In Japan No. 10 Conservation activities of rice paddy terraces in Ishibu, Shizuoka Prefecture, Japan and "Shizuoka One Company, One Village Campaign"

1. Regional Profile

| Geographical Location | Country and Region | Ishibu district, Matsuzaki Town, Shizuoka Prefecture, Japan, Eastern Asia | | |
|-----------------------|------------------------|---|--|--|
| | Longitude and Latitude | North Latitude 34° 45' 11", East Longitude 138° 46' 44" (Matsuzaki Town hall) | | |
| | Geographical | Agricultural and fishing village area | | |
| | Conditions | Approx. 140 km in a straight line from Tokyo (capital) | | |
| | | Approx. 40 km in a straight line from Shizuoka City (prefectural capital) | | |
| Natural Topography | | Matsuzaki Town is surrounded by the Amagi mountain range in the north, east, and | | |
| Environment | and Altitude | south, and faces Suruga Bay in the west. The highest altitude is 0 meters (sea level) | | |
| | | and the highest altitude is 995.5 m. | | |
| | | • Rice terraces in Ishibu are paddy fields that spread over the hilly land over altitudes of 120 m through 250 m. | | |
| | Climate | of 120 m through 250 m. • The average yearly temperature in Matsuzaki Town is about 15.9°C and the annual | | |
| | Oiiiiate | precipitation is 1,919 mm. | | |
| | | • Its climate is classified as Cfa (humid subtropical climate), based on the Koeppen | | |
| | | Climate Classification. | | |
| | Vegetation and | • The vegetation of Matsuzaki Town mainly consists of broad-leaved evergreen | | |
| | Soil | forests in the coastal area, secondary forests such as konara oak (Quercus serrata) | | |
| | | and sawtooth oak (Quercus acutissima) in the low-altitude areas, and Japanese cedar | | |
| | | and Japanese cypress in the high-altitude areas. | | |
| | | • The forest of Ishibu district is mainly the secondary konara oak forest, in | | |
| | | combination with broad-leaved evergreen forests composed of Castanopsis sieboldii | | |
| | | etc. and Japanese cedar plantation forest. The soil is brown forest soil. | | |
| | Biodiversity | In Ishibu district, there is a mosaic landscape with a combination of paddy fields and | | |
| | and | surrounding forests, and various organisms inhabit there. | | |
| | Ecosystem | Various organisms inhabit in the rice paddy terraces in Ishibu, such as violet, | | |
| | | Cirsium spicatum, Calanthe discolor, firefly, Japanese pheasant, Japanese white-eye, | | |
| | | Japanese squirrel, and Japanese hare. | | |
| Social | Population and | • The population of Matsuzaki Town decreased from 12,183 in 1960 to 8,104 in 2005. | | |
| Background | Changes in | • As reflected in the population aging rate (the percentage of the population aged 65 | | |
| | Population | or older) of 33.7% as of 2005, the population in Matsuzaki Town is aging. | | |
| | History and | • In the rice paddy terraces in Ishibu, rice farming was continuously practiced from | | |
| | Culture | the Edo Period (1603-1868). Moreover, the sericultural business was operated and | | |
| | Dogional | high-quality Izu charcoal was produced in the old days. | | |
| | Regional | • The major industries of Matsuzaki Town include agriculture, fishery, and tourism. However, the local economies have generally been depressed in recent years due to | | |
| | Economy (Major | the change in the area's industrial structure and outflowing and aging population. | | |
| | Industries, | The number of workers in each industry sector in 2005 is as follows. | | |
| | Livelihood | Primary Industry (agriculture, forestry and fishery) 279 7.0% | | |
| | (including data | Secondary Industry (mining, manufacturing and 779 19.7% | | |
| | and forecasts)) | construction) | | |
| | | Tertiary Industry (commerce, tourism and others) 2,903 73.3% | | |
| | | Total* 3,961 100.0% | | |
| | | *Note: As the percentages of workers in Primary Industry, Secondary Industry, and | | |
| | | Tertiary Industry are rounded off to one decimal place, they may not add up to | | |
| | | 100.0%. | | |

2. Use and Management of Natural Resources in the Region

(1) Use and Management of Natural Resources in the Past and Present

1) Land Use Related to the Use and Management of Natural Resources in the Past and Present

- Mountain forests and farmland account for 85.0% and 4.0%, respectively, of the total area of Matsuzaki
 Town (85.23 km²). The greatest plain field in the west coast of Izu is formed in the lower reaches of Naka
 River and Iwashina River and cultivated land of about 500 hectares and the built-up area of Matsuzaki
 Town lie therein.
- Agricultural land on the overall mountainous Izu Peninsula is distributed in extremely small groups. The
 rice paddy terraces in Ishibu consist of about 1,000 terrace fields and cover about 10 hectares in total.
 They are one of the biggest of all terraces located on the Izu Peninsula.

2) Objectives and Details of the Current Use and Management of Natural Resources

[Rice paddy terraces in Ishibu]

- Ishibu contains masonry terraces because it is very hilly and high-quality volcanic tuff called Izu stone
 was produced there.
- In the rice paddy terraces in Ishibu, rice farming was continuously practiced in terraces of about 18 hectares from the Edo Period (1603-1868) to about 1955.
- Currently, 4 hectares of terraces remain. Rice farming is practiced on 2 hectares and the rest of the terrace is used for growing plants for the landscape, etc.

[Utilization and management of natural resources in the surroundings of terraces]

- In the forests of the Ishibu district, forest products such as wood, charcoal, and compost were produced in the old days. In particular, high-quality charcoal was well known as "Izu charcoal"; however, the volume of forest products has drastically fallen in recent years.
- Although there was a material recycle between forests and agricultural land (grass cut from forests is used as compost for farmland), such relationship has been lost.
- Matsuzaki Town produces leaves of cherry used for sakura mochi rice cakes as a special local product, providing 70% of the total volume in Japan. In Ishibu district, leaves of cherry blossom are also produced.



Picture: Rice paddy terraces in Ishibu (Photograph provided by Matsuzaki Town)

(2) Problems Associated with the Use and Management of Natural Resources and their Impact on Biodiversity

[Deterioration of rice paddy terraces]

- Since the rice paddy terraces in Ishibu were managed on a small scale and have a terrain where mechanical equipment cannot be easily implemented, the amount of abandoned land gradually increased due to effects of postwar change in the social and economic circumstance surrounding agriculture.
- By 1999, the year when activities to conserve rice paddy terraces began, about 90% of the total area (18 hectares) of the then present rice paddy terraces were given up as abandoned land, resulting in a deterioration in the environment where organisms lived, as reflected in a dramatic decrease in the number of fireflies and water stick insects that were once often seen there.

[Deterioration of forests around rice paddy terraces]

- With respect to secondary forests around the rice paddy terraces, use of the forests dramatically fell due
 to decreasing demand for firewood and charcoal as a result of the rise in popularity of fossil fuel as well
 as decreasing demand for forest-based compost as a result of the popularity of chemical fertilizers. With
 this change, the succession of vegetation progressed and the habitat of wild plants and animals has been
 deteriorating.
- With respect to artificial coniferous forests around the rice paddy terraces, public functions such as the
 maintenance of water source forests and prevention of soil outflow were weakened due to the
 discontinuance of management such as tree thinning as a result of the sluggish forestry industry, leading
 to deterioration in the environment where wild plants and animals lived.

(3) Regional Plans and Other Measures toward a Resolution of the Above Problems

- Efforts for conserving rice paddy terraces in Ishibu district have been exerted in accordance with the Conservation and Utilization Vision of Rice Paddy Terraces in Ishibu District formulated by the Promotion Committee for Conservation of Rice Paddy Terraces in Ishibu District, an organization of local volunteers as well as annual plans laid out based on the said vision.
- Shizuoka Prefecture has taken various supportive measures to restore farming and mountain villages
 where deterioration of farmland and weakening of village functions has become more pronounced due to
 a lack of labor as a result of depopulation and aging population. One of these efforts is the "One
 Company, One Village Campaign in Shizuoka."
- Details are described in the following section: "3. Details."

3. Details

(1) Overview

Through conservation activities of rice paddy terraces that are the resource representing local nature, history, and culture, Ishibu district aims to restore the local industries by combining insufficient financial and labor force, know-how, and others through active tie-ups and exchanges with outside urban residents, companies, universities, and other organizations.

| Location | Ishibu, Matsuzaki Town, Shizuoka | | | |
|-------------|--|--|--|--|
| Involved | [Promotion Committee for Conservation of Rice Paddy Terraces in Ishibu District] | | | |
| Parties | The committee is composed of local residents and government. It is the implementing body of activities | | | |
| . artioo | such as accepting paddy terrace owners. | | | |
| | [Company and university] | | | |
| | Provide financial or labor support for the conservation activities of rice paddy terraces | | | |
| | [Shizuoka Prefecture] | | | |
| | Certifies the conformity of each cooperative activity performed by the Promotion Committee for | | | |
| | Conservation of Rice Paddy Terraces with a company or university to the objective of "One Company, | | | |
| | One Village Campaign in Shizuoka" and provides supports to the activities through PR. | | | |
| Background | | | | |
| and history | • In 1999 when the rice paddy terraces in Ishibu were selected the "top-ten rice paddy terraces, etc. | | | |
| | in Shizuoka," local farmer volunteers established the "Promotion Committee for Conservation of | | | |
| | Rice Paddy Terraces in Ishibu District" and carried out restoration work of rice paddy terraces in | | | |
| | cooperation with local residents and general volunteers. | | | |
| | [Start of exchanges with urban residents and formulation of the "Conservation and Utilization | | | |
| | Vision of Rice Paddy Terraces in Ishibu District"] | | | |
| | • In 2000, the Committee started an on-site farming activity for urban residents and others by using | | | |
| | the restored rice paddy terraces. | | | |
| | • In conjunction with this activity, the Committee formulated the "Conservation and Utilization | | | |
| | Vision of Rice Paddy Terraces in Ishibu District." | | | |
| | [Expansion of exchanges through the "Ownership System of Rice Paddy Terraces" and tie-ups with | | | |
| | companies and other organizations] | | | |
| | • In 2002, the Akaneda Village Hyakusho no Sato ("home of peasant's hundred smiles") was opened | | | |
| | and the ownership system of rice paddy terraces was introduced. | | | |
| | • In 2005 and 2006, the Organization established joint structures with five companies and others | | | |
| | based on the "One Company, One Village Campaign in Shizuoka" and thereby started to receive | | | |
| _ | continuous financing or labor support. | | | |
| Purpose | • Given that various industries including agriculture, fishery, and tourism are linked with each other | | | |
| and | in Ishibu district, the aim is to promote mutual cross-industrial understanding and cooperative | | | |
| objectives | work and to build a community where all the industries from the primary industry to the tertiary | | | |
| | industry can prosper through the conservation activities of rice paddy terraces. | | | |

| Main | [Exchanges with urban residents through the "Ownership System of Rice Paddy Terraces" | | | | |
|-----------|--|--|--|--|--|
| contents | By concluding an agreement between the Promotion Committee for Conservation of Rice Paddy | | | | |
| | Terraces in Ishibu District and each of urban residents and others based on the "Ownership System | | | | |
| | of Rice Paddy Terraces," the Committee provides the residents with rice harvested in the rice | | | | |
| | paddy terraces in exchange for financial or labor support. | | | | |
| | • The Ownership System consists of Rice-Farming Owners who participate in farming work an | | | | |
| | Trust Members who only provide financial support. | | | | |
| | [Tie-ups with companies and universities through the "One Company, One Village Campaign | | | | |
| | Shizuoka''] | | | | |
| | • The "One Company, One Village Campaign in Shizuoka" is a system whereby Shizuoka | | | | |
| | Prefecture matches the head of a farming and mountain village seeking financial or labor support | | | | |
| | from a company with a company that is willing to perform CSR activity and enter into a business | | | | |
| | with farming and mountain villages. And then gives certification to each of the attained efforts. | | | | |
| | • In 2006 and 2007, Ishibu district, as a result of making good use of this system, successfully | | | | |
| | established cooperative relationships with three private companies, one association of liquor sales, | | | | |
| | and one university based on the "One Company, One Village Campaign in Shizuoka" and started | | | | |
| | receiving financial or labor support. | | | | |
| Major | • Through active tie-ups with outside entities, new funds, labor force, know-how, and other benefits | | | | |
| Successes | were introduced, allowing the conservation activities of rice paddy terraces to continue, while the | | | | |
| | tie-ups have produced new efforts including development and sales of special local products | | | | |
| | wherein black rice and red rice grown in the rice paddy terraces are used. | | | | |
| | • As a result of conservation activities of rice paddy terraces, the natural environment is also | | | | |
| | improving dramatically as firefly and water stick insect have begun to appear again. | | | | |

Outline of "One Company, One Village Campaign in Shizuoka" [Description]

- In 2005, Shizuoka Prefecture started the "One Company, One Village Campaign in Shizuoka" in order to restore farming and mountain villages where deterioration of agricultural land and weakening of settlement functions had become more pronounced due to a lack of labor as a result of depopulation and aging population. This campaign aimed to restore these areas by increasing the population of urban areas that exchanges with the people of agricultural villages.
- The model of this campaign is the "One Company, One Rural Village Sisterhood Relationships" that has been implemented all over South Korea since 2004. This campaign has already created over 10,000 relationships, gathering attention as a measure for restoring agricultural villages.

[Objective and purpose]

- The objective of the "One Company, One Village Campaign" is to restore the subject area through cooperative activities with an agricultural village and a company(ies).
- The aim of this campaign is to generate cooperative activities and exchanges between an agricultural village and an urban area by Shizuoka Prefecture matching a demand of the agricultural village such as "we want more labor," "we want to increase exchanges," "we want to obtain stable customers", or "we want to develop special local product with a company" with a demand of the company such as "we want to give social contribution," "we want to make good use of the strength of the village to welfare benefits for employees", or "we want to commercialize a resource of the rural area" and to promote restoration of the subject area.

[Actual result by November 2009]

- By November 2009, 20 companies and organizations established cooperative relationships with 17 organizations located in farming and mountain villages. (The relationship between a company and a farming and mountain village is not necessarily tied on a one-to-one basis.)
- Supportive activities provided by companies vary greatly, such as participation in conservation activities of farmlands, donation with a portion of corporate profit, development of special local products, and conservation activities of organisms living on farmland.
- Details of efforts exerted in the rice paddy terraces in Ishibu are shown later.

(2) Details of the Use and Management of Natural Resources from the "Five Perspectives" of the Satoyama Initiative

The table below shows the primary relevance of this case to the five perspectives.

Details are given below the table for the perspectives which have high relevance (items with the " " mark in the table).

| | Five Perspectives | Relevance to this Case | | |
|----|---|------------------------|---|--|
| | | Degree of Relevance | Summary of Relevance | |
| 1) | Resource use within the carrying capacity and resilience of the environment | | Rice paddy terraces that used to be cultivation abandonment lands have been restored through exchanges and cooperative work with outside urban residents and companies. * Details to follow. | |
| 2) | Cyclic use of natural resources | 0 | • One of the future efforts is to regenerate the cyclic system with farmland and forests which existed in the past. | |
| 3) | Recognition of the value and importance of local traditions and cultures | 0 | In the conservation activities of rice paddy terraces, farming methods and customs handed over by local residents (e.g. Donto yaki festival) have been continued. | |
| 4) | Natural resource management by various participating and cooperating entities | | Through the "Ownership System of Rice Paddy Terraces," exchanges with urban residents have been created and new funds and labor force have been introduced. Through the "One Company, One Village Campaign in Shizuoka," new cooperative relationships have been produced with companies and others and new funds, labor force, know-how, and other benefits have been introduced. * Details to follow. | |
| 5) | Contributions to local socio-economics | | These exchanges and relationships have produced new efforts including development and sales of special local products wherein black rice and red rice harvested in the rice paddy terraces are used. The "Ownership System of Rice Paddy Terraces" have had ripple effects through the economy of local industries relating to tourism as a result of increasing population that exchanges with urban areas. * Details to follow. | |

1) Resource use within the carrying capacity and resilience of the environment

[Restoration of deteriorated rice paddy terraces]

• In 2000, the restoration work of cultivation abandonment lands was performed. About 4 hectares of rice paddy terraces were successfully restored after about 100-days work by over 300 volunteers. Rice farming has been practiced on 2 of those hectares.





Pictures: Images of rice paddy terraces before and after the restoration (Source: Website of "Akaneda Village Hyakusho no Sato")

4) Natural resource management by various participating and cooperating entities

[Exchanges with urban residents and others through the Ownership System of Rice Paddy Terraces]

- In order to continue and expand exchanges with urban residents and others, the Ownership System of Rice Paddy Terraces started in 2002. The Ownership System of Rice Paddy Terraces in Ishibu consists of Rice-Farming Owners who participate in farming work such as rice planting and harvesting and Rice Paddy Terrace Trust Members who mainly provide financial support.
- In order to execute the Ownership System of Rice Paddy Terraces, administration work relating to seeking members as well as contracting and communicating with the members are required. Because local residents were not able to bear the financial burden of such work on their own, the work is carried out with the support from Matsuzaki Town hall.
- The number of members of the Ownership System steadily increased. Currently, the system has been
 completely established as evidenced by the percentage of repeaters that exceeded 70% and exchanges
 with urban residents have blossomed.
- The membership fees of the Ownership System have been an important source of income for local farms.
 With the subsidy of "direct payment to the hilly and mountainous areas" that the district joined in 2000, accumulation of agricultural land and purchase of agricultural machinery based on the schedule have been made.

[Tie-ups with companies and others through the "One Company, One Village Campaign in Shizuoka"]

 The Promotion Committee for Conservation of Rice Paddy Terraces in Ishibu District established cooperative relationships with the following companies through the "One Company, One Village Campaign in Shizuoka" executed by Shizuoka Prefecture, receiving continuous financial or labor support and know-how and other benefits.

Table: Description of efforts in tie-ups with companies through conservation activities of rice paddy terraces in Ishibu

| Partner companies, etc. | Description of activity |
|--|---|
| AstraZeneca | Under the name of "Supportive Project for Aging Villages" as a part of a CSR activity, the company sends a group consisting of 30 to 150 workers to 40 different areas in Japan where the problems of an aging population or depopulation are worsening. Each group engages in work relating to agriculture, forestry, and environmental improvement in response to the needs of the relevant area, while organizing physical activities and exchange events. The company performs activities in rice paddy terraces in Ishibu as part of the above project. |
| Fujinishiki Sake Brewery Co., Ltd.; Hirakishuzo Co., Ltd.; Matsuzaki Liquor Retail Union | In Ishibu district, Matsuzaki Town, the three companies shown on the left are engaged in the production and sales of "Hyakusho Ikki" shochu (distilled alcoholic beverage) that is made from black rice or red rice harvested in rice paddy terraces in Ishibu. In order to protect rice paddy terraces where raw materials of shochu are produced, the companies donate a portion of their sales to conservation activities of rice paddy terraces. |
| Fuji Tokoha University, Department of Environment and Disaster Research | Students participate in volunteer work for building ridges and cutting grass in the rice paddy terraces, helping areas that suffer from a lack of labor. In 2006, a total of 150 persons visited the Ishibu district. Although the Ishibu district welcomes participants of the ownership system who work in the areas of rice planting and harvesting, it had a shortage of labor for work such as grass cutting, plowing, and irrigating. Therefore, the activities by those student volunteers have been important. |



Picture: Student volunteers from Fuji Tokoha University (Source: Website of Shizuoka Prefecture)

5) Contributions to local socio-economics

[Development and sales of products that are made from black rice and red rice grown in rice paddy terraces]

- The Promotion Committee for Conservation of Rice Paddy Terraces in Ishibu District makes efforts to develop and sell processed food products that are made from black rice and red rice grown in the rice paddy terraces in cooperation with local companies and the Chamber of Commerce.
- Products that are currently available in the market include "Hyakusho Ikki" shochu made from black rice and red rice, black rice bread, tanada black rice udon noodles, and black rice manjuu cake. The annual

sales of these products amount to about 6 million yen.

- Black rice shochu, which the Chamber of Commerce spent four years on developing, was very popular as evidenced by the fact that 6,000 bottles marketed by initial limited production were sold out after one month and a half. Together with the newly joined red rice shochu, these shochu are raising expectations that they would be a promising local brand-name product.
- The Committee also cooperates in the development of black rice senbei cracker, a product of neighboring Nishiizu Town.

[Ripple effect on industries relating to tourism]

- As the number of members of the Ownership System of Rice Paddy Terraces is increasing every year, the
 number of those who exchange with outside parties is steadily growing, and this is producing ripple
 effects on industries related to tourism. For example, a total of 700 persons visited the area for two days
 at the time of rice planting, occupying all the rooms of bed-and-breakfast (minshuku) accommodations.
- Moreover, the Committee makes efforts to develop tourist products such as sketch and photography tours by using the magnificent landscape of the rice paddy terraces with a view of Mt. Fuji and Suruga Bay.



Picture: Shochu produced with black rice and red rice in Ishibu (Photograph provided by Matsuzaki Town)

End