Practices associated with returning the profits from cultural ecosystem services to natural resources management

### 1. Overview

### (1) Background and features of the practice

This form of tourism that shows wild animals and plants to tourists from other areas began to spread in developing countries after the mid 20<sup>th</sup> century as a way to succeed both in gaining funds to protect nature and means to secure the livelihoods of local residents. This new form of tourism was later named "eco tourism." Eco tourism is currently widely recognized as a concept of sustainable tourism in developed countries.

The International Ecotourism Society (TIES) defines ecotourism as "responsible travel to natural areas that conserves the environment and sustains the well-being of local people."

Concepts such as green-tourism, agri-tourism, and blue-tourism are also available as sustainable forms of tourism that utilize local resources in a similar way to ecotourism, they target different locations and types of local resources as tourism resources.

### (2) Details of the practices and their applicability

- i. Details of the practice
  - Taking into account the unique natural and cultural resources of a given area, this practice focuses on the spiritual, intellectual, recreational, and educational values of a location and provides tour programs that utilize local resources to visitors from outside.
- ii. Range of application
  - This practice is applicable to all areas as long as local entities and visitors from outside share the same demand.
- iii. Implementing bodies
  - The systems that incorporate ecotourism are composed of local residents, as the main implementing body, public entities (including government organizations, international organizations, and NGO/NPOs), participate to take coordinating and supporting role, as well as tourism industries that provide services to tourists.

### [Cases]

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

In Japan No.11: Town revitalization through the utilization of the history and culture of the community in Kanakura, Machino Town, Wajima City, Ishikawa Prefecture, Japan

Around the world No.1: Revitalization of Satoyama, Hampyeong-gun, Sangok-ri, Mopyeong-maur in Korea

# 2. Effects obtained from these Cases regarding the sustainable use and management of natural resources

Implementation of the practices in this category is associated with the following effects in the sustainable use and management of natural resources and the maintenance of a healthy secondary nature.

### (1) Effects on the sustainable use and management of natural resources (socioeconomic effects)

- The unique secondary nature developed through human activities against the background of the characteristic local natural environment, history, and culture can become a tourism resource that attracts visitors from the outside. Effects such as improvements in the income of local residents and prevention of population outflow can be expected from working on sustainable tourism using such resources.
- During the process of working on sustainable tourism taking advantage of the secondary nature, local residents take charge of various roles. Visible effects such as improved income help them renew their pride in inheriting the values of the nature, which is expected to result in sustainable use and management of natural resources.

#### (2) Effects on the health of the secondary nature (effects on ecosystem and biodiversity)

- The main groups that own and manage secondary nature can use the funds received as compensation for accepting tourists to conserve and regenerate secondary nature.
- In areas where natural resources have been overexploited to make a living, change from past inappropriate uses of natural resources can be expected from the introduction of sustainable tourism as a new means of livelihood.
- Conservation and the improvement of local biodiversity can be expected through the above aspects.

### 3. Toward the implementation of this practice : Points of planning and examples of action items based on the "Five Perspectives" of the SATOYAMA Initiative

The following sections describe points and action items to plan the implementation of this practice in areas with secondary nature.

## Table: Points of planning and action items based on the "Five Perspectives" of the Satoyama Initiatives

"Five Perspectives" of the Satoyama Initiative	Points of planning	Action items
(1) Resource use within the carrying capacity and resilience of the environment	<ul> <li>As a prerequisite to develop sustainable tourism it is necessary to identify the carrying capacity of the local environment to be used for tourism.</li> <li>As a fundamental policy that embodies the above information, it is necessary to set up the number of people to accept in the area and the zoning for use.</li> </ul>	<ul> <li>Identify environmental carrying capacity (organize the conditions to use and manage natural resources).</li> <li>Set up a basic policy of sustainable use (number of people to accept in the area and zoning).</li> </ul>
(2) Cyclic use of natural resources	• It is necessary to make sure that implementing this practice does not impede an area's natural resource circulations.	Check whether the practice is in harmony with an area's natural resource circulations.
(3) Recognition of the value and importance of local traditions and cultures	• It is effective to actively explore and reflect traditional local resources of agriculture, forestry, and fishery in order to create attractive programs that are unique to areas with secondary nature.	Create programs based on local traditions and cultures.
(4) Natural resource management by various participating and cooperating entities	<ul> <li>In order to ensure the proper actions of various participants, it is necessary to create implementation systems, mechanisms, and rules to regulate them.</li> <li>In order to make ecotourism functional, it is effective for public entities to get involved and coordinate, supervise, and implement measures based on the legal binding power.</li> </ul>	<ul> <li>Establish implementation systems.</li> <li>Establish rules and mechanisms of use and management.</li> </ul>
(5) Contributions to local socio-economies	<ul> <li>It is necessary to actively consider employing local residents as guides and for other roles in tourism-related industries.</li> <li>It is important to provide education and programs for human resources development and capacity building to make sure that the participants follow rules and provide high quality services.</li> </ul>	<ul> <li>Employment plans for local residents</li> <li>Plan for education, human resources development, and capacity building.</li> </ul>

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Action items	<ul> <li>Identify environmental carrying capacity (organize the conditions to use and manage natural resources).</li> <li>Set up a basic policy of sustainable use (number of people to accept in the area and zoning).</li> </ul>

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

Areas with secondary nature have already been the subjects of various uses of natural resources such as in agriculture, forestry, and fishery. Thus, there is a risk that the introduction of new, improper uses for tourism (e.g. invitation of excessive number of tourists to obtain short-term benefit) may increase the amount of natural resources used and negatively affect the nature and the socioeconomic conditions of the area.

Therefore, realizing sustainable tourism requires the identification of tourism carrying capacity of the local environment (the acceptable amount of human activities that will not degrade the environment) and the preparation of utilization plans that are within that carrying capacity.

It is difficult to quantitatively identify environmental carrying capacity from the beginning. Thus, the participants should organize state of the use and management of natural resources based on qualitative information and verify whether there is a room to accept tourists. In order to carry out quantitative monitoring in the planning/implementation stage, it is also effective to identify data items to be collected continuously in advance.

A basic plan for sustainable tourism is created based on the outcome of this monitoring. Among the items to be stipulated in the plan, "the acceptable number of tourists" and "zoning for use" are especially important points as they become the fundamentals for all efforts. Therefore, these points should be determined clearly.

Main items	Examination methods
Acceptable number of tourists	• Estimate the amount of natural resources (e.g. food, fuel, and materials) required for and the amount of waste produced from the new tourism operations. Then, set up the acceptable number of tourists so that it falls within the remaining strength of the environmental carrying capacity.
	• If overexploitation is currently a problem, the acceptable number of people must be reduced from the current condition, or it will be necessary to implement measures to improve the uses of natural resources.
Zoning for use	• Verify usage conditions such as agriculture, forestry, and fishery conditions, as well as the habitat conditions of flora and fauna to be protected, usage control through laws or local customs, and usage control based on culture or religion.
	<ul> <li>Based on the usage control, set areas to be used for tourism, and assign zoning based on the controlling conditions.</li> </ul>
	• The zoning outcomes need to be clearly shown in diagrams or maps so that all participants can share the information.
Considerations to guarantee the above points	• Legal measures to ensure the acceptable number of torists and zoing for use should be implemented in case a high risk of overexploitation that would overwhelm the environmental carrying capacity is expected, or if the occurrence of overexploitation is expected to cause great damage.
	<ul> <li>Such legal measures do not have to cover all areas; they can be focused on areas with especially high risks.</li> </ul>

Table: Examples of the basic policies of sustainable tourism

### (2) Cyclic use of natural resources

Points of planning	• It is necessary to make sure that implementing this practice does not impede an area's natural resource circulations.
Action items	Check whether the practice is in harmony with an area's natural resource circulations.

The local material flows used for tourism must be in harmony with the circulation of local natural resources in order to reduce the negative impact of this practice on the nature and socioeconomic activities of the area.

Thus, it is necessary to examine changes in the material flows associated with the new tourism uses (such as materials brought in from outside) and whether they can be smoothly incorporated with existing resource circulations.

### (3) Recognition of the value and importance of local traditions and cultures

Points of planning	• It is effective to actively explore and reflect traditional local resources of agriculture, forestry, and fishery in order to create attractive programs that are unique to areas with secondary nature.
Action items	Create programs based on local traditions and cultures.

It is necessary to provide unique programs that are different from other areas in order to attract new tourists to areas with secondary nature.

Thus, it is effective to actively develop both a secondary nature that is not readily enjoyable in pristine nature and local resources that are embedded in local history and culture, as well as develop programs that utilize these resources (e.g. experience agriculture, forestry, fishery harvesting, or traditional cultures).

Table: Relationships between traditional local resources of agriculture, forestry, or fishery and programs seen in specific Cases

Cases	Traditional local resources of agriculture, forestry, or fishery	Programs based on traditional resources of agriculture, forestry, or fishery
In Japan No.10 Conservation activities of rice paddy terraces in Ishibu, Shizuoka Prefecture, Japan and "Shizuoka One Company, One Village Campaign"	<ul> <li>Traditional landscapes of terrace paddy fields developed through rice farming.</li> </ul>	<ul> <li>Implementation of a "terrace paddy field ownership system" in which urban residents pay user fees to rent farmland and conduct farming as they receive instructions from local farmers.</li> </ul>
In Japan No.11 Town revitalization through the utilization of the history and culture of the community in Kanakura, Machino Town, Wajima City, Ishikawa Prefecture, Japan	<ul> <li>Traditional land use and landscapes which are the combination of secondary forests, agricultural land, communities, reservoirs, and shrines/temples, etc.</li> <li>Traditional food culture</li> </ul>	<ul> <li>Establish walking trails based on traditional land use and landscapes.</li> <li>Serve dishes that use locally grown agricultural crops at the café in the grounds of a temple.</li> </ul>
Around the world No.1 Revitalization of Satoyama, Hampyeong-gun, Sangok-ri, Mopyeong-maur in Korea	• Traditional land uses and landscapes which are the combinations of secondary forests, agricultural land, communities, reservoirs, etc.	<ul> <li>Provide experience programs, such as harvesting and processing of agricultural products.</li> <li>Build guest houses using traditional houses as accommodation for tourists.</li> </ul>

Points of planning	<ul> <li>In order to ensure the proper actions of various participants, it is necessary to create implementation systems, mechanisms, and rules to regulate them.</li> <li>In order to make ecotourism functional, it is effective for public entities to get involved and coordinate, supervise, and implement measures based on the legal binding power.</li> </ul>
Action items	<ul><li>Establish implementation systems.</li><li>Establish rules and mechanisms of use and management.</li></ul>

### (4) Natural resource management by various participating and cooperating entities

In order to realize sustainable tourism, all stakeholders (including tourists) need to understand the environmental carrying capacity and act within it. Also, the sustainable use and management of natural resources that become the sources of tourism require not only the owners or managers of said resources but also all beneficiaries to properly share both the benefits and burdens.

Meanwhile, tourism operation involves various aspects such as tours, experiential encounters, transportation, dining, and lodging; thus, it consists of a great variety and number of stakeholders. Cooperation with entities (such as tourists and tourism industries) outside the area is also essential.

Thus, in order to ensure actions within the environmental carrying capacity and proper allocation of burdens and benefits, it is necessary to identify the existence of many stakeholders of various types and establish implementation systems, mechanisms, and rules to regulate them. Also, in order to make these systems, mechanisms, and rules functional, neutral public entities such as government organizations need to join the projects to coordinate the interests of the stakeholders and take legal measures against those who violate rules (e.g. those who implemented banned action or entered limited entry zones).

### Table: Expected systems, mechanisms, and rules to be established

Items	Details
Implementation system	• Need to establish a cooperative system that involves all of the sustainable tourism stakeholders in and outside the target area, including tourism industries, tour guides, and managers (such as land owners) of the natural resource used in the tourism.
	• It is effective for neutral public entities such as government organizations to join the operation as a party to coordinate interests and supervise stakeholders.
	• It is important to build an autonomous implementation system that mainly involves local residents.
Mechanism	• It is necessary to establish a system that only allows businesses that comply with the environmental carrying capacity to participate in sustainable tourism (e.g. a license system, and a system to permit entry into natural areas).
	• Tourism industries and tourists need to build a system to return benefits to the managers of natural resources.
Rules	• It is necessary to determine compliance matters for individual groups such as businesses, guides, and tourists (e.g. prohibited acts, areas of limited access, and actions on those who violate rules).
	• When necessary, it is effective to set up rules on the relationship between tourism industries and other industries (e.g. agriculture, forestry, and fishery) that also use natural resources in order to maintain harmony between them.

### (5) Contributions to local socio-economies

Points of planning	<ul> <li>It is necessary to actively consider employing local residents as guides and for other roles in tourism-related industries.</li> <li>It is important to provide education and programs for human resources development and capacity building to make sure that the participants follow rules and provide high quality services.</li> </ul>
Action items	<ul> <li>Employment plans for local residents</li> <li>Plan for education, human resources development, and capacity building.</li> </ul>

In sustainable tourism, the active employment of local residents is necessary to increase the welfare of local residents within a given environmental carrying capacity. It is especially important to employ local residents who possess a good understanding of local nature and culture as guides for tourists. It is also effective to expand employment opportunities by cooperating with transportation, lodging, and restaurant bussinesses that are run by local residents.

In order to ensure that tourism industries and guides comply with mechanisms and rules (see "4) Natural resource management by various participating and cooperating entities" in the above section) and offer high quality service to tourists, it is important that individual participants sufficiently understand the concepts of sustainable tourism and gain sufficient knowledge and skills to realize it. Thus, systematic education, human resource development, and capacity building programs must be provided to the participants.