

Successfully preserving national heritage in Japan



Photo: Eisuke Imai

The curved lines of the earth and the water in rice terraces are ideal material for sketching. This group of artists enjoys the view in Hata, Takashima city, Shiga prefecture.

As a result, the next generation of terrace farmers left for the cities. Surveys in 1993 and 2005 revealed that the area under rice terraces had gone down from 220 to 138 thousand hectares during that period. In 2007, the average age of the 3.12 million people active in agriculture in Japan was 64 years. The average age of people working in rice terraces was estimated as even older!

Since the 1960s, the rural landscape has completely changed. Larger and squarer fields have been formed from joining together smaller paddy fields in the plains. These larger areas can easily be equipped with modern canals and farm roads for farm machinery.

Rice terraces, on the other hand, have been left behind in this wave of development. Their lower productivity has never improved. However, the rapid change seen in rural landscapes has increased the value of the rice terraces as unique scenery and examples of rural atmosphere. In mountainous areas, terraced paddy fields form beautiful curves, reminding Japanese people of their tradition. Rice terraces are also places for experimental education in food, life and environment. Abandoning the terraces would have serious consequences, because of their water and biodiversity functions. They are “products” that are not for sale, but are yet consumed publicly. In 2001, the Science Council of Japan estimated annual values

Rice in Japan has traditionally been grown on terraces built into volcanic slopes. With Green Revolution technology, however, rice fields in the plains became so productive that the terraced systems were threatened. When the Japanese people realised they were losing a valuable natural and cultural resource, farmers gained the support of the local and national governments in joint efforts to preserve the rice terraces as their spiritual home.

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People compare the grandeur and beauty of the rice terraces in Japan to the pyramids in Egypt. Rice terraces, however, are alive with farmers, crops, cultures, and rituals which are handed over and evolving from generation to generation. They are not simply a tourist attraction or a device for producing rice. Rice terraces make people aware of their relationships with their ancestors, families, colleagues and nature.

Terraced rice cultivation in Japan, however, has been under threat. The decline started in the late 1960s. At that time, there was a surplus of rice in Japan, which resulted in a policy to set aside paddy fields. The relatively high cost of production associated with rice terraces made this type of farming difficult.

of arable farming in Japan at 3499 billion yen (US\$ 39 billion) as flood damage relief and 2376 billion yen (US\$ 26 billion) for their recreational and relaxing functions.

Support from all walks of life

A development project was planned for the *Shiro-yone sen-mai-da* rice terraces, near the city of Wajima, on the Noto peninsula facing the Japan Sea, in 1970. However, instead of going ahead with the project, the local government decided to pay out subsidies to support farming in rice terraces for prolonged periods. The rice terraces were then designated as a place of scenic beauty under the Cultural Properties Protection Law in 2001. It covers an area of 1.81 ha and consists of 1004 paddy plots. The plots have an average size of less than 20m², meaning that all work must be done by hand. Local governments appreciate the conventional rice farming and its scenic beauty as a significant resource for tourism.

Public support for preservation of rice terraces has increased since the mid-1990s. Some urban people have launched programmes, like community supported agriculture, with annual contracts to lease rice terraces. Municipalities, for example, established the National Rice Terraces Liaison Council. This Council organised the 14th National Rice Terrace Summit Meeting in 2008, close to Nagasaki city. More than 2000 politicians, farmers and members of the general public attended the event, which was covered by the media. At the same time, committed individuals organised a “*Tanada* network” that supports preserving the rice terraces (see Box). Activities include schools in rice terraces for learning about farming hands-on, provision of information through websites and bulletins, and promoting collaborative programmes with private companies and rice terrace farmers, to develop public opinion and values. In 1999, the “Rice Terraces Research Association” was established to promote research into rice terraces. It has members from all walks of life like researchers and artists, but also administrative officials, farmers, office workers, housewives, photographers and retirees. It organises national and international field trips (such as to Bali in Indonesia, Yunnan in China and Nanhe in Korea), and surveys rice terraces as required.

Rice terraces in the Japanese landscape

Japan is an island country, with a population of 127 million. It was formed by hundreds of volcanoes, of which 108 are still active. Topography is steep, and rainwater quickly runs out through narrow rivers into the sea. People in Japan traditionally eat rice and sea foods. Through history, the Japanese people have built and developed rice terraces in the steep volcanic landscape. The sulphur in volcanic ash makes soil acid, which is harmful to many crops, but with irrigation it makes rice grow well.

Paddy rice cultivation started on the continent—now China—some 7000 years ago, and was introduced to Japan about 2500 years ago. Rice terraces are referred to as *tanada* in Japanese. The word *tanada* originates in a land register recorded in 1338. It came about as the result of investigating the area and the yield of its rice paddy fields. Up to this day, rice terraces are a unique natural feature, a complex mix of human activities, society and the natural environment, and are seen as the peoples’ spiritual home. Water in paddy fields and the irrigation and drainage system serves as a network of wetlands and waterways that represent a human-made natural environment with a rich flora and fauna. Birds such as cranes, egrets and white storks prey on aquatic bugs, frogs and fish. Furthermore, the network also recharges groundwater, reduces peak flood flows, and provides recreational areas, all important for downstream cities.

National and local policy development

In 1992, the Ministry of Agriculture, Forestry and Fisheries established a policy referring to the multi-functionality of agriculture for the first time. In 1993, 1997 and 1998, it approved projects to preserve soil and water, and for restoring abandoned arable lands for the different functions of rice terraces. 1998 was the first time the word *tanada* was mentioned in the national budget, and about US\$ 600 million was appointed for a three-year project period. These projects supported farmers in restoring abandoned paddy plots. A land owners’ system was also introduced, for citizens who want to enjoy farming there, for instance in the city of Chikuma in Nagano prefecture.

In 1999, a new “Food, Agriculture and Rural Village Basic Law” was enacted, with four pillars: to ensure stable food supply, present the multifunctional roles of agriculture, establish sustainable development of agriculture, and promote rural villages. The old basic law aimed at reducing income gaps between agriculture and other industries; the new one aims to improve people’s life and sound development of national economy. In 2000, the government launched a “Mountainous and Intermediate Areas Direct Payment System”. In this system, farmers make a community agreement and engage in collective actions. These actions can be aimed at preventing the abandonment of arable lands, promoting multifunctional agriculture, or collaborating with schools and encouraging community action. By 2007, farmers cultivating almost 700 thousand hectares of farmland in over a thousand municipalities were participating in this system.

In 1999, the Minister of Agriculture authorised a project entitled “The best rice terrace areas in Japan”, approving 134 terraced areas as ones with scenic beauty and sustainable, multi-functional agriculture. This did not involve subsidies, but the areas received merits as valuable sightseeing spots and places for producing good quality rice. Local people became proud of their home village, and established many organisations for preserving rice terraces. In 1999, the Cultural Properties Protection Law allowed the designation of Obasute in Koshoku city as the first agricultural place of scenic beauty; others followed. The Agency for Cultural Affairs established a system of appointing areas for cultural scenery preservation in 2004. This allowed for the Scenery Law to regulate land use and economic activities so as to preserve scenery in rice terraces based on the agreement of local dwellers and municipalities.

The survival of the rice terraces in Japan and other Asian monsoon regions will enable people to taste the advantages of the slow life, and to realise the value of what they have inherited from their ancestors. Such places may have a lesser economic role in modern society; but they have a cultural and natural role far beyond the grains that they produce. ■

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