 28, 2008	February 12, 2009	1416.1(S*), 2.4(AS* Total 1418.5	2(1,8)
July 28, 2006		337.5	1(2)
September 21, 2011		606.5	2(1,8)
September 21, 2011		518.3	2(1,5,6,8)
February 22, 2010		292.0	2(5,7,8)
February 22, 2010		64.3	1(1)
January 26, 2006	July 28, 2006 July 26, 2007	174.6 (S), 13.7 (AS 1) 165.7 (AS 2), Total 354.0	2(1,3,5,8)
March 28, 2008		1842.8	1(5), 1(7)
August 5, 2010		295.9	1(5), 1(8)
February 12, 2009		228.5	2(1,5,6,7,8)
September 21, 2011		565.8	2(1,5,8)
February 22, 2010		16.0	2(1,8)
July 26, 2007		8.3	1(1)
February 12, 2009	(Nominated on November 18, 2011)	5355.7	2(3,5,8)
February 12, 2009		8976.9	2(1,3,5)
February 12, 2009	February 7, 2011	3324.2 (S), 519.1(AS) Total 3843.3	2(1,3,5,7,8)
February 7, 2011		244.6	1(4), 1(5)
February 12, 2009	September 21, 2011	13392.7(S), 79.6(AS) Total 13472.3	2(1,3,5,7,8)
February 12, 2009		5303.6	2(3,4,5,7,8)
July 28, 2008		400.9	2(1,5)
September 21, 2011		475.5	1(1)
February 22, 2010	August 5, 2010	1105.6(S), 349.6(AS) Total 1455.2	2(7,8)
September 21, 2011		3881.1	2(1,8)
February 7, 2011	September 21, 2011	313.9(S), 810.4(AS) Total 1124.3	2(3,8)
January 24, 2012			2(1,4,8)
July 28, 2008	July 23, 2009 February 22, 2010	63.9(S), 73.8(AS 1) 468.1(AS 2), Total 605.80	2(1,3,6)
February 7, 2011		159.9	2(4,7,8)
March 28, 2008	February 22, 2010	14.1(S), 224.7(AS) Total 238.8	2(1,5,8)
August 5, 2010		92.0	2(1,8)

^{*}Selection, **Additional Selection



Distribution Map of Important Cultural Landscapes

[Data 2]

Cultural Landscape in Uji: Tea Production and Its Organic Links with Other Activities

1. Tea plantations in Uji

A typical visual image of a tea plantation would be rows of tea plants stretching as far as the eye can reach, with bright sunshine pouring down on them. This is in fact an image of just one type of tea plantation called "sun-grown." In sun-grown tea plantations, tea leaves are exposed to direct sunlight so that they acquire an astringent taste, as in *sencha* and *bancha* teas. Many tea plantations in and around Uji City, on the other hand, are "shade-grown": tea plants are shaded from the sunlight with *honzu* (reed screens and straw) or *kanreisha* (cheesecloth-like black screens made of synthetic fiber).



In Uji, shades are placed one by one each year starting from April. The soft tea buds are carefully hand-picked in the harvesting season that begins in early May. Tea leaves thus collected have little

Fig.1. Harvesting in *honzu*-covered tea garden

astringency but instead feature a deep aroma and an enhanced flavor (*umami*) and a clear color; they are processed into *tencha* (raw ingredient of *matcha* - powdered green tea) and *gyokuro*, and other high-grade teas.

2. Tea cultivation in shade-grown tea plantations

(1) Production in tea plantations

· Tea plantation-rice paddy-reed field-forest linkage

The most important element of cultivation in shade-grown tea plantations is shielding the light. In the traditional *honzu*-covered tea cultivation, the first step in light shielding involves constructing a frame with logs and bamboo poles over the tea plantations. Reed screens are then placed over the frame top to form the first layer, over which rice plant straw is spread as the second layer. In this manner, 95% to 98% of the light is shielded. Throughout the month of May, the new tea tips are harvested by hand. Compared to *kanreisha*, *honzu* is more effective in maintaining temperature, thereby helping tea plant growth and preventing frost. The use of straw also has effects other than light shielding: it imparts a distinctive aroma to the tea plants, and after harvesting, the straw is put on the ground around the roots of the tea plants and between the ridges as mulch, which controls to weed growth and soil temperature adjustment.

Uji's tea production is greatly aided by the surrounding natural environment. Rice plant straw, essential in tea growing in Uji, is produced in rice paddies in the flood plains of the Uji River and nearby terrace fields. Reeds for reed screens are taken from Lake Biwa. The proximity of Lake

Biwa is considered an important factor in the development of tea production in Uji. Moreover, the nearby forests provide cedar trees and bamboo as materials for the tea plantation frames, as well as firewood and charcoal, also required for tea production.

Tea plantations and native species

Japan's tea-producing regions have traditionally cultivated native species of tea that have been propagated in respective locales in the form of seeds since the old days. Different regional climatic conditions and cultivation methods have resulted in varieties with distinctive qualities and characteristics. Uji also has its native species of tea, from which have derived numerous excellent varieties, such as those represented by the "Asahi" and "Samidori" brands.

Tea plantations that grow native species have various types of tea plants. This facilitates natural blending, while at the same time making it more difficult to homogenize tea taste due to qualitative divergence. In recent years, the conversion of tea plantations into residential estates, coupled with a focus on single-variety cultivation, has rapidly shrunk the percentage of native species. According to Kyoto Prefecture's statistics on tea production (2009), native species occupy only 11% or 179.3 ha of the total surface area of 1,622.7 ha for tea plantations in Kyoto Prefecture. In Uji City alone, the native species takes up 13 ha or 17.5% of the total of 74.4 ha. This indicates that many Uji tea producers adhere to the traditional values of the native species, while also giving birth to excellent varieties.

• Tea plantations and oigoya

Every tea plantation has its *oigoya*, a dedicated workshop. In shade-grown tea production, *oigoya* ware originally built as a storage space for materials for the frames, such as bamboo poles and logs and reed screens, all of which are essential for light shielding. Therefore, no equivalent is found in sun-grown tea production. In fact, *oigoya* can be considered characteristic of Uji's tea plantations which produce *tencha* and *gyokuro* away from sunlight.

A typical *oigoya* is 4 to 6 meters wide and about 12 meters long, to allow for the storage of bamboo poles and the like. In recent years, *oigoya* are becoming smaller in size since permanent shelves are installed over an increasing number of tea plantations, thereby eliminating the need for extra materials. Nevertheless, an *oigoya* is always found near a tea plantation.

Tea plantations and persimmon trees

In Uji, persimmon trees often stand in or on the edges of tea plantations as if to command attention from passers-by. Those persimmon trees are said to have been planted to protect the tea plants from frost and sunlight.

Why persimmon trees and not other trees? Supposed reasons for this choice of tree include the fact that just like tea plants, persimmon trees, are well suited to, sandy clay soil, which drains well

yet retains sufficient water; persimmon fruits can be harvested as an interim crop after the busy season for tea growers; and it is easier to keep persimmon fruits from falling prematurely, due to the tea plants surrounding the persimmon trees stabilizing the soil temperature.

Given the recent trends of permanent shelf installation and tea plantation standardization, persimmon trees have been gradually disappearing from tea plantations. Yet, one can see that the remaining persimmon trees enhance the scenic beauty of these tea plantations.



Fig. 2. Tea leaves grow covered by reed screens and straw (an *oigoya* is visible in upper right hand corner)



Fig. 3. A persimmon tree in a tea garden

3. Processing of tea leaves into aracha

Manufacturing process and tea factories

One characteristic of tea production is the fact that the tasks performed by tea farmers include processing. For *tencha*, tea farmers handle tasks up to steaming and drying of tea leaves, which results in the primary processed product called *aracha* or crude tea. *Aracha* is then shipped to wholesale houses and markets, where it is finished as *matcha*.

An indispensable element in *tencha* processing are the long, brick-built drying furnaces developed in Uji during the Taisho era (1912-1926). They are about 16 meters long. Although having such a furnace built in a tea factory requires a large floor space, many tea factories in the built-up part of Uji have them and use them for *aracha* processing even today. What has made this possible?

In medieval times, Uji was a city crowded with the mansions of *chashi* (tea masters who selected and blended tea leaves). In the modern era, as the profession of *chashi* declined, the former residences were divided into long strips of land, on which tea merchants' houses were built. As a result, those houses extended far back, as much as 60 meters from the shop front facing the street. Tea-making facilities were thus installed along the dirt floor that extended out to the rear. This floor layout with a considerable depth is believed to have enabled the development and installation of the Uji drying furnaces.

Tea farmers and wholesale houses

The manner in which the tea is distributed varies from one locale to another. In Uji, tea distribution involves tea farmers handling tasks from tea production to *aracha* manufacturing, and the wholesale houses that buy *aracha* from the tea farmers and process it as the finished product or *shiagecha*. Some tea farmers engage in the entire process of finishing their home-grown tea as merchandise and selling it to retailers, but they are quite rare.

Tea farmers here usually belong to the Uji City Tea Producers Cooperative Association, and 70 to 80percent of them always sell their *aracha* to their designated wholesale houses. This system, called *iritsuke*, is typical of tea distribution in Uji. In the *iritsuke* system, different tea farmers do business with different wholesalers; some sell to several houses, others to only one. The main advantage of this system is stable shipments, while the disadvantage is late payment. For example, a tea farmer selling *aracha* to a wholesaler in June can expect to get paid for this shipment in two installments - in August and December. For this reason, recent years have seen some tea farmers leaving the *iritsuke* system to supply directly to the general cooperative market. In any case, the high concentration and proximity of producers and processors/sellers in a single district is a distinctive characteristic of Uji's tea industry.



Fig. 4. Tea farmer's house in a commercial district



Fig. 5. Tea factory at the back of a house built on a long strip of land

Even today, despite Uji's advanced urbanization, tea tarmers and wholesalers continue to live in the city, carrying out tea leaf production, processing it into *aracha* using drying furnaces, finishing processing, and retail sales—all entirely within Uji.

Uji's shade-grown tea production is not made possible solely by the tea plantation. It is founded on the methods and techniques of tea production, as well as links between tea production and other human activities that involve various forms of land utilization, such as rice production, reed planting, and work in *oigoya* and tea factories. Together, all these factors constitute Uji's sustainable tea plantation landscape.